



CENSUS OF INDIA 1961

VOLUME I

INDIA



PART I-A (i)
TEXT

LEVELS OF REGIONAL DEVELOPMENT IN INDIA
Being Part I of General Report on India

A. MITRA

of the Indian Civil Service

Minister General and ex-officio Census Commissioner for India

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CENSUS OF INDIA 1961—UNION PUBLICATIONS

PART I	General Report on the Census, Sub-divided into three sub-parts, viz.;
PART I-A	General Report
PART I-A(i)—TEXT	Levels of Regional Development in India
PART I-A(ii)—TABLES	Levels of Regional Development in India
PART I-B	✓ Vital Statistics of the decade
PART I-C	Subsidiary Tables
PART II	Census Tables on Population, sub-divided into :
PART II-A(i)	General Population Tables
PART II-A(ii)	Union Primary Census Abstracts
PART II-B(i)	✓ General Economic Tables (B-I to B-IV)
PART II-B(ii)	✓ General Economic Tables (B-V)
PART II-B(iii)	✓ General Economic Tables (B-VI to B-IX)
PART II-C(i)	✓ Social and Cultural Tables
PART II-C(ii)	Language Tables
PART II-C(iii)	✓ Migration Tables (D-I to D-III and D-V)
PART II-C(iv)	✓ Migration Tables (D-IV and D-VI)
PART III	
PART III-(i)	✓ Household Economic Tables (14 States)
PART III-(ii)	Household Economic Tables (India, Uttar Pradesh and Union Territories)
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PART IV-A(i)	✓ Housing Report
PART IV-A(ii)	✓ Report on Industrial Establishments
PART IV-A(iii)	✓ House Types and Villages layouts
PART IV-B	✓ Housing and Establishment Tables
PART V	✓ Special Tables for Scheduled Castes and Scheduled Tribes and Ethnographic notes sub-divided into two Sub-parts viz.,
PART V-A	✓ Special Tables for Scheduled Castes and Scheduled Tribes
PART V-B	✓ Ethnographic Notes
PART VI	✓ Village Survey Monographs
PART VII	✓ Monographs on Rural Crafts Survey and list of Fairs and Festivals
PART VII-A	Handicraft Survey Monograph
PART VII-B	✓ Fairs and Festivals
PART VIII	Administration Report
PART VIII-A	✓ Administration Report (Enumeration)
PART VIII-B	Administration Report (Tabulation)
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PART IX	Census Atlas Volume
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PREFACE

This part of the General Report on the 1961 Census of India was designed, processed and written out almost entirely between the second half of May and the end of July this year. The critical reader will naturally find in it many blemishes and areas of incomplete analysis which a more leisurely and careful treatment might have avoided. The pressures in the conduct of the Indian Census Programme hardly permit desirable periods of gestation. This Report is therefore presented more out of regard for the data it contains than any pretensions to other claims, for admittedly the presentation here attempted is tentative and needs further calibration by means of principal components analysis. The data are published in a separate volume [Part I-A(ii)].

This book started out with two aims. First to dissolve the political and administrative outlines and let the natural regions, subregions and divisions emerge in their complex associations of natural features, social, cultural and general ecological characteristics. Secondly, to apply to the picture that emerged a ranking device based on about three dozen, what appeared to the writer to be, significant indicators. This ranking device was based on a simple hypothesis. Given a certain amount of agricultural, general and economic infrastructure and a potential of human resources one is entitled to expect economic growth in the modern sense of the word, particularly in organised industry, in direct relation to them. This process of delineation should be able to bring out zones of backwash and spread effect and also those which a further instalment of economic growth might be able to retrieve from areas of backwash into those of spread. It was assumed that these areas of backwash and spread would set in motion forces of polarisation. It was therefore decided to apply several validity tests to verify this polarisation.

Of the fact of economic and even social and cultural polarisation there is little room for doubt. The main aim has been to let the facts speak for themselves. The abstract statements at the end of Chapter II bring out some of the salient ones. Fortunately for the country this polarisation has been far from regional, nothing like the north-south polarisation that one finds in Europe or the Americas. The picture that emerges is one of pockets and zones of backwardness invariably enclosed by areas of prosperity or spread effect. In very many areas except in the north and north east, the areas of prosperity and spread effect join hands across areas of backwash. Such a situation is particularly heartening for the logistics of development. It is no longer so much a matter of invasion of one region by another by organising and injecting all the prerequisites of economic growth, but of encircling and mopping up of pockets. How the sights should be set for this operation is of course outside the scope of this work.

In the chapter on Delineation I have quoted very frequently from O.H.K. Spate's *India & Pakistan* (1954) and S. P. Chatterjee's *Regional Patterns of the Density and Distribution of Population in India* published in *The Geographical Review of India*, June 1962. Dr. Spate's book has served as a constant companion during my travels as well as Dr. Chatterjee's short piece and it is quite likely that some of their own words have crept into my writing unnoticed despite every wish to acknowledge each observation to its author. I am indebted to Dr. B. S. Minhas of the Planning Unit of the Indian Statistical Institute for a very useful discussion on Chapter II and particularly on the tasks that lie unaccomplished. Dr. Miss P. Sengupta, Map Officer and her staff kindly undertook to design the physiographic table and execute the maps.

My warmest personal thanks must go to my colleagues who processed and reprocessed, checked and rechecked all the statistics that were planned and designed and who enriched the final copy with useful suggestions, and to Shri Prem Narani, my Secretary, and Shri S. Rajagoplan who typed out a long and difficult manuscript. The brunt of the work fell on Shri O. P. Sharma and his team for whom nothing seemed to be too big a job. This book owes the most to their zeal and devotion. There is no greater pleasure for me than to acknowledge my debt particularly to :

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INTRODUCTORY NOTE

INDIA'S FIVE YEAR PLANS aim to level the local features which divide the country into natural regions and subregions that have so long sheltered an immense variety of cultural and economic organisation. Natural regions and subregions have in the past created much diversity and even exclusiveness in many spheres of India's life, thought and activity, to which the Plans now seek to give unity and cohesion.

India is thus at a most interesting stage of a dialectical process: the unity of social and economic planning at grips with a many-splendoured diversity of natural regions and subregions, economic situations, cultures, and tongues. The latter, enjoying a truly continental range, leaves room for more than one kind of classification.

What is attempted below is, first, a fresh classification of natural regions, subregions and divisions of India. This classification stops at the level of the administrative district even when a district like Dehra Dun, Madurai, Ganjam or Burdwan is composed of distinct, mutually exclusive features, for it is both important and expedient to realize that at this level its diversity is sub-

ordinate to the compusions of economic and administrative unity.

Second, to which the first provides a frame, a set of *ad hoc* indicators has been applied with the object of ranking the natural regions, subregions, divisions and districts by certain broad stages of social, cultural and economic achievement. This ranking will incidentally indicate which indicators generally constitute the strong and weak features of districts, divisions, natural subregions and regions.

Finally, on the strength of this ranking, a regrouping of districts has been made to bring into relief those areas which show greater affinity to each other in terms of social and economic development and in doing so are either isolated from their immediate neighbours or, ignoring the barriers of natural regions and subregions, form tracts of their own astride them. These tracts which form either small islands or continuous belts across natural regions and subregions will show the extent to which the twin process of economic development and cultural change is at work in any part of the country.

CHAPTER I

NATURAL REGIONS, SUBREGIONS AND DIVISIONS

THIS CLASSIFICATION differs in certain features from the one adopted in the Census of 1951. It generally agrees with the classification adopted in the National Atlas and the forthcoming India Gazetteer, although there are minor departures. As explained above, the classification goes down to the level of an administrative district, and no further, even when a district betrays distinct and mutually exclusive natural features, *e.g.*, Midnapore or Dehra Dun.

The classification is laid down in Statement I.1. In any classification a balance has to be struck between too many and too few. The components should be numerous enough to throw real diversity into relief and yet not so prolix as to miss the wood for the trees. For example, while in the details of discussion it has been mentioned how Jammu and Kashmir falls into four convenient parcels—Ladakh; the valley composed of Srinagar, Baramulla and Anantnag; the mountain districts of Doda, Poonch and Udhampur; and the foothill districts of Jammu and Kathua.—in the classification itself they have been combined into only one Division, Jammu and Kashmir. At the other extreme, however, single districts like Bastar or Dangs have been given the distinction of divisions by themselves, because it was felt that they stood apart from their neighbours much too prominently to be ignored.

The following are some of the areas in which the present classification has departed from other classifications:

1. The Northern Plains have been considered as one Region right from Bikaner in

the West to the Brahmaputra and Surma Valleys in the East.

2. Uttar Pradesh—The Jamuna-Ganga Doab of Uttar Pradesh has been split into two parts, the Upper and the Lower. The country north of the Ganga has been divided into four Divisions: Tarai or foothills; Rohilkhand; Oudh; and the Eastern Districts which are crisscrossed by the Gomati, the Tons, the Ghaghra and the Rapti.

3. Separate divisions for North Bihar and South Bihar Plains.

4. Separate divisions for Darjeeling; Jalpaiguri and Cooch Behar; West Dinajpur and Malda; Murshidabad, Nadia, Calcutta and 24 Parganas.

5. Hooghly, Howrah and Midnapore have been placed under the Damodar Delta.

6. The Brahmaputra and Surma Valleys have been associated with the Northern Plains.

7. The Central Hills and Plateaus have been considered to stretch from Sirohi in the West to the Rajmahal Hills (Santal Parganas) and Rarh (Birbhum, Burdwan and Bankura) in the East. Separate divisions within the same Subregions have been allotted for example to Delhi and Gurgaon obviously in deference to their political jurisdictions but it was considered desirable to divide Bundelkhand Subregion into Chambal Ravines (N. W. Madhya Pradesh), Trans Jamuna Alluvial Veneer and North Central Madhya Pradesh; Malwa into North Malwa Uplands and Malwa Plateau. Similarly the Vindhya Ranges and Plateaus have been divided into the

Vindhya proper, Rewa Plateau (Vindhyan-Scarp Lands) and Kaimur Vindhya (Mirzapur of U.P.). The Central Madhya Pradesh Plateau has been divided into Narmada Valley (Jabalpur, Narsimhapur and Hoshangabad), Western, Central and Eastern Satpuras, Baghelkhand Plateau, Chhattisgarh and Dandakaranya. The Orissa Hills and Upland districts have been divided into two divisions west and east of Mahanadi, while Dhanbad, Santal Parganas, Purulia and Rarh (Birbhum, Burdwan and Bankura) have been classified as separate divisions.

8. The Deccan has been divided into four Subregions; Maharashtra Deccan, Andhra Deccan, Mysore Deccan and Tamilnad Hills and Uplands. It is usual to regard the fourth as a separate and independent feature. Maharashtra Deccan has been split into the Divisions of Khandesh, Nasik Basin, Vidarbha, Mahakoshal, Marathawada, Western Ghats (Desh); Andhra Deccan into Telengana and Rayalaseema;

Mysore Deccan into Inland Karnataka, Northern Maidan, Central Maidan, Malnad and Southern Maidan; Tamilnad Hills and Uplands into Nilgiri and Coimbatore Plateau.

9. Kathiawar has been split into two, Kanthades consisting of Banaskantha and Sabarkantha composed of the Aravalli outliers and the alluvial shelf and Kathiawar; Dangs has been named as a separate division and so has Greater Bombay as Ulhas Basin. I have borrowed the Konkana-Kerala Transition from O.H.K. Spate to define a Subregion consisting of the Goa and the Karnataka Coast (North and South Kanara). I have also separated the Malabar districts from the former Travancore-Cochin ones.

10. In the Eastern Coastal Plain I have broken the continuity of the coastline by incorporating Ganjam in the North-Western Orissan Hills and Plateaus.

The districts of India, Sikkim and Bhutan stand classified as follows:

STATEMENT I.1

Natural Regions, Subregions and Divisions of India

Region	Subregion	Division	No. of districts	District
1	2	3	4	5
1 Himalayas	1.1 West Himalayas	1.11 Jammu and Kashmir	9	Ladakh, Srinagar, Baramulla, Anantnag, Doda, Poonch, Udhampur, Jammu, Kathua.
		1.12 Himachal Pradesh and Himalayan Punjab	9	Chamba, Mandi, Bilaspur, Sirmur, Kinnaur, Mahasu, Lahaul and Spiti, Kangra, Simla.
		1.13 Himalayan Uttar Pradesh (Highland Districts)	8	Uttar Kashi, Chamoli, Tehri Garhwal, Garhwal, Dehra Dun, Pithoragarh, Almora, Naini Tal.
	1.2 East Himalayas	1.21 Darjeeling-Sikkim	2	Darjeeling, Sikkim.
		1.22 Bhutan-Assam Himalayas	2	Bhutan, North-East Frontier Agency.

STATEMENT I.1

Natural Regions, Subregions and Divisions of India—contd.

Region	Subregion	Division	No. of districts	District
1	2	3	4	5
1 Himalayas—concl'd.	1.3 North-Eastern Ranges	1.31 Assam Hills (Meghalaya)	4	United Khasi and Jaintia Hills, United Mikir and North Cachar Hills, Garo Hills, Mizo Hills.
		1.32 North-Eastern Border Hills	3	Nagaland (Kohima, Tuensang, Mokokchung).
		1.33 "	1	Manipur.
		1.34 "	1	Tripura.
2 Northern Plains	2.1 Rajasthan Plain	2.11 Rajasthan Desert (Thar : Marwar)	3	Bikaner, Jaisalmer, Jodhpur.
		2.12 Rajasthan Dry Area	6	Ganganagar, Churu, Nagaur, Pali, Jalor, Barmer.
	2.2 Punjab Plains	2.21 North Punjab Plain	4	Gurdaspur, Amritsar, Kapurthala, Ferozepur.
		2.22 Beas-Sutlej Doab (Bisht Doab)	3	Hoshiarpur, Jullundur, Ludhiana.
		2.23 East Punjab Plain	3	Ambala, Patiala, Karnal.
		2.24 South Western Punjab (Haryana)	5	Bhatinda, Sangrur, Rohtak, Hissar, Mahendragarh.
		2.3 Uttar Pradesh Plains	5	Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh.
	2.4 Bihar Plains	2.32 Lower Ganga-Jamuna Doab	9	Mathura, Agra, Mainpuri, Etah, Farrukhabad, Etawah, Kanpur, Fatehpur, Allahabad.
		2.33 Uttar Pradesh Tarai (Koshala)	8	Pilibhit, Kheri, Sitapur, Bahraich, Gonda, Basti, Gorakhpur, Deoria.
		2.34 Rohilkhand	6	Bijnor, Moradabad, Rampur, Bareilly, Budaun, Shahjahanpur.
		2.35 Oudh	7	Hardoi, Lucknow, Bara Banki, Unnao, Rae Bareilly, Sultanpur, Faizabad.
		2.36 East Uttar Pradesh	6	Pratapgarh, Varanasi, Jaunpur, Ghazipur, Ballia, Azamgarh.
	2.5 West Bengal Plains	2.41 North Bihar Plain (Tirhut)	6	Saran, Champaran, Muzaffarpur, Darbhanga, Saharsa, Purnea.
		2.42 South Bihar Plain (Magadha)	5	Shahabad, Gaya, Patna, Monghyr, Bhagalpur.
	2.6 Assam Valleys	2.51 North Bengal Plain (Duars)	2	Jalpaiguri, Cooch Behar.
		2.52 Northern Para Delta (Barind)	2	West Dinajpur, Malda.
		2.53 Ganga Delta	4	Murshidabad, Nadia, Calcutta, 24-Parganas.
		2.54 Damodar Delta	3	Hooghly, Howrah, Midnapore.
		2.61 Brahmaputra Valley	6	Goalpara, Kamrup, Darrang, Nowgong, Sibsagar, Lakhimpur.
		2.62 Surma Valley	1	Cachar.

STATEMENT I.1

Natural Regions, Subregions and Divisions of India—contd.

Region	Subregion	Division	No. of districts	District
1	2	3	4	5
3 Central Hills and Plateaus	3.1 Rajasthan Hills and Plateaus	3.11 Aravallis and Uplands	9	Jaipur, Tonk, Sawai Madhopur, Bharatpur, Alwar, Sikar, Bhilwara, Jhunjhunu, Ajmer.
		3.12 Delhi Ridges	1	Delhi.
		3.13 Aravalli Outlier	1	Gurgaon.
		3.14 Rajasthan Hills (Mewar, Bagar)	4	Udaipur, Sirohi, Banswara, Dungarpur.
		3.15 East Rajasthan Hills	4	Chitorgarh, Kota, Bundi, Jhalawar.
	3.2 Bundelkhand	3.21 Chambal Ravines (North Western Madhya Pradesh)	4	Morena, Bhind, Gwalior, Datia.
		3.22 Trans Jamuna Alluvial Veneer	4	Jhansi, Jalaun, Hamirpur, Banda.
		3.23 North Central Madhya Pradesh	2	Tikamgarh, Chhatarpur.
		3.31 North Malwa Uplands	2	Shivpuri, Guna.
	3.3 Malwa	3.32 Malwa Plateau	9	Rajgarh, Mandsaur, Shajapur, Ratlam, Ujjain, Dewas, Indore, Jhabua, Dhar.
		3.41 Vindhya	5	Vidisha, Raisen, Sehore, Sagar, Damoh.
	3.4 Vindhya Ranges and Plateaus	3.42 Rewa Plateau; Vindhyan Scarp Lands	3	Panna, Satna, Rewa.
		3.43 Kaimur (Vindhyachal)	1	Mirzapur.
		3.51 Narmada Valley	3	Jabalpur, Narsimhapur, Hoshangabad.
	3.5 Central Madhya Pradesh Plateau	3.52 Western Satpuras (Satpura-Gawilgarh Hills)	2	West Nimar, East Nimar.
		3.53 Central Satpuras (Gawilgarh-Mahadeo Hills)	3	Betul, Chhindwara, Seoni.
		3.54 Eastern Satpuras (Maikala Range)	2	Balaghat, Mandla.
		3.55 Baghelkhand Plateau	3	Shahdol, Sidhi, Surguja.
	3.6 Orissa Hills and Plateaus	3.56 Chhattisgarh	4	Durg, Raipur, Bilaspur, Raigarh.
		3.57 Dandakaranya	1	Bastar.
		3.61 North Western Hills	5	Koraput, Kalahandi, Boudh-Khondmals, Bolangir, Ganjam.
		3.62 North Eastern Hills	5	Sambalpur, Sundargarh, Keonjhar, Dhenkanal, Mayurbhanj.

STATEMENT I.1

Natural Regions, Subregions and Divisions of India—contd.

Region	Subregion	Division	No. of districts	District
1	2	3	4	5
3 Central Hills and Plateaus—concl.	3.7 South Bihar Hills and Plateaus	3.71 Chhota Nagpur Plateau	4	Palamau, Hazaribagh, Ranchi, Singhbhum.
		3.72 Gondwana Trough	1	Dhanbad.
		3.73 Rajmahal Hills	1	Santal Parganas.
4 The Deccan	3.8 West Bengal Uplands	3.81 Ranchi Peneplains	1	Purulia.
		3.82 Rarh	3	Birbhum, Burdwan, Bankura.
	4.1 Maharashtra Deccan	4.11 Khandesh	2	Dhulia, Jalgaon.
		4.12 Nasik Basin	1	Nasik.
		4.13 Vidarbha	4	Buldhana, Akola, Amravati, Yeotmal.
		4.14 Mahakoshal	4	Nagpur, Wardha, Bhandara, Chanda.
	4.2 Andhra Deccan	4.15 Marathawada	5	Aurangabad, Parbhani, Bhir, Nanded, Osmanabad.
		4.16 Western Ghats (Desh)	6	Poona, Satara, Sholapur, Sangli, Kolhapur, Ahmadnagar.
		4.21 Telengana (Southern Deccan)	9	Adilabad, Nizamabad, Medak, Hyderabad, Mahbubnagar, Karimnagar, Warangal, Khammam, Nalgonda.
		4.22 Rayalaseema	4	Kurnool, Cuddapah, Anantapur, Chittoor.
	4.3 Mysore Deccan	4.31 Inland Karnataka	2	Belgaum, Dharwar.
		4.32 Southern Deccan Plateau (North Maidan)	3	Bidar, Gulbarga, Bijapur.
		4.33 Raichur-Bellary (Central Maidan)	2	Raichur, Bellary.
		4.34 South Maidan	5	Chitradurga, Tumkur, Mandya, Bangalore, Kolar.
	4.4 Tamilnad Hills and Uplands	4.35 Malnad	5	Shimoga, Chikmagalur, Hassan, Coorg, Mysore.
		4.41 Nilgiri	1	Nilgiri.
		4.42 Coimbatore Plateau (Kongunad)	4	North Arcot, Salem, Coimbatore, Madurai.
		5.11 Kutch	1	Kutch.
5 The West Coast Plains	5.1 Kutch and Kathiawar	5.12 Kanthadesh	2	Banaskantha, Sabarkantha.
		5.13 Kathiawar	7	Mehsana, Surendranagar, Rajkot, Amreli, Junagadh, Bhavnagar, Jamnagar.
		5.13A Diu	1	Diu.
	5.2 Gujarat Plain and Dangs	5.21 Gujarat Plain	6	Panchmahals, Ahmedabad, Kaira, Baroda, Broach, Surat.

STATEMENT I.1

Natural Regions, Subregions and Divisions of India—concl'd.

Region	Subregion	Division	No. of districts	District
1	2	3	4	5
5 The West Coast Plains—concl'd.	5.2 Gujarat Plain and Dangs—concl'd.	5.21A Daman	1	Daman.
		5.22 Dangs	1	Dangs.
	5.3 Konkan Coastal Lowland	5.31 North Konkan	1	Thana.
		5.31A Dadra and Nagar Haveli	1	Dadra and Nagar Haveli.
		5.32 Ulhas Basin	1	Greater Bombay.
	5.4 Konkan Kerala Transition	5.33 Kolaba-Ratnagiri	2	Kolaba, Ratnagiri.
		5.41 Coastal Karnataka	2	North Kanara, South Kanara.
	5.4A Goa	5.4A Goa	1	Goa.
	5.5 Kerala Coastal Plains—Western and Southern Ghats (South Sahyadri)	5.51 Malabar	3	Cannanore, Kozhikode, Palghat.
		5.51A Mahe	1	Mahe.
		5.52 Kerala Coastal Plain	6	Trichur, Ernakulam, Kottayam, Alleppey, Quilon, Trivandrum.
6 The East Coast Plains	6.1 Tamilnad Coastal Plain	6.11 Nagarcoil Valley	1	Kanyakumari.
		6.12 Dry South East	2	Ramanathapuram, Tirunelveli.
		6.13 Coromandel Coast	7	Thanjavur, Tiruchirapalli, South Arcot, Chingleput, Madras, Pondicherry, Karaikal.
	6.2 Andhra Coast	6.21 Andhra Coastal Plain	7	Nellore, Guntur, Krishna, West Godavari, East Godavari, Visakhapatnam, Srikakulam.
		6.21A Yanam	1	Yanam.
	6.3 Orissa Coast	6.31 Orissa Coastal Plain	3	Puri, Cuttack, Balasore.
7 The Islands	7.1 The Western Islands	7.1 The Western Islands	1	Laccadive, Minicoy and Amindivi Islands.
	7.2 The Eastern Islands	7.2 The Eastern Islands	1	Andaman and Nicobar Islands.

The following is a numerical analysis of the Regions, Subregions, Divisions and Districts. The number of Divisions would have dwindled to 86 had 3.12 and 3.13 been amalgamated with 3.11 and 3.43 with 3.42.

STATEMENT I.2

Numerical analysis of Regions, Subregions and Divisions

	Regions	Subregions	Divisions	Districts
INDIA	7	31	89	337
1 Himalayas	1	3	9	39 (including Sikkim and Bhutan)
2 Northern Plains	1	6	20	94
3 Central Hills and Plateaus	1	8	27	87
4 The Deccan	1	4	15	57
5 The West Coast Plains	1	5	11	37
6 The East Coast Plains	1	3	5	21
7 The Islands	1	2	2	2

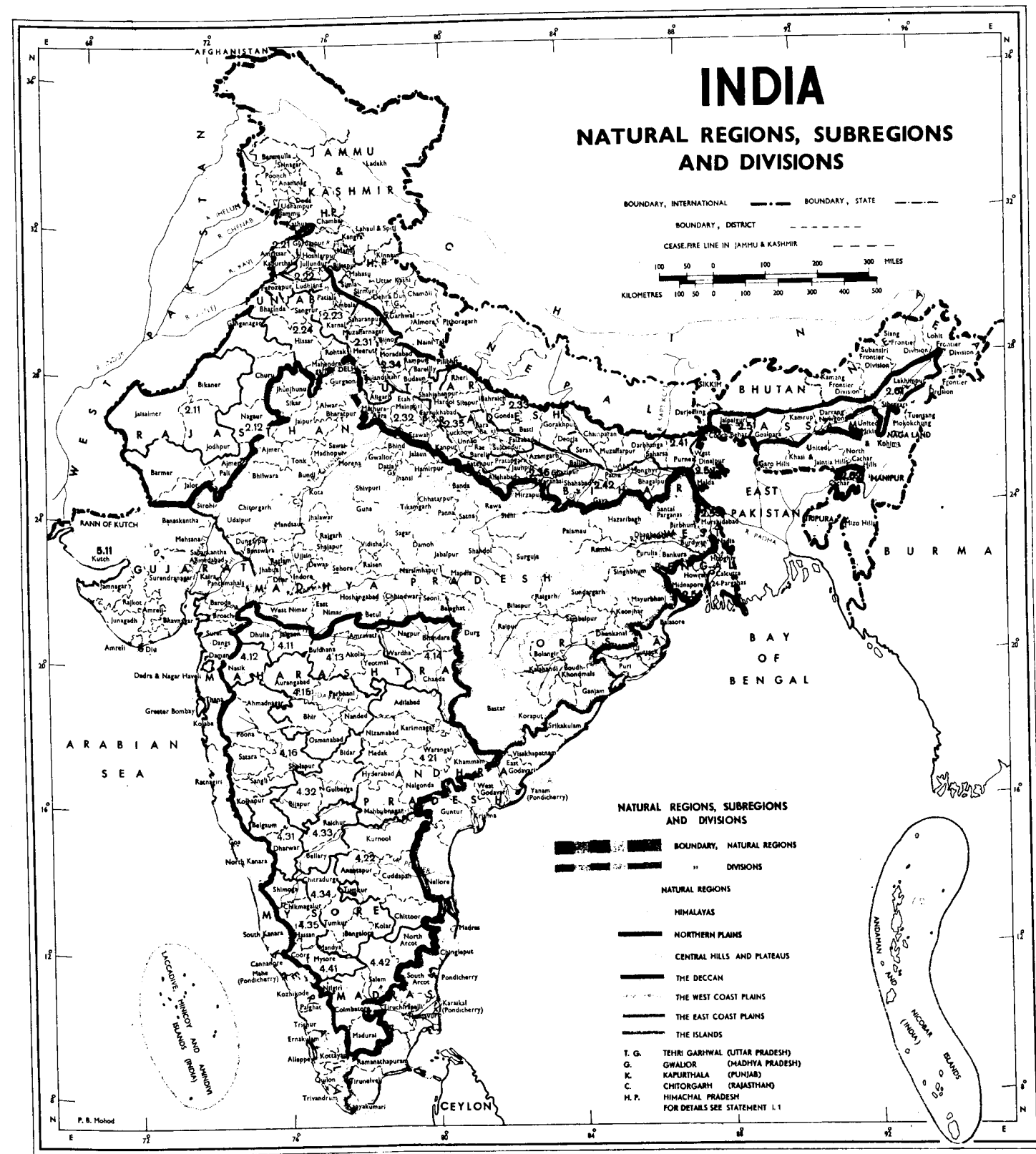
The following statement gives the distribution of area and population of the 7 Natural Regions of India.

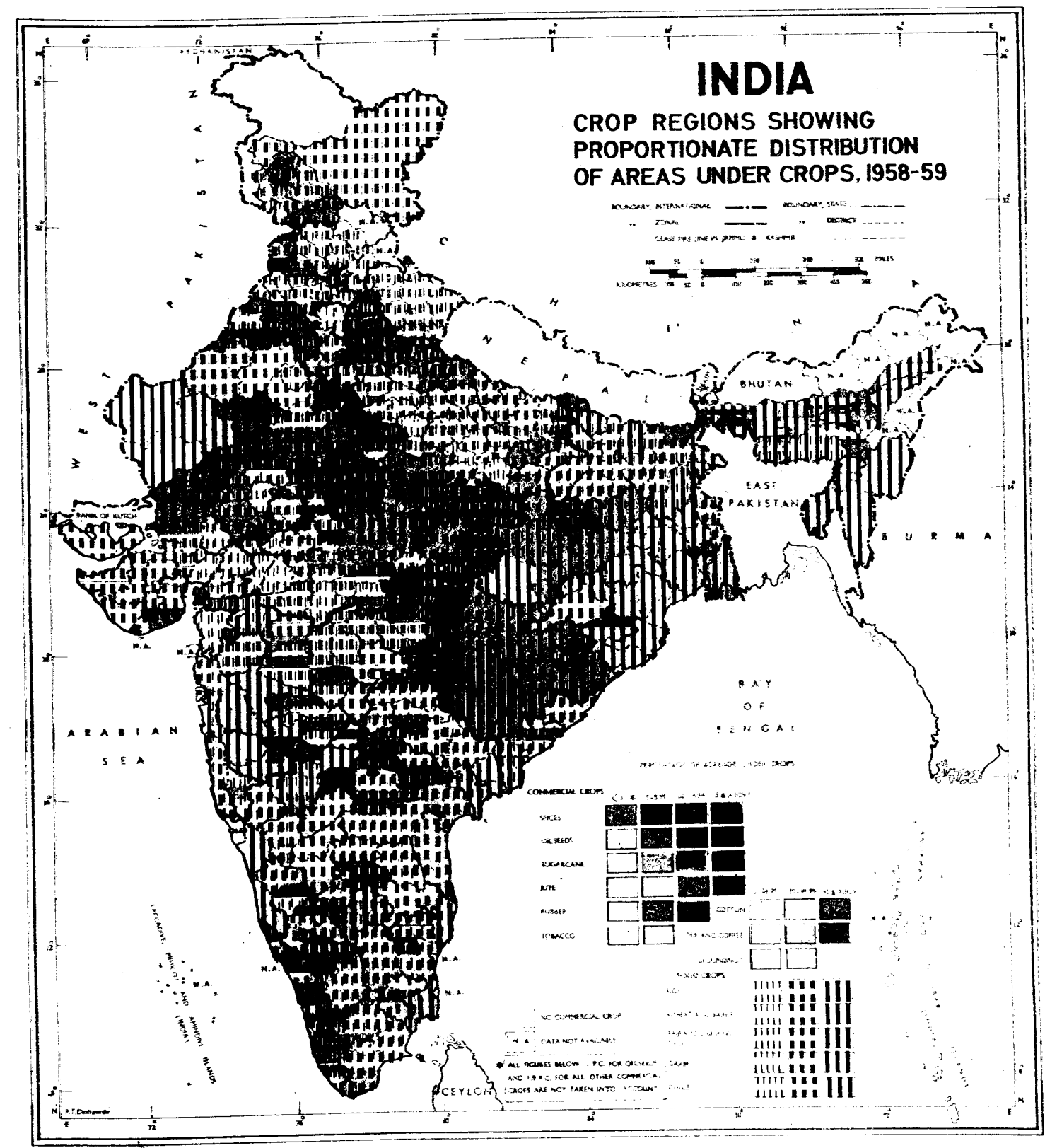
STATEMENT I.3

Area and population of Regions

Region	Area in square miles supplied by the Surveyor General	Population	Percentage shared by each Region	
			Area	Population
INDIA	1,232,561*	439,234,771	100·00	100·00
1 Himalayas	171,215*	13,943,898	13·89	3·17
2 Northern Plains	272,361	162,021,323	22·10	36·89
3 Central Hills and Plateaus	336,433	85,438,548	27·30	19·45
4 The Deccan	270,880	85,969,395	21·98	19·57
5 The West Coast Plains	107,665	49,185,358	8·73	11·20
6 The East Coast Plains	70,781	42,588,593	5·74	9·70
7 The Islands	3,226	87,656	0·26	0·02

*Excludes non-censused area of 32,358 sq. miles of Jammu and Kashmir.





INDIA
DISTRICTWISE DISTRIBUTION OF MAJOR LANGUAGES
1961

BOUNDARY, INTERNATIONAL BOUNDARY, STATE
" ZONAL " DISTRICT
CEASE - FIRE LINE IN JAMMU & KASHMIR

100 50 0 100 200 300 MILES
KILOMETRES 100 50 0 100 200 300 400 500

ARABIAN SEA
BAY OF BENGAL
EAST PAKISTAN
BURMA
CEYLON

INDO - EUROPEAN FAMILY
DARDIC OR PISACHA PERCENTAGE
90 + 60-89.9 30-59.9 <30

LANGUAGES SPOKEN SUBSIDIARY TO MOTHER TONGUE HAVE NOT BEEN TAKEN INTO ACCOUNT

KASHMIRI
INDO ARYAN
KARATHI
KONKANI
ORIYA
BHARI
BENGALI
ASSAMESE
HINDI
URDU
PUNJABI
GUJARATI
BHILI
KHANDSHI
RAJASTHANI
PAHARI - UNSPECIFIED
NAPALI
KURMAUNI
GARHWALI
SIRMAURI
HARDEALI
BHARMAURI / GADDI
CHAMEALI
CHURABI
SINJHI / KACHHBI

AUSTRO - ASIATIC FAMILY
PERCENTAGE
90 + 60-89.9 30-59.9 <30

KHASI
NICOBARESE
MUNDA
SANTALI
MUNDARI
BHUMJI
HO
KORKU
SAVARA

TIBETO - CHINESE FAMILY
TIBETAN - HIMALAYAN
TIBETAN/BHUTAN
LADAKHI
LAHULI
SIKKIM BHOTIA
KANAUJI
LEPCHA
BHOTIA
UNSPECIFIED
BALTI

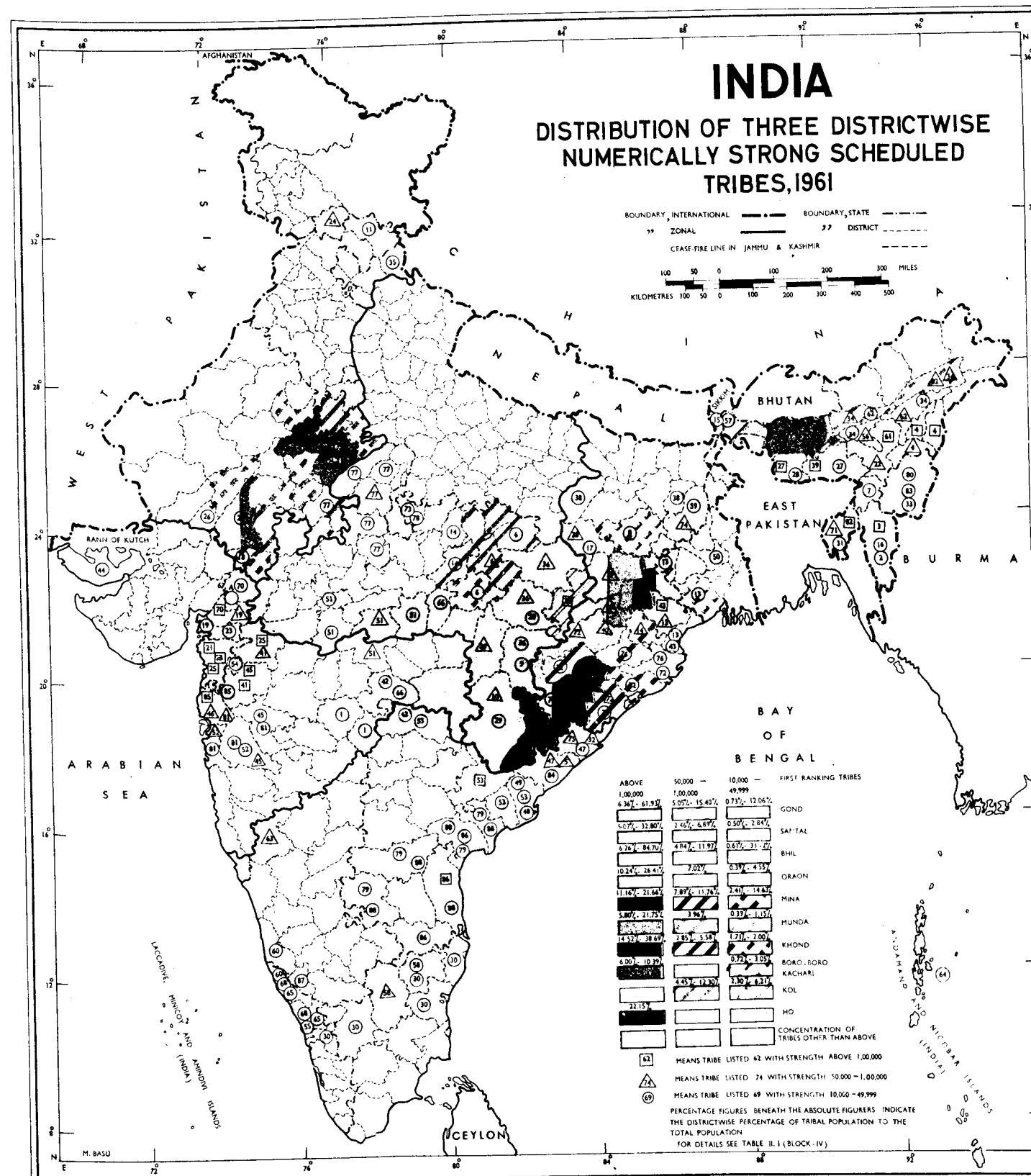
DRAVIDIAN FAMILY
TAMIL
MALAYALAM
KANNADA
COORG / KODAGU
TULU
TELUGU
GONDI
KURUKH / ORAON
KUI
ONGE

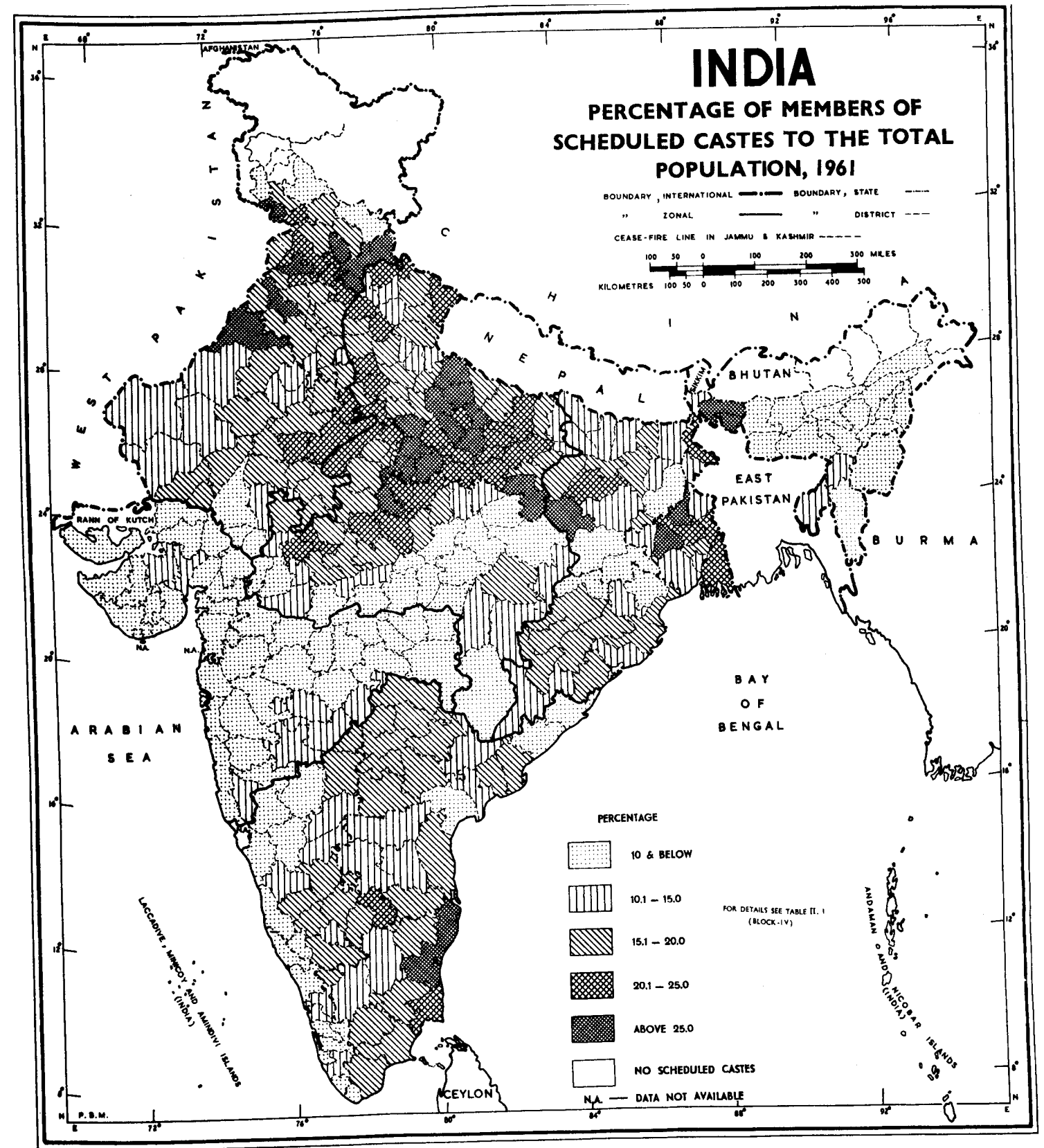
NORTH ASSAM
PERCENTAGE
90 + 60-89.9 30-59.9 <30

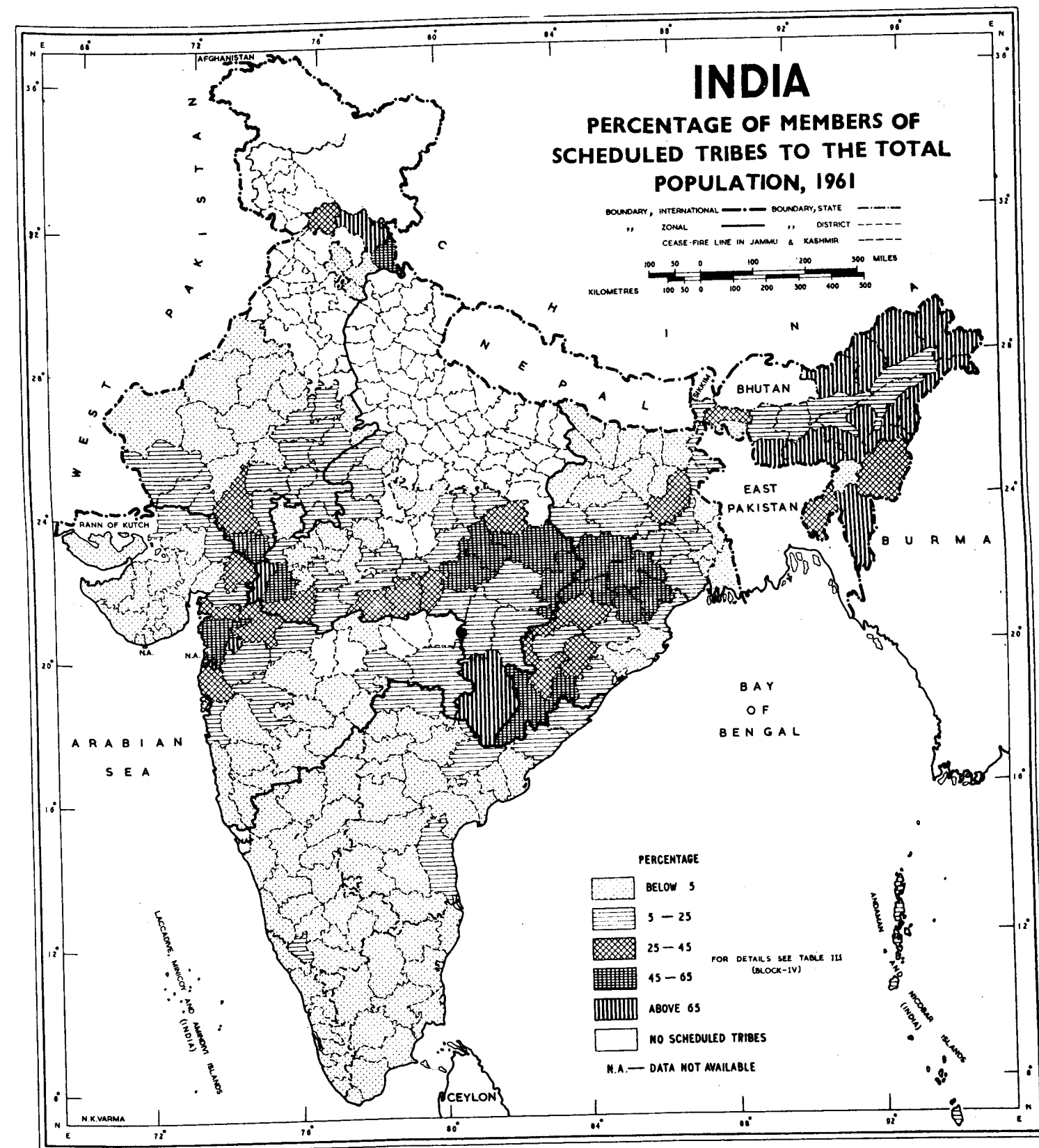
NEFA
LANGURGES
ASSAM
BURMESE
GARO
BODO/BORO
DIPHASA
NAGA
LANGUAGES
HAKIR
MANIPURI / MEITHEI
LUSHAI/MIZO

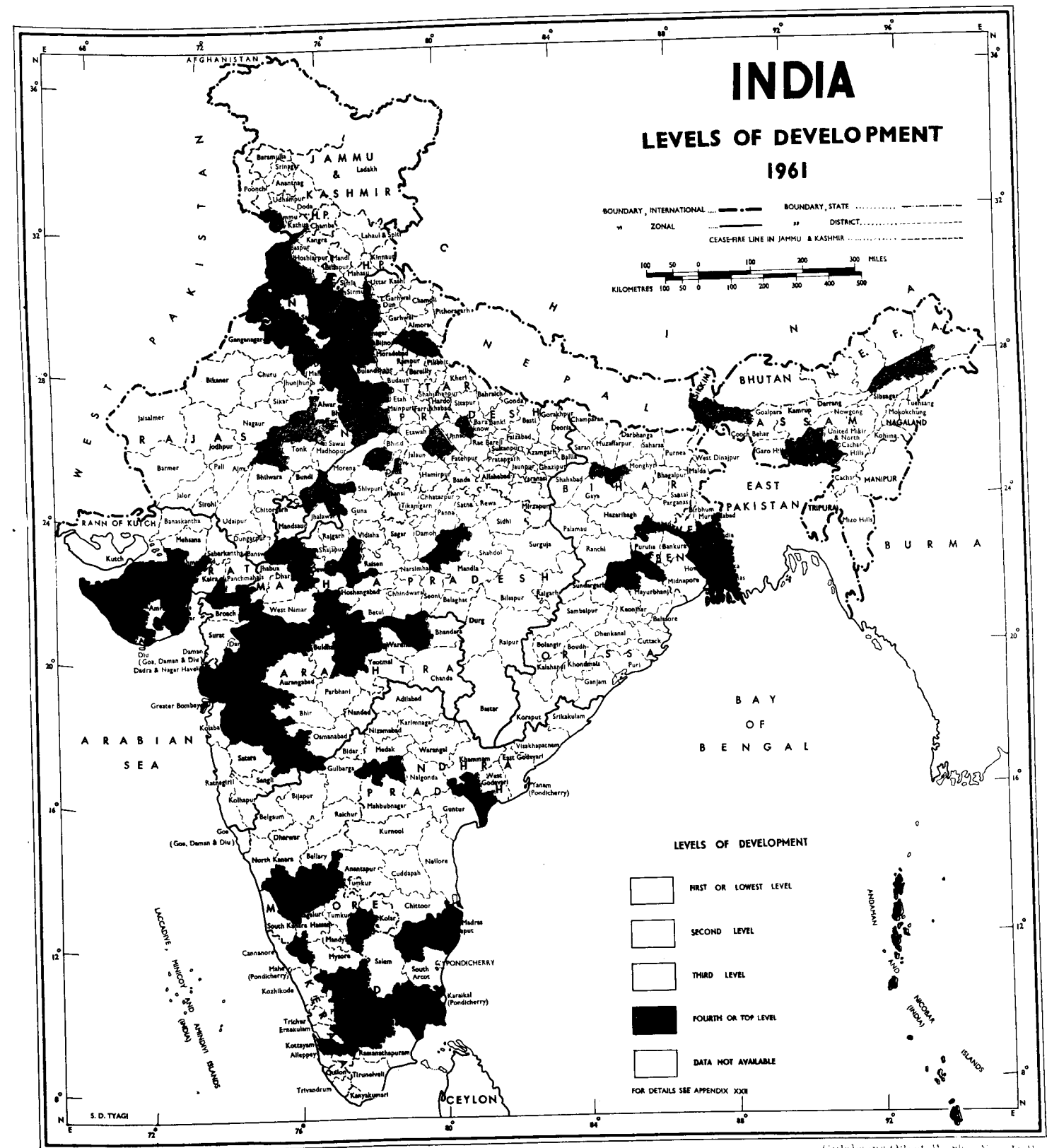
SHADRAWAYE languages under Pahari group spoken in Doda district by 12% of its population

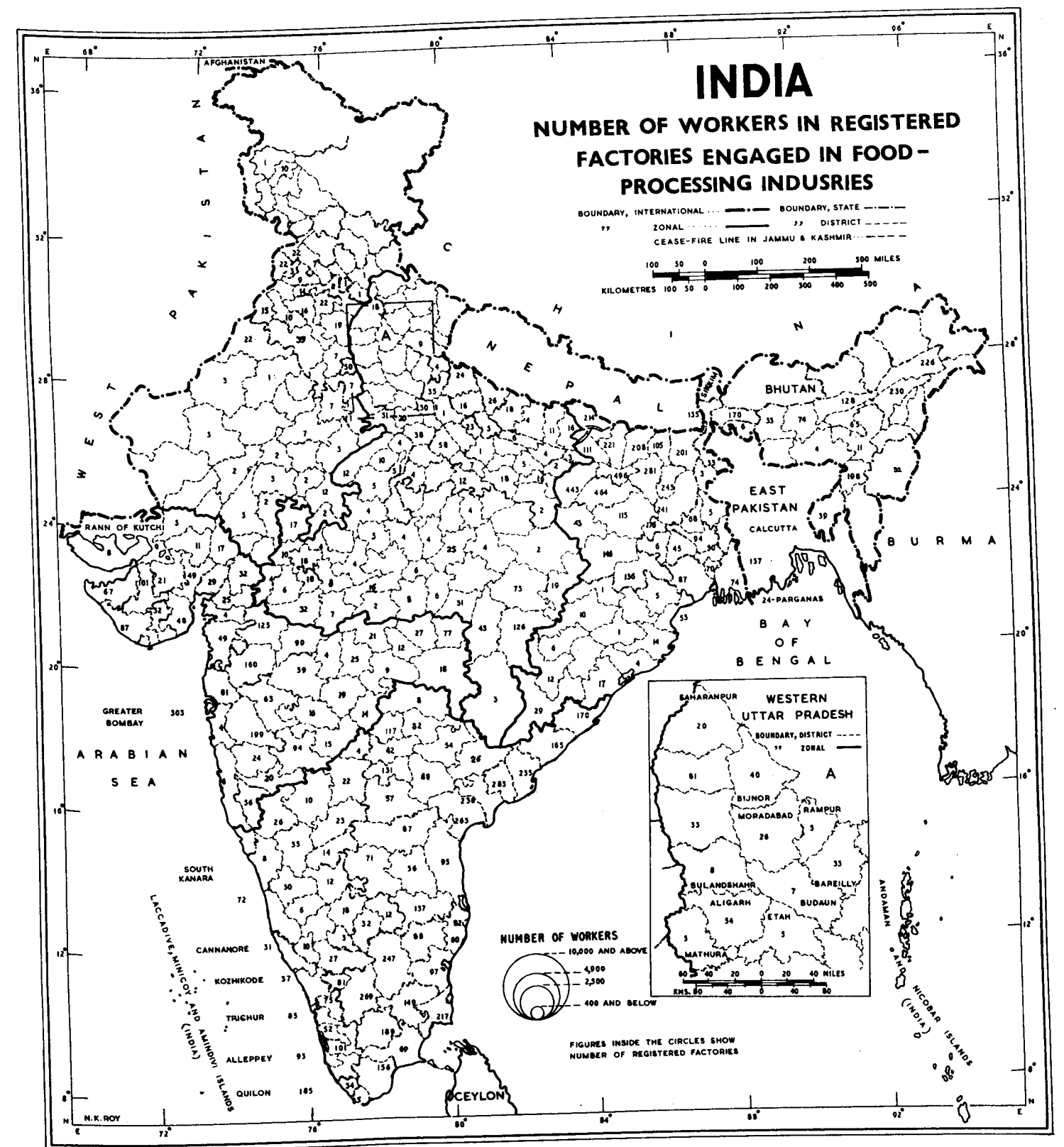
printed by Anandabsons Offset Works, New Delhi.

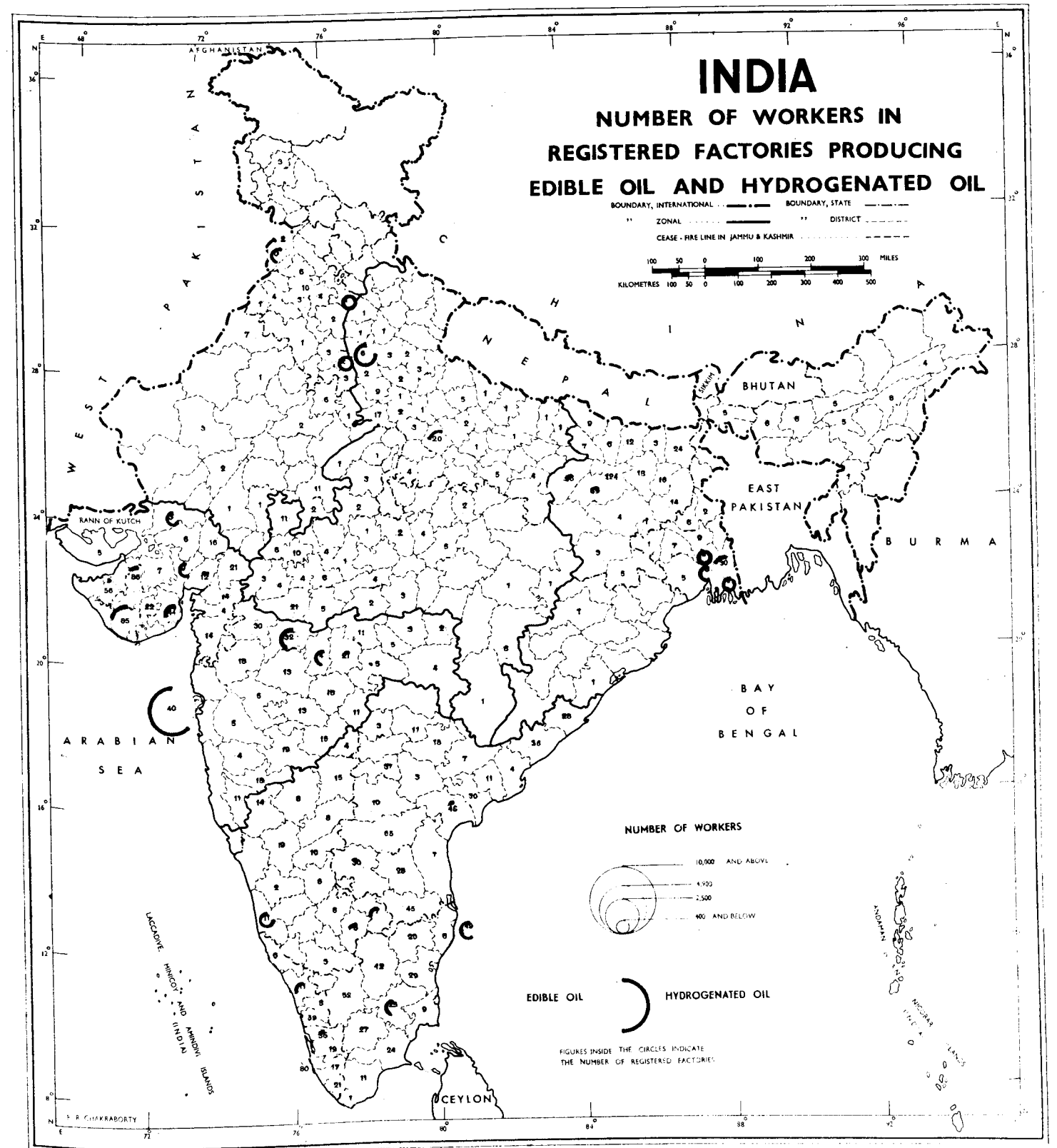


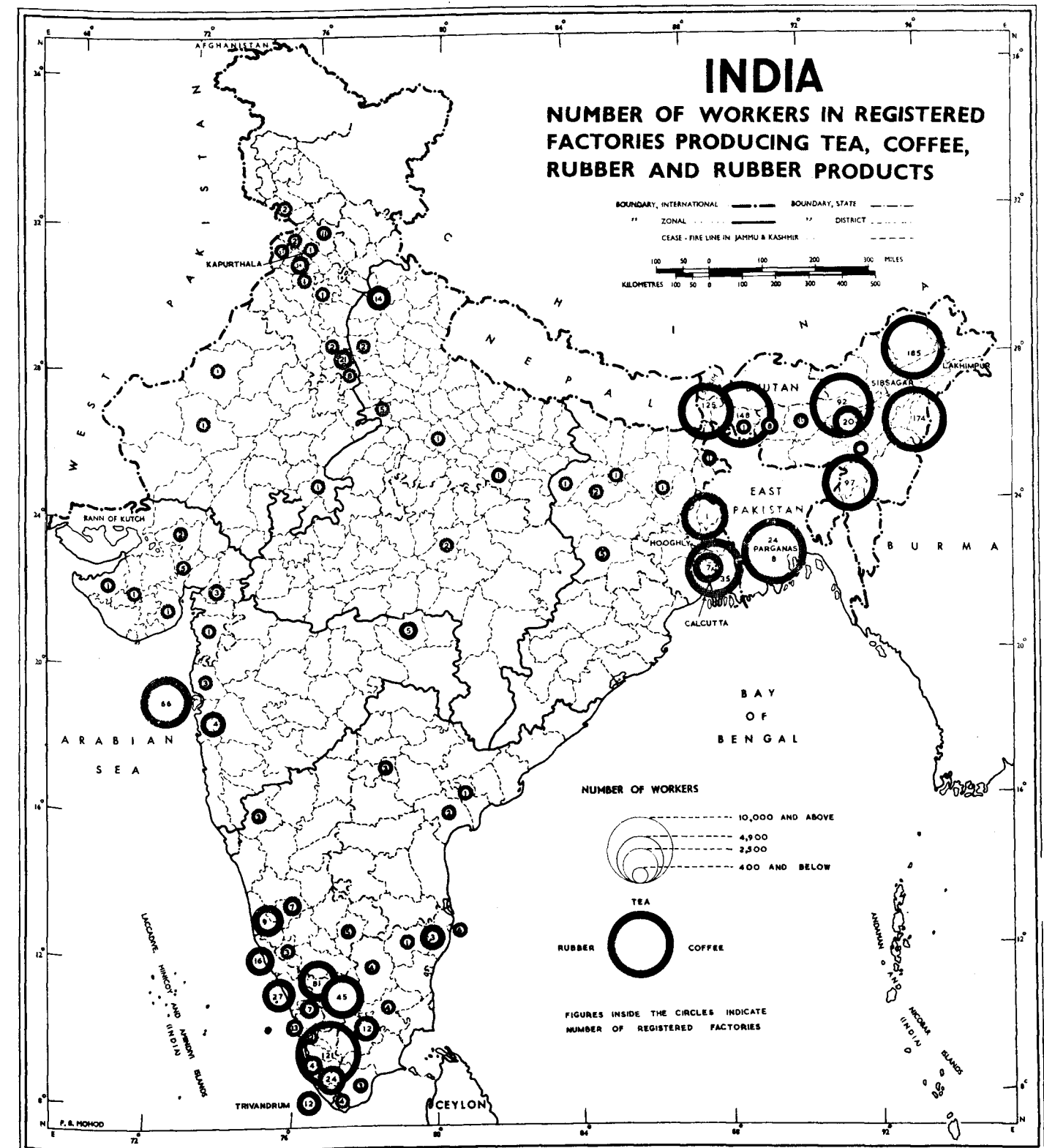


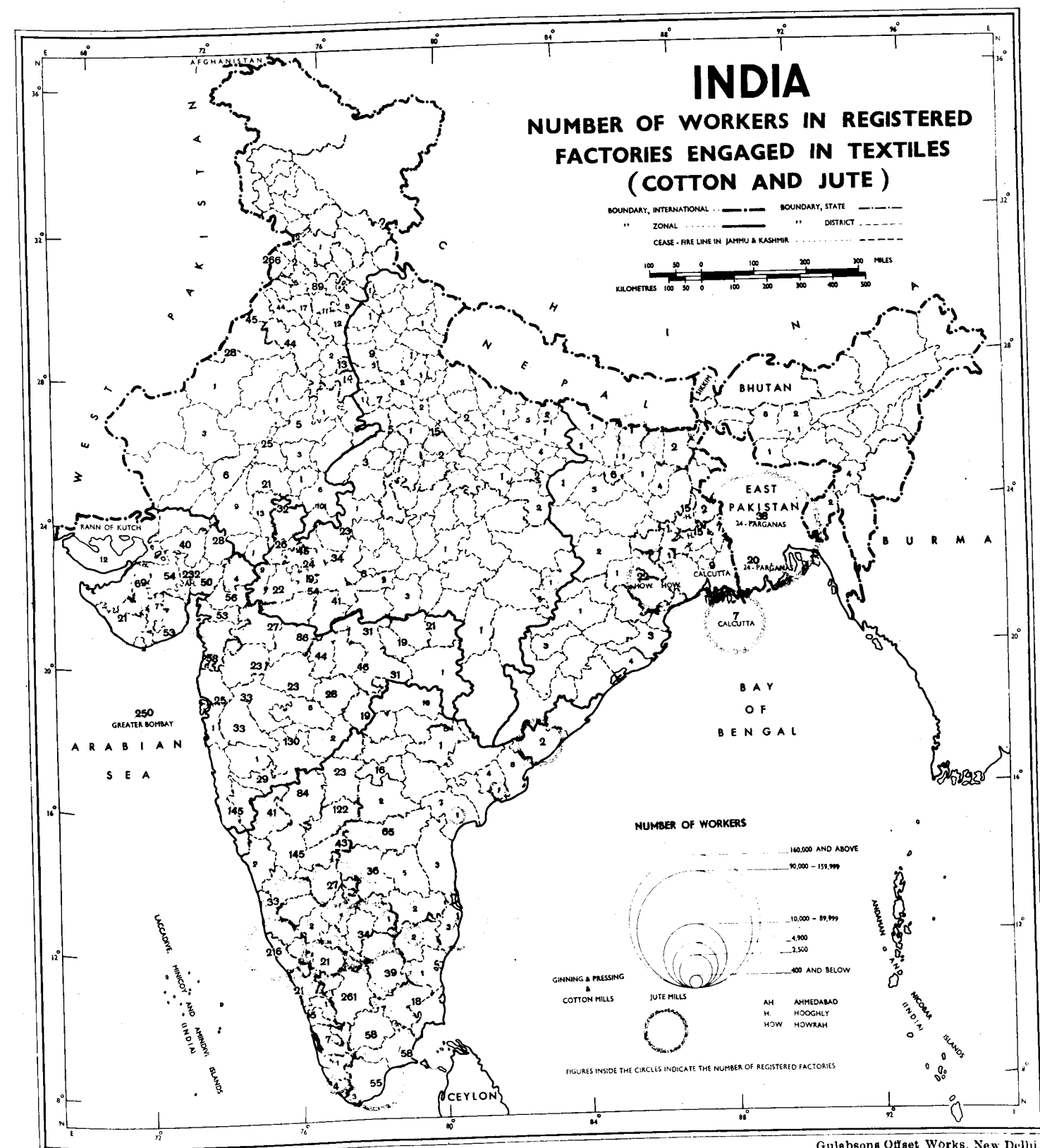


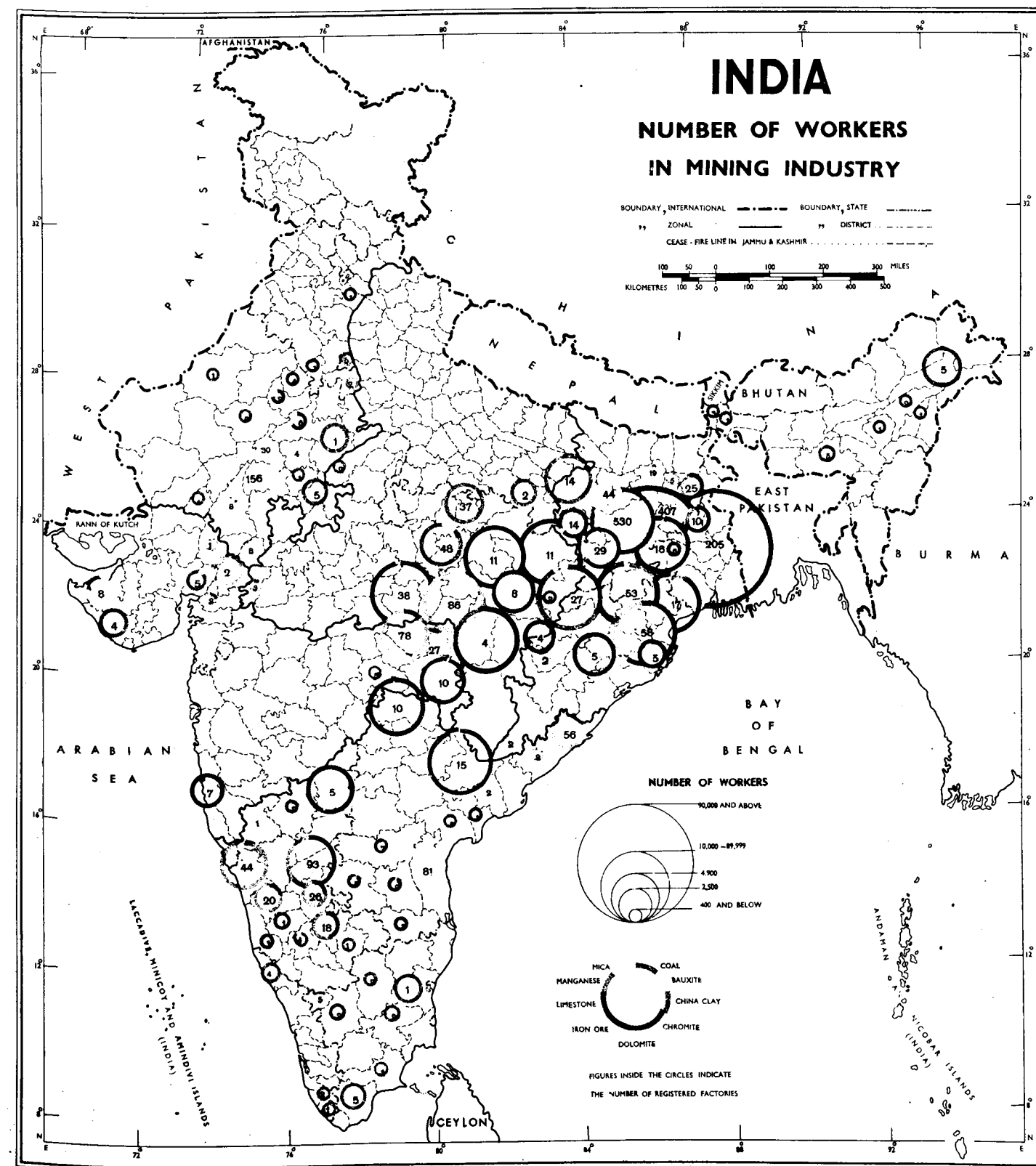


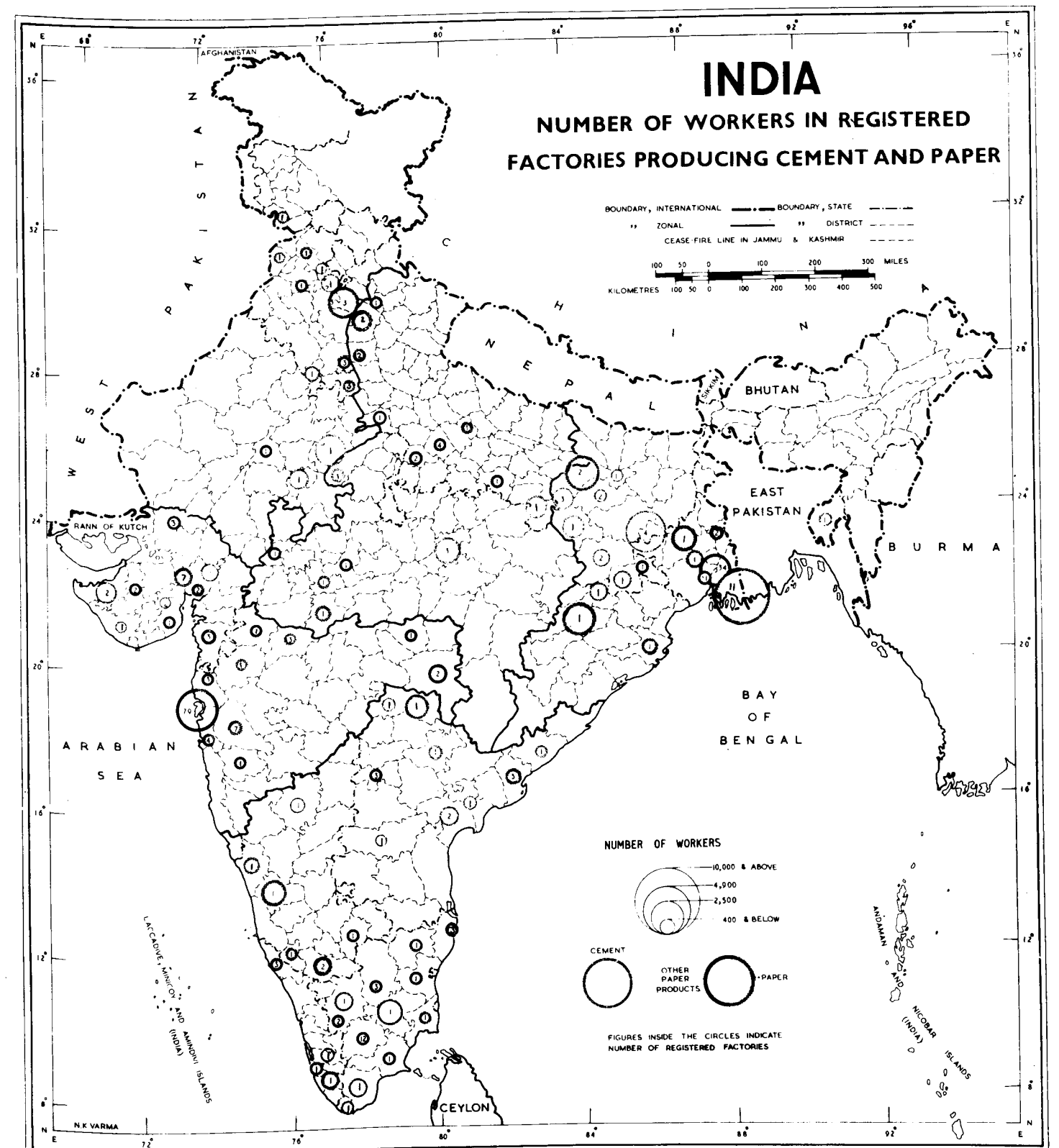






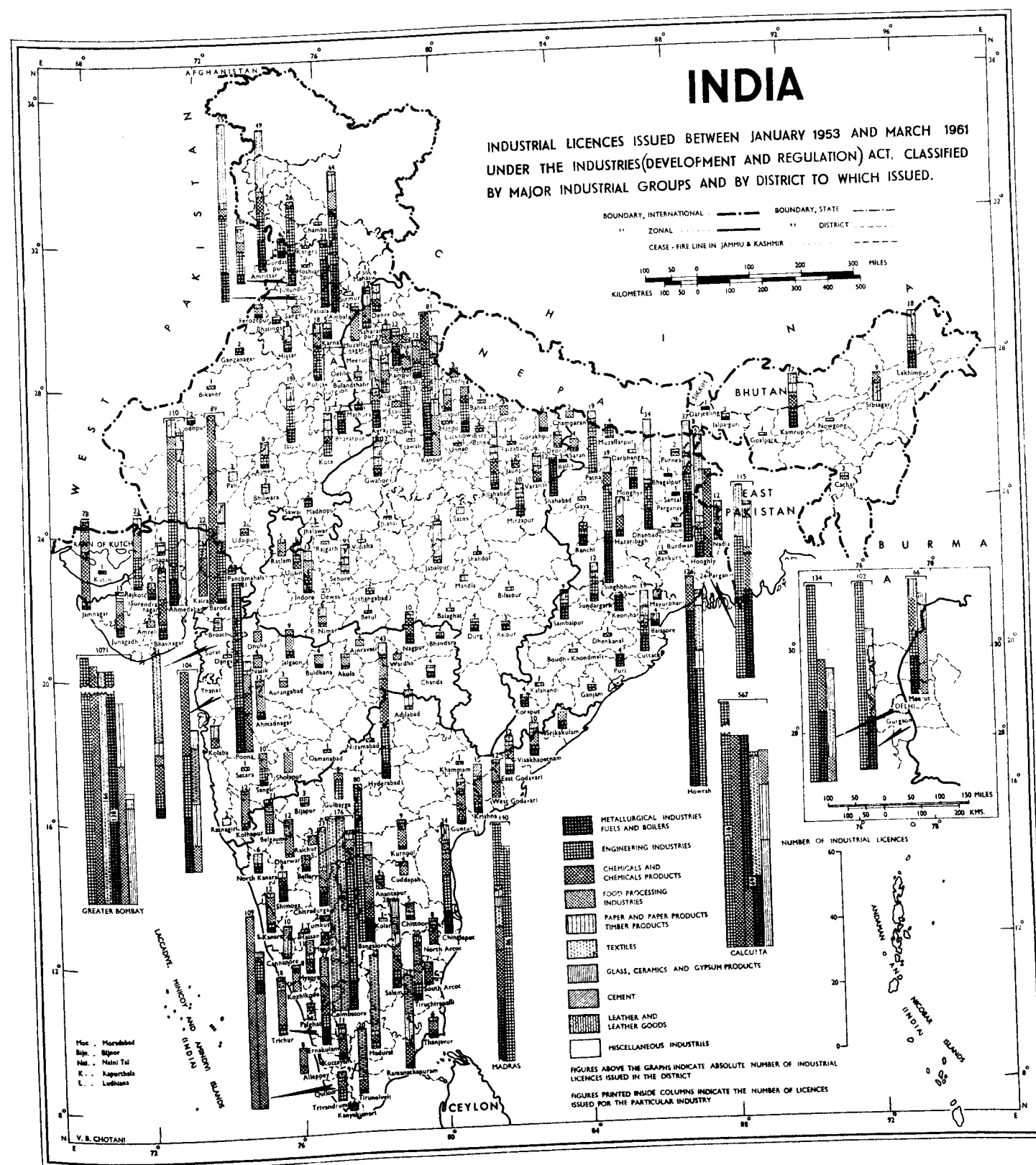


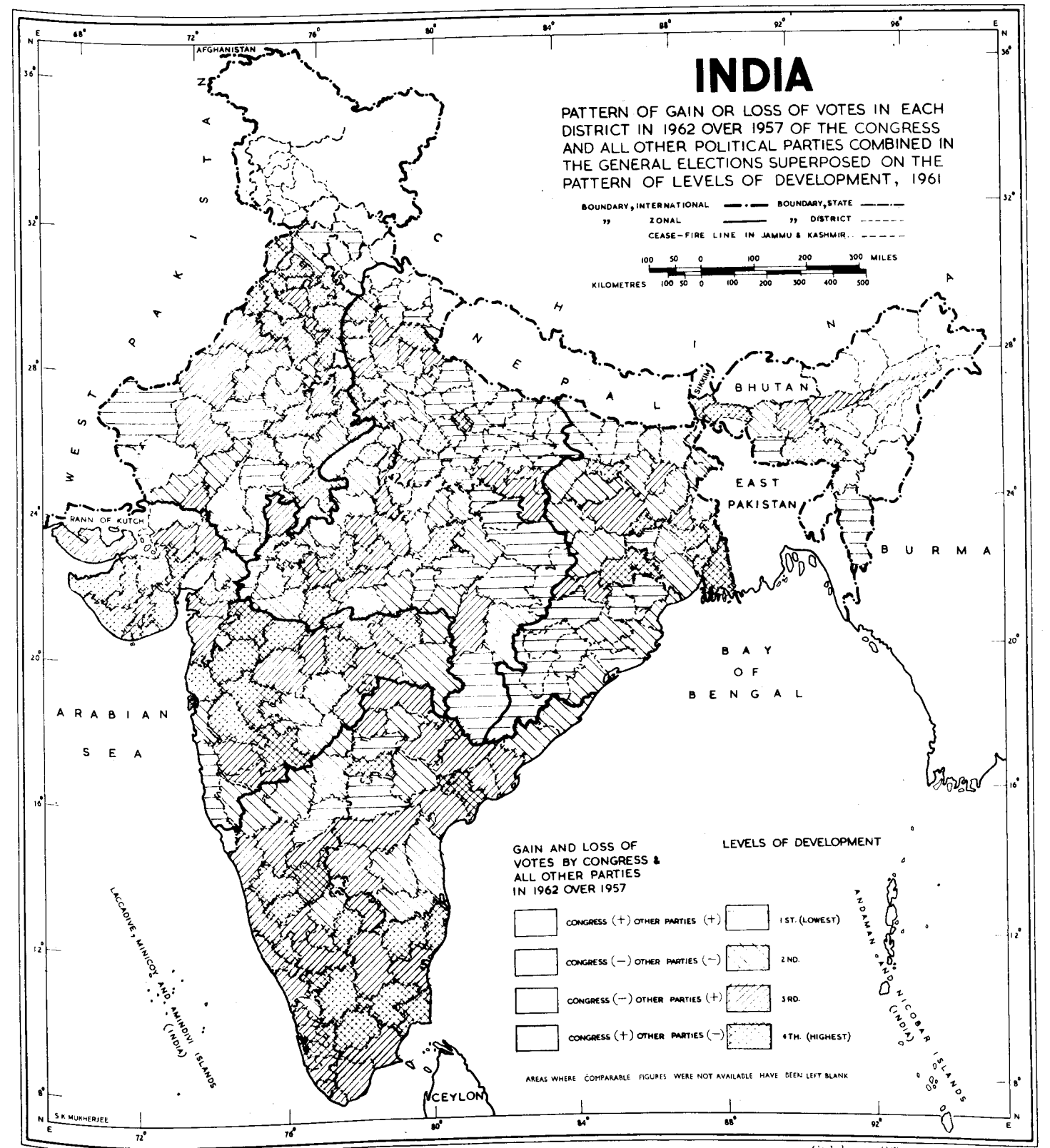


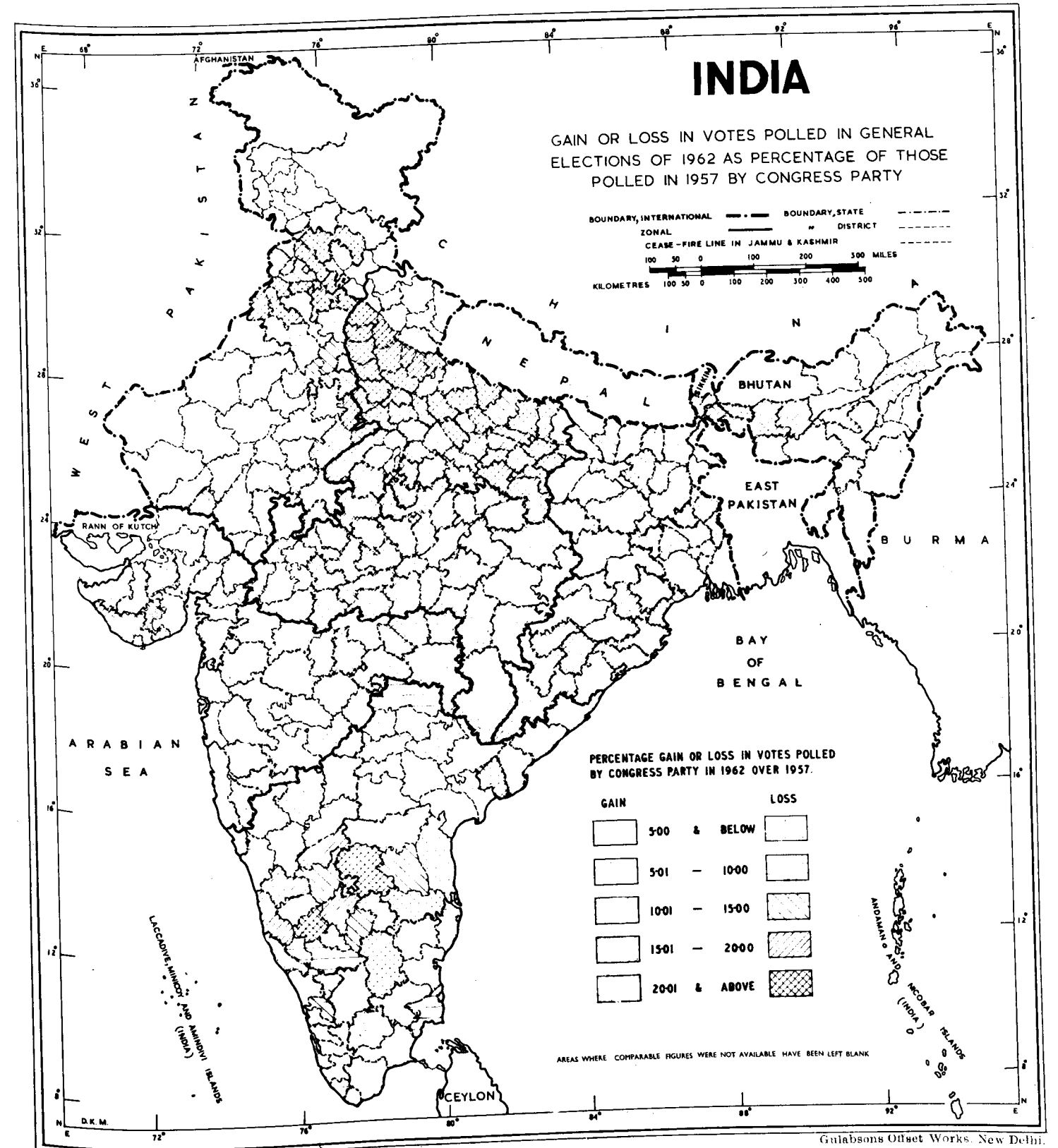


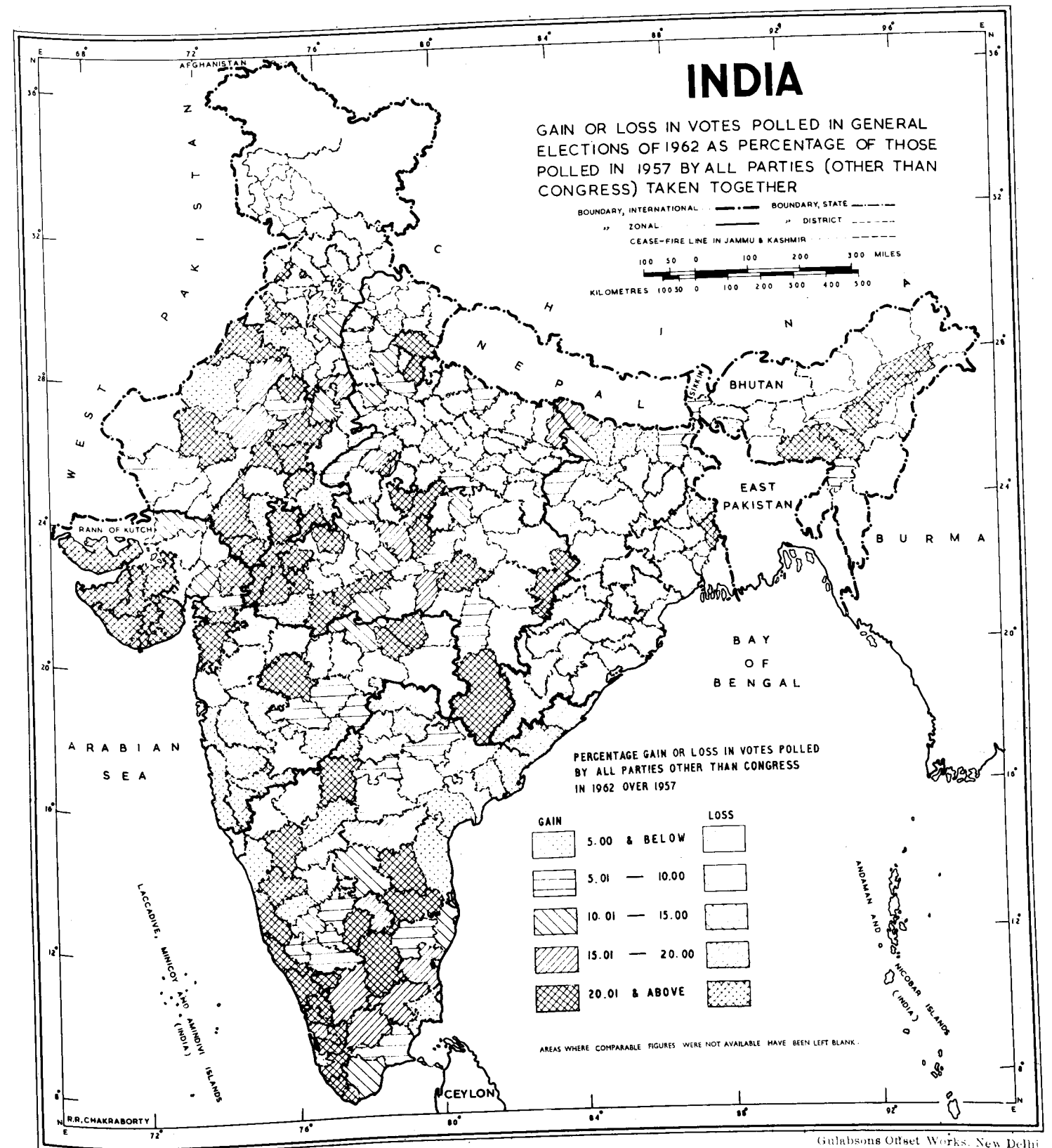
INDIA

INDUSTRIAL LICENCES ISSUED BETWEEN JANUARY 1953 AND MARCH 1961
UNDER THE INDUSTRIES(DEVLOPMENT AND REGULATION) ACT, CLASSIFIED
BY MAJOR INDUSTRIAL GROUPS AND BY DISTRICT TO WHICH ISSUED.









CHAPTER II

THE RANKING DEVICE

Table II. I is divided into several convenient blocks. The contents of each block are given below:

Information prepared for each district of India

Block I

A. *Geology, Topography, Rainfall, House Type, Language and Scheduled Tribes and Castes*

Continuous Serial	Block Serial	
1	1	Geological features
	2	Topography
2		(a) Physical features
3		(b) Rivers and streams
4		(c) Slope and drainage
	3	Altitude (Range)
5		(a) Minimum
6		(b) Maximum
7	4	Rainfall
8	5	Type of building by wall and roof material
9	6	Numerically major language (Name and percentage to population)
10—12	7	Names and strength of three major Scheduled Tribes where their number exceeds 10,000 each
		B. <i>Soils, Crops and yield of Rice</i>
13	8	Soil
14—25	9	Local names of types of soil and incidence of revenue (wherever available); 12 columns (limited to six types, minimum and maximum for each)
26	10	Food crops (with percentage of land under each crop limited to 5 per cent and above of gross area sown)
27	11	Cash crops (with percentage of land under each crop limited to 5 per cent and above of gross area sown)
28	12	Yield of clean rice per standard acre in maunds (wherever available)

Block II

Agricultural infrastructure

29	1	Area under double crop per cent of net area sown
30	2	Gross area irrigated per cent of gross area sown
31	3	Households cultivating 0-5 acres per cent of all cultivating households
32	4	Pure tenancy holdings per cent of all cultivating households
33	5	Hired attached workers per cent of all workers at cultivation
34	6	Cultivators and agricultural labourers per 100 acres of net area sown
35	7	Cultivators and agricultural labourers per cent of rural working population

Block III*Participation rates in traditional sector*

- 36 1 Male participation rate, 1961
- 37 2 Female participation rate, 1961
- 38 3 Males working in agriculture per cent of male working populations 1961
- 39 4 Single and family workers in non-agricultural per cent of total non-agricultural workers, 1961
- 40 5 Workers in household industry per cent of total working population, 1961

Block IV*Potential of human resources*

- 41 1 Persons per sq. mile
- 42 2 Females per 1,000 males
- 43 3 Rural population per 1,000 of total population
- 44 4 Percentage increase of population, 1951-61
- 45 5 Immigrants per cent of total population, 1961
- 46 6 Children 0-4 per cent of women aged 15-44, 1961
- 47 7 Crude literacy rate, 1961
- 48 8 Scheduled Tribe population per cent of total population, 1961
- 49 9 Scheduled Caste population per cent of total population, 1961

Block V*Distributive trade, manufacturing and infrastructure*

- 50 1 Workers in retail trade per 1,000 of total population
- 51 2 Workers in manufacturing per 1,000 of total population
- 52 3 Census houses used as business houses or offices per 1,000 of all census houses
- 53 4 Census houses used as community centres per 1,000 of all census houses
- 54 5 Census houses used as restaurants and eating houses per 1,000 of all census houses
- 55 6 Census houses used as rest houses per 1,000 of all census houses
- 56 7 Census houses used as school houses per 1,000 of all census houses
- 57 8 Census houses used as medical institutions per 1,000 of all census houses
- 58 9 Miles of surfaced roads per 1,000 sq. miles of area

Block VI*Organised industrial activity in the modern sector*

- 59 1 Establishments run on electricity per cent of all industrial establishments
- 60 2 Workers in registered factories per cent of all workers
- 61 3 Degree of congestion in housing
- 62 4 Whether headquarters town (1) generates own electricity or (2) is connected to grid or (3) both or (NE) none
- 63 5 Industrial specialization in organised sector. Five industries graded according to declining ratio

Briefly, therefore, the blocks bring out the following broad features:

Block I . . . General ecology

Block II . . . Agricultural infrastructure

Block III . . . Participation rates with special reference to traditional economy

Block IV . . . Potential of human resources

Block V . . . Distributive trade, manufacturing and infrastructure

Block VI . . . Organised industry in the modern sector

The table thus seeks to bring into focus not only the dominant natural features but the essential demographic picture in its relation both to the local social frame and the level of economic activity.

The assumption behind this presentation is simple enough. I have proceeded on the premise that given a certain degree of agricultural and general infrastructure along with a potential of human and other resources, there is bound to be a certain level of economic development and of organised industrial activity in the modern sector.

At the outset it is important to point out that I do not pretend that all the indices are either essential or the best that could be chosen. On the contrary I was compelled to abandon certain more obvious and significant indices merely because they were difficult to collect with reference to a particular point of time. Not having yet devised a system of statistical weights I chose safety in a large number of indices. I believe it will be possible in later exercises to weed out a number of indices by means of component analysis and replace some of the present ones by more significant ones. I consider this a purely preliminary exercise which is going to print not so much for its own worth but for the value of the data.

Block I. General ecology.

It is now necessary briefly to explain the reason why each index was chosen. The first 12 columns very obviously bring together the composite ecological picture of each region, subregion and division: the

geological and topographical features, the rainfall, water supply, drainage, the type of building associated with each type of rainfall, terrain and crop, and the linguistic and ethnic composition. The next 16 columns (13-28) describe the nature of the soil and the incidence of revenue depending on the nature of the soil and an account of human endeavour and skill in qualitatively and quantitatively variegating the agricultural produce. Column 28 (yield of clean rice per standard acre in maunds wherever available) affords some measure of the quality of tillage and the efficiency of agricultural practices, of inputs of various kinds and the maintained level of soil nutrients.

Block II. Agricultural infrastructure.

Col. 29. *Area under double crop per cent of net area sown* was regarded as a composite end-expression of effort in three directions: area, yield and cropping pattern and an urge for cash crops.

Col. 30. *Gross area irrigated per cent of gross area sown* was regarded as an indirect measure of total of inputs that go with irrigation, viz., better technique, manures and fertilizers, seed and a higher level of farming activity and the urge for cash crops.

Col. 31. *Households cultivating 0.5 acres per cent of all cultivating households.* This was expected to provide an estimate of agriculture carried on primarily by subsistence-oriented peasant households

and a measure of the built-in depressor in Indian agriculture.

Col. 32. *Pure tenancy holdings per cent of all cultivating households* was expected to provide a measure of the built-in depressor in Indian agriculture, the concentration of ownership and of control.

Col. 33. *Hired attached workers per cent of all workers at cultivation* was intended to provide a measure of crop production for the market and of regional labour supply.

Col. 34. *Cultivators and agricultural labourers per 100 acres of net area sown* was intended as an index of pressure of family, free and unfree agricultural labour on the crop bearing soil.

Col. 35. *Cultivators and agricultural labourers per cent of rural working population* was intended as a general index of the two major sectors, agriculture and non-agriculture.

Block III. Participation rates in Traditional Sector.

All the indices in this block were intended as indices of the strength of traditional enterprise.

Block IV. Potential of Human Resources.

Col. 41. *Persons per sq. mile.* This is a generally recognised index.

Col. 42. *Females per 1,000 males.* A general index of migration.

Col. 43. *Rural population per 1,000 of total population.* An index of urbanization.

Col. 44. *Percentage increase of population 1951-61* intended as a composite index.

Col. 45. *Immigrants per cent of total population 1961.* A measure of the pull factor operating in certain areas.

Col. 46. *Children 0-4 per cent of women aged 15-44.* A rough index of the ability of the population to multiply.

Col. 47. *Crude literacy rate, 1961.* A general index of cultural and technological advance.

Col. 48-49. *Scheduled Tribe and Scheduled Caste Population.* An index of yet largely untapped human reserves.

Block V. Distributive trade, manufacturing and infrastructure.

Cols. 50-58. These are self-explanatory. It is possible that in later exercises I shall like to weed out some columns or replace them.

Block VI. Organised industrial activity in the modern sector

Col. 59. *Establishments run on electricity per cent of all industrial establishments.* I have included all manufacturing, repairing and servicing establishments that are run on electricity inclusive of single person establishments on the ground that the use of electricity itself means a clean break with the past, technological and industrial advance including adoption of new tools and scales of production.

Col. 60. *Workers in registered factories per cent of all workers* may be regarded as a good index of modernization.

Col. 61. *Degree of congestion in housing.* A good general index of economic activity in India.

Col. 62. *Whether headquarters town (1) generates own electricity or (2) is connected to grid or (3) both or (NE) none.* Connexion to grid is an important consideration and a firm qualitative index of future growth.

Col. 63. *Industrial specialization in organised sector. Five industries graded according to declining ratio.* This is a qualitative index.

The degree of reliability of the data varies not only from one item to another but from one geographical area to another for any particular item. It is important to bear this in mind before one proceeds to apply refined calibrations which the traffic may not bear. For obvious reasons, therefore, it is wholesome and expedient to keep the ranking technique as simple as possible. The method is briefly described below.

It was decided to leave out of statistical use the data of Block I as being largely descriptive and qualitative. Thereafter for each column in Blocks II to VI, except for those for housing congestion and industrial pattern, the districts were arranged in quartiles in order of their observed values. Each quartile was thereafter split as much as possible in two equal halves of values. In some cases the marks (1 to 8 or 1 to 4) were directly related to the ascending values of a cell on the assumption that a high value reflected credit on a district while a low value signified the reverse. In some others the eighths or fourths were inversely related to the value of a cell, a high eighth or fourth value being associated with a low actual value of the cell concerned. This too was a matter of simple rules; e.g., eighth values and actual values were inversely related in the column devoted to households cultivating 0.5 acres per 100 of cultivating households, but were directly related in the column devoted to gross area irrigated as percentage of gross area sown. I have retained a positive grading of proportions of members of Scheduled Tribes and Castes according to their strength—high eighths for high ratio and *vice versa*—although there may be more than one opinion on the subject because there is nothing to dispute the long-term value of this asset. Greater Bombay, Calcutta and Madras Corporation, which have no rural areas, have been placed as a matter of course in the highest level of development.

The next step was to pool the eighth values obtained for all the columns together by this process of ranking and obtain their total score for each district. All the districts, thereafter, were freshly arranged in quartiles in ascending order of their total scores. This rearrangement and the position of each district in terms of its total score formed the basis of the final ranking in the four levels of development presented in the next chapters.

I must hasten at this point to mention the obvious shortcomings from which this technique suffers. First, it oversimplifies the scoring and loads the dice in favour of those indicators which are positively associated against those others which are negatively associated. Secondly, the assigning of integer rank values to quantitative data split up into quartiles or octiles and then adding up integer rank values again for a large number of characteristics introduces an element of arbitrary and subjective weighting. This may easily result in the accumulation of small differences around the margins of quartile classes, particularly in the twilight zones of octiles 2 and 3 and octiles 6 and 7 and distort the true picture of variability. Ideally, therefore, such an array of quantitative data should be subjected to analysis in search of principal components, first, to derive the implicit weights, which one cannot really do without and, secondly, to reduce the number of effective characteristics. It is proposed to undertake such analysis in the near future and present the modified rankings in a later part of the General Report for 1961.

But the present device, too, has its points. While it possibly distorts the scores at either end, the middle zones should be fairly dependable. Even in the terminal regions, as has been observed above, the distortions on account of marginal accumulations will be largely limited to two sections: the ones between

octiles 2 and 3 and octiles 6 and 7. In the following chapters we shall examine whether this technique seems to talk practical politics and helps demarcate areas and districts where human effort has or has not got the better of nature. It should also be able to put the finger on the strong and weak points in the life of each district.

In the chapters that follow I propose to apply several validity tests: (1) Whether values in agriculture (block II) and distributive trade, manufacturing and social and economic infrastructure (block V) are positively associated with values in organised industrial activity in the modern sector (block VI). Also the nature of association of participation rates in the traditional sector (block III) and that of potential of human resources (block IV) with blocks II, V and VI. The nature of this association is sought to be brought out by arranging the total score for each of the first four blocks into three groups: (i) Low or A in which the total score for the block is less than 20; (ii) Medium or B in which the total score for the block lies between 20 and 30; and (iii) High or C in which the total score for the block exceeds 30. The fifth block is similarly arranged in three groups:

(1) Low or A in which the total score for the block is less than 5; (2) Medium or B in which the total score is 5 to 10; and (3) High or C in which the total

score for the block exceeds 10. Where aggregates of like ranks in one block are matched by aggregates of like ranks in another, the association is taken to be positive.

(2) Whether the pattern of shift of male participation rate from agriculture to non-agriculture is generally positively associated with the levels of development as worked out by this ranking device.

(3) Whether the concentration of registered factories and organised industrial activity in the modern sector occurs in districts ranked in the higher levels of development.

(4) Whether the districts ranked in the higher levels of development have been able to attract the bulk of new industrial licenses issued under the Industries (Development and Regulation) Act between 1953 and 1961.

None of these tests appears to have been applied before which offers itself as a reason for presenting this analysis, although I am only too mindful of the inadequacy of my treatment. As I have explained above, I do not regard the methodology as anything but tentative, despite the fact that the results look encouraging. At the same time I think the data are too valuable and exciting to be denied to other research workers in this and other allied fields, and I look forward to their comments. The following picture of the four levels of development emerges on the map of India.

STATEMENT II.1

Natural Subregion 1	Blocks of contiguous districts 2	Isolated or discontinuous districts surrounded by districts of other levels of development 3
<i>The first or lowest level of development.</i>		
1.11 Jammu and Kashmir.	Ladakh, Baramulla, Poonch, Anantnag, Doda, Udhampur, Kathua.	
1.12 Himachal Pradesh and Himalayan Punjab	Bilaspur, Kangra, Chamba, Lahaul and Spiti, Kinnaur.	
1.13 Himalayan Uttar Pradesh (Highland Districts)	Uttar Kashi, Tehri Garhwal, Chamoli, Pithoragarh, Almora, Garhwal.	
1.21 Darjeeling-Sikkim		Sikkim
1.22 Bhutan-Assam Himalayas		North-East Frontier Agency]

STATEMENT II.1—contd.

Natural Subregion 1	Blocks of contiguous districts 2	Isolated or discontinuous districts surrounded by districts of other levels of development 3
1.31 Assam Hills (Meghalaya)		Garo Hills, Hills, Mizo Hills
1.32 North-Eastern Border Hills (Nagaland)	Kohima, Tuensang, Mokokchung.	Manipur
1.33 North-Eastern Border Hills (Manipur)		Jaisalmer
2.11 Rajasthan Desert (Thar: Marwar).		Barmer, Nagaur
2.12 Rajasthan Dry Area		Fatehpur
2.32 Lower Ganga-Jamuna Doab		
2.33 Uttar Pradesh Tarai (Koshala)	Kheri, Sitapur, Bahraich, Gonda, Basti, Gorakhpur, Deoria.	Budaun
2.34 Rohilkhand	Hardoi, Unnao, Rae Bareli, Bara Banki, Faizabad, Sultanpur.	
2.35 Oudh	Pratapgarh, Jaunpur, Azamgarh, Ballia, Ghazipur.	
2.36 East Uttar Pradesh	Saran, Champaran, Muzaffarpur, Darbhanga.	
2.41 North Bihar Plain (Tirhut)		Bhilwara
3.11 Aravallis and Uplands		Banswara
3.14 Rajasthan Hills (Mewar, Bagar)		
3.22 Trans Jamuna Alluvial Vencer	Hamirpur, Banda.	Jhabua
3.32 Malwa Plateau		Rewa
3.42 Rewa Plateau: Vindhyan Scarp Lands		
3.53 Central Satpuras (Gawilgarh-Mahadeo Hills)		Seoni
3.54 Eastern Satpuras (Maikala Range)		Mandla
3.55 Baghelkhand Plateau	Sidhi, Surguja.	
3.56 Chhattisgarh	Bilaspur, Raigarh.	Bastar
3.57 Dandakaranya		
3.61 North Western Hills	Koraput, Kalahandi, Bolangir, Baudh-Khondmals.	
3.62 North Eastern Hills	Mayurbhanj, Keonjhar, Sambalpur.	Purulia
3.81 Ranchi Penepains		Medak, Mahbubnagar
4.21 Telengana (Southern Deccan)		Raichur
4.33 Raichur-Bellary (Central Maidan)		Ratnagiri
5.33 Kolaba-Ratnagiri		Puri
6.31 Orissa Coastal Plain		
<i>The second or lowest but one level of development.</i>		
1.11 Jammu and Kashmir		Srinagar
1.12 Himachal Pradesh and Himalayan Punjab	Mandi, Mahasu, Sirmur.	United Mikir and North Cachar Hills
1.31 Assam Hills (Meghalaya)		Churu
2.12 Rajasthan Dry Area	Jalor, Pali.	Hoshiarpur
2.22 Beas-Sutlej Doab (Bisht Doab)		Mahendragarh
2.24 South Western Punjab (Haryana)		
2.32 Lower Ganga-Jamuna Doab	Etah, Mainpuri, Farrukhabad, Etawah.	Shahjahanpur
2.34 Rohilkhand		
2.41 North Bihar Plain (Tirhut)	Saharsa, Purnea.	

STATEMENT II.1—*contd.*

Natural Subregion 1	Blocks of contiguous districts 2	Isolated or discontinuous districts surrounded by districts of other levels of development 3
2.42 South Bihar Plain (Magadha) . . .	Shahabad, Gaya.	Monghyr
2.51 North Bengal Plain (Duars) . . .		Cooch Behar
2.52 Northern Para Delta (Barind) . . .	West Dinajpur, Malda.	
2.53 Ganga Delta . . .		Murshidabad
2.54 Damodar Delta . . .	} Midnapore, Bankura.	
3.82 Rarh . . .		
2.61 Brahmaputra Valley . . .		Goalpara, Nowgong
2.62 Surma Valley . . .		Cachar
3.11 Aravallis and Uplands . . .	Jhunjhunu, Sikar, Tonk, Sawai Madhopur.	
3.14 Rajasthan Hills (Mewar, Bagar) . . .	Udaipur, Dungarpur.	
3.15 East Rajasthan Hills . . .		Chitorgarh, Jhalawar
3.21 Chambal Ravines (N.W. Madhya Pradesh) . . .	Morena, Bhind, Datia.	
3.22 Trans Jamuna Alluvial Veneer . . .		Jalaun
3.23 North Central Madhya Pradesh . . .	Tikamgarh, Chhatarpur.	
3.31 North Malwa Uplands . . .	Shivpuri, Guna.	
3.32 Malwa Plateau . . .	Rajgarh, Shajapur.	Dhar
3.41 Vindhya . . .		Damoh
3.42 Rewa Plateau: Vindhyan Scarp Lands . . .	Panna, Satna.	
3.51 Narmada Valley . . .		Narsimhapur
3.52 Western Satpuras (Satpura-Gawilgarh Hills) . . .		West Nimar
3.53 Central Satpuras (Gawilgarh-Mahadeo Hills) . . .	Betul, Chhindwara.	
3.54 Eastern Satpuras (Maikala Range) . . .		Balaghat
3.55 Baghelkhand Plateau . . .		Shahdol
3.56 Chhattisgarh . . .		Raipur
3.61 North Western Hills . . .		Ganjam
3.62 North Eastern Hills . . .		Dhenkanal
3.71 Chhota Nagpur Plateau . . .	Palamau, Ranchi.	
3.73 Rajmahal Hills . . .		Santal Parganas
4.14 Mahakoshal . . .	Bhandara, Chanda.	
4.15 Marathawada . . .	Parbhani, Bhir, Osmanabad.	
4.16 Western Ghats (Desh) . . .		Kolhapur
4.21 Telengana (Southern Deccan) . . .		Karimnagar, Nalgonda
4.22 Rayalaseema . . .	Cuddapah, Chittoor.	
4.31 Inland Karnataka . . .		Belgaum
4.32 Southern Deccan Plateau (North Maidan) . . .	Bidar, Gulbarga, Bijapur.	
4.34 South Maidan . . .		Tumkur
5.12 Kanthadesh . . .		Banaskantha
5.21 Gujarat Plain . . .		Panchmahals
5.22 Dangs . . .		Dangs
5.33 Kolaba-Ratnagiri . . .		Kolaba
5.51 Malabar . . .		Palghat
6.21 Andhra Coastal Plain . . .	Srikakulam, Visakhapatnam.	Nellore
6.31 Orissa Coastal Plain . . .	Balasore, Cuttack.	

STATEMENT II.1—*contd.*

Natural Division 1	Blocks of contiguous districts 2	Isolated or discontinuous districts surrounded by districts of other levels of development 3
<i>The third or one below highest level of development.</i>		
1.12 Himachal Pradesh and Punjab . . .		Simla Tripura
1.34 North-Eastern Border Hills (Tripura) . . .		
2.11 Rajasthan Desert (Thar: Marwar) . . .	Bikaner, Jodhpur.	Ganganagar Sangrur Bulandshahr
2.12 Rajasthan Dry Area . . .		
2.24 South Western Punjab (Haryana) . . .		
2.31 Upper Jamuna-Ganga Doab . . .	} Allahabad, Varanasi Mirzapur.	
2.32 Lower Ganga-Jamuna Doab . . .		
2.36 East Uttar Pradesh . . .		Pilibhit
3.43 Kaimur (Vindhyachal) . . .		
2.33 Uttar Pradesh Tarai (Koshala) . . .	Bijnor, Moradabad, Rampur,	
2.34 Rohilkhand . . .	Bareilly.	Bhagalpur
2.42 South Bihar Plain (Magadha) . . .		
2.61 Brahmaputra Valley . . .	Kamrup, Darrang, Sibsagar.	Alwar Sirohi Bundi Jhansi Mandsaur, Dewas
3.11 Aravallis and Uplands . . .		
3.14 Rajasthan Hills (Mewar, Bagar) . . .		
3.15 East Rajasthan Hills . . .		
3.22 Trans Jamuna Alluvial Veneer . . .		
3.32 Malwa Plateau . . .	Vidisha, Sagar, Raisen.	Hoshangabad
3.41 Vindhya . . .		Durg
3.51 Narmada Valley . . .		Sundargarh
3.56 Chhattisgarh . . .		Hazaribagh
3.62 North Eastern Hills . . .		Birbhum
3.71 Chhota Nagpur Plateau . . .		Buldhana
3.82 Rarh . . .	Yeotmal, Wardha.	
4.13 Vidarbha . . .		Aurangabad, Nanded
4.14 Mahakoshal . . .		
4.15 Marathawada . . .	Satara, Sangli.	
4.16 Western Ghats (Desh) . . .	Adilabad, Nizamabad, Warangal,	
4.21 Telengana (Southern Deccan) . . .	Khammam.	
4.22 Rayalaseema . . .	Anantapur, Kurnool.	Dharwar Bellary Mandya, Kolar
4.31 Inland Karnataka . . .		
4.33 Raichur-Bellary (Central Maidan) . . .		
4.34 South Maidan . . .		
4.35 Malnad . . .	Hassan, Mysore.	Salem Kutch Sabarkantha Mehsana, Amreli Kaira
4.42 Coimbatore Plateau (Kongunad) . . .		
5.11 Kutch . . .		
5.12 Kanthadesh . . .		
5.13 Kathiawar . . .	Broach, Surat.	
5.21 Gujarat Plain . . .	North Kanara, South Kanara.	
5.41 Coastal Karnataka . . .	Cannanore, Kozhikode.	
5.51 Malabar . . .	Trichur, Ernakulam, Alleppey, Quilon,	
5.52 Kerala Coastal Plain . . .	Trivandrum.	Kanyakumari
6.11 Nagarcovil Valley . . .	Ramanathapuram, Tirunelveli.	
6.12 Dry South East . . .		South Arcot Guntur
6.13 Coromandel Coast . . .	East Godavari, West Godavari.	
6.21 Andhra Coastal Plain . . .		
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STATEMENT II. 1—concl'd.

Natural Division 1	Blocks of contiguous districts 2	Isolated or discontinuous districts surrounded by district of other levels of development 3
<i>The fourth or highest level of development.</i>		
1.11 Jammu and Kashmir		Jammu
1.13 Himalayan Uttar Pradesh (Highland Districts)		Dehra Dun, Naini Tal
1.21 Darjeeling-Sikkim		Darjeeling
1.31 Assam Hills (Meghalaya)		United Khasi and Jaintia Hills
2.21 North Punjab Plain	Gurdaspur, Amritsar, Kapurthala, Ferozepur.	
2.22 Beas-Sutlej Doab (Bisht Doab).	Jullundur, Ludhiana.	
2.23 East Punjab Plain	Ambala, Patiala, Karnal.	
2.24 South Western Punjab (Haryana)	Bhatinda, Hissar, Rohtak.	
2.31 Upper Jamuna-Ganga Doab	Saharanpur, Muzaffarnagar, Meerut.	Aligarh
2.32 Lower Ganga-Jamuna Doab	Mathura, Agra.	Kanpur
2.35 Oudh		Lucknow
2.42 South Bihar Plain (Magadha)		Patna
2.51 North Bengal Plain (Duars)		Jalpaiguri
2.53 Ganga Delta.	Nadia, 24-Parganas.	
2.54 Damodar Delta	Hooghly, Howrah.	
2.61 Brahmaputra Valley		
3.11 Aravallis and Uplands	Jaipur, Ajmer.	Lakhimpur
3.12 Delhi Ridges	} Delhi, Gurgaon.	Bharatpur
3.13 Aravalli Outlier		
3.15 East Rajasthan Hills		
3.21 Chambal Ravines (N.W. Madhya Pradesh)		Kota
3.32 Malwa Plateau		Gwalior
3.41 Vindhya	Ratlam, Ujjain, Indore.	
3.51 Narmada Valley		Sehore
3.52 Western Satpuras (Satpura-Gawilgarh Hills)		Jabalpur
3.71 Chhota Nagpur Plateau		East Nimar
3.72 Gondwana Trough		Singhbhum
3.82 Rarh		Dhanbad
4.11 Khandesh		Burdwan
4.12 Nasik Basin	Dhulia, Jalgaon.	
4.13 Vidarbha		Nasik
4.14 Mahakoshal	Akola, Amravati.	
4.16 Western Ghats (Desh)		Nagpur
4.21 Telengana (Southern Deccan)	Ahmadnagar, Poona, Sholapur.	
4.34 South Maidan		Hyderabad
4.35 Malnad		Chitradurga,
4.41 Nilgiri	Shimoga, Chikmagalur.	Bangalore
4.42 Coimbatore Plateau (Kongunad)	Coimbatore, Madurai.	Coorg
5.13 Kathiawar	Bhavnagar, Surendranagar, Rajkot, Jamnagar, Junagadh.	Nilgiri
5.21 Gujarat Plain		North Arcot
5.31 North Konkan		
5.52 Kerala Coastal Plain		Ahmedabad, Baroda
6.13 Coromandel Coast		Thana
6.21 Andhra Coastal Plain	Tiruchirapalli, Thanjavur.	Kottayam
		Chingleput
		Krishna

The clusters in each level of development are extremely interesting, particularly in the third and fourth levels where they are more agglomerated than in the first and second and testify to the unmistakable spread effects which will be evident later on in this chapter. Of particular significance are the isolated districts. These isolated districts amount to a total of 127, of which 23 are in the first level, 36 in the second level, 34 each in the third and fourth levels. A phenomenon of the greatest importance is the isolated districts in the third level with the exception of Tripura and Bhagalpur, which are all either on the fringe of the districts of the fourth or top level or are new active centres of industry themselves like Durg and Sundargarh. Of the isolated districts in the fourth level, Jammu, Naini Tal, United Khasi and Jaintia Hills, Kanpur, Lucknow, Kota, Jabalpur, Patna, Lakhimpur, Singhbhum, Hyderabad, Coorg and Bangalore derive their importance either for very strategic or historic or geographi-

cal reasons while Kottayam and Krishna are each on the fringe of districts of the third level, apart from what they have developed themselves.

The districts in the 4 levels of development are arranged State by State in Appendix XXII at the end of this Chapter.

Despite the fact that all indices have been given equal weight, the association between the different blocks are so high that several features stand out hard and clear.

Let us, for instance, consider urban population. The two statements below give (1) percentage distribution of total population and (2) percentage distribution of urban population in the sum of all districts placed in each level of development. The statement on urban population yields a clear picture of concentration of urban population in the upper levels of development.

STATEMENT II. 2

Percentage distribution of total population among levels of development in each State

State 1	Level of development				
	Total 2	Bottom 3	Second 4	Third 5	Top 6
INDIA	100.00	19.66	25.02	24.60	30.72
Andhra Pradesh.	100.00	7.83	36.46	44.21	11.50
Assam	100.00	4.83	37.17	40.94	17.06
Bihar	100.00	32.55	45.35	8.84	13.26
Gujarat	100.00	12.30	45.04	42.66	14.52
Jammu and Kashmir.	100.00	67.50	17.98	..	10.25
Kerala	100.00	10.51	79.24	16.68	16.28
Madhya Pradesh	100.00	25.77	41.27	38.59	61.41
Madras	100.00	..	..	20.39	52.62
Maharashtra	100.00	4.62	22.37	41.87	23.47
Mysore	100.00	4.67	29.99	4.32	..
Orissa	100.00	53.64	42.04	7.57	78.33
Punjab	100.00	5.33	8.77	20.58	24.20
Rajasthan	100.00	15.21	40.01	20.12	20.60
Uttar Pradesh	100.00	50.12	9.16	4.14	58.00
West Bengal	100.00	3.90	33.96	..	100.00
Andaman and Nicobar Islands	100.00	..	..	..	100.00
Delhi	100.00	..	69.63	..	..
Himachal Pradesh	100.00	30.37	..	..	..
Manipur	100.00	100.00	..	100.00	..
Tripura	100.00	..	..	..	..
North-East Frontier Agency	100.00	100.00	..	..	..
Nagaland	100.00	100.00	..	..	..
SIKKIM	100.00	100.00	..	..	..

STATEMENT II.3

Percentage distribution of urban population arranged for each State by the level of development of the districts

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
INDIA	100.00	5.86	13.79	23.29	57.06
Andhra Pradesh	100.00	4.06	23.89	43.83	28.22
Assam	100.00	2.54	31.04	37.95	28.47
Bihar	100.00	17.24	39.01	9.91	33.84
Gujarat	100.00	..	4.24	31.95	63.81
Jammu and Kashmir	100.00	28.73	49.73	..	21.54
Kerala	100.00	..	6.73	86.79	6.48
Madhya Pradesh	100.00	9.64	28.18	18.34	43.84
Madras	100.00	..	..	29.00	71.00
Maharashtra	100.00	1.32	9.57	10.64	78.47
Mysore	100.00	3.05	21.22	38.89	36.84
Orissa	100.00	42.40	45.37	12.23	..
Punjab	100.00	1.06	4.87	7.22	86.85
Rajasthan	100.00	7.99	31.59	24.40	36.02
Uttar Pradesh	100.00	18.55	7.44	29.64	44.37
West Bengal	100.00	1.08	10.22	1.18	87.52
Andaman and Nicobar Islands	100.00	..	..	..	100.00
Delhi	100.00	..	..	..	100.00
Himachal Pradesh	100.00	25.59	74.41	..	..
Manipur	100.00	100.00	..	..	..
Tripura	100.00	..	..	100.00	..
Nagaland	100.00	..	..	..	..
Sikkim	100.00	..	..	..	..

The following statement underlines the feature brought out above in respect of

Class I Cities and Town Groups (population above 100,000).

STATEMENT II.4

Percentage distribution of population in Class I Cities, and Town Groups arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
INDIA	100.00	1.03	5.30	16.67	77.00
Andhra Pradesh	100.00	..	10.79	30.08	59.13
Assam	100.00	..	..	49.58	50.42
Bihar	100.00	12.57	25.97	8.52	52.94
Gujarat	100.00	..	..	12.46	87.54
Jammu and Kashmir	100.00	..	74.17	..	25.83
Kerala	100.00	..	..	100.00	..
Madhya Pradesh	100.00	..	7.74	13.16	79.10
Madras	100.00	..	..	18.10	81.90
Maharashtra	100.00	..	2.67	1.75	95.58
Mysore	100.00	..	6.75	37.71	55.54
Orissa	100.00	..	100.00	..	..
Punjab	100.00	..	..	..	100.00
Rajasthan	100.00	..	..	..	..
Uttar Pradesh	100.00	..	8.95	30.24	60.81
West Bengal	100.00	3.49	2.28	34.70	59.53
Delhi	100.00	..	3.05	..	96.95
					100.00

Even more eloquent is the following statement of the distribution of registered

factories and persons employed in registered factories by States in 1961.

STATEMENT II.5

Distribution of registered factories for each State by the level of development of the districts to which they respectively belong

State	Level of development									
	Total		Bottom		Second		Third		Top	
	No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11
INDIA	49,960	3,915,131	2,284	116,787	7,249	278,578	11,947	844,524	28,480	2,675,242
Andhra Pradesh	4,918	223,371	140	2,142	1,210	35,517	2,645	145,253	923	40,459
Assam	1,241	80,047	2	34	299	13,825	557	32,591	383	33,597
Bihar	6,133	209,290	961	27,871	2,667	55,641	744	26,669	1,761	99,109
Gujarat	3,840	360,528	..	..	84	5,731	1,526	95,133	2,230	259,664
Jammu and Kashmir	139	10,964	21	1,317	80	7,178	..	..	38	2,469
Kerala	2,412	252,961	..	..	215	11,551	1,968	224,569	229	16,841
Madhya Pradesh	1,928	155,564	222	10,337	612	29,550	328	23,749	766	91,878
Madras	5,587	300,387	..	..	..	..	1,617	70,804	3,970	229,583
Maharashtra	8,233	787,379	36	1,779	705	25,768	450	40,514	7,042	719,318
Mysore	2,406	219,298	152	6,244	464	25,768	982	85,114	808	102,172
Orissa	488	47,739	227	11,241	241	16,800	20	19,698	..	..
Punjab	3,468	127,018	14	396	86	6,347	62	3,286	3,306	116,989
Rajasthan	914	57,507	99	4,316	159	8,992	308	14,859	348	29,340
Uttar Pradesh	2,751	298,174	312	47,933	173	10,536	604	55,348	1,662	184,357
West Bengal	4,307	719,793	60	2,812	230	23,507	74	5,040	3,943	688,434
Andaman and Nicobar Islands	11	1,882	..	..	..	..	..	..	11	1,882
Delhi	1,060	59,150	..	..	..	..	..	..	1,060	59,150
Himachal Pradesh	28	2,063	4	196	24	1,867	..	..	..	..
Manipur	34	119	34	119	..	..	..	..	..	..
Tripura	62	1,897	..	..	..	..	62	1,897	..	..

The following two statements give the percentage distribution of registered factories into four levels of development in each State.

STATEMENT II.6

Percentage distribution of registered factories into four levels of development in each State.

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
INDIA	100.00	4.57	14.51	23.92	57.00
Andhra Pradesh	100.00	2.85	24.60	53.78	18.77
Assam	100.00	0.16	24.10	44.88	30.86
Bihar	100.00	15.67	43.49	12.13	28.71
Gujarat	100.00	..	2.19	39.74	58.07
Jammu and Kashmir	100.00	15.11	57.55	..	27.34
Kerala	100.00	..	8.91	81.59	9.50
Madhya Pradesh	100.00	..	31.74	17.01	39.73
Madras	100.00	11.52	..	28.94	71.06
Maharashtra	100.00	..	..	5.47	85.53
Mysore	100.00	0.44	8.56	40.81	33.58
Orissa	100.00	6.32	19.29	4.10	..
Punjab	100.00	46.52	49.38	1.79	95.33
Rajasthan	100.00	0.40	2.48	33.70	38.07
Uttar Pradesh	100.00	10.83	6.29	21.96	60.41
West Bengal	100.00	11.34	5.34	1.72	91.55
Andaman and Nicobar Islands	100.00	1.39	..	..	100.00
Delhi	100.00	..	..	..	100.00
Himachal Pradesh	100.00	..	..	..	..
Manipur	100.00	14.29	85.71	..	..
Tripura	100.00	100.00	..	100.00	..

STATEMENT II.7

Percentage distribution of workers in registered factories for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
INDIA	100.00	2.98	7.12	21.58	68.32
Andhra Pradesh	100.00	0.96	15.90	65.03	18.11
Assam	100.00	0.04	17.27	40.72	41.97
Bihar	100.00	13.32	26.59	12.74	47.35
Gujarat	100.00	..	1.59	26.39	72.02
Jammu and Kashmir	100.00	12.01	65.47	..	22.52
Kerala	100.00	..	4.57	88.77	6.66
Madhya Pradesh	100.00	6.68	18.99	15.27	59.06
Madras	100.00	..	..	23.57	76.43
Maharashtra	100.00	0.23	3.27	5.14	91.36
Mysore	100.00	2.85	11.75	38.81	46.59
Orissa	100.00	23.55	35.19	41.26	..
Punjab	100.00	0.31	5.00	2.59	92.10
Rajasthan	100.00	7.50	15.64	25.84	51.02
Uttar Pradesh	100.00	16.08	3.53	18.56	61.83
West Bengal	100.00	0.39	3.27	0.70	95.64
Andaman and Nicobar Islands	100.00	..	..	..	100.00
Delhi	100.00	..	..	..	100.00
Himachal Pradesh	100.00	9.50	90.50	..	..
Manipur	100.00	100.00	..	..	..
Tripura	100.00	..	..	100.00	..

Even in the matter of industrial establishments, run on electricity, which includes even single person establishments,

the concentration in the top levels is remarkable as will appear from the two statements given on pages 23 and 24.

STATEMENT II.8

Number of industrial establishments run on electricity for each State by level of development of each district

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
INDIA	120,687	4,005	11,317	27,606	77,759
Andhra Pradesh	5,156	89	1,159	2,186	1,722
Assam	474	7	114	217	136
Bihar	6,310	939	2,554	667	2,150
Gujarat	13,559	..	297	7,322	5,940
Jammu and Kashmir	1,016	215	435	..	366
Kerala	4,528	..	323	3,702	503
Madhya Pradesh	6,111	379	1,339	910	3,483
Madras	12,809	..	..	3,874	8,935
Maharashtra	18,555	86	1,383	1,370	15,716
Mysore	7,901	160	1,212	2,360	4,169
Orissa	659	243	375	41	..
Punjab	10,003	100	337	315	9,251
Rajasthan	2,678	98	511	749	1,320
Uttar Pradesh	10,538	1,561	645	3,702	4,630
West Bengal	15,777	67	546	130	15,034
Andaman and Nicobar Islands	11	..	..	..	11
Delhi	4,393	..	..	..	4,393
Himachal Pradesh	107	20	87	..	..
Manipur	39	39	..	..	..
Tripura	61	..	..	61	..
SIKKIM	2	2	..	..	..

STATEMENT II. 9

Percentage distribution for each State of industrial establishments run on electricity by level of development of each district

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
INDIA	100.00	3.32	9.38	22.87	64.43
Andhra Pradesh	100.00	1.72	22.48	42.40	33.40
Assam	100.00	1.43	24.05	45.78	28.69
Bihar	100.00	14.88	40.48	10.57	34.07
Gujarat	100.00	..	2.19	54.00	43.81
Jammu and Kashmir	100.00	21.16	42.82	..	36.02
Kerala	100.00	..	7.13	81.76	11.11
Madhya Pradesh	100.00	6.20	21.91	14.89	57.00
Madras	100.00	..	..	30.24	69.76
Maharashtra	100.00	0.46	7.46	7.38	84.70
Mysore	100.00	2.02	15.34	29.87	52.77
Orissa	100.00	36.87	56.91	6.22	..
Punjab	100.00	1.00	3.37	3.15	92.48
Rajasthan	100.00	3.56	19.08	27.97	49.29
Uttar Pradesh	100.00	14.81	12	35.13	43.94
West Bengal	100.00	0.43	3.46	0.82	95.29
Andaman and Nicobar Islands	100.00	..	..	..	100.00
Delhi	100.00	..	..	..	100.00
Himachal Pradesh	100.00	18.69	81.31	..	..
Manipur	100.00	100.00	..	..	..
Tripura	100.00	..	..	100.00	..
SIKKIM	100.00	100.00	..	..	..

APPENDIX I

Number of districts

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	327	79	88	76	84
Andhra Pradesh	20	2	7	9	2
Assam	11	2	4	3	2
Bihar	17	4	8	2	3
Gujarat	17	..	3	7	7
Jammu and Kashmir	9	7	1	..	1
Kerala	9	..	1	7	1
Madhya Pradesh	43	9	20	7	7
Madras	13	..	..	5	8
Maharashtra	26	1	7	7	11
Mysore	19	1	5	8	5
Orissa	13	8	4	1	..
Punjab	19	2	2	2	13
Rajasthan	26	5	11	6	4
Uttar Pradesh	54	28	6	10	10
West Bengal	16	1	6	1	8
Andaman and Nicobar Islands	1	..	..	..	1
Delhi	1	..	..	..	..
Himachal Pradesh	6	3	3	..	..
Manipur	1	1	..	..	..
Tripura	1	..	..	1	..
North-East Frontier Agency	1	1	..	..	..
Nagaland	3	3	..	..	..
SIKKIM	1	1	..	..	..

APPENDIX II
Total population

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	438,156,951	86,131,875	109,610,928	107,772,980	134,641,168
Andhra Pradesh	35,983,447	2,818,047	13,118,431	15,907,018	4,139,951
Assam	11,872,772	573,291	4,412,855	4,860,632	2,025,994
Bihar	46,455,610	15,122,554	21,067,242	4,107,547	6,158,267
Gujarat	20,633,350	..	2,536,657	9,293,946	8,802,747
Jammu and Kashmir	3,560,976	2,403,633	640,411	..	516,932
Kerala	16,903,715	..	1,776,566	13,394,269	1,732,880
Madhya Pradesh	32,372,408	8,342,617	13,359,720	5,399,701	5,270,370
Madras	33,686,953	..	..	13,001,063	20,685,890
Maharashtra	39,553,718	1,827,203	8,847,062	8,065,281	20,814,172
Mysore	23,586,772	1,100,895	7,074,020	9,875,609	5,536,248
Orissa	17,548,846	9,412,521	7,377,708	758,617	..
Punjab	20,306,812	1,082,971	1,781,343	1,537,341	15,905,157
Rajasthan	20,155,602	3,066,122	8,064,965	4,147,940	4,876,575
Uttar Pradesh	73,746,401	36,963,659	6,751,265	14,835,853	15,195,624
West Bengal	34,926,279	1,360,016	11,861,904	1,446,158	20,258,201
Andaman and Nicobar Islands	63,548	..	..	..	63,548
Delhi	2,658,612	..	..	..	2,658,612
Himachal Pradesh	1,351,144	410,365	940,779	..	..
Manipur	780,034	780,034	..	..	..
Tripura	1,142,005	..	..	1,142,005	..
Nagaland	369,200	369,200	..	..	..
North-East Frontier Agency	336,558	336,558	..	..	..
SIKKIM	162,189	162,189	..	..	..

APPENDIX III

Total number of Cities, Town Groups and Towns (all classes) arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	2,444	289	574	726	855
Andhra Pradesh	212	22	70	103	17
Assam	56	2	20	24	10
Bihar	126	24	66	12	24
Gujarat	175	..	12	76	87
Jammu and Kashmir	41	33	1	..	7
Kerala	79	..	7	65	7
Madhya Pradesh	210	33	95	48	34
Madras	287	..	..	113	174
Maharashtra	241	12	63	57	109
Mysore	214	10	54	93	57
Orissa	62	32	26	4	..
Punjab	177	7	16	22	132
Rajasthan	145	17	64	32	32
Uttar Pradesh	244	84	29	65	66
West Bengal	149	5	41	6	97
Andaman and Nicobar Islands	1	..	..	..	1
Delhi	1	..	..	..	1
Himachal Pradesh	13	3	10	..	..
Manipur	1	1	..	..	..
Tripura	6	..	..	6	..
Nagaland	3	3	..	..	..
SIKKIM	1	1	..	..	..

APPENDIX IV

Total urban population

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	78,746,942	4,615,329	10,856,147	18,336,348	44,939,118
Andhra Pradesh	6,274,508	254,571	1,499,156	2,749,879	1,770,902
Assam	913,028	23,145	283,438	346,498	259,947
Bihar	3,913,920	674,941	1,526,616	387,903	1,324,460
Gujarat	5,316,624	..	225,513	1,698,573	3,392,538
Jammu and Kashmir	593,315	170,455	295,084	..	127,776
Kerala	2,554,141	..	171,850	2,216,822	165,469
Madhya Pradesh	4,627,234	446,243	1,304,019	848,510	2,028,462
Madras	8,990,528	..	..	2,607,112	6,383,416
Maharashtra	11,162,561	147,858	1,068,024	1,187,414	8,759,265
Mysore	5,266,493	160,622	1,117,506	2,048,233	1,940,132
Orissa	1,109,650	470,456	503,434	135,760	..
Punjab	4,038,595	43,321	199,272	295,179	3,550,823
Rajasthan	3,281,478	262,276	1,036,666	800,566	1,181,970
Uttar Pradesh	9,479,895	1,758,880	704,895	2,810,133	4,205,987
West Bengal	8,540,842	92,478	873,107	103,769	7,474,488
Andaman and Nicobar Islands	14,075	..	..	..	14,075
Delhi	2,359,408	..	..	..	2,359,408
Himachal Pradesh	63,928	16,361	47,567	..	..
Manipur	67,717	67,717	..	..	..
Tripura	102,997	..	..	102,997	..
Nagaland	19,157	19,157	..	..	..
SIKKIM	6,848	6,848	..	..	..

APPENDIX V

Number of Class I Cities and Town Groups arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	113	3	13	33	64
Andhra Pradesh	11	..	2	6	3
Assam	2	..	..	1	1
Bihar	9	2	3	1	3
Gujarat	6	..	..	1	5
Jammu and Kashmir	2	..	1	..	1
Kerala	4	..	..	4	..
Madhya Pradesh	8	..	1	2	5
Madras	11	..	..	4	7
Maharashtra	13	..	1	1	11
Mysore	6	..	1	4	1
Orissa	1	..	1	..	..
Punjab	5	..	..	..	5
Rajasthan	6	..	1	2	3
Uttar Pradesh	17	1	1	7	8
West Bengal	11	..	1	..	10
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	1	..	..	..	1
Himachal Pradesh	..	..	..	..	..
Manipur	..	..	..	..	..
Tripura	..	..	..	..	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX VIII

Population in Class II Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	9,387,431	685,665	1,380,148	2,158,741	5,162,877
Andhra Pradesh	532,301	..	182,724	349,577	..
Assam	58,480	..	..	..	58,480
Bihar	503,491	88,264	205,672	60,208	149,347
Gujarat	622,030	..	52,167	309,435	260,428
Jammu and Kashmir	..	..	..	..	..
Kerala	294,361	..	77,620	164,056	52,685
Madhya Pradesh	380,245	86,706	..	..	293,539
Madras	1,452,791	..	..	336,832	1,115,959
Maharashtra	767,510	..	158,782	245,946	362,782
Mysore	662,445	63,329	175,923	215,529	207,664
Orissa	228,033	60,815	76,931	90,287	..
Punjab	887,086	..	50,739	..	836,347
Rajasthan	241,128	..	50,636	136,561	53,931
Uttar Pradesh	1,114,462	318,834	164,272	195,432	435,924
West Bengal	1,520,473	..	184,682	..	1,335,791
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	..	..	..	..	..
Manipur	67,717	67,717	..	..	..
Tripura	54,878	..	..	54,878	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX IX

Percentage distribution of population of Class II Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	100·00	7·30	14·70	23·00	55·00
Andhra Pradesh	100·00	..	34·33	65·67	..
Assam	100·00	..	..	..	100·00
Bihar	100·00	17·53	40·85	11·96	29·66
Gujarat	100·00	..	8·39	49·74	41·87
Jammu and Kashmir	..	..	..	..	..
Kerala	100·00	..	26·37	55·73	17·90
Madhya Pradesh	100·00	22·80	..	..	77·20
Madras	100·00	..	..	23·19	76·81
Maharashtra	100·00	..	20·69	32·04	47·27
Mysore	100·00	9·56	26·56	32·53	31·35
Orissa	100·00	26·67	33·74	39·59	..
Punjab	100·00	..	5·72	..	94·28
Rajasthan	100·00	..	21·00	56·63	22·37
Uttar Pradesh	100·00	28·61	14·74	17·54	39·11
West Bengal	100·00	..	12·15	..	87·85
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	..	..	..	..	..
Manipur	100·00	100·00	..	..	..
Tripura	100·00	..	..	100·00	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX X

Number of Class III Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	481	46	106	163	166
Andhra Pradesh	51	2	17	31	1
Assam	11	..	5	4	2
Bihar	28	7	12	4	5
Gujarat	40	..	2	20	18
Jammu and Kashmir	1	1	..	..	..
Kerala	25	..	2	22	1
Madhya Pradesh	30	4	14	9	3
Madras	60	..	..	28	32
Maharashtra	45	2	7	11	25
Mysore	30	..	12	11	7
Orissa	8	4	3	1	..
Punjab	31	..	2	6	23
Rajasthan	23	4	13	1	5
Uttar Pradesh	52	21	8	13	10
West Bengal	46	1	9	2	34
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	..	..	..	..	..
Manipur	..	..	..	..	..
Tripura	..	..	..	..	..
Nagaland	..	..	..	..	..
Sikkim	..	..	..	..	..

APPENDIX XI

Population in Class III Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	14,529,866	1,447,870	3,124,847	4,766,574	5,190,575
Andhra Pradesh	1,520,603	56,092	517,045	902,665	44,801
Assam	325,874	..	159,886	102,492	63,496
Bihar	846,020	211,597	353,600	119,657	161,166
Gujarat	1,195,513	..	64,622	572,622	558,269
Jammu and Kashmir	21,087	21,087	..	..	..
Kerala	705,627	..	49,434	613,817	42,376
Madhya Pradesh	953,166	130,684	422,973	291,848	107,661
Madras	1,843,631	..	..	833,452	1,010,179
Maharashtra	1,370,544	53,851	207,152	380,222	729,319
Mysore	840,139	..	339,274	290,327	210,538
Orissa	224,943	122,718	81,924	20,301	..
Punjab	982,227	..	66,318	177,462	738,447
Rajasthan	667,337	119,220	372,295	26,478	149,344
Uttar Pradesh	1,578,566	684,487	221,223	389,035	283,821
West Bengal	1,454,589	48,134	269,101	46,196	1,091,158
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	..	..	..	..	..
Manipur	..	..	..	..	..
Tripura	..	..	..	..	..
Nagaland	..	..	..	..	..
Sikkim	..	..	..	..	..

APPENDIX XII

Percentage distribution of population in Class III Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	100·00	9·96	21·51	32·81	35·72
Andhra Pradesh	100·00	3·69	34·00	59·36	2·95
Assam	100·00	..	49·06	31·45	10·49
Bihar	100·00	25·01	41·80	14·14	19·05
Gujarat	100·00	..	5·40	47·90	46·70
Jammu and Kashmir	100·00	100·00	..	..	..
Kerala	100·00	..	7·01	86·99	6·00
Madhya Pradesh	100·00	13·71	44·38	30·62	11·29
Madras	100·00	..	..	45·21	54·79
Maharashtra	100·00	3·93	15·12	27·74	53·21
Mysore	100·00	..	40·38	34·56	25·06
Orissa	100·00	54·56	36·42	9·02	..
Punjab	100·00	..	6·75	18·07	75·18
Rajasthan	100·00	17·86	55·79	3·97	22·38
Uttar Pradesh	100·00	43·36	14·01	24·65	17·98
West Bengal	100·00	3·31	18·50	3·18	75·01
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	..	..	..	..	..
Manipur	..	..	..	..	..
Tripura	..	..	..	..	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX XIII

Number of Class IV Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	746	90	195	238	223
Andhra Pradesh	71	7	22	35	7
Assam	8	1	4	3	..
Bihar	42	10	25	3	4
Gujarat	53	..	5	27	21
Jammu and Kashmir	4	4	..	..	..
Kerala	31	..	3	24	4
Madhya Pradesh	55	7	29	11	8
Madras	96	..	..	40	56
Maharashtra	85	4	23	19	39
Mysore	77	2	29	35	11
Orissa	22	13	7	2	..
Punjab	36	2	2	3	29
Rajasthan	52	7	23	12	10
Uttar Pradesh	75	30	10	20	15
West Bengal	35	3	11	3	18
Andaman and Nicobar Islands	1	..	..	..	1
Delhi	..	..	..	..	..
Himachal Pradesh	2	..	2	..	..
Manipur	..	..	..	..	..
Tripura	1	..	..	1	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX XIV

Population in Class IV Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State 1	Level of development				
	Total 2	Bottom 3	Second 4	Third 5	Top 6
TOTAL	10,261,964	1,249,031	2,658,942	3,267,597	3,086,344
Andhra Pradesh	922,500	92,712	223,723	422,660	101,339
Assam	196,855	14,257	52,706	41,822	..
Bihar	582,283	132,059	352,521	36,816	55,887
Gujarat	702,693	..	75,905	352,539	273,159
Jammu and Kashmir	59,300	59,300	..	..	..
Kerala	446,727	..	37,027	344,893	64,802
Madhya Pradesh	749,199	99,658	391,249	148,577	102,715
Madras	1,302,822	..	..	532,243	770,579
Maharashtra	1,181,982	55,354	304,400	277,551	544,677
Mysore	1,041,284	38,556	385,322	476,667	140,739
Orissa	310,647	189,617	95,858	25,172	..
Punjab	482,669	20,547	24,222	40,110	397,790
Rajasthan	707,581	103,199	306,515	162,286	135,581
Uttar Pradesh	1,043,830	404,170	138,619	277,036	224,005
West Bengal	498,894	34,652	164,327	45,910	254,005
Andaman and Nicobar Islands	14,075	..	..	..	14,075
Delhi	..	..	..	..	..
Himachal Pradesh	25,473	..	25,473	..	..
Manipur	..	..	..	..	..
Tripura	13,240	..	..	13,240	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX XV

Percentage distribution of population in Class IV Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State 1	Level of development				
	Total 2	Bottom 3	Second 4	Third 5	Top 6
TOTAL	100·00	12·17	25·91	31·84	30·08
Andhra Pradesh	100·00	10·05	30·10	49·64	10·21
Assam	100·00	13·34	47·45	39·21	..
Bihar	100·00	22·34	61·74	6·32	9·60
Gujarat	100·00	..	10·94	50·18	38·88
Jammu and Kashmir	100·00	100·00	..	..	..
Kerala	100·00	..	8·29	77·20	14·51
Madhya Pradesh	100·00	13·30	52·22	19·83	14·65
Madras	100·00	..	..	40·85	59·15
Maharashtra	100·00	4·68	25·76	23·48	46·08
Mysore	100·00	3·70	37·00	45·78	13·52
Orissa	100·00	61·04	30·86	8·10	..
Punjab	100·00	4·26	5·02	8·31	82·41
Rajasthan	100·00	14·58	43·32	22·94	19·16
Uttar Pradesh	100·00	38·72	13·28	26·54	21·46
West Bengal	100·00	6·95	32·94	9·20	50·91
Andaman and Nicobar Islands	100·00	..	..	..	100·00
Delhi	..	..	..	..	..
Himachal Pradesh	100·00	..	100·00	..	..
Manipur	..	..	..	..	..
Tripura	100·00	..	..	100·00	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX XVI

Number of Class V Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	755	100	200	215	240
Andhra Pradesh	70	13	26	26	5
Assam	23	1	8	10	4
Bihar	35	4	21	3	7
Gujarat	58	..	4	21	33
Jammu and Kashmir	5	4	..	..	1
Kerala	15	..	1	13	1
Madhya Pradesh	96	17	46	22	11
Madras	81	..	..	28	53
Maharashtra	74	6	24	20	24
Mysore	57	7	7	26	17
Orissa	25	13	12	..	..
Punjab	52	2	5	8	37
Rajasthan	51	6	23	11	11
Uttar Pradesh	74	20	8	22	24
West Bengal	27	1	13	1	12
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	4	2	2	..	..
Manipur	..	..	..	..	..
Tripura	4	..	..	4	..
Nagaland	3	3	..	..	..
SIKKIM	1	1	..	..	..

APPENDIX XVII

Population in Class V Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	5 662,322	732,923	1,532,655	1,604,728	1,792,016
Andhra Pradesh	548,197	98,767	211,809	199,746	37,875
Assam	177,537	8,888	62,530	76,277	29,842
Bihar	274,792	32,957	162,919	27,372	51,544
Gujarat	449,928	..	31,819	167,349	250,760
Jammu and Kashmir	33,133	27,614	..	..	5,519
Kerala	104,800	..	7,769	91,425	5,606
Madhya Pradesh	672,111	113,901	329,741	154,245	74,224
Madras	615,049	..	..	204,706	410,343
Maharashtra	542,603	38,653	185,957	143,655	174,338
Mysore	424,118	58,737	56,123	191,551	117,707
Orissa	190,064	94,552	95,512	..	..
Punjab	380,703	11,891	37,610	61,632	269,570
Rajasthan	389,611	39,857	183,820	85,064	80,870
Uttar Pradesh	561,572	155,376	63,079	158,164	184,953
West Bengal	208,841	9,692	91,621	8,663	98,865
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	28,379	16,033	12,346	..	..
Manipur	..	..	..	..	..
Tripura	34,879	..	..	34,879	..
Nagaland	19,157	19,157	..	..	..
SIKKIM	6,848	6,848	..	..	..

APPENDIX XVIII

Percentage distribution of population in Class V Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL					
Andhra Pradesh	100.00	12.94	27.07	28.34	31.65
Assam	100.00	18.01	38.64	36.44	6.91
Bihar	100.00	5.01	35.22	42.96	16.81
Gujarat	100.00	11.99	59.29	9.96	18.76
Jammu and Kashmir	100.00	..	7.07	37.20	55.73
Kerala	100.00	83.34	..	..	16.66
Madhya Pradesh	100.00	..	7.41	87.24	5.35
Madras	100.00	16.95	49.06	22.95	11.04
Maharashtra	100.00	..	..	33.28	66.72
Mysore	100.00	7.12	34.27	26.48	32.13
Orissa	100.00	13.85	13.23	45.17	27.75
Punjab	100.00	49.75	50.25	..	..
Rajasthan	100.00	3.12	9.88	16.19	70.81
Uttar Pradesh	100.00	10.23	47.18	21.83	20.76
West Bengal	100.00	27.67	11.23	28.16	32.94
Andaman and Nicobar Islands	100.00	4.64	43.87	4.15	47.34
Delhi	..	..	..	..	..
Himachal Pradesh	100.00	..	..	..	..
Manipur	..	56.50	43.50	..	..
Tripura	..	..	..	..	..
Nagaland	100.00	..	..	100.00	..
Sikkim	100.00	100.00	..	..	..
			..	..	..

APPENDIX XIX

Number of Class VI Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	211	40	39	46	86
Andhra Pradesh	1	..	..	..	1
Assam	11	..	3	6	2
Bihar	5	..	2	..	3
Gujarat	8	..	..	2	6
Jammu and Kashmir	29	24	..	..	5
Kerala	..	..	..	..	..
Madhya Pradesh	16	4	5	4	3
Madras	17	..	..	8	9
Maharashtra	13	..	5	3	5
Mysore	35	..	3	14	18
Orissa	3	1	2	..	..
Punjab	40	3	6	5	26
Rajasthan	9	..	3	4	2
Uttar Pradesh	10	7	..	..	3
West Bengal	7	..	4	..	3
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	7	1	6	..	..
Manipur	..	..	..	..	..
Tripura	..	..	..	..	..
Nagaland	..	..	..	..	..
Sikkim	..	..	..	..	..

APPENDIX XX

Population in Class VI Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	728,452	107,471	135,356	175,145	310,480
Andhra Pradesh	3,963	..	..	..	3,963
Assam	41,177	..	10,316	25,130	5,731
Bihar	19,999	..	6,739	..	13,260
Gujarat	34,935	..	..	8,602	26,333
Jammu and Kashmir	81,973	62,454	..	..	19,519
Kerala	..	..	..	..	..
Madhya Pradesh	65,164	15,294	20,264	15,934	13,672
Madras	60,121	..	..	27,123	32,998
Maharashtra	48,998	..	18,547	12,857	17,594
Mysore	125,338	..	14,074	54,741	56,523
Orissa	9,655	2,754	6,901	..	..
Punjab	141,820	10,883	20,383	15,975	94,579
Rajasthan	34,259	..	12,261	14,783	7,215
Uttar Pradesh	21,798	15,758	..	..	6,040
West Bengal	29,176	..	16,123	..	13,053
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	10,076	328	9,748	..	..
Manipur	..	..	..	..	..
Tripura	..	..	..	..	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX XXI

Percentage distribution of population in Class VI Town Groups and Towns arranged for each State by the level of development of the districts to which they respectively belong

State	Level of development				
	Total	Bottom	Second	Third	Top
1	2	3	4	5	6
TOTAL	100·00	14·75	18·58	24·05	42·62
Andhra Pradesh	100·00	..	..	..	100·00
Assam	100·00	..	25·05	61·03	13·92
Bihar	100·00	..	33·70	..	66·30
Gujarat	100·00	..	..	24·62	75·38
Jammu and Kashmir	100·00	76·19	..	..	23·81
Kerala	..	..	..	..	..
Madhya Pradesh	100·00	23·47	31·10	24·45	20·98
Madras	100·00	..	..	45·11	54·89
Maharashtra	100·00	..	37·85	26·24	35·91
Mysore	100·00	..	11·23	43·67	45·10
Orissa	100·00	28·52	71·48	..	..
Punjab	100·00	7·67	14·37	11·27	66·69
Rajasthan	100·00	..	35·79	43·15	21·06
Uttar Pradesh	100·00	72·29	..	..	27·71
West Bengal	100·00	..	55·26	..	44·74
Andaman and Nicobar Islands	..	..	..	..	..
Delhi	..	..	..	..	..
Himachal Pradesh	100·00	3·26	96·74	..	..
Manipur	..	..	..	..	..
Tripura	..	..	..	..	..
Nagaland	..	..	..	..	..
SIKKIM	..	..	..	..	..

APPENDIX XXII

Districts arranged according to level of development in each State

State	Level of development	District	State	Level of development	District
1	2	3	1	2	3
Andhra Pradesh	Highest or Top	Krishna Hyderabad	Bihar—concl'd.	Second—concl'd.	Santal Parganas Palamau Ranchi
	Third	East Godavari West Godavari Guntur Anantapur Kurnool Nizamabad Adilabad Warangal Khammam		Lowest or Bottom	Saran Champaran Muzaffarpur Darbhanga
	Second	Srikakulam Visakhapatnam Nellore Chittoor Cuddapah Karimnagar Nalgonda		Highest or Top	Jamnagar Rajkot Surendranagar Bhavnagar Junagadh Ahmedabad Baroda
	Lowest or Bottom	Mahbubnagar Medak		Third	Amreli Kutch Sabarkantha Mehsana Kaira Broach Surat
Assam	Highest or Top	Lakhimpur United Khasi and Jaintia Hills	Gujarat	Second	Banaskantha Panchmahals Dangs ..
	Third	Kamrup Darrang Sibsagar		Lowest or Bottom	..
	Second	Goalpara Nowgong Cachar United Mikir and North Cachar Hills		Highest or Top	Jammu
	Lowest or Bottom	Garó Hills Mizo Hills		Third	..
Bihar	Highest or Top	Patna Dhanbad Singhbhum	Jammu and Kashmir	Second	Srinagar
	Third	Bhagalpur Hazaribagh		Lowest or Bottom	Anantnag Baramulla Ladakh Doda Udhampur Kathua Poonch
	Second	Gaya Shahabad Monghyr Saharsa Purnea		Highest or Top	Kottayam
				Third	Cannanore Kozhikode Trichur Ernakulam

APPENDIX XXII

Districts arranged according to level of development in each State—contd.

State	Level of development	District	State	Level of development	District
1	2	3	1	2	3
Kerala—concl'd.	Third—concl'd.	Alleppey Quilon Trivandrum	Madras	Highest or Top	Madras Chingleput North Arcot Coimbatore Nilgiri Madurai Tiruchirapalli Thanjavur
	Second	Palghat		Third	South Arcot Salem Ramanathapuram Tirunelveli Kanyakumari
	Lowest or Bottom	..		Second	..
Madhya Pradesh	Highest or Top	Gwalior Ratlam Ujjain Indore East Nimar Sehore Jabalpur	Maharashtra	Lowest or Bottom	..
	Third	Mandsaur Dewas Vidisha Raisen Hoshangabad Sagar Durg		Highest or Top	Greater Bombay Thana Nasik Dhulia Jalgaon Ahmadnagar Poona Sholapur Akola Amravati Nagpur
	Second	Morena Bhind Datia Shivpuri Guna Tikamgarh Chhatarpur Panna Satna Shahdol Dhar West Nimar Shajapur Rajgarh Betul Damoh Narsimhapur Chhindwara Balaghat Raipur		Third	Satara Sangli Aurangabad Nanded Buldhana Yeatmal Wardha
	Lowest or Bottom	Rewa Sidhi Jhabua Mandla Seoni Surguja Bilaspur Raigarh Bastar	Mysore	Second	Kolaba Kolhapur Parbhani Bhir Osmanabad Bhandara Chanda
				Lowest or Bottom	Ratnagiri
				Highest or Top	Bangalore Chitradurga Coorg Shimoga Chikmagalur
				Third	Kolar Bellary Mysore

APPENDIX XXII

Districts arranged according to level of development in each State—contd.

State	Level of development	District	State	Level of development	District
1	2	3	1	2	3
Mysore—concl'd.	Third—concl'd.	South Kanara Hassan Mandya North Kanara Dharwar	Rajasthan	Highest or Top	Bharatpur Jaipur Ajmer Kota
	Second	Tumkur Belgaum Bijapur Gulbarga Bidar		Third	Ganganagar Bikaner Alwar Jodhpur Sirohi Bundi
	Lowest or Bottom	Raichur		Second	Churu Jhunjhunu Sawai Madhopur Sikar Tonk Pali Jalor Udaipur Chitorgarh Dungarpur Jhalawar
Orissa	Highest or Top	..		Lowest or Bottom	Jaisalmer Nagaur Barmer Bhilwara Banswara
	Third	Sundargarh			
	Second	Ganjam Dhenkanal Cuttack Balasore			
	Lowest or Bottom	Kalahandi Koraput Sambalpur Bolangir Baudh-Khondmals Puri Keonjhar Mayurbhanj	Uttar Pradesh	Highest or Top	Naini Tal Dehra Dun Saharanpur Muzaffarnagar Meerut Aligarh Mathura Agra Kanpur Lucknow
Punjab	Highest or Top	Hissar Rohtak Gurgaon Karnal Ambala Jullundur Ludhiana Ferozepur Amritsar Gurdaspur Kapurthala Bhatinda Patiala		Third	Bijnor Moradabad Rampur Bareilly Pilibhit Bulandshahr Allahabad Jhansi Varanasi Mirzapur
	Third	Simla Sangrur			
	Second	Hoshiarpur Mahendragarh		Second	Shahjahanpur Etah Mainpuri Farrukhabad Etawah Jalaun
	Lowest or Bottom	Kangra Lahaul and Spiti			

APPENDIX XXII

Districts arranged according to level of development in each State—concl'd.

State	Level of development	District	State	Level of development	District
1	2	3	1	2	3
Uttar Pradesh—concl'd.	Lowest or Bottom	Uttar Kashi Chamoli Pithoragarh Tehri Garhwal Garhwal Almora Budaun Fatehpur Hamirpur Banda Kheri Sitapur Hardoi Unnao Rae Bareilly Bahraich Gonda Bara Banki Faizabad Sultanpur Pratapgarh Basti Gorakhpur Deoria Azamgarh Jaunpur Ballia Ghazipur	West Bengal—concl'd.	Third	Birbhum
				Second	Cooch Behar West Dinajpur Malda Murshidabad Bankura Midnapore
				Lowest or Bottom	Purulia
			Andaman and Nicobar Islands	Highest or Top	Andaman and Nicobar Islands
			Delhi	Highest or Top	Delhi
			Himachal Pradesh	Highest or Top	..
				Third	..
				Second	Mandi Mahasu Sirmur
				Lowest or Bottom	Chamba Bilaspur Kinnaur
			Manipur	Bottom	Manipur
			Tripura	Third	Tripura
			North-East Frontier Agency	Lowest or Bottom	North-East Frontier Agency
			Nagaland	Lowest or Bottom	Kohima Mokokchung Tuensang
			Sikkim	Lowest or Bottom	SIKKIM
West Bengal	Highest or Top	Darjeeling Jalpaiguri Nadia 24-Parganas Calcutta Howrah Hooghly Burdwan			

CHAPTER III

DELINEATION OF NATURAL REGIONS AND LEVELS OF DEVELOPMENT

THE THEME OF THIS CHAPTER is to outline the extent to which the level of human effort still conforms to or has succeeded in getting the better of the general pattern bestowed or imposed, depending on the way one likes to look at it, by a natural region, subregion or division. This chapter will therefore first briefly describe the general topographical features of each natural region, subregion or division, the

characteristics that contribute to its homogeneity and those that introduce elements of heterogeneity, and, finally, name those districts and areas which stand out from the general environmental pattern. The theme of the next chapter will be to attempt a regrouping of those areas, and districts which either conform to or stand out from their natural environment.

Analysis of Cities, Town Groups and Towns, by predominant function and size classes

[I—100,000 +; II—50,000-99,999; III—20,000-49,999; IV—10,000-19,999; V—5,000-9,999; VI— upto 4,999]

INDIA

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total . . .	2,462	113	138	484	1,727	748	761	218
Agricultural . . .	594	..	3	41	550	210	269	71
Port . . .	90	15	7	19	49	27	19	3
Artisan . . .	304	6	14	54	230	108	107	15
Manufacturing . .	387	43	47	108	189	101	75	13
Trade and Commerce	193	5	8	48	132	47	67	18
Transport . . .	69	3	7	15	44	26	16	2
Service . . .	825	41	52	199	533	229	208	96

Note 1. The following 6 towns though Agriculturally predominant have been shown against Port.

- Class III
 - Karanja (Maharashtra)
 - Mangrol (Gujarat)
- Class IV
 - Gangavati (Mysore)
 - Mulky (Mysore)
- Class V
 - Harnai (Maharashtra)
- Class VI
 - Tankara (Gujarat)

Note 2. Throughout this chapter class of town is represented by one or other of the 6 ranges of population while function of town denotes that the particular function suggested is pursued by the most substantial proportion of its working population.

REGION I HIMALAYAS

This Region contains the entire Himalayan girdle in the north and northeast with the mountain or highland districts, States and Union Territories embedded in valleys or encrusted on ridges and foothills. The districts which are more in the plains than in the foothills have been excluded. This region is treated in three subregions (West Himalayas, East Himalayas and North-Eastern Ranges), and nine divisions (Jammu and Kashmir, Himachal Pradesh and Himalayan Punjab,

Himalayan Uttar Pradesh of Highland Districts, Darjeeling-Sikkim, Bhutan-NEFA, the hill districts of Assam, Nagaland, Manipur and Tripura). It is significant that in each Division the district at the base of the hill and mountain tracts shows a higher level of development than the tract it serves because it provides the funnelneck of all economic activity in the upper reaches and the contact mart with the plains. The entire region can be roughly described as a Rice Tract.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

1 HIMALAYAS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total . . .	112	4	3	6	99	16	29	54
Agricultural . . .	17	..	..	..	17	..	2	15
Artisan . . .	3	..	1	..	2	..	2	..
Manufacturing . . .	2	..	..	..	2	..	1	1
Trade and Commerce	3	..	1	..	2	..	1	1
Service	87	4	1	6	76	16	23	37

1.11 1 Himalayas 1.1 West Himalayas 1.11 Jammu and Kashmir.

Jammu and Kashmir may be divided into four distinct subdivisions. The first, Ladakh has the Karakoram massif and K₂ in the far north, the Great Himalayas and Zaskar Range in the South, and the Indus in between. The greater part of the Ladakh Plateau has a series of east-west river valleys and alluvial cones south of the Depsang, Soda and Lingzi-Tang

Plains in the east and the Paltistan Karakoram Range in the west; from north to south the Shyock-Nubra valleys and the Shyock dam; the Chang-Chemmo valley, the Harong valley, the Pangong rift, the Ladakh range, the Indus furrow. Then follow the Zaskar Range and the Greater Himalayas, Rupshu and the Tibetan Plains. Alluvial cones are much sought after for human settlement, of which there are several along the Indus between Skardu and Leh. Apart from the fact that the

work participation rates in the traditional sector of cultivation and household industry (Block III) as well as distributive trade manufacturing and infrastructure (Block V) enjoy medium values, all the other sectors have low values in Ladakh, serving to put this tract on the lowest level of all-round development. The principal language is Ladakhi.

The second subdivision in Jammu and Kashmir begins from the southern flanks of the Greater Himalayas and encloses the valley of Kashmir, walled in on the west, south and part of the east by the Pir Panjal which joins the Siwalik ranges. The districts included in the famous vale are Baramulla, Srinagar and Anantnag, all three distinguished by rice cultivation (40, 47 and 51 per cent respectively of all cultivated land under rice). This naturally is an area of dense population: 238 persons per sq. mile in Baramulla, 531 in Srinagar and 312 in Anantnag. The surrounding mountains including the Pir Panjal are practically uninhabited. The valley is full of furrows, the Jhelum providing the main water supply for irrigation and navigation. Above the alluvial flats rise extensive terraces locally known as 'Karewas' which are level surfaces between the incised streams dissecting the terraces, the flanks of which are generally steep. These Karewas, wherever irrigated by channels (Kuls) produce rice, maize and the much prized saffron. The Jhelum marshes and lakes, including the great Wular, harbour floating gardens and encourage formation of new land on the shallow lake-margins with the help of boatloads of lake-mud and weeds. These are called demb lands, used not only for raising 'fruits and vegetables, but even forage, maize and tobacco' (Spate). In the west, Baramulla houses the neck of the Jhelum gorge. It is mainly the high value of block V which lifts Srinagar up

from the general setting of the medium values for all blocks for this zone to the second level of development, Baramulla and Anantnag being still relegated to the first or lowest level. All the three districts have medium values for each of the five Blocks, except that Srinagar has 'high' value for Block V (distributive trade, manufacturing and infrastructure). Craft industries are more important in all the three districts, factories being confined largely to Srinagar as State enterprises. The registered factories are concerned with weaving of silk, wool and miscellaneous fabrics, forestry and logging, leather and livestock, processing of food and some amount of non-metallic minerals, that is, processing of material locally grown. All the three districts are connected by electricity grid. The principal language is Kashmiri.

The third subdivision in Jammu and Kashmir begins with the high flanks of the Pir Panjal (average height 4,000 m., Pir Panjal Pass 3,494 m., Banihal Pass 2,832 m.) which breaks down into the lower but highly dissected Tertiary hills of the Punjab border. This zone contains three districts in an arc from west to east: Poonch, Udhampur and Doda. The density of population is the least in Doda (61 persons per sq. mile) and highest in Poonch (193). Udhampur has 147. The staple cultivation is maize followed by wheat and only small quantities of rice in Poonch and Udhampur. Doda commands a portion of the Upper Chenab valley although Poonch and Udhampur take the benefit of it and its tributaries for rice cultivation. Values for all blocks in all three districts are either low or medium. Doda has no electricity while Poonch and Udhampur generate their own. All the three districts are graded the first or lowest level of development. There are no organised industries except

for forestry and logging in Doda and mining and quarrying in Poonch and Udhampur. The principal language in Poonch is Pahari, in Udhampur Punjabi and in Doda Kashmiri.

The fourth subdivision in Jammu and Kashmir consists of the foothills and Siwalik terrain and a narrow strip 5-15 miles wide of the Punjab plains at altitude of 1,100—1,200 ft. The country is badly ravined which accounts for the second place for rice for both Jammu and Kathua, the principal crop being wheat. The density of population in Jammu is 414 persons per sq. mile, that for Kathua being only 203.

The values for blocks IV, V and VI are high for Jammu, those for blocks II and III being medium. They place Jammu on the fourth or top level of development. But Kathua is still on the first level, the value for block IV (potential of human resources) alone being high, that for block III (participation rates in the traditional sector of economy, agriculture and household industry) being low, the remaining blocks being medium. Jammu generates

its own electricity and is also connected to a grid from Jogindernagar at Pathankot while Kathua is connected to grid. Organised industry is diversified: food, silk weaving, transport equipment, printing and publishing and miscellaneous industries. But in Kathua it is limited to wood products alone. The principal language in both districts is Punjabi with which apparently Dogri has been identified.

This Division, therefore, puts the strong imprint of its natural features on seven out of nine districts in its four zones. All seven districts are in the first or lowest level of development, while Srinagar is in the second and Jammu in the fourth or top. It may be borne in mind that Srinagar drains Ladakh and the high settlements while Jammu funnels all activity between Jammu and Kashmir and the plains. The population increase in the entire division is low, but immigration is heavy in Jammu and Kathua. The proportion of children 0-4 to women of 15-44 is high in all districts except Ladakh and the Valley which possibly augurs rapid population increase in the current decade. Most areas, except Doda and Jammu, grow oilseeds.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

1-11 JAMMU AND KASHMIR

Function of town	Class of town						
	Total	I	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	41	2	1	38	4	5	29
Agricultural	14	..	..	14	..	1	13
Artisan	1	..	..	1	..	1	..
Manufacturing	1	..	..	1	..	1	..
Service	25	2	1	22	4	2	16

Class I cities with their function :
Service—Srinagar, Jammu.

1.12 1 Himalayas 1.1 West Himalayas 1.12 Himachal Pradesh and Himalayan Punjab.

The eastern continuation of the Pir Panjal beyond the Chandrabhaga and upper Chenab Valley, the Siwaliks, the intermediate spurs, and the lesser Himalaya which here forms a definite range, the Dhaola Dhar, girdling the southern edge of the Chamba Valley, form a typical longitudinal arrangement. The Siwaliks, 'here with a remarkably even crest at 2,000—3,000 feet, but largely deforested and savagely eroded, form the *chos* (should be *cho*) torrents which bring ruin to the plains below' (Spate). The Dhaola Dhar separates the longitudinal sections of Beas and Ravi. Chamba district takes the upper reaches of the Chenab in the north, while the Ravi flows past Chamba and Dalhousie. The Beas takes its rise in Lahaul and Spiti and runs east-west through Kulu, Mandi and Kangra. The Sutlej flows through Kinnaur and Bilaspur. Mahasu, Simla and Sirmur are on the Siwalik range. The Kulu Valley alone (north-south) is nearly transverse to the main trends (east-west).

Lahaul and Spiti has the sparsest population (6 persons to the square mile), although it has experienced high rates of increase and immigration in the last decade. The proportion of children 0-4 to women of 15-44 is however low. The other districts in this division in ascending order of population density are Kinnaur (16), Chamba (79), Mahasu (159), Kangra (169), Sirmur (173), Mandi (237), Bilaspur (354) and Simla (507).

The division may be divided into five well defined subdivisions. The first, Lahaul and Spiti, is reminiscent of Ladakh on account of its low population density and the rivers it gives rise to. Lahaul and Spiti is in the first level of development: the values of blocks III (participation rates in the

traditional sector of economy: agriculture and household industry) and IV (potential of human resources) are high, for block V medium while those for blocks II and VI are low. It generates its own electricity but has no registered factory.

The second subdivision is Chamba, a valley enclosed between the outliers of the Pir Panjal and the Dhaola Dhar. S. P. Chatterjee calls the pattern of population distribution in these valleys dendritic—treelike, which is apt, as settlements follow the course of rivers and their tributaries. Chamba has high value for block IV (potential of human resources and high tribal population), low value for block VI (organised industrial activity) and medium values for the remaining blocks. It generates electricity locally but is also connected to Uhi River Power Supply Grid. It enjoys the first or lowest level of development. Chamba is the only district in the Division which grows oilseeds.

The third subdivision is comprised of the districts on the Beas valley, Mandi and Kangra. Kangra is in two parts, Kangra proper and Kulu valley intersected by the wedge of Mandi. Kangra valley is featured by the Jaswan Dun, a piedmont plain or flat-floored valley. All values for Kangra are either low or medium, while block IV (potential of human resources) alone is high for Mandi. Both Kangra and Mandi are connected to electricity grid. Kangra is placed in the first level of development, while Mandi is placed in the second.

The fourth subdivision as formed by the single district of Kinnaur which enjoys high values for block IV but low value for block II (agricultural infrastructure) and medium values for the remaining blocks. It has no electricity. A peculiar feature is the high Bhotiya valleys and dominant tribal population. It is in the first level of development.

The fifth subdivision consists of Bilaspur on the north of the Simla ridge dipping into the Sutlej gorge. Simla, Mahasu and Sirmur in the eastern foothills (Kiarda dum). Bilaspur and Sirmur have low values for block VI (organised industrial activity) but high values for block IV (potential of human resources), and medium values for other blocks. Immigration is moderate in both. Bilaspur is placed in the first level of development and Sirmur in the second. But Simla, because of its high values in blocks III, IV and V, electricity generation and grid, is placed in the third level of development, with a high immigration value, while Mahasu is placed in the second by virtue of its high values in blocks III and IV. Both Simla and Mahasu have appreciable degrees of urbanisation and industrial modernisation.

The presence of valleys is readily recognised by the existence of appreciable proportions of rice cultivation in Mandi (19 per cent), Bilaspur (9), Sirmur (8) and Kangra (15), where the most palpable and attractive evidence of human activity is the terraced rice fields and temperate fruit orchards.

The major industrial resource of this Division is the generation of electricity at Jogindernagar (Mandi) which is mainly utilized in the plains. Forestry is of great importance but mineral resources are widely scattered and of no great importance. The most important extraction is slate from quarries at Kangra and Bilaspur.

Five of the nine districts in this Division are still in the first or lowest level of development. Mandi, Sirmur and Mahasu are in the second level and Simla in the third. Human enterprise therefore still largely defers to natural environment. There is much consciousness and pride

about language. For example, Chamba largely speaks Bharmauri/Gaddi. Mandi Mandeali, Sirmur Sirmauri, Kinnaur Kinnauri, Mahasu Pahari, Lahaul and Spiti Lahuli, Kangra and Simla Hindi.

Analysis of Town Groups and Towns by predominant function and size classes

Function of town	Class of town					
	Total	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7
Total	25	1	24	4	6	14
Agricultural	3	..	3	..	1	2
Manufacturing	1	..	1	..	..	1
Trade and Commerce	1	..	1	..	..	1
Service	20	1	19	4	5	10

1.13 1 Himalayas 1.1 West Himalayas 1.13 Himalayan Uttar Pradesh (Highland Districts).

This Division, now generally called Uttarakhand (excluding Dehra Dun and Naini Tal), is divided into two longitudinal parts: Garhwal and Kumaon. Both again are contained between the Tons river before it meets the Jamuna in the West and the Maha Kali before it meets the Sarda in the East. The Division thus includes the Himalayan basins of the Jamuna, the Ganges, the Ramganga and the Sarda. Alkanmandaa and Ganges roughly separates the two territories longitudinally. Garhwal contains Uttar Kashi, Chamoli, Garhwal, Tehri Garhwal and Dehra Dun. Kumaon contains Pithoragarh, Almora and Naini Tal. S. P. Chatterjee has very rightly described the outermost Himalayan range, known as the Siwalik as 'the most important population divide in the Himalaya. It hardly

rises above 1,000 m., but its much dissected surface, steep southern scarp, thin soil covering and fairly dense jungle, discourage agricultural activities, and it remains almost uninhabited. There is a sudden bursting of life where the Siwalik ends and the piedmont plains or flat-floored interior valleys, locally known as duns begin.' The Jaswan Dun has already been mentioned. In this Division Dehra Dun 'is a typical example of these valley oases in the outer Himalayas.'

The northernmost extremity of this Division is composed of a garland of glaciers and peaks: the Kedarnath—Badrinath group which gives rise to the Bhagirathi and Alakananda; Kamet across the Alakananda and farther East Trisul, Nanda Kot and Nanda Devi. Apart from Dehra Dun the country is heavily dissected almost throughout at heights of 1,000—3,800 m. The climate shows the usual montane variations. Run-off is extremely rapid, particularly where the surface is bare of forests. Climbing up the tarai or bhabar land and Siwalik one proceeds from the *sal* forests, to evergreen oak and rhododendron around 1,000 m. and up, with ash, yew, ilex and bamboo, and further up the coniferous belt between 3—4,000 m., and finally alpine scrub. There are grass patches up to 5,400 m. The forests naturally play an important part in the life of the people. Mineral deposits are patchy and not of much economic significance.

Spate observes that 'the basis of life in Kumaon is an elaborately organised agriculture.' He quotes S. D. Pant to describe the Kumaon cultivation types: *katil* on the forest edge, *upraon* on hillsides and *talaon*, valley. The terracing is often most elaborate. Equally elaborate and ingenious are rotations. On the *upraon* the village lands are divided into two compact blocks, the rice and the *madua sars*,

and these have an alternating rotation. In *talaon* land the three very different systems of paddy cultivation enable the same area to grow *kharif* rice for years, rotating the type of tillage and introducing different *rabi* crops. Soils are generally poor, shallow and stony and manuring is very important. The range of crops is described in block II. It will be seen that rice is sedulously cultivated in all districts, being to some extent a prestige food. Market-gardening and potato cultivation are fast gaining ground while sheep rearing is widespread.

On the Garhwal side Hardwar at the Southeastern tip of Dehra Dun district, where the Ganges breaks the Siwaliks, is a typical contact mart, with the added attractions of the holy river' (Spate). The Dun drains evenly into Jamuna and Ganges, the town lying on the low swelling interfluvium. The towns are essentially petty marts: 'contact points of hill and plain in the bhabar, or nodes of valley—on ridge-ways the importance of sunshine is emphasised by the distinction between cultivated *tailo* slopes—the sunny or adret side of the valleys—and the forested *saylo*: at the highest level live the Bhotiyas, among whom pastoralism and trading are more important than agriculture. Villages are usually along spurs low enough to avoid the bleakness of the ridgetops, but well above the sultry valleys; the village lands often extend in strip-parish fashion, from irrigated valley floor to forested or grassy ridge top' (Spate).

There are thus, broadly, three natural subdivisions: The first is comprised of Uttar Kashi, Chamoli, Tehri Garhwal and Garhwal. Of these Tehri Garhwal is connected to electricity grid, Garhwal generates its own while Uttar Kashi and Chamoli have no electricity.

All the four districts have places in the first or lowest level of development, the

values for Tehri Garhwal particularly being low for all blocks except III (participation rates in traditional economy) where it is medium. All the four districts have low values in block II (agricultural infrastructure) and block V (distributive trade, manufacturing and infrastructure). In block III Uttar Kashi alone enjoys high value, the other three commanding only medium. In block IV (potential of human resources) Uttar Kashi and Chamoli have medium and Tehri Garhwal and Garhwal low values. In block VI (organised industrial activity) Uttar Kashi and Tehri Garhwal have low and Chamoli and Garhwal medium values. There are no registered factories in Uttar Kashi and Chamoli. Tehri Garhwal has very few engaged in miscellaneous manufactures but Garhwal has a few factories engaged in miscellaneous manufactures, machinery other than electrical and transport.

The principal language in Uttar Kashi, Chamoli and Tehri Garhwal is Garhwali. In Garhwal it is Hindi.

The second subdivision is formed by one district alone: Dehra Dun, which itself is sharply divided in two: the Dun composed of porous bhabar soil and patches of badlands and Mussoorie Hills which rise abruptly to a peak of 2,005 m. (Camel's Back). Landaur is 7,534', and Pari Tibba 6,749'. Dehra Dun is noted for its forestry; timber, sawyards, charcoal, furniture. The principal language is Hindi.

In respect of economic development Dehra Dun ranks in the fourth or top level with high values for all blocks except III (participation rates in traditional economy) where the value is medium, which itself is magnificent. Dehra Dun generates its own electricity and is also connected to grid. Curiously and significantly enough in the matter of registered factories food industries and not forestry take the pride of place, followed by textiles, miscellaneous industries, printing and publishing and non-

metallic minerals. The population density of Dehra Dun in 1961 was 452 persons per square mile.

The third subdivision is composed of Pithoragarh of the high valleys, Almora (usually between 2,000—2,500 m.) and Naini Tal. Pithoragarh has no town and no electricity. In the valleys and recesses it grows rice but the staple is wheat, *ragi* and barley. Almora has two beautiful towns: Ranikhet with its cantonment and Almora, both important as educational centres and renowned for their wood carving and woollen goods. Almora is connected to electricity grid. Naini Tal, like Dehra Dun, stands apart in development. It generates its own electricity and is also connected to grid. The principal language of Pithoragarh and Almora is Kumauni and of Naini Tal Hindi.

The pattern of values for both Pithoragarh and Almora is identical, low in blocks II, V and VI and medium in III (traditional economy) and IV (human resources). Both are in the first or lowest rank of development. Pithoragarh has no registered factories but Almora has a few engaged in textiles, miscellaneous industries and chemicals.

Naini Tal occupies a place in the fourth or top rank of development. It enjoys high values in II (agricultural infrastructure), IV (potential of human resources), V (distributive trade and infrastructure) and VI (organised industrial activity) and medium value in III (traditional sector). Its pooled total score is much higher than even Dehra Dun's. The population density in 1961 was 237 per sq. mile.

Six out of eight districts in the Division therefore are in the lowest level of development. They constitute the six highland districts of Uttar Pradesh. Dehra Dun descends to the duns and Naini Tal to the tarai (bhabar land in Haldwani) and are

both placed in the fourth or top level of development. They form the funnelnecks of two basins and drain, enriching themselves in the process, the bulk of the economic products and activity of the highland districts, offering themselves in return as important contact marts with the great northern plains. Both Dehra Dun and Naini Tal have high immigration.

Further, Naini Tal has experienced high natural increase which is supported by the high proportion of children 0-4 to women of 15-44.

We now skip the great chain of tarai districts from Pilibhit to Jalpaiguri and proceed to the next division of the Himalayan Region.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

Analysis of Cities, Towns

1-13 HIMALAYAN UTTAR PRADESH (HIGHLAND DISTRICTS)

Function of town	Class of town						
	Total	I	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	26	1	2	23	5	8	10
Artisan	1	..	..	1	..	1	..
Trade and Commerce	1	..	..	1	..	1	..
Service	24	1	2	21	5	6	10

Class I cities with their function :

Service—Dehra Dun.

and size class

Analysis of Cities, Town Groups and Towns by predominant function and size classes

Analysis 37

1-1 WEST HIMALAYAS

Function of town	Class of town						
	Total	I	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8
	92	3	4	85	13	19	53
Total	17	..	..	17	..	2	15
Agricultural	2	..	..	2	..	2	..
Artisan	2	..	..	2	..	1	1
Manufacturing	2	..	..	2	..	1	1
Trade and Commerce	69	3	4	62	13	13	36
Service							

1.21 1 Himalayas 1.2 East Himalayas 1.21 Darjeeling-Sikkim.

The foothills of Darjeeling slowly descend into the tarai (locally called Morang) of Siliguri Subdivision which is a narrow strip of the North Bengal plain, crisscrossed by many fast flowing streams, producing coarse porous bhabar soil excellent for growing tea. Darjeeling district is longitudinally cut into two unequal halves by the Tista gorge with Darjeeling and Kurseong in the West and Kalimpong in the East. The central knot of spurs is at Ghoom and Tiger Hill from which one spur travels to Senchal and another to Darjeeling. A third forms the high spine of the Kurseong spur, while a fourth of the Mirik spur. Beyond Sukhiapokri starts the Singalila range which has four high points: Sandakphu, Sabarkum, Phalut and Singalila. On the east is thrown the Peshok-Tukdah spur which descends to the Tista gorge. The population density is high being 497 per sq. mile in 1961.

Sikkim is a mass of deeply dissected highland. The high west wall of the Himalaya proceeds up the Jongri glacier to Kang La (La=pass), on to Kabru (24,015') leaving Pandim (22,020') on the East to meet Kanchanjangha (28,466') in Nepal. The highest peak in Sikkim proper, Powhunri (23,180') South-east of Dongkya La, and the next Siniolchu (22,570') north-east of Pandim. Almost on the northern border adjoining Tibet but well inside Sikkim is the second highest peak Chomomo (22,430'). The two northern passes are Serpuba La (16,400') and Kongralama La (16,900'). The pass on the North-east is Dongkya La (18,131') south of Cholamo Lake (17,000'). The two most important trade passes until recent times were Nathu La and Jelep La both leading into the Chumbi

valley. The population density was 58 per sq. mile in 1961.

While tea is the most important manufacture of Darjeeling, agriculture includes terraced wet paddy (*pani-khet*) in the valleys in both Darjeeling and Sikkim. Orange is extensively grown and cardamom is an important cash crop. Bamboo is the staple building and piping material. Settlement is essentially dendritic and in Sikkim often dispersed in hamlets of two to four homesteads. The large villages and small towns are important staging points in the great trade routes with Nepal and Tibet.

The most important crop in Darjeeling is rice, in Sikkim maize and also rice. Siliguri grows much jute and the district as a whole some oilseeds.

In ranking Darjeeling and Sikkim are at opposite poles. Darjeeling takes its place in the fourth or top level with high values for all blocks except III (participation rates in traditional economy) in which it rates medium, which itself is significant as in Dehra Dun. It generates its own electricity at several points and has a grid network. Siliguri, the base subdivision of Darjeeling, acts as the funnelneck of all activity in Darjeeling and Sikkim, part of Ilam (Nepal), the North Bengal Plains and Assam. By contrast, Sikkim is in the first or lowest grade with low value in block II, medium values in blocks IV, V and VI and high value only in block III (participation rates in traditional sector).

The principal industries in Darjeeling are tea, transport and transport equipment, wood industries, basic chemicals and furniture and fixtures.

Analysis of Town Groups and Towns by predominant function and size classes

1.2 EAST HIMALAYAS AND 1.21 DARJEELING-SIKKIM

Function of town	Class of town					
	Total	II	III	IV—V	IV	V
1	2	3	4	5	6	7
Total	5	1	2	2	1	1
Trade and Commerce	1	1	..	..	..	..
Service	4	..	2	2	1	1

The principal language in both territories is Nepali.

1.22 1 Himalayas 1.2 East Himalayas 1.22 Bhutan-Assam Himalayas.

There is not much in common between Bhutan and North-East Frontier Agency except the East Himalayan range. Both have still many wild mountains and forests, rolling yak and mithun pastures. In the North-west Bhutan is presided over by the superb cone of Chomolhari (Divine Queen of Mountains, 23,930'), guarding the Tang La on the Brahmaputra Tsangpo watershed. Kula Kangri (7,539 m.) is located near the glacial pass of Monla Karchung. The valleys of Bhutan and North-East Frontier Agency open out normally to the South, except in Tirap Division of North-East Frontier Agency where they open out to the northwest, in typical alternate strips of wide basin and narrow gorge. The Duars or doors of Bhutan have the usual features of tarai country, growing *sal* forests, grass and reed, jute and tobacco. Some of the valleys have strips of flat floor before they acquire a wide apron of level plain. These are given over to paddy fields. Maize and millets are grown, mainly by semi-shifting methods. Much forest product is collected.

The Assam Himalayas used to be 'the least known part of the whole subcontinent' (Spate) but North-East Frontier Agency has since been extensively surveyed. The territory is extremely rugged and very sparsely populated, settlements being found mostly along the mountain torrents and their valleys, as in Diliang, Dibang and Lohit valleys. Unlike Nagaland, Manipur and Mizo Hills, villages are located mainly on hill slopes and seldom on hill tops.

It has not been possible to rank Bhutan. Neither is information available for as many as six items in block II and one each in blocks IV and V for North-East Frontier Agency which has high value only for block III (participation rates in the traditional sector of agriculture and household industry) and medium values in block IV (potential of human resources). That it is rapidly developing will appear from the fact that it ranks medium in block V (distributive trade and infrastructure). Headquarters stations have small electricity generating sets. The overall ranking is still the first or lowest level of development. The extent of Nepali immigration in North-East Frontier Agency may be gauged from the fact that the largest single language is Nepali. There are no towns in North-East Frontier Agency.

1.31 1 Himalayas 1.3 North-Eastern Ranges 1.31 Assam Hills (Meghalaya).

This Division embraces the four hill districts of Assam, which fall into three convenient subdivisions.

S. P. Chatterjee has called the first of the three subdivisions the Meghalaya plateau comprising the Garo Hills and United Khasi and Jaintia Hills. This plateau separates two densely populated valleys, the Brahmaputra Valley in the North and the Surma Valley in the South and is thickly inhabited. The grassy plateau tops are specially favoured to

which the pine forests and waterfalls lend great charm. The lava soils in the plateau scarps 'are extremely fertile and suitable for growing oranges. South of the Tura range there is some concentration of population in the Someswari and other river valleys.' (Chatterjee). Rice is the major crop in all districts claiming more than 50 per cent acreage in all except United Mikir and North Cachar Hills (Mizo Hills 93 per cent), followed by maize. Sugarcane, cotton and oilseeds are grown in United Mikir and North Cachar Hills and cotton, jute and oilseeds in Garo Hills.

The United Mikir and North Cachar Hills, East of the United Khasi and Jaintia Hills, forming the second subdivision, are mostly inhabited by Mikirs and Kacharis who do much *jhum* or shifting cultivation. Mikir villages hug the hill slopes. The population being mobile, most villages are small, as all villagers of the same clan still prefer to live in the same house. The Kacharis also practise *jhum* cultivation and live either on the lower hill slopes or in the river valleys. Diphu is the district headquarters. Lumding is the largest railway centre.

The Mizo Hills is the third subdivision in the South wedged in between Tripura and Chittagong Hill Tracts in the West and Manipur in the East. The mountain ridges and valleys run North-south commanding some of the most charming and haunting landscapes made picturesque by a highly cultured and enterprising population, the Lushais. Most villages of the Lushais are on tops of hills or ridges, small, neat and highly organised. The silted Champhai lake lends itself to concentration of population. Aijal is the only town and district headquarters.

Garo Hills had the highest population density in 1961 of 97 persons per sq. mile, United Khasi and Jaintia Hills of 83, United

Mikir and North Cachar Hills of 48 and Mizo Hills the lowest of 33. The principal languages are respectively Garo, Khasi, Mikir and Mizo. The populations are overwhelmingly tribal.

Garo Hills has low value in block II (agricultural infrastructure), high value in block IV (potential of human resources) and medium values in blocks III, V and VI. It generates a small quantity of electricity in Tura. It is placed in the first level of development. So is Mizo Hills which has no electricity and enjoys medium values in all blocks except in block IV where the value is high.

United Mikir and North Cachar Hills is placed in the second level of development having medium values in all blocks except in block IV where the value is high. The district is, therefore, treading the same line of development as Mizo Hills; only it is ahead of the latter. It generates electricity in the headquarters.

United Khasi and Jaintia Hills is way ahead of the other three districts, enjoying a high total score. It has high values in blocks II, III and IV and medium values in blocks V and VI. The district contains the capital of Assam State and has a wide range of organised industry in registered factories: printing and publishing, transport equipment, electricity generation, wood products, machinery other than electrical.

Garo Hills has some cotton and jute ginning and pressing. Mizo Hills has no registered factories. United Mikir and North Cachar Hills has registered factories devoted to food processing, wood and cork products and generation of electricity.

The Division as a whole is, therefore, very much awake and, although development is still patchy, the ferment is evident everywhere. The rates of natural increase and immigration are high but the proportion of children 0-4 to women of 15-44 is

high only in United Mikir and North Cachar Hills, suggesting that there may have been an under-statement of immigration in favour of natural increase.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

1.31 ASSAM HILLS (MEGHALAYA)

Function of town	Class of town					
	Total	I	IV-VI	IV	V	VI
1	2	3	4	5	6	7
Total	5	1	4	1	2	1
Service	5	1	4	1	2	1

Class I cities with their function :
Service—Shillong.

1.32 1 Himalayas 1.3 North-Eastern Ranges 1.32 North-Eastern Border Hills (Nagaland).

Nagaland has a landscape of forest clad ranges like the Patkoi, Naga Hills and Mizo Hills and deep incised valleys. The highest peak is Saramati (3,826, m.) east of Kohima. Both dispersed and nucleated types of villages are found. The Angami Nagas are astonishingly skilled in terrace cultivation and irrigate their rice lands by ingeniously guided water channels from harnessed mountain streams. Angami villages are large and compact like those in and around Kohima. The other Naga tribes, Aos, Semas, Sangtams, Konyaks, etc. practise *jhum* or shifting cultivation and live in smaller fortified settlements on hilltops.

The most important crop is rice (95 per cent of acreage) which provides both solid food and liquor. The languages are Naga. The population is overwhelmingly tribal.

Kohima generates its own electricity for the civil and military settlement and part of Kohima town. Although values for blocks

III and IV in Kohima are high, those for blocks V and VI are medium and for block II is low. There are no registered factories. The total scores for Mokokchung and Tuensang are low.

Nagaland takes its place in the first or lowest level of development.

Analysis of Town Groups and Towns by predominant function and size classes

1.32 NAGALAND

Function of town	Class of town	
	Total	V
1	2	3
Total	3	3
Service	3	3

1.33 1 Himalayas 1.3 North-Eastern Ranges 1.33 North-Eastern Border Hills (Manipur).

Imphal, the capital of Manipur, lies in a lovely valley, an intermont, paddy floored basin, which is some 60 miles long and 30 miles wide, at a height of 2,600 ft. above sea level. The scenery on the valley and on the roads leading to it is most beautiful. The valley is surrounded by hills, which rise from 2,500 ft. to 5,000 ft. above it. The whole drainage of the valley escapes at the southern end through a gorge in the hills only a few hundred yards wide. There are several large lakes, the largest being Logtak, suggestive of glacial action in the past.

Almost the sole crop is rice. The principal language is Manipuri.

Manipur has about the same score as Nagaland. The values for blocks II, III and VI are low while that for block V is medium. Only block IV (potential of human resources) is high. Manipur town generates its own electricity.

The state occupies the first or lowest level of development.

1.34 1 Himalayas 1.3 North-Eastern Ranges 1.34 North-Eastern Border Hills (Tripura).

Tripura suggests a boxing glove to the Southwest of Cachar and West of Mizo Hills. It borders Comilla district in the east and Chittagong and Chittagong Hill Tracts of East Pakistan in the South. It is mostly a plain and plateau country ribbed with north-south hill ranges which divides Tripura into long narrow longitudinal strips of plateau with incised valleys. The slopes and valleys are filled with dense mixed forest, mainly bamboo, which from the air looks like elaborate, luminous green coral and sea anemone on clear, ocean floors. To the extreme west on the Haora river is Agartala, the State headquarters, which is barely four miles from Akhaura, the most important railway junction of Comilla in East Pakistan. In the South-west Sonamura on the Gumti river faces Comilla town. The Seloniamuhari doab in Belonia (South-western subdivision) contains very thickly settled villages, but Sabrum, the Southernmost subdivision, is mostly wooded. The first North-south range of low hills starts due east of Belonia town and passes through the western regions of Sabrum. The Muhari river drains this ridge in the West. The second longitudinal ridge, Deotamura, starts east of Mohanpur Tea Estate in Agartala subdivision (Bar Mura peak 570 m.) runs down almost due south, its spine serving as the dividing line between Udaipur and Amarpur subdivisions, the eastern reaches of Belonia until it partially subsides near Ajodhya Bazar and Sabrum where the Fenny river flowing down the valley between the second and third ridges acquires a respectable width. Khowai subdivision in the north straddles the third, longitudinal Atharamura ridge (counting from Belonia in the West), a high point on the range being Atharamura 1,463 ft. Amarpur subdivision, south of Khowai and north of Sabrum, also straddles the same third ridge (the highest point on this tract

being Jari Mura 1,355'). The Chingri river flows down the valley between the third and the fourth longitudinal ridge. This fourth, Langtarai-Sardengmura ridge (Langtarai Peak, 1,539') which divides Kamalpur (West) from Kailasahar (East) in the North is a thick, fat spine with many high points down the line. Dharmanagar subdivision, the easternmost, stands west of the fifth longitudinal Sakkanklang ridge (highest peak Sakkan) which divides it from Kailasahar. Dharmanagar itself is on the Silua river in the valley of which nestle many villages. The sixth and easternmost ridge is marked by the Jampai Tlang. The eastern boundary, which separates Tripura from Mizo Hills and the Chittagong Hill Tracts, is formed by the Lungai river between the Hachhek and Jampui ranges to its source in the Betling Sib Peak (939 m.). The boundary next runs in an irregular line to the Dolajari Peak, and then along the Sardeng range and the Fenny river, till the latter enters the district of Noakhali (East Pakistan). Each successive hill range towards the East is a little higher than the previous one. These ranges also increase in height southwards from the plains of Sylhet and northwards from Chittagong District, till they reach their highest points near the watershed line of the rivers running North and South. The northern portions of the valleys between these ranges are for the most part flat, swampy and covered with rank vegetation; while, to the south, they are of a wild and broken character, intersected by an infinity of deep-cut ravines and low, intricate narrow-topped ridges.

The chief crop is rice but Tripura also grows much jute, some cotton and oilseed. It is also a fairly important tea growing area. The texture of the population has been greatly changed by the influx of a large population of displaced persons which has settled in the western alluvial

areas of Agartala, Belonia and Udaipur but mainly in the northern valley floors of Kamalpur. Kailasahar, Khowai and Dharmanagar and even Amarpur. The other subdivisions of Sabrum, Khowai, Dharmanagar and Amarpur are hilly and inhabited by hill tribes mainly Tipperahs, Jamaitiyas, Nowattias, Riangs, Hallams and Kukis. This explains why Bengali, the principal language, accounts for only 65 per cent of the population. Tribal villages in the hills are usually small and scattered, situated on hill tops. The plains villages are nucleated and large and wherever possible line river banks.

Agartala town generates its own electricity and so do a number of other towns including Dharmanagar and Kailasahar (except Belonia which is not electrified). The number of factories for such a small State is comparatively large, devoted mainly to rice, jute and tea and miscellaneous manufactures. Electricity is generated in small sets in tea gardens. It is mainly tea which accounts for the high value in block VI.

The values for block IV (potential of human resources), V (distributive trade and infrastructure) are also high; that for block II is medium, that for block III is low. Tripura is placed in the third level of development. It seems to have made good with the investment of the Five Year Plans. Both natural increase, immigration and proportion of children 0-4 to women of 15-44 are very high.

Analysis of Town Groups and Towns by predominant function and size classes

1.32, 1.33, 1.34 NORTH-EASTERN BORDER HILLS

Function of town	Class of town				
	Total II	IV-V	IV	V	
1	2	3	4	5	6
Total	7	2	5	1	4
Artisan	1	1	..	..	..
Service	6	1	5	1	4

Analysis of Cities, Town Groups and Towns by predominant function and size classes

1.3 NORTH-EASTERN RANGES

Function of town	Class of town					
	Total	I	II	IV-VI	IV	V
1	2	3	4	5	6	7
Total	15	1	2	12	2	9
Artisan	1	..	1	..	..	..
Service	14	1	1	12	2	9

REGION 2 NORTHERN PLAINS

This Region has been made to include all the plains country that lies between the Himalayas and the Central Hills and Plateaus of the great central Indian land-mass. It begins in the West with a solid block of Thar desert and six westernmost dry districts in Rajasthan which forms the first subregion with two divisions—the Thar and the Dry districts. The next subregion is formed by the Punjab Plains, composed of four divisions: North Punjab Plain, Beas-Sutlej Doab, East Punjab Plain and South Western Punjab (Haryana). The third subregion, confined to Uttar Pradesh, is contiguous to the second and comprised of six Divisions, all in Uttar Pradesh: from West to East and from North to South, Upper Jamuna-Ganga Doab, Lower Ganga-Jamuna Doab, Uttar Pradesh Tarai, Rohilkhand, Oudh and East Uttar Pradesh. The fourth subregion is confined to Bihar

and consists of two Divisions, North Bihar Plain (Tirhut), north of the Ganga, and South Bihar Plain (Magadha) south of the great river. This subregion runs into the fifth in West Bengal, composed of four Divisions: North Bengal Plain (Duars) and Barind, north of the Ganga, Ganga Delta and Damodar Delta. The sixth subregion of the Great Northern Plains is composed of the two Assam Valleys of Brahmaputra and Surma.

Chatterjee describes the Great Plains as the world's largest aggradational plain, extremely suitable as a human habitat. And indeed, this great and ancient plain contains one of the largest and densest populations in the world. But as has been described above it falls conveniently into 6 Subregions, 20 Divisions and 94 districts.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2 NORTHERN PLAINS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	638	37	57	141	403	176	176	51
Agricultural	84	—	1	9	74	34	29	11
Port	2	1	..	1	..	..	..	..
Artisan	81	2	5	9	65	33	28	4
Manufacturing	98	14	18	34	32	14	15	3
Trade and Commerce	131	2	4	29	96	32	49	15
Transport	22	2	4	5	11	5	4	2
Service	220	16	25	54	125	58	51	16

2.1 Rajasthan Plain.

This Subregion is mainly desert and desert fringe. The homogeneous features are desert, a common crop *bajra* and a common culture represented by the predominance of Rajasthani except in Ganganagar where although it is the largest single tongue, its proportion is only 44%. The very fact that more than six million people live in this Division is a testimony to man's

subjugation of the desert. 'The northern parts are being redeemed by canal irrigation, leading to fairly dense habitation. Elsewhere, the typical desert landscape with shifting sand dunes and interior drainage basins still prevails, and settlements generally run along the short dry valleys (wadis) or are located in blowouts or pediplains and shallow basins near deep wells.' (Chatterjee).

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.1 RAJASTHAN PLAIN

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	50	2	1	8	39	21	14	4
Agricultural	20	..	..	3	17	11	4	2
Artisan	5	..	..	2	3	3	..	..
Manufacturing	6	..	1	2	3	1	2	1
Trade and Commerce	5	..	..	1	4	2	..	1
Transport	3	..	..	..	3	2	..	..
Service	11	2	..	..	9	3	6	..

2.11 2 Northern Plains 2.1 Rajasthan Plain 2.11 Rajasthan Desert (Thar: Marwar).

In India, the Thar desert proper is contained mostly in Bikaner and Jaisalmer on the West Pakistan border and Jodhpur just inside them. Spate thinks that 'the numerous hills of old rock protruding through the aeolian veneer indicate that the Thar is part of the Peninsular mass; but most of it is covered with superficial deposits, and the boundaries are hence ill-defined except where the desert is banked against the Aravalli Range. The desert is particularly evident in Jaisalmer where the density of population is still 9 persons per

sq. mile. In Bikaner, particularly in the old Ghaggar bed canal irrigation has attracted population since 1931. Bikaner has a density of 42 persons per sq. mile. The densest is Jodhpur with 102.

The three districts form a compact Division, united by the desert and precarious dry cultivation. *Bajra* is the most important crop followed by small quantities of *jowar*. Canal irrigation in Bikaner and the depressions between the sandhills in Jodhpur favour some sesamum. Nevertheless, except for Jaisalmer, both Bikaner and Jodhpur show high values for urban growth. All three districts exhibit high values for decadal population increase as

well as for proportion of children aged 0-4 to women aged 15-44. The proportion of immigrants during 1951-61 is also appreciable. Together, they seem to predict rapid population growth in the current decade 1961-71. This and the Dry Area districts incidentally raise the great shepherd hordes who take their cattle and even sheep and goats every year across hundreds of miles to the forests of Madhya Pradesh and Gujarat.

In respect of development Jaisalmer is in the first or lowest level, while both Bikaner and Jodhpur are in the third. The values for Jaisalmer are medium in blocks II, III and VI, low in block V but high in block IV. Bikaner and Jodhpur have high values in block IV, but medium values in blocks III, V and VI. Bikaner has medium and Jodhpur high value in block II. Irrigation in Bikaner and Jodhpur has thus put the districts on a higher level of activity in block II. The rapidly increasing population will probably contribute to a quickening of economic activity, there being no dearth of enterprise among the hardy, practical desert people.

Bikaner and Jodhpur specialise in transport industries owing to the old State railways. Bikaner and Jodhpur have sizeable registered factories in cotton and jute ginning and pressing, electricity, printing and publishing and basic metals.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.11 RAJASTHAN DESERT (THAR:MARWAR)

Function of town 1	Class of town				
	Total 2	I 3	IV-V 4	IV 5	V 6
Total	12	2	10	4	6
Agricultural	3	..	3	2	1
Artisan	1	..	1	1	..
Manufacturing	2	..	2	..	2
Trade and Commerce	2	..	2	1	1
Service	4	2	2	..	2

Class I cities with their function:
Service—Bikaner, Jodhpur.

2.12 2 Northern Plains 2.1 Rajasthan Plain 2.12 Rajasthan Dry Area.

This Division is wrapped round the Thar Division or Marwar comprising Bikaner, Jaisalmer and Jodhpur. It may conveniently be divided into two Subdivisions. Ganganagar, Churu and Nagaur in the North forming the north-eastern fringe of the desert proper, from which Ganganagar has been relieved by the canal system along the bed of the Ghaggar or the old Saraswati; and Pali, Jalor and Barmer comprised of the Luni Wadi and the Aravalli daman or undulating plateau. The Luni takes its rise in Lake Sambhar, the salt lake half in Nagaur and half in Jaipur, and passes mainly through Barmer so far as this Division is concerned and falls into the Great Rann of Kutch. While the upper Luni contains a great underground reservoir, in Barmer it forms a large salt basin, the Pachpadra, the exploitation of whose brine pits is of great economic consequence to Barmer.

This Division too is a great *bajra* tract except for Ganganagar which grows more horse-gram than *bajra* and even more wheat, thanks to the low country and canals. In their damper valleys Pali, Jalor and Nagaur grow some wheat and oilseeds too. Ganganagar and to a smaller extent Pali (locally known as Godwar) have been growing more and more cotton and oilseeds in recent years.

Migration to the canal areas of Ganganagar continues apace, part of which is spilling over into Churu. In other districts although migration is low, natural increase is very high, a fact that is supported by the high proportion of children aged 0-4 to women 15-44. This indicates that the Division is in for acceleration in population increase. The density is lowest in Barmer (60) and highest in Pali (171). The urban proportion is high in Churu, medium in

Ganganagar and Nagaur and low in the other three districts.

In our ranking Barmer and Nagaur are placed at the lowest level with high values only for block IV (potential of human resources). Jalor, Pali and Churu are in the second level with high values in block IV. Ganganagar, however, stands apart from the other districts of the Division and ranks in the third level with high values in II and IV and medium values in III, V and VI.

The Division as a whole shows considerable factory activity particularly in the districts of Ganganagar, Nagaur and Pali.

Ganganagar has cotton and jute ginning and pressing, textiles, food industries, wood and electricity. Nagaur is strong in non-metallic minerals, tobacco, basic metals and machinery. Pali is pre-eminent in tiles but has also non-metallic minerals, cotton and jute pressing, wood and electricity. The only important industry in Jalor is basic metals and in Barmer, apart from salt, tobacco. Churu has only printing presses and food industries.

The Division thus presents a picture of general sparseness of development as one proceeds from the North to the South Ganganagar claiming a place in the third level and Barmer in the lowest or first level.

Analysis of Town Groups and Towns by predominant function and size classes

2.12 RAJASTHAN DRY AREA

Function of town 1	Class of town						
	Total	II	III	IV—VI	IV	V	VI
	2	3	4	5	6	7	8
Total	38	1	8	29	17	8	4
Agricultural	17	..	3	14	9	3	2
Artisan	4	..	2	2	2	..	..
Manufacturing	4	1	2	1	1	..	..
Trade and Commerce	3	..	1	2	..	1	1
Transport	3	..	..	3	2	..	1
Service	7	..	..	7	3	4	..

2.2 Punjab Plains.

This Subregion naturally falls into four Divisions: the North Punjab Plain; the Beas-Sutlej Doab; the East Punjab or Trans Jamuna Plain; and South Western Punjab (Haryana) or Sutlej/Jamuna or Delhi Doab. The first three Divisions—North Punjab, the Doab and East Punjab—are wheat tracts; the fourth, adjoining the Rajasthan Desert, is more gram and *bajra* country. But wheat and gram are common everywhere except in Mahendragarh which grows only *bajra* and gram.

All the four Divisions grow cotton and oilseeds which are pervading even the irrigated Rajasthan Dry districts. Sugar-cane is grown in Kapurthala and Ferozepur. The principal mother tongue is Punjabi in Gurdaspur, Amritsar, Kapurthala and Ferozepur (North Punjab Plain), Jullundur and Ludhiana (Bisht Doab), Patiala (East Punjab Plain) and Bhatinda and Sangrur (in Haryana). Hindi is dominant in Hoshiarpur (Bisht Doab), Ambala and Karnal (East Punjab Plain) and Rohtak, Hissar and Mahendragarh (in Haryana).

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.2 PUNJAB PLAINS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	152	5	12	27	108	33	46	29
Agricultural	26	..	..	..	26	5	13	8
Artisan	14	..	1	..	13	4	6	3
Manufacturing	23	2	4	7	10	4	5	1
Trade and Commerce	46	..	1	13	32	11	13	8
Transport	2	..	1	..	1	1	..	..
Service	41	3	5	7	26	8	9	9

2.21 2 Northern Plains 2.2 Punjab Plains 2.21 North Punjab Plain.

This Division is comprised of the districts of Gurdaspur, Amritsar, Kapurthala and Ferozepur all of which lie between Ravi and Beas, that is, the Northeastern part of the Bari Doab of which Amritsar is the high point. The lowlying flood plains of the Ravi-Beas Doab create vexing problems of annual flooding, water-logging, drainage and alkalinity in the

western reaches of Amritsar, Kapurthala and particularly Ferozepur. This explains the comparatively low density of Kapurthala and Ferozepur where the villages are small and widely spaced. Elsewhere the villages are large and nucleated, density is high, Amritsar reaching as much as 782 persons per sq. mile. Urbanisation is high in all the districts and so are the values for immigration and proportion of children of age 0-4 to women of 15-44. There is evidence of internal shifts and rearrangement of population between

districts, outmigration going hand in hand with immigration.

All the districts rank at the top or fourth level of development, their values in blocks II, IV and V being uniformly high, Gurdaspur has low value in block III and high value in block VI and Amritsar in all blocks except III (participation rates in the traditional sector of economy). Kapurthala and Ferozepur have low values in block III and medium in block VI.

All the four districts are connected by

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.21 NORTH PUNJAB PLAIN

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	36	1	3	9	23	5	11	7
Agricultural	4	..	..	..	4	..	3	1
Artisan	2	..	..	..	2	1	1	..
Manufacturing	6	1	1	2	2	1	1	..
Trade and Commerce	8	..	..	5	3	..	1	2
Service	16	..	2	2	12	3	5	4

Class I cities with their function :
Manufacturing—Amritsar.

2.22 2 Northern Plains 2.2 Punjab Plains 2.22 Beas-Sutlej Doab (Bisht Doab).

The Beas-Sutlej or Bisht Doab comprises the districts of Hoshiarpur, Jullundur and Ludhiana. Much of Hoshiarpur is subject to sub-Siwalik *cho* erosion in the northern reaches and is heavily scarred with ravines, which accounts for its comparatively low population density (555 per sq. mile). But Bhakra Dam and

grid and have flourishing industrial bases. Gurdaspur is strong in metal products, woollen textile, machinery and wood industries. Amritsar, Kapurthala and Ferozepur are strong in textile industries particularly Amritsar which is versatile in cotton, silk and wool and Ferozepur which is strong in cottons. While Amritsar is still minor in transport equipment and metal products, Kapurthala is forging ahead with electrical equipment, food and miscellaneous industries. Ferozepur is strong in food, basic metals and printing.

Nangal and the new Beas Scheme promise to make good various deficiencies. Jullundur occupies the middle of the Bisht Doab and draws its strength accordingly from the rich and virile soil. Ludhiana commands an important Sutlej crossing.

The main food crops are wheat, gram and maize. A little rice is grown in the dun areas of Hoshiarpur. Cotton, sugar-cane and groundnut are grown in Jullundur and Ludhiana.

Urbanisation is strong in this Division. Natural increase is high in Ludhiana but immigration is still higher in all three districts thus suggesting internal shifts and movements of population. The proportion of children aged 0-4 to women of 15-44 is of moderate order. Literacy is among the highest in India.

Hoshiarpur is in the second level of the development score, with high values for blocks II and IV but low value for block III and medium values for blocks V and VI. The presence of Bhakra and the expansion of the great industrial complex of Nangal will no doubt shortly raise its level. At the present moment it seems to

make a subdivision within the Division. Jullundur and Ludhiana are at the top level, Ludhiana commanding an appreciably higher score, with high values for all blocks except, significantly enough, III in which its value is low. Jullundur has high values for blocks II, IV and VI and medium value for block V and low value for III.

The entire Division enjoys great industrial as well as agricultural importance and is an example of a high degree of balanced economic growth and enterprise. It is particularly strong in metal products, machinery and engineering and transport equipment, wood and food industries. All districts are connected by grid.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.22 BEAS-SUTLEJ DOAB (BISHT DOAB)

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	26	2	1	3	20	7	8	5
Agricultural	1	..	..	..	1	..	1	..
Artisan	7	..	..	..	7	3	3	1
Manufacturing	4	1	..	1	2	1	..	1
Trade and Commerce	6	..	..	1	5	2	2	1
Service	8	1	1	1	5	1	2	2

Class I cities with their function:
Manufacturing—Ludhiana.
Service—Jullundur.

**2.23 2 Northern Plains 2.2 Punjab Plains
2.23 East Punjab Plain.**

The three districts of this natural Division, Patiala, Ambala and Karnal merge in the east with the Jamuna-Ganga Doab of the densely populated Ganga plain.

The population densities are: Patiala 545, Ambala 597 and Karnal 485. All three districts have been responsible for the rehabilitation of a large displaced population from West Pakistan. An important effect has been the establishment of brand new towns like Nilokheri, Rajpura

Township and Chandigarh and the rejuvenation of old towns like Patiala, Ambala and Karnal. Kalka in Ambala is the funnelneck of economic and demographic activity between the Punjab and Himachal Pradesh Hills and the Plain, a pronounced economic border.

All the four important factors of high population growth have high values in these three districts: urban proportion, natural increase, immigration ratio and proportion of children 0-4 to women of 15-44.

All the three districts are important wheat growing areas. They also grow small quantities of rice. Gram is important in Patiala and Ambala which form an intermediate section of the diagonal gram belt which extends from Gurdaspur in the North-west as far as Murshidabad in the South-east. The northern reaches of

Ambala have a belt of bhabar soil but the rest is thick loam and alluvium, being in the Sutlej-Jamuna Doab. The entire area is longitudinally served by the West Jamuna Canal.

All the three districts are in the top or fourth level of development with high values in blocks II and IV and close to high values in block VI. Block V (dis-tributive trade and infrastructure) still holds high places for Ambala and Patiala and medium for Karnal. The pooled scores are high.

As for industries and electrification all these districts are now connected by grid. Their strongest line is basic metal industries but paper products, food, textiles, transport equipment, machinery and electrical equipment are also considerable.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.23 EAST PUNJAB PLAIN

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	36	2	4	3	27	7	13	7
Agricultural	4	..	..	..	4	..	2	2
Artisan	5	..	1	..	4	..	4	..
Manufacturing	6	..	1	1	4	..	3	1
Trade and Commerce	7	..	..	1	6	2	3	1
Transport	1	..	..	..	1	1	..	..
Service	13	2	2	1	8	4	2	2

Class I cities with their function:
Service—Ambala, Patiala.

2.24 2 Northern Plains 2.2 Punjab Plains
2.24 South Western Punjab
(Haryana).

This is part of the Sutlej-Jamuna or Delhi Doab, "a great wedge of light loam and sand which Rajputana pushes northwards almost to the Sutlej" (quoted by Spate). Well irrigation is important in the light fertile loams of the North in this Division, but in the South-west, still loosely referred to as the *Jangal Desh* or jungle country, the sandy loam has much less water but is drought resistant. The chief crops are gram, wheat and *bajra*, in that order, in Bhatinda, Sangrur and Rohtak, but gram and *bajra* in Hissar and Mahendragarh. Wheat is mainly irrigated. Gram and barley are the chief *rabi* and millets the chief *kharij* dry crops. Cotton is of great importance in Bhatinda and Sangrur, so much so that the cotton stock exchange at Bhatinda is one of the busiest centres in North India. Hissar and Rohtak have belts of good land and irrigation in the Sutlej and Jamuna riverains and the Ghaggar bed. The density of population is the lowest in Hissar, although the district has seen both heavy natural increase and immigration in the last decade. Owing to the paucity of waterpoints villages also are definitely large and rely on tanks for their domestic supply; which is rare in the north. Stock rearing is of great importance, the Hissar or Haryana bullock being one of the most nobly built animals. Hissar and Mahendragarh have an abundance of *kikar*, an acacia bark, an important tanning substance which is complementary to the large supplies of hides and skins and the large population of *Chamars* and members of other Scheduled Castes in these five districts. But the rapid extension of cotton and groundnut now seriously threatens the existence of the Haryana breed. Mahendragarh

suffers from alkalinity and the fringes of the Rajasthan desert.

Population density is lowest in Hissar (287), but steadily increases to 397 in Bhatinda, 408 in Mahendragarh, 470 in Sangrur and 609 in Rohtak. Except for Mahendragarh where natural increase in 1951-61 has been only moderately high, in all the districts including Mahendragarh, both natural increase, immigration and the proportion of children 0-4 to women 15-44 are very high, indicating the possibility of a heavy increase in the current decade. The new highways have become the areas of heavy concentration of population and investment on education and other infrastructure.

Mahendragarh is placed in the second level of development and has high values for blocks II and IV, low value for block III and medium values for blocks V and VI. At the other geographical end, Bhatinda, Rohtak and Hissar are placed in the fourth level of development, with high values for II and IV, medium values for V and VI, and low value for Bhatinda and Rohtak and medium for Hissar in III. Sangrur is placed in third level of development with high values in II and IV medium values in V and VI and low value for III.

A whole range of industries is rapidly growing up in Haryana. Bhatinda and Hissar are important for cotton ginning, pressing and baling. Rohtak is important for transport equipment. Mahendragarh is important for stone quarrying and stone cutting. Food industries are important in the whole Division. But basic metal industries, machinery, forestry and logging also are rapidly gaining ground.

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Analysis of Town Groups, and Towns by predominant function and size classes

2.24 SOUTH WESTERN PUNJAB (HARIANA)

Function of town	Class of town						
	Total	II	III	IV—VI	IV	V	VI
	2	3	4	5	6	7	8
1							
Total	54	4	12	38	14	14	10
Agricultural	17	..	..	17	5	7	5
Manufacturing	7	2	3	2	2	..	..
Trade and Commerce	25	1	6	18	7	7	4
Transport	1	1	..	..	..	..	..
Service	4	..	3	1	..	..	1

2.31-2 The Jamuna Ganga.

I have been attached to the Ganga and the Jamuna rivers in Allahabad ever since my childhood and, as I have grown older, this attachment has also grown. I have watched their varying moods as the seasons changed, and have often thought of the history and myth and tradition and song and story that have become attached to them through the long ages and become part of their flowing waters.

The Ganga, especially, is the river of India, beloved of her people, round which are intertwined her racial memories, her hopes and fears, her songs of triumphs, her victories and her defeats. She has been a symbol of India's age-long culture and civilization, ever-changing, ever-flowing, and yet ever the same Ganga. She reminds me of the snow-covered peaks and deep valleys of the Himalayas, which I have loved so much, and of the rich and vast plains below, where my life and work have been cast.

Smiling and dancing in the morning sun light, and dark and gloomy and full of mystery as the evening shadows fall, a narrow, slow and graceful stream in winter, and a vast roaring thing during the monsoon, broad-bosomed almost as the sea, and with something of the sea's power to destroy, the Ganga has been to me a symbol and a memory of the past of India, running into the present, and flowing on to the great ocean of the future.

And though I have discarded much of past tradition and custom, and am anxious that India should rid herself of all shackles that bind and constrain her and divide her people, and suppress vast numbers of them, and prevent the free development of the body and the spirit; though I seek all this, yet I do not wish to cut myself off from that completely.

I am proud of that great inheritance that has been, and is, ours and I am conscious that I too, like all of us, am a link in that unbroken chain which goes back to the dawn of history in the memorial past of India. That chain I

would not break, for I treasure it and seek inspiration from it. And as witness of this desire of mine and as my last homage to India's cultural inheritance, I am making this request that a handful of my ashes be thrown into the Ganga at Allahabad to be carried to the great ocean that washes India's shore.

LAST WILL AND TESTAMENT OF JAWAHARLAL NEHRU

Mainly for convenience of treatment along political boundaries the great Ganga Plain, included in the second Region of the Northern Plains is divided into the following Subregions and Divisions :

Subregions	Divisions
2.3 Uttar Pradesh Plains	2.31 Upper Doab Jamuna-Ganga 2.32 Lower Doab Ganga-Jamuna 2.33 Uttar Pradesh (Koshala) Tarai 2.34 Rohilkhand 2.35 Oudh 2.36 East Uttar Pradesh
2.4 Bihar Plains	2.41 North Bihar Plain (Tirhut) 2.42 South Bihar Plain (Magadha)
2.5 West Bengal Plains	2.51 North Bengal Plain (Duars) 2.52 Northern Para Delta (Barind) 2.53 Ganga Delta 2.54 Damodar Delta

In the great Ganga Plain, the eastern part is more densely populated than the western, the land being almost entirely alluvial and full of rich silt, the bhabar, bhangar, tarai and bhur lands having been left behind. Thus districts like Saharanpur, Pilibhit, Kheri, Bijnor, Hardoi and Bahraich in the North-west and North

have comparatively low population densities compared to the central and eastern districts. Rainfall, too, in the eastern tracts is normally enough to dispense with irrigation. The river courses swing less violently than in the west and there is much less of alkalinity or saline efflorescence. In the tract below the Siwalik and in the bhabar the inhospitable, rocky and coarse, porous soil does not permit a dense population but once the Ganga-Jamuna Doab proper is reached habitation is dense. In the Doab again the lands farthest from the river, that is, in the middle, usually have the least density while those nearer the river have higher densities. The flood plains of the Ganga are on the whole more densely populated than those of the Jamuna which seems to carry more rocky detritus and thick, heavy sand than the Ganga. Population density seems to be intimately associated with local relief and depth of water table. The central and western portions of the Ganga Plain are highly urbanised. The smaller towns throughout this great tract developed as market centres in the heart of densely populated rural areas.

The Uttar Pradesh Plain may be divided into 2 broad tracts: (1) the Jamuna-Ganga Doab which has been classified into two divisions: Upper Doab and Lower Doab and (2) the Ganga Plain which has been divided into 4 Divisions, the Tarai, Rohilkhand, Oudh and East Uttar Pradesh.

We shall first briefly delineate the water regime of the Jamuna-Ganga Doab.

Upper Jamuna-Ganga Doab

This tract of country begins with Saharanpur and Dehra Dun in the North, between the Jamuna in the West and Ganga in the East and travels in an arc of varying width down to Allahabad, the confluence of the Jamuna and Ganga.

Apart from the fact that this tract is subdivided into a number of smaller Doabs between the two great rivers, formed by rivers which are mostly tributaries to the Ganga, the upper and middle tracts are well served by a series of longitudinal canals.

The more important of the smaller Doabs are from West to East :

- (1) Saharanpur-Muzaffarnagar: (a) Jamuna-Krishni
(b) Krishni-Hindan
- (2) Meerut-Bulandshahr: (a) Jamuna-Hindan
(b) Kali-Ganga
- (3) Aligarh-Agra-Etah-Mainpuri: (a) Kali-Sengar
(b) Sengar-Rind
(c) Rind-Isan
- (4) Etawah-Kanpur-Fatehpur: (a) Jamuna-Sengar
(b) Sengar-Rind
(c) Rind-Ganga
- (5) Allahabad: (a) Jamuna-Sasur-Khaderi
(b) Sasur-Khaderi-Ganga

The more important canals from West to East are :

(1) **The Eastern Jamuna Canal:** Headworks at Faizabad, northwestern corner of Saharanpur. Serves western areas of Saharanpur, Muzaffarnagar, Meerut, Bulandshahr and Shahdara of Delhi. It irrigates the Jamuna-Hindan Doab.

(2) **The Upper Ganga Canal:** Headworks at Hardwar, threads through Saharanpur, Muzaffarnagar, branches at Jauli. The main Upper Ganga Canal passes through the heart of Meerut, becomes the Ganga Canal in Bulandshahr, leaves Aligarh on its west, is called Lower Ganga Canal before it branches near Akraabad into two: the Kanpur Branch and the Etawah Branch. The two branches run almost parallel to each other until the Etawah Branch veers south and peters out near Kiraon in Ghatampur (Kanpur district). The Kanpur Branch disintegrates into small branches South West of Kanpur. The Kanpur and Etawah Branches of the Lower Ganga Canal irrigate the Sengar-Isan Doab.

(3) **The eastern branch of the Upper-Ganga Canal** which takes off at Jauli called Anupshahr Branch, and attenuates near Rajghat (Bulandshahr). This irrigates the tract between the Kali in the west and the Ganga in the east.

(4) **The Lower Ganga Canal:** Headworks at Naraura (Bulandshahr), branches about 12 miles North-northwest of Etah. The western or Bhognipur branch goes down to Shikohabad (Mainpuri) and Etawah and then runs midway between Jamuna and Sengar up to Sikandra and Bhognipur (Kanpur). The eastern or Bewar Branch ends below Bewar (Mainpuri). The Bhognipur branch irrigates the middle of the Jamuna-Sengar Doab while the Bewar Branch irrigates the middle of the Isan-Kali Doab mainly in Etah and Mainpuri.

(5) **The Agra Canal:** Headworks at Okhla, South Delhi, irrigates Gurgaon, Mathura and Agra.

Over and above all this extensive water supply the Upper Ganga-Jamuna Doab enjoys an expanding network of deep tubewells. But the entire Doab tract suffers from varying degrees of saline efflorescence (reh).

The entire tract is Hindi-speaking. The proportion of members of scheduled castes is between one-sixth and one-quarter of the total population in every district of this subregion.

We shall now briefly describe the Ganga Plain.

The Ganga Plain	2.33 Uttar Pradesh Tarai (Koshala)
	2.34 Rohilkhand
	2.35 Oudh
	2.36 East Uttar Pradesh

These four Divisions of the subregion of Uttar Pradesh Plains are distinguished from the two Divisions of the Jamuna-Ganga Doab inasmuch as they are north of the river Ganga and form a large arc between the Ganga in the south and the Highland districts of Uttar Pradesh and Nepal in the north.

A brief account of the river and canal system of this entire tract taken as a whole will be helpful for comprehension of its water regime and crop distribution.

The main rivers of this tract which all are tributaries of the Ganga are, from West to East :

1. **Malin**—This river enters Najibabad tehsil in Bijnor and falls into Ganga at a point Northwest of Bijnor.
2. **Ban**—This river passes through Bijnor and falls into river Gangan at a point midway between Amroha and Moradabad towns in Moradabad.
3. **Gangan**—Enters the State East of Najibabad, passes through Bijnor and Moradabad and falls into the Ramganga at Shahabad tehsil in Rampur district.
4. **Sot**—This river becomes articulate in Amroha (Moradabad) passes through Bisauli and Budaon of Budaun and falls into the Ganga, north of Farrukhabad town (Farrukhabad).
5. **Ramganga**—This river emerges from the northern mountains and enters Bijnor in Nagina tehsil and passes through the districts of Moradabad, Rampur, Bareilly, Shahjahanpur and falls

into the Ganga in Bilgram tehsil of Hardoi.

6. **Kosi**—Descends from Almora, enters Rampur district and falls into Ramganga near south-eastern corner of Moradabad district and Shahabad of Rampur.
7. **Deoha**—Issues from Nandaur (Haldwani, Naini Tal), passes through Tarai (Kichha), passes west of Pilibhit town (Pilibhit), down Bisalpur tehsil, is called Garra river before it falls into Ramganga in Bilgram (Hardoi), a little before the Ramganga itself falls into Ganga.
8. **Sarda**—Known as Chauka in the upper reaches, it emerges near Tanakpur (Naini Tal), passes through Puranpur (Pilibhit), Lakhimpur (Kheri), Sitapur and Biswan of Sitapur and falls into the Gogra in Sidhauri (Sitapur).
9. **Sarda Canal**—More important than Sarda river is Sarda canal: head-works Tanakpur. Several miles northwest of Puranpur (Pilibhit), it branches into two. The Hardoi Branch passes through Powayan and Shahjahanpur, on to Bilgram (Hardoi), Safipur, Unnao and Purwa of Unnao district. The Lucknow Branch descends to several miles South-east of Hardoi and branches again: the Sandila Branch into Sandila (Hardoi) and Malihabad (Lucknow), the Lucknow Branch via Sandila and Malihabad to Utrahtia south of Lucknow where it branches again in two: Rae Bareilly Branch and Haidargarh Branch: The Rae Bareilly

Branch passes through Mohanlal-ganj (Lucknow) and Maharaj-ganj (Rae Bareilly), exhausts itself near the Sai river above and below Rae Bareilly town. The Haidargarh Branch passes through Mohanlal-ganj (Lucknow) and exhausts itself beyond Haidargarh (Bara Banki) around the Gomati river.

10. **Gomati**—Gomati is formed by the streams Bhainsi and Joknai in Powayan (Shahjahanpur district). It passes through Mohamdi tehsil (Kheri) and divides Hardoi district from Sitapur, enters Malihabad (Lucknow) and passes through Lucknow city, travels through Bara Banki, Sultanpur, Jaunpur, and falls into Ganga at Saidpur, North-east of Varanasi. The Sai river joins Gomati between Jaunpur and Kerakat (Jaunpur).

11. **Ghagra**—Enters through Nighasan (Kheri) in three main streams, Kauriala, Girwa and Babai (Sarju) and proceeds to form the boundary between the districts of Sitapur and Bara Banki on the right bank and Bahraich and Gonda on the left bank, between Faizabad and Basti, Azamgarh and Gorakhpur, Ballia and Deoria falling at the eastern tip of Ballia into the Ganga.

12. **Rapti**—Enters at the junction of Nanpara and Bahraich tehsils of Bahraich. Travels through Bahraich, Gonda, Basti, Gorakhpur and falls into the Ghagra near Barhaj between Ghosi (Azamgarh) and Salempur (Deoria).

The entire territory is thus arranged in longitudinal and transverse ribbons of minor Doabs. These are some of the minor Doabs in the general direction of West to East :

- | | |
|-------------------------------|---|
| 1. Bijnor-district | (a) Ganga-Malin
(b) Malin-Gangan
(c) Gangan-Ramganga |
| 2. Moradabad | (a) Ganga-Ban
(b) Ban-Ramganga |
| 3. Budaun | (a) Ganga-Mahawa
(b) Mahawa-Sot
(c) Sot-Gangan-Ramganga |
| 4. Bijnor-Naini Tal | Ramganga-Dhela |
| 5. Bareilly-Pilibhit | Ramganga-Deoha |
| 6. Unnao-Allahabad-Pratapgarh | Ganga-Sai |
| 7. Sultanpur-Faizabad | Gomati-Ghagra |
| 8. Basti | Ghagra-Kuwana |
| 9. Faizabad | Gomati-Marha
Marha-Ghagra |
| 10. Ghazipur | (a) Gomati-Besu-Mangai
(b) Mangai-Chhoti Sarju |

We may now return to a bare mention of several other features.

The entire tract is Hindi-speaking. There is another fact of sociological importance. The heart of Uttar Pradesh has a solid and continuous region containing high proportions of members of scheduled castes, surrounded by a girdle in the East and South-east by a group of districts of slightly lower proportions. The districts are as follows with the percentages of members of scheduled castes mentioned against them.

District	Members of Scheduled Castes per 100 of total population
A. Core of high concentration of members of Scheduled Castes	
1. Kheri . . .	26.65
2. Sitapur . . .	30.77
3. Hardoi . . .	30.96
4. Lucknow . . .	23.79
5. Bara Banki . . .	27.89
6. Unnao . . .	28.17
7. Rae Bareilly . . .	29.44
8. Sultanpur . . .	23.79
9. Faizabad . . .	24.37
10. Azamgarh . . .	24.46
B. Outer Girdle of concentration of Scheduled Castes	
11. Agra . . .	22.37
12. Etawah . . .	25.69
13. Kanpur . . .	20.13
14. Fatehpur . . .	22.42
15. Pratapgarh . . .	20.80
16. Allahabad . . .	24.04
17. Jaunpur . . .	21.16
18. Basti . . .	20.08

There is a third cluster of districts in the West consisting of Saharanpur

(23.50), Bulandshahr (20.34), Bijnor (20.24) and Aligarh (20.86) which have high ratios. All other districts (19 in number) have less than 20 per cent of their population as members of scheduled castes.

This is a matter of much importance which still continues to leave its mark on the levels of development. For, in spite of the fact that high ratios of members of scheduled castes have been positively associated with high scores, all the districts mentioned above except Lucknow, Agra, Etawah, Kanpur, Allahabad, Saharanpur, Bulandshahr, Bijnor and Aligarh have been ranked in the first or lowest level of development.

The other paradoxical feature of much concern is that despite such natural endowments as many as 28 districts out of a total of 54 should have places in the first or lowest level of our present scheme of ranking, and 6 in the second level, while only 10 should be in the third level and another 10 in the fourth or top level.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.3 UTTAR PRADESH PLAINS

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
	2	3	4	5	6	7	8
Total	192	14	16	44	118	61	57
Agricultural	11	—	..	2	9	6	3
Artisan	39	1	1	3	34	17	17
Manufacturing	18	4	3	4	7	6	1
Trade and Commerce	34	2	1	6	25	10	15
Transport	4	1	..	1	2	1	1
Service	86	6	11	28	41	21	20

2.31 2 Northern Plains 2.3 Uttar Pradesh Plains 2.31 Upper Jamuna-Ganga Doab.

This Division may be divided into two subdivisions: Saharanpur and Muzaffarnagar forming the bhabar and bhangar country, and Meerut, Bulandshahr and part of Aligarh, the Khadar country. The plain below the Siwalik in Saharanpur is *cho* and bhabar land. The upper part of the inter-stream areas, particularly the areas between the Jamuna in the West and Krishni and Hindan in the East and again, between the Hindan and the Kali Nadi West in Saharanpur and Muzaffarnagar, designated the bhangar, is well drained and intensively irrigated by wells and canals. The lowlying flood plains on the right bank of the Ganga in Muzaffarnagar, Meerut and Bulandshahr are called the Khadar: they have sandy soils and annual floods. In these districts 'settlements increase in number away from the Ganga, especially where land is better drained and soils are of loamy type' (Chatterjee).

The lowest density of population obtains in Saharanpur (760 persons per sq. mile) and the highest in Meerut (1,168). The urban ratio is among the highest in India. Natural increase is comparatively low but immigration is appreciable and so is the proportion of children 0-4 to women

15-44 suggesting acceleration of population increase.

The principal food crops are wheat, rice and gram in Saharanpur and Muzaffarnagar but wheat, gram, barley and coarser grain in the other three districts. Sugarcane is grown in considerable quantities in all districts except Aligarh. Bulandshahr grows a little jute.

Saharanpur, Muzaffarnagar, Meerut and Aligarh qualify for the fourth or top level of development. Saharanpur makes the highest score for the Division. All the four districts have high values for blocks II and IV, high values for Saharanpur and Meerut and medium for Muzaffarnagar and Aligarh for block V and low values for III. In block VI Saharanpur is high, Muzaffarnagar, Aligarh and Meerut are medium. Bulandshahr is placed in the third level having high values for II, IV and VI, medium value for V and low value for III. In the matter of total score Muzaffarnagar, Meerut and Aligarh are close to each other. Bulandshahr has the lowest score for the Division.

All districts are connected by grid. The most important factory industry in this Division is food, chiefly sugar, grain and dal mills, followed by textiles. But the next important group of industries is machinery, metal products, printing, transport and miscellaneous industries.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.31 UPPER JAMUNA-GANGA DOAB

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
	2	3	4	5	6	7	8
Total	47	3	5	10	29	15	14
Agricultural	2	..	..	1	13	6	7
Artisan	14	..	1	2	1	1	..
Manufacturing	4	..	1	2	5	4	1
Trade and Commerce	9	1	1	2	8	3	5
Service	18	2	3	5			

Class I cities with their function:
Trade and Commerce—Saharanpur.
Service—Meerut, Aligarh.

2.32 2 Northern Plains 2.3 Uttar Pradesh Plains 2.32 Lower Ganga-Jamuna Doab.

This Division is made of nine districts which make a continuous gram tract. Wheat competes with gram in seven districts down to Kanpur. But in Fatehpur and Allahabad, while wheat practically disappears, rice comes into its own but gram holds sway. *Jowar* and *bajra* are grown in all districts. Very little of cash crops is grown.

The density of population varies within narrow limits, the lowest being Fatehpur (644) and the highest Agra (997). Urban proportions are high in Agra and Kanpur and appreciable in Mathura and Allahabad. Natural increase has been modest. Immigration has been high in Mathura, Agra, Mainpuri and Kanpur suggesting internal shifts and transfers. Immigration into Allahabad has been comparatively low. The proportion of children 0-4 to women 15-44 is high only in Agra, but appreciable in Mathura, Mainpuri, Etawah and Fatehpur.

Fatehpur ranks in the lowest level. The total score is low. Although the values in blocks II and IV are high, low in block III and medium in V and VI. The district is connected to grid.

Mainpuri, Etah, Farrukhabad and Etawah form a solid geographically central block of moderate or second level of development. They have almost identical total scores with very similar values in each block: high for blocks II and IV, low

for III, medium for V and VI. All are connected by grid. Farrukhabad also generates electricity.

Allahabad alone is placed in the third level with high values for blocks II and IV and medium values for III, V and VI. It generates its own electricity.

Mathura and Agra, contiguous districts, and Kanpur are placed in the top level. Agra and Kanpur have identical scores and distribution, high values in II, IV and V and medium values in III and VI. Mathura is much lower than either but enjoys high values in II and IV, medium values in V and VI and low value in III. Agra and Kanpur generate their own electricity but Mathura is connected to grid.

This Division also presents a rich texture of organised industry in which the chief components are basic metals (Mathura), food industries (Etah, Etawah and Fatehpur), textiles (Kanpur), printing and publishing (Allahabad). Agra and Mainpuri are important in glass, pottery, stone, in short, non-metallic mineral products. Wherever food is not of primary importance it invariably takes the second most important place. The other important industries are machinery, textiles, transport equipment, footwear and ready-made garments (Kanpur), leather and leather products, wood, cotton and jute ginning and pressing: a very promising mixture of primary and secondary products. Agra is at the eastern and hide and skin receiving end of the livestock tracts of Rajasthan.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.32 LOWER GANGA-JAMUNA DOAB

Function of town	Class of town						
	Total	I	II	III	IV-V	IV	V
	2	3	4	5	6	7	8
1	42	4	3	7	28	12	16
Total	1	..	..	..	1	..	1
Agricultural	5	..	..	..	5	3	2
Artisan	5	2	1	1	1	1	..
Manufacturing	10	..	..	2	8	2	6
Trade and Commerce	2	..	..	..	2	1	1
Transport	19	2	2	4	11	5	6
Service							

Class I cities with their function :
Manufacturing—Agra, Kanpur.
Service—Mathura, Allahabad.

2.33 2 Northern Plains 2.3 Uttar Pradesh Plains 2.33 Uttar Pradesh Tarai (Koshala).

This entire border strip of tarai soil is porous and coarse in the upper reaches, much dissected by shifting torrent beds. It is suitable for sugarcane particularly in Pilibhit, Lakhimpur-Kheri and Deoria. The chief crop is rice which is pre-eminent in the entire tract but low yielding on account of the soil. The next considerable food crop is wheat and barley. Gram obtains in 5 districts: Pilibhit, Kheri, Sitapur, Bahraich and Gonda. The whole Division thus bears multiple crops including valuable sugarcane which gives it a concentration of sugar factories.

The urban ratio is low throughout and so are natural increase of population, rate of immigration and proportion of children 0-4 to women 15-44. The only exception is Pilibhit which has moderately high ratios for all four.

Pilibhit alone is in the third level of development, having high values in blocks II and IV and medium values in III, V and VI. The remaining seven districts in the Division fall in the first or lowest level of development. Of these again the eastern districts of Bahraich, Gonda, Basti and Deoria (with the exception of Gorakhpur in between Basti and Deoria) are even worse than Kheri, Sitapur and Gorakhpur. Bahraich, Gonda and Basti have either low or medium values for all blocks. Gorakhpur and Deoria have high values for II and medium for VI. As regards other blocks Gorakhpur has medium for III and V and high for IV and in respect of Deoria the values are low for III and V and medium for IV. Kheri and Sitapur have high values for IV, medium values for II and VI and low values for V. In block III Kheri and Sitapur have medium and low values respectively. All the districts are now connected by grid. Gorakhpur also generates electricity.

In organised factory industry, food industries dominate the entire factory sector in Pilibhit, Kheri and Deoria, the three most important districts for sugar. Sugar factories are also dominant in Basti, Bahraich, Sitapur and Gonda. The most important industry in Gorakhpur, of

course, is transport equipment on account of the large railway workshops. Textiles are of some importance in Gonda, Basti, Gorakhpur and Bahraich. Gorakhpur is also important for printing. Sizable machine industries are growing up in Gorakhpur, Sitapur and Kheri.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.33 UTTAR PRADESH TARAI (KOSHALA)

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
	2	3	4	5	6	7	8
Total	27	1	3	5	18	14	4
Agricultural	1	..	..	..	1	1	..
Artisan	3	..	..	..	3	2	1
Manufacturing	3	..	..	..	3	2	1
Trade and Commerce	5	..	..	1	4	2	2
Transport	1	1	..	..	..	..	..
Service	14	..	3	4	7	7	..

Class I cities with their function:
Transport—Gorakhpur

2.34 2 Northern Plains 2.3 Uttar Pradesh Plains 2.34 Rohilkhand.

This Division corresponds to the historic Rohilkhand or the land of the Rohillas.

Bijnor and Moradabad in the northern end of this Division have much *bhur* land or 'patches of sandy soil, in places sufficiently extensive to form low but undulating sandy uplands' (Spate). Much of this land, generally arid and waterlogged in the depressions, has been reclaimed by tubewells.

Bijnor may be divided into several longitudinal doabs, which are from west to east (1) the Ganga-Malin which is mainly *bhur* land, (2) Malin-Gangan, (3) Gangan-Ramganga and (4) Ramganga-

Dhela. The Ramganga main canal emerges at Dhampur.

Moradabad has two small doabs (1) the Ganga-Ban and (2) Ban-Ramganga. These divide southwards further in Budaun district to (1) Ganga-Mahawa (2) Mahawa-Sot and (3) Sot-Gangan-Ramganga.

'A narrow belt of sparsely populated Khadar land, lowlying and subject to floods, lies on either side of the Ramganga, the main river of Rohilkhand, the greater part of which cannot be kept permanently under the plough because of flooding and the shifting of the river course. East of this belt, the land is free from floods and is intensively irrigated, and dotted with a large number of flourishing villages. Bareilly, an industrial centre,

stands on the edge of an old river terrace overlooking the eastern bank of the Ramganga, which also skirts the western fringes'. (Chatterjee) The Ramganga-Deoha doab runs through much of Shahjahanpur, the main city standing on the East bank of the Deoha river.

In contrast to the Tarai Division (2.33), Rohilkhand is a predominantly wheat tract, with rice following as a close second. The third important foodcrop is gram. Bajra is grown in the *usar* tracts of Moradabad, Budaun and Shahjahanpur. The most important cash crop is sugarcane which is grown extensively in Bijnor, Moradabad, Rampur and Bareilly and feed their sugar mills. Groundnut is grown in Budaun which has oil and dal mills in addition to rice and flour factories.

The urban ratio is high in Moradabad, Rampur and Bareilly all of which have flourishing industrial cities. It is moderately high in Shahjahanpur and Bijnor but low in Budaun. Natural increase and immigration are low to moderate except in Rampur but the proportion of children 0-4 to women 15-44 is high in Bijnor. Moradabad and Rampur, moderately high in Bareilly and Budaun, but low in Shahjahanpur which suggests a high rate of increase in the current decade.

Budaun is placed at the first or lowest level of development with low values for blocks III and V, medium in VI but high

values in II and IV. Shahjahanpur is placed at the second level with low value for block III, medium values for block V and VI and high values for II and IV, the total scores of the two districts being quite close to each other.

Moradabad, Bijnor, Rampur and Bareilly are placed on the third level, although characteristically enough Bijnor has low value for block III, medium for blocks V and VI and high values for II and IV. Moradabad, Rampur and Bareilly have identical rankings in the various blocks, except that in blocks III and VI, Moradabad and Rampur have high and Bareilly medium values in block VI whereas low for Moradabad and medium for Rampur and Bareilly in block III. All districts are connected by grid but Rampur and Bareilly generate electricity locally in addition.

The foremost organised industry in the Division is food, but the textiles industry is stronger in Budaun and Rampur. Bareilly is a large railway repair centre. Non-metallic minerals are prominent in Bijnor and Moradabad. Basic metals are considerable in Moradabad. The manufacture of machinery and metal products is gaining ground in Moradabad, Rampur, Bareilly and Shahjahanpur.

This as a whole is one of the advanced Divisions in the Uttar Pradesh Plains.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.34 ROHILKHAND

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
	2	3	4	5	6	7	8
Total	36	4	3	8	21	10	11
Agricultural	2	..	1	1	1	1	..
Artisan	5	..	1	..	4	2	2
Manufacturing	5	2	1	..	2	2	..
Trade and Commerce	5	1	..	1	3	1	2
Service	19	1	1	6	11	4	7

Class I cities with their function :
Manufacturing—Moradabad, Rampur.
Trade and Commerce—Bareilly.
Service—Shahjahanpur.

2.35 2 Northern Plains 2.3 Uttar Pradesh Plains 2.35 Oudh.

Except for Hardoi and Unnao which have densities of 675 and 680 persons per sq. mile respectively, the density is uniformly high, Lucknow having 1,382 persons per sq. mile. But it is strange that this heartland of Uttar Pradesh should suffer from the lowest level of development, except for the capital district of Lucknow.

Hardoi and Lucknow because of their river and water regimes are almost a continuation of the previous Division (2.34) and are predominantly wheat and barley districts. The rice districts are Bara Banki, Unnao, Rae Bareli, Sultanpur and Faizabad. In all seven districts, however, wheat, barley, and rice go close together, the third and almost equally important foodcrop being gram, this being as extensive a gram tract as Rohilkhand. Groundnut has extended to Hardoi.

Except for Lucknow which has a high urban and immigration ratio, the entire division has low or moderate values for urbanization, natural increase, immigration and proportion of children 0-4 to women 15-44. Thus even demographically, the area shows sluggishness and relative lack of vitality.

Except for Lucknow all six districts are placed in the first or lowest rank of

development. Their block values are close to one another, the range of total scores being low. All six districts have low values for blocks III and V. Sultanpur and Faizabad have low values for VI but medium values for the other four districts. Hardoi, Bara Banki and Unnao have high values for block V, while Rae Bareli, Sultanpur and Faizabad have medium values. All have high values in block II, except Bara Banki and Faizabad which have medium scores. Lucknow alone, very obviously because of its great city, is in the fourth or top level with high scores for blocks II, IV and V and medium scores for blocks III and VI.

All the districts are connected by electricity grid but Hardoi and Lucknow generate electricity locally also. The most important factory industry in this region is food: flour, rice and dal mills. Transport industries are important in Lucknow and Rae Bareli. Basic metals are important in Sultanpur. Unnao has a variety of miscellaneous industries. Textiles are important in Faizabad but minor in Lucknow and Bara Banki. Printing is important in Lucknow, and leather products (except footwear) in Unnao. There is some machinery industry in Lucknow. Bara Banki and Faizabad.

It is obvious that this Division like Rohilkhand and Tarai has not yet been able to take full advantage of its natural endowments and geographical position.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.35 OUDH

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
	2	3	4	5	6	7	8
Total	20	1	1	7	11	6	5
Agricultural	5	..	..	1	4	3	1
Artisan	5	..	..	1	4	2	2
Trade and Commerce	1	..	..	..	1	..	1
Service	9	1	1	5	2	1	1

Class I cities with their function :
Service—Lucknow.

2.36 2 Northern Plains 2.3 Uttar Pradesh Plains 2.36 East Uttar Pradesh.

This is the easternmost Division of the Uttar Pradesh plain which has a general but not wholly substantiated reputation of poverty. It is certainly the densest region of Uttar Pradesh, the density being nowhere less than 1,000 persons per sq. mile except in the westernmost district of Pratapgarh (882).

This again is a predominantly rice zone, the second most important crop being barley and the third gram. Wheat is grown in Pratapgarh, Varanasi and Jaunpur. Sugarcane is grown in Azamgarh.

Except for Varanasi which has a high urban ratio because of the city, the values for urbanisation, natural increase, immigration and young population (children 0-4 to women 15-44) are either low or moderate. Ghazipur alone shows a moderately high proportion of young children 0-4 to women 15-44.

Except for Varanasi, again, five districts are placed in the first or lowest level of development. Azamgarh has the lowest

aggregate score, values in II, IV and V being medium and in III and VI low. Pratapgarh, Jaunpur, Ghazipur and Ballia have high values in II but low values in III. Jaunpur and Ghazipur have high values in IV, the others have medium values. Jaunpur and Ballia have medium, Pratapgarh low values in V and VI. Ghazipur has medium value in V and low in VI. These five districts are connected by grid.

Varanasi generates its own electricity. In development it is in a group with Allahabad and Mirzapur, in the third level. It has high values in II, IV and V, medium value in VI and low value in III.

Pratapgarh has practically little organised industry except in transport. Indeed transport is one of the main industries in all districts of this region. Textiles are important in Azamgarh and Varanasi, chemicals in Ghazipur and Varanasi and food in Jaunpur. The generation of electricity is important in Varanasi and Jaunpur, non-metallic mineral products in Jaunpur and Azamgarh and basic metals in Jaunpur.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.36 EAST UTTAR PRADESH

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	20	1	1	7	11	4	7
Artisan	7	1	..	1	5	2	3
Manufacturing	1	..	..	1	..	..	..
Trade and Commerce	4	..	..	..	4	1	3
Transport	1	..	..	1	..	..	..
Service	7	..	1	4	2	1	1

Class I cities with their function :
Artisan—Varanasi.

2.4 Bihar Plains

The Bihar Plains are a continuation of the Uttar Pradesh Plains with important geographical and cultural differences.

The Ganga enters Bihar at Chapra, the tip of Ballia district of Uttar Pradesh that runs into Bihar and makes the confluence of the Ganga and Ghagra. In Bihar, this is the dividing point between Saran and Shahabad. A few miles to the East of this confluence is the trijunction point of Saran, Shahabad and Patna which is also the point at which the Son falls into the Ganga. The Ganga now enters into Bihar proper and proceeds to divide the North from the South Bihar Plains. Immediately to the north-east of Patna city the Narayani or Great Gandak joins the Ganga from the north-west. The district of Saran is thus entirely in the Gandak-Ghagra Doab. The Narayani forms the north-western most extremity of Champaran district (North Bihar Plain: Tirhut) at Bhainsalotan, the site of the Gandak barrage, celebrated for the last of Jawaharlal Nehru's visits (4 May 1964), in his own words, to any of New India's temples.

Champaran, Muzaffarpur and Darbhanga are dissected into irregular longitudinal strips by many small rivers. The diara flood plains are wider here than in the Upper Ganga Plains, and even on the doabs there are many *jhils*, more or less permanent lakes, the beds of dead (*mara*) or old (*huri*) rivers and *chaurs*—long semi-circular marshes, the abandoned meanders of dead rivers which develop into a vast and intricate chain of temporary lakes during the rainy season. The more important of the small rivers are Nona, the Buri Gandak which falls into the Ganga east of Khagaria (Monghyr) and Kahara (Saharsa). But the most important river in the East which enters the East is the two main entrants of Kosi Dhar through Nirmali and Tribeniganj Anchals of Saharsa which falls into Ganga east of Bhagalpur town. The Mahananda, descending from Kurseong in Darjeeling district enters Purnea in the northeast, leaving Thakurganj, Pothia and Kishanganj anchals on its left.

In South Bihar Plain (Magadha) the district of Shahabad is partly wedged in between Ganga and Son. There are three longitudinal canal systems: Chausa in the

extreme West, Buxar in the middle and Arrah in the East. The Phalgu river travels almost due North from Hazaribagh where it is named Mohana through the middle of Gaya district where it is called Phalgu on to Patna district. The Sakri meanders in Patna and Gaya districts. The

Kiul river travels across Monghyr district and falls into the Ganga at Lakhisarai.

A string of hill ranges travels diagonally across the South Bihar Plain from Shahabad to Barabar and Rajgir Hills in Gaya on to the Monghyr Hills in Monghyr and Rajmahal Hills in Santal Parganas.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.4 BIHAR PLAINS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	81	6	6	17	52	32	19	1
Agricultural	20	..	1	3	16	10	6	..
Artisan	12	1	1	1	9	6	3	..
Manufacturing	6	1	..	3	2	1	1	..
Trade and Commerce	5	..	..	..	5	3	2	..
Transport	5	..	2	2	1	1	..	..
Service	33	4	2	8	19	11	7	1

2.41 2 Northern Plains 2.4 Bihar Plains
2.41 North Bihar Plain (Tirhut).

Champaran is full of sand and in the tarai contains *sal* and tall reedy grasses. Darbhanga and Saharsa have patches of peat soil. The density of population of Champaran is comparatively low (851 per sq. mile). Saharsa (819 per sq. mile) has so long been greatly disturbed by the ravages of the Kosi, and Purnea (731) has tarai areas of *sal* and grass. Saran (1,337), Muzaffarpur (1,364) and Darbhanga (1,314) have high densities. Chatterjee speaks of 'two distinct demographic regions' which is a little of an overstatement. It will of course be correct to state that the tract lying West of the Kosi is better drained and has rich loamy soils

and consequently dense population. The country East of Kosi is often laden with sand. But even within each region population distribution is not uniform. The doab between the Gandak and Ghagra (Champaran) is less densely populated than the doab between the Ghagra and Ganga (Saran). Motihari is very thickly populated and so is the tract along the Gandak near Gopalganj-Gobindpur.

The entire area is known as Tirhut. Rice is the predominant crop followed by maize and some wheat. Champaran grows much sugarcane. Saharsa and Purnea grow jute. Spate notes '(i) the remarkable concentration of maize on the wedge of light loams between Ganga and Burhi Gandak and on the sandy Koshi soils, and its corresponding absence on

the heavy *matiyar* with its tendency to waterlogging; (ii) the somewhat similar distribution of barley in Eastern Uttar Pradesh and Western Bihar, but more restricted towards the East than in maize owing to the increasing rainfall, and the increasing dominance of rice, barley being essentially a "rabi after bhadai" crop. Sugar refining including industrial alcohol is the biggest industry in North Bihar. The petroleum oil refinery at Barauni, opposite Mokameh in the northern half of Monghyr district, is going to be the most important industrial complex in North Bihar.

The urban ratio is low and except in Saharsa and Purnea where population increase is high, natural increase is generally low in the Division. There is enough internal evidence to show that some population migrated from Saharsa and Purnea to East Pakistan before 1951 but returned before 1961. Migration, too, is thus low except in Saharsa and Purnea. The proportion of children 0-4 to women 15-44 is low in all other districts but high in Saharsa and Purnea. The language is Hindi. The proportion of members of scheduled castes is low.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.41 NORTH BIHAR PLAIN (TIRHUT)

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	38	2	2	9	25	16	9
Agricultural	10	..	..	..	10	7	3
Artisan	4	..	..	1	3	2	1
Manufacturing	2	..	..	1	1	..	1
Trade and Commerce	3	..	..	..	3	1	2
Transport	2	..	1	1	..	..	..
Service	17	2	1	6	8	6	2
Class I cities with a population of 100,000 or more							

Class I cities with their function:
Service—Muzaffarpur, Darbhanga.

Saran, Champaran, Muzaffarpur and Darbhanga are close to one another in total scores. The values are either low or medium for every block, except that Saran, situated in the Ghagra-Ganga Doab removed from the tarai waters, enjoys high value for agricultural infrastructure. Each district generated its own electricity in 1961. Saharsa and Purnea are not much better in their block values except that in block IV (potential of human resources) both Saharsa and Purnea have high values. They too generate their own electricity.

The important organised industries are food stuffs in all districts; metal products in Saran, Muzaffarpur; wood industries in Champaran, Darbhanga and Purnea; printing and publishing in Saran, Champaran, Saharsa and Purnea; machinery in Muzaffarpur and Saharsa; generation of electricity in all districts except Saran and Darbhanga.

This Division thus is still a homogeneous area with a high population density but relatively low level of development throughout.

2.42 2 Northern Plains 2.4 Bihar Plains
2.42 South Bihar Plain (Magadha).

"The plains lying South of the Ganga are also densely populated though the distribution is less uniform. This is more marked on the extreme West of the southern plains, especially in the doab between the Ganga and the Son. There is a considerable concentration of population on the banks of these two rivers, but on the adjoining ill-drained Kadai lands, there are fewer people. Immediately on the East of the Son, the southern fringes of the plains have a concentration of population on the banks of the north-flowing streams, but as the plains become flatter in the North, the population spreads out more evenly. Farther north, the pattern of population distribution changes again. The people cluster on the high banks of the main river, avoiding the nearby marshy *jalas* and *tals*. This is very noticeable near Mokameh". (Chatterjee). Again, unlike the North Bihar plains, the plains in South Bihar are traversed by short rugged hills, like those near Rajgir and south and southwest of Monghyr, where the population is sparse and scattered.

Magadha, as this Division is called, has been the cradle of an ancient and flourishing civilization. Pataliputra, Rajgir, Gaya, Bodh Gaya, Nalanda are magic names associated with the past and the noblest in India's history. But in modern times the South Bihar Plain 'seems to lack individuality. It has indeed great interest for the geographer, but this is as illustrating the transition from the drier plains of the West to the Delta rather than by any distinctive regional quality of its own'. (Spate).

The chief crop in this Division is rice followed mainly by gram and wheat. In Monghyr and Bhagalpur grow maize. In Shahabad about 30 per cent of the net sown area is irrigated by canals. In other

districts the source of irrigation is either wells or tanks (ahars) or pynes, small private canals, for the most part mere inundation cuts from small streams and rivers like the Sakri, or Kiul or Mohana. The pynes and ahars are chiefly used for paddy but the wells are used mostly for rabi. A rather remarkable development in the vicinity of Patna city is the development of market gardening for the Calcutta, Dhanbad and Jamshedpur markets, in the anchals of Phulwari, Pun Pun, Fatwah, Harnau and Bakhtiarpur, lowlying tracts where streams like Pun Pun are ponded back when the Ganga is in high flood. Patna has given its name to the finest quality rice.

Except for Patna which has a moderately high urban ratio the Division is not very distinguished either for urban ratio, natural increase, immigration or proportion of children 0-4 to women 15-44. Density is very high in Patna (1,386) chiefly owing to the city and concentration of industries. Shahabad has the lowest (733), Gaya comes next with 769, followed by Bhagalpur (805) and Monghyr (860). The language in Shahabad is Bhojpuri. The proportion of members of scheduled castes is particularly high in Gaya.

Patna is placed in the fourth or top level of development with high values for blocks II, IV and V and medium values for III and VI. It generates electricity and is connected with DVC Grid. Bhagalpur is placed in the third level with high values for blocks II, IV and V, medium for VI and low value for block III. The district generates its own electricity. Shahabad, Gaya and Monghyr are placed in the second level with very similar aggregate scores and have low values for III, medium values for V and VI and high values for IV. Shahabad and Gaya have high and Monghyr medium value for block II. All the districts are connected by grid. Monghyr also generates its own electricity.

The important organised industries are food industries in all districts; cotton textiles in Shahabad and Gaya; wool and silk textiles in Bhagalpur, printing and publishing in Gaya, Patna and Monghyr; non-metallic minerals in Shaha-

bad and Gaya; basic metals in Monghyr; transport equipment in Patna and Monghyr; tobacco in Monghyr and Bhagalpur; generation of electricity in Gaya; leather and leather products in Patna.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.42 SOUTH BIHAR PLAIN (MAGADHA)

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	43	4	4	8	27	16	10	1
Agricultural	10	..	1	3	6	3	3	..
Artisan	8	1	1	..	6	4	2	..
Manufacturing	4	1	..	2	1	1	..	..
Trade and Commerce	2	..	..	..	2	2	..	..
Transport	3	..	1	1	1	1	..	..
Service	16	2	1	2	11	5	5	1

Class I cities with their function:
Artisan—Bhagalpur.
Manufacturing—Monghyr.
Service—Gaya, Patna.

2.5 West Bengal Plains.

The West Bengal Plains have been divided into four divisions.

2.51 The North Bengal Plain (Duars) or submontane tarai, locally known as the Duars (doors from Bhutan), comprising the districts of Jalpaiguri and Cooch Behar.

2.52 The Northern Para Delta and Barind, consisting of West Dinajpur and Malda. The western portion of Malda is of course part of Ganga delta.

2.53 The Ganga Delta comprising the districts east of the Bhagirathi and the Hooghly (Murshidabad, Nadia, Calcutta and 24-Parganas). Of this tract Murshidabad and Nadia form the 'moribund delta'. The northern half of 24-Parganas including Calcutta down to a rough transverse line through Basirhat, Canning and Diamond Harbour constitutes 'the mature delta'. The territory South of this transverse line is 'active delta'.

2.54 The Damodar Delta. This tract consisting of Hooghly, Howrah and Midnapore

has been formed by the hydraulic interaction of the Damodar and the Hooghly which explains why the southeastern margins of Howrah and the mouth of the Rupnarayan are still 'active delta', which continues along the coastline of Midnapore.

This Subregion, therefore, covers the entire soil profile from the Himalayan foothills to the mangrove reaches of the Bay of Bengal. The principal mother tongue is Bengali.

This great rice tract has more than one pattern of yield in maunds per acre. For example Cooch Behar (9.02), Nadia (9.27) and Malda (9.38) form one group. The second group is formed by the districts of West Dinajpur (10.22), Murshidabad (10.60), 24-Parganas (10.99), Jalpaiguri (11.28) and Midnapore (11.45). The third group is formed by Howrah (12.36) and Hooghly (13.10). None of the districts, however, attain the yield of the great rice tracts of Andhra Pradesh, Madras, Mysore or Kerala.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.5 WEST BENGAL PLAINS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	112	9	21	34	48	22	19	7
Agricultural	6	..	..	1	5	2	3	..
Port	2	1	..	1	..	..	..	..
Artisan	7	..	2	2	3	2	1	..
Manufacturing	40	7	10	17	6	2	4	..
Trade and Commerce	22	..	2	6	14	5	7	2
Transport	2	1	..	..	1	..	..	1
Service	33	..	7	7	19	11	4	4

2.51 2 Northern Plains 2.5 West Bengal Plains 2.51 North Bengal Plain (Duars).

This Division is typical tarai country. The upper areas are still under forest, mainly *sal*. Much of the tall grass and reed jungle has been cleared for rice, jute, tobacco and most important of them all tea. Soils are naturally much coarser than farther south, often sandy or even gravelly.

The main food crop is rice and the cash crop jute. But oilseeds are gaining

ground too. Tea is extensive in Jalpaiguri. The density of population in Jalpaiguri is 570, in Cooch Behar 776.

The urban ratio is modest, but natural increase, immigration and proportion of children 0-4 to women 15-44 are high.

Jalpaiguri is placed in the top or fourth level with a good score. It has high values in II, IV and V and medium values in III and VI. The largest hydroelectric project in Northern Bengal, the Jaldhaka scheme, is now in progress. The district generates its own electricity.

Cooch Behar is placed in the second level. It has high value only in block IV (potential of human resources) but medium values in II, V and VI and low value in III.

The proportion of members of scheduled castes is very high in this Division. It is 31 per cent in Jalpaiguri and 47 per cent in Cooch Behar.

The more important organised industries are food industries, wood industries and transport equipment in both districts, machinery in Jalpaiguri and printing and publishing in Cooch Behar and miscellaneous industries in both.

Thus even this small Division presents two distinct tracts of development in the two districts.

Analysis of Town Groups and Towns by predominant function and size classes

2.51 NORTH BENGAL PLAIN (DUARS)

Function of town	Class of town					
	Total	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7
Total	12	4	8	2	3	3
Agricultural	1	..	1	1	..	..
Trade and Commerce	6	2	4	1	2	1
Service	5	2	3	..	1	2

2.52 2 Northern Plains 2.5 West Bengal Plains 2.52 Northern Para Delta (Barind).

Soils are varied in this Division. It consists of patches of old alluvium, clayey silts, sandy clays and loams, which become finer and more fertile towards the Ganga. In West Dinajpur the soil is mostly heavy clay. In the heart of this

small Division lies Barind, a large island or terrace of older quasi-lateritic alluvium. The Barind still carries some scrub and degraded remnant forest, which is being rapidly swept away by colonization. Barley, wheat, pulses and oilseeds are grown in the *diara* tracts of Kaliachak, Manikchak and Harischandrapur in Malda. The chief food crop of course is rice and the cash crop jute. Malda grows some gram, barley and oilseeds.

West Dinajpur has a population density of 642 and Malda of 878, West Dinajpur having more of the Barind than Malda. The urban ratio is low, but both districts have high rates of natural increase, immigration and proportion of children 0-4 to women 15-44. The percentage of members of scheduled castes is 22 in West Dinajpur and 13 in Malda.

Both districts are placed in the second level of development and have almost identical grades, high values in block IV, medium values in blocks V and VI and low values in block III. West Dinajpur has medium value but Malda high value in block II. Both districts generate electricity locally. Organised industry is mainly confined to food processing in both districts, wood industry, transport equipment and generation of electricity in Malda.

Analysis of Town Groups and Towns by predominant function and size classes

2.52 NORTHERN PARA DELTA (BARIND)

Function of town	Class of town					
	Total	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7
Total	8	3	5	1	3	1
Trade and Commerce	5	1	4	1	3	..
Service	3	2	1	..	..	1

2.53 2 Northern Plains 2.5 West Bengal Plains 2.53 Ganga Delta.

The Division is composed of 4 districts; Murshidabad, Nadia, Calcutta and 24-Parganas.

Murshidabad is stretched across the Bhagirathi as it enters the districts beyond the Rajmahal Hills. On the right bank of Bhagirathi the land is the new alluvial apron of the Rarh, old alluvium and red soil. The western tract of the district is thus dissected by streams which descend from the uplands: the more important ones being the Mayurakshi and Dwaraka. The eastern tract is crisscrossed by the meanders of the Jalangi.

A little of Nadia (Nabadwip) also falls on the right bank of the Bhagirathi. Murshidabad and Nadia on the east bank of the Bhagirathi are a true example of the Moribund delta, in which all the rivers, Jalangi, Churni, Bhairab, Ichhamati and Mathabhanga form a network of drainage but are also liable to be ponded back when the flood level in the Bhagirathi is high. Calcutta is an enclave of 24-Parganas whose low level and salt lakes cause grave problems of run-off during early monsoon storms. The northern and eastern parts of 24-Parganas are mature delta but in the Sundarbans the delta is still very much active.

The soil is thus entirely alluvium in the stable and active delta but presents problems of drainage. It is mainly sandy loam, with patches of stiff clays in the moribund delta. The Sundarbans including the reclaimed Sonarpur-Arrapanch areas are clays, with fresh sands along the sea-face, and of course strongly saline. In Murshidabad and Nadia 'the oftakes of the old distributaries have been silted up, and the rivers themselves flow on old levees. Even in flood the country in general is

not inundated; on the other hand the interflaves are ill drained owing to their saucer section, so typical of the innumerable *bils*.

The chief food crop is rice and the cash crop jute, which in this Division have struck a complicated three-cornered balance for many decades between man-days of labour on the one side, jute forecasts on the second and wholesale prices on the third, so much so that even statistical forecasts, based on scientific samples came to acquire a vested interest and bias. Nadia grows more *rabi* crops than *kharif* and therefore pulses and oilseeds. Sugar-cane is extensively grown in north-western Nadia and Southern Murshidabad which feeds the large sugar mill at Plassey. Gram is grown in both the northern districts.

The densities of Murshidabad (1,105) and Nadia (1,135) are high. But "the largest concentration of population is to be found in and around Calcutta on the flood-plain of the Ganga and its tributaries. Long meandering belts of contiguous villages with their surrounding orchards, separated by extensive rice fields, characterise the cultural landscape here. The deltaic relief, fertile soils and easy communications have rendered this spot most attractive for human settlement" (Chatterjee). The 'long meandering belts of contiguous villages' are mostly due to their having been established on the bank(s) of rivers or streams which have either moved away or been reduced to levees or to *bils* or old river beds. That is why they sometimes exhibit thick dendritic patterns.

The urban ratio is high in 24-Parganas and of course 100 per cent in Calcutta. It is moderately high also in Nadia but low in Murshidabad. The rate of natural increase has been high in all districts except Calcutta, that of immigration high in all districts except Murshidabad. The

proportion of young children 0-4 to women 15-44 is high in Murshidabad and Nadia, moderately high in 24-Parganas but low in Calcutta. The proportion of members of scheduled castes is high in 24-Parganas (24) and Nadia (20).

Murshidabad is placed in the second level of development. It has high values in II and IV, medium values in V and VI and low value in III. Nadia and 24-Parganas are placed in the top or fourth level of development. Nadia and 24-Parganas have high values for blocks II, IV, V and VI. In III, Nadia is low while 24-Parganas is medium. Calcutta has high values for all blocks except, naturally enough, in block II in which the value is nil. Calcutta

has been placed on the top level of development.

Murshidabad, Nadia and 24-Parganas are connected by grid. Calcutta is connected to grid and also generates its own electricity.

The more important industries are textiles in Murshidabad, Nadia, Calcutta and 24-Parganas; food industries in Murshidabad and Nadia; tobacco and jute pressing in Murshidabad; transport equipment in Nadia, Calcutta and 24-Parganas; machinery and metal products in Nadia, Calcutta and 24-Parganas; electrical machinery and rubber in 24-Parganas and Calcutta.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.53 GANGA DELTA

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	55	6	16	14	19	15	1	3
Port	2	1	..	1	..	..	..	..
Artisan	5	..	2	1	2	2	..	..
Manufacturing	21	5	7	7	2	2	..	..
Trade and Commerce	10	..	2	3	5	3	1	1
Transport	1	..	..	..	1	..	..	1
Service	16	..	5	2	9	8	..	1

Class I cities with their function :
Port—Calcutta.

Manufacturing—South Suburban, Kamarhati, Baranagar, Bhatpara, South Dum Dum.

2.54 2 Northern Plains 2.5 West Bengal Plains 2.54 Damodar Delta.

The Division forms the tract between the outer bank of the Damodar elbow and the Hooghly and is in the upper tracts a typical dead delta zone. 'Here the small, some

formerly spill, channels of Damodar, have lost their head waters by silting or shifts of that river, while the Hooghly has probably been pushed to the East by the detritus of the plateau streams' (Spate). This is thus a region of silted and stagnant bils, of Kana (blind), boja (choked) and

mara (dead) nadis, which have been recently resuscitated by a network of Damodar canals. The dead and dying rivers have led to extensive market gardening and potato growing in Hooghly and Howrah districts. 'In the South lowland Midnapore is only partly deltaic, has saline soil with a prograding coastal plain marked by lines of old beach-ridges, which give rise to linear settlement patterns around Contai' (Spate). The western half of Midnapore is a firm shelf containing the last surface outcrops of the solid rocks of the Central Hills and Plateaus and contains red and skeletal soils.

The chief and almost the only crop in this Division is rice. Hooghly and Howrah grow jute.

The flood plains of Hooghly (1,841), Howrah (3,639) and Midnapore (826) are more densely populated than those on the east bank of the Hooghly river, because of better drainage facilities and availability of water in this tract.

The urban ratio is high in Hooghly and Howrah, but modest in Midnapore.

Natural increase is high in all three districts. Immigration is high in Hooghly and Howrah but low in Midnapore. The proportion of young children 0-4 to women 15-44 is moderately high in Hooghly but modest in Howrah and Midnapore.

Hooghly and Howrah are placed in the fourth or top level of development with high values for blocks II, IV and V and medium values for block III. Hooghly has medium value and Howrah high value for block VI. Midnapore is placed in the second level of development, with high values only for blocks II and IV, medium values for blocks V and VI and low value for block III.

All the districts are connected by grid.

The important organised industries are textiles and transport equipment in Hooghly and Howrah; chemicals in Hooghly and Midnapore; basic metals and metal products in Howrah; foodstuffs in all three districts; and wood industries in Midnapore.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.54 DAMODAR DELTA

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	37	3	5	13	16	4	12
Agricultural	5	..	..	1	4	1	3
Artisan	2	..	..	1	1	..	1
Manufacturing	19	2	3	10	4	..	4
Trade and Commerce	1	..	..	..	1	..	1
Transport	1	1	..	..	..	..	..
Service	9	..	2	1	6	3	3

Class I cities with their function :
Manufacturing—Howrah, Baly.
Transport—Kharagpur.

2.6 Assam Valleys.

There are two separate valleys in Assam, both part of the great Northern Plains: the Brahmaputra Valley and the Surma Valley. Spate picturesquely calls the Brahmaputra Valley, 'the great ramp-valley, from Dhubri to its blind end and beyond Sadiya', extending over 400 miles, 'with a remarkably even breadth of about 60 miles, except where the Mikir and Rengma Hills narrow it slightly. Most of this great area is formed of the detrital terraces of the Brahmaputra and its numerous tributaries'. Already at the Dihang-Dibong-Lohit confluence, nearly 900 miles from the sea, the stream even in the dry season is broader than the Rhine or the Rhone, in their lower courses. At high stage, after snow-melt and in the rains, it is an immense corridor of waters five miles and more wide, with a discharge at Goalpara of over half a million cusecs. The channel is of course braided and shifting on a scale proportionate, a factor which hampers steamer navigation (which extends for 800 miles to Dibrugarh) and compels settlement as a rule to lie well back, with in some cases a dry weather extension to the shore. The great floods are a chief factor in inhibiting the clearing of the waste. Rainfall is high enough to obviate irrigation, flood being far more dangerous than drought, but there is something of a rain-shadow effect along the southern flanks of the valley, especially in the lee of the

Shillong Plateau. Large areas are covered with *sal* forest and with tall reed-jungle in the swamps and *jhils* of the immense flood plain. In these swamps the one-horned rhinoceros, elsewhere extinct, survives.

'Settlements are for the most part large hamlets rather than villages, sites usually on rises or along levees. They are surrounded by fruit trees (plantain, papaya, mango, jack-fruit) and bamboo. The multitudinous uses of bamboo are the most striking feature in the material culture.' (Spate)

Rice and jute are the most important crops. Oilseeds are also important. Holdings are not large, usually about 5 acres of paddy plus small patches of vegetables, sugarcane, areca and betel for sale as well as home consumption. The most important resource is tea, the overriding importance of which is now threatened by the new one of mineral oil. Forests and coal are other major resources which have not yet been skilfully exploited.

The steep edge of the Shillong Plateau overlooking the Surma Valley is extremely straight and precipitous, rising over 5,000 ft. in 10 or 12 miles; scoured by the highest rainfall in the world it is naturally wildly dissected and covered with dense jungle.

The predominant language of the Brahmaputra Valley is Assamese and that of Surma Valley Bengali.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.6 ASSAM VALLEYS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	51	1	1	11	38	7	21	10
Agricultural	1	..	..	..	1	..	..	1
Artisan	4	..	..	1	3	1	1	1
Manufacturing	5	..	..	1	4	..	2	2
Trade and Commerce	19	..	..	3	16	2	10	4
Transport	6	..	1	2	3	..	3	..
Service	16	1	..	4	11	4	5	2

2.61 2 Northern Plains 2.6 Assam Valleys 2.61 Brahmaputra Valley.

This Valley, proceeding up the Brahmaputra ramp from South-west to North-east consists of 6 districts: Goalpara, Kamrup, Darrang, Nowgong, Sibsagar and Lakhimpur. Goalpara, Kamrup, Sibsagar and Lakhimpur are transversely dissected by the Brahmaputra but Darrang is almost wholly on its right bank and Nowgong on its left.

Goalpara and Kamrup form the lower Brahmaputra Valley bordered by the Bhutan Hills in the North and Shillong Plateau in the South. There are many small tributaries both in the North and South. The northern tributaries are Manas, Champamati, Saralbhang, Gadadhar, Gangadhar in Goalpara and Mara Manas, Pagladiya and Puthimari in Kamrup. The southern tributaries are Krishnai and Dudhani in Goalpara and Umtru, Kalang and Kalsi in Kamrup.

Darrang is girdled by the Daffa Hills in the North and Mikir Hills in the East. Nowgong is a valley defined by the Kopili reentrant girdled by the Mikir Hills in the east and Shillong Plateau in the South. Together they form an irregular ellipse with the Brahmaputra passing through the middle. Darrang presents a number of northern tributaries, of which the chief is Dhansiri, to the great river: Kameng, Barnadi, Nanai, Bardi, Dhansiri etc. Nowgong contributes the course of the Kopili and its tributaries Barapani and Umtru. Sibsagar and Lakhimpur form the Upper Brahmaputra Valley. Sibsagar is girdled by the Naga Hills in the Southeast and the Mikir Hills in the East, while Lakhimpur is girdled by the Abor Hills in the North, Mishmi Hills in the Northeast, Patkoi Hills in the Southeast and the Mikir Hills in the Southwest. In Sibsagar Dhanisiri is the main river and tributary to the

Brahmaputra, the minor ones being the Jhansi, Dikhu, Disai and Disang from the south. In Lakhimpur the tributaries are Subansiri, Dihang and Dibang from the North, Lohit from the East and Dibru, Buri Dihing and Disang from the South.

Spate has observed that 'Assam is now India's *lebensraum*, the last frontier of settlement of any significance'. For the best part of a century it has been East Bengal's *lebensraum*, a steady stream of landhungry colonisers having migrated from areas like Rangpur, Mymensingh, Dacca, Sylhet and Comilla to colonise the Brahmaputra *chars* and braided banks. The density is still modest, the lowest being 312 persons per sq. mile in Lakhimpur and the highest 550 in Nowgong. The proportion of members of scheduled tribes is lowest in Sibsagar (6.36 per cent) and highest in Goalpara (14.7); that of members of scheduled castes is low, too, the highest proportion being reached in Nowgong (8.4).

The urban ratio is modest. There is reason to suspect that information about migration was tardily given in the Census of 1961. Nevertheless, both natural increase and immigration are high in the Valley. The proportion of children 0-4 to women 15-44 is uniformly and extremely high, suggesting a fresh burst of population increase in the current decade.

The chief crops are rice, jute and oilseeds. The land does not need irrigation. On the contrary the problem is to keep out or drain superfluous water and rain.

With the exception of Lakhimpur which is placed in the fourth or top level of development on account of its agriculture and industries, Kamrup, Darrang and Sibsagar are placed in the third level of achievement while Goalpara and Nowgong are in the second with total scores

very close to one another's. For example, Goalpara and Nowgong have identical total scores with medium values in blocks II, V and VI, high values in block IV and low in block III. Kamrup and Sibsagar have higher and identical total scores, with high values for IV and medium values for V and VI. Kamrup has high value for II and low value for III while Sibsagar has medium values for both. Darrang has a higher score than all four and has high value for IV and medium values for the rest.

Lakhimpur stands out in development. It has high values in III, IV and V and medium values in II and VI.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

2.61 BRAHMAPUTRA VALLEY
Class of town

Function of town	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	45	1	1	9	34	6	20	8
Artisan	4	..	..	1	3	1	1	1
Manufacturing	5	..	..	1	4	2	2	2
Trade and Commerce	16	..	..	1	15	2	10	3
Transport	5	..	1	2	2	..	2	..
Service	15	1	..	4	10	3	5	2

Class I cities with their function :
Service—Gauhati

2.62 2 Northern Plains 2.6 Assam Valleys
2.62 Surma Valley.

This valley floor has been carved by the Kopili-Surma-Kusiyara rivers from the northeast and the Barak-Jiri rivers from the Barail Range in the north and northeast. Cachar may thus also be called the Barak valley, and is girdled by the Lushai Hills in the south, the Barail Range in the north and northeast and the Manipur Hills in the east.

Cachar has patches of red soil and old alluvium at the foot of the hills. The main crops are rice, jute and tea.

The density of population is moderately high (514). The percentage of members of scheduled castes is 14. The urban ratio is modest but both natural increase and immigration are moderately high. So is the percentage of children 0-4 to women 15-44.

All districts except Kamrup have their own electricity. Only Kamrup is connected to grid.

The most important organised industry everywhere is food except in Goalpara where it is transport. Transport is important in all districts. Wood too is important in the entire subdivision. Chemicals and cotton and jute ginning and pressing are important in Goalpara. Textiles and printing and publishing are important in Kamrup. Machinery (tea machinery) is undertaken in Darrang, Nowgong and Lakhimpur. Lakhimpur enjoys the monopoly of petroleum and coal.

The district is placed in the second level of development with medium values in II, III, V and VI and high value in IV. It generates electricity locally. The main organised industries are food, wood, jute ginning and pressing, transport equipment and generation of electricity. There are many tea estates.

Analysis of Town Groups and Towns by predominant function and size classes

2.62 SURMA VALLEY

Function of town	Total	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7
Total	6	2	4	1	1	2
Agricultural	1	..	1	..	..	1
Trade and Commerce	3	2	1	..	..	1
Transport	1	..	1	..	1	..
Service	1	..	1	1	..	..

REGION 3 CENTRAL HILLS AND PLATEAUS

This Region constitutes the great heart or central land mass of India and is placed between the great Plains below the Himalayan Range in the North and the great Deccan Lava Plateau in the South. It extends in unbroken array from as far

West as Sirohi in Rajasthan to as far east as the Rajmahal Hills and Rarh in West Bengal, dissected by a mosaic of valleys achieving radial drainage. A brief account of this Region of great physical complexity will help us to comprehend the main features.

Analysis of Cities, Town Groups and Towns by predominant function and size classes
3 CENTRAL HILLS AND PLATEAUS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	468	20	13	80	355	133	190	32
Agricultural	85	..	..	1	84	18	57	9
Port	1	..	..	..	..	..	..	1
Artisan	69	1	1	6	61	18	40	3
Manufacturing	93	10	6	22	55	28	25	2
Trade and Commerce	24	1	..	6	17	6	9	2
Transport	23	1	2	5	15	10	5	..
Service	173	7	4	40	122	53	54	15

3.1 Rajasthan Hills and Plateaus.

The first Subregion is named Rajasthan Hills and Plateaus and covers all the districts of Rajasthan not counted in the Desert and Dry Areas plus Delhi and Gurgaon of Punjab. This Subregion is next

divided into 5 Divisions, mainly on account of the arrangement of their hill and drainage patterns.

3.11 Aravallis and Uplands.

The first Division is the Aravallis which includes Jaipur, Tonk, Sawai Madhopur, Bharatpur, Alwar, Sikar,

Bhilwara, Jhunjhunu and Ajmer. All these districts lie on the western ranges and outliers of the Aravallis from the southwest to the northeast. The districts in this Division can be arranged into two convenient subdivisions according to the orientation of their drainage.

(a) Sikar-Jhunjhunu-Alwar-Bharatpur-Jaipur.

These districts together with Delhi and Gurgaon constitute the northern section or the outliers of the western and northern Aravalli ranges. The small rivers drain in several directions. For instance, Kantli runs through Sikar and Jhunjhunu (Sekhawati domain) northward to peter out in Rajgarh tehsil of Churu; the Sahibi travels upward into Gurgaon and went into a phenomenal flood in 1964; the Dhund Nadi and its tributaries drain Jaipur to be renamed Morel before it joins the Banas which thereafter joins the Chambal; the Banganga or Utangan runs through Alwar to Bharatpur; the Gambhir travels through Bharatpur. The small streams Rupnagar and Saraswati emanate from Sambhar to flow through Ajmer and from the Luni which ends in the Rann of Kutch. This is what the Jodhpur-Jaipur saddle of the Aravallis and the Damans do to the rivers.

(b) Bhilwara-Ajmer-Tonk-Sawai Madhopur.

This constitutes the Central section and interstices of the Aravalli ranges. The Banas drains this subdivision (Bhilwara, Sawai Madhopur) and also part of Udaipur and Chitorgarh, although the latter two districts really belong to the Eastern Aravallis or Mewar Hills. Udaipur is also drained by the Sabarmati and the Gomati in the south. Part of Ajmer in the west again is commanded by the Luni. The Banas forms the Tonk Basin before it joins the Chambal.

3.12 Delhi Ridges (Delhi)

3.13 Aravalli Outlier (Gurgaon)

Delhi and Gurgaon are at the northernmost tip where the Aravalli exhausts itself in the Jamuna Plain.

3.14 Rajasthan Hills (Mewar, Bagar).

This is the central mass of the very ancient Aravalli Ranges and contains Udaipur, Sirohi, Banswara and Dungarpur. It forms three subdivisions according to drainage patterns. Udaipur is drained in two directions: (1) by the tributaries of the Banas towards the northeast as the river proceeds to join the Chambal and (2) in the South by the tributaries of the Sabarmati which flows into the Gulf of Cambay. Sirohi is drained in two directions: towards the southwest by another Banas which gives Banaskantha of Gujarat its name before it flows into the Little Rann of Kutch; towards the northwest by the tributaries like Sukri of the Luni which drains into the Great Rann. Dungarpur and Banswara are drained towards the South: Dungarpur by the tributaries of the Sabarmati and Banswara by the Mahi, both of which flow into the Gulf of Cambay. Udaipur and Dungarpur are called Mewar and Banswara Bagar.

3.15 East Rajasthan Hills.

This Division contains Chitorgarh, Kota, Bundi and Jhalawar. Chitorgarh is drained towards the northeast by Hagan, Gujri and Berach, tributaries of the Banas; Bundi in the same direction by the tributaries of the Chambal; Kota and Jhalawar in the same direction again by the tributaries of the Chambal and the Kali Sindh and Parbati, themselves tributaries of the Chambal. Jhalawar is drained (1) by the Kali Sindh which traverses the diagonal Mukandwara Hills through the Gagraun Gap northeast of Jhalawar town and (2) by the Parwan in the east. The Chambal,

the Kali Sindh and the Parbati together make the Kota Basin.

This subregion thus covers the Rajasthan than Aravallis.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.1 RAJASTHAN HILLS AND PLATEAUS

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	109	5	4	18	82	32	41	9
Agricultural	33	..	..	1	12	3	7	2
Artisan	14	..	2	4	9	6	3	..
Manufacturing	15	..	..	2	5	1	2	2
Trade and Commerce	7	..	..	1	3	2	1	..
Transport	5	1	..	9	21	9	7	5
Service	35	4	1					

3.11 3 Central Hills and Plateaus 3.1 Rajasthan Hills and Plateaus 3.11 Aravallis and Uplands.

This is a great millet and gram tract, the coarsest of the three millets—*bajra*—claiming the greatest cultivated area in Jaipur, Sikar and Jhunjhunu. Wheat and barley are grown in the irrigated tracts of all districts except Sikar and Jhunjhunu where the acreages are negligible. Gram is grown throughout. Except for Bhilwara and Ajmer which grow some cotton, no other district grows it. Oilseeds are grown in Bharatpur and Alwar while Bhilwara and Ajmer grow sesamum.

The density of population is lowest (179) in Tonk despite its Basin. It is low also in Bhilwara (214), Sawai Madhopur (232) and Sikar (274) and high in the plains districts a topographical explanation of which has already been attempted. The urban ratio is low in Sawai Madhopur,

Alwar and Bhilwara, moderate in Tonk, Sikar and Jhunjhunu and high only in Jaipur and Ajmer. The rate of increase is low to moderate throughout the Division and so is migration, it being high only in Ajmer. But the ratio of children 0-4 to women 15-44 is moderate to high in all districts except Bhilwara suggesting that the growth of population may accelerate in the current decade. The proportions of members of scheduled castes and tribes are low. The mother tongue is Rajasthani except in the four northeastern districts of Tonk, Sawai Madhopur, Bharatpur and Alwar where it is Hindi.

Bhilwara is placed in the lowest level of development, with high value only for IV (potential of human resources), medium values for II, III and VI and low value for V (distributive trade, manufacturing and infrastructure). Tonk, Sawai Madhopur, Sikar and Jhunjhunu are placed in the second level, the former two with total scores of 127 and 126 respectively with

identical rankings in all the five blocks. Sikar has low values in III and VI, medium value in V and high values in II and IV, while Jhunjhunu has medium values in III, V and VI and high values in II and IV. Bharatpur and Alwar are placed in the fourth and third levels with medium values in V and VI, and high in II and IV, Bharatpur being medium and Alwar low in III. Jaipur and Ajmer are placed in the top level, Ajmer being much ahead even of Jaipur. Ajmer has high values in II, IV, V and VI and medium in III, whereas Jaipur has high value in II, IV and V and medium in III and VI.

None of the districts except Sikar and Jhunjhunu were connected to grid. In the organised sector food industries are important in Alwar, Sawai Madhopur,

Bharatpur and Bhilwara; textiles in Sikar, Bhilwara, Ajmer and Jaipur; cotton and fibre ginning and pressing in Tonk, Bhilwara and Ajmer; metals and basic metals in Jaipur and Bharatpur; transport equipment in Bharatpur, Ajmer and Sawai Madhopur; printing and publishing in Alwar, Sikar, Sawai Madhopur and Ajmer.

This Division displays great diversity in the levels of development, from the lowest through the highest level. Bhilwara in the hilly tract is at one end. Tonk and Sawai Madhopur which are a mixture of ranges and basins are in the second level with Sikar and Jhunjhunu. Alwar close to the Jamuna alluvials is in the third level while Bharatpur and industrialized Jaipur and Ajmer are at the top.

Analysis of Cities, Town Groups and Towns by predominant function and size classes
3.11 ARAVALLIS AND UPLANDS

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	61	2	3	13	43	20	20	3
Agricultural	24	..	..	1	23	10	13	..
Artisan	8	..	1	1	6	3	2	1
Manufacturing	9	..	1	4	4	3	1	..
Trade and Commerce	2	..	..	..	2	1	..	1
Transport	4	1	..	1	2	1	1	..
Service	14	1	1	6	6	2	3	1
Class I cities with their function : Transport—Ajmer. Service—Jaipur.								

3.12 3 Central Hills and Plateaus 3.1 Rajasthan Hills and Plateaus 3.12 Delhi Ridges.

Delhi is at the meeting point between the Delhi Doab in the north, Haryana in the west, the Aravallis in the southwest and the Jamuna alluvials in the south and has all the characteristics of the four regions in its several parts. It is thus singularly blessed in the variety of its soils, water regimes and locally bred peasant communities apart from the complexities bestowed on it by the fact of its having become the Union Capital. Down the corridors of time it has had radial communications with all parts of India. Any one who held Delhi held in fee the routes to the northwest, the great Ganga Plains to the southeast, to the West, and to the strategic sea coast of Cambay through Malwa in the south-west. This explains why no Government felt really secure and supreme until it was established in Delhi.

Since the Partition and Independence, Delhi has rapidly grown to be the most important centre in continental India for Government activity, transport, communication, banking, warehousing, clearance of goods and, chiefest of all, concentration of talent. It has acquired a truly mixed and cosmopolitan population. Delhi is also rapidly shedding its character as the seat of Government dominated by official and bureaucratic values and acquiring for its citizens the priceless gift of anonymity. With each year that passes Delhi becomes a better place to live in and for following one's pursuit and to cultivate the company of one's own choice.

The chief crop is gram followed by wheat and some way behind by the two northern millets. Thus while it betrays the predominance of the Aravalli characteristics in its crop pattern, the influence of the Delhi Doab (the West Jamuna Canal) is reflected in the second and important place

occupied by wheat. Delhi is now rich in market gardening. The principal language is Hindi. The density is 4,640 per sq. mile.

High values, as might be expected, are exhibited in urban ratio and immigration and a slightly lower ranking in natural increase. But in the proportion of children 0-4 to women 15-44, Delhi has a medium value, which is possibly due to the high immigration ratio even of women of working age.

Delhi has about the highest score (173) in India for the aggregate of all blocks, values being high for all blocks except III (participation rates in traditional sector) where it is medium.

In organised industry, textiles, and associated chemicals hold the pride of place, followed by machinery, transport equipment, printing and publishing and metal products. Delhi generates its own electricity and is connected to grid.

Analysis of City by predominant function and size class

3.12 DELHI RIDGES

Function of town	Class of town	
	Total	I
1	2	3
Total	1	1
Service	1	1

Class I cities with their function:
Service—Delhi.

3.13 3 Central Hills and Plateaus 3.1 Rajasthan Hills and Plateaus 3.13 Aravalli Outlier.

Gurgaon, south-west of Delhi, share Delhi's privileges in location, both in agriculture and industry. Urban colonies are developing in Gurgaon almost as rapidly as in Delhi, while around Gurgaon and Faridabad whole industrial complexes

have sprung into existence. Gurgaon has proportionately less wheat than Delhi and conforms more to the Aravalli crop pattern. There is much market gardening. The principal language is Hindi. The density is high (528). The proportion of members of scheduled castes is medium.

The urban ratio in Gurgaon is still medium but the rates of natural increase, immigration and ratio of children 0-4 to women 15-44 are high.

Gurgaon is placed in the fourth level of development with high values in blocks

II, IV and V, medium in block VI and low in III.

It is connected to grid. In organised industry, machinery and electrical equipment rule supreme, followed by metal products, non-metallic mineral products, cotton textiles, leather and leather products.

Delhi and Gurgaon are developing complementarity on account of the decision not to permit location of heavy engineering industries in Delhi. Gurgaon may therefore expect very rapid growth in the current decade.

Analysis of Town Groups and Towns by predominant function and size classes

3.13 ARAVALLI OUTLIER

Function of town	Class of town						
	Total	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	13	1	3	9	1	4	4
Agricultural	3	..	..	3	1	2	..
Artisan	2	..	..	2	..	1	1
Manufacturing	1	1	..	..	..	..	..
Trade and Commerce	4	..	2	2	..	1	1
Service	3	..	1	2	..	..	2

3.14 3 Central Hills and Plateaus 3.1 Rajasthan Hills and Plateaus 3.14 Rajasthan Hills (Mewar, Bagar).

This Division consists of a group of 4 districts: Udaipur, Sirohi, Banswara and Dungarpur.

This is a compact maize tract extended in the south by Jhabua. Sirohi alone has the inferior millet *bajra* and a low population density (176) but the three remaining districts have barley, wheat and gram. Rice is grown in appreciable quantities in the depressions of Banswara and Dungarpur, where significantly enough, population density is higher than in the two other

districts. Sesamum is grown in all districts except Udaipur, and cotton has recently made its mark in Banswara.

The principal language in Udaipur and Sirohi is Rajasthani and in Banswara and Dungarpur Bhili. The tribal population is high in all four districts, being, again, very high in Banswara and Dungarpur. As one might expect, the urban ratio is very low in Banswara and Dungarpur, low in Udaipur and medium in Sirohi. Natural increase is medium in Udaipur and Sirohi but high in Banswara and Dungarpur. The proportion of children 0-4 to women 15-44 is medium in Udaipur and Sirohi but high in Banswara and

3.15 3 Central Hills and Plateaus 3.1 Rajasthan Hills and Plateaus 3.15 East Rajasthan Hills.

This Division again consists of 4 districts: Chitorgarh, Kota, Bundi and Jhalawar. The least densely populated districts are picturesque Bundi (156) and impressive Kota (176) but Bundi is growing rapidly and Kota will now see rapid industrial expansion. Chitorgarh has low density (184) mainly on account of its gaunt ridges, the fort being even more evocative and Gibraltar-like than Gwalior and exquisite in its functional layout. Jhalawar is the densest (208) district.

Chitorgarh and Kota constitute a wheat tract followed by *jowar* and gram while Bundi and Jhalawar make a *jowar* tract followed by wheat and gram. The Division thus makes a transverse cross geographically. Chitorgarh grows cotton and groundnut and Kota and Bundi linseed.

The urban ratio is moderately high only in Kota and Bundi, being medium in Chitorgarh and Jhalawar. The rate of natural increase is moderate in Bundi and Jhalawar but moderately high in Chitorgarh and Kota. Immigration is moderately high in all four districts and so is the proportion of children 0-4 to women 15-44 in Kota. The latter is high in Bundi and moderate in Chitorgarh and Jhalawar.

Chitorgarh and Jhalawar are placed in the second level of development. Chitorgarh has high value only in block IV, low value in block V and medium values in the rest while Jhalawar has high values in II and IV, medium values in III, V and VI. Bundi is placed in the third level while Kota in fourth level with identical values, high in II, IV and VI and medium in III and V. Kota and Jhalawar are connected to grid but Chitorgarh and Bundi generated their own electricity in 1961.

Dungarpur. Sirohi has seen much immigration compared to Udaipur, Banswara and Dungarpur where the value of immigration is low.

Saw mills are important in Sirohi and Banswara. Food industries are important in Udaipur alone. Cotton and jute ginning and pressing are important in Udaipur and Banswara, textiles in Udaipur, which has also a large locomotive workshop and garages. Printing and publishing are growing in Udaipur and Banswara. All districts generate their own power.

This Division exhibits varying degrees of development. Banswara is at the lowest level of development with high value only for block IV, medium values for II, III and VI and low for V. Udaipur and Dungarpur are in the second level with identical rankings in each group except block V, where Udaipur has medium and Dungarpur low value and the total score of Udaipur is higher than that of Dungarpur. Sirohi is placed in the third level mainly owing to its high values in II, IV and VI, medium value in V and low in III. This district is an instance of acceleration of development through industrial locationing.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.14 RAJASTHAN HILLS (MEWAR, BAGAR)

Function of town	Class of town				
	Total	I	IV-V	IV	V
1	2	3	4	5	6
Total	15	1	14	6	8
Agricultural	2	..	2	..	2
Artisan	2	..	2	..	2
Manufacturing	2	..	2	1	1
Trade and Commerce	1	..	1	..	1
Transport	1	..	1	1	..
Service	7	1	6	4	2

Class I cities with their function:
Service—Udaipur.

In organised industry, cotton ginning is important in Chitorgarh and Jhalawar; food in all districts, transport in Kota and Bundi; non-metallic minerals in Bundi and Chitorgarh; tobacco in Chitorgarh and Jhalawar; and wood industries in Chitorgarh and Bundi. Bundi has the

highest ratios for electricity and organised labour.

This Division, too, has a fair range of development and conforms to the general pattern of Rajasthan in which there are pronounced signs of break-through being effected by individual districts.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.15 EAST RAJASTHAN HILLS

Function of town	Class of town						
	Total	I	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	19	1	2	16	5	9	2
Agricultural	4	..	..	4	..	4	..
Artisan	2	..	..	2	..	2	..
Manufacturing	3	..	..	3	2	1	..
Service	10	1	2	7	3	2	2

Class I cities with their function:
Service—Kota.

3.2 Bundelkhand.

This Subregion lies to the northeast of the previous one and embraces the wild drainage basin of the Chambal which emerges from the eastern Aravallis to fall into the Jamuna. I have called the first Division of this subregion (3.21) the Chambal Ravines which cover the districts of Morena, Bhind, Gwalior and Datia. Bhind, Morena and western Gwalior are drained by the Chambal and its tributaries. Sabalgarh of Morena, for example, is drained by the Kunwari which falls into Chambal. Eastern Gwalior and Datia are drained by the Sind and its tributaries like Besuli or Vaisali. The Sind falls into the Jamuna just below the Chambal. This Subregion thus constitutes a highly dissected gneissic terrain. Spate picturesquely

calls the sheer cliff of Gwalior Fort a stranded Gibraltar.

I have included in this subregion as its second Division (3.22) the Trans Jamuna Alluvial Veneer and the Jamuna badlands, the jagged scarp lands of the extremities of Bundelkhand gneiss. I have classified Tikamgarh and Chhatarpur as the third Division (3.23) of this subregion for the same reason.

The second Division (3.22) Trans Jamuna Alluvial Veneer, part of Bundelkhand, a cultural and historic tract, is formed by the northern extremities of the Vindhya Ranges. It consists of Jhansi, Jalaun, Hamirpur and Banda all belonging to Uttar Pradesh. All drain toward the northeast into the Jamuna. Jhansi is drained by the Betwa or Betrabati, Jalaun

by a tributary of the Betwa, Hamirpur by the Dhasan and Birwa which join the Betwa before it falls into Jamuna; Banda by the Ken which falls into the Jamuna. The drainage in this second division is also from south-west to north-east.

The third Division is really part of the second, even as the second is a part of the first, except for political division into Uttar and Madhya Pradesh. It consists of Tikamgarh and Chhatarpur. Tikamgarh is drained by the upper reaches of the Dhasan and its tributaries like Jamni while Chhatarpur is drained by the Ken.

The three Divisions thus make the sub-region of Bundelkhand, the reasons for whose historic, physical and geographical homogeneity may now be clear. Bundelkhand constitutes the wild eastern flank of the great Malwa passageway from the northern plains to the Deccan and ultimately to the seaboard at Cambay. But

the archaeological remains in Jhansi, Tikamgarh and Chhatarpur, particularly the impressive complexes at Khajuraho (Chhatarpur), Sanchi and Vidisha (Vidisha) bear evidence that this flank was once carefully nurtured. It is well within the bounds of feasibility that the great Asoka Pillar at Sanchi was shipped up the Jamuna and Betwa from Chunar by boats and rafts. In the north except in the larger alluvial plains, villages nestle at the foot of scarps, at gaps, grouped around forts on little isolated hills. On the more homogeneous lavas, human settlements and topographical rises alternate in an intricate pattern. *Kans* grass is widespread. There is much rough grazing, not only by local cattle but by animal migration from Rajasthan. Villages are small, stoutly built, often of stone. The outer walls are blind and doorways massive and low for fortification.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.2 BUNDELKHAND

Function of town	Class of town						
	Total	I	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	41	2	11	28	11	14	3
Agricultural	8	..	..	8	..	5	3
Artisan	8	..	3	5	1	4	..
Manufacturing	5	1	..	4	3	1	..
Trade and Commerce	3	..	1	2	..	2	..
Transport	1	..	..	1	..	1	..
Service	16	1	7	8	7	1	..

3.21 3 Central Hills and Plateaus 3.2 Bundelkhand 3.21 Chambal Ravines (North Western Madhya Pradesh).

This Division consists of four districts: Morena, Bhind, Gwalior and Datia. All

of them are badly scarred and gullied by erosion. Besides, this tract has been traditionally the area of flanking depredations on the great Delhi-Malwa highway: bandits had their hideouts in the ravines and perpetrated their robberies in that

harsh and inhospitable territory. Chambal irrigation is going to bring about much change. The chief crop in Morena and Bhind is gram, followed by wheat and millets. This is the Rajasthan pattern and Morena and Bhind may, in some ways, be regarded as an extension of it. Bhind grows oilseeds. Gwalior and Datia make a wheat tract, in which wheat is followed by gram and *jowar*. Gwalior alone grows some rice. Population density is lowest in Morena (174), low in Datia (255) and moderate in Gwalior (326) and Bhind (373). Bhind is high because it is at the edge of the Lavas in the southwest, the Jamuna badlands in the southeast of Agra and southwest of Etawah. The principal language is Hindi. The proportion of scheduled tribes is low but that of members of scheduled castes is around one-fifth of the total population.

The urban ratio is moderate in Morena and Bhind, moderately high in Datia and high in Gwalior. Natural increase is moderately high in all districts except Bhind. Immigration is moderately high in Morena and Bhind and high in Gwalior and Datia. The proportion of children 0-4 to women 15-44 is moderately high in

Analysis of Cities, Town Groups and Towns by predominant function and size classes
3.21 CHAMBAL RAVINES (NORTH WESTERN MADHYA PRADESH)

Function of town	Class of town						
	Total	I	III	IV-VI	IV	V	VI
Total	15	1	3	11	3	5	3
Agricultural	7	..	..	7	..	4	3
Artisan	2	..	1	1	1	..	..
Manufacturing	3	1	..	2	2	..	..
Trade and Commerce	2	..	1	1	..	1	..
Service	1	..	1	..	..	..	..
Class I cities with their function : Manufacturing—Gwalior							

three districts and high in Morena. The Division, therefore, presents a picture of fair population increase.

In the matter of development Morena, Bhind and Datia are placed in the second level mainly on account of their strength in II (agricultural infrastructure) and IV (potential of human resources). Morena and Datia have medium values in III, while Bhind has low value. In V, Morena, Bhind and Datia have medium values. In VI, Morena and Bhind have medium values and Datia low value.

Organised industry is highest in Gwalior which is placed in the top level of development. Gwalior has high values in II, IV and V and medium values in III and VI.

The principal industries are non-metallic mineral products in Morena and Gwalior; food industries in all districts; chemicals in Morena and Datia; textiles, machinery and printing and publishing in Gwalior.

This Division, therefore, presents a good range of development with Gwalior forming the nodal point.

3.22 3 Central Hills and Plateaus 3.2
Bundelkhand 3.22 Trans Jamuna
Alluvial Veneer.

This Division consists of the edges of the Vindhyan Lavas, the Jamuna badlands and the Trans Jamuna Alluvial Veneer. It comprises of 4 districts all in Uttar Pradesh: Jhansi, Jalaun, Hamirpur and Banda. All are drained by rivers flowing from the Vindhya Hills and Plateaus into the Jamuna. Agriculturally, the division is of a piece with the rest of Bundelkhand inasmuch as the chief crops are gram and *jowar* and the other inferior millets *bajra* and *tur*. But the Uttar Pradesh strain is quite strong, too, wheat being the second most important crop, running close to gram. Rice is grown only in Banda which is more alluvial than scarpland. Jalaun alone grows appreciable quantities of oilseeds.

Population density is lowest in Jhansi (274), low in Hamirpur (286) and high in Banda (308) and Jalaun (374). The proportion of members of scheduled castes is about a quarter of the total population. Hindi is the principal language.

The urban ratio is high in Jhansi, moderately high in Jalaun and moderate in Hamirpur and Banda. The rate of natural increase is moderate in all districts except in Jhansi where it is moderately high. Immigration is moderately high in Jhansi and Jalaun, moderate in Hamirpur but low in Banda. The proportion of children 0-4 to women 15-44 is moderately high in all districts suggesting prospects of acceleration of population increase.

Hamirpur and Banda are placed in the lowest level of development with identical ranks in II and IV (high), VI (medium) and V (low). In III, Hamirpur has a low and Banda a medium rank. Jalaun is

placed in the second level with low values in III and VI but compensating high values in II and IV and medium for V. Jhansi is placed in the third level with high values in II and IV but medium values in III, V and VI. Jhansi and Banda generate their own electricity but Jalaun and Hamirpur are connected to grid.

In organised industry, transport and machinery are important in Jhansi and Hamirpur; paper and paper products in Jalaun (the paper mill is the only industry); textiles in Hamirpur; non-metallic minerals in Banda and Jhansi; food industries in Banda.

Thus, this Division, too, has a wide range of development and is breaking through the limitations imposed by nature.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.22 TRANS JAMUNA ALLUVIAL VENEER

Function of town	Class of town					
	Total	I	III	IV-V	IV	V
1	2	3	4	5	6	7
Total	20	1	6	13	7	6
Agricultural	1	..	..	1	..	1
Artisan	5	..	2	3	..	3
Trade and Commerce	1	..	..	1	..	1
Transport	1	..	..	1	..	1
Service	12	1	4	7	7	..

Class I cities with their function:
Service—Jhansi.

3.23 3 Central Hills and Plateaus 3.2 Bundelkhand 3.23 North Central Madhya Pradesh.

This Division consists of two districts—Tikamgarh and Chhatarpur—both in Madhya Pradesh. They have been separated from the Trans Jamuna Alluvial Veneer Division for two not very convincing reasons: (a) they are more embedded in the Jamuna badlands and have less of the alluvial veneer and (b) politically they belong to Madhya Pradesh. This however gives a slightly different crop pattern: *Jowar*, wheat, rice and barley in Tikamgarh; wheat, *jowar*, gram and barley in Chhatarpur. Sesamum is grown in both. Population density is low: 176 in Chhatarpur and 232 in Tikamgarh. Although, the proportion of scheduled tribes is low, that of scheduled castes is fair—about a fifth of the total population. Hindi is almost the only language.

The urban ratio is low in Tikamgarh but moderate in Chhatarpur. Natural increase is moderately high in both but immigration is moderate. The proportion of children 0-4 to women 15-44 however is high suggesting acceleration of population increase in the current decade.

Both districts are placed in the second level of development mainly by virtue of their high ranks in blocks II and IV and medium rank in III. Ranking is low and medium in V and VI for Tikamgarh and Chhatarpur respectively. Both districts generate their own electricity. There is no registered factory in Tikamgarh and the sole registered factory in Chhatarpur manufactures beverages.

Analysis of Town Groups and Towns by predominant function and size classes

3.23 NORTH CENTRAL MADHYA PRADESH

Function of town	Class of town				
	Total	III	IV—V	IV	V
1	2	3	4	5	6
Total	6	2	4	1	3
Artisan	1	..	1	..	1
Manufacturing	2	..	2	1	1
Service	3	2	1	..	1

The Bundelkhand subregion is thus largely homogeneous with the majority of districts in the second level of development. Hamirpur and Banda alone are at the lowest level, while Jhansi is in the third and Gwalior in the top.

3.3 Malwa.

The third subregion of Malwa lies east of the Eastern Aravallis from which it is marked off by a great boundary fault, advantage of which has been taken to site the Gandhi Sagar of the Chambal Dam. I have brought within the name of Malwa the historic passageway between the Jamuna-Chambal Doab in the Northeast and the Gulf of Cambay in the southwest and made it consist of two Divisions (1) the North Malwa Uplands and (2) the Malwa Plateau proper, consisting of the outlying northern slopes of the Deccan Lava proper of the Vindhya Hills ranges.

The first Division (3.31) consists of Guna and Shivpuri, the long slope of Deccan Lavas in the Chambal basin of which the river Sind (passing through Guna and Shivpuri) forms the eastern flank. Shivpuri itself is traversed by the Parbati which has been dammed up in two places, Kaketa Dam and Harsi Dam. The Parbati later joins Sind. Guna is drained by Parbati in the west and Sind in the east. The second Division, Malwa Plateau (3.32) consists of 9 districts

(Rajgarh, Mandsaur, Shajapur, Ratlam, Ujjain, Dewas, Indore, Jhabua and Dhar) which are in the Vindhyan Hills proper.

Jhabua and Dhar are drained in a north-westerly direction by the tributaries of the Mahi which bends backward double to fall into the Gulf of Cambay. Mandsaur is drained by the Chambal. Ratlam, Indore, Dewas, Ujjain and Shajapur are drained by streams like Malini, Chameli, Sipra, Chhoti Kali Sindh, tributaries of the Chambal, which flow north to the Gandhi Sagar. Rajgarh is drained by small streams like Uri and Wagh which flow into Narmada and also by the

tributaries of the Kali Sindh which takes its tribute to Chambal. Dhar is drained in the South by Man and Karam which fall into the Narmada. Indore is drained in the north by the Gambhir a tributary of Chambal and in the south by Chorara which falls into Narmada.

Thus, for reasons of slope and drainage as well as for other obvious physical, historic and cultural characteristics, I have included the entire tract of 11 districts in Malwa, although I have placed them in two Divisions, the northern consisting of the tract of Lava slopes and the rest the main mass of Vindhyan Hills.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.3 MALWA

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	65	2	1	8	54	16	31	7
Agricultural	19	..	..	..	19	2	12	5
Artisan	8	..	..	..	8	1	7	..
Manufacturing	8	2	..	3	3	2	1	..
Trade and Commerce	1	..	..	..	1	1	..	..
Transport	2	..	1	..	1	..	1	..
Service	27	..	..	5	22	10	10	2

3.31 3 Central Hills and Plateaus 3.3 Malwa 3.31 North Malwa Uplands.

This Division comprising two districts—Shivpuri and Guna—both of which have almost identical population densities (142 and 141) forms the northern edge of the Malwa subregion, clinging to the northwest of Bundelkhand. But they are distinguished and for this reason separated from Bundelkhand by their distinctive crop

pattern (wheat being predominant followed by *jowar* and gram), their low population density, appreciable proportion of scheduled tribes and other demographic characteristics. The principal language is Hindi. Only Shivpuri grows some sesamum.

Urban ratio, natural increase and immigration are moderate in Shivpuri and moderately high in Guna. The proportion

of children 0-4 to women 15-44 is moderately high in Shivpuri and high in Guna.

Both districts are placed in the second level of development with identical rankings in all blocks: high in II and IV, medium in III, V and VI. In the organised sector food industries are important in both. Chemicals are important in Shivpuri, while transport is important in both. Shivpuri produces machinery while Guna has cotton ginning and pressing. Both districts generate their own electricity.

This Division is thus homogeneous.

Analysis of Town Groups and Towns by predominant function and size classes

3.31 NORTH MALWA UPLANDS

Function of town	Class of town				
	Total	III	IV-V	IV	V
1	2	3	4	5	6
Total	9	2	7	1	6
Agricultural	2	..	2	..	6
Artisan	3	..	3	..	2
Manufacturing	2	1	1	..	3
Trade and Commerce	1	..	1	1	..1
Service	1	1	..	..	..

3.32 3 Central Hills and Plateaus 3.3 Malwa 3.32 Malwa Plateau.

Nine districts have been included in this Division: Rajgarh, Mandsaur, Shajapur, Ratlam, Ujjain, Dewas, Indore, Jhabua and Dhar. In levels of development they fall into four groups: Lowest, Jhabua; Second level, Rajgarh, Shajapur and Dhar; Third level, Mandsaur and Dewas; Top level, Ratlam, Ujjain and Indore.

The richness of agriculture in Malwa is illustrated by the range of crops and the

ubiquity of cotton reinforced in certain places by groundnut. Except for the south-western corner of Jhabua, Indore and Dhar (Jhabua grows maize, being an extension of the Central Aravalli Division, while Indore and Dhar grow wheat), jowar is the main crop in this Division, followed closely behind by wheat and a long way behind by gram. Maize is also grown in patches. The only area which grows any rice is Jhabua in the damp valleys.

The Division is favoured with a generally low population density (minimum 172 in Dewas and maximum 282 in Ujjain) except in Indore alone where it is moderately high (550). Jhabua has a very high proportion of members of scheduled tribes (Bhili is the principal language), and Dhar, too, claims a high ratio (51). Scheduled caste ratios are high in Ujjain (23.5), Shajapur (22.7), Rajgarh (18.9) and Dewas (18). Except for Jhabua (Bhili) and Ujjain (Rajasthani), the principal language is Hindi, although nowhere except in Rajgarh and Shajapur does Hindi enjoy a ratio exceeding 67 per cent.

The urban ratio is high in Mandsaur, Ratlam, Ujjain and Indore, moderately high only in Dewas and moderate in the rest. Natural increase and immigration appear to be complementary in several districts but evenly high only in Dewas, Ratlam and Indore. Immigration is low in Jhabua and moderate in Dhar and Rajgarh. The proportion of children 0-4 to women 15-44 is high in Ratlam, Dewas, Jhabua and Indore suggesting acceleration of population increase, but only moderately high in the remaining districts.

In ranking, Jhabua is placed in the lowest level with high value only in IV, medium in II, III and VI and low in V. Rajgarh, Shajapur and Dhar have very close scores in the second level having high values in IV, medium in III, V and VI. In II, Rajgarh and Dhar have medium values

and Shajapur high. Mandsaur and Dewas are placed in the third level with identical total scores and values in all blocks except that in II Mandsaur has a high value and Dewas a medium one. Ratlam, Ujjain and Indore are placed in the top level: of them again, Ratlam and Ujjain have identical ranks in all blocks but Indore is ahead of them, having high values in all blocks except medium for III.

All districts except Rajgarh and Jhabua are connected by grid. In addition Indore generates its own electricity as do Rajgarh

and Jhabua. Cotton ginning and pressing is either the principal or an important organised industry in all districts. Textiles is important in Mandsaur, Ratlam, Ujjain, Dewas, Indore; food industries in Mandsaur, Ratlam, Ujjain, Dewas and Indore; machinery in Mandsaur, Dewas and Indore; metal products in Indore; paper and paper products in Ratlam; electricity generation in Mandsaur, Shajapur, Jhabua and Dhar; tobacco in Ratlam and Dewas.

This Division is thus fairly heterogeneous in levels of development.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.32 MALWA PLATEAU

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	56	2	1	6	47	15	25	7
Agricultural	17	..	..	..	17	2	10	5
Artisan	5	..	..	..	5	1	4	..
Manufacturing	6	2	..	2	2	2	..	..
Transport	2	..	1	..	1	..	1	..
Service	26	..	..	4	22	10	10	2

Class I cities with their function :
Manufacturing—Ujjain, Indore.

3.4 Vindhya Ranges and Plateaus.

I have separated Vindhya Ranges and Plateaus from Malwa which also are part of the Vindhya system. The districts in this fourth subregion fall into three Divisions.

3.41 Vindhya.

The first (3.41), formed of 5 districts, forms the heart of Madhya Pradesh: Vidisha, Raisen, Sehore, Sagar and Damoh. Damoh is bounded in the southeast by the Bhanrer Range. Vidisha, Raisen, Sehore

(Bhopal) and Sagar are drained mainly by the Betwa and the Dhasan and their small tributaries before they join into the Jamuna in the northeast. Sehore is drained by Parbati in the west and Betwa in the east. Vidisha is drained by Betwa. Sagar is drained by the Dhasan in the west and the Bewas in the east. Damoh is drained by the Ken which falls into the Jamuna in Banda district (Uttar Pradesh). These districts form the main easterly mass of the Vindhya Hills and Plateaus.

3.42 Rewa Plateau: Vindhyan Scarp Lands.

The second Division is composed of the Vindhyan Scarp Lands and Vindhya Rocks to form the Rewa Plateau. It consists of the districts of Panna, Satna and Rewa. This Division, therefore, logically lies to the northeast of the first and contains the northeastern extremity of the Bhanrer Range, the Panna Hills and the Kaimur Hills. Panna is drained by the Ken, Satna by the Tons or Tamasa of which Satna is a tributary and Rewa by the Belan which joins the Tons. There is some tank irrigation, but valleys are often dammed up and sowing is done in the moist soil after the rains. Much of the alluvium is a fertile black loamy soil well adapted to wheat.

3.43 Kaimur (Vindhyachal).

The third Division consisting of Mirzapur (Uttar Pradesh) is more a political Division and should properly belong to the second or Rewa Plateau or Vindhyan Scarp Lands. It is commonly known as Vindhyachal. But it has also its separate drainage identity, because northern Mirzapur drains northwestwards through the Tons into the Ganga, while Southern Mirzapur is drained transversely from west to east by the Son and its tributaries, mainly the Rihand and Kanhar which flow from the southnorthward to join the Son. There is another river Karmanasa at the eastern corner of Mirzapur which travels through Chunar into the Ganga near Buxar (Shahabad).

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.4 VINDHYA RANGES AND PLATEAUS

Function of town	Total	Class of town				
		I	III	IV—V	IV	V
1	2	3	4	5	6	7
Total	33	3	6	24	9	15
Agricultural	1	..	..	1	..	1
Artisan	15	1	1	13	6	7
Manufacturing	5	2	2	1	1	..
Trade and Commerce	2	..	1	1	..	1
Transport	1	..	1	..	..	..
Service	9	..	1	8	2	6

3.41 3 Central Hills and Plateaus 3.4 Vindhya Ranges and Plateaus 3.41 Vindhya.

This Division consists of 5 districts—Vidisha, Raisen, Sehore, Sagar and Damoh—and forms the heartland of Madhya Pradesh.

The main crop is wheat followed a long way behind by *jowar* and gram or gram and *jowar*. Only Damoh grows appreciable quantities of rice. Damoh alone grows sesamum.

Population density is generally low, being lowest in Raisen (126) and highest

3.42 3 Central Hills and Plateaus 3.4 Vindhya Ranges and Plateaus 3.42 Rewa Plateau: Vindhyan Scarp Lands.

in Sehore (209). The proportion of tribal population is as much as 14 per cent in Raisen. That of scheduled castes is never below 15 per cent being as high as 20.9 in Vidisha. Hindi is the principal language of the Division.

The urban ratio is low in Raisen, moderately high in Vidisha and Damoh, and high in Sehore and Sagar. Natural increase and immigration go hand in hand and are moderately high in Vidisha, Sagar and Damoh, and high in Raisen and Sehore. The proportion of children 0-4 to women 15-44 is moderately high in Vidisha and Sehore and high in Raisen, Sagar and Damoh.

Damoh is placed in the second level of development with high values in II and IV, low in III and V and medium in VI; Vidisha, Raisen and Sagar form a fairly homogeneous block in the third level with high values in II and IV, medium values in III, V and VI, except for low for Sagar in III. Sehore is placed in the top level of development with high values in II, IV and V and medium in III and VI.

All districts are connected by grid except Sagar which generates its own electricity. Use of industrial electricity and the proportion of workers in organised industry are highest in Sehore. Food industries are important in all districts; textiles and electrical machinery are important in Sehore; tobacco in Sagar and Damoh; transport equipment in Vidisha; printing and publishing in Sagar.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.41 VINDHYAS

Function of town	Total	Class of town				
		I	III	IV—V	IV	V
1	2	3	4	5	6	7
Total	21	2	4	15	5	10
Agricultural	1	..	1	8	4	1
Artisan	10	1	..	..	..	..
Manufacturing	3	1	2	..	..	..
Transport	1	..	1	6	1	5
Service	6	..	..	..	..	..

Class I cities with their function :
Artisan—Sagar.
Manufacturing—Bhopal.

Although historically Panna was reckoned in Bundelkhand and Rewa in Baghelkhand, yet the line of the Ken river in the west, the northern ridges of the Bhanrer Hills in the south, the Panna Hills in the north and the Kaimur Hills in the southeast gives this tract of Rewa Plateau and Vindhyan Scarp Lands a homogeneity which it does not share either with the rest of what has been circumscribed as Bundelkhand in the west or of what has been circumscribed as Baghelkhand in the east. The heart of this Division is drained by the Tons and its tributaries. The Tons flows northeast and falls into the Ganga about 20 miles southeast of Allahabad. It is the valley of the Tons that gives rice its pre-eminence in Panna and Rewa and a second place in Satna and wheat an honoured place in the whole tract with a first place in Satna. Gram is common to all districts; *jowar* is raised in Panna and Satna. Oilseeds are grown in all three districts. The crop pattern thus lends further distinction to this tract which already stands out from the central Vindhya Plateau by its physical features.

The density of population, on the other hand, is by no means homogeneous, Panna having a density as low as 119 and Rewa as high as 318 with Satna in the middle with 242. The proportion of scheduled tribes is slightly higher than that of scheduled castes, the former ranging between 13.3 and 14.6 per cent except in Panna where the proportion of scheduled castes (17.44) is higher than that of scheduled tribes. Hindi is the predominant language.

The urban ratio is low in Panna and Rewa and only moderate in Satna, but the rates of natural increase are high in Panna

which forms the basin of the Wainganga and contains the Mahakal Plateau as it escalates in the southeast. Betul is drained by the Tapti, Chhindwara is drained by the Pench, Seoni by the Wainganga.

3.54 Eastern Satpuras (Maikala Range).

This Division is further east of the previous one (3.53) and consists of Balaghat and Mandla. Balaghat and Mandla constitute the stows of the Upper Narmada Valley of the dissected plateau of the Maikala on its northeastern face. Mandla collects the Narmada tributaries while Balaghat feeds the Wainganga by such tributaries as Chandan, Bagh, etc.

3.55 Baghelkhand Plateau.

Traditionally called Baghelkhand, this Division, further east of the previous one (3.54) consists of the Districts of Sidhi, Shahdol and Surguja. The peak of Amar-kantak is at the southernmost point of Shahdol. Shahdol is full of Maikal scarp lands and is drained by the upper reaches of the Son near its source and its tributaries. Sidhi is lined in the north by the Kaimur Hills with the line of the Son closely hugging their base and is drained by the river Gopad and its branches. The Rihand falls into the Son. Sidhi is the valley of the upper Son. Although Surguja is at the meeting point of Baghelkhand and Chhattisgarh and may be claimed with almost equal force and cogency by either on cultural, social and economic grounds, I have placed Surguja under Baghelkhand because of the slope of drainage and the arrangement of the Hill Ranges. For, this is the third district in the company of Sidhi and Shahdol which drains through Rehar and Moran tributaries of the Rihand, northward into the Son. Surguja marks the very irregular Son-Mahanadi watershed, which starts from Deogarh (3,370') north of Sonhat and travels in a southern arc around Mainpat, Ranijala Peak, Upar Ghat, and then up to Mailan Hill. Surguja is formed

mainly of Gondwana rocks with the last outposts of Archaean and Deccan Lavas. It contains very important coalfields.

3.56 Chhattisgarh.

Apart from being a culturally homogeneous area, the Chhattisgarh, consisting of the districts of Durg, Raipur, Bilaspur and Raigarh has a physiographic compactness and unity. It is separated from the Wainganga Valley by a narrow divide formed partly by the Maikala Range of the Satpuras and partly by the isolated hills of Bhandara and Chanda. 'Within a short distance three contrasting demographic regions are seen between Gondia and Dongargarh. First the linear settlements of the Wainganga Valley, then scattered habitations and finally a compact mass in the Chhattisgarh basin' (Chatterjee). Bordered by the Maikala Range in the northwest and north, the Chhota Nagpur and Hazaribagh Plateau and Ranges in the east, and the Wainganga-Mahanadi watershed in the East and Southeast, Chhattisgarh contains two contiguous basins of the Mahanadi: (1) the Seonath-Mahanadi Doab in the districts of Durg and Raipur, and (2) the Hasdo-Mahanadi Doab or the Raigarh Basin in Bilaspur and Raigarh. The Seonath, travels in a north-easterly direction across Durg. At Sanjari Balod Taluk in Durg, a tributary of Seonath, Tandula, has a large reservoir at Balod.

The Mahanadi forms in Kanker of Bastar, travels across Raipur in a north-easterly direction to Bilaspur. The Pairi takes its rise in the southeast of Raipur and travels north to join the Mahanadi. The Seonath forms the boundary between Bilaspur and Raipur districts and meets the Mahanadi in Baloda-Bazar tehsil of Raipur to be henceforth called the Mahanadi. The Arna travels south from Bilaspur and joins the Seonath in Mungeli tehsil (Bilaspur). The other river of Bilaspur, Hasda, travels due south and falls into Mahanadi at Raipur. Raigarh is drained by the Mand,

Kurket and Kelo rivers which travel into the Mahanadi.

'Villages are definitely at waterpoints, closepacked, mud-built with mud or tiled roof; they have a pueblo aspect enhanced by mud walls joining up farmstead buildings and separating the field.' (Spate).

The heart of the plain is occupied by a great basin of Cuddapah rocks. The rivers are mature, occasionally incised in gullied banks. The basin is girdled by more or less broken forest country. Before the Marathas it used to be a Gond Kingdom.

3.57 Dandakaranya.

This comprising a single district Bastar has been made a Division because of its

cultural, social and physiographic uniqueness as well as size. The chief river is Indravati which travels across the middle of Bastar from east to west and receives tributaries from east to west like Bhaskel. Narangi, Baordigh and Gudra, each of which runs north to south dissecting Bastar into longitudinal strips. The district headquarters, Jagdalpur, is on the Indravati which travels westward to fall into the Godavari near Mahadeopur at the corner of Karimnagar district of Andhra Pradesh. The Sabari, the southernmost river of Bastar which flows along the boundary of Madhya Pradesh, Orissa, joins the Sileru at Konta the trijunction of Madhya Pradesh, Andhra Pradesh and Orissa before it falls into the Godavari in Andhra Pradesh.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.5 CENTRAL MADHYA PRADESH PLATEAU

Function of town	Class of town							
	Total	I	II	III	IV-VI]	IV	V	VI
1	2	3	4	5	6	7	8	9
Total . . .	97	3	4	11	79	28	45	6
Agricultural . . .	16	..	..	..	16	3	12	1
Artisan	16	..	..	..	16	5	10	1
Manufacturing . .	26	2	2	5	17	7	9	1
Trade and Commerce	6	1	..	1	4	1	3	..
Transport	6	..	1	1	4	3	1	..
Service	27	..	1	4	22	9	10	3

3.51 3 Central Hills and Plateaus 3.5 Central Madhya Pradesh Plateau 3.51 Narmada Valley.

The three districts in this Division are Jabalpur, Narsimhapur and Hoshangabad. Wheat is the main food crop in Jabalpur and Hoshangabad but the second crop in Narsimhapur. Rice is important in Jabalpur but minor in Narsimhapur and unimportant in Hoshangabad. Gram is common to all districts and more important in Narsimhapur. Hoshangabad alone grows cotton

and oilseeds. Population density is lowest in Hoshangabad (160), low in Narsimhapur (208) and high in Jabalpur (326). The proportion of scheduled tribes is around 12 per cent in Jabalpur and Narsimhapur but 7.5 in Hoshangabad. The proportion of scheduled castes is around 10 per cent in the Division. The Principal language is Hindi.

The urban ratio is moderately high in Narsimhapur and Hoshangabad but high

in Jabalpur. The rate of natural increase is however moderately high in Jabalpur and Narsimhapur and moderate in Hoshangabad. The rate of immigration is high in Jabalpur, moderate in Narsimhapur and moderately high in Hoshangabad. The proportion of children 0-4 to women 15-44 however is high in Narsimhapur and Hoshangabad and moderately high in Jabalpur, suggesting possible acceleration of population increase in the current decade.

In levels of development Narsimhapur is placed in the second grade, Hoshangabad in the third and Jabalpur in the top or fourth. Narsimhapur has high values in II and IV, low in III and medium in V and VI. Hoshangabad has high values in II and IV and medium in III, V and VI. Jabalpur has high values in

II, IV and V and medium values in III and VI.

Hoshangabad is connected to grid. Narsimhapur is fed by Kareli Diesel Station. Jabalpur generates its own electricity.

The most important industries are non-metallic mineral products (cement) and tobacco in Jabalpur and also in Narsimhapur and Hoshangabad. Jabalpur is important for electrical machinery and machinery in general and wood. Cotton ginning and pressing is confined to Hoshangabad. Food processing obtains in Narsimhapur and Hoshangabad.

The Division therefore carries evidence of considerable activity and ferment.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.51 NARMADA VALLEY

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	19	1	1	2	15	6	9
Agricultural	1	..	..	..	1	..	1
Artisan	3	..	..	..	3	1	2
Manufacturing	4	1	1	..	2	2	..
Trade and Commerce	3	..	..	1	2	1	1
Transport	1	..	..	1	..	..	..
Service	7	..	..	..	7	2	5

Class I cities with their function :
Manufacturing—Jabalpur.

3.52 3 Central Hills and Plateaus 3.5 Central Madhya Pradesh Plateau 3.52 Western Satpuras (Satpura-Gawilgarh Hills).

This Division consists of the twin districts of West (formerly Khargone) and East (formerly Khandwa) Nimar and is bounded by the Narmada in the north and the concave curve of the Satpuras in the south. This is a preeminently *jowar* tract with small quantities of wheat and rice only in the river valleys of East Nimar. The main cash crops are cotton and groundnut. Population density is low in East Nimar (166) but moderate in West Nimar (264). In the latter the proportion of scheduled tribes is as high as 40 per cent, but in East Nimar it is only about 8 per cent. The proportion of scheduled castes is low (9 to 10.7 per cent). In West Nimar the principal language is Rajasthani, in East Nimar it is Hindi.

This diversity in cultural characteristics is however subdued in the demographic

features which present a certain uniformity. The urban ratio is moderately high in West and high in East Nimar. The rate of natural increase is high in both. Immigration is modest in West Nimar but high in East Nimar. The proportion of children 0-4 to women 15-44 is high in both.

In levels of development however the districts present great differences. West Nimar is in the second level with high values only for IV and medium values in II, III, V and VI, but East Nimar is in the top or fourth level with high values for IV and VI and medium values in II, III and V.

West Nimar generates its own electricity while East Nimar is connected to grid. Cotton ginning and pressing is important in both districts as are tobacco, food and textiles. Beverages are important in West Nimar and paper and paper products in East Nimar.

Analysis of Town Groups and Towns by predominant function and size classes

3.52 WESTERN SATPURAS (SATPURA-GAWILGARH HILLS)

Function of town	Class of town						
	Total	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	16	2	1	13	5	6	2
Agricultural	5	..	..	5	1	3	1
Artisan	2	..	..	2	1	1	..
Manufacturing	3	1	1	1	..	1	..
Service	6	1	..	5	3	1	1

3.53 3 Central Hills and Plateaus 3.5 Central Madhya Pradesh Plateau 3.53 Central Satpuras (Gawilgarh-Mahadeo Hills).

This Division contains three districts: Betul, Chhindwara and Seoni. Its physical

configuration has already been described to bring out why it deserves to be considered as a separate tract. In crop production, too, it has a certain homogeneity, the principal crop being *jowar* (except in Seoni where it is rice), followed by wheat and

gram. There are no important cash crops. Population density is generally low, ranging between 144 in Betul, 156 in Seoni and 172 in Chhindwara. The proportion of scheduled tribes is about a third or more of the total population. The proportion of scheduled castes too is around 9 per cent in Betul and Chhindwara and 4 in Seoni. Hindi is the principal language although its ratio is generally low.

The urban ratio is low in Seoni, moderate in Betul and moderately high in Chhindwara. The rates of natural increase and immigration are also moderate with a slight tendency toward moderately high for natural increase in Betul. But the proportion of children 0-4 to women 15-44 is high in Betul and Chhindwara and moderately high in Seoni.

The three districts show two levels of development. Seoni is the least developed and is in the first level. It has high value in II, medium in III, IV and VI and low value in V. Betul and Chhindwara are in the second level with high value in IV, medium values in III and VI and low in V, medium and high in II for Betul and Chhindwara respectively.

All districts are connected by grid. Food is the only industry in Betul. It is important in Chhindwara and Seoni. Wood industry and transport are important in Chhindwara and Seoni. Cotton ginning and pressing and machinery are found in Chhindwara and beverages in Seoni. The extent of organised industry and of electricity use are low.

Analysis of Town Groups and Towns by predominant function and size classes

3.53 CENTRAL SATPURAS (GAWILGARH-MAHADLO HILLS)

Function of town	Class of town					
	Total	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7
Total	13	2	11	3	7	1
Agricultural	4	..	4	1	3	..
Artisan	1	..	1	..	1	..
Manufacturing	3	..	3	..	2	1
Trade and Commerce	1	..	1	..	1	..
Transport	1	..	1	1	..	..
Service	3	2	1	1	..	..

3.54 3 Central Hills and Plateaus 3.5
Central Madhya Pradesh Plateau 3.54
Eastern Satpuras (Maikala Range).

This Division consists of Mandla and Balaghat. Besides being plateaus and basins of the Narmada and Wainganga in the northeastern stows and the concave arc of the Maikala Range they have similarities in crop production. Rice is the most important crop in both, but Mandla also grows small quantities of wheat, gram, maize and oilseeds. Population density is low in Mandla (134) but medium in Balaghat (230). Mandla has a large proportion of tribal population (62 per cent) while Balaghat has only 11 per cent. The population of scheduled castes is low in both. Hindi is the principal language.

The urban ratio is low. But while natural increase is low in Balaghat, it is moderately high in Mandla. Immigration is moderately high in Balaghat but moderate in Mandla. The proportion of children

0-4 to women 15-44 is low in Balaghat but high in Mandla.

The two districts show two levels of development. Both have identical rankings in III and VI (medium). But II is high in Balaghat and medium in Mandla, while IV is high in Mandla and medium in Balaghat and V is low in Mandla and medium in Balaghat.

Mandla generates its own electricity and has no organised industry. Balaghat is connected to grid. Food industry is the most important in Balaghat followed by tobacco and wood industries.

Analysis of Town Groups and Towns by predominant function and size classes

3.54 EASTERN SATPURAS (MAIKALA RANGE)

Function of town	Class of town			
	Total	IV-V	IV	V
1	2	3	4	5
Total	6	6	4	2
Artisan	2	2	1	1
Manufacturing	1	1	..	1
Transport	1	1	1	..
Service	2	2	2	..

3.55 3 Central Hills and Plateaus 3.5
Central Madhya Pradesh Plateau 3.55
Baghelkhand Plateau.

This Division consists of three districts: Shahdol, Sidhi and Surguja. Rice is the most important crop but the other crops have low acreages. Sidhi alone grows oilseeds. Population density is low in all three districts: 121 in Surguja, 147 in Sidhi and 155 in Shahdol. The scheduled tribes constitute more than half the population in Shahdol and Surguja and about a third in Sidhi. The proportion of members of

scheduled castes is low in Surguja and Shahdol (less than 6 per cent each) and about 10 per cent in Sidhi. The principal language is Hindi.

The urban ratio is low in Sidhi and Surguja and moderate in Shahdol. The rate of natural increase is moderately high in Surguja and Sidhi and high in Shahdol. Immigration is low in Sidhi but moderately high in Shahdol and Surguja. The proportion of children 0-4 to women 15-44 is moderately high in all districts.

Sidhi and Surguja are in the first level of development with identical rankings in all blocks: high in IV, medium in II and III, low in V and VI. Shahdol is placed in the second level although the rankings are identical except that VI is medium in Shahdol.

All three districts generate their own electricity. Sidhi has no registered factory. In Surguja, apart from the coal mines which are the really important industry, tobacco and chemicals claim major place and food last. In Shahdol tobacco, chemicals and food are the three important industries.

Analysis of Town Groups and Towns by predominant function and size classes

3.55 BAGHELKHAND PLATEAU

Function of town	Class of town					
	Total	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7
Total	12	1	11	3	6	2
Artisan	1	..	1	..	1	..
Manufacturing	5	..	5	2	3	..
Transport	1	..	1	..	1	..
Service	5	1	4	1	1	2

3.56 3 Central Hills and Plateaus 3.5 Central Madhya Pradesh Plateau 3.56 Chhattisgarh.

This great basin consisting of 4 districts—Durg, Raipur, Bilaspur and Raigarh—has been described. Almost the only crop is rice, but wheat is grown in small quantities in Raipur. Durg and Raipur grow linseed. Population density is moderate, ranging from 208 in Raigarh, 244 in Raipur, 251 in Durg to 260 in Bilaspur. The proportion of scheduled tribes is comparatively low (11 to 18 per cent) in Durg. Raipur and Bilaspur but is as high as 46 per cent in Raigarh. The proportion of scheduled castes ranges from 11 to 18. Hindi is the principal language.

Raigarh and Bilaspur are placed in the lowest level of development, both have

identical total scores and high values in IV, medium ones in II, III and VI, but Raigarh has medium and Bilaspur low in V. Raipur is placed in second level while Durg in the third level with identical high values in II and IV and medium values in V and VI. In III, Durg has high value while Raipur has medium.

Durg and Bilaspur are connected to grid. Raipur generates its own electricity and is also connected to grid. Raigarh generates its own electricity. Durg has the Bhilai Steel Plant and manufactures textiles, machinery and tobacco. Food, tobacco and chemicals are important in Raipur, Bilaspur and Raigarh; wood industries in Raipur and Raigarh; machinery in Raipur and Bilaspur; generation of electricity in Durg and Bilaspur.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.56 CHHATTISGARH

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	
Total	29	2	1	4	22	7	18	1
Agricultural	6	..	..	..	6	1	5	..
Artisan	7	..	..	..	7	2	4	1
Manufacturing	10	1	..	4	5	3	2	..
Trade and Commerce	2	1	..	..	1	..	1	..
Transport	2	..	1	..	1	1	..	..
Service	2	..	..	..	2	..	..	..

Class I cities with their function:
Manufacturing—Durg.
Trade and Commerce—Raipur.

3.57 3 Central Hills and Plateaus 3.5 Central Madhya Pradesh Plateau 3.57 Dandakaranya.

The principal crop in Bastar is rice. There is no cash crop worth the mention. Population density is low being only 77 per sq. mile. The proportion of scheduled tribes is very high (72 per cent), that of scheduled castes is low (5.5 per cent). Gond is the principal language but does not cover more than 41 per cent. The urban ratio is low but the rate of natural increase high. Immigration is low but the proportion of children 0-4 to women 15-44 is high, suggestive of acceleration in population increase in the current decade.

Bastar is placed in the lowest level of development with high value only in IV, medium in II and III, and low in V and VI. The district generates its own electricity. Tobacco is the important industry followed by chemicals, food and wood industries.

Analysis of Town Groups and Towns by predominant function and size classes

3.57 DANDAKARANYA

Function of town	Class of town		
	Total	III	V
1	2	3	4
Total	2	1	1
Service	2	1	1

3.6 Orissa Hills and Plateaus.

The Subregion follows the easterly course of the Central Hills and Plateaus beyond Eastern Madhya Pradesh and consists of two Divisions in Orissa: (1) the North Western Hills of Orissa east of Bastar and Raipur and (2) the North Eastern Hills which are a continuation of the Chhattisgarh Plateau and Seonath-Mahanadi basin.

The North Western Orissa Hills consist of the districts of Koraput, Kalahandi,

Bolangir, Baudh-Khondmals and Ganjam. Koraput is a high and rugged plateau compared to Durg and Raipur and is frequently dotted with high stretches and peaks. The Bhaskel takes its rise in North Koraput but the Indravati flows east to west across the district. The Sabari winds through South Koraput as the Kolab. South of the impressive Machkund Dam, the Machkund becomes the Sileru, to mark the boundary between Sileru and East Godavari. In East Koraput the Nagavali and Vansadhara flow into the sea in Srikakulam.

The Koraput Hills escalate down somewhat in Kalahandi forming a watershed but the district is still full of high points and plateaus. The Indravati takes its rise in South Kalahandi. The middle of Kalahandi is traversed by the Tel river which is joined by Udanti from the northern section. Kalahandi forms a transverse watershed. The south slopes westward towards Koraput while the north slopes eastward towards the Mahanadi.

The Kalahandi Plateau escalates sharply in Bolangir. Bolangir still remains a moderately raised plateau with high points but none above 2,422 ft. (Siker in Titlagarh). The district is drained in a southeasterly direction by transverse streams like the Indra, Lani, Singada, Suktal into the Tel, which forms the boundary between Bolangir in the northwest and Kalahandi and Baudh-Khondmals in the southeast. The Tel joins the Mahanadi at Sonapur, from which point Mahanadi becomes the boundary of Bolangir and Baudh-Khondmals.

The slope of Baudh-Khondmals, continuation of the Bastar-Koraput mass further east, is towards the northwest and northeast. While escalating rapidly towards the Seonath-Mahanadi Doab in the north through Kalahandi and Bolangir, the Koraput high plateau descends more slowly in Baudh-Khondmals, but more steeply down

Ganjam to the sea. Baudh-Khondmals thus is full of high points throughout the district, dissected by the steep valleys of streams like the Raul, Burakuma, Kodogo which drain into the Tel in the northwest and by Bagh and Salki which drain into the Mahanadi in the northeast. The tract between Raikia and Udaygiri thana headquarters defines the watershed.

The high plateau of Koraput and Baudh-Khondmals maintains its height well into

the northwestern thanas of Ganjam but escalates very steeply into the Vansadhara valley in the southwest but much less steeply in the southeast down to the sea. The only important river is Rushikuliya which flows into the sea East of Chhatapur. Vansadhara which forms for a while the westernmost boundary of Ganjam delineates the southwesterly slope of that tract of low plateau. The highest points are Singaraju Parbat (4,973') and Mahendragiri (4,923'), the latter within ten miles of the sea.

Analysis of Town Groups and Towns by predominant function and size classes

3.6 ORISSA HILLS AND PLATEAUS

Function of town	Class of town						
	Total	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	45	2	5	38	15	20	3
Agricultural	4	..	..	4	1	3	..
Port	1	..	..	1	..	..	1
Artisan	3	..	..	3	..	3	..
Manufacturing	5	1	..	4	3	1	..
Transport	2	..	..	2	1	1	..
Service	30	1	5	24	10	12	2

3.61 3 Central Hills and Plateaus 3.6 Orissa Hills and Plateaus 3.61 North Western Hills.

This Division consists of the hilly and upland districts of Orissa to the West of the Mahanadi: Koraput, Kalahandi, Baudh-Khondmals, Bolangir and Ganjam. The principal crops are rice and the superior millets, *jowar* and *ragi*. Bolangir and Ganjam grow oilseeds. Population density is lowest in Baudh-Khondmals (120), low in Koraput (151) and Kalahandi (200) but comparatively high in Bolangir (313) and Ganjam (396). The proportion of sche-

duled tribes is highest in Koraput (61 per cent), considerable in Kalahandi (33) and Baudh-Khondmals (42) but low in Bolangir (21) and Ganjam (10). The proportion of members of scheduled castes is lowest in Koraput (12 per cent) and as high as 19 per cent in Kalahandi and Baudh-Khondmals. Oriya is the principal language.

The values of urban ratio, natural increase, immigration and proportion of children 0-4 to women 15-44 are low in all cases in all districts.

In levels of development all except Ganjam are placed in the lowest level. In

Koraput and Ganjam have medium values and Kalahandi, Baudh-Khondmals and Bolangir have high values; in III Kalahandi and Bolangir have low values and Koraput, Baudh-Khondmals and Ganjam have medium values; in IV all districts have medium values except Ganjam which has a high value; in V Koraput, Kalahandi and Bolangir have low values and Baudh-Khondmals and Ganjam have medium values; in VI all districts have medium values except Bolangir which has a low value.

Koraput and Ganjam are connected by

Analysis of Town Groups and Towns by predominant function and size classes

3.61 NORTH WESTERN HILLS

Function of town	Class of town						
	Total	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	26	1	2	23	5	15	3
Agricultural	2	..	..	2	..	2	..
Port	1	..	..	1	..	..	1
Artisan	3	..	..	3	..	3	..
Transport	1	..	..	1	..	1	..
Service	19	1	2	16	5	9	2

3.62 3 Central Hills and Plateaus 3.6 Orissa Hills and Plateaus 3.62 North Eastern Hills.

In the northeastern Hills of Orissa one sees the terminals of the southerly continuation of the Chhota Nagpur Plateau and the easterly continuation of the Bastar-Koraput mass in the process of which is created the great Mahanadi-Koel-Brahmani basin.

The districts in this Division are Sambalpur, Dhenkanal, Sundargarh, Keonjhar and Mayurbhanj.

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grid from the Machkund. Other districts generate their own electricity. Food is the most important industry in all districts except Baudh-Khondmals where leather and leather products is the only organised industry. Wood industries are important in Koraput, Kalahandi, Bolangir and Ganjam. Machinery is important only in Koraput. Transport equipment is important in Koraput, Bolangir and Ganjam. Textiles is important in Bolangir and printing and publishing in Bolangir and Ganjam; basic metals in Koraput, metal products in Kalahandi and chemicals in Ganjam.

Sambalpur is dissected in two by the longitudinal flow of the Mahanadi and the placing of the great Hirakud Dam in the north central region. The tributary streams to the west of the Mahanadi have a southeasterly slope: e.g. the Tira. Those to the east of the Mahanadi are divided between the slope to the west for the Mahanadi and the slope to the east for the Brahmani which flows longitudinally across the eastern thanas of Sambalpur. These features are continued into Dhenkanal, southwest of Sambalpur and east of Baudh-Khondmals, where the strike of the isolated

ranges (the Panchadhara range along the Mahanadi, the Barun range along the Brahmani) is northwest-southeast. The Mahanadi forms the boundary between Baudh-Khondmals and Dhenkanal. The Brahmani flows through the eastern half of Dhenkanal.

Sundargarh sits like a cap on the top of Sambalpur. The western half of the Plateau drains into the Mahanadi through streams like Basundhara and Ib. In the eastern half the Sankh and the Koel meet at the northwestern corner of Rourkela town to form the Brahmani.

Keonjhar, east of Dhenkanal and south-east of Sundargarh, seems to exhaust for a moment the isolated rocks on low plateau which are such a feature of the North-western and Western Hill districts. The valley of the Baitarani which flows north-south across the eastern half of Keonjhar is comparatively free of rock except the Kantipal rock. In the east, rocks like the Dhuardhuma and the Daimunda rise to heights above 2,000 ft.

The isolated rocks appear again in Mayurbhanj as the plateau rises. Mayurbhanj is drained into Baitarani in the West by streams like Tentua and Budhi, flowing into the Subarnarekha in the east and toward the sea in the southeast.

This Division consists of 5 districts all east of the Mahanadi except that the river passes through the middle of Sambalpur. Almost the only important crop is rice,

sesamum being raised in Dhenkanal. Population density is low in Sundargarh (200), Sambalpur (223), Keonjhar (231), Dhenkanal (243) and medium in Mayurbhanj (299). The proportion of scheduled tribes is high in Sundargarh (58), Mayurbhanj (61) and Keonjhar (47), moderate in Sambalpur (29) and comparatively low in Dhenkanal (14). The proportion of scheduled castes is comparatively low in Sundargarh and Mayurbhanj but moderately high in Keonjhar (14), Sambalpur (16) and Dhenkanal (18). The principal language is Oriya.

The urban ratio is low in all districts except Sundargarh where it is moderately high owing to Rourkela and Rajgangpur and in Sambalpur where it is moderate owing to the town of Sambalpur and the Hirakud complex. Natural increase is low in Sambalpur, moderate in Mayurbhanj, moderately high in Keonjhar and Dhenkanal and high in Sundargarh. Immigration is moderate in Sambalpur and Keonjhar, high in Sundargarh but low in Dhenkanal and Mayurbhanj. The proportion of children 0-4 to women 15-44 is low in Sambalpur and Sundargarh, moderate in Keonjhar and Mayurbhanj but moderately high in Dhenkanal.

All districts except Dhenkanal and Sundargarh are placed in the lowest level of development with total scores close to one another. But the rankings in the various blocks are diverse as will be seen in the following statement:

District	Blocks				
	II	III	IV	V	VI
Sambalpur	High	Medium	High	Medium	Low
Keonjhar	Medium	Medium	High	Medium	Low
Mayurbhanj	Medium	Medium	Medium	Medium	Medium

Recapitulation

The Rajasthan and Madhya Pradesh Subregions being very complex will bear recapitulation to show the interrelationships.

The Rajasthan and Madhya Pradesh Subregions may be briefly described as follows proceeding from the West to the East:

1st Subregion. 3.1 Rajasthan Hills and Plateaus. This has 5 Divisions and 19 districts.

3.11 The first Division, the Aravallis, is mainly confined to 9 districts, the western ranges of the Aravalli Hills drained in south mainly by the Luni and in the north by the Chambal and its tributaries.

3.12-3 The second and third Divisions are the northern Aravalli Outliers constituting Delhi and Gurgaon of Punjab.

3.14 The fourth Division consists of 4 districts in South Rajasthan Hills (Mewar and Bagar) and is mainly drained south by the Banas, Mahi and Sabarmati.

3.15 The fifth Division consists of 4 districts of the Eastern Rajasthan Ranges drained north mainly by the Chambal, Kali Sindh and Parbati.

The districts of Banswara of the 1st subregion and Jhabua of the 3rd subregion mark the vital knot of (1) the Aravallis which travel to the north and northeast and (2) the Vindhya which travel to the northeast and east.

2nd Subregion. 3.2 Bundelkhand. This is the northern terminal of the lava flow of the Vindhya Ranges and is capped by the Trans Jamuna Alluvial Veneer of 4 Uttar Pradesh districts south of Jamuna between the Chambal in the west and Ganga in the east. This subregion has 3 Divisions and 10 districts.

3.21 The first Division comprises the Chambal Ravines and contains 4 northern districts of Madhya Pradesh. The tract is drained by the Chambal and its tributaries.

Although Sambalpur has built up modern industry the population engaged in it is small compared to its total population. Dhenkanal is placed in the second level of development with high values for II and IV, medium for V and low for III and VI. Sundargarh alone is placed in the third level of development with high value for IV and medium values for II, III, V and VI.

All districts except Keonjhar are connected by grid. The most important industry is the Rourkela Steel Works, cement and refractory mills in Sundargarh, and the aluminium works in Hirakud, Sambalpur. There is a great deal of mining in the tract. Sambalpur has an important paper mill. Basic metals are important in Sambalpur, Sundargarh, Keonjhar; wood industries in Sundargarh, Keonjhar, Dhenkanal; food industries in Sambalpur, Dhenkanal and Mayurbhanj; tobacco in Sambalpur and Dhenkanal; textiles in Mayurbhanj.

Analysis of Town Groups and Towns by predominant function and size classes

Function of town	Class of town					
	Total	II	III	IV-V	IV	V
1	2	3	4	5	6	7
Total	19	1	3	15	10	5
Agricultural	2	..	..	2	1	1
Manufacturing	5	1	..	4	3	1
Transport	1	..	..	1	1	..
Service	11	..	3	8	5	3

3.22 The second Division comprises the Trans Jamuna Alluvial Veneer described above and consists of 4 Uttar Pradesh districts drained mainly by the Betwa, Dhasan and Ken.

3.23 The third Division comprises 2 districts of North Central Madhya Pradesh, continuation of the badlands and scarps. The entire subregion is historically known as Bundelkhand.

3rd Subregion. 3.3 The third Subregion, Malwa, east of the 1st subregion and south of the 2nd is the historic passageway between the Ganga-Jamuna Doab and the Gulf of Cambay. It comprises the western mass of the Vindhya Ranges and consists of 2 Divisions and 11 districts.

3.31 The first Division, North Malwa Uplands, consists of 2 districts and is drained by the Parbati and Sindh.

3.32 The second Division, Malwa Plateau, consists of 9 districts and is drained in the south by the Mahi and in the north by the tributaries of the Chambal and by Kali Sindh, Parbati and Sindh.

4th Subregion. 3.4 The fourth Subregion, Vindhya Ranges and Plateaus, contains the main central mass of the Vindhya Ranges and is composed of 3 Divisions and 9 districts.

3.41 The first Division, the Vindhyas, consists of 5 districts forming the heart of Madhya Pradesh and is drained by the Betwa, Dhasan and Ken.

3.42 The second Division, the Rewa Plateau, consists of the Vindhyan Scarp Lands and Rocks and contains the Rewa and Panna Hills and is drained by the Tons (Tamasa) into the Ganga.

3.43 The third Division, Kaimur (Vindhyachal), the easternmost outlier of the Vindhyas consists of the district Mirza-

pur which is transversely drained by the Son and longitudinally by the Rihand.

5th Subregion. 3.5 The fifth Subregion, the Central Madhya Pradesh Plateau, consists of the entire country contained in Madhya Pradesh to the south, southeast and east of the Vindhya Ranges. It is divided into 7 Divisions and 18 districts.

3.51 The first Division, Narmada Valley, consists of 3 districts Jabalpur, Narsimhapur and Hoshangabad and comprises the Mahadeo and Gawilgarh Hills.

3.52 The second Division, Western Satpuras, consists of 2 districts West and East Nimar in the Satpura-Gawilgarh Hills. It forms the lower and southern section of the Narmada furrow which marks the southern boundary of the Vindhya Ranges. Both districts are drained into Narmada (Kundi and Chhota Tawa).

3.53 The third Division, Central Satpuras, consists of 3 districts in the Plateau and Valley formed by the outer scarps of the Gawilgarh and Mahadeo Hills which descend steeply in the south and southeast and the three districts form three important basins: Betul that of Tapti, Chhindwara of Pench and Seoni of Wainganga.

3.54 The fourth Division, Eastern Satpuras (Maikala Range), comprising 2 districts is a continuation of the basins formed by the third Division and is enclosed in the east by the western stows of the girdle of the Maikala Range. Mandla forms the Narmada and Balaghat the Wainganga.

3.55 The fifth Division, Baghelkhand Plateau, comprising 3 districts—Sidhi, Shahdol and Surguja—is historically called Baghelkhand. Baghelkhand is a high Plateau enclosed by the Kaimur Range in the northwest, the Bhanrer Range in the west, the Maikala Range in the southwest and the Hazaribagh—Chhota Nagpur Ranges in the East. The Johilla tributary of the Son in Shahdol has a curious course, being separated from the broader parallel valley of the upper Son by

a narrow ridge of Deccan Lava flung by the Amarkantak. The Son issues from the eastern flank of Amarkantak (the Narmada issues from the western flank) and drains Shahdol and Sidhi which form the upper Son Valley. Surguja is drained by the Rihand and is mainly trough land of Gondwana origin.

3.56 The sixth Division, comprising 4 districts, is historically called Chhattisgarh. It consists of the great Seonath-Mahanadi Doab which drains the entire country enclosed by the Surguja high plateau constituting the Son-Mahanadi watershed in the north, the Maikala in the northwest and east, the isolated hills of Bhandara and Chanda, the eastern rim of the Nagpur Maidan, the high ridge of the Western Bastar Hills and the Bastar-Koraput-Kalahandi-Bolangir girdle in the south and southeast.

3.57 The seventh Division, comprising a single district, Bastar, is named Dandakaranya.

In contrast to the densely populated Ganga Plains the Central Hills and Plateaus have sparse populations. Further, a substantial proportion of India's tribes inhabit this Region. All except the arid west was originally forested. Even the semi-desert often carries a very open acacia shrub (*Kikar*). Considerable areas of deciduous forest (largely *Sal*) remain, especially in Chhota Nagpur, and on the higher country. Thorn forests prevail in the west. The first two Subregions in Rajasthan delineated above have high rugged ranges and sharp ridges and much hard quartzite rocks which do not favour water, which accounts for the great distances between villages. In many cases villages are no more than a few homesteads erected either in forest clearings or depressions. There are exceptional areas of concentration where for example an extensive flat surface comes between rugged ridges, as in the Bhorat plateau between Kumbalgarh and Gogunda in western Udaipur. The Aravallis which

splay out in fanlike form both to the northeast and southwest, are densely wooded and sparsely populated. The eastern uplands in Tonk, Sawai Madhopur, Bharatpur, Alwar have a thicker mantle of fertile soils, higher rainfall in summer months, better perennial irrigation, a fairly even distribution of population and high land utilization.' (Chatterjee). The densest habitations are to be found along the river courses and around irrigation tanks. 'The plains near Jaipur are formed of river-borne alluvium and sand drifts, and are characterised by sparsely populated zones'.

The Chambal Ravines are not particularly hospitable to human habitation. They are inaccessible and heavily eroded. A thick mantle of alluvium in the North Malwa Upland (Shivpuri and Guna) has, however, been able to attract population.

The fertility and density of population in the Malwa Plateau are due to the rich black soils and fairly regular rainfall. 'The topography is characterised by rolling plains, separated by flat topped forested hill ranges, and drained by a number of north flowing rivers', Betwa, Parbati, Kali Sindh and Chambal. Most of the villages are located on the interfluvies.

At the very base of the Malwa Plateau is the Vindhyan mountain range, 270 miles long. There are very few permanent settlements in the mountains except in forest clearings and around some ancient forts and rock caves like Mandhata, Bagh or Mandu. 'Small and scattered villages, however, appear in larger numbers on the southern slopes which are well drained and not too steep' (Chatterjee).

The Narmada Valley is narrow and confined to a rocky bed because of the high ranges on either bank, the tract between Hoshangabad and Nemawar (below Indore) alone attaining any width at all. It is only at the estuary below Broach that the Narmada attains a real expanse.

The Satpura-Gawilgarh tract (Nimar) is characterised by open mixed forest, good grazing ground and a very sparse population. It is only in regions around Chhota Tawa that some concentration of population is noticed, notably Khandwa, a town of great antiquity and an important cotton centre.

3.7 South Bihar Hills and Plateaus

3.8 West Bengal Uplands.

In reality the two Sub-regions are one tract, although they have been divided into two to distinguish Bihar and West Bengal areas. This tract consists of the hills and plateaus in South Bihar, the Chhota Nagpur Peneplains, which succeed the Satpura-Maikala ranges in the east, with the Gondwana rocks of Surguja interposed. The Chhota Nagpur Peneplains extend to the higher Hazaribagh Range and the faulted Damodar trough. Beyond the North-Koel which carries tribute to the Son is formed a great rectangle of about 40,000 sq. miles, rolling peneplains mainly of archaean gneisses, bisected longitudinally by the fault trough of the Damodar with its Lower Gondwana Coal. Most of this area lies in the Chhota Nagpur Plateau which extends beyond it into the Jamshedpur Gap.

The Hazaribagh peneplain north of Damodar lies at about 1,300'. Across it and slightly diagonal to its eastwest extension, runs the Hazaribagh 'Range', really a higher plateau (c. 2,000 ft.) with some monadnocks rising to 2,800 ft. The plateau on the whole is rather open, and there is a fair amount of cultivation. On the north it falls abruptly, but with many irregular spurs and outliers covered with open jungle into the Ganga Plain; to the south-east the descent is more gradual and the Upper Ajoy and Damodar-Jamuna Valleys provide routes across the plateaus giving Calcutta direct access to the Central Ganga Plain. In the northeast the Rajmahal Hills, highly dissected plateaus of basalts of

Gondwana age, rise steeply from the alluvium in the great bend of the Ganga. Considering the terrain they are well cultivated and densely peopled; the Santals occupy the broader valleys, keeping large herds of buffaloes in the smaller side-valleys, while on the higher ground the Paharias cultivate remarkably steep slopes'. (Spate)

The Damodar Basin is a small but rich and busy area. It has been intensely used as a railway corridor and its coalfields feed India's industries. The Gondwana rocks of the basin form generally low undulating terrain. The main stream runs west-east, providing a depression at little over 1,500 ft. into the north Koel Valley; the railway through this Chandwa Gap provides strategic communication. The larger tributaries are all on the left bank. The watershed between the Damodar and the Upper Ajoy at Asansol is a low bluff called the Durgapur Forests. The interfluvium is followed by a railway with a branch to Giridih coalfields in the Barakar Valley. To the south the recession of the Ranchi peneplain scarps give easy access to the Subarnarekha and Jamshedpur across Purulia. The west of the Damodar Basin is formed by the Tori and the Karanpura coalfields.

The Damodar Basin and the Ranchi peneplains are shelved in the east by the Rarh which is composed of lateritic old alluvium, flanked by 'the coalesced fans of rivers draining the Peninsular plateaus'—Ajoy, Damodar, Rup Narayan, Kasai. The lateritic areas (Khoai) are very poor. The firm shelf has been an ancient settlement tract between the dense jungle of the plateau and the delta marshes.

As explained at the outset the tract is in reality one, although it has been divided into two Subregions:

3.7 South Bihar Hills and Plateaus.

This Subregion contains 3 Divisions and 6 districts.

3.71 Chhota Nagpur Plateau consists of Palamau, Hazaribagh, Ranchi and Singhbhum. It really consists of three subdivisions: the Hazaribagh Plateau containing Palamau and Hazaribagh; the Ranchi Peneplains which should include Purulia and Singhbhum which extends to Mayurbhanj and Keonjhar. Palamau is dotted with *pats* and drained by the Kanhar and North Koel. North Hazaribagh is drained to the north by the Morhar, Lilajan and Mohana which travel to Gaya. The Damodar rises at Chandwa in Palamau and travels east across Ramgarh, Gola, Bokaro, Bermo to Panchet. Its main tributaries are Bokaro, Konar, Tilaiya and Barakar.

The area around Gumla-Ghagra in Ranchi is a sharp wedge which serves as a versatile watershed. It sends North Koel to the northwest, the Sankh south down its southwestern flank, the South Koel south also down its southeastern flank. Not far from where the South Koel takes its rise, the Subarnarekha issues from around Semo Peak (2,475') southwest of Ranchi and travels east parallel to but south of Damodar. The Ranchi Plateau slopes east to the Purulia peneplains. The Sankh travels due south down Western Ranchi through Simdega. The South Koel joins the

Karo and forms the Koel. Ranchi is thickly studded with peaks. 'Western Ranchi is generally about 2,000, 2,500 ft. It is open, broadly rolling country with mature valleys bordered however by low gullied terraces. They are broken by monadnocks, "fantastic cones and domes of gneiss, looking as if they had been exuded from the earth as gigantic bubbles that had become solid instead of bursting" (Spate)'. The Subarnarekha travels southeast after Muri and descends to Jamshedpur where it is joined by Kharkai, after which it travels to Midnapore at Gopiballavpur, later to form for a while the boundary between West Bengal and Orissa. Soils are mostly thin and poor—sandy or clayey red soils on the gneisses, badly leached and deficient in humus and minerals.

3.72 Gondwana Trough. This Division is made of the single district of Dhanbad which is drained through the middle transversely by Damodar.

3.73 Rajmahal Hills. The Rajmahal hills are drained west to east, proceeding from north to south, by the Gumani, Bansloi, Pagla, Brahmani, Dwarka and Mayurakshi: which also drain Birbhum district of West Bengal before they fall into the Bhagirathi.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

Function of town	Class of town						
	Total	I	II	III	IV-VI	IV	V
1	2	3	4	5	6	7	8
Total	45	3	1	11	30	10	16
Agricultural	4	..	..	..	2	1	3
Artisan	2	..	..	..	8	1	6
Manufacturing	15	2	1	2	2	2	..
Transport	4	..	..	5	14	5	6
Service	20	1	..	..	..	..	..

3.71 3 Central Hills and Plateaus 3.7 South Bihar Hills and Plateaus 3.71 Chhota Nagpur Plateau.

This Division consists of the districts of Palamau, Hazaribagh, Ranchi and Singhbhum. It is only in the upland and hilly district of Palamau that gram, maize and *tur* are important. Maize and *ragi* are also grown in Hazaribagh and *ragi* in Ranchi. But all things considered the Division is a rice tract with the highest percentage of acreage under rice in Singhbhum. Population density is low in Palamau (242) and medium in Singhbhum (398). The population of scheduled tribes is about a fifth of the total in Palamau and about an eleventh in Hazaribagh but is more than 3/5ths in Ranchi and a little less than half in Singhbhum. The proportion of scheduled castes is a little more than a quarter in Palamau but low in the other districts. The principal language is Hindi in Palamau and Hazaribagh. But Ranchi is very mixed, and Hindi, although the strongest single language, is only 25.5 per cent. In Singhbhum the strongest single language is Ho with only 21.6 per cent. Ranchi and Singhbhum are two of the most polyglot districts in India.

The urban ratio is low in Palamau, moderate in Hazaribagh and Ranchi and high in Singhbhum. Natural increase is low in Ranchi, moderate in Palamau and Singhbhum, and moderately high in Hazaribagh. Immigration is low in two districts and moderate in Hazaribagh and moderately high in Singhbhum. The proportion of

children 0-4 to women 15-44 is low in Singhbhum, moderately high in Hazaribagh and Ranchi and high in Palamau.

Palamau and Ranchi are placed in the second level of development, Hazaribagh in the third and Singhbhum in the top. Palamau and Ranchi have identical scores and identical values in III (medium, IV (high) and VI (medium). Palamau has high value in II and medium value in V and Ranchi has medium value in both. Hazaribagh has high values in both II and IV and medium values in III, V and VI. Singhbhum has high values in II, III, IV and medium values in V and VI.

Ranchi is rapidly assuming importance as a great industrial centre on account of the headquarters of the National Coal Development Corporation, Hindustan Steel and the great Heavy Engineering Works and other projects. Hazaribagh will be very important for Bokaro Steel Works, power, coal mines and washeries, Singhbhum is of course very important for the Tata Steel Works, TELCO, TMB Motor works and ancillaries and many important basic metal and engineering projects. All districts are connected by grid.

The important organised industries are wood industry in Palamau and Ranchi; non-metallic minerals in Palamau, Hazaribagh and Ranchi; foodstuffs in Palamau, Hazaribagh and Ranchi; basic metals in Singhbhum; metal products in Ranchi and Singhbhum; transport equipment in Singhbhum; tobacco in Palamau and Singhbhum.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.71 CHHOTA NAGPUR PLATEAU

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	31	2	1	7	21	6	12	3
Agricultural	3	..	..	..	3	1	2	..
Artisan	2	..	..	..	2	1	1	..
Manufacturing	12	1	1	2	8	1	6	1
Transport	1	..	..	1	..	..	..	..
Service	13	1	..	..	8	3	3	2

Class I cities with their function:
Manufacturing—Jamshedpur,
Service—Ranchi.

3.72 3 Central Hills and Plateaus 3.7 South Bihar Hills and Plateaus 3.72 Gondwana Trough.

This Division—consisting of one district Dhanbad—properly belongs to the Chhota Nagpur Plateau but has been separated because of its preeminence in coal and allied industries. Almost the sole crop is rice and a little maize. Population density is very high (1,045 per sq. mile) and the proportions of scheduled tribes (11 per cent) and castes (18) are both appreciable. The principal language is Hindi, although the proportion of speakers is just under 55 per cent.

Both the urban ratio, the rates of natural increase and immigration are high but the proportion of children 0-4 to women 15-44 is low, there being a large proportion of working women in the district.

Dhanbad is placed in the highest level of development, its value in every block being high. Besides coal mining it commands a great variety of industrial activity. It is placed on powerful electricity grids. The important industries are coal and refractories, basic metals, coal products and miscellaneous industries.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.72 GONDWANA TROUGH

Function of town	Class of town					
	Total	I	III	IV-VI	IV	VI
1	2	3	4	5	6	7
Total	5	1	2	2	1	1
Manufacturing	3	1	2	..	..	..
Transport	1	..	..	1	1	..
Service	1	..	..	1	..	1

Class I cities with their function:
Manufacturing—Dhanbad-Jharia-Sindri

3.73 3 Central Hills and Plateaus 3.7 South Bihar Hills and Plateaus 3.73 Rajmahal Hills.

This Division contains one district, Santal Parganas embracing the Rajmahal Hills. The main crop is rice, maize being a second but minor crop. There is much shifting cultivation. Population density is moderately high (487). The proportion of scheduled tribes is high (38 per cent) while that of scheduled castes is modest (7.6). The strongest single language is Hindi which has, however, a strength of only 36 per cent in evidence of the polyglot nature of the district.

The urban ratio, the rate of natural increase and the rate of immigration are low. The proportion of children 0-4 to women 15-44 is moderate.

Santal Parganas is placed in the second level of development. The value in block II alone is high, but those in III, IV, V and VI are medium. The district is connected by grid. The important organised industries are foodstuffs, tobacco, metal products, chemicals and non-metallic minerals (road metal).

Analysis of Town Groups and Towns by predominant function and size classes

3.73 RAJMAHAL HILLS

Function of town	Class of town				
	Total	III	IV-V	IV	V
1	2	3	4	5	6
Total	9	2	7	3	4
Agricultural	1	..	1	..	1
Transport	2	1	1	1	..
Service	6	1	5	2	3

3.8 West Bengal Uplands.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

3.8 WEST BENGAL UPLANDS

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	33	2	1	13	20	12	8
Artisan	3	..	..	1	2	1	1
Manufacturing	14	1	..	4	9	5	4
Trade and Commerce	5	..	..	1	4	3	1
Transport	2	..	..	..	2	2	..
Service	9	1	1	4	3	1	2

3.81 3 Central Hills and Plateaus 3.8 West Bengal Uplands 3.81 Ranchi Peninsulars.

This Division contains the district of Purulia formerly part of Manbhum which was split in three to produce two districts—Dhanbad (Bihar) and Purulia (West Bengal)—and a remnant which was amalgamated with Singhbhum. The chief features of Purulia are the Baghmundi Hills in the west, the Jaridih sandstone hills in the northwest, the Panchet in the northeast and the Manbazar Hills in the southwest. The district is drained eastward by the Dhalkishor and the Kasai. East of the Subarnarekha the plateau sinks gradually into the deltaic alluvium, and is generally veneered with laterite. Almost the sole crop is rice. The district also grows small quantities of oilseeds. Population density is fairly high (565). The proportion of scheduled tribes is about a fifth of the total population while that of scheduled castes is less than a eighth. The principal language is Bengali.

The urban ratio is moderate but those of natural increase, immigration and proportion of children 0-4 to women 15-44 are low.

Purulia is placed in the lowest level of development close in score to Santal Parganas. The value of block IV alone is high while those of II, III, V and VI are medium.

The district is connected by grid. The main organised industries are basic chemicals, tobacco, transport equipment, metal products and foodstuffs.

Analysis of Town Groups and Towns by predominant function and size classes

3.81 RANCHI PENINSULARS

Function of town	Class of town				
	Total	III	IV—V	IV	V
1	2	3	4	5	6
Total	5	1	4	3	1
Manufacturing	3	..	3	2	1
Transport	1	..	1	1	..
Service	1	1	..	..	..

3.82 3 Central Hills and Plateaus 3.8 West Bengal Uplands 3.82 Ranchi.

The Division consists of 3 districts. The drainage of Birbhum has already been described. Burdwan is drained mainly by Ajoy and Damodar. The Ajoy forms the boundary of Birbhum and Burdwan for some part. The Damodar forms the boundary between Burdwan and Bankura for some part. Bankura is drained west-east mainly by the Dhalkishor or Dwara-keshar and the Kasai or Kangsabati. The Dhalkishor is joined by the Silai at Ghatal, from which point downward it is called Rup Narayan. The Kasai joins the Kalighai in Tamluk subdivision of Midnapore to form the Haldi river. The Subarnarekha enters at Gopiballavpur, passes through Nayagram and out to Orissa West of Dantan.

The traditional southern Ranch of Bengal consists of the 3 districts of Birbhum, Burdwan and Bankura. The main crop is rice but all 3 districts now grow appreciable quantities of sugarcane and oilseeds. Population density is highest in Burdwan (1,139) but high, too, in Birbhum (830) and Bankura (629).

The urban ratio is moderate in Birbhum and Bankura but moderately high in Burdwan. Natural increase is high in Birbhum and Burdwan and only moderately high in Bankura. Immigration is high in Burdwan, moderate in Birbhum and low in Bankura. The proportion of children 0-4 to women 15-44 is high in Birbhum, moderately high in Burdwan and moderate in Bankura.

Bankura is placed in the second level of development. It has high values in blocks II and IV, medium in V and VI and low in III. Birbhum is placed in the third level with high values in II and IV, medium values in V and VI, and low in III. Burdwan is placed in the top level with high ranks in all blocks except III and VI in which the value is medium.

The districts are connected by grid and extensive systems of irrigation canals. The important organised industries are coal and steel in Burdwan; food industries in Birbhum, Bankura and Burdwan; non-metallic minerals in Birbhum and Burdwan; basic metals in Burdwan; machinery in Birbhum; paper in Burdwan; basic chemicals in Burdwan and Bankura.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

Analysis of Cities, Town Groups		3.82 RARH		Class of town				
		Total	I	II	III	IV—V	IV	V
Function of town		2	3	4	5	6	7	8
		28	2	1	9	16	9	7
Total		3	..	..	1	2	1	1
Artisan		11	1	..	4	6	3	3
Manufacturing		5	..	..	1	4	3	1
Trade and Commerce		1	..	..	..	1	1	..
Transport		8	1	1	3	3	1	2
Service								

Class 1 cities with their function:
Manufacturing—Asansol.
Burdwan.

REGION 4 THE DECCAN

In the Deccan has been included all that tract of land between the Central Hills and Plateaus above and the Western and Eastern Coastal Plains encircling it below. The Deccan has been divided into 4 Subregions corresponding to four political territories: Maharashtra Deccan, Andhra Deccan, Mysore Deccan and Tamilnad Hills and Uplands. Maharashtra Deccan contains 22 districts comprising 6 Divisions: Khandesh, Nasik Basin, Vidarbha, Mahakoshal,

Marathawada and Western Ghats (Desh). Andhra Deccan has 13 districts in 2 Divisions: Telengana (Southern Deccan) and Rayalaseema. Mysore Deccan has 17 districts comprising 5 Divisions: Inland Karnataka, Southern Deccan Plateau (North Maidan), Central Maidan (Raichur-Bellary), South Maidan and Malnad. Tamilnad Hills and Uplands has 5 districts in 2 Divisions: Nilgiri and Coimbatore Plateau (Kongunad).

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4 THE DECCAN

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	631	23	36	121	451	212	191	48
Agricultural	264	..	2	16	246	109	112	25
Port	4	..	..	1	3	3	..	..
Artisan	89	1	5	24	59	32	21	6
Manufacturing	97	14	15	27	41	24	15	2
Trade and Commerce	16	..	1	6	9	6	3	..
Transport	14	..	1	4	9	6	3	..
Service	147	8	12	43	84	32	37	15

NOTE: The following 2 towns though agriculturally predominant have been shown against Port:
Class III
Karanja (Maharashtra)

Class IV
Gangavati (Mysore)

4.1 Maharashtra Deccan.

Sbate observes that 'Maharashtra, the Maratha country par excellence, may be taken as roughly conterminous with the main mass of the Deccan Lavas above the Ghats. To the North the Tapti Valley, flanked by typical lava plateaus but floored by alluvium, forms a transition to the Central Indian Scarp Lands; in the South, along the Malaprabha, there is another belt

where Archaeans and lavas interdigitate and where cultural allegiance is divided between the Marathi and Kannada languages. But to the East the boundary of Marathi speech shows a striking accordance with the edge of the Lavas'. Hence the division of the original Hyderabad State into Marathawada and Telengana. The whole Subregion bears the imprint of the Marathas, has 'a strong historic personality, a distinctive agriculture, power

sources in the Ghats' and a rural society which has profited by cotton prices.

The contrast between the scarp and the plateau faces of the Western Ghats which bound this Subregion on the west is great: on the one side deep ravines and canyons, on the other flat-topped spurs intersected by mature valleys. The spurs lose height to the East rapidly, becoming mere flat-topped relic ridges on the watersheds. The actual dissected belt, the Ghats proper, is only a few miles wide as a rule: generally 2,500-3,000 ft. high, it reaches 4,500 or more in the culminations whence spring the transverse spurs, such as the Tryambak massif at the root of the Balaghat Hills, north-west of Nasik, the source of the Godavari. In some places there are Peint forests and the Dangs (south of the Tapti). 'Behind Ratnagiri and Goa there is a tangle of dense jungle, including teak, or terraces and valley-floors; elsewhere it carries more open forest with not a little bare rock on the flanks of the more massive lava flows' (Sbate).

'The general slope to the east and south-east is gentle. Poona lies at 1,800 ft. and it is over 100 miles down the Bhima to the 1,500 ft. contour. From the Ghat culminations long tongues of higher ground (over 2,000 ft.) run east and divide the plateau into compartments which (except on the upper Kistna) are mature or even senile in aspect: the plains of Berar and Nagpur, the great basin of the upper Godavari, the Bhima from Poona to beyond Sholapur' (Sbate).

The entire subregion grows very little rice. The great cash crops are cotton and sugar in a preeminent realm of *jowar*. Soils are of great importance. The more mature black earth of the alluvial Tapti trough extends across the Amraoti height of land (Purna/Wardha watershed). Most of the soil is 'medium regur', and the higher ground carries immature regur or even red soils, which are notably poorer.

'Villages are usually large and compact, but more widely spaced than in the Ganga plains. Houses are often of stone or brick, the latter with attractive detail in doorways and recesses, and have low pitched roofs of semicylindrical tiles or flat mud roofs. Many villages are grouped round a little fort or retain the old gates' (Sbate).

The larger towns have been strategic in origin since ancient times, commanding the mouths of prosperous valleys and took on administrative, commercial and tax collection functions in consequence. Of fascinating coincidence is the sitting of the old rock monasteries with unvarying regularity at the end or mouth of ancient trade routes. Most small towns are primarily collecting centres and administrative headquarters.

The three major valleys which contain perennial rivers are, from north to south, the Godavari, the Bhima and the Krishna. All three flow from west to east through different rainfall belts and the population concentration seems to vary in direct ratio to the amount of rainfall. Flanking each of the three river valleys there are flat-topped but steep-sided low hills, which are sparsely populated, and in many cases, uninhabited. The belt that has the highest concentration of population in the Maharashtra plateau lies on the extreme west, extending eastwards from the foot of the Sahyadri to a maximum width of 120 km. Its length from Nasik in the north to a little south of Gokak in the south is about 450 km. Not only do the headwaters of the Godavari, Bhima and Krishna lie within this belt, but numerous smaller perennial streams fed by rain in the Sahyadri flow through this area and make agriculture prosperous. 'It is mainly along these streams that the population is concentrated, giving rise to a very characteristic linear pattern. Small towns have sprung up wherever level tracts are extensive' (Chatterjee).

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.1 MAHARASHTRA DECCAN

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	202	10	11	40	141	73	57	11
Agricultural	100	..	1	10	89	45	38	6
Port	3	..	..	1*	2	2	..	..
Artisan	14	..	2	4	8	5	3	..
Manufacturing	24	5	4	6	9	6	3	..
Trade and Commerce	6	..	..	3	3	2	1	..
Transport	6	..	1	2	3	3	..	..
Service	49	5	3	14	27	10	12	5

*Agriculture is also predominant.

4.11 4 The Deccan 4.1 Maharashtra Deccan 4.11 Khandesh.

The first Division Khandesh (Dhulia and Jalgaon formerly called West and East Khandesh) occupies the middle Tapti Valley and runs from East to West along the southern flanks of the Satpuras. This Valley, though much smaller than the Narmada, contains more people than the latter, because of its flat alluvium covered floor. From the Burhanpur Gap the Tapti flows through rich cotton growing area of Khandesh, a rich agricultural plain dotted with large villages and industrial and commercial towns. Its main tributary, the Purna, flows through the rich cotton growing plains of Berar and supports a large population, both rural and urban. Two rivers take their rise in the Western Ghats in the west and flow east to join the west-flowing Tapti; the Panjhra rises in the Dangs (Gujarat) and flows east through Sakri and Dhulia talukas into the Tapti near the junction of Sindkheda taluka (Dhulia) and Amalner taluka (Jalgaon). The Girna rises from the Tryambak further north of

the Godavari, travels through Malegaon (Nasik), Chalisgaon and Erandol talukas and falls into the Tapti in Jalgaon.

The Division is particularly prosperous in millets. Dhulia grows wheat also. The chief cash crops are groundnut and cotton which occupy considerable acreage. Population density in Dhulia is low (279) but moderately high in Jalgaon (402). Dhulia contains a very considerable tribal population (38 per cent) but Jalgaon's proportion is modest (5.6). The proportion of scheduled castes is low in both (3.6 and 3.5 per cent). The principal language is Marathi in both districts, but the strength of Marathi is low (36 per cent only) in Dhulia.

The urban ratio is moderately high in Dhulia and high in Jalgaon. Immigration is moderately high in both but natural increase is high in Dhulia and moderate in Jalgaon. The proportion of children 0-4 to women 15-44 is high in Dhulia but only moderately high in Jalgaon.

Both Dhulia and Jalgaon are placed in the highest level of development with identical total scores and uniform values in the different blocks: high in II, IV, V and VI and medium in III.

Each district generates its own electricity. The important organised industries are processing of agricultural produce, food industries and textiles in both districts; tobacco and transport equipment in Dhulia; miscellaneous industries and electricity, gas and steam in Jalgaon.

Analysis of Town Groups and Towns by predominant function and size classes

Function of town	4.11 KHANDESH Class of town			
	Total	II	III	IV
1	2	3	4	5
Total	20	3	6	11
Agricultural	13	..	3	10
Port	1	..	..	1
Manufacturing	3	1	2	..
Trade and Commerce	1	..	1	..
Transport	1	1	..	..
Service	1	1	..	..

4.12 4 The Deccan 4.1 Maharashtra Deccan 4.12 Nasik Basin.

The Tryambak massif, sheltering a lone

Analysis of Cities, Town Groups and Towns by predominant function and size classes

		4-12 NASIK BASIN						
		Class of town						
Function of town		Total	I	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	
Total	12	2	2	2	1	1	2	1
Agricultural	2	..	..	1	1	..	..	..
Port	1	..	1	..	..	..	..	..
Artisan	1	..	..	2	..	1	..	..
Manufacturing	3	1	..	1	..	..	..	..
Trade and Commerce	1	..	1	1	1	..	..	1
Transport	2	..	..	1	..	..	..	..
Service	2	1	..	..	..	..	..	..

Class I cities with their function :
Manufacturing—Malegaon
Service—Nasik.

district Nasik, is at the root of the Balaghat Range and is the source of the Godavari. It deserves to form a Division by itself being separated from Khandesh by the Satmala Hills in the north and northeast.

This Division consists only of one district, Nasik. The main crops are the three millets of which the inferior millet, *haira*, holds the first place. Wheat is extensively grown. The main cash crop is groundnut. Population density is 309 persons per sq. mile. The proportion of scheduled tribes is 24.5 per cent and that of scheduled castes 3.7 per cent. Marathi is the principal language.

Both urban ratio and rate of natural increase are high. But the level of immigration and the proportion of children 0-4 to women 15-44 are moderately high.

The district is placed in the top level of development with high values in IV, V and VI and medium values in II and III.

Nasik generates its own electricity. The important organised industries are printing and publishing (important government presses for general and security printing as well as private presses), tobacco, food industries, transport equipment and processes allied to agriculture.

4.13 4 The Deccan 4.1 Maharashtra Deccan 4.13 Vidarbha.

Vidarbha corresponds generally to part of old Berar, and consists of Buldhana, Akola, Amravati and Yeotmal. Amravati has the largest raw cotton market in Berar and Akola is a cotton textile town. This is all plateau land between the Satpuras in the north and the Ajanta Hills in the south. The main river is the Purna which rises in the Gawilgarh Hills and flows west through lower Amravati, upper Akola and upper Buldhana to meet the Tapi at Edalabad (Jalgaon). Yeotmal is drained in a south-easterly direction by the Penganga which flows down the eastern slopes of the Ajanta Range.

This Division consists of the 4 districts of Buldhana, Akola, Amravati and Yeotmal formerly known as Berar and has great homogeneity, the principal food crop being *jowar* and the second crop wheat and *tur*. The chief and universal cash crop is cotton. Groundnut is grown in Buldhana and Akola. Population density is modest, being 210 in Yeotmal, 263 in Amravati, 281 in Buldhana and 291 in Akola. There is no scheduled tribe population in Buldhana and Akola, but a small proportion (4.5) in Amravati, and a fair proportion in Yeotmal (14 per cent). The proportion of scheduled castes ranges from 3.9 per cent

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in Yeotmal to 5.3 per cent in Buldhana. Marathi is the principal language.

The urban ratio is moderately high in Yeotmal and Buldhana and high in Akola and Amravati. Natural increase is moderate in Amravati and Yeotmal and moderately high in Buldhana and Akola. Immigration is moderately high in Buldhana, Amravati and Yeotmal and high in Akola. The proportion of children 0-4 to women 15-44 is moderate in Buldhana and moderately high in the other three districts.

Buldhana and Yeotmal are placed in the third level of development. The values are high in IV and medium in II, III, V and VI. Similarly Akola and Amravati are placed in the top level of development with high values in IV, V and VI and medium values in II and III.

Buldhana generates its own electricity but the remaining districts are connected to grid. The important organised industries are processing of agricultural produce in all districts; food industries; textiles in Akola and Amravati; tobacco in Buldhana and Yeotmal; printing and publishing in Buldhana, Akola and Amravati; basic metal industries in Buldhana; non-metallic minerals and wood industries in Yeotmal; generation of electricity in Akola.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.13 VIDARBHA

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	38	2	1	9	26	19	6	1
Agricultural	25	..	1	4	20	15	5	..
Port	1	..	..	1*	..	..	..	..
Artisan	1	..	..	..	1	..	1	..
Manufacturing	1	..	..	..	1	1	..	..
Service	10	2	..	4	4	3	..	1

Class I cities with their function :
Service—Akola, Amravati.
*Agriculture is also predominant.

4.14 4 The Deccan 4.1 Maharashtra Deccan 4.14 Mahakoshal.

This area may be roughly called the Nagpur Maidan or the Wardha-Wainganga Valley bounded on the north by the Gawilgarh-Mahadeo Hill ranges and uplands, on the east by the watershed of the Wainganga-Seonath-Mahanadi basins and the Indravati river, on the south by the eastern extension of the Nirmal Range and on the west by the Wardha river.

The Wardha river serves as the boundary line between Vidarbha on the west and Mahakoshal on the east. In the north, Nagpur and Bhandara are a continuation of the Pench and Wainganga valleys below the Mahadeo Hills. Nagpur district is drained through the middle by the Konher which passes through between Nagpur and Kamptec. It is joined by the Pench near the junction of Nagpur and Umrer talukas. The Wainganga flows down Gondia and Bhandara talukas (Bhandara) and joins the Pench at the junction of Nagpur and Bhandara districts. The augmented Wainganga then flows down through Brahmapuri, Chanda and Gadhi chiroli (Chanda) to be joined again by the Wardha. The river from now on is called Pranhita until it meets the Godavari west of Sironcha at the boundary of Sironcha (Chanda) and Chinnur (Adilabad, Andhra). The river, called Godavari hereafter, forms the southern boundary of Chanda and at the south-eastern point is met by Indravati from Bastar. The two branches of the Penganga, the Western flowing through Parbhani (Hingoli and Kalamnuri talukas) into Nanded, and the eastern down Larhwa and Pusad (Yeotmal) join at the north of Adilabad and flow to meet the Wardha at Rajura (Chanda).

The Deccan Lavas give place to generally Archaean terrain, irregularly undulating country at about 900-1,100 ft. broken by small, apparently disconnected hills. A considerable portion of the Valley itself.

as well as the hills to north and east is heavily forested. This is the great domain of *sal*. Minor products—bamboo, charcoal, myrobalans, lac, *bidi* wrapping leaves, fodder—are important. Rice accounts for nearly half of the total sown area in Bhandara followed by wheat and oilseeds (linseed). 'The Wainganga marks the transition from the agriculture of Maharashtra, with its uncertain rain but moisture-retentive regur, its wide plains and commercial bias, to the realm of paddy in the better-watered but more broken north-eastern peninsula' (Spate). The more important minerals are manganese and haematite. The great Gondwana trough extending to the Lower Godavari Valley contains coal. Small coalfields extend from the Pench Valley to Singareni and Tandur, and includes the Warora and Bellapur mines in Chanda.

This Division consists of 4 districts, Nagpur, Wardha, Bhandara and Chanda which comprised the former Nagpur Division of Madhya Pradesh and went to Maharashtra. From many points of view it is a homogeneous and internally balanced tract. *Jowar* is the principal crop in Nagpur and Wardha and rice in Bhandara and Chanda (river valleys of Wainganga and tributaries). Wheat is an important second crop. Cotton is the principal cash crop in Nagpur and Wardha and oilseeds that of Bhandara and Chanda.

Population density is low in Chanda (123). It is moderate in Wardha (261) and moderately high in Bhandara (350) and Nagpur (395). There is no scheduled tribe population in Nagpur, Wardha and Bhandara but the proportion in Chanda is fair (15 per cent). The proportion of scheduled castes is low. The principal language is Marathi.

The urban ratio is moderate in Bhandara and Chanda, but high in Nagpur and

Wardha. Natural increase is moderate in Wardha, Bhandara and Chanda and moderately high in Nagpur. Immigration is high in Nagpur and Wardha and moderate in Bhandara and Chanda. The proportion of children 0-4 to women 15-44 is low in Bhandara, moderate in Nagpur and Chanda and moderately high in Wardha.

Bhandara and Chanda are placed in the second level of development with high values in II, medium in III, IV, V and VI. Wardha is placed in the third level with high values in II, IV and V and medium in III and VI. Nagpur is placed

in the highest level with high values in II, IV and V and medium in III and VI.

All districts are connected by grid. The more important organised industries are tobacco in all districts; textiles in Nagpur and Wardha; printing and publishing in Nagpur and Bhandara; food industries in Wardha, Bhandara and Chanda; transport equipment in Nagpur; machinery in Wardha; basic metals and chemicals in Bhandara; paper and non-metallic minerals in Chanda; processing of agricultural produce in Wardha; electricity, gas and steam in Chanda.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.14 MAHAKOSHAL

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
	2	3	4	5	6	7	8
Total	25	1	2	8	14	7	7
Agricultural	10	..	..	1	9	3	6
Artisan	8	..	2	3	3	2	1
Manufacturing	4	1	..	2	1	1	..
Service	3	..	..	2	1	1	..

Class I cities with their function:
Manufacturing—Nagpur.

4.15 4 The Deccan 4.1 Maharashtra
Deccan 4.15 Marathawada.

It has been mentioned above how the boundary of Maratha speech accords with the edge of the Lavas. Marathawada includes districts taken from former Hyderabad State and allotted to Maharashtra in October 1956 and consists of: Aurangabad, Parbhani, Bhir, Nanded and Osmanabad.

This Division is encircled by the Sahyadri or Ajanta Range in the north (Aurangabad), the Nirmal Range in the east (Parbhani and Nanded) and the Balaghat Range in Bhir and Osmanabad. It is drained mainly by the Godavari which flows west-east across the middle. The Sindphana rising in the Balaghat Hills pours into the Godavari at the northern corner of Bhir. The Purna descending from the Ajanta Hills through Parbhani

is joined east of Parbhani town by the Dudna flowing from the west and then falls into the Godavari midway between Parbhani and Nanded towns. Thereafter the Godavari flows in a southeasterly direction through the middle of Nanded district into Andhra Pradesh.

The principal food crop is *jowar* followed by wheat and the principal cash crop cotton which claims considerable acreage.

This Division consists of 5 districts which were formerly in the old Hyderabad State in which it constituted a Marathawada region as opposed to the Telengana Region. The districts are Aurangabad, Parbhani, Bhir, Nanded and Osmanabad. The principal crop is *jowar* in all districts but the variety of subsidiary crops is great, ranging to wheat, *bajra*, *tur* and gram. Cotton is grown in all districts except Osmanabad and groundnut in Aurangabad and Bhir. Population density is fairly even in all districts ranging from 237 in Aurangabad and Bhir, through 249 in Parbhani and 268 in Osmanabad to 271 in Nanded. The proportion of scheduled tribes is low but that of scheduled castes is appreciable in Bhir (13.5 per cent) and Osmanabad (13.4 per cent). The principal language is Marathi.

The urban ratio is moderate in Bhir and Osmanabad, but moderately high in Aurangabad, Parbhani and Nanded. Natural increase is moderate in Parbhani and Bhir, moderate in Nanded and Osmanabad and high in Aurangabad; immigration is moderate in Aurangabad, Parbhani, Bhir and Osmanabad and moderately high in Nanded. The proportion of children 0-4 to women 15-44 is moderate in all districts except Bhir where it is moderately high.

Parbhani, Bhir and Osmanabad are placed in the second level of development with high values in II and IV and medium values in III, V and VI. Nanded and Aurangabad are placed in the third level with high values in II and IV and medium values in III, V and VI. The pattern of development is therefore homogeneous.

All districts generate their own electricity except Nanded which is connected to grid. The more important organised industries are processing of agricultural produce and food industries in all districts; textiles in Aurangabad and Bhir; generation of electricity in Parbhani and Osmanabad; transport equipment in Parbhani and Nanded; electrical machinery in Parbhani; and non-metallic minerals in Aurangabad.

Analysis of Town Groups and Towns by predominant function and size classes

4.15 MARATHAWADA

Function of town	Class of town						
	Total	II	III	IV—VI	IV	V	VI
	2	3	4	5	6	7	8
Total	52	3	4	45	13	27	5
Agricultural	31	..	..	31	7	20	4
Artisan	2	..	..	2	2	..	..
Manufacturing	1	1	..	..	..	..	..
Trade and Commerce	2	..	2	..	..	..	..
Transport	1	..	..	1	1	..	..
Service	15	2	2	11	3	7	1

4.16 4 The Deccan 4.1 Maharashtra Deccan 4.16 Western Ghats (Desh).

This is the sixth Division of the Maharashtra Deccan and throughout the tract the ghat Lavas look like an assembly of large layered cakes. The Division consists of the districts of Poona, Satara, Sholapur, Sangli, Kolhapur and Ahmadnagar. The Pravara and the Mula issuing from the Western Ghats flow eastward across Ahmadnagar (Harischandrapur Range) join in Nevasa taluka before falling into the Godavari at the boundary of Aurangabad and Ahmadnagar districts.

The drainage of the central area is done by the Bhima which issues from the Ghats northeast of Matheran and flows southeast across Poona district. The Nira flows below Rajgarh transversely west to east and joins the Bhima in Sholapur (Bhima valley). The Nira forms the boundary of Poona and Sholapur, the Bhima of Poona, Ahmadnagar and Sholapur; the Ghod which joins the Bhima above Dhond town divides Poona from Ahmadnagar. The Sina which flows southeast dividing Ahmadnagar from Osmanabad joins the Bhima in Akalkot (Sholapur). The Bhima and its tributaries thus drain the district: Poona, Sholapur and Ahmadnagar.

The Krishna drains the lower half of Maharashtra Western Ghats. It issues from north of Mahabaleswar (4,558') and the Koyna from south of the peak. They flow southeast and join off Karad in Satara district. The river Krishna is again joined in quick succession, first by the Yerla flowing south and draining eastern Satara, and next by the Warna which forms the boundary between Satara in the north and Kolhapur in the south. The Krishna is again considerably augmented by streams which flow northeast draining the lower half of Kolhapur. Thereafter the Krishna flows southeast across the

middle of Sangli (Krishna Gap) into Bijapur (Mysore).

The extreme South of Kolhapur is drained by the Ghataprabha and its tributary which unite in Belgaum outside of the Division.

The chief food crop is *jowar* except for a certain amount of rice in the Ghataprabha Valley in Kolhapur. The chief cash crop is groundnut as against cotton in Marathawada.

This Division is principally a millet tract in which rice is grown only in Kolhapur. The chief cash crop is groundnut but sugarcane is grown in Kolhapur. Population density is lowest in Ahmadnagar (274). It is 320 in Sholapur, 355 in Satara, 371 in Sangli, 410 in Poona and 501 in Kolhapur. The proportion of scheduled tribes is negligible except in Poona (3.6 per cent) and Ahmadnagar (6 per cent). The proportion of scheduled castes is comparatively low or moderate in all districts except Kolhapur (11.4 per cent) and Sholapur (12.8 per cent). The principal language is Marathi.

The urban ratio is moderate in Satara and Ahmadnagar, moderately high in Sangli and Kolhapur and high in Poona and Sholapur. Natural increase is moderate in Satara and moderately high in all other districts. Immigration is moderately high in all districts except Poona where it is high. The proportion of children 0-4 to women 15-44 is moderate in Kolhapur and moderately high in all other districts.

Kolhapur is placed in the second level of development with high values in IV and V, medium values in III and VI and low value in II. Satara and Sangli are placed in the third level with high values in IV and V, medium values in III and VI, high value for Satara and medium value for Sangli in II. Poona, Sholapur and

Ahmadnagar are placed in the top level of development, with high values in II, IV and V and medium values in III. In VI Poona has top value and Sholapur and Ahmadnagar medium values.

All districts generate their own electricity except Poona which is connected to grid and Kolhapur which is connected to grid and generates its own electricity. The more important organised industries are

machinery and food industries in Poona, Satara, Sangli, Kolhapur and Ahmadnagar; textiles in all districts except Ahmadnagar, and Satara; transport equipment in all districts except Sangli and Ahmadnagar; non-metallic minerals in all districts except Poona, Sholapur and Ahmadnagar; chemicals in Satara and Ahmadnagar; processing of agricultural produce in Sholapur and Ahmadnagar; and generation of electricity in Sangli.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.16 WESTERN GHATS (DESH)

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	55	5	2	11	37	18	15	4
Agricultural	19	..	..	2	17	9	6	2
Artisan	2	..	..	..	2	1	1	..
Manufacturing	12	3	2	2	5	2	3	..
Trade and commerce	2	..	..	..	2	2	..	..
Transport	2	..	..	1	1	1	..	..
Service	18	2	..	6	10	3	5	2

Class I cities with their function:
Manufacturing—Sholapur, Sangli, Kolhapur.
Service—Poona, Ahmadnagar.

4.2 Andhra Deccan.

Andhra Deccan has been divided into 2 Divisions: Telengana and Rayalaseema. The Subregion is bounded in the north by the Nirmal Range, the Wardha and Pranhita rivers, on the east by the Mahendragiri Hills and the Bastar mass, on the west by the Raichur Doab and the Bellary peneplains and on the south by the Tiruppati Hills. The Deccan portion of Andhra is called Telengana, the littorals, Andhra or Andhra coastal, and the so-called ceded area from Madras (Anantapur, Cuddapah, Kurnool and

Chittoor) Rayalaseema. Chittoor is transitional to Tamilnad. The chief rivers flowing from west to east are, from north to south; the Godavari, the Krishna, the Tungabhadra, the Penner and the Cheyyeru.

The entire subregion is a predominantly *jowar* tract with rice in the low valleys, the latter emerging as the first crop only where valleys are extensive as in Karimnagar (Godavari and Manedamada). Nizamabad (Nizamsagar irrigation) and Chittoor (low lands). Except for cotton in

Adilabad, the principal cash crops in Telengana are oilseeds. In Rayalaseema they are groundnut and cotton. The language is mainly Telugu.

The bulk of the Telengana Division consists of peneplains developed on the Archaean gneisses. In the north, particularly in Khammam (Singareni), faulting has preserved a belt of Gondwanas (with some coal) along the lower Godavari trough. The levels are usually between 1,600 and 2,000 ft. The Tungabhadra and Krishna Valleys lie at 1,000—1,500 ft. The Bhima-Godavari doab further north consists of great swelling upland reaching 2,400 ft. in places. "But the general aspect nearly everywhere is that of practically senile peneplains, intersected by broad, open, almost completely graded valleys, and littered with monadnocks which range from considerable hill groups to innumerable fantastic tors which look like dumps of gigantic road-metal.

Bare hills, reddish-khaki plains with scattered thorny scrub, rivers merely ribbons of sand for half the year or more, tanks banded into the little valleys, all combine to produce a landscape with a desolate and brooding charm" (Spate). This landscape, such as Spate speaks of, is seen at its best and most haunting in Anantapur and Cuddapah districts of Rayalaseema.

The contrast between Marathawada and Telengana is striking.

The northern boundary of Adilabad district is formed by the Penganga running west to east to join the Wardha in Rajura taluka (Chanda, Maharashtra). Sirpur taluk of Adilabad is bounded on the east by the Pranhita which joins the Godavari west of Sironcha (Chanda). The Manjra drains west Medak and Nizamabad and falls into the Godavari as it enters Telengana to divide Adilabad from Medak. The Kadam issues north of Nirmal Hills and flows into the Godavari. Further south-

east, the Godavari is joined by the Indravati and forms the eastern boundary of Khammam (Telengana). The Maner forms the boundary between Nizamabad and Karimnagar, while another stream, the Manedamada, drains Karimnagar before it falls into the Maner.

In the east of the Division, the Godavari runs down the south east of Khammam, leaving Bhadrachalam taluk on the left bank. Before it pierces the Papikonda Range across the north of West and East Godavari, lining the southeast of Khammam, the Godavari is joined at Kunavarani by the Konda which is made of two rivers the Sabari and Sileru.

Hyderabad is drained through the middle, west to east, by the Musi river which passes through the city. The Musi travels through Ramannapet taluk of Nalgonda and is joined by the Aleru which travels down from the northwest. The Musi thereafter travels along the Western boundary of Huzurnagar (Nalgonda eastern border) to join the Krishna. Further east, first the Paleru and then the Muneru, travel south through Nalgonda and Khammam respectively to fall into the Krishna, the first near the trijunction point of Nalgonda, Krishna and Guntur districts, the second well into Krishna. The Krishna forms the boundary between Guntur and Krishna districts.

The Raichur Doab is formed by the convergence of the Krishna flowing down from Mahabaleswar in the north and the Tungabhadra from Sringeri (Kudremukh 6,215') in Chikmagalur in the southwest, at Nandikotkur taluk of Kurnool to form the boundary line between Mahbubnagar in the north and Kurnool in the south. Between this confluence and the point at which it is augmented by the Musi, it is joined first by Dindi which drains East Mahbubnagar and then by Peddavagu which forms Nalgonda's eastern boundary. Before the Tungabhadra unites with the Krishna it is

joined by the Hagari which cuts through the Western margin of Anantapur and

forms the Western boundary of Kurnool along Alur and Adoni taluks.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.2 ANDHRA DECCAN

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	123	3	6	23	91	39	52
Agricultural	49	..	..	1	48	16	32
Artisan	22	..	1	7	14	8	6
Manufacturing	17	2	4	3	8	5	3
Trade and Commerce	4	..	..	1	3	2	1
Transport	4	..	..	1	3	1	2
Service	21	1	1	10	15	7	8

4.2.1 4 The Deccan 4.2 Andhra Deccan 4.2.1 Telengana (Southern Deccan).

This Division consists of the 9 districts of Telengana: Adilabad, Nizamabad, Medak, Hyderabad, Mahbubnagar, Karimnagar, Warangal, Khammam and Nalgonda. This is preeminently a *jowar* tract, in which rice takes the lead in irrigated districts like Nizamabad and Karimnagar, but becomes secondary in other districts. Maize is common. Sugarcane is grown in Nizamabad in which is situated the biggest sugar mill of Hyderabad State. Cotton is grown in Adilabad. In all other districts oilseeds are extensive while groundnut is grown in Mahbubnagar, Karimnagar, Warangal, Khammam and Nalgonda.

Population density is low in Adilabad (161), Khammam (173) and Mahbubnagar (223), moderate in Nalgonda (287), Warangal (312), Nizamabad (328), Medak (334) and Karimnagar (353) and high in Hyderabad (688). The proportion

of scheduled tribes is negligible in all other districts except Adilabad (13 per cent) and Khammam (16 per cent); but the proportion of scheduled castes varies from 13.5 per cent in Khammam to 19.4 per cent in Karimnagar. The principal language is Telugu.

The urban ratio is, as might be expected, highest in Hyderabad, only moderately high in Adilabad, Nizamabad, Warangal and Khammam and moderate in Medak, Mahbubnagar, Karimnagar and Nalgonda. The rate of natural increase is high in Khammam, moderately high in Nizamabad and Nalgonda, moderate in Adilabad but low everywhere else. The level of immigration is high in Nizamabad, Hyderabad and Khammam, moderately high in Adilabad, moderate in Warangal and Nalgonda and low in Medak, Mahbubnagar and Karimnagar. The proportion of children 0-4 to women 15-44 is low in Nizamabad, Medak and Hyderabad and only moderate everywhere else.

The Division presents much heterogeneity and a wide range in development. Medak and Mahbubnagar are at the lowest level with high values only in II and medium values in all other blocks. Karimnagar and Nalgonda are placed in the second level of development with identical rankings, high in II, medium in III, V and VI and medium value for Karimnagar and high for Nalgonda in IV. Adilabad, Nizamabad, Warangal and Khammam are placed in the third level with total scores close to each other's. Adilabad, Nizamabad and Warangal have identical rankings in the various blocks, high in II and IV and medium in III and VI and high value in Nizamabad and medium for Adilabad and Warangal in V. Khammam alone has high value in IV and medium values in II, III, V and VI. Hyderabad alone is placed in the top level of development with high values in

II, IV and V and medium values in III and VI.

All districts are connected by grid. Food industries are common to all districts except Adilabad and Hyderabad; tobacco is common to all districts except Medak; textiles is important in Adilabad, Hyderabad, Karimnagar and Warangal; cotton ginning and pressing is important only in Adilabad, a cotton growing district, and so is paper; transport equipment is important in Nizamabad, Medak, Hyderabad, Mahbubnagar, Khammam and Nalgonda; chemicals are important in Nizamabad, and Khammam; machinery and metal products are important in Hyderabad, Karimnagar and Nalgonda; leather except footwear in Warangal and Nalgonda; printing and publishing in Hyderabad and Khammam; non-metallic mineral products in Adilabad; and wood industries in Karimnagar.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.21 TELEGANA (SOUTHERN DECCAN)

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	71	2	3	10	56	22	34
Agricultural	27	..	..	..	27	6	21
Artisan	9	..	..	2	7	4	3
Manufacturing	13	1	3	3	6	4	2
Trade and Commerce	2	..	..	..	2	1	1
Transport	1	..	..	..	1	..	1
Service	19	1	..	5	13	7	6

Class I cities with their function:
Manufacturing—Warangal,
Service—Hyderabad.

4.22 4 The Deccan 4.2 Andhra Deccan
4.22 Rayalaseema.

Except for Guntur and Nellore districts the country south of the Krishna in Andhra Pradesh constitutes Rayalaseema. Kurnool is lined in the north by the Gajjalkonda and Cumbum Hills. Guntur and Nellore are separated from Rayalaseema in the West by the great arch of the Nallamalais Range, extended to the Southeast by the parallel Vellikonda Range which meets the Nagari Hills at the Southeastern corner of Chittoor. The Palkonda Range with the Errakonda Range to its west is placed northwest to southeast in the South of Cuddapah, its southeastern tip being Tirupati.

The western arcs consist of the Erramalai-Yellamalai-Seshachalam-Palkonda Hills. The Papagni and Cheyveru descend through gorges from the Palkonda scarps to flow northeast to join the Pennar.

Anantapur is drained by the Pennar which takes its rise around Muddagiri and Nandi Drug in Tumkur (Mysore), travels northeast and flows east through Tadpatri, skirting the southern slopes of the Yellamalai along Proddatur and Cuddapah across Nellore to the sea. The Chitravati rises from the northeast of Nandi Drug and flows northeast into Pennar at the foot of the Yellamalai. The Papagni has its source within a few miles to the east of that of the Chitravati, passes through the Seshachalam gorges and falls into Pennar north of Cuddapah town. The Cheyveru is joined by the Punchu at the remarkable confluence-gorge in the Palkondas and flows up the Razampetta corridor, north-east to join the Pennar between Sidhout (Cuddapah) and Atmakur (Nellore).

The large Anantapur-Chittoor basin is thus subdivided into several interior longitudinal basins—the Pennar-Chitravati, the Chitravati-Papagni, the Papagni-Cheyveru—in each of which the slope is from southwest to northeast. This basin gives in the east on the transitional zone of the

Swarnamukhi Valley below Tirupati with its intermont basins under the stows of the Nagari Hills.

To the north of the Anantapur-Chittoor basin is the central Kunderu basin in Cuddapah consisting of the longitudinal Kurnool-Cuddapah plain (Kunderu river) and the central longitudinal Sagileru Valley (Sagileru-Gundlakamma river) down the eastern border of Cuddapah in the Nallamalais. These basins are thus made by the rivers which flow from the north to the south to join the Pennar. They are from West to East the Kunderu and the Sagileru. Both drain Kurnool and Cuddapah. The Kunderu basin forms a great crescent, with its middle in the wide Nandyal Valley (700–800'). The Western limits are marked off from the Deccan Plateaus by the outfacing scarps of the Erramalais, Seshachalam and Palkonda Ranges. In the South, the Palkondas form a very fine scarp overlooking the Anantapur-Chittoor basins. The eastern limit of the central Kunderu basin is formed by the parallel Nallamalais and Vellikondas ('outside hills') with a beautifully regular development of longitudinal valleys, chiefly the Sagileru. The hills are wooded and are peopled by scheduled tribes, chiefly the Chenchus.

The crops are mostly jowar, other millets, groundnut and some irrigated paddy. The topography in the longitudinal valleys favours the construction of large tanks by bunding a transverse tributary gorge. The generally arid aspect is mitigated by groves of mangoes around the tanks; houses are stone or mud-walled, and round beehive huts, striped vertically in white and rust, attest the Telugu country' (Spate).

Spate excels himself in describing what one identifies as the country between Tirupati and Kalahasti and Tirupati and Madras. The valley between Tirupati, Chandragiri and Nagari Hills upto

Kalahasti in the northeast is the Swarnamukhi Valley, made by the Swarnamukhi river, while the one to the southeast of Tirupati created by the Nagari river towards Tiruvallur is the Nagari Valley. The Nagari basins are better cultivated than those of the plateau, but even they are not very impressive agriculturally; their flattish floors are broken by patches of sandy soil, almost bare but for a thin grass/acacia cover, and by naked rock exfoliation surfaces, looking like *roches moritonnees* and often used as threshing floors. Around the plain a lateritic piedmont slope fringes the craggy hills, with boulders as big as a small house on the talus slopes. Below the lateritic apron is a better-watered and more fertile piedmont strip, which is in places a solid belt of paddy, the zone of bush and trees along the laterite margin being a favoured settlement-line. It is a strange landscape: fantastic hills, stacked and pinnaced, long ridges capped by massive quartzites, reflected in the still waters of the big tanks with their borders of toddy palms; an eerily attractive picture under iron-blue or grey skies?

This Division is also a large *jowar* tract with rice as a subsidiary crop, but the three millets dominate. The cash crops are groundnut in all districts and cotton in Kurnool and Anantapur.

Population density is low in Kurnool (207), Cuddapah (226) and Anantapur (239) but comparatively high in Chittoor (328). The proportion of scheduled tribes is small in all four districts but that of scheduled castes is moderate in Kurnool

and Cuddapah and fair in Anantapur and Chittoor. The principal language is Telugu.

The urban ratio is moderately high in all districts but the rate of natural increase is low in Cuddapah and Chittoor and only moderate in Kurnool and Anantapur. Immigration is low in Kurnool and Cuddapah and very moderate in Anantapur and Chittoor. The proportion of children 0-4 to women 15-44 is low in Cuddapah and Chittoor and moderate in Kurnool and Anantapur.

Cuddapah and Chittoor are placed in the second level of development. Cuddapah has high values in II, IV and V and medium values in III and VI. Chittoor has high values in IV and VI and medium values in II, III and V. Kurnool and Anantapur are placed in the third level of development with high values in II and IV and medium values in III. Kurnool has high values while Anantapur has medium values in V and VI.

All districts are connected by grid. Food industries and textiles are common to all districts. Cotton ginning and pressing is common to Kurnool, Cuddapah and Anantapur. Non-metallic mineral products are common to all districts except Cuddapah. Printing and publishing is important in Kurnool; chemicals and transport industries in Cuddapah; tobacco and metal products in Chittoor.

This Division is thus more or less homogeneous, development in Kurnool and Anantapur being a matter more of degree than kind.

Function of town	Class of town						
	Total	I	II	III	IV-V	IV	V
1	2	3	4	5	6	7	8
Total	52	1	3	13	35	17	18
Agricultural	22	..	..	1	21	10	11
Artisan	13	..	1	5	7	4	3
Manufacturing	4	1	1	..	2	1	1
Trade and Commerce	2	..	..	1	1	1	..
Transport	3	..	..	1	2	1	1
Service	8	..	1	5	2	..	2

Class I cities with their function:
Manufacturing —Kurnool.

4.3 Mysore Deccan.

This subregion consists of the South Deccan Plateaus. It is divided into 5 Divisions: Inland Karnataka consisting of 2 districts, Belgaum (although Belgaum is in some ways more related to Bijapur) and Dharwar; Southern Deccan Plateau with 3 districts, Bidar, Gulbarga and Bijapur, more appropriately Northern Maidan; Central Maidan consisting of Raichur Doab and Bellary Peneplains; South Maidan consisting of 5 districts: Chitradurga, Tumkur, Mandya, Bangalore and Kolar; and Malnad consisting of 5 districts: Shimoga, Chikmagalur, Hassan, Coorg and Mysore (although it is usual to exclude Mysore from Malnad).

South of the Maharashtra Plateau the Mysore table land rises still higher and the rock type changes from lava to gneiss. The northern border is more complex. The great scarps of the Kaladgi sandstones are cut across by the Ghataprabha and Malaprabha. South of the hills a plain of black soil is formed in Dharwar. The topography is a rolling upland, drained by

the Cauvery in the south, the Tungabhadra, the Malaprabha and Ghataprabha in the north and the North Pennar, Palar and South Pennar or Ponnaiyar (Pinakini or Purnahar?) rivers in the northeast and east. The population is concentrated in the valleys, while the uplands contain pastures. The most extensive and important Divisions are the Malnad or hilly (mal, malai) country in the west and the more open 'champaign' country of the maidan (parkland) in the east. In the extreme west, north of Coorg, the Malnad overlaps into the Ghats, here reaching 5,000-6,000 ft. It is highly dissected by the headwaters of the Tunga and Bhadra, and of the Cauvery, all of which rise on the very crest of the Ghats, only about 30 miles east of the Arabian Sea.

A strip about 6-14 miles wide in the extreme west carries tall evergreen forest, but most of the Malnad has a mixed deciduous vegetation of teak, sissoo and sandalwood. The most interesting of the many complex small ranges of the Malnad is the Baba Bhudan group (Peak 6,317'),

the first home of coffee in India. The Maidan consists of rolling plateaus rising in the east (Tumkur and Kolar) into disjointed granitic hills of Tancastean irregular plan and elevation. There is however a great deal of local diversity.

The most important crops in inland Karnataka, Southern Deccan Plateau, Raichur and Bellary are *jowar* and millets, groundnut and cotton. In the Malnad the most important crop is rice followed by *ragi* and *jowar*. In the Maidan again the important crops are *jowar* and *ragi*, followed by rice and groundnut. Tank-irrigation is important and made possible by the bunding of narrow streams. There are nearly 40,000 tanks, large and small, over half the irrigated area depending on tanks.

Villages are larger, more compact and widely spaced in the northern part of the plateau than in the Maidan. In the Malnad tiny hamlets abound. Houses are generally mudwalled or of stone, usually low built around a courtyard, which may be surrounded by carved and painted verandahs. Thatch roofing is the rule and tile is a sign of prosperity. In the east flat roofs are common.

The Central Sahyadris or Western Ghats form the western flank of Belgaum and Dharwar. The slope of Dharwar is from southwest to northeast while that of Belgaum is from west to east. The Krishna enters Belgaum between Athani and Raibag taluks and flows into Bagalkot (Bijapur) where it is joined from the southwest by the Ghataprabha passing through Gokak and Mudhol taluks of Belgaum. Further east the Malaprabha passing through Badami and Hangund taluks of Bijapur joins the Krishna at Hangund. The Dhane flows down southeast and joins the Krishna at near Lingsugur

(boundary of Gulbarga and Raichur). The Bhima flows down from the northwest and joins the Krishna as it leaves Gulbarga at Yadgir taluk. Further north the Manjra crosses the Bidar transversely in Bhalki.

The Tunga and the Bhadra take their rise from the north and south of Sringeri (Kudremukh peak 1,892m-Chikmagalur) respectively and travel northeast to meet north of Bhadravati (Shimoga). Thereafter the Tungabhadra flows first as the boundary between Shimoga and Chitradurga and then between Dharwar and Bellary and thereafter between Raichur and Bellary. The Varada divides North Kanara and Dharwar from Shimoga but traverses Dharwar to fall into Tungabhadra between Harpanahalli and Hadagalli (Bellary). The Hagari flowing out northeast from Chikmagalur, through Vani Vilasa Sagar in Hariyur (Chitradurga-Tumkur), travels up Chitradurga and passing through Anantapur enters Bellary and falls into the Tungabhadra north of Siruguppa (Bellary). Tumkur is drained in the northeast by the North Pennar, and Kolar also in the northeast by the Chitravati and Papagni. Southeastern Kolar is drained by the upper reaches of the Palar while eastern Bangalore (Hoskote) is drained by the South Pennar or Ponnaiyar. The Cauvery takes its rise south of Mercara in Coorg and flowing east is joined from the northwest through Hassan (Belur, Alur and Arkalgud taluks) by the Hemavati at Krishnarajasagar. Further south the Kabbani joined by the Nugu travels from southwest to northeast through southwest Mysore and joins the Cauvery near Srirangapatnam followed by the Cauvery Falls and Sivasamudram (Mysore-Mandya). The Shimsa flows in a southeasterly direction forming the boundary in places of Mandya and Bangalore to fall into the Cauvery east of Sivasamudram. The Arkavati descending from Nandi Drug is entirely confined to the State flowing longitudinally to Cauvery. The Cauvery

marks the boundary of Mandya and Mysore and Bangalore-Mysore, *i.e.* Malnad from Maidan.

Counting from north to south the main basins and doabs are: (1) the Manjra Basin in Bidar; (2) the Bhima-Krishna Doab enclosing Bijapur and Gulbarga; (3) the Krishna-Ghataprabha Doab enclosing strips of Belgaum and Bijapur; (4) the Ghataprabha-Malaprabha Doab; (5) the Malaprabha-Krishna and Tungabhadra

Doab enclosing part of North Kanara, Dharwar and Raichur; (6) the Varada-Tungabhadra Doab enclosing Shimoga; (7) the Tungabhadra-Hagari Doab enclosing Chikmagalur, Chitradurga and Bellary; (8) the North Pennar-Chitravati-Papagni drainage in Tumkur; (9) the Palar drainage in Kolar; (10) the South Pennar or Ponnaiyar drainage in Bangalore and (11) the Cauvery-Hemavati-Kabbani-Shimsa-Arkavati drainage in Coorg, Hassan, Mysore, Tumkur-Mandya and Bangalore.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.3 MYSORE DECCAN

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	196	5	9	27	155	67	53	35
Agricultural	95	..	1	1	93	39	35	19
Port	1	..	..	..	1	1	..	..
Artisan	29	..	1	8	20	13	2	5
Manufacturing	28	3	3	10	12	5	5	2
Trade and Commerce	2	..	..	..	2	2	..	..
Service	41	2	4	8	27	7	11	9

4.31 4 The Deccan 4.3 Mysore Deccan 4.31 Inland Karnataka.

This Division consists of Belgaum and Dharwar, although Dharwar, thanks to its black soil in the east, is more akin to Bijapur. It is a millet tract which also grows rice and wheat. The principal cash crops are groundnut and cotton. Population density is fairly even in the Division: density in Belgaum being 385 and in Dharwar 369. The proportion of scheduled tribes (2.6 and 0.5) as well as of scheduled castes (8.7 and 5.6 respectively) is comparatively low. The principal language is Kannada.

The urban ratio is high in Dharwar and moderately high in Belgaum. The rate of natural increase is moderate in Belgaum and moderately high in Dharwar. The rate of immigration is moderate in both districts. But the proportion of children 0-4 to women 15-44 is moderately high in both.

Belgaum is placed in the second level of development and has high values only in IV and V with medium values in all others. Dharwar is placed in the third level of development with high values in II, IV and V and medium values in the rest.

Belgaum generates its own electricity but Dharwar is connected to grid. Food, tobacco, cotton ginning and pressing, textiles and transport equipment are important industries in both.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.31 INLAND KARNATAKA

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	30	2	1	5	22	19	3
Agricultural	19	..	..	..	19	17	2
Artisan	5	..	1	2	2	2	..
Manufacturing	3	1	..	2	..	..	..
Service	3	1	..	1	1	..	1

Class I cities with their function :
Manufacturing—Hubli-Dharwar.
Service—Belgaum.

**4.32 4 The Deccan 4.3 Mysore Deccan
4.32 Southern Deccan Plateau (North
Maidan).**

This Division is a continuation of the Marathawada (4.15) Division of Maharashtra Deccan and is more akin to it than a separate Division. But for administrative and zoning convenience it has been called the North Maidan area of the South Deccan Plateau. The Division consists of 3 districts, Bidar, Gulbarga and Bijapur.

This is a millet tract, in which Bijapur grows a little wheat. All districts grow groundnut and Gulbarga and Bijapur grow cotton. Population density is lowest in Gulbarga (223), low in Bijapur (253) and comparatively high in Bidar (319). The proportion of scheduled tribes is negligible. That of scheduled castes is low in Bijapur and fair in Bidar and Gulbarga. The principal language is Kannada, although in Bidar its proportion is just above 50 per cent.

The urban ratio is moderately high in all districts but the rate of natural increase is low in Gulbarga and only moderate in Bidar and Bijapur. Immigration is moderate in all three districts. The proportion of children 0-4 to women 15-44 is low in Bidar and Gulbarga and moderate in Bijapur.

All 3 districts are placed in the second level of development but each has a different pattern. Thus Bidar has high values in II and IV and medium in III, V and VI; Gulbarga has high values in II and VI and medium in III, IV and V and Bijapur has high values in IV and V, medium in II and VI and low in III.

The districts generate their own electricity. Food industries are important in all districts. There is no other organised industry in Bidar. Cotton ginning and pressing, textiles and non-metallic mineral products are important in Gulbarga and Bijapur; tobacco in Gulbarga and transport equipment in Bijapur.

Analysis of Town Groups and Towns by predominant function and size classes

4.32 SOUTHERN DECCAN PLATEAU
(NORTH MAIDAN)

Function of town	Class of town					
	Total	II	III	IV—V	IV	V
1	2	3	4	5	6	7
Total	29	2	8	19	15	4
Agricultural	12	..	..	12	8	4
Artisan	8	..	3	5	5	..
Manufacturing	5	1	4	..	..	..
Service	4	1	1	2	2	..

**4.33 4 The Deccan 4.3 Mysore Deccan
4.33 Raichur-Bellary (Central
Maidan).**

This Division consists of 2 districts: Raichur and Bellary. Raichur is contained in the Doab of Bhima-Krishna and Tungabhadra. It is entirely a millet tract and grows cotton and groundnut. Population density is low (203), scheduled tribes are negligible while the ratio of scheduled castes is only 10 per cent. The principal language is Kannada.

The urban ratio is moderately high but natural increase is low and immigration and proportion of children 0-4 to women 15-44 are moderate.

Raichur is placed in the lowest level of development with medium values in all the blocks.

The district is connected to grid. The main industries are cotton ginning and pressing, food, tobacco, transport equipment and printing and publishing.

Bellary is jowar country which grows cotton and groundnut. The density of

population is low (240). The proportion of scheduled tribes is negligible. The ratio of scheduled castes is 13.6 per cent. The principal language is Kannada.

The urban ratio is high, but the rate of natural increase is moderate, that of immigration moderately high and of children 0-4 to women 15-44 low.

The district is placed in the third level of development with high values for II, IV, V and VI and medium in III.

Bellary is connected to grid and the important industries are food industries, cotton ginning and pressing, machinery, transport equipment and printing and publishing.

Analysis of Town Groups and Towns by predominant function and size classes

4.33 RAICHUR-BELLARY (CENTRAL
MAIDAN)

Function of town	Class of town				
	Total	II	IV—V	IV	V
1	2	3	4	5	6
Total	17	3	14	6	8
Agricultural	12	1	11	5	6
Port	1	..	1	1*	..
Manufacturing	1	..	1	..	1
Service	3	2	1	..	1

*Agriculture is also predominant.

**4.34 4 The Deccan 4.3 Mysore Deccan
4.34 South Maidan.**

This Division consists of the 5 Mysore districts of Chitradurga, Tumkur, Mandya, Bangalore and Kolar, and is an extensive millet tract, the chief millet being ragi. Rice is grown as a second crop. Groundnut is grown in Chitradurga, Tumkur and Kolar and cotton only in Chitradurga.

Population density is moderate in Chitradurga (262), fair in Tumkur (336), moderately high in Kolar (406) and

Mandya (480) and high in Bangalore (802). The proportion of scheduled tribes is negligible in all districts but that of scheduled castes is appreciable ranging from 13 per cent in Mandya to as much as 25 per cent in Kolar. The principal language is Kannada although its strength is only 51 per cent in Bangalore and 53 per cent in Kolar.

The urban ratio is moderate in Tumkur and Mandya, moderately high in Chitradurga and high in Kolar and Bangalore. The rate of natural increase is low in Kolar, moderate in Tumkur and Bangalore and moderately high in Chitradurga and Mandya. The level of immigration is moderate in Chitradurga and Tumkur, moderately high in Mandya and Kolar and high in Bangalore. The proportion of children 0-4 to women 15-44 is low in Bangalore and Kolar, moderate in Tumkur and Mandya and moderately high in Chitradurga.

The Division enjoys a wide range of development. Tumkur is placed in the second level, Mandya and Kolar in the third

and Chitradurga and Bangalore in the fourth. Tumkur has high values in II and IV and medium values in III, V and VI. Mandya and Kolar have high values in IV and medium values in III and VI. In II, Mandya has high while Kolar has medium values and in V, Mandya has medium while Kolar has high values. Chitradurga and Bangalore are in the top level of development, Chitradurga has high values in II, IV and V and medium values in III and VI, while Bangalore has high values in IV and V and medium values in II, III and VI.

All districts are connected by grid. Food industries are important in all districts except Bangalore. Textiles are important in Chitradurga, Bangalore and Kolar; machinery in Chitradurga, Mandya and Bangalore; tobacco in Chitradurga, Tumkur and Kolar; chemicals in Tumkur, Mandya and Kolar; non-metallic minerals in Tumkur and Kolar; cotton ginning and pressing in Chitradurga; furniture and fixtures in Tumkur; wood industries, in Mandya; transport equipment in Bangalore.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.34 SOUTH MAIDAN

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	59	2	1	8	48	17	17	14
Agricultural	27	..	..	..	27	4	13	10
Artisan	13	..	..	2	11	6	1	4
Manufacturing	10	2	1	3	4	3	1	..
Trade and Commerce	2	..	..	..	2	..	..	..
Service	7	..	..	3	..	2	..	..

Class I cities with their function:
Manufacturing—Bangalore, Kolar Gold Fields.

4.35 4 The Deccan 4.3 Mysore Deccan
4.35 Malnad.

This Division consists of 5 upland districts: Shimoga, Chikmagalur, Hassan, Coorg and Mysore. The principal crop is rice in Shimoga, Chikmagalur and Coorg and *ragi* in Hassan and Mysore but millets are important in all districts. Groundnut is grown in Shimoga and Mysore. The Division has moderate population density. Density is low in Coorg (203), Chikmagalur (212) and Shimoga (251), but comparatively high in Hassan (334) and Mysore (369). The proportion of scheduled tribes is either negligible or low in all districts except Coorg where it is 8.4 per cent. The proportion of scheduled castes is moderate only in Coorg (9.5 per cent) but appreciable in the remaining districts varying from 14.3 per cent in Shimoga to 17.5 per cent in Mysore. The principal language is Kannada.

The urban ratio is moderately high in Chikmagalur, Hassan and Coorg, and high in Shimoga and Mysore. Both natural increase and immigration are moderate in Mysore, moderately high in Hassan and high in Shimoga, Chikmagalur and Coorg. The proportion of children 0-4 to women 15-44 is moderate in Mysore, moderately

high in Hassan, Chikmagalur and Coorg and high in Shimoga.

Hassan and Mysore are placed in the third level of development with high values in II and IV and medium values in III and VI. Hassan has medium value in V while Mysore has high value. Shimoga, Chikmagalur and Coorg are placed in the fourth level of development. Coorg has high values in III, IV and V and medium values in II and VI; Shimoga has high values in II, IV and V and medium values in III and VI; Chikmagalur has high values in II, III, IV and V and medium value in VI.

All districts are connected by grid. Basic metals are important in Shimoga-Bhadravati. Food industries are important in all districts except Hassan; paper and paper products in Shimoga and Coorg; chemicals in Shimoga, Chikmagalur, Hassan and Mysore; wood industries in Shimoga, Chikmagalur and Coorg; transport equipment in Chikmagalur and Mysore; non-metallic minerals in Chikmagalur; machinery in Hassan and Coorg; cotton ginning and pressing in Hassan; rubber and rubber products in Coorg; textiles and tobacco in Mysore.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.35 MALNAD

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	61	1	2	6	52	10	21	21
Agricultural	25	..	..	1	24	5	10	9
Artisan	3	..	..	1	2	..	1	1
Manufacturing	9	..	1	1	7	2	3	2
Service	24	1	1	3	19	3	7	9

Class I cities with their function:
Service—Mysore.

4.4 Tamilnad Hills and Uplands.

This Subregion consists of 2 Divisions: Nilgiri and Coimbatore Plateau.

4.41 Nilgiri.

'The Nilgiris (Blue Mountains) form a compact plateau of about 1,000 sq. m. with a summit-level of 6,000—8,000 ft. rising with extreme abruptness on all sides; on the eastern slopes there is a fall of 6,000 ft. in 1½-2 miles, the face of the Coimbatore plateau is hardly less steep, and on the north the Nilgiris are cut off from the 3,000-4000 ft. Mysore plateaus by the deep straight gash of the Moyar Trench (the Mysore Ditch), the narrow floor of which lies at 1,000'—2,000'. The massif is as it were islanded between the Moyar and the Bhavani to the south.' (Spate). The Kallar flows down Ootacamund and Coonoor.

The Nilgiri is virtually the trijunction point of the Western and Eastern Ghats and the Tamilnad Hills and Plateaus. Life in the Nilgiri is centred on Ootacamund (lying under the highest point of the plateau, Doda Betta, 8,760'), and its satellites Wellington and Coonoor. The Pykara rising southwest of Ootacamund is harnessed at Pykara Falls before it descends into the Moyar. The Bhavani flows southwest to northeast hugging the foothills.

4.42 Coimbatore Plateau (Kongunad).

The Coimbatore Plateau is studded with a series of ranges which make a great arc with its outer side towards the Bay of Bengal. From the north to the south they consist of (1) the Javadi Hills in the north and Tiruvannamalai in the south of North Arcot; (2) the Melagiri Hills in north-west Salem and the Shevaroy Hills and Kalrayan Hills in southeast Salem, the Kollaimalai Hills in South Salem and South Arcot; (3) the Pachaimalai Hills in north Tiruchirapalli; (4) the Sirumalai Hills in Melur (Madurai); and the Anaimalai,

Palni and Andipatti Hills in West Madurai; (5) the Madurai Hills in Central Madurai; (6) the Shencottah in West Tirunelveli and (7) the Mahendragiri in Kanyakumari.

The highest peaks are Doda Betta (2,637m), Kodai Kanal (2,506m) and Anai Mudi (2,695m) which is however in Devicolum (Kerala).

The front to the Palghat gap is steep and in the east remarkably straight. The southeastern flanks of the Palnis overlooking the upper Vaigai reentrant, such as Nilakottai and Tirumangalam taluks, are also remarkably abrupt as also the Varushanad Valley (Srivilliputtur taluk, Ramanathapuram) containing the upper reaches of the Vaigai below the Cardamom and Andipatti Hills. Below the Shencottah gap in Tenkasi (Tirunelveli) 'the change from the jungleclad mountain to the tank-pitted Tamilnad Plain is very sudden'. (Spate)

Proceeding from the north to the south the Subregion may be divided into four sections according to their river regions: (1) Palar-Cheyyar through North Arcot and Chingleput; (2) The Cauvery and its tributaries across Nilgiri, Coimbatore, Tiruchirapalli and Thanjavur; (3) the Vaigai across Ramanathapuram and (4) the Tambraparni across Tirunelveli. All flow naturally from the western hills and plateaus into the Bay of Bengal on the Coromandel Coast.

The Palar or Paleru drains Kolar and flows by the northern slopes of the Javadi Hills and is joined midway between Kanchipuram and Chingleput by the Cheyyar flowing in a northeasterly direction from the south of the Javadis. The Penner or Ponnaiyar flows diagonally (northwest-south-east) across Salem along the northern edges of the Shevaroy to Fort St. David-Cuddalore in South Arcot. The Vellar is fed by two main branches, one from the

Shevaroy in the north and the other from the Pachaimalais in the south across South Arcot to Porto Novo.

In the central stretches of Madras the Cauvery enters the State from Kollegal taluk of Mysore through the valley between the Southern slopes of the Melagiris in the north, is harnessed at the Hogenakal Falls, before it flows into the Stanley Reservoir in Salem. The Biligiri (white mountain) Rangan Hills and the smaller ranges like Attimalai and Madheswar-malai intervene between the Cauvery and Moyar. The Moyar rising west of Doda Betta skirts the north of Nilgiri and is joined by the Bhavani which descends from the Coonoor side where it is dammed up in transit at Bhavani Sagar (Lower Bhavani Project). The Noyil rises from a 1,998m. peak west of Coimbatore, traverses the district to fall into the Cauvery at the junction of Coimbatore and Tiruchirapalli districts. The Amaravati with its tributaries rises from the Anaimalai and Palni Hills to flow northeast into the Cauvery at Karur (Tiruchirapalli). These three rivers drain very mature valleys into the Cauvery. The Bhavani and the Amaravati are perennial, but the Noyil is dry for most of the year, with practically no water in its lower course and little in the middle.

At Tiruchirapalli the Cauvery creates a genuine mesopotamia in Srirangam Island and splits into two. The left or northern arm, the Coleroon, travels northeast to fall into the sea south of Chidambaram, marking the boundary first between Tiruchirapalli and Thanjavur and next between South Arcot and Thanjavur. The right or southern arm, the Cauvery makes an enormous delta with the Vellar.

The Vaigai rises in the Varushanad valley formed by the Palnis in the north, the Cardamoms in the west and the Periyar Hills in the south. Its tributary, Suruli, is formed in the Kambam Valley west of Varushanad. At first the Vaigai flows northeast and then in a great sweeping

curve due southeast across Madurai and Ramanathapuram down to Pamban Channel. The Vaigai is perennial only in the high Varushanad Valley, in contrast to its tributary the Suruli, which has feeders direct from the Cardamoms, as well as an artificial supply of Periyar water. Rice and millets are the staple crops with considerable cotton and tobacco.

Western Ramanathapuram and northern Tirunelveli is drained by the Vaipuri. Southern Tirunelveli is drained by the Chittar flowing from the northwest and the Tambraparni from the southwest through the Papanasham Reservoir to fall into the Gulf of Mannar.

West of the middle Palar the Mysore Ghat descends in a series of steps from a general level of 3,000 ft. and more through a broad shelf at about 2,250 ft. Both the ghat scarps and the line of the Javadis have in general straight trends, and the Tamilnad Hills have flattish surfaces at heights comparable to those of the plateau. The Tamilnad summits are generally higher than the opposite heights of the Mysore Plateau: 3,600-3,800 ft. in the Javadis, 5-5,400 in the Shevaroy. The steep flank of the hills are usually forested, but within this girdle of jungle the plateaus carry a surprisingly large agricultural population. On the shelf below the main Mysore Ghat much land is still under forest, mostly rather open and used mainly for grazing. This is geographically, and perhaps historically, an off-shoot of the famous cattle breeding centres of Mysore (the famous Amrit mahal breed which used to be raised in Channarayana for drawing gun-carriages in Tipu Sultan's time is now almost extinct, but the finelimb-iron-grey Hillikars with their tuning fork horns are the counterpart of the noble Harianas of the Punjab); 'the Dharmapuri/Krishnagiri cattle markets are the main source of heavy draught animals for an area stretching from Malabar to Chittoor, while the best animals are sold

as far afield as Madura and Tinnevely as coach bullocks'. (Spate). The whole of Salem district, Gudiyatham and Tiruppattur of North Arcot, Gobichettipalayam and Erode taluks of Coimbatore and Karur taluk of Tiruchirapalli are studded with cattle markets and tanneries. The weekly shandies engage in brisk cattle business. This is essentially a dry crops area. The three main millets are the staple food crops, rice being important towards the margins of the region—where the Palar opens out and on the southern flanks of the Tamilnad Hills. But the Lower Bhavani Sagar Project has converted large tracts (193,000 acres) in Coimbatore (Gobichettipalayam, Bhavani, Erode, Dharapuram) and Tiruchirapalli (notably Karur) into the most prosperous rice country. In the south around Salem, groundnut and some cotton are grown. The Telugu-speaking Reddis are skilled tank cultivators.

Below the island of Sivasamudram the river plunges through a succession of wild gorges, with right-angle staircase bends conforming to the northwest-southeast and southwest-northeast stresses of the plateau edge. The Hogenakal Falls may

be taken as the end of the plateau course. There is, however, another narrow straight gorge, west of Salem, and this provides the emplacement for the Mettur Dam.

Between the Cauvery and Palghat lies an extensive low plateau; Coimbatore. The individuality of this region comprising the Madheswarmalai, the Biligiri Rangan Hills, and the Attimalai, is attested by the survival of its ancient name Kongunad—roughly Coimbatore district, southwest Salem (Omalur, Salem, Sankari, Tiruchengode, Rasipuram and Namakkal taluks) and Karur taluk of Tiruchirapalli that is between the Cauvery in the north and Amravati in the south. Rice is unimportant in Kongunad except in the command area of the Lower Bhavani Sagar Project but cotton, groundnut and, recently, sugarcane are important. Paddy is practically confined to ayacuts (areas supplied from anicuts or weirs) in the major valley bottoms. The tract is preeminent in irrigated garden cultivation. For example, Erode daily sends truckloads of vegetables to Madras by road. There is much pasturing and well irrigation has made spectacular progress.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

4.4 TAMILNAD HILLS AND UPLANDS								
Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	110	5	10	31	64	33	29	2
Agricultural	20	..	..	4	16	9	7	..
Artisan	24	1	1	5	17	6	10	1
Manufacturing	28	4	4	8	12	8	4	..
Trade and Commerce	4	..	1	2	1	..	1	..
Transport	4	..	..	1	3	2	1	..
Service	30	..	4	11	15	8	6	1

4.41 4 The Deccan 4.4 Tamilnad Hills and Uplands 4.41 Nilgiri.

The Division consists of the single district of Nilgiri. The chief crops are rice and potato and the cash crops tea and coffee. Population density is 417 persons per square mile. The proportion of scheduled tribes is low but the percentage of members of scheduled castes is 19. Tamil is the strongest single language although its percentage is only 40.

The urban ratio, the ratio of natural increase and immigration are high but the proportion of children 0-4 to women 15-44 is moderate, evidence of high migrant labouring population among women.

The district is placed in the highest level of development with high values in III, IV and V and medium values in II and VI.

The district is connected to grid. The main industries are tea and coffee, transport equipment, printing and publishing, machinery and miscellaneous industries.

Analysis of Town Groups and Towns by predominant function and size classes

4.41 NILGIRI							
Function of town	Class of town						
	Total	II	III	IV—V	IV	V	
1	2	3	4	5	6	7	
Total	7	2	2	3	2	1	
Manufacturing	4	..	2	2	2	..	
Service	3	2	..	1	..	1	

4.42 4 The Deccan 4.4 Tamilnad Hills and Uplands 4.42 Coimbatore Plateau (Kongunad).

This Division consists of North Arcot, Salem, Coimbatore and Madurai. The chief

crops in Salem and Coimbatore are the three millets and rice while in North Arcot and Madurai it is rice and millets. All districts grow groundnut and Coimbatore and Madurai grow cotton.

Population density is high in all districts. Salem has 539 persons per sq. mile, Coimbatore 590, Madurai 660 and North Arcot 671. The proportion of scheduled tribes is negligible in Coimbatore and Madurai and very low in North Arcot (1.9) and Salem (2.6). But the proportion of scheduled castes is appreciable, varying from 14.5 per cent in Salem to 19.7 per cent in North Arcot. The principal language is Tamil.

The urban ratio is moderately high in North Arcot and Salem and high in Coimbatore and Madurai. The rate of natural increase is low in all districts and so is immigration in North Arcot and Salem. Immigration is moderate in Coimbatore and Madurai. The proportion of children 0-4 to women 15-44 is low in all districts.

Salem is placed in the third level of development with high values in II, IV and V and medium values in III and VI. Coimbatore, Madurai and North Arcot are placed in the highest level with high values in II, IV, V and VI and medium values in III.

All districts are connected to grid. The chief organised industries are textiles and food industries in all districts. Chemical industries are located in North Arcot and Salem; electrical machinery is manufactured in Salem and Madurai, transport equipment in Coimbatore and Madurai, machinery in Coimbatore and Madurai, non-metallic minerals (cement) in Salem, leather products and printing and publishing in North Arcot.

4.42 COIMBATORE PLATEAU (KONGUNAD)

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	103	5	8	29	61	31	28	2
Agricultural	20	..	..	4	16	9	7	..
Artisan	24	1	1	5	17	6	10	1
Manufacturing	24	4	4	6	10	6	4	..
Trade and Commerce	4	..	1	2	1	..	1	..
Transport	4	..	..	1	3	2	1	..
Service	27	..	2	11	14	8	5	1

Class I cities with their function :

Artisan—Salem.

Manufacturing—Vellore, Coimbatore, Kurichi, Madurai.

REGION 5 THE WEST COAST PLAINS

The entire Coastal Shelf on the Arabian sea has been taken as one Region and divided into 5 Subregions: (1) Kutch and Kathiawar, (2) Gujarat Plain and Dangs, (3) Konkan Coastal Lowland, (4) Konkan Kerala Transition and (5) Kerala Coastal Plains—Western and Southern Ghats (South Sahyadri).

Kutch and Kathiawar have three Divisions: Kutch (1 district), Kanthadesh (2 districts) and Kathiawar (7 districts). Diu is an 'enclave' in Kathiawar. The second

Subregion Gujarat Plain and Dangs is divided into two Divisions: Gujarat Plain (6 districts) and Dangs. Daman is an 'enclave' of the Plains. The Konkan Coastal Lowland is divided into 3 Divisions: North Konkan (Dadra & Nagar Haveli and Thana), Ulhas Basin (Greater Bombay) and Kolaba-Ratnagiri. Konkan Kerala Transition has one Division: Coastal Karnataka (2 districts) and Goa. Kerala Coastal Plains has 2 Divisions: Malabar (3 districts) and Kerala Coastal Plain (6 districts). Mahe is an enclave.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5 THE WEST COAST PLAINS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	325	14	14	74	223	107	99	17
Agricultural	56	..	..	6	50	15	30	5
Port	62	9	5	14	34	16	16	2
Artisan	13	..	..	4	9	6	3	..
Manufacturing	58	2	3	16	37	21	14	2
Trade and Commerce	12	..	..	5	7	2	5	..
Transport	8	..	..	1	7	4	3	..
Service	116	3	6	28	79	43	28	8

NOTE : The following 4 towns though agriculturally predominant have been shown against Port :

Class III
Manerol (Gujarat)Class IV
Mulki (Mysore)Class V
Harnai (Maharashtra)Class VI
Tankara (Gujarat)

5.1 Kutch and Kathiawar.

"The Rann is a vast expanse of naked tidal mudflats, a black desolation flecked with saline efflorescences, or the sudden flights of great flocks of flamingoes; here and there the banks of dead creeks are picked out in a white skeletal outline of salt or scum. To the north the desert of mud and the desert of sand in the Thar merge almost imperceptibly. The normal dendritic pattern of the creeks has been interrupted by earthquakes, notably that of 1819 which interrupted the old Indus distributaries into the Rann by the formation of a fault-scarp 10-18 ft. high and some 56 miles long, the Allah Bund ("God's Dyke"). Yet isolation is not complete nor the waste entirely trackless.

Kutch has a discontinuous backbone (up to 900-1,100 ft.) of Jurassic-Miocene rocks, mainly sandstones with intrusive and interbedded basalts, flanked by alluvial and aeolian deposits; the highest point (1,525') lies away to the North on Pachham Islands in the Rann. Physically it is an alternation of little flat-topped steepedged plateaus, much dissected round the margins, and tiny alluvial basins. The Rann itself appears to be a broken anticline." (Spate).

The main crops are the two millets, *jowar* and *bajra*. Cotton is grown. But grazing and cattlebreeding are important, Kutch being also noted for its breeds of horses and camels.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5.1 KUTCH AND KATHIAWAR

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	112	3	5	27	77	30	38	9
Agricultural	40	..	..	5	35	10	20	5
Port	20	1	2	3	14	3	9	2
Artisan	2	..	..	..	2	1	1	..
Manufacturing	15	..	1	8	6	4	2	..
Trade and Commerce	5	..	..	2	3	2	1	..
Transport	..	..	..	1	..	..	..	..
Service	29	2	2	8	17	10	5	2

5.11 5 The West Coast Plains 5.1 Kutch and Kathiawar 5.11 Kutch.

This Division consists of one district Kutch. The chief crops are *jowar* and the inferior millet *bajra*. Almost the sole cash crop is cotton. Population density is very low, being 42 persons per sq. mile, partly on account of the vast uninhabited wastes of the Ranns. The proportion of scheduled

tribes (4.7 per cent) and scheduled castes (9 per cent) are moderate. The strongest single language is Gujarati but its percentage is only 53.

The urban ratio, rate of natural increase and the proportion of children 0-4 to women 15-44 are moderately high. But the level of immigration is low.

Kutch is placed in the third level of development with high values in II, IV and V medium value in VI and low value in III.

The district is connected to grid as well as generates its own electricity. The important organised industries are food industries, cotton ginning and pressing, petroleum products, transport equipment and non-metallic minerals (salt).

Analysis of Town Groups and Towns by predominant function and size classes

5.11 KUTCH

Function of town	Class of town		
	Total	III	V
1	2	3	4
Total . .	6	4	2
Port . . .	3	1	2
Service . .	3	3	..

5.12 5 The West Coast Plains 5.1 Kutch and Kathiawar 5.12 Kanthadesh.

This Division is formed by the 2 districts of Banaskantha and Sabarkantha, forming the throat or *Kantha*, a kind of alluvial piedmont, between the highland and the plain, through which the Banas, Sabarmati and Mahi descend into Kathiawar from Rajasthan. The Luni forms the westernmost point as it falls into the Great Rann. The Banas enters at Dhanera taluka and flows through Deesa, Kankrej and Radhanpur talukas into the Little Rann. The Saraswati follows a parallel course to its east. The Sabarmati, east of the Saraswati, drains Mahi Kantha (Idar) while the Mahi drains east Mahi Kantha and Rewa Kantha. Both fall into the Gulf of Cambay. The main crops are millets and maize, cotton and groundnut. In the lower reaches the doab contains the very rich districts of Ahmedabad and Kaira.

The chief crop is the inferior millet, *bajra*, but Banaskantha also grows *jowar*

while Sabarkantha grows maize, rice and wheat. Sabarkantha also grows cotton and groundnut. Population density in Banaskantha is 214 while it is 336 in Sabarkantha. The proportion of scheduled tribes is 5 in Banaskantha and 14 in Sabarkantha. The proportion of scheduled castes is 9.6 in Banaskantha and 8.5 in Sabarkantha. The principal language is Gujarati.

The urban ratio is low in both districts but the rate of natural increase is high. Immigration is moderate in Banaskantha but moderately high in Sabarkantha. The proportion of children 0-4 to women 15-44 is high in Banaskantha and moderately high in Sabarkantha.

Banaskantha is placed in the second level of development with high values in II, IV and VI, medium value in V and low value in III. Sabarkantha is placed in the third level of development with high values in II, IV and V medium value in VI and low value in III.

Banaskantha generates its own electricity while Sabarkantha is connected to grid. The chief organised industries are food industries and transport equipment in both. Paper and paper products, footwear and textile goods and generation of electricity are important in Banaskantha, while cotton ginning and pressing, non-metallic mineral products and printing and publishing are important in Sabarkantha.

Analysis of Town Groups and Towns by predominant function and size classes

5.12 KANTHADESH

Function of town	Class of town				
	Total	III	IV-V	IV	V
1	2	3	4	5	6
Total . .	9	1	8	6	2
Agricultural	1	..	1	..	1
Trade and Commerce	2	..	2	1	1
Service . .	6	1	5	5	..

5.13 5 The West Coast Plains 5.1 Kutch and Kathiawar 5.13 Kathiawar.

The great mass of Kathiawar is formed of sheets of Deccan Lava, intersected by swarms of trap dykes. The actual edge of the lavas is marked by a discontinuous strip of laterite with much alluvium. Most of Kathiawar lies below 600 ft., but there are two hills masses: the longitudinal arc of Manday Hills east of Rajkot across Rajkot, Amreli and Bhavnagar and the higher and bolder Girnar and Gir Ranges (up to 2,100') in Junagadh and Amreli. These two dissected plateaus have a radial drainage pattern. 'They are linked by a narrow and sinuous neck over 600' separating the two major rivers of Kathiawar, the Bhadar (110 miles long) flowing west across Junagadh, and the Shetrunji east across Amreli and Bhavnagar. A few miles west of this watershed rises the remarkable circular group of the Girnar Hills culminating in Gorakhnath, the highest point of Kathiawar (1,117m)'. (Spate).

Jamnagar has the Okha Rann in the western tip. The Barda Hills lie across the boundary of Junagadh and Jamnagar in the west, the Alech Hills in southwest Rajkot. Girnar Hills are in Junagadh taluk of Junagadh. The rivers except for Bhadar and Shetrunji are engaged mostly in local drainage. The Bambha and the Kankavati drain north Surendranagar into the Little Rann; in the west from west to east the Vartu, the Bhadar and the Ojat drain southwest Junagadh while the Singavada and Machundri drain the southern end of Amreli. The Shetrunji drains Bhavnagar flowing southeasterly while the Bhogawa drains southern Surendranagar and Ahmedabad and falls into the Sabarmati in an easterly direction.

The banks of the streams are often badly gullied. 'The larger blocks of cultivation are, therefore, often located at the foot of the ridges or low plateaus or on

the broader interfluvies.' In the east the alluvial Gohilwad lowland along the Nal depression is well cultivated. Wheat is the main crop, followed by millets. Ground water is brackish and the soil sandy along the Cambay coast. Large areas inland however are devoted to *bajra*, wheat, cotton and *jowar*. Cotton is preeminent in the north in Surendranagar (Dhrangadhra-Wadhwan plateau), but the southern Sorath coast (Junagadh-Amreli) is unequal. The Bhadar and Ojat basins towards the sea are dominated by salt marshes, but above them the 'gher' or sweet water lands in upper Junagadh and Rajkot raise rich crops of *jowar*, *bajra*, cotton, oilseeds and rice. Dwarka (Okha Mandal) and the Halar coast in Jamnagar in the north again are agriculturally poor, the Halar being marshy creekland. Millets and oilseeds are grown but the chief wealth lies in the magnificent cattle of the Rabbaris.

Villages over much of Kathiawar are strongly nucleated and large, 'sited on rises, bluffs along the valleys, hill-foot fans or river crossings'. In Halar and Kutch, however, they are often mere hamlets and great stock corrals are prominent features of material culture. The village skyline has a peculiar Spanish flavour owing to the straight, angular roofs of crowded, stone houses.

This Division consists of 7 districts all in Kathiawar: Mehsana, Surendranagar, Rajkot, Amreli, Junagadh, Bhavnagar and Jamnagar. The whole of Kathiawar is a millet tract growing almost nothing else by way of food crops but *bajra* and *jowar*. The principal cash crops are groundnut, which is extensive, and cotton. Population density is lowest in Surendranagar(169), low in Jamnagar(206), Amreli(269), and Rajkot (283), but moderately high in Junagadh (304), Bhavnagar (313) and Mehsana (469). The proportion of scheduled tribes is negligible while that of

scheduled castes is mostly moderate elsewhere but appreciable in Surendranagar (10 per cent) and Mehsana (8.6 per cent). The principal language is Gujarati.

The urban ratio is high in all districts except Mehsana where it is moderately high. Natural increase is moderate in Mehsana, moderately high in Amreli, Junagadh and Bhavnagar, and high in Surendranagar, Rajkot and Jamnagar. The level of immigration is low in Mehsana, moderate in Junagadh and Bhavnagar, and moderately high in Surendranagar, Rajkot, Amreli and Jamnagar. The proportion of children 0-4 to women 15-44 is uniformly high in all districts except Mehsana where it is moderate.

Mehsana and Amreli are placed in the third level of development with high values in II, IV and V, medium in VI and low in

III. Surendranagar, Rajkot, Junagadh, Bhavnagar and Jamnagar are placed in the fourth or top level of development with high values in II, IV, V and VI. Surendranagar, Rajkot and Bhavnagar have low values in III while Junagadh and Jamnagar have medium values.

Except for Bhavnagar which generates its own electricity all districts are connected to grid. In addition Rajkot and Jamnagar generate electricity. The important organised industries are food industries in all districts except Mehsana; textiles in all districts; cotton ginning and pressing in Mehsana, Surendranagar, Rajkot and Bhavnagar; non-metallic mineral products in Surendranagar, Junagadh, Bhavnagar and Jamnagar; chemicals in Surendranagar, Amreli and Jamnagar; transport equipment in Rajkot and Amreli; machinery in Bhavnagar; tobacco in Mehsana; and electricity generation in Jamnagar.

Analysis of Cities, Town Groups and Towns by predominant function and size classes
5.13 KATHIAWAR

Function of town	Class of town							
	Total	I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total . . .	96	3	5	22	66	24	34	8
Agricultural . . .	39	..	..	5	34	10	19	5
Port . . .	17	1	2	2*	12	3	7	2*
Artisan . . .	2	..	..	..	2	1	1	..
Manufacturing . .	15	..	1	8	6	4	2	..
Trade and Commerce	3	..	..	2	1	1	..	..
Transport . . .	1	..	..	1	..	..	..	..
Service . . .	19	2	2	4	11	5	5	1

Class I cities with their function :
Port—Bhavnagar.

Service—Rajkot, Jamnagar.

*Includes 1 town in which agriculture is predominant.

Analysis of Town Groups and Towns by predominant function and size classes
5.13A DIU

Function of town	Class of town	
	Total	VI
1	2	3
Total	1	1
Service	1	1

5.2 Gujarat Plain and Dangs.

Spate observes that 'Gujarat might almost be described as an intrusion of Indo-Gangetic conditions into the Peninsula: a great tract of alluvium formed by the Sabarmati, Mahi and minor parallel streams, actively prograding into the Gulf of Cambay'. This great shelf of firm alluvium is found in four sections, the first contained between Sabarmati in the west

Analysis of Cities, Town Groups and Towns by predominant function and size classes
5.2 GUJARAT PLAIN AND DANGS

Function of town	Class of town						
	Total	I	II	III	IV-V	IV	V
1	2	3	4	5	6	7	8
Total	65	3	5	13	44	23	21
Agricultural	9	..	..	1	8	1	7
Port	6	1	2	2	1	..	1
Artisan	4	..	..	1	3	3	..
Manufacturing . . .	11	2	2	2	5	2	3
Trade and Commerce .	4	..	..	3	1	..	1
Transport	3	..	..	..	3	2	1
Service	28	..	1	4	23	15	8

5.21 5 The West Coast Plains 5.2 Gujarat Plain and Dangs 5.21 Gujarat Plain.

This Division consists of 6 districts in the continental alluvium and shelf east of the Gulf of Cambay: Panchmahals, Ahmedabad, Kaira, Baroda, Broach and Surat. Rice is the principal crop in Panchmahals, Baroda and Surat, but millets are the prevailing crop of the division and while maize is important in Panchmahals,

and Mahi in the east (Ahmedabad and Kaira), the second between the Mahi in the northeast and the Narmada (Panchmahals, Baroda and part of Broach), the third between the Narmada and the Tapi enclosing the southern half of Broach and the northern half of Surat, the fourth between the Tapi in the North and Damanganga in the South enclosing Surat and Dangs. The richest lands are in Kaira and Baroda.

Villages are particularly large in Kaira, village sites in Gujarat Plains being mainly determined by fresh water points. The village plans of Gujarat, published in the Housing Report and Village Surveys show interesting zoning of the Kaliparaj or less favoured castes and the Upaliparaj or the higher castes. Poorer houses are generally of mud and grass with thatched roofs. Tiles and tin are a sign of prosperity.

wheat is a considerable crop in Ahmedabad and Broach. Cotton is important in every district while groundnut obtains in Panchmahals, Ahmedabad, Kaira and Baroda.

Population density is fair in Broach (299) but high in Panchmahals (426), Surat (503), Baroda (507), Ahmedabad (642) and Kaira (740). The proportion of scheduled tribes is negligible in Ahmedabad and Kaira, moderately high in Baroda

(21.5 per cent) and high in Panchmahals (34), Broach (41.6) and Surat (50). The proportion of scheduled castes is low in Panchmahals, Kaira, Baroda, Broach and Surat but moderate in Ahmedabad (10 per cent). The principal language is Gujarati.

The urban ratio is moderate in Panchmahals, moderately high in Kaira and Broach, and high in Ahmedabad, Baroda and Surat. Natural increase is high in Panchmahals and Ahmedabad and moderately high in the remaining four districts. The level of immigration is low in Panchmahals, moderate in Kaira and Surat, moderately high in Baroda and Broach, and high in Ahmedabad. The proportion of children 0-4 to women 15-44 is moderate in Ahmedabad, Kaira, Baroda and Surat, and moderately high in Panchmahals and Broach.

Panchmahals is placed in the second level of development with high values in IV and VI, medium values in II, III and

V. Kaira, Broach and Surat are placed in the third level with high values in IV, V and VI and medium values in II and III except for Kaira which has low value in III. Ahmedabad and Baroda are placed in the highest level with high values in IV, V and VI and medium value in III. Ahmedabad has a high value in II and Baroda a medium value.

Panchmahals and Ahmedabad generate their own electricity. Other districts are connected by grid. The important organised industries are transport equipment in Panchmahals and Ahmedabad; food industries in Panchmahals, Broach and Surat; non-metallic mineral products in Panchmahals, Ahmedabad, Kaira, Baroda, Broach and Surat; cotton ginning and pressing in Panchmahals, Ahmedabad, Kaira, Baroda, Broach and Surat; chemicals in Panchmahals, Baroda and Surat; textiles in Ahmedabad, Kaira, Baroda, Broach and Surat; and machinery in Ahmedabad and Baroda.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5.21 GUJARAT PLAIN

Function of town 1	Class of town						
	Total 2	I 3	II 4	III 5	IV-V 6	IV 7	V 8
Total	64	3	5	13	43	23	20
Agricultural	9	..	..	1	8	1	7
Port	6	1	2	2	1	..	1
Artisan	4	..	..	1	3	3	..
Manufacturing	11	2	2	2	5	2	3
Trade and Commerce	3	..	..	3	..	..	..
Transport	3	..	..	..	3	2	1
Service	28	..	1	4	23	15	8

Class I cities with their function :
Port—Surat.
Manufacturing—Ahmedabad, Baroda.

Analysis of Town Groups and Towns by predominant function and size classes

5.21A DAMAN

Function of Town 1	Class of town	
	Total 2	V 3
Total	1	1
Trade and Commerce	1	1

5.22 5 The West Coast Plains 5.2 Gujarat Plains and Dangs 5.22 Dangs.

The Dangs are the northern extreme of the Western Ghats behind and west of the Satmala Hills and the Tryambak massif. It is mainly forest country extended to the south by the Peint forests in Peint mahal of Nasik. The tract lies well back between the transversely flowing Purna or Ambica river in the north and the Damanganga in the south.

The Division consists of only 1 district: Dangs. The chief crops are *ragi* and rice. Population density is low, being 104.

The population is overwhelmingly (92.5 per cent) made up of scheduled tribes. The principal mother tongue is Khandesi. There is no town, but both natural increase and immigration are high, the proportion of children 0-4 to women 15-44 being among the highest.

The district is placed in the second level of development, having high value only in IV, medium values in III, V and VI and low value in II. The district is not electrified. The only organised industry is saw mills.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5.3 KONKAN COASTAL LOWLAND

Function of town 1	Class of town						
	Total 2	I 3	II 4	III 5	IV-VI 6	IV 7	VI 8
Total	39	3	5	31	12	17	2
Agricultural	1	..	..	1	..	5	..
Port	17	3	3	11	6	1	..
Manufacturing	5	..	2	3	2	3	..
Trade and Commerce	3	..	..	3	..	1	..
Transport	2	..	..	2	3	6	2
Service	11	..	..	11	3	..	..

5.3 Konkan Coastal Lowland.

The Konkan is the coastal lowland as far south as Goa. It is much broken by hills, frequently high and massive. There is a flat alluvial belt along the coast in Thana, but only 4-8 miles wide, presided over to the east by a series of parallel ridges reaching 1,500—2,000' (Dahanu and Palghar taluks of Thana), in which rivers like the Surya Vaitarani, Vada, Ulhas have lower courses more or less parallel to the coast before reaching it transversely. The Ulhas and its tributaries form a great amphitheatre between the Ghats and the Matheran outlier. South of Bombay the pattern changes: except for the Amba which travels northwest to Alibag, the streams are shorter and directly transverse (the Pundalik at Kolaba), though some, like the Vashisti through Dapoli and Khed of Ratnagiri, and Savitri have also formed amphitheatres under the Ghats whose tremendous scarps dominate the Konkan. Mangroves are important for fuel. The laterites are very barren. 'The hills and the tangled country below the Ghats, like the Ghats themselves, are covered with tropical semi-evergreen forest'. Bombay city dominates the life of the Konkan.

The watersheds of the Ulhas Basin are the Thal Ghat (1,900') to Nasik and the Bhor Ghat (1,800') to Poona. The island of Bombay is formed of two lines of Deccan Lava hills. The intervening valley, originally tidal marsh, has been reclaimed. The Island is separated from Salsette by the Mahim river, a broad tidal stream, and the largely silted Thana creek.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5.4 KONKAN KERALA TRANSITION

Function of town	Class of town						
	Total	I	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8
Total	29	1	4	24	11	7	6
Agricultural	2	..	..	2	1	1	..
Port	9	1	1	7	6	1	..
Artisan	1	..	..	1	..	1	..
Manufacturing	6	..	..	6	1	3	2
Service	11	..	3	8	3	1	4

Analysis of Town Groups and Towns by predominant function and size classes

5.4A GOA

Function of town	Class of town					
	Total	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7
Total	11	1	10	1	3	6
Port	1	..	1	..	1	..
Manufacturing	3	..	3	..	1	2
Service	7	1	6	1	1	4

5.41 5 The West Coast Plains 5.4 Konkan Kerala Transition 5.41 Coastal Karnataka.

North Kanara is more highland than lowland, the latter being restricted to pockets along the lower courses of the rivers which break the Ghats. The coastal taluks have medium densities, but only about half of the land is cultivated. Rice is the main crop. The Ghat forests reach down to the sea in several places. Karwar on the Kalinadi is the most important port. The Ghats are rugged and have a dense forest growth. Sandalwood is important in the south. There is much shifting cultiva-

tion (Kumri). The forests and spice gardens are important. Dwellings, utensils and decorative crafts are mainly of wood or bamboo. The Yellapur area grows the best teak.

'South Kanara, like the Ulhas basin and Goa, is an embayment of lowland, widest in the Netravali Valley behind Mangalore. The setting back of the Ghats permits a greater development of alluvium than in North Kanara, broad wedges rather than narrow strips. These are backed by a low (150-400') plateau of laterite, covering perhaps half the area, and essentially sterile despite heavy rain. The drainage pattern along the watershed, especially across the border in Coorg, is of a beautiful complexity' (Spate).

Forests are the chief wealth. Cashewnut is being rapidly extended. Sailing craft take Mangalore tiles to the Gulf of Aden and Mombasa every year to return with raw cashewnuts for the South Kanara factories. Mangalore is the only important town.

This Division consists of the 2 districts of North Kanara and South Kanara in Mysore. Almost the sole crop of any importance is rice. North Kanara has a low population density of 173 persons per sq. mile and South Kanara one of 496 persons

5.5 Kerala Coastal Plains—Western and Southern Ghats (South Sahyadri).

The Kerala Coastal Plains have been divided into 2 Divisions; Malabar and Kerala Coastal Plain.

In every respect Kerala is one of the most distinctive tracts of India, the Kashmir of the south, but even more pleasing than the Vale of Kashmir in certain ways. The general tripartite longitudinal division runs through the entire Subregion: alluvial coastland including the lagoons and lakes, the low lateritic plateaus and foothills ('the midlands') and the gneissic highlands. The northern lowlands are more complex than the southern. The great development of lagoons and backwaters, saline or fresh, with some artificial cuts, form splendid waterways for about 150 miles from the Ponnani mouth to Trivandrum. The largest of these widens out south of Cochin and east of Alleppey into Vembanad Lake, where a very efficient feat of pumping, draining and bunding has formed the astonishing Kuttanad, a stupendous checker-board of the largest and best tended paddy plots in India. The laterites form plateaus at 200-600 ft. with much grass and scrub into which project spurs of the Anaimalai-Cardamom Hills which, south of Palghat, have a strong southeast-northwest trend: e.g. the Periyar Valley.

The more important rivers from north to south are Valapattanam and Mahe (Cannanore); Murat, Korappula, Chaliyar and Chaliyam (Kozhikode); Ponnani (Palghat). Periyar (Kottayam-Ernakulam; Pambiyar (Quilon and Alleppey).

per sq. mile. North Kanara has a negligible and South Kanara a small (3 per cent) scheduled tribe population. The proportion of scheduled castes in both is around 5 per cent. The principal language in North Kanara is Kannada and in South Kanara Tulu although in either place the strength of the principal language is only moderate: 54 per cent Kannada in North Kanara and 47 per cent Tulu in South Kanara.

The urban ratio is moderately high in both districts but while both natural increase and immigration are high and moderately high in North Kanara, they are respectively moderate and low in South Kanara. The proportion of children 0-4 to women 15-44 is moderately high in North Kanara and moderate in South Kanara.

Both districts are placed in the third level of development with identical rankings in the blocks: high in IV and V and medium in II, III and VI.

North Kanara generates its own electricity while South Kanara is connected to grid. The important organised industries are: food industries and non-metallic mineral products (tiles) in both districts; paper mills, wood and transport equipment industry in North Kanara; textiles, printing and publishing and tobacco in South Kanara.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5.41 COASTAL KARNATAKA

Function of town	Class of town						
	Total	I	III	IV—V	IV	V	VI
1	2	3	4	5	6	7	8
Total	18	1	3	14	10	4	..
Agricultural	2	..	..	2	1	1	..
Port	8	1	1	6	6*	..	..
Artisan	1	..	..	1	..	1	..
Manufacturing	3	..	..	3	1	2	..
Service	4	..	2	2	2	..	..

Class I cities with their function:

Port—Mangalore.

*Includes 1 town in which agriculture is predominant.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5.5 KERALA COASTAL PLAINS—WESTERN AND SOUTHERN GHATS
(SOUTH SAHYADRI)

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	80	4	4	25	47	31	16
Agricultural	4	..	..	..	4	3	1
Port	10	3	1	5	1	1	..
Artisan	6	..	..	3	3	2	1
Manufacturing	21	..	..	4	17	12	5
Transport	2	..	..	..	2	1	1
Service	37	1	3	13	20	12	8

5.51 5 The West Coast Plains 5.5 Kerala Coastal Plains—Western and Southern Ghats (South Sahyadri) 5.51 Malabar 5.51A Mahe.

The 4 districts in this Division are Cannanore, Kozhikode, Palghat and Mahe (Pondicherry). The most important crop is rice in all three districts, a common feature of the coastal plains. Palghat grows some groundnut.

Population density abruptly assumes large proportions in this Division: 812 in Cannanore, 897 in Palghat, 1,018 in Kozhikode and 6,089 in Mahe. The proportion of scheduled tribes is low in each district and so is that of scheduled castes except in Palghat where it is 12 per cent. The principal language is Malayalam.

The urban ratio is moderate in Palghat, moderately high in Cannanore and Kozhikode and high in Mahe. Natural increase is low in Mahe and Palghat, moderately high in Kozhikode and high in Cannanore.

Immigration is high in Mahe, low in Palghat and moderate in Cannanore and Kozhikode. The proportion of children 0-4 to women 15-44 is low in Mahe and Palghat and moderate in Cannanore and Kozhikode.

Palghat is placed at the second level of development with high values in IV and V and medium values in II, III and VI. Cannanore and Kozhikode are placed in the third level with high values in IV and V and medium values in II and VI and medium value for Cannanore and low for Kozhikode in III. Cannanore and Kozhikode have similar trends in their development.

All districts are connected by grid. The important organised industries are: timbering and saw milling in Kozhikode; pressed wood and hardboard in Cannanore; steel rerolling in Kozhikode (Tellicherry); paper and wood pulp in Kozhikode (Mavur); textiles in Kozhikode and Cannanore; spinning and textiles in Palghat.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

5.51 MALABAR

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
1	2	3	4	5	6	7	8
Total	37	1	1	10	25	15	10
Agricultural	1	..	..	..	1	1	..
Port	6	1	..	5	..	..	..
Artisan	2	..	..	1	1	..	1
Manufacturing	15	..	..	2	13	10	3
Transport	2	..	..	..	2	1	1
Service	11	..	1	2	8	3	5

Class I cities with their function:
Port—Calicut.

Analysis of Town Groups and Towns by predominant function and size classes

5.51A MAHE

Function of town	Class of town	
	Total	V
1	2	3
Total	1	1
Service	1	1

5.52 5 The West Coast Plains 5.5 Kerala Coastal Plains—Western and Southern Ghats (South Sahyadri) 5.52 Kerala Coastal Plain.

This Division consists of 6 districts: Trichur, Ernakulam, Kottayam, Alleppey, Quilon and Trivandrum. The principal food crop is rice, but the garden or cash crops are coconut and cardamom in Kottayam, sesamum in Alleppey, coconut and tapioca in Quilon and Trivandrum. Population density is very high in the Division: 1,062 in Quilon, 1,442 in Trichur and Ernakulam, 2,067 in Trivandrum and 2,558 in Alleppey. The lowest is Kottayam with 706. The proportion of scheduled tribes is negligible but that of scheduled castes is fair: from 8 per cent

in Ernakulam to 12 per cent in Quilon. The principal language is Malayalam.

The urban ratio is moderate in Trichur, Kottayam and Quilon, moderately high in Alleppey and high in Ernakulam and Trivandrum. Natural increase is moderate in Trichur and Alleppey; moderately high in Ernakulam and high in Kottayam, Quilon and Trivandrum. Immigration is low in Trichur, Alleppey and Trivandrum, moderate in Ernakulam and Quilon and moderately high in Kottayam. The proportion of children 0-4 to women 15-44 is low in Alleppey, moderate in Trichur, Ernakulam and Trivandrum and moderately high in Kottayam and Quilon. The demographic picture is thus unstable and transitional.

Trichur, Ernakulam, Alleppey, Quilon and Trivandrum are placed in the third level of development with high values in IV and V, medium values in II (except Trivandrum which has a high value in II) and VI and low values in III. Kottayam is placed in the top level of development with high values in II, IV and V and medium values in III and VI.

All districts are connected by grid. The important organised industries are food industries, non-metallic minerals, textiles, wood and machinery in Trichur; textiles, chemical products, transport equipment in Ernakulam; food industries, rubber and

rubber products, printing and publishing in Kottayam; textiles, food industries, rubber and rubber products in Alleppey, food industries and non-metallic mineral industries in Quilon; food industries and transport equipment in Trivandrum.

Analysis of Cities, Town Groups and Towns by predominant function and size classes
5.52 KERALA COAST L PLAIN

Function of town	Class of town						
	Total	I	II	III	IV—V	IV	V
Total	2	3	4	5	6	7	8
Agricultural	42	3	3	15	21	16	5
Port	3	..	..	..	3	2	1
Artisan	4	2	1	..	1	1	..
Manufacturing	4	..	..	2	2	2	..
Service	6	..	..	2	4	2	2
	25	1	2	11	11	9	2

Class I cities with their function :
Port—Alleppey, Trivandrum.
Service—Cochin-Ernakulam-Alwaye.

REGION 6 THE EAST COAST PLAINS

The East Coast Plains has been divided into 3 Subregions. The first is Tamilnad Coastal Plain, the second Andhra Coast, the third Orissa Coast. The first Subregion consists of 3 Divisions: the Nagarcoil Valley (1 district), the Dry South East (Ramanathapuram and Tirunelveli), and Coromandel Coast (5 coastal districts of Madras and 2 areas of Pondicherry). The second Subregion consists of 1 Division (7 coastal districts of Andhra and Yanam of Pondicherry). The third Subregion contains 1 Division (3 coastal districts of Orissa).

The Nagarcoil Valley including Kanyakumari nestles under the heights of the Comorin Hills and Mahendragiri and is drained by the streams that flow from them.

The foothills of Tirunelveli and Ramanathapuram are covered with black soil, favourable to cotton. This is followed towards the sea by a colluvial (piedmont) zone and then by a red soil tract. Finally

comes the Tambraparni Valley with its green vegetation. In Ramanathapuram the upper shelf under the hills is followed by a tract of monadnocks (Sirumalai) and then by wide fanshaped segments of laterite-alluvium (from Varshelai to Vaipar). The tank country west of the Southern Trunk Road is complemented in the east by the coastal strip stretching to Pamban Island and Adam's Bridge.

In the Coromandel Coast, the Cauvery Delta in Thanjavur has several sections from the coast inwards: the Delta head, the Delta proper, the Vellar-Coleroon Doab, the Coleroon-Cauvery Doab (Srirangam Island and floodplains) and the main delta plains against the higher western margins (the Vallam tableland) and older irrigated area. The seaface is marshy, lined with a low dune belt attenuating to Point Calimere and the Vedaraniyam salt swamp. Thanjavur is thus a very recent alluvial strand plain still progressing in places.

The country north of Thanjavur from west to east proceeds from peneplained gneisses below the Tamilnad Hills through remnants of marine deposits to the Cuddalore sandstone laterite shelf. To the north, south of the Pulicat Lagoon, are embayments in the young alluvial plains (in Korteliyar-Coom-Palar Valleys) and Pondicherry (Ponnaiyar). The Vellar basin serves as a transition to the Cauvery Delta.

In the Andhra Coastal Plain the Nellore lowlands descend from the Archaean low peneplains to the coastal alluvium. Vijaywada is located at the heart of the Krishna Canal System and is important as an entrepot. The Krishna Delta is intensively irrigated and intersected by roads, rails and waterways, leading to heavy concentration of population. East of the Krishna

villages are small and scattered. West Godavari is placed in the Krishna-Godavari breach while East Godavari is formed by the Vashist and Gautami, the two mouths of the great Godavari. The delta subsides to the subdeltaic margins, the delta proper, the sea face and the Kalleru Lake. Visakhapatnam falls at the end of the Khondalite Zone dissected into peneplains. The main feature of Srikakulam is the Sileru trough, the Ganjam lowlands overlooked by the lateritic foothills and the Waltair highlands.

In the Orissa Coastal Plain, apart from the great Chilka Lake, Puri is made by the Baitarani Valley while Cuttack is the gift of the Mahanadi-Brahmani basin. Balasore is formed by the deltas of the Salandi, Barabalong and Subarnarekha rivers.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

6 THE EAST COAST PLAINS

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	287	15	15	62	195	103	76	16
Agricultural	88	..	..	9	79	34	39	6
Port	20	5	2	3	10	7	3	..
Artisan	49	2	2	11	34	19	13	2
Manufacturing	39	3	5	9	22	14	5	3
Trade and Commerce	7	2	2	2	1	1	..	..
Transport	2	..	..	..	2	1	1	..
Service	82	3	4	28	47	27	15	5

Analysis of Cities, Town Groups and Towns by predominant function and size classes
6.1 TAMILNAD COASTAL PLAIN

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total . .	180	6	12	31	131	64	52	15
Agricultural . .	51	..	..	2	49	17	26	6
Port . . .	13	2	2	2	7	6	1	..
Artisan . . .	33	2	2	7	22	9	11	2
Manufacturing . .	29	1	5	7	16	9	5	2
Trade and Commerce	3	..	1	1	1	1	..	..
Service . . .	51	1	2	12	36	22	9	5

6.11 6 The East Coast Plains 6.1 Tamilnad Coastal Plain 6.11 Nagarcoil Valley.

This Division consists of 1 district, Kanyakumari. The sole crop is rice. Population density is very high, being 1,544 per sq. mile. The proportion of scheduled tribes is negligible while that of scheduled castes is low (4 per cent). The principal language is Tamil.

The urban ratio is moderately high. Natural increase is moderate, immigration is low and so is the proportion of children 0-4 to women 15-44.

Kanyakumari is placed in the third level of development with high values in II, IV and V, medium value in VI and low value in III.

The district is connected to grid. The important organised industries are food,

textiles, non-metallic mineral products, transport equipment and miscellaneous products.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

6.11 NAGARCOIL VALLEY

Function of town	Class of town		
	Total	I	IV
1	2	3	4
Total . . .	4	1	3
Port . . .	1	..	1
Artisan . . .	1	1	..
Service . . .	2	..	2

Class I cities with their function:
Artisan—Nagercoil.

6.12 6 The East Coast Plains 6.1 Tamilnad Coastal Plain 6.12 Dry South East.

The 2 districts in this Division are Ramanathapuram and Tirunelveli. Thanks to the uplands, much tank irrigation and the Tambraparni Valley in the east, the Division grows rice and millets, cotton and groundnut. Population density marks a depressed transition between the highly dense Kerala Coast and the dense Coromandel Coast. In this Division it is 502 in Ramanathapuram and 619 in Tirunelveli. The proportion of scheduled tribes is negligible while that of scheduled castes is a little over 15 per cent in each. The principal language is Tamil.

The urban ratio is high in both districts but natural increase, immigration and proportion of children 0-4 to women 15-44 are low.

Both districts are placed in the third level of development with high values in II, IV and V, medium values in III, and high value for Ramanathapuram and medium for Tirunelveli in VI.

Both districts are connected by grid. The important organised industries are textiles, chemicals, food and cotton ginning in both, printing in Ramanathapuram and miscellaneous industries in Tirunelveli. The Division is thus very homogeneous.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

6.12 DRY SOUTH EAST

Function of town	Class of town							
	Total	I	II	III	IV—VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total . . .	64	2	4	16	42	20	14	8
Agricultural . . .	15	..	..	1	14	6	5	3
Port . . .	5	1	..	1	3	2	1	..
Artisan . . .	19	1	1	7	10	4	4	2
Manufacturing . .	10	..	2	4	4	2	2	..
Trade and Commerce	1	..	1	..	..	..	..	..
Service . . .	14	..	..	3	11	6	2	3

Class I cities with their function:
Port—Tuticorin.
Artisan—Palayamcottai.

6.13 6 The East Coast Plains 6.1 Tamilnad Coastal Plain 6.13 Coromandel Coast.

This Division consists of 7 districts: Thanjavur, Tiruchirapalli, South Arcot, Chingleput and Madras of Madras, Pondicherry and Karaikal of Pondicherry. The main crop is rice accompanied by the millets in the uplands of Tiruchirapalli, South Arcot and Chingle-

put. These last three districts also grow much groundnut, Tiruchirapalli grows sesamum. Population density is high. Beginning with 579 in Tiruchirapalli, 696 in Chingleput, 724 in South Arcot, 868 in Thanjavur it rises to 1,458 in Karaikal, 2,280 in Pondicherry and 35,339 in Madras. The proportion of scheduled tribes is negligible but that of scheduled castes is appreciable, being generally between 12.4 and 17.7 per cent in 4 districts,

23 per cent in Thanjavur, 26.3 per cent in South Arcot and 28 per cent in Chingleput. The principal language is Tamil.

The urban ratio is moderately high in Thanjavur, South Arcot, Chingleput, Pondicherry and Karaikal. Natural increase is low in all districts except Karaikal where it is moderate and Madras where it is high. Immigration is low in South Arcot, moderate in Thanjavur and Tiruchirapalli, moderately high in Chingleput and high in Madras, Pondicherry and Karaikal. The proportion of children 0-4 to women 15-44 is low everywhere.

South Arcot is placed in the third level of development with high values in II and IV, medium values in III, V and VI. Madras is of course placed in the top level by rights. Thanjavur, Tiruchirapalli and Chingleput are placed in the highest level

also, with high values for II, IV, V and VI and medium values in III.

All districts are connected by grid. The important organised industries are food industries in Thanjavur, Tiruchirapalli and South Arcot; transport equipment in Thanjavur, Tiruchirapalli and Chingleput; textiles in Tiruchirapalli, South Arcot and Madras; printing and publishing in Thanjavur, Tiruchirapalli and Madras; chemicals in Thanjavur and Chingleput; electrical machinery in South Arcot and machinery in South Arcot, Chingleput and Madras; non-metallic mineral products in Tiruchirapalli and South Arcot; tobacco in Thanjavur; leather products in Chingleput and metal products in Madras. The new heavy electrical machinery project in Tiruchirapalli is going to give a great fillip to industrial activity in this Division.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

6.13 COROMANDEL COAST

Function of town	Total	Class of town						
		I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	112	3	8	15	86	41	33	7
Agricultural	36	..	..	1	35	11	21	3
Port	7	1	2	1	3	3	..	..
Artisan	13	..	1	..	12	5	7	..
Manufacturing	19	1	3	3	12	7	3	2
Trade and Commerce	2	..	..	1	1	1	..	..
Service	35	1	2	9	23	14	7	2

Class I cities with their function :
Port—Madras.
Manufacturing—Tiruchirapalli.
Service—Thanjavur.

6.21 6 The East Coast Plains 6.2 Andhra Coast 6.21 Andhra Coastal Plain.

This Division consists of the 7 districts of Nellore, Guntur, Krishna, West Godavari, East Godavari, Visakhapatnam and Srikakulam.

The contrast between the Andhra Coastal Plain and the Tamilnad Coastal Plain is striking. One sees it not only in the demographic features but in the economic features as well.

The principal crops are rice and millets except in West Godavari where it is solely rice. Groundnut is the main cash crop in Guntur, Krishna, Visakhapatnam and Srikakulam and oilseeds in Visakhapatnam. Population density is low in Nellore (255); moderate in Visakhapatnam (442) and high in Guntur (521), Srikakulam (602), Krishna (617) East Godavari (624) and West Godavari (657). The principal language is Telugu.

The urban ratio is moderate in Nellore and Srikakulam, moderately high in West and East Godavari and Visakhapatnam and high in Guntur and Krishna. Natural increase and immigration are low in Nellore, East Godavari, Visakhapatnam and Srikakulam. Natural increase is moderate in Guntur, Krishna and West Godavari. Immigration is low in Guntur and moderately high in Krishna and West Godavari. The proportion of children

0-4 to women 15-44 is uniformly low.

Nellore, Visakhapatnam and Srikakulam are placed in the second level of development. Nellore has high values in II and IV and medium in III, V and VI. Visakhapatnam and Srikakulam have high values in VI and medium values in III, IV and V. Visakhapatnam has medium value and Srikakulam high value in II. Guntur, West and East Godavari are placed in the third level of development with high values in II, IV and V, medium values in III, and high values in VI except for West Godavari which has medium value. Krishna is placed in the top level with high values in II, IV and V and medium values in III and VI.

All districts are connected by grid. The more important organised industries are non-metallic mineral products in Nellore, Guntur, Krishna and East Godavari; food industries in all districts; tobacco in Nellore, Krishna and West Godavari; transport equipment in Nellore and Krishna; cotton and jute ginning and pressing in Nellore, Visakhapatnam and Srikakulam; textiles in Guntur, West and East Godavari and Visakhapatnam; machinery in Guntur and Krishna; metal products in West Godavari and Srikakulam; basic metals in Srikakulam; leather except footwear in West Godavari; petroleum and oil in Visakhapatnam.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

6.21 ANDHRA COASTAL PLAIN [for 6.2 add Yanam]

Function of town	Total	Class of town						
		I	II	III	IV-VI	IV	V	VI
1	2	3	4	5	6	7	8	9
Total	89	8	2	28	51	32	18	1
Agricultural	35	..	..	1	28	15	13	..
Port	6	3	..	4	12	10	2	..
Artisan	16	..	..	2	5	4	..	..
Manufacturing	9	2	1	1	..	2	2	..
Trade and Commerce	4	2	1	13	4	..	..	..
Service	19	1	1	..	..	..	..	..

Class I cities with their function :
Port—Visakhapatnam, Kakinada, Bandar (Masulipatam).
Manufacturing—Eluru, Guntur.
Trade and Commerce—Vijayawada, Rajahmundry.
Service—Nellore.

Analysis of Town Groups and Towns by predominant function and size classes

6.21A YANAM

Function of town	Class of town	
	Total	V
1	2	3
Total	1	1
Service	1	1

6.31 6 The East Coast Plains 6.3 Orissa Coast 6.31 Orissa Coastal Plain.

The 3 districts in this Division are Puri, Cuttack and Balasore. Almost the sole crop is rice, but oilseeds are also grown in small quantities.

Population density is moderately high: 461 in Puri, 565 in Balasore, 727 in Cuttack. The proportion of scheduled tribes is low in Puri and Cuttack but moderate in Balasore (6.8 per cent); that of scheduled castes is appreciable in

all districts (14 per cent in Puri, 18 in Cuttack and 19 in Balasore). The principal language is Oriya.

The urban ratio is low in Balasore and moderate in Puri and Cuttack. Natural increase is moderate in Puri and Cuttack and high in Balasore. Immigration and proportion of children 0-4 to women 15-44 are low everywhere, the latter being moderate in Balasore.

Puri is placed in the lowest level of development with high values only in II and IV, medium value in V and low values in III and VI. Cuttack and Balasore are placed in the second level with high values in II and IV, low values in III and VI, and medium value in V.

All districts are connected to grid. The important organised industries are basic metals in Puri and Cuttack; food industries in Puri and Balasore; textiles in all three districts; wood industries in Puri and Balasore; paper in Cuttack; machinery in Balasore; printing and publishing in Cuttack; tobacco in Puri.

Analysis of Cities, Town Groups and Towns by predominant function and size classes

6.3 ORISSA COAST AND 6.31 ORISSA COASTAL PLAIN

Function of town	Class of town					
	Total	I	II	III	IV—V	V
1	2	3	4	5	6	8
Total	17	1	1	3	12	5
Agricultural	2	—	—	—	2	—
Port	1	—	—	—	1	—
Manufacturing	1	—	—	—	1	—
Transport	2	—	—	—	1	—
Service	11	1	1	3	6	3

Class I cities with their function :
Service—Cuttack,

REGION 7 THE ISLANDS

This Region consists of two groups of islands, the islands in the Arabian Sea in the west and the islands in the Bay of Bengal in the east. The chief crop in the Laccadive, Minicoy and Amindivi Islands is coconut. In Andaman and Nicobar Islands the crops grown are rice, coconut and breadfruit.

Population density is very high in the coral islands of Laccadive, Minicoy and Amindivi Islands (2,241). In Andaman and Nicobar Islands the density is low (20). Almost the entire population in Laccadive, Minicoy and Amindivi Islands has been scheduled as a tribe. In Andaman and Nicobar the proportion is 22. The principal language in Laccadive, Minicoy and Amindivi Islands is Malayalam, in the Andaman and Nicobar Islands it is Nicobarese as a single group although its percentage is only 22.

The urban ratio is low in Andaman and Nicobar Islands. There is no town in Laccadive, Minicoy and Amindivi Islands. Natural increase, immigration and proportion of children 0-4 to women 15-44 are

low in Laccadive, Minicoy and Amindivi Islands and high in Andaman and Nicobar Islands.

Laccadive, Minicoy and Amindivi Islands are placed in the lowest level of development while Andaman and Nicobar Islands are placed in the highest level. Laccadive, Minicoy and Amindivi Islands are not electrified but the Andaman Islands generate their own electricity. There is no registered factory in Laccadive, Minicoy and Amindivi Islands. The important industries in Andaman and Nicobar Islands are wood products, repairs of ships and boats, match splints, boat building and light and power.

Analysis of Town Groups and Towns by predominant function and size classes

7.2 ANDAMAN AND NICOBAR ISLANDS

Function of town	Class of town	
	Total	IV
1	2	3
Total	1	1
Port	1	1

CHAPTER IV

ASSOCIATION OF CHARACTERISTICS

TABLE IV.1 ARRANGES THE districts of India according to the four levels of development under their respective natural regions, subregions and divisions and gives for each (a) the total number of registered factories, (b) the total number of workers in registered factories, (c) the number of factories employing (i) 20—99 workers and (ii) 100 or more workers in (1) rice mills, (2) atta mills, (3) dal mills, (4) sugarcane mills, (5) edible oil mills, (6) hydrogenated oil mills, (7) jute and cotton gins and presses and (8) tobacco factories. Table IV.1 is thus mainly devoted to agro industries which process food and cash crops grown in the locality or environs.

Table IV.2 arranges the districts of India according to the four levels of development under their respective natural regions, subregions and divisions and gives for each (1) whether the district town generates its own electricity or is connected to grid or both or none, (2) urban population per 1,000 of total population (3) urban workers per 1,000 of total population, (4) number of class I Cities/Town Groups, (5) number of Cities, Town Groups and Towns by function, (6) total number of registered factories, (7) total number of workers in registered factories, (8) number of workers in registered factories per 100 of total workers and (9) the number of factories in 20 selected non-agricultural industries classified according to employment by 100+, 1,000+ and 2,000+.

Table IV.3 gives for each district arranged by level of development under each State the percentage of area under cash crops relative to magnitude of workers

in registered factories engaged in processing the respective crop.

We may now examine whether there is any noticeable association between values in each of the five blocks (II, III, IV, V and VI) on the one hand and the four levels of development determined by the combined scores on the other.

Broadly speaking, the five index blocks stand for the following universes:

Block II : Agricultural Infrastructure
Block III : Participation rates in traditional sector
Block IV : Potential of human resources
Block V : Distributive trade, manufacturing and infrastructure
Block VI : Organised industrial activity in the modern sector

The values under each block were graded as follows :

Value A = Where the total score is less than 20 for the blocks II, III, IV and V and less than 5, for block VI

Value B = Where the total score is between 20 and 30 for the blocks II, III, IV and V and between 5 and 10 for block VI

Value C = Where the total score is more than 30 for the blocks II, III, IV and V and more than 10 for block VI

It has already been seen in Table IV.2 how organised industrial activity is concentrated in precisely those districts which have attained a high level of development in other blocks also. Table IV.2 gives statistical proof for the first time on the national scale of the positive association between industrial growth on the one hand and improvements in agricultural infrastructure, potential of human resources, distributive trade, manufacturing and infrastructure on the other.

The following statement illustrates the distribution of districts in each block by (a) low, medium and high values in (b) each of the four levels of development.

STATEMENT IV.1

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
II	20	3	1	1	36	30	22	13	23	55	53	67
III	26	32	24	20	47	55	50	54	23	55	53	67
IV	4	9	..	..	37	9	..	..	6	1	2	7
V	41	..	..	..	37	72	40	13	38	79	76	81
VI	24	10	..	..	37	72	40	13	1	7	36	68
Total	115	54	25	21	212	236	174	121	68	150	181	263

Of the 324 districts in this statement, 79 are placed in the first or lowest level of development, 88 in the second level, 76 in the third, and 81 in the fourth or top level of development. Greater Bombay, Calcutta and Madras which are in the top level have been excluded and so have been Laccadive, Minicoy and Amindivi Islands; Dadra and Nagar Haveli; Goa, Daman and Diu and Pondicherry.

This statement is very instructive inasmuch as we find from Part I that the number of districts with low values in each block is highest (115) in the lowest level of development. This number is reduced to less than half (54) in the next higher level of development. In the third level of development the number of districts with low values is only 25. In the fourth or top level of development the number of districts with low values is still further reduced to 21. We find from Part II that the number of districts with medium values in the blocks is fairly high (212) even in the lowest level of development. The number of districts with medium values in the index blocks is highest (236) in the second level of development. In many ways the zone of middle values in the second level of development serves as the watershed or median between districts of low and high development. But this number falls off substantially (174) in the third level of development and is lowest (121 districts) in the fourth or top level of development. On the whole, the number of districts with medium values in index blocks is much more even in the first or lowest level of development

than that of those with low values. This difference is progressively accentuated in the higher levels of development. In the second level of development we find 236 districts with medium values against 54 with low values; in the third level of development, 174 districts with medium values against 25 with low values; in the fourth or top level of development 121 districts with medium values against 21 with low values.

The nature of the association between scores of blocks and levels of development is very forcefully brought out in Part III. In this Part, high values are found only in 68 districts in the lowest level of development, in 150 districts in the second level, in 181 districts in the third level and in 263 districts in the fourth or top level.

This statement as a whole in its three parts reveals the preconditions of development. It provides the objective statistical proof of association between overall levels of development and the value levels in each index block. Tables IV.1, 2 and 3 now provide the statistical underpinning to the association between the preconditions of growth and the effect of multipliers on them. For, it will be seen that an overwhelming concentration of registered factories occurs in the higher levels of development even when districts are arranged in terms of 35 indices in which no more than 3 indicators are concerned with organised industrial activity in the modern sector. This serves very conclusively to highlight the strong association between high levels of performance

in agriculture, human resources, distributive trade, general manufacturing and infrastructure on the one hand and organised modern industrial activity on the other.

Thus in Index Block II—agricultural infrastructure—we find in Part I of Statement IV.1 that the number of districts with low scores in this block is highest (20) in the lowest level of development and dwindles very steeply to 3 in the second level and is reduced to 1 in the third and fourth levels respectively. This means that a high level of development is incompatible with low score in block II or, in other words, levels of development are directly associated with the score in block II. This conclusion is strengthened in Parts II and III of the statement where we find that the number of districts with medium values in block II tends to decline progressively with successively higher levels of development, whereas the number of districts with high values in block II progressively rises with successively higher levels of development (except for a small dip in the third level) until the number of districts with high scores in block II reaches the highest figure of 67 in the fourth or top level of development.

Significantly enough the block of participation rates in traditional sector shows little trend in the four levels of development, beyond the fact that the number of districts having medium values in this block are consistently high at each level and those having high values are low at each level. This may lend support to the view that neither the level of organised industry nor the shift from agriculture to non-agriculture has been of sufficient magnitude so far on any scale to have any noticeable impact or to support any pronounced trend on participation rates in the traditional sector, except that the pooled score of low and high values in the third and fourth levels of development are

distinctly lower than those in the first and second levels.

	1st level	2nd level	3rd level	4th level
Pooled score of low and high values in Block III	32	33	26	27

In block IV (potential of human resources) there is a distinct positive association between improving potential and improving level of development. Thus low values in block IV are found only in 4 districts of the first level, there being no district with low values in the other levels. A similar picture obtains in the case of medium values. 37 districts have medium values in the first level, only 9 in the second level, and no district at all in the third and fourth levels. The number of districts with high values jumps from 38 in the first level of development to 79 in the second level. The number moves to 76 in the third level and up again slightly to 81 in the fourth or top level. It is therefore clear that potential of human resources is highly associated with the higher levels of development in India.

Nowhere else however is the positive association between ascending numbers of districts with high values on the one hand and ascending levels of development on the other so markedly evident as in blocks V and VI. In block V districts with low values drop steeply from the first level (41) to the second (9) and disappear altogether in the third and fourth levels. Medium values in the second level of development form a kind of watershed. But it is in respect of high values in both blocks that the ascent in the number of districts in each successively higher level is dramatic, unimpaired and impressive.

Thus for India as a whole the positive association between high values in blocks II, V and VI and ascending levels of development seems clearly brought out. It also seems clear that there is much compatibility between ascending levels of

development and high values in block IV. It is particularly encouraging that the districts which have been classified in the third and fourth levels of development, especially the latter, have a high concentration of large and important industrial establishments thus generally lending support to the methodology adopted for determining the levels of development. The results indisputably demonstrate that any appreciable level of organised industrial activity is dependent on high levels of achievement in non-industrial sectors as well: notably, in the field of settled and commercial agriculture, potential of human resources, distributive trade, general manufacturing and infrastructure, and the use of electricity. This is very forcefully brought out by the fact that although it was a case of only three cells in block VI as against a total 32 cells in the remaining blocks, high values in the former are, in the logic of development, powerfully associated with high values in the latter.

We may now briefly recapitulate and extend this analysis to natural regions, subregions and selected natural divisions of India.

Of the 79 districts in the first level of development, the distribution of values in each block between low, medium and high is by no means even. The largest concentration occurs in the medium values. But there is no district with a high value in block VI which indicates that in these 79 districts development of industries in the modern organised sector is still poor. The number of districts with high values in block V among these 79 districts is again only 1, also proving that distributive trade, manufacturing and infrastructure are unsatisfactory. The state of agricultural infrastructure is far from satisfactory either, the number of districts with high

values in block II being only 23. The only block in which the districts in the first level of development feel reasonably strong is IV (potential of human resources).

Of the 88 districts in the second level of development as many as 85 districts have medium or high values in block II (agricultural infrastructure), only 3 districts have low values in this block. In block III (participation rates in the traditional sector) as many as 32 districts have low values, 55 medium values and only 1 high value. As many as 79 districts have high values in IV (potential of human resources), 9 have medium values and none with low value. The districts in the second level of development have mostly no more than low or medium values in V (distributive trade, manufacturing and infrastructure). Only 7 districts in V and 8 in VI have high values.

Of the 76 districts in the third level of development there is only 1 district with low value in II and 22 districts with medium values in II. The remaining 53 districts have high values in II. All the 76 districts have high values in IV. None of the districts have any low values in V and VI, but there are 40 districts with no more than medium values in V against 36 with high values. In VI there are 62 districts with medium values and 14 with high values, which suggests only moderate degrees of achievement in the modern organised industry sector.

Of the 81 districts in the fourth or top level of development as many as 67 have high values in II, all have high values in IV, 68 have high values in V. In block VI, however, there are more districts (41) with medium values than with high values (40), which suggests that this block has still to make much leeway. There are still 7 districts at this level with high values in block III.

STATEMENT IV 2

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

NATURAL REGION : 1—HIMALAYAS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	1	2	3	4	5	6	7	8	9	10	11	12	13
I		2	3	4	5	6	7	8	9	10	11	12	13
II	.	19	..	1	..	7	5	1	1	..	..	..	4 = 38
III	.	4	..	1	..	16	4	..	4	6	1	1	1 = 38
IV	.	4	..	..	..	13	1	..	..	9	4	2	5 = 38
V	.	9	..	..	..	17	4	..	1	..	1	2	4 = 38
VI	.	10	3	..	..	16	2	1	1	..	..	1	4 = 38
Total	.	46	3	2	..	69	16	2	7	15	6	6	18

As will appear from Statement IV.2 this is a natural region of much unevenness in development, the majority (26 districts) of the 38 computed districts being in the first or lowest level of development. But it is significant that of the 5 districts placed in the highest level of development as many as 4 have high values in II, V and VI and 5 in IV but only one has a high value in III (participation rates in traditional sector). Of the 2 districts placed in the third level of development, high values obtain in both cases in IV and V.

Among registered factories engaged in the processing of agricultural produce (agro industries limited to the milling of rice, atta, dal, sugarcane, edible oils, hydrogenated oils, jute and cotton ginning and pressing and making of tobacco products), the statistical analysis supports the general picture. There are no registered rice or atta mills in the first three levels of development. All the rice (9) and atta (1) mills are concentrated in the districts of top development. There is only one Khandsari mill in the second level of development but two in the fourth level, but as many as 3 large sugar mills in districts of the fourth level. By contrast all the four mills concerned with edible oil are

in the first (1) and second (3) levels of development. There is 1 jute press and 3 tobacco factories in the districts of third level of development.

Among the lines devoted to the processing and manufacturing of non-agricultural products analysis was limited to steel; industrial machinery; electrical machinery; cloth; jute; cement; tea and coffee; paper and paper products; petroleum and oil; aluminium; artificial yarn and fabrics like rayon etc.; fertilizers; heavy electricals; machine tools; railway wagons, locomotives and coaches; fine chemicals; heavy chemicals; generation of electricity, gas and steam; coal, limestone and non-metallic industries. This Region has only one medium-sized steel works in (Nahan Foundry) Sirmur which is placed in the second level. There are four medium and one large cotton mills in districts of the second level and only one medium cotton mill in the fourth level. All the 15 tea factories are placed in districts of the top level of development. Similarly, the only fine chemicals factory in the Region is in a district of the top level. There is 1 mine devoted to coal, limestone and non-metallic mineral in a district placed in the first level.

STATEMENT IV.3.II

Selected Industries Outside Agricultural Processing

2 NORTHERN PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	..	..	1	170	31	10,729	32	10,899
Machinery (Industrial)	100+ 1000+ 2000+	1	751	..	..	..	..	2	2,765	2	2,765
Machinery (Electrical)	100+ 1000+ 2000+	..	..	..	..	3	579	8	6,251	12	7,581
Cloth	100+ 1000+ 2000+	2	716	..	..	1	196	4	1,720	6	2,016
Jute	100+ 1000+ 2000+	1	1,047	..	1,673	7	3,974	84	112,382	96	118,745
Cement	100+ 1000+ 2000+	1	1,047	2	4,608	1	2,235	32	90,899	33	93,134
Tea	100+ 1000+ 2000+	..	..	1	4,608	..	2,235	21	74,913	22	77,148
Paper and paper products	100+ 1000+ 2000+	..	..	..	3,500	..	..	80	201,988	83	207,643
Petroleum	100+ 1000+ 2000+	..	..	4	1,881	..	..	73	198,443	76	204,098
Aluminium	100+ 1000+ 2000+	..	..	..	..	..	..	49	162,984	50	166,484
Artificial fibre rayon etc.	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,028	5	2,909
Fertilizers	100+ 1000+ 2000+	..	..	24	3,823	116	18,466	1	1,028	1	1,028
Railway wagons locomotives coaches	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
Leather and leather products	100+ 1000+ 2000+	..	..	2	3,097	..	..	..	..	..	..
Fine chemicals	100+ 1000+ 2000+	..	..	2	3,097	..	..	14	13,674	16	16,771
Heavy chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	5	10,998	7	14,095
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	..	..	3	8,723	3	8,723
Coal, lime and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	1	1,228	..	..	1	1,228
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	3	2,549	3	2,549
		..	..	..	..	..	..	1	1,249	1	1,249
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	4	2,299	4	2,299
		..	..	1	2,671	..	..	..	..	..	..
		..	..	1	2,671	..	..	..	..	..	..
		..	..	..	..	..	..	6	1,124	7	3,795
		..	..	..	..	..	..	..	..	1	2,671
		..	..	..	..	..	..	3	4,107	3	4,107
		..	..	..	..	..	..	2	4,005	2	4,005
		..	..	..	..	..	..	1	2,061	1	2,061
		..	..	..	..	..	..	16	6,348	16	6,348
		..	..	..	..	..	..	1	2,482	1	2,482
		..	..	..	..	..	..	1	2,482	1	2,482
		..	..	..	..	..	..	12	3,144	12	3,144
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	5	2,718	5	2,718
		..	..	2	495	..	..	..	..	..	..
		..	..	..	..	2	657	8	3,595	12	4,747
		..	..	4	1,871	..	..	..	..	..	..
		..	..	..	..	8	2,558	74	20,941	88	25,592
		..	..	..	..	..	..	2	3,835	2	3,835
		..	..	..	..	..	..	1	2,707	1	2,707

STATEMENT IV.4

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

NATURAL REGION : 3 CENTRAL HILLS AND PLATEAUS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	14	10	2	3	7	25	13	13 = 87
III	..	3	7	4	18	28	10	13	..	..	1	2 = 87
IV	..	..	..	..	6	2	..	..	15	33	15	16 = 87
V	..	15	8	..	6	27	15	4	..	..	..	12 = 87
VI	..	6	5	..	15	28	13	10	..	2	2	6 = 87
Total	24	20	4	1	59	95	40	30	22	60	31	49

Of a total of 87 computed districts in this Natural Region 21 are in the first or lowest level of development. 35 in the second level, 15 are in the third level and 16 in the fourth or top level. Development is therefore uneven. But it is encouraging that the values of blocks II and IV are medium or high in all districts. The values for block V are either low or medium in the majority of districts which are placed in the first and second levels of development. The values for block VI are mostly medium for the majority of districts in the four levels of development indicating medium, and in 11 districts low industrial activity. Of the 16 districts placed in the top level of development only 6 have high values and 10 medium values in block VI. The majority of these 16 districts have high values for blocks II and IV also. As many as 13 districts have medium values in block III (participation rates in the traditional sector) indicating that the majority of the districts at the top level are still at some transitional stage. This Region displays a distinctive pattern. While the agricultural processing industries are fairly distributed among the four levels of development (although the predominance of numbers in the first and second levels plainly testify to the concentration of even agro industries in the third and fourth levels), the non-agricultural manufacturing

industries have a strong bias in favour of districts of the third and, most of all, the fourth levels.

Thus the 21 districts in the first level have 101 rice mills of the employment size 20—99 each and only 6 large ones employing more than 100 persons; 1 small dal mill, 2 khandsari sugar mills, 6 oil mills, 19 cotton gins and presses of which 5 employ more than 100 persons each and 90 tobacco factories of which 5 employ more than 100 persons each. On the other hand these 21 districts in the lowest level have 3 steel mills employing more than 100 persons each, 1 jute factory employing 756 workers, 1 large paper mill employing 2,540 persons, 2 aluminium factories employing a total of 465, 2 factories engaged in generation of electricity and 3 factories engaged in coal, limestone etc. of which 1 employs 1,112 persons.

The 35 districts in the second level have a much larger number (140) of rice mills (of which 1 is really big employing as many as 3,089 persons), 6 atta mills, 14 dal mills, 3 khandsari sugar mills, 46 oil mills, 137 cotton and jute gins and presses and 108 tobacco factories of which 21 employ more than 100 persons each. But the number and range of non-agro industries are not much greater than those in districts of the first level: 1 factory of industrial

machinery, 4 of cement (of which 2 employ more than 1,000 persons each), 1 of aluminium, 1 of fine chemicals, 1 of generation of electricity and 1 of coal, limestone and non-metallic industry.

The 15 districts in the third level have proportionately more of factories in each kind of agro industry except hydrogenated oils. The average employment, too, is higher than in districts of the first and second levels. In non-agro industries the third level districts are fortunately placed in steel (3 of which 1 employs 15,590), cloth (5 of which 1 employs 2,475), cement (3 of which 2 employ 2,499 persons in all), machine tools (1 employing 132), fine chemicals (1 employing 212), electricity (6 of which 1 employs 1,169) and coal, limestone and non-metallic industries (55 of which 1 employs 1,706).

The 16 districts in the fourth level have, proportionately the largest concentration of both agro and non-agro industries. Between them they have 3,433 mills out of a total of 6,625 for the entire region and employ

332,733 out of a total of 494,431. This level is fairly strong in each of the 8 agricultural industries and has as much as 18 kinds of large selected non-agro industries, chiefly steel (13 mills of which 6 employ an average of a little less than 10,000 each), industrial machinery (6 of which 1 employs 1,844), electrical machinery (5 employing 1,343), cloth (24 of which 12 employ an average of close on 4,000 each), cement (4 of which 1 employs 1,118), paper and paper products (6 of which 1 employs 1,644), aluminium (2 of which 1 employs 1,203), rayon (2 employing an average of over 1,000 persons each), fertilizers (2 of which 1 employs 7,500 persons), heavy electricals (1 employs 1,126), machine tools (6 employing 1,155) railway wagons, locomotives etc. (1 employing 3,230), leather and leather products (1 employing 585), fine chemicals (1 employing 331), heavy chemicals (1 employing 656), electricity (18 of which 1 employs 1,500), coal, limestone and non-metallic industry (41 of which 1 employs 3,156 persons).

STATEMENT IV.4.I

Agricultural Processing Industries

3 CENTRAL HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all Industries		576	27,618	1,660	53,140	956	80,940	3,433	332,733	6,625	494,431
Rice	20-99	101	4,602	138	5,214	64	3,346	85	3,661	388	16,823
	100+	6	785	2	3,189	9	1,136	2	237	19	5,347
Atta	20-99	..	..	..	..	..	..	..	..	..	..
	100+	..	..	..	238	4	169	7	389	17	796
Dal	20-99	1	37	14	..	..	..	4	713	4	713
	100+	..	..	..	361	..	..	..	..	..	..
Sugarcane	20-99	1	75	1	20	5	178	2	66	9	339
	100+	1	143	2	442	2	999	3	1,227	8	2,811
Edible oils	20-99	6	212	45	1,574	19	645	37	1,460	107	3,891
	100+	..	..	1	107	1	400	4	827	6	1,334
Hydrogenated oils	20-99	..	..	..	..	..	..	..	..	..	..
	100+	..	..	..	..	..	..	..	..	..	..
Jute and cotton ginning and pressing	20-99	14	681	116	6,125	..	..	2	355	2	355
	100+	5	752	21	2,502	49	1,897	101	5,040	280	13,743
Tobacco	20-99	85	3,271	87	3,820	7	759	19	2,806	52	6,819
	100+	5	610	21	2,858	8	1,996	227	8,366	446	17,453
										53	7,553

STATEMENT IV.4.II

Selected Industries Outside Agricultural Processing

3 CENTRAL HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+	3	657	..	..	3	17,741	13	57,150	19	75,548
	1000+	..	..	..	..	2	17,052	6	55,233	8	72,285
	2000+	..	..	..	..	1	15,590	5	53,421	6	69,011
Machinery (Industrial)	100+	..	..	1	120	..	..	6	3,101	7	3,221
	1000+	..	..	..	..	..	..	1	1,844	1	1,844
	2000+	..	..	..	..	..	..	..	..	..	..
Machinery (Electrical)	100+	..	..	..	..	..	..	5	1,343	5	1,343
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Cloth	100+	..	..	..	..	5	4,265	24	56,773	29	61,038
	1000+	..	..	..	..	1	2,475	17	54,348	18	56,823
	2000+	..	..	..	..	1	2,475	12	47,567	13	50,042
Jute	100+	1	756	..	..	..	..	..	..	1	756
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Cement	100+	..	..	4	5,325	3	3,379	4	2,818	11	11,522
	1000+	..	..	2	3,948	2	2,499	1	1,118	5	7,565
	2000+	..	..	1	2,592	..	..	..	..	1	2,592
Paper and paper products	100+	1	2,540	..	..	..	..	6	3,574	7	6,114
	1000+	1	2,540	..	..	..	..	1	1,644	2	4,184
	2000+	1	2,540	..	..	..	..	..	..	1	2,540
Petroleum	100+	..	..	..	..	..	..	2	230	2	230
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Aluminium	100+	2	465	1	427	..	..	1	1,305	5	2,197
	1000+	..	..	..	..	..	..	..	1,203	1	1,203
	2000+	..	..	..	..	..	..	2	2,072	2	2,072
Artificial fibre rayon etc.	100+	..	..	..	..	..	..	1	1,149	1	1,149
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Fertilizers	100+	..	..	..	..	..	..	1	7,600	2	7,600
	1000+	..	..	..	..	..	..	1	7,500	1	7,500
	2000+	..	..	..	..	..	..	1	7,500	1	7,500
Heavy electricals	100+	..	..	..	..	..	..	1	1,126	1	1,126
	1000+	..	..	..	..	..	..	1	1,126	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Machine tools	100+	..	..	..	..	1	132	6	1,155	7	1,287
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Railway wagons locomotives coaches	100+	..	..	..	..	..	..	1	3,230	1	3,230
	1000+	..	..	..	..	..	..	1	3,230	1	3,230
	2000+	..	..	..	..	..	..	1	3,230	1	3,230
Leather and leather products	100+	..	..	..	..	..	..	1	585	1	585
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Fine chemicals	100+	..	..	1	144	1	212	1	331	3	687
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Heavy chemicals	100+	..	..	..	..	..	..	1	656	1	656
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Generation of electricity	100+	2	576	1	100	6	2,622	18	5,632	27	8,930
	1000+	..	..	..	..	1	1,169	1	1,500	2	2,669
	2000+	..	..	..	..	..	..	..	..	..	..
Coal, limestone and non-metallic mineral products	100+	3	1,393	1	120	55	12,766	41	16,765	100	31,044
	1000+	1	1,112	..	..	1	1,706	2	4,856	4	7,674
	2000+	..	..	..	..	..	..	1	3,156	1	3,156

STATEMENT IV.5

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

NATURAL REGION : 4 THE DECCAN												
Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
II	..	..	1	..	1	3	5	6	2	11	15	13
III	..	..	1	..	3	14	20	16	..	..	..	3
IV	..	..	..	..	3	4	..	..	..	11	20	19
V	..	..	..	..	3	11	10	..	..	4	10	19
VI	..	..	..	..	3	13	18	10	..	2	2	9
Total	..	2	..	..	13	45	53	32	2	28	47	63

The Region shows a fairly high level of development. Of a total of 57 computed districts only 3 are in the lowest level of development, 15 in the second level, 20 in the third level and as many as 19 in the top level. Values are almost entirely either medium or high. Of the 20 districts in the third level of development, all enjoy high values in IV, 15 enjoy high values in II, 10 in V. But organised industrial activity is not fully articulate at this level, since as many as 18 districts enjoy no more than medium values in block VI. This is beautifully highlighted by the prevalence of medium values in participation rates in the traditional sector (III) in all the 20 districts. Of the 19 districts in the top level as many as 13 have high values in II, all have high values in IV and V. In this level, too, organised industrial activity is not fully articulate because 10 districts have medium and 9 high values in VI and 16 districts have medium and 3 high values in III. The Region as a whole is very much in a transitional stage but the existence of prerequisites of development in the entire region is unmistakable.

The Region renders evidence of much agricultural production and processing industries in districts at all levels of development, although there is overwhelming proof of concentration of agricultural processing industries in districts of the third and fourth levels of development.

Thus in the 3 districts of the first level the occurrence of 10 rice mills, 5 atta mills,

1 large sugar mill (employment 825), 16 oil mills (of which 4 employ more than 100 persons each), 122 gins and presses (of which 8 employ more than 100 each) and 34 tobacco factories is no mean achievement at all and would do honour to many districts in other tracts showing higher levels of achievement on account of other values. On the other hand, however, there are no modern non-agro industries in any of these 3 districts which serves as a good object lesson that a desirable pace of development and breakthrough is satisfactorily achieved with a complementary role of agro and non-agro industries.

In the second level the number of rice mills increases to 24, that of dal mills is 10 (of which 1 employs about 250 persons). The number of sugar mills is 32 (of which 7 employ more than 100 persons each), of oil mills 124 (of which 7 employ an average of well over 100 persons), 167 gins and presses (of which 36 employ more than 100 persons each), 232 tobacco factories (of which 22 employ more than 150 persons on the average).

In the matter of non-agro industries, although the range is not very wide, the number of factories turning out industrial machinery is 4, the number of cloth mills is 9, of cement factories 1, paper mill 1, electricity generating stations 2 and coal, limestone and non-metallic mineral factories 6.

The 20 districts in the third level of development have 76 rice mills, 10 atta mills, 9 dal mills, 18 sugar mills (of which 3 employ more than 1,000 persons each including 1 employing 2,000), 124 oil mills (of which 7 employ an average of over 200 persons each), 3 hydrogenated oil mills (of which 1 employs more than 200 persons), 367 gins and presses (of which 125 employ more than 100 persons) and as many as 345 tobacco (*bidi*) factories (of which 27 employ an average of more than 150 each). In the non-agro sector there are 38 cloth mills (of which 12 employ more than 1,000 persons each of which again 3 employ an average of more than 3,600 workers each); 2 cement factories (the position in 1961), 2 paper mills (of which 1 employs 1,571), 3 fine chemicals mills, 1 heavy chemicals mill employing 915 persons, 2 electricity generating stations and 5 coal, limestone and non-metallic mineral establishments (of which 1 employs 1,695 persons).

The 19 districts in the top level of development have 118 rice mills (of which 3 employ more than 100 each), 21 atta mills (of which 3 employ an average of 100 persons each), 16 dal mills, 103 sugar mills (25 employing on an average a little less

than 500 workers each), 105 oil mills of which 11 employ a total of 2,129 workers, 7 hydrogenated oil mills (of which 2 employ on average more than 250 workers), 385 gins and presses (of which 99 employ more than 100 workers each and at least 1 employs 2,000), and 306 tobacco factories (of which 91 employ more than 100 persons each including 3 employing more than 1,000 persons each of which again 1 employs 2,000 persons). Between them they have 1 steel mill (Bhadravati) employing 5,136, 12 factories of industrial machinery (of which 1 employs 3,433), 2 factories of electrical machinery, 150 cloth mills (of which 38 employ more than 1,000 persons each, of which again 13 employ more than 4,000 each on the average), 1 cement factory (in 1961), 17 tea factories, 4 paper mills (of which 1 employs 2,000), 1 petroleum installation, 3 machine tools (of which 2 employ 4,478 of which again 1 employs 3,000), 7 leather factories, 8 fine chemicals factories, 3 heavy chemicals factories (of which 1 employs 1,444), 5 electricity generating stations and 19 coal, limestone and non-metallic mineral establishments. Thus the non-agro industries are distinguished both by size of establishment and versatility of products.

STATEMENT IV. 5. I
Agricultural Processing Industries
4 THE DECCAN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all Industries		292	8,386	1,628	60,527	2,595	154,913	5,843	439,237	10,358	663,063
Rice	20-99	10	210	24	634	75	2,356	115	3,688	224	6,888
	100+	..	..	..	..	1	100	3	331	4	431
Atta	20-99	5	100	..	..	10	297	18	541	33	938
	100+	..	..	..	..	..	..	3	300	3	300
Dal	20-99	..	..	9	275	9	264	16	462	34	1,001
	100+	..	..	1	250	..	..	..	..	1	250
Sugarcane	20-99	..	..	25	645	9	251	78	2,044	112	2,940
	100+	..	..	7	13,761	9	7,766	25	12,316	42	24,668
Edible oils	20-99	12	390	117	3,752	117	4,459	94	3,682	340	12,283
	100+	4	550	7	889	7	1,659	11	2,129	29	5,227
Hydrogenated oils	20-99	..	..	..	..	2	96	5	110	7	206
	100+	..	..	..	..	1	201	2	505	3	706
Jute and Cotton ginning and pressing	20-99	114	2,679	131	4,338	242	19,890	286	13,913	773	30,820
	100+	8	1,400	36	4,789	125	21,644	99	9,230	268	47,063
Tobacco	20-99	34	1,093	210	8,293	318	12,628	215	11,657	777	33,671
	100+	..	..	22	3,558	27	4,438	91	21,402	140	29,398

STATEMENT IV.5.II
Selected Industries Outside Agricultural Processing
4 THE DECCAN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Steel	100 + 1000 + 2000 +	..	..	..	..	..	..	1	5,136	1	5,136
Machinery (Industrial)	100 + 1000 + 2000 +	..	..	4	762	..	..	1	5,136	1	5,136
Machinery (Electrical)	100 + 1000 + 2000 +	..	..	..	..	..	..	12	7,803	16	8,565
Cloth	100 + 1000 + 2000 +	..	..	9	3,807	..	..	2	4,604	2	4,604
Cement	100 + 1000 + 2000 +	..	..	1	1,265	33	11,034	150	134,379	51	118,675
Tea	100 + 1000 + 2000 +	..	..	..	..	..	..	13	93,349	16	69,092
Paper and paper products	100 + 1000 + 2000 +	..	..	1	952	2	1,821	4	2,529	7	5,312
Petroleum	100 + 1000 + 2000 +	..	..	..	..	1	1,571	1	2,000	2	3,571
Machine tools	100 + 1000 + 2000 +	..	..	..	..	..	..	1	115	1	115
Leather and leather products	100 + 1000 + 2000 +	..	..	..	..	..	..	3	4,585	3	4,585
Fine chemicals	100 + 1000 + 2000 +	..	..	..	..	..	..	2	4,478	2	4,478
Heavy chemicals	100 + 1000 + 2000 +	..	..	..	..	..	..	1	3,000	1	3,000
Generation of electricity	100 + 1000 + 2000 +	..	..	..	..	..	..	7	1,008	7	1,008
Coal, Lime-stone and non-metallic mineral products	100 + 1000 + 2000 +	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	3	501	8	2,106	11	2,607
		..	..	..	..	1	915	3	1,662	4	2,577
		..	..	..	..	..	..	1	1,444	1	1,444
		..	..	2	342	2	200	5	1,746	9	2,288
		..	..	..	..	..	..	..	..	..	..
		..	..	6	907	5	2,809	19	5,836	30	9,552
		..	..	..	..	..	..	..	..	1	1,695

STATEMENT IV.6

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

NATURAL REGION : 5 THE WEST COAST PLAINS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	1	2	3	4	5	6	7	8	9	10	11	12
I	..	1	2	..	1	..	2	11	1	..	1	5
II	..	..	1	11	3	1	4	5	6	..	..	..
III	..	..	..	..	..	..	..	..	..	..	5	16
IV	..	..	..	..	..	..	3	..	..	1	2	16
V	..	..	..	..	..	..	3	13	1	..	2	3
VI	..	..	..	..	..	1	3	13	1	..	2	3
Total	..	1	3	11	4	3	12	29	8	1	10	40

This Region shows a high level of development. The district of Greater Bombay has been excluded from this table on account of the fact that it has no rural area. The number of districts at the lowest level of development is the smallest for any region, being only 1. The number of districts at the second level of development is only 5. Ratnagiri, the sole district in the lowest level of development has low or medium values for all blocks except V in which alone it has a high value. There are 16 districts in the third level of development. Each of these 16 districts enjoys either medium or high values in all blocks

except in block III (participation rates in traditional sector) where the values are either low (11 districts) or medium (5 districts). 9 districts are at the top level of development. All of these 9 districts have high values in blocks IV and V and as many as 8 have high values in block VI. Only 7 districts have high values in block II (Greater Bombay has no agriculture). All the 9 districts have either low (3 districts) or medium values (6 districts) only in block III (participation rates in traditional sector). Thus the majority of the districts are in the two top levels of development.

STATEMENT IV.6.I

Agricultural Processing Industries

5 THE WEST COAST PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries		36	1,779	375	20,225	3,847	348,107	2,952	311,904	7,210	682,015
Rice	20-99 100 +	..	..	63	1,557	69	1,968	4	110	136	3,635
Atta	20-99 100 +	..	..	3	511	6	900	..	..	9	1,411
Dal	20-99 100 +	..	..	..	174	12	300	5	238	20	712
Sugarcane	20-99 100 +	..	..	..	..	9	250	3	95	12	345
Edible oils	20-99 100 +	..	..	..	..	..	..	..	..	..	..
Hydrogenated oils	20-99 100 +	..	..	..	..	2	67	..	..	2	67
Jute and cotton ginning and pressing	20-99 100 +	..	..	..	..	5	1859	..	..	5	1,859
Tobacco	20-99 100 +	..	..	..	..	99	3,093	99	112	229	7,389
		..	..	18	450	8	1,202	8	452	10	1,654
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	1	68	..	1,097	5	1,197
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	71	4,415	137	6,656	209	11,121
		..	..	3	464	87	16,749	74	13,149	164	30,362
		..	..	..	..	..	..	..	..	..	..
		1	54	26	1,190	172	6,765	21	850	220	8,859
		..	..	4	550	13	1,779	..	..	17	2,329

Selected Industries Outside Agricultural Processing

5 THE WEST COAST PLAINS

[illegible]

STATEMENT IV.7

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

NATURAL REGION : 6 THE EAST COAST PLAINS

PART I TO THE EAST COAST PLAINS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
I	2	3	4	5	6	7	8	9	10	11	12	13
II	.	.	.	.	.	1	.	.	10	11	12	13
III	.	.	.	.	.	1	.	.	10	11	12	13
IV	.	.	.	.	.	1	.	.	10	11	12	13
V	.	.	.	.	.	1	.	.	10	11	12	13
VI	.	.	.	.	.	1	.	.	10	11	12	13
Total	2	4	1	.	1	12	11	5	2	9	23	15

= 17
 = 17
 = 17
 = 17

Madras Corporation has been excluded

Madras Corporation has been excluded from this table because it has no rural area.

This, too, is a developed region, only 1 district out of a total of 17 being in the first or lowest level of development, and 5 in the second level. There are as many as 7 districts in the third level and 4 in the top level. Even in the third level the 7 districts have high values in II, IV and V (except for 1 district which has a medium value). Organised industrial activity (VI) has mostly medium values in the third level. The 4 districts in the top

level are strong, having high values, in II, IV, V and VI (except for 1 district which has a medium value). Characteristically enough, none of the 11 districts in the two top levels of development enjoy any high value in block III (participation rates in traditional sector). All things considered, this Region as a whole shows very promising levels of development.

In the single district in the first level of development, Puri, there are only 2 rice mills and 1 tobacco factory and 1 steel rerolling mill (employing 161).

The 5 districts in the second level have between them 83 rice mills (of which 3 employ a total of 419 persons), 2 atta mills, 10 khandsari and sugar mills (of which 5 employ a total of 1,843), 31 oil mills, 9 gins and presses and 21 tobacco factories. Of the selected non-agro industries, these 5 districts have between them 1 steel rerolling mill, 2 cloth mills (of which 1 employs 4,514), 2 jute mills (total employment 5,103), 1 paper mill employing 728, 1 petroleum refinery (employment 419) and 4 coal, limestone and non-metallic mineral establishments (1 employing 1,264).

The strength of the Region lies in the districts of the third level more than in that of those in the fourth. In the 7 districts in the third level there are 255 rice mills, 4 dal mills, 14 sugar mills (7 employ a total of 3,885), 38 oil mills, 1 hydro-generated oil mill, 73 gins and presses (of which 12 employ more than 100 persons each) and 309 tobacco factories out of which as many as 120 employ more than

100 each, which includes as many as 12 employing more than 1,000 each of which again 2 employ more than an average of 3,380 each. The agricultural prosperity of these 7 districts can thus be easily appreciated. Between them they have 24 cloth mills employing more than 100 each (5 employ more than 1,000 each of which again 2 employ a total of 7,935), 2 jute mills employing more than 1,000 each, 4 cement factories, 1 paper factory, 2 heavy chemicals mills and 3 mines and quarries.

The strength of the 4 districts in the top level also lies very much in their agricultural processing industries (142 rice mills, 4 dal mills, 6 sugar mills, 19 oil mills, 1 hydrogenated oil mill, 17 tobacco factories of which as many as 8 employ more than 100 each) and in the selected non-agro industries of cloth (7 mills), cement (2 factories), fertilizers (1), railway wagons, locomotives and coaches (1), leather (3), fine chemicals (1), and coal, limestone and non-metallic mineral products (3).

STATEMENT IV.7.I

Agricultural Processing Industries

6 THE EAST COAST PLAINS

[illegible]

STATEMENT IV.7.II

Selected Industries Outside Agricultural Processing

6 THE EAST COAST PLAINS

[illegible]

STATEMENT IV. 8

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 1.1 WEST HIMALAYAS

WEST HIMALAYAS																		
Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)									
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level						
I	1	2	3	4	5	6	7	8	9	10	11	12	13					
II	.	.	.	.	.	12	..	1	..	6	4	..	1	..	..	2	=26	
III	.	.	.	.	.	3	..	..	..	13	3	..	3	..	1	1	..	=26
IV	.	.	.	.	.	3	..	..	..	10	1	..	..	5	3	1	3	=26
V	.	.	.	.	.	7	..	..	..	11	3	..	..	..	1	1	3	=26
VI	.	.	.	.	.	8	3	..	..	10	1	1	..	..	..	..	3	=26
Total	.	.	.	.	.	33	3	1	..	50	12	1	4	7	5	3	11	

Of the 26 districts as many as 18 are in the first level of development, 4 in the second, 1 in the third and 3 in the top level. All the 18 districts in the lowest level have either low or medium values in all blocks, except for high values for 2 districts in block III (participation rates in traditional sector) and 5 in block IV (potential of human resources). Simla, the sole district in the third level of development has characteristically enough, high values in blocks III, IV, and V, low in II (agricultural infrastructure) and medium in VI (industrial activity in the modern sector). All the 3 districts in the top level have high values in blocks IV, V and VI, and except for 1 district also in block II. Significantly enough none of them have high values in block III.

Of a total of 9 rice and 1 atta mill in the Himalayan Region, this Subregion claims 1 each. All the 3 khandsari sugar

mills in the Region are in this Subregion and the 3 large sugar mills of the Region are also in this Subregion, in districts of the top level. All the 4 edible oil mills of the Region are in this Subregion too in districts of the first (1) and second (3) levels.

Among all the non-agro registered factories in the Himalayan Region all but 12 tea factories employing 1,676 persons are in this Subregion. The steel and cloth mills (except 1) are placed in districts of the second level, the coal, limestone and non-metallic factories in the first level. 1 cloth and 3 tea factories in districts of the fourth level.

In the aggregate, however, this Sub-region claims a little less than half of all registered factories, but nearly two-thirds of all workers in registered factories in the Region.

STATEMENT IV.8.I

Agricultural Processing Industries

1.1 WEST HIMALAYAS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all Industries		48	2,983	104	9,045	5	955	124	8,658	281	21,651
Rice	20—99 100+	..	..	..	..	..	..	1	20	1	20
Atta	20—99 100+	..	..	..	..	..	..	1	45	1	45
Sugarcane	20—99 100+	..	..	1	50	..	..	2 3	48 1,890	3 3	98 1,890
Edible oils	20—99 100+	1	40	3	70	..	..	..	..	4	110

STATEMENT IV.8.II

Selected Industries Outside Agricultural Processing

1.1 WEST HIMALAYAS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	1	490	..	..	..	..	1	490
Cloth	100+ 1000+ 2000+	..	..	4	2,975	..	..	1	514	5	3,489
Tea	100+ 1000+ 2000+	..	..	..	..	..	..	3	473	3	473
Coal, Limestone and non-metallic mineral products	100+ 1000+ 2000+	1	146	..	..	..	..	..	..	1	146

STATEMENT IV. 9

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUB REGION : 1.2 EASTERN HIMALAYAS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
1	2	3	4	5	6	7	8	9	10	11	12	13	
II	2	..	..	..	..	..	..	..	..	..	..	1	=3
III	..	..	..	..	..	..	..	1	2	..	..	..	=3
IV	..	..	..	..	2	..	..	..	..	..	..	1	=3
V	..	..	..	..	2	..	..	..	..	..	..	1	=3
VI	..	..	..	..	1	..	..	..	..	..	..	1	=3
Total	3	..	..	..	5	..	..	1	2	..	..	4	

There are only 3 districts in the Sub-region of which 2 are in the first or lowest level and 1 in the highest level. The disparities in development are therefore high. Even in the 2 districts of first level intersectoral development is uneven, their values being low in block II, medium in IV and V, and high in block III. One has low value and another medium value in block VI. The only district in the top level enjoys uniformly high values in each block except III where the value is medium.

All the rice mills in this Subregion are

concentrated in Darjeeling the sole district of the top level of development. The range of non-agricultural industry in the organised sector is limited to tea and fine chemicals. The 12 tea factories and the single fine chemicals factory (cinchona factory in Darjeeling) are confined to the sole district (Darjeeling) in the top level of development.

This Subregion claims only 171 out of a total of 593 factories in the Region and no more than 8,877 workers out of a total of 33,809.

STATEMENT IV. 9.I
Agricultural Processing Industries
1.2 EAST HIMALAYAS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all Industries		..	..	..	..	..	..	171	8,877	171	8,877
Rice	20-99 100+	..	..	..	..	..	..	8	243	8	243

STATEMENT IV. 9.II

Selected Industries Outside Agricultural Processing

1.2 EAST HIMALAYAS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Tea	100+ 1000+ 2000+	..	..	..	..	..	..	12	1,676	12	1,676
Pine chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	1	229	1	229

STATEMENT IV. 10

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 1.3 NORTH EASTERN RANGES

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
1	2	3	4	5	6	7	8	9	10	11	12	13	
II	..	..	..	..	1	1	1	..	..	..	..	1	=9
III	..	..	..	..	3	1	..	..	2	..	..	1	=9
IV	..	..	..	..	1	..	..	..	4	1	1	1	=9
V	..	..	..	..	4	1	..	1	..	..	1	..	=9
VI	..	..	..	..	5	1	..	2	6	1	3	3	
Total	10	..	1	..	14	4	1	2	6	1	3	3	

This is a Subregion of low development. Of the total of 9 districts as many as 6 are in the first level, and one each in the second, third and fourth levels. It is significant that while the district in the third level has high values in V and VI, the district in the fourth level has but medium values in these blocks. The district in the top level has high values in blocks II, III and IV only. The analysis shows that no district can be regarded as

indisputably in the top level of development although the total score places it as such nor can it be regarded as enjoying the prerequisites of such classification.

The only cotton ginning and bailing factory and 3 tobacco factories of the Region are in this Subregion, in the district of third level. This Subregion has no registered factory in any of the non-agro industries selected for this analysis.

STATEMENT IV.10.I

Agricultural Processing Industries

1.3 NORTH EASTERN RANGES

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all Industries		36	153	17	383	62	1,897	26	848	141	3,281
Jute and cotton ginning and pressing	20-99 100+	..	..	..	..	1	22	..	..	1	22
Tobacco	20-99 100+	..	..	..	..	..	99	..	..	3	99

STATEMENT IV.11

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION: 2.1 RAJASTHAN PLAIN

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	3	1	1	..	..	2	2	..	=9
III	..	..	2	..	3	1	3	..	..	..	..	..	=9
IV	..	..	..	..	..	..	..	..	3	3	3	..	=9
V	..	3	1	..	..	2	3	..	..	..	..	..	=9
VI	..	1	..	..	2	3	3	..	..	..	..	..	=9
Total	..	4	3	..	8	7	10	..	3	5	5	..	

This Subregion is marked by an even distribution of 3 districts in each of the first three levels. There is no district in the top level. Each district, irrespective of level of development, has high values in block IV (potential of human resources). 4 districts (2 each in the second and third levels of development) have high values in block II (settled agriculture).

The districts in the first level have only

3 medium tobacco factories and 1 coal, limestone and non-metallic factory. There is only 1 medium jute and cotton gin and press in a second level district. But the great bulk of all registered factories (264 out of a total of 313 in the Subregion) employing no less than 13,076 out of a total of 16,355 persons occur in 3 districts placed in the third or highest ever level of development, for this Subregion.

STATEMENT IV.11.I

Agricultural Processing Industries

2.1 RAJASTHAN PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all Industries		24	726	25	2,553	264	13,076	..	..	313	16,355
Atta	20-99 100+	..	..	..	..	1	43	..	..	1	3
Sugarcane	20-99 100+	..	..	..	..	1	598	..	..	1	598
Edible Oils	20-99 100+	..	..	..	..	1	40	..	..	1	40
Jute and cotton ginning and pressing	20-99 100+	..	..	1	47	12	649	..	..	13	694
Tobacco	20-99 100+	..	..	..	..	4	751	..	..	4	751
						2	74	..	..	5	174
		3	100	..	..	..	..	..	..	..	..

STATEMENT IV.11.II

Selected Industries Outside Agricultural Processing

2.1 RAJASTHAN PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	2	657	..	..	2	657
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	1	111	..	..	1	187	..	..	2	298
		..	..	..	..	..	..	..	..	..	..

STATEMENT IV.12

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION: 2.2 PUNJAB PLAINS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	..	..	..	..	2	..	..	..	= 15
III	..	..	2	1	10	..	..	..	..	..	2	1	= 15
IV	..	..	..	..	..	..	2	1	5	..	..	..	= 15
V	..	..	..	..	..	..	2	1	7	..	..	..	= 15
VI	..	..	..	..	..	..	4	2	14	..	4	2	36
Total	..	..	2	1	10	..	..	..	..	..	..	..	

By contrast to the Rajasthan Plains, this Subregion is marked by a high degree of development, among the highest in India. 12 out of 15 districts are in the highest level of development, 1 in the third and 2 in the second. There are none in the first or lowest level. All of them have high values for blocks II and IV; out of 12 districts of highest level 7 have high and 5 medium values in block V, while 5 have high and 7 medium values in block VI. This proves that although the sectors of distributive trade, manufacturing, infrastructure and modern organised industrial activity are still some way from attaining a uniformly high level, the base of human potential and agricultural development is sound.

In districts of the second level there are only 4 small rice mills, 1 medium sized cement factory (employing 686) but 1 large fertilizer factory (Fertilizer Corporation of India, Naya Nangal, employment 2,671). In the sole district in the third level there are 1 rice mill, 1 sugarcane factory, 2 oil mills, 18 jute and cotton gins and presses (employing a total of 1,036 persons) and 1 steel factory employing 170 persons. All the remaining 3,170 registered factories out of a total of 3,313 occur in districts placed in the fourth or highest level of development, in which the agro industries are in as strong a muster as the non-agro factories.

STATEMENT IV.12.I
Agricultural Processing Industries

2-2 PUNJAB PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all Industries		..	..	86	6,347	57	2,321	3,170	107,363	3,313	116,031
Rice	20-99 100+	..	..	4	107	1	20	7	193	12	320
Atta	20-99 100+	..	..	..	..	..	..	12	675	12	675
		..	..	..	..	..	..	3	445	3	445
Dal	20-99 100+	..	..	..	..	..	..	2	44	2	44
Sugarcane	20-99 100+	..	..	..	..	1	291	4	147	4	147
		..	..	..	..	..	..	4	2,696	5	2,987
Edible oils	20-99 100+	..	..	..	..	2	111	16	693	18	804
		..	..	..	..	..	..	1	108	1	108
Hydrogenated oils	20-99 100+	..	..	..	..	..	..	1	91	1	91
		..	..	..	..	..	..	1	140	1	140
Jute and cotton ginning and pressing	20-99 100+	..	..	..	..	18	1,036	92	4,723	110	5,739
		..	..	..	..	..	..	22	3,007	22	3,007
Tobacco	20-99 100+	..	..	..	..	..	..	1	25	1	25

STATEMENT IV.12.II
Selected Industries Outside Agricultural Processing

2-2 PUNJAB PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	..	..	1	170	..	..	1	170
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	1	143	1	143
Machinery (Industrial)	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	19	14,627	19	14,627
		..	..	..	..	..	..	4	8,197	4	8,197
		..	..	..	..	..	..	3	7,075	3	7,075
Cloth	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	1	1,028	2	1,714
		..	..	..	..	..	..	1	1,028	1	1,028
Cement	100+ 1000+ 2000+	..	..	1	686	..	..	..	..	..	..
		..	..	..	..	..	..	1	2,549	1	2,549
		..	..	..	..	..	..	1	2,549	1	2,549
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	3	1,436	3	1,436
Artificial fibre rayon etc.	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
Fertilizers	100+ 1000+ 2000+	..	..	1	2,671	..	..	..	..	1	2,671
		..	..	1	2,671	..	..	..	..	1	2,671
		..	..	..	..	..	..	4	732	4	732
Machine tools	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	1	122	1	122
Leather and leather products	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	1	170	1	170
Heavy chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	1	246	1	246
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..

STATEMENT IV.13

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 2-3 UTTAR PRADESH PLAINS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	8	..	..	..	12	5	8	8 = 41
III	..	..	..	..	5	..	4	3	..	..	..	.. = 41
IV	..	..	..	..	10	..	..	..	10	5	8	8 = 41
V	..	..	..	..	6	5	7	3	..	..	1	5 = 41
VI	..	..	..	..	14	5	5	7	..	..	3	1 = 41
	..	..	..	..	14	10	16	13	22	10	20	22
Total	35	5	4	5	43	10	16	13	22	10	20	22

This is a Subregion of moderate development. As many as 20 districts out of 41 are in the first level, 5 in the second, and 8 each in the third and fourth. Agricultural development is satisfactory because even of the 20 districts in the

lowest level as many as 12 have high and 8 medium values in block II, all districts in the three remaining levels showing uniformly high values in block II. Potential of human resources presents almost an identical picture. But the position in

blocks V and VI is not very satisfactory, only 5 districts and 1 district in the top level of development showing high values in V and VI respectively. The values of block III, too, are either low or medium in all cases.

This is the Subregion which has a concentration of rice (10) and sugarcane (62) factories in districts of the first or lowest level. In districts of the first level there are only 1 dal mill, 6 oil mills, 1 tobacco factory (employment 125), 1 cloth factory (employment 474) and 1 jute factory (employment 1,047) and 1 coal, limestone and non-metallic industry.

In districts of the second level, there is an increase in rice mills to 21, atta mills to 2, dal mills to 4, jute and cotton gins and presses to 1. There are 25 khandsari mills and 4 sugar mills and 6 oil mills of which 4 employ between 20 and 99 persons and 2 above 100 persons each. There are no non-agro industries in districts of the second level except 3 fair sized

factories engaged in coal, limestone and non-metallic minerals employing a total of 1,642 persons.

There is a marked rise in the total number of agro and non-agro factories and their employment in the 8 districts placed in the third level of development. A greater variety and versatility in the two sectors is also noticeable. But the greatest concentration and versatility are noticeable in the 8 out of a total of 41 districts placed in the top level of development. These 8 districts claim as many as 1,576 registered factories out of a total of 2,558 and an employment of 178,168 out of a total of 282,216. All the 8 selected types of agro industries are represented in strength and as many as 10 types of non-agro industries. The marked association and high concentration of agro and non-agro industries in these 8 districts underline the complementarity of growth in agriculture and industry.

STATEMENT IV.13.I

Agricultural Processing Industries

2-3 UTTAR PRADESH PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No. 3	Workers 4	No. 5	Workers 6	No. 7	Workers 8	No. 9	Workers 10	No. 11	Workers 12
Total of all Industries		285	46,420	171	10,463	526	47,165	1,576	178,168	2,558	282,216
Rice	20-99	10	382	21	643	5	143	6	174	42	1,342
	100+	..	..	..	..	..	..	..	..	..	..
Atta	20-99	..	..	2	75	2	102	5	223	9	400
	100+	..	..	..	..	..	..	4	1,031	4	1,031
Dal	20-99	1	21	4	114	1	20	16	469	22	624
	100+	..	..	..	..	..	..	..	..	..	..
Sugarcane	20-99	24	959	25	900	35	1,296	64	2,459	148	5,614
	100+	38	24,374	4	2,062	11	10,295	18	17,296	71	54,027
Edible oils	20-99	6	211	4	158	9	412	19	900	38	1,681
	100+	..	..	2	284	2	224	13	2,618	17	3,126
Hydrogenated oils	20-99	..	..	..	..	..	..	4	1,313	4	5,315
	100+	..	..	..	..	..	..	..	..	..	..
Jute and cotton ginning and pressing	20-99	..	..	1	64	5	201	2	98	2	365
	100+	..	..	..	..	1	139	..	..	1	139
Tobacco	20-99	1	125	..	..	2	63	1	60	3	123
	100+	..	..	..	..	1	163	2	2,166	4	2,473

STATEMENT IV.13.II

Selected Industries Outside Agricultural Processing

2-3 UTTAR PRADESH PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No. 3	Workers 4	No. 5	Workers 6	No. 7	Workers 8	No. 9	Workers 10	No. 11	Workers 12
1											
Steel	100+	..	..	..	..	..	..	1	3,237	9	3,237
	1000+	..	..	..	..	..	..	1	1,090	1	1,090
	2000+	..	..	..	..	3	579	1	150	4	729
Machinery (Industrial)	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	..	..	1	196
	2000+	..	..	..	..	..	..	..	..	..	..
Machinery Electrical	100+	..	..	..	..	1	196	..	..	..	..
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	5	3,254	19	50,945	25	54,673
Cloth	100+	1	474	..	..	1	2,235	13	48,146	14	46,955
	1000+	..	..	..	..	..	..	11	44,720	12	..
	2000+	..	..	..	..	..	..	2	4,550	3	5,597
Jute	100+	1	1,047	..	..	..	..	1	4,550	3	5,597
	1000+	1	1,047	..	..	..	..	1	3,489	1	3,489
	2000+	..	..	..	..	1	112	..	..	..	112
Tea	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	4	2,246	4	2,246
	2000+	..	..	..	..	..	..	1	1,052	1	1,052
Paper and paper products	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	1	863	1	863
	2000+	..	..	..	..	..	..	..	..	..	..
Artificial fibre rayon etc.	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	12	4,921	12	4,921
	2000+	..	..	..	..	..	..	1	24,82	1	24,82
Leather and leather products	100+	..	..	..	..	..	..	1	2,482	1	2,482
	1000+	..	..	..	..	..	..	3	458	3	458
	2000+	..	..	..	..	..	..	..	..	..	..
Fine chemicals	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	1	508	1	508
	2000+	..	..	..	..	..	..	..	..	..	..
Heavy chemicals	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	39	6,832	40	10,956
	2000+	..	..	..	..	7	2,371	..	..	..	..
Coal limestone and non-metallic mineral products	100+	1	111	3	1,642	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..

STATEMENT IV.14

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 2-4 BIHAR PLAINS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level		2nd level		1st level		2nd level		1st level		2nd level	
	1	2	3	4	1	2	3	4	1	2	3	4
I	..	..	..	..	..	..	..	..	..	..	..	..
II	..	..	..	..	..	..	..	..	..	..	..	..
III	..	..	..	..	..	..	..	..	..	..	..	..
IV	..	..	..	..	..	..	..	..	..	..	..	..
V	..	..	..	..	..	..	..	..	..	..	..	..
VI	..	..	..	..	..	..	..	..	..	..	..	..
Total	3	5	1	..	16	13	1	2	1	7	3	3

Of the 11 districts in this Subregion, 4 are in the first level, 5 are in the second and 1 each in the third and fourth levels. This Subregion is, therefore, characterised by tardy development. The only district in the top level does not claim high values in blocks III and VI.

In the non-agro sector, districts in the second level have the widest variety, although the number of registered factories employing more than 100 persons is small and is confined to electrical machinery (1), cloth (1), jute (2 of which 1 employs 3,500 persons), cement (3), paper and

paper products (2 employing more than 1000 each), electricity (2), coal, limestone and non-metallic industries (1). The 4 districts in the first level have between them only 1 large factory in industrial machinery and 1 in cloth. The single

district in the third level similarly has only 1 large cotton mill. But the solitary district in the top level has 1 large steel factory, 1 cotton mill, 2 large leather factories, 1 fine chemicals, 1 electricity and 1 coal, limestone and non-metallic industry.

STATEMENT IV.14.I

Agricultural Processing Industries
2.4 BIHAR PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries		961	27,871	1,883	42,928	332	8	837	16,164	4,013	91,145
Rice	20—99	46	2,003	35	1,967	1	100	2	102	83	4,072
Atta	100+	3	341	8	982	1	100	2	102	12	1,423
Dal	20—99	1	72	2	112	1	20	2	266	6	204
Sugarcane	100+	1	70	2	70	2	266	3	366	3	366
Edible oils	20—99	23	13,101	3	173	5	249	2	40	9	468
Hydrogenated oils	100+	5	211	2	2,623	2	200	1	1,000	29	18,924
Jute and cotton ginning and pressing	20—99	1	44	4	236	4	110	15	605	1	100
Tobacco	100+	1	20	10	539	2	146	4	500	8	3,195

STATEMENT IV.14.II

Selected Industries Outside Agricultural Processing
2.4 BIHAR PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Steel	100+	1	751	1	100	1	134	1	134	1	134
Machinery (Industrial)	100+	1	751	1	100	1	134	1	134	1	134
Machinery (Electrical)	100+	1	751	1	100	1	134	1	134	1	134
Cloth	100+	1	242	1	695	1	620	1	750	4	2,307
Jute	100+	1	242	1	695	1	620	1	750	4	2,307
Cement	100+	1	242	1	695	1	620	1	750	4	2,307
Paper and paper products	100+	1	242	1	695	1	620	1	750	4	2,307
Leather and leather products	100+	1	242	1	695	1	620	1	750	4	2,307
Fine chemicals	100+	1	242	1	695	1	620	1	750	4	2,307
Generation of electricity	100+	1	242	1	695	1	620	1	750	4	2,307
Coal, limestone and non-metallic mineral products	100+	1	242	1	695	1	620	1	750	4	2,307

STATEMENT IV.15

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 2.5 WEST BENGAL PLAINS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	1	2	3	4	5	6	7	8	9	10	11	12
II	..	..	..	..	..	..	2	..	..	..	3	..
III	..	..	..	..	..	..	..	..	..	..	..	..
IV	..	..	..	..	..	..	..	..	..	..	..	..
V	..	..	..	..	..	..	..	..	..	..	..	..
VI	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	12	..	6	..	8	..

This Subregion shows uneven development. Of the 10 districts, none is in the first level but as many as 5 are in the second level. There is no district in the third level but as many as 5 again in the top level. The 5 districts in the second level again show unevenness in intersectoral growth. Thus, 2 have medium and 3 high values in II, all 5 low values in III, but high values in IV and again medium values in V and VI. All the 5 districts in the top level have high values in II, IV and V, low value in I and medium values in 4 for III, medium values in 2 and high values in 3 for VI.

The 5 districts in the second level have a large number of medium sized rice mills (112) and 5 large rice mills. The 2 oil mills are medium sized and so is the solitary jute press. There are 2 medium sized tobacco factories. Between them the 5 districts have only 2 cotton mills employing a total of 978 persons. The great bulk of the registered factories are concentrated in the 5 districts of the top level, emphasizing the richness of range and high complementarity between agro-based and non-agro industries in these 5 districts.

STATEMENT IV.15.I

Agricultural Processing Industries
2.5 WEST BENGAL PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries		..	..	169	20,637	..	..	1,943	468,584	2,112	489,221
Rice	20—99	..	..	112	5,183	..	..	123	5,808	235	10,991
Atta	100+	..	..	5	711	..	..	4	478	9	1,189
Dal	20—99	..	..	..	..	..	..	4	166	4	166
Sugarcane	100+	..	..	..	..	..	..	4	619	4	619
Edible oils	20—99	..	..	..	..	..	..	22	626	22	626
Hydrogenated oils	100+	..	..	..	..	..	..	..	..	..	..
Jute and cotton ginning and pressing	20—99	..	..	..	..	..	..	1	357	1	357
Tobacco	100+	..	..	..	..	..	..	6	294	8	360
	20—99	..	..	..	..	..	..	1	86	1	86
	100+	..	..	..	..	..	..	4	813	4	813
	20—99	..	..	..	..	..	..	1	303	7	360
	100+	..	..	..	..	..	..	1	100	1	100
	20—99	..	..	..	..	..	..	1	1,199	2	68
	100+	..	..	..	..	..	..	..	..	1	1,199

STATEMENT IV. 15. II
Selected Industries Outside Agricultural Processing
2.5 WEST BENGAL PLAINS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.		No.		No.		No.		No.	
		Workers		Workers		Workers		Workers		Workers	
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	..	..	..	..	21	7,358	21	7,358
Machinery (Industrial)	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,675	1	1,675
Machinery (Electrical)	100+ 1000+ 2000+	..	..	..	..	..	..	6	15,958	6	5,958
Cloth	100+ 1000+ 2000+	..	..	..	..	..	..	2	4,694	2	4,694
Jute	100+ 1000+ 2000+	..	..	2	978	..	..	4	1,720	4	1,720
Tea	100+ 1000+ 2000+	..	..	..	..	..	..	45	46,060	47	147,038
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	..	..	15	34,556	15	34,556
Aluminium	100+ 1000+ 2000+	..	..	..	..	..	..	7	23,118	7	23,118
Fertilizers	100+ 1000+ 2000+	..	..	..	..	..	..	78	197,438	78	197,438
Machine tools	100+ 1000+ 2000+	..	..	..	..	..	..	71	193,893	71	193,893
Railway wagons, locomotives, coaches	100+ 1000+ 2000+	..	..	..	..	..	..	48	159,495	48	159,495
Leather and leather products	100+ 1000+ 2000+	..	..	..	..	..	..	102	16,337	102	16,337
Fine chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	9	8,879	9	8,879
Heavy chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	3	7,397	3	7,397
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	..	..	2	6,174	2	6,174
Coal, lime-stone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	..	..	3	2,549	3	2,549
		..	..	..	..	..	..	1	1,249	1	1,249
		..	..	..	..	..	..	6	1,124	6	1,124
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	1	696	1	696
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	3	4,107	3	4,107
		..	..	..	..	..	..	2	4,005	2	4,005
		..	..	..	..	..	..	1	2,061	1	2,061
		..	..	..	..	..	..	1	104	1	104
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	8	2,436	8	2,436
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	3	2,040	3	2,040
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	7	3,355	7	3,355
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	32	13,580	32	13,580
		..	..	..	..	..	..	2	3,835	2	3,835
		..	..	..	..	..	..	1	2,707	1	2,707

STATEMENT IV. 16
Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 2.6 ASSAM VALLEYS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	1	2	3	4	5	6	7	8	9	10	11	12
II	..	..	..	..	..	3	2	1	..	..	1	..
III	..	..	2	1	..	1	2	..	..	..	..	1
IV	..	..	..	..	..	..	..	..	3	3	1	..
V	..	..	..	..	..	3	3	..	..	..	..	1
VI	..	..	..	..	..	3	3	1	..	..	..	..
Total	..	2	1	..	..	10	10	2	..	3	4	3

The 7 districts in this Subregion progressively taper off in the three upper levels of development, there being none in the first level. There are 3 districts in the second level, 3 in the third and 1 in the fourth. But intersectoral development again is uneven and no district can be regarded as having indisputably "arrived".

It is the districts in the second level of development which have the largest number of small rice (12), oil (4) mills and

jute presses (4). There is 1 atta mill. There are, besides, 24 tea factories in these 3 districts in the second level. In the 3 districts of the third level there are 8 rice mills, 3 atta mills and 6 oil mills but 1 large sugarcane factory employing 359 persons. There is 1 cloth mill employing 100 persons but there are 115 tea factories and the Digboi Oil Factory employing 1,228 persons. The only district in the fourth level has only 2 rice and 1 oil mill but as many as 96 tea factories and 1 factory of coal, limestone and non-metallic industry.

STATEMENT IV.16.I

Agricultural Processing Industries

2.6 ASSAM VALLEYS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.		No.		No.		No.		No.	
		Workers		Workers		Workers		Workers		Workers	
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		..	..	282	13,442	557	32,591	357	32,749	1,196	78,782
Rice	20-99 100+	..	..	12	374	8	255	2	42	22	671
Atta	20-99 100+	..	..	1	48	3	120	..	..	4	168
Sugarcane	20-99 100+	..	..	..	..	1	359	..	..	1	359
Edible oils	20-99 100+	..	..	4	120	6	233	1	25	11	378
Jute and cotton ginning and pressing	20-99 100+	..	..	4	174	..	..	..	..	4	174
		..	..	2	311	..	..	..	..	2	311

STATEMENT IV.16.II

Selected Industries Outside Agricultural Processing

2.6 ASSAM VALLEYS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Cloth	100+	..	..	..	..	1	100	..	..	1	100
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Tea	100+	..	..	24	3,823	115	18,354	96	19,124	235	41,301
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..
Petroleum and oil	100+	..	..	..	..	1	1,228	..	..	1	1,228
	1000+	..	..	..	..	1	1,228	..	..	1	1,228
	2000+	..	..	..	..	..	..	..	..	..	..
Coal, limestone and non-metallic mineral products	100+	..	..	..	..	..	..	1	108	1	108
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..

STATEMENT IV. 17

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 3.1 RAJASTHAN HILLS AND PLATEAUS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	1	2	3	4	5	6	7	8	9	10	11	12	
II	..	..	..	..	2	3	..	..	..	5	3	6	= 19
III	..	1	2	1	2	7	1	5	..	..	..	..	= 19
IV	..	..	..	..	..	..	..	..	2	8	3	6	= 19
V	2	2	..	..	..	6	3	2	..	..	..	4	= 19
VI	..	1	..	..	2	5	1	3	..	2	2	3	= 19
Total . .	2	4	2	1	6	21	5	10	2	15	8	19	

This Subregion presents a promising picture. Of the total of 19 districts only 2 are in the lowest level, 8 in the second level, 3 in the third and as many as 6 in the top. These 6 districts again enjoy high values in II and IV, and either high or medium values in V and VI. Of the 3 districts in the third level 2 have mostly low value in block III.

Among the 2 districts (Bhilwara and Banswara) in the lowest level Bhilwara has 1 dal and 1 khandsari sugar mill, 10 cotton gins and presses (of which 4 employ more than 100 persons each) and 3

tobacco factories. Banswara has only 1 factory devoted to jute ginning and pressing. Banswara has no large non-agro industrial factory whereas Bhilwara again has 2 devoted to coal, limestone and non-metallic minerals.

The 8 districts in the second level have 2 rice mills, 1 dal mill, 1 sugar mill, 2 oil mills, 12 gins and presses (of which 2 employ 339 persons) and 2 tobacco factories. Sawai Madhopur has a large cement factory (employment 2,592). There is 1 fine chemicals factory and 1 factory

devoted to coal, limestone and non-metallic industry.

The 3 districts in the third level of development (Alwar, Sirohi and Bundi) are still deficient in both agro and non-agro industries. Alwar claims all the 4 edible oil mills of the Subregion. Bundi has 2 medium sized khandsari factories as well as a cement factory (employment 1,124) which is the only instance of a large selected non-agro industry.

None of the 6 districts in the top level have any rice, dal or sugar mills. Between them they have 7 atta mills, 9 oil mills, 2 hydrogenated oil mills, 16 gins and presses and 8 tobacco factories. But the range of factories employing more than 100 persons each is impressive, there being 1,544 registered factories in these 6 districts alone out of a total of 1,797 factories in all the 19 districts of the Subregion. The employment in these 1,544 factories is 98,116 as against a total of 109,928 for the whole Subregion.

STATEMENT IV.17.I

Agricultural Processing Industries

3.1 RAJASTHAN HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		75	3,590	134	6,439	44	1,783	1,544	98,116	1,797	109,928
Rice	20-99 100+	..	..	2	74	..	..	..	..	2	74
Atta	20-99 100+	..	..	..	..	..	..	4	186	4	186
Dal	20-99 100+	1	37	1	37	..	..	..	..	2	74
Sugarcane	20-99 100+	1	75	1	342	..	58	..	..	3	133
Edible oils	20-99 100+	..	..	2	71	4	149	9	435	15	655
Hydrogenated oils	20-99 100+	..	..	..	..	..	..	2	355	2	355
Jute and cotton ginning and pressing	20-99 100+	7	318	10	604	..	..	16	687	33	1,609
Tobacco	20-99 100+	3	98	2	89	..	..	8	377	13	654

STATEMENT IV.17.II

Selected Industries Outside Agricultural Processing

3.1 RAJASTHAN HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100 + 1000 + 2000 +	..	..	..	..	..	..	6	1,437	6	1,437
Machinery (Industrial)	100 + 1000 + 2000 +	..	..	..	..	..	..	3	1,014	3	1,014
Machinery (Electrical)	100 + 1000 + 2000 +	..	..	..	..	..	..	5	1,343	5	1,343
Cloth	100 + 1000 + 2000 +	..	..	..	..	..	..	7	17,456	7	17,456
Cement	100 + 1000 + 2000 +	..	..	1	2,592	1	1,124	4	16,576	4	16,576
Paper and paper products	100 + 1000 + 2000 +	..	..	1	2,592	..	..	3	15,454	3	15,454
Petroleum and oil	100 + 1000 + 2000 +	..	..	..	..	..	..	2	355	2	355
Aluminium	100 + 1000 + 2000 +	..	..	..	..	..	..	2	230	2	230
Machine tools	100 + 1000 + 2000 +	..	..	..	..	..	..	1	102	1	102
Leather and leather products	100 + 1000 + 2000 +	..	..	..	..	..	..	4	724	4	724
Fine chemicals	100 + 1000 + 2000 +	..	..	..	..	..	..	1	585	1	585
Heavy chemicals	100 + 1000 + 2000 +	..	..	1	144	..	..	1	331	2	475
Generation of electricity	100 + 1000 + 2000 +	..	..	..	..	..	..	1	656	1	656
Coal lime-stone and non-metallic mineral products	100 + 1000 + 2000 +	2	281	1	120	..	..	5	2,811	5	2,811
		..	..	..	..	..	..	1	1,500	1	1,500
		..	..	..	..	..	..	15	13,310	18	3,711

STATEMENT IV.18

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 3.2 BUNDELKHAND

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	..	..	..	..	2	6	1	1
III	..	1	2	..	1	4	1	1	..	..	..	..
IV	..	..	..	..	..	..	..	..	2	6	1	1
V	..	2	1	..	..	5	1	..	..	..	..	1
VI	..	..	3	..	2	3	1	1	..	..	..	..
Total	3	6	..	..	3	12	3	2	4	12	2	3

This Subregion has a high peak in the second level of development. It has 2 districts in the first level and 1 each in the third and fourth levels. In the general picture of unevenness and comparative backwardness the intersectoral distribution of values in the different blocks is not very encouraging either. For instance, neither of the districts in the third and fourth levels has high values in blocks III and VI although they have high values in II and IV. That is, even their strength lies more in agriculture and potential of human resources.

Curiously enough the 2 districts in the first level have a concentration of agro-industries: rice 4 mills but no non-agro industry. In the second level there are only 6 dal mills and 1 oil mill and 1 cement factory employing 629 persons. In the third level there is only 1 oil mill and 1 fine chemicals factory. There are only 2 rice mills in the single district (Gwalior) of the fourth level but a heavy concentration of non-agro industrial concerns (73 out of 159 factories for the whole Subregion and 13,653 workers out of 19,518).

STATEMENT IV.18.I

Agricultural Processing Industries

3.2 BUNDELKHAND

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		18	439	29	1,241	39	4,185	73	13,653	159	19,518
Rice	20-99 100+	4	108	..	..	..	..	2	45	6	153
Dal	20-99 100+	..	..	6	121	..	..	..	..	6	121
Edible oils	20-99 100+	..	..	1	20	1	29	..	..	2	49

STATEMENT IV.18.II

Selected Industries Outside Agricultural Processing

3.2 BUNDELKHAND

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
I	2	3	4	5	6	7	8	9	10	11	12
Machinery (Industrial)	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,844	1	1,844
Cloth	100+ 1000+ 2000+	..	..	..	..	..	..	3	7,757	3	7,757
Cement	100+ 1000+ 2000+	..	..	1	629	..	..	1	6,498	1	6,498
Artificial fibre rayon etc.	100+ 1000+ 2000+	..	..	..	..	..	..	1	923	1	923
Machine tools	100+ 1000+ 2000+	..	..	..	..	..	..	1	252	1	252
Fine chemicals	100+ 1000+ 2000+	..	..	..	..	1	212	..	..	1	212
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	..	..	1	109	1	109

STATEMENT IV.19

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 3.3 MALWA

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
I	2	3	4	5	6	7	8	9	10	11	12	13	
II	..	..	..	..	1	2	1	2	..	3	1	1	= 11
III	..	..	..	..	1	5	2	3	..	..	..	..	= 11
IV	..	..	..	..	..	..	..	..	1	5	2	3	= 11
V	1	..	..	..	..	5	2	..	..	..	..	3	= 11
VI	..	..	..	..	1	5	2	2	..	..	..	1	= 11
Total	1	..	..	..	3	17	7	7	1	8	3	8	

This is a Subregion of well distributed development. Of a total of 11 districts only 1 is in the lowest level, 5 are in the second, 2 in the third and 3 in the fourth. No district except 1 has low values in any block. Even districts in the second level have either medium or high values. Districts in the top level have all high values in IV and V, but 2 have medium values in II and VI. Organised industrial activity in the modern sector has high value only in 1 district.

The only district (Jhabua) in the lowest level of development has 2 oil mills and 8 gins and presses of which 1 employs 100 persons and no factory in the selected range of non-agro industries. The 5

districts in the second level have a concentration of oil mills (9 employing 290) and gins and presses (71 of which 13 employ 1,489 persons), but no non-agro factories in the selected ranges. The 2 districts in the third level have a proportionately greater range of agro industries; 2 cotton mills and 1 electricity generating station. The 3 districts in the top level have the widest range of agro industries and 5 selected types of non-agro industries. Cloth mills (10 of which 6 employ more than 2,000 each and 3 more than 1,000 each), paper and paper products (2 factories), rayon (1 employing 1,149), machine tools (1) and electricity (2).

STATEMENT IV.19.I

Agricultural Processing Industries

3.3 MALWA

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
I	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		14	558	110	5,355	121	6,142	375	47,006	620	59,062
Rice	20-99 100+	..	..	..	..	..	..	2	64	3	64
Alta	20-99 100+	..	..	..	..	1	24	1	69	2	63
Dal	20-99 100+	..	..	1	20	..	..	3	92	4	112
Sugarcane	20-99 100+	..	..	..	..	3	120	2	66	5	186
Edible oils	20-99 100+	2	41	9	290	8	274	13	424	32	1,029
Jute and cotton ginning and pressing	20-99 100+	7	363	13	2,848	42	1,500	57	2,774	164	7,485
Tobacco	20-99 100+	1	100	..	..	8	237	8	190	16	427

STATEMENT IV.19.II

Selected Industries Outside Agricultural Processing

3.3 MALWA

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
I	2	3	4	5	6	7	8	9	10	11	12
Cloth	100+ 1000+ 2000+	..	..	..	..	2	1,120	10	25,613	12	26,733
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	..	..	9	25,478	9	25,478
Artificial fibre rayon etc.	100+ 1000+ 2000+	..	..	..	..	..	..	6	21,160	6	21,160
Machine tools	100+ 1000+ 2000+	..	..	..	..	..	..	2	1,141	2	1,141
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,149	1	1,149
		..	..	..	..	..	..	1	1,149	1	1,149
		..	..	..	..	..	..	1	179	1	179
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	1	100	2	434	3	534

STATEMENT IV.20

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 3.4 VINDHYA RANGES AND PLATEAUS

	Part I				Part II				Part III							
	A (Low value)				B (Medium value)				C (High value)							
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level				
Block	1	2	3	4	5	6	7	8	9	10	11	12	13			
II	.	.	.	..	..	..	..	1	..	..	..	..	3	4	1	= 9
III	.	.	.	..	1	1	..	1	2	3	1	..	..	..	..	= 9
IV	.	.	.	..	..	..	..	..	..	..	..	1	3	4	1	= 9
V	.	.	.	1	2	..	..	..	1	4	..	..	..	..	..	= 9
VI	.	.	.	..	..	..	..	1	3	4	1	..	..	..	..	
Total	.	.	1	3	1	..	3	6	11	2	1	6	8	3		

This Subregion of 9 districts has 1 district in the first level of development, 3 in the second, 4 in the third and 1 again in the fourth level of development. The intersectoral distribution of medium and high values even in the third and top levels is so uneven that no district can be regarded as having registered all round development. But it is significant that all the 4 districts in the third level have high values in II and IV and medium values in blocks V and VI.

The only district (Rewa) in the lowest level of development has only 1 tobacco factory and no non-agro industry in the selected ranges. The 3 districts in the second grade however have between them 1 rice mill, 3 oil mills and 14 tobacco factories but only 1 factory generating elec-

tricity. There is slightly more of industrial variety in the 4 districts of the third grade with 2 atta mills, 2 dal mills, 22 tobacco factories, 2 cloth factories, 1 cement factory (employment 1,375), and 1 machine tools factory. In the single district (Sohore of Bhopal) of the top level there is a proportionate concentration of both agro and non-agro industries, Bhopal claiming a large cloth mill (employment 2,104) and the very important heavy electrical industry (employment 1,126). There is 1 paper mill and 1 electricity generating station. Sohore alone claims 42 out of a total of 213 mills and factories in the entire Sub-region, and employs 7,777 out of a total factory employment of 18,330 in the Sub-region.

STATEMENT IV. 20. I

Agricultural Processing Industries

3.4 VINDHYA RANGES AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries		10	871	66	3,670	95	6,012	42	7,777	213	18,330
Rice	20-99	..	..	..	..	..	..	..	..	1	50
	100+	..	..	1	50	..	..	..	..	..	106
Atta	20-99	..	..	..	..	..	..	..	..	2	248
	100+	..	..	..	..	2	106	..	1	1	40
Dal	20-99	..	..	..	..	..	..	..	..	2	..
	100+	..	..	..	..	2	40	..	..	..	..
Sugarcane	20-99	..	..	..	..	..	..	..	..	..	611
	100+	..	..	..	..	..	..	..	..	1	194
Edible oils	20-99	..	..	..	..	..	..	1	611	4	..
	100+	..	..	3	118	..	..	1	76	..	55
Jute and cotton ginning and pressing	20-99	..	..	..	..	..	..	..	..	2	..
	100+	..	..	..	..	..	..	2	55	..	..
Tobacco	20-99	1	50	14	533	20	888	5	210	40	1,681
	100+	..	..	..	..	2	212	..	..	2	212

STATEMENT IV.20.II

Selected Industries Outside Agricultural Processing

3.4 VINDHYA RANGES AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Cloth	100+	..	..	..	..	2	670	1	2,104	3	2,774
	1000+	..	..	..	..	..	..	1	2,104	1	2,104
	2000+	..	..	..	..	1	1,375	..	2,104	1	2,104
Cement	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	1	434	1	434
	2000+	..	..	..	..	..	..	..	..	..	..
Paper and paper products	100+	..	..	..	..	..	..	1	1,126	1	1,126
	1000+	..	..	..	..	..	..	1	1,126	1	1,126
	2000+	..	..	..	..	..	..	..	..	..	..
Heavy electricals	100+	..	..	..	..	..	..	..	..	1	132
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	1	132	..	..	..	..
Machine tools	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	1	203	2	303
	2000+	..	..	..	..	..	..	..	..	..	..
Generation of electricity	100+	..	..	..	..	..	..	..	..	..	..
	1000+	..	..	..	..	..	..	..	..	..	..
	2000+	..	..	..	..	..	..	..	..	..	..

STATEMENT IV.21

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 3.5 CENTRAL MADHYA PRADESH PLATEAU

SUBREGION : 3.5 CENTRAL MADHYA PRADESH													Part III C (High value)	
Block	Part I A (Low value)				Part II B (Medium value)								Total	
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level		
	1	2	3	4	5	6	7	8	9	10	11	12		13
II	..	..	..	..	..	6	3	..	..	1	4	2	1	-18
III	..	..	1	..	..	7	6	1	2	..	..	1	..	-18
IV	..	..	..	..	..	1	1	..	..	6	6	2	2	-18
V	..	..	..	..	..	1	4	2	1	..	..	..	1	-18
VI	..	6	3	..	..	4	7	2	1	..	..	..	1	-18
Total	9	4	..	..	..	19	21	5	5	7	10	5	5	

This Subregion is dominated at each

of the four levels by the crops: rice and bidi. Rice

This Subregion is marked by low development. Of a total of 18 districts as many as 7 each are in the first and second levels and only 2 each are in the third and fourth levels. Further there is only 1 district with high values in each of the important blocks V and VI, which goes to highlight the backwardness of the Subregion. The Subregion, however, is strong in its potential of human resources, because except for 2 districts having medium value all the remaining 16 districts have high values in block IV, irrespective of their levels of development.

This Subregion is dominated at each level by the twin Kings: rice and *bidi*. Rice is more dominant in the two lower levels of development, and *bidi* although the poorest industry in India, in the two upper levels.

In the 7 districts in the first level of development the majority of the factories are concerned with rice (65 mills of which 5 employ more than 100 persons each), oil (3) and *bidi* (43 of which 4 employ more than 100 each). Only 1 factory each is concerned with Jute and generation of electricity.

To a renewed concentration of rice and *bidi* factories in the 7 districts of the second level is added 5 atta mills, 6 dal mills, 20 oil mills and 54 gins and presses (of which 6 employ more than 100 persons each). Of the 89 rice mills 1 employs as many as 3,089 persons. Of the 60 *bidi* factories as many as 15 employ more than 100 persons. There is no selected non-agro industry in the second level.

There are proportionately more *bidi* factories in the 2 districts in the third level of development and more dal mills too. There are 2 steel factories of which 1 employs 1,462, 1 cloth factory employ-

ing 2,475 and 3 electricity generating stations (of which 1 employs 1,169).

In the 2 districts (Jabalpur and East Nimar) in the top level of development there is only 1 rice mill, 1 atta mill, 6 dal mills, 8 oil mills (of which 1 employs 128), 34 gins and presses (of which 8 employ 1,286) but as many as 43 tobacco factories of which 9 employ 1,808 persons. There are 2 cloth mills of which 1 (in Jabalpur) employs 2,351 persons, 2 cement factories (both in Jabalpur) of which 1 employs 1,118 and 3 (2 in Jabalpur) electricity generating stations.

STATEMENT IV. 21.I

Agricultural Processing Industries

3.5 CENTRAL MADHYA PRADESH PLATEAU

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		198	8,958	409	19,356	151	15,593	276	123,442	1,034	67,349
Rice	20-99 100+	60 5	2,882 600	87 2	13,294 3,189	11 1	257 100	1 ..	20 ..	159 8	16,453 3,889
Atta	20-99 100+	..	..	5	218	..	..	..	96	6	314
Dal	20-99 100+	..	..	6	183	4	181	6	161	16	525
Edible oils	20-99 100+	3	99	20	614	3	97	7	208	33	1,018
Jute and cotton spinning and pressing	20-99 100+	..	..	48 6	2,673 674	7 2	397 208	26 8	1,524 1,286	181 16	4,594 2,168
Tobacco	20-99 100+	39 4	17,554 509	45 15	12,327 11,925	1 6	871 731	34 9	11,638 1,808	137 34	6,390 4,973

STATEMENT IV. 21.II

Selected Industries Outside Agricultural Processing
3.5 CENTRAL MADHYA PRADESH PLATEAU

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	..	..	2 1	2,151 1,462	..	..	2 1	2,151 1,462
Cloth	100+ 1000+ 2000+	..	..	..	..	1 1	2,475 2,475	2 1	2,502 2,351	3 2	4,977 4,826
Jute	100+ 1000+ 2000+	1	756	..	..	..	..	..	..	1	756
Cement	100+ 1000+ 2000+	..	..	..	..	..	..	2 1	1,667 1,118	2 1	1,667 1,118
Generation of electricity	100+ 1000+ 2000+	1	471	..	..	3 1	1,617 1,169	3	590	7 1	2,678 1,169

STATEMENT IV. 22

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 3.6 ORISSA HILLS AND PLATEAUS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	2	3	4	5	6	7	8	9	10	11	12	13
I	..	..	..	..	3	1	1	..	4	1	..	..
II	..	..	..	..	5	1	1	..	..	..	..	..
III	..	..	..	..	5	..	..	..	2	2	1	..
IV	..	..	..	..	4	2	1	..	..	..	..	..
V	..	..	..	..	4	1	1	..	..	..	..	..
VI	..	..	..	..	4	1	1	..	..	..	..	..
Total	8	2	..	..	21	5	4	..	6	3	1	..

This Subregion is characterised by comparative backwardness. Of the 10 districts as many as 7 are in the first level, 2 are in the second and 1 in the third level of development. There is no district in the top level. The intersectoral distribution of values in the different blocks is also uneven and tends toward low and medium.

The 7 districts in the first level have the largest concentration of agro industries, the range of which is limited to rice, sugarcane, oil and *bidi*. Sambalpur has a large paper mill (employment 2,540), 2 aluminum factories, 1 electricity generating station and 1 works

of coal, limestone and non-metallic industry.

The 2 districts in the second level of development have 12 rice mills, 1 oil mill and 7 *bidi* factories but no selected non-agro industry.

The only district (Sundargarh) in the third level of development has only 1 atta mill but the Rourkela Steel Works (employment 15,590), a large cement factory (employment 880) and 1 coal, limestone and non-metallic minerals factory.

The association between agro and non-agro industries is therefore high in the first level but fairly inverse in the second and third levels.

STATEMENT IV.22.I

Agricultural Processing Industries

3·6 ORISSA HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		201	10,390	67	1,495	20	19,698	..	..	288	31,583
Rice	20—99 100+	37 1	1,612 185	12	396	..	..	..	..	49	2,008
Atta	20—99 100+	..	..	..	..	1	39	..	..	1	39
Sugarcane	20—99 100+	..	..	..	..	..	..	..	..	..	..
Edible oils	20—99 100+	1	72	1	41	..	..	..	..	1	143
Tobacco	20—99 100+	21	630	7	161	..	..	..	..	2	113
		..	..	..	..	..	..	..	..	28	791

STATEMENT IV.22.II

Selected Industries Outside Agricultural Processing

3·6 ORISSA HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	3	657	..	..	1	15,590	..	..	4	16,247
Cement	100+ 1000+ 2000+	..	..	..	..	1	15,590	..	..	1	15,590
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	1	880	..	..	1	880
Aluminium	100+ 1000+ 2000+	1	2,540	..	..	..	..	..	..	1	2,540
Generation of electricity	100+ 1000+ 2000+	2	465	..	..	..	..	..	..	2	465
Coal, limestone, and non-metallic minerals products	100+ 1000+ 2000+	1	105	..	..	..	..	..	..	1	105
	100+ 1000+ 2000+	1	1,112	..	..	1	239	..	..	2	1,351
		..	..	..	..	..	..	..	..	1	1,112

STATEMENT IV.23

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION: 3·7 SOUTH BIHAR HILLS AND PLATEAUS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	..	1	..	..	..	2	1	2
III	..	..	..	..	..	3	1	..	..	..	..	2
IV	..	..	..	..	..	1	..	..	..	2	1	2
V	..	..	..	..	..	3	1	1	..	..	..	1
VI	..	..	..	..	..	3	1	1	..	..	..	1
Total	..	..	..	..	..	11	3	2	..	4	2	8

This Subregion is marked by promising levels of development. Of the 6 districts, 3 are in second level, 1 in the third and 2 in the top. All values are either medium or high. But it is significant that all the districts in the second and third levels have medium values only in III, V and VI. Of the 2 districts in the top level 1 each have medium and high values in V and VI. The levels of development are therefore still to be fully realised.

Apart from the usual pattern of agro industries, the 2 districts (Palamau and Ranchi) out of the 3 districts in the second level have between them 1 industrial machinery factory, 2 cement factories (one each in Palamau and Ranchi) and 1 aluminium factory (Ranchi). The position

of Ranchi is likely to change very radically with the establishment of the Heavy Engineering, Foundry Forge and associated industries. The only district in the third level, Hazaribagh, has 1 medium sized rice mill and 1 large oil mill employing 400 persons in the agro Sector and 2 factories generating electricity and 54 factories in coal, limestone and non-metallic mineral products. But the biggest concentration of non-agro industries occurs in the top level in Singhbhum and Dhanbad, Singhbhum claiming steel (Jamshedpur, employment 21,222) and cement (2 mills, 1 in Singhbhum employing 951) and Dhanbad claiming fertilizers (2 of which 1 employs 7,500 persons) and coal, limestone and non-metallic mineral products (17 of which 2 employ more than 1,000 persons each).

STATEMENT IV.23.I

Agricultural Processing Industries

3·7 SOUTH BIHAR HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		..	..	784	12,713	412	22,487	924	82,945	2,120	118,145
Rice	20—99 100+	..	..	8	301	1	20	5	132	14	453
Atta	20—99 100+	..	..	1	20	..	..	1	38	2	58
Sugarcane	20—99 100+	..	..	1	20	..	..	..	..	1	20
Edible oils	20—99 100+	..	..	4	209	1	400	3	144	7	353
Tobacco	20—99 100+	..	..	18	611	..	..	171	5,900	189	6,511
		..	..	1	150	..	..	..	1,234	10	1,384

STATEMENT IV.23.II
Selected Industries Outside Agricultural Processing

3.7 SOUTH BIHAR HILLS AND PLATEAUS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	..	..	..	..	3	23,514	3	23,514
		..	..	..	..	..	..	2	23,034	2	23,034
		..	..	..	..	..	..	1	21,222	1	21,222
Machinery (Industrial)	100+ 1000+ 2000+	..	..	1	120	..	..	1	100	2	220
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
Cement	100+ 1000+ 2000+	..	..	2	2,104	..	..	2	1,151	4	3,255
		..	..	1	1,356	..	..	..	..	1	1,356
		..	..	..	..	..	..	..	..	..	..
Aluminium	100+ 1000+ 2000+	..	..	1	427	..	..	..	..	1	427
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
Fertilizers	100+ 1000+ 2000+	..	..	..	..	..	..	2	7,600	2	7,600
		..	..	..	..	..	..	1	7,500	1	7,500
		..	..	..	..	..	..	1	7,500	1	7,500
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	2	905	1	420	3	1,325
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	54	12,527	17	10,309	71	22,836
		..	..	..	..	1	1,706	2	4,856	3	6,562
		..	..	..	..	..	..	1	3,156	1	3,156

STATEMENT IV.24

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 3.8 WEST BENGAL UPLANDS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	2	3	4	5	6	7	8	9	10	11	12	13	
I	..	..	..	..	1	..	..	..	..	1	1	1	=4
II	..	..	..	..	..	..	..	..	..	..	..	..	=4
III	..	..	1	1	1	..	..	1	..	..	..	..	=4
IV	..	..	..	..	..	..	..	..	1	1	1	1	=4
V	..	..	..	..	1	1	1	..	..	..	..	1	=4
VI	..	..	..	..	1	1	1	1	..	..	..	..	=4
Total	..	1	1	..	4	2	2	2	1	2	2	3	

All the 4 districts in the Subregion have 1 district each in each level of development. The district at the top level has attained great consistency of development, values in all blocks except III and VI being high. The 3 remaining districts have medium values in blocks V and VI.

The district in the lowest level of development, Purulia, has the largest number of *bidi* factories (of which 1 employs 101) but has no other agro or non-agro

industry. The district in the second level, Bankura, has 28 rice mills, 6 oil mills (1 employing 107 persons), and 6 *bidi* factories of which 5 employ more than 100 workers each. Bankura has no non-agro industry either. The district of Birbhum in the third level has 60 rice mills of which 8 employ more than 100 persons each, 1 sugar mill employing 287 and 3 oil mills, but no selected non-agro industry. Burdwan alone in the top level, has as many as 76 rice mills (of which 2 employ 237 persons), 4 oil mills, 1 *bidi*

factory and a concentration of selected non-agro industries: steel (all 4 factories employ more than 2,000 persons each), industrial machinery (1 employing 143), cloth (1 employing 1,341), paper and paper products (1 employing 1,644),

aluminium (1 employing 1,203), railway locomotives and wagons (1 employing 3,230), electricity generating stations (5), and coal, limestone and non-metallic mineral products (9 employing 3,146).

STATEMENT IV. 24-I
Agricultural Processing Industries

3.8 WEST BENGAL UPLANDS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries	..	60	2,812	61	2,870	74	5,040	199	59,794	394	70,516
Rice	20-99 100+	..	..	28	1,099	52	3,069	74	3,400	154	7,568
		..	..	..	..	8	1,036	2	237	10	1,273
Sugarcane	20-99 100+	..	..	..	..	1	287	..	..	1	287
		..	..	..	..	..	..	..	..	..	..
Sugarcane	20-99 100+	..	..	5	211	3	96	4	173	12	480
		..	..	1	107	..	..	..	..	1	107
Edible oils	20-99 100+	..	..	1	99	..	..	1	51	23	1,089
		..	..	5	783	..	..	..	..	6	884
Tobacco	20-99 100+	21	939	101	783	..	..	..	..	..	..

STATEMENT IV. 24.II
Selected Industries Outside Agricultural Processing

3.8 WEST BENGAL UPLANDS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	..	..	..	..	4	32,199	4	32,199
		..	..	..	..	..	..	4	32,199	4	32,199
		..	..	..	..	..	..	4	32,199	4	32,199
Machinery (Industrial)	100+ 1000+ 2000+	..	..	..	..	..	..	1	143	1	143
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
Cloth	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,341	1	1,341
		..	..	..	..	..	..	1	1,341	1	1,341
		..	..	..	..	..	..	..	..	..	..
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,644	1	1,644
		..	..	..	..	..	..	1	1,644	1	1,644
		..	..	..	..	..	..	..	..	..	..
Aluminium	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,203	1	1,203
		..	..	..	..	..	..	1	1,203	1	1,203
		..	..	..	..	..	..	..	..	..	..
Railway wagons, locomotives coaches	100+ 1000+ 2000+	..	..	..	..	..	..	5	1,065	5	1,065
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	..	..	9	3,146	9	3,146
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..

STATEMENT IV.25

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 4.1 MAHARASHTRA DECCAN

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	2	3	4	5	6	7	8	9	10	11	12	13	
I													
II		1					3	3		5	4	6	=22
III						6	7	9					=22
IV							2			4	7	9	=22
V							5	4			1	3	=22
VI						6	7	3				6	=22
Total		1				19	21	15		10	14	30	

This is a Subregion of promising development, there being no district in the first or lowest level. There are 6 districts in the second, 7 in the third and 9 in the top level. Of the 6 districts in the second level only 1 district has low values in block II, all other values being either medium or high. All the 7 districts in the third level have either medium or high values in each block. All 9 districts in the top level have high values in blocks IV and V; 6 each have high values and 3 each medium values in blocks II and VI. Thus all districts, and particularly, the top 9, enjoy very favourable positions in blocks IV and V.

The most remarkable thing to notice among agro industries in this Subregion is the preeminence of processing of cash crops: sugarcane, cotton, tobacco and to some extent edible oils. This applies to districts at all the three levels of development. The other remarkable thing is the large number of factories concerned with these commodities even in districts placed in the second and third levels, not to speak of those in the fourth, thus indicating that

the Subregion is on the way to harmonious and synchronised development with a progressive and inevitable increase in number and employment in the districts of the upper levels. And although the range and concentration of large non-agro industries is still none too remarkable in this tract of 22 districts they show a fair enough distribution at all three levels, suggesting a strong climate of savings, inner logic of growth, and of multipliers at work throughout the tract and not of alien implantation due to fortuitous circumstances favouring location of individual units. The next important thing to notice is the remarkable increase in the size of establishments in districts of the third and fourth levels as opposed to those in districts in the second level, thus proving that enterprises improve in scale in districts of higher levels of achievement. These seem to be the outstanding and distinguishing features of industrial activity and development in Maharashtra Deccan. The wealth has plainly come from cotton, sugarcane, groundnut and tobacco and is paying for an increasingly versatile range of industrial production.

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STATEMENT IV.25.

Agricultural Processing Industries

4.1 MAHARASHTRA DECCAN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries				629	22,825	450	40,514	2,485	178,529	3,564	241,868
Rice	20-99 100+				60			2	51	5	111
Atta	20-99 100+					1	27	1	48	2	75
Dal	20-99 100+			1	25	6	174	12	229	19	528
Sugarcane	20-99 100+			24	595	3	101	77	2,024	104	2,720
Edible oils	20-99 100+			5	2,261	5	2,050	21	10,714	31	15,025
Hydrogenated oils	20-99 100+			25	1,216	17	878	64	2,689	106	4,783
Jute and cotton ginning and pressing	20-99 100+			3	489	1	100	7	890	11	1,479
Tobacco	20-99 100+						201	2	505	2	506
	20-99 100+			22	1,025	63	3,320	178	9,081	263	13,426
	20-99 100+			8	1,239	56	9,960	68	12,267	132	23,466
	20-99 100+			60	2,680	22	1,218	186	10,400	268	14,298
	20-99 100+			8	1,408	3	535	79	15,508	90	17,451

STATEMENT IV.25.II

Selected Industries Outside Agricultural Processing

4.1 MAHARASHTRA DECCAN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Machinery (Industrial)	100+ 1000+ 2000+			3	455			5	2,970	8	3,425
	100+ 1000+ 2000+							1	1,171	1	1,171
Cloth	100+ 1000+ 2000+			1	1,265	11	11,950	22	48,542	34	61,757
	100+ 1000+ 2000+					5	10,255	14	44,918	20	56,438
Tea	100+ 1000+ 2000+					1	4,164	9	38,284	10	42,448
Paper and paper products	100+ 1000+ 2000+			1	962			2	524	3	1,386
Petroleum	100+ 1000+ 2000+							1	115	1	115
Machine tools	100+ 1000+ 2000+							1	107	1	107
Fine chemicals	100+ 1000+ 2000+							5	1,653	6	1,754
Heavy chemicals	100+ 1000+ 2000+							1	118	1	118
Generation of electricity	100+ 1000+ 2000+			1	242			5	1,746	6	1,988
Coal, Limestone and non-metallic mineral products	100+ 1000+ 2000+			3	557	1	1,695	9	1,886	13	4,138
	100+ 1000+ 2000+					1	1,695			1	1,695

STATEMENT IV.27

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 4.3 MYSORE DECCAN

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	1	2	1	2	..	3	5	3	-1
III	..	1	..	..	1	4	6	3	..	..	..	2	-17
IV	..	..	..	..	1	1	..	..	..	4	6	5	-17
V	..	..	..	..	1	3	2	..	..	2	4	5	-17
VI	..	..	..	..	1	4	5	5	..	1	1	..	-17
Total	..	1	..	..	5	14	14	10	..	10	16	15	

This Subregion of 17 districts also presents a very favourable picture of development. There is only 1 district in the first level, 5 in the second level, 6 in the third and 5 in the top. None of the districts, except only 1, enjoys low values in any block. All 16 districts enjoy either medium or high values. The prerequisites of development are fairly evenly available in all districts although the values for block VI (organised industrial activity in the modern sector) are still medium in most districts.

This Subregion is fairly homogeneous in its wealth of agro industries. The agri-

cultural processing industries are more or less evenly distributed both in number and scale of establishments in terms of food industries, sugar, oil, cotton ginning and pressing and tobacco. But the location of selected non-agro industries is confined both in number and scale of operation mainly to districts in the third and fourth levels of development, there being no selected non-agro industry in the first level and only 6 cloth mills, 1 cement factory, 1 electricity generating station and 3 coal, limestone and non-metallic mineral products factories in the 5 districts of the second level.

STATEMENT IV.27.I

Agricultural Processing Industries

4.3 MYSORE DECCAN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries	..	152	6,244	464	25,768	629	56,709	808	102,172	2,053	190,893
Rice	20-99	1	20	14	405	30	942	13	290	58	1,657
Atta	100+	..	..	..	..	1	100	2	200	3	300
Dal	20-99	5	100	..	..	9	270	15	410	29	780
	100+	..	..	..	..	..	..	3	300	3	300
Sugarcane	20-99	..	..	8	250	..	..	..	..	12	390
	100+	..	..	1	250	3	90	1	50	1	250
Edible oils	20-99	..	..	1	50	..	..	..	..	2	100
	100+	1	825	2	1,500	3	3,750	1	100	7	6,175
Hydrogenated oils	20-99	12	390	40	1,130	33	1,144	10	360	95	3,024
	100+	4	550	4	400	3	700	2	700	13	2,350
Jute and cotton ginning and pressing	20-99	..	..	..	..	1	50	3	60	4	110
	100+	..	..	..	..	..	..	..	..	..	..
Tobacco	20-99	114	2,679	105	3,174	121	4,305	6	217	346	10,375
	100+	8	1,400	28	3,550	63	10,760	15	4,500	114	20,210
	20-99	1	50	28	1,169	26	1,160	9	453	64	2,832
	100+	..	..	14	2,150	13	2,070	8	3,816	35	8,096

STATEMENT IV.27.II

Selected Industries Outside Agricultural Processing

4.3 MYSORE DECCAN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		2	3	4	5	6	7	8	9	10	11
Steel	100+ 1000+ 2000+	..	..	..	..	..	..	1	5,136	1	5,136
Machinery (Industrial)	100+ 1000+ 2000+	..	..	..	..	..	..	1	5,136	1	5,136
Machinery (Electrical)	100+ 1000+ 2000+	..	..	..	..	..	..	2	850	2	850
Cloth	100+ 1000+ 2000+	..	..	6	1,951	14	8,008	35	20,520	55	30,479
Cement	100+ 1000+ 2000+	..	..	1	500	3	5,500	4	13,000	7	18,500
Tea	100+ 1000+ 2000+	..	..	..	..	..	..	2	10,500	3	13,500
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	..	..	1	500*	1	500
Machine tools	100+ 1000+ 2000+	..	..	..	..	..	..	1	2,000	2	2,250
Fine chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	1	2,000	1	2,000
Heavy chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	1	3,000	1	3,000
Generation of electricity	100+ 1000+ 2000+	..	..	..	..	..	..	1	3,000	1	3,000
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	..	..	1	3,000	1	3,000

*Relates to Coffee

STATEMENT IV.28

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 4.4 TAMILNAD HILLS AND UPLANDS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	..	..	..	1	..	..	..	1	3
III	..	..	..	..	..	..	..	1	3	..	..	..	1
IV	..	..	..	..	..	..	..	..	..	..	..	1	4
V	..	..	..	..	..	..	..	..	..	..	..	..	3
VI	..	..	..	..	..	..	..	..	..	..	..	3	15
Total	..	..	..	..	..	..	..	2	5	..	..	3	15

This is a highly developed Subregion of 5 districts in which there are not only no districts in the first and second levels but only 1 in the third level, all the remaining 4 districts being in the top level. The only district in the third level has high values in II, IV and V, a matter of great promise. Of the 4 districts in the top level, all have high values in IV and V, 3 have top values in II and VI. This means that the Subregion is rich in

promise as well as fulfilment.

This is reflected in the distribution of food and cash crop processing industries in the Subregion and the very obvious relationship between savings in the agricultural sector and their investment in the non-agricultural organised industrial sector that is revealed in the pattern, versatility and scale of selected non-agro industrial establishments in the Subregion.

STATEMENT IV.28.I

Agricultural Processing Industries 4.4 TAMILNAD HILLS AND UPLANDS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		..	..	..	..	510	17,086	2,017	130,005	2,527	147,091
Rice	20-99 100+	..	..	..	..	20	651	100	3,347	120	3,998
Atta	20-99 100+	..	..	..	..	..	..	2	83	2	83
Dal	20-99 100+	..	..	..	..	..	..	2	48	2	48
Sugarcane	20-99 100+	..	..	..	..	..	..	1	20	1	20
Edible oils	20-99 100+	..	..	..	..	..	..	3	1,502	3	1,502
Jute and cotton ginning and pressing	20-99 100+	..	..	..	..	8	237	18	511	26	748
Tobacco	20-99 100+	..	..	..	..	..	..	2	539	2	539
		..	..	..	..	5	160	102	4,615	107	4,775
		..	..	..	..	..	..	16	2,463	16	2,463
		..	..	..	..	2	64	9	423	11	487
		..	..	..	..	..	..	3	426	3	426

STATEMENT IV.28.II

Selected Industries Outside Agricultural Processing 4.4 TAMILNAD HILLS AND UPLANDS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Machinery (Industrial)	100+ 1000+ 2000+	..	..	..	..	..	..	6	4,333	6	4,333
Cloth	100+ 1000+ 2000+	..	..	..	..	..	..	1	3,433	1	3,433
Cement	100+ 1000+ 2000+	..	..	..	..	5	4,208	89	63,164	94	67,372
Tea	100+ 1000+ 2000+	..	..	..	..	1	1,945	19	33,603	20	35,548
Leather and leather products	100+ 1000+ 2000+	..	..	..	..	..	..	2	9,305	2	9,305
Heavy chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	1	834	1	834
Coal, limestone and mineral products	100+ 1000+ 2000+	..	..	..	..	..	..	14	2,960	14	2,960
		..	..	..	..	..	..	7	1,008	7	1,008
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	1	915	1	1,444	2	2,359
		..	..	..	..	..	..	1	1,444	1	1,444
		..	..	..	..	..	..	..	..	..	..
		..	..	..	..	4	1,114	1	818	5	1,932
		..	..	..	..	..	..	..	..	..	..

STATEMENT IV.29

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION: S-1 KUTCH AND KATHIAWAR

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level		2nd level		1st level		2nd level		1st level		2nd level	
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
1	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	..	..	..	..	..	1	4	5
III	..	..	..	..	..	..	..	..	..	..	..	..
IV	..	..	..	..	..	..	..	..	..	1	4	5
V	..	..	..	..	..	..	..	..	..	..	4	5
VI	..	..	..	..	..	..	..	..	..	1	..	5
Total	..	..	1	4	3	..	1	4	2	..	3	12

This is a Subregion of much achievement. Of a total of 10 districts, no district is in the first or lowest level. Only 1 is in the second level. 4 districts are in the third level and as many as 5 or half of the districts are in the top level. All the 4 districts in the third level have high values in each block except III and VI. In the latter block the values are medium, indicating the need for greater industrial

activity in the modern organised sector. Again each of these 5 districts in the top level have high values in each of the blocks except III.

The pattern of concentration of agro and non-agro industries in districts of the higher levels of development is too patent in the following statement to need verbal elaboration.

STATEMENT IV.29.I

Agricultural Processing Industries S-1 KUTCH AND KATHIAWAR

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all industries		..	..	22	524	252	25,208	960	56,970	1,234	82,702
Rice	20-99 100+	..	..	..	..	1	60	..	..	1	60
Atta	20-99 100+	..	..	..	..	..	..	1	28	1	28
Dal	20-99 100+	..	..	..	..	..	..	..	..	..	..
Sugarcane	20-99 100+	..	..	..	..	1	571	..	..	1	571
Edible oils	20-99 100+	..	..	1	32	21	871	102	3,514	124	4,417
Hydrogenated oils	20-99 100+	..	..	..	..	..	..	2	452	3	652
Jute and cotton ginning and pressing	20-99 100+	..	..	..	..	..	..	3	972	3	972
Tobacco	20-99 100+	..	..	..	..	..	..	..	..	..	..
		..	..	..	..	31	1,762	79	3,751	110	5,513
		..	..	..	..	30	5,846	20	3,446	50	9,292
		..	..	..	..	10	586	2	81	12	667
		..	..	..	..	1	370	..	..	1	370

STATEMENT IV.29.11

Selected Industries Outside Agricultural Processing

5.1 KUTCH AND KATHIAWAR

Industry	Size of employment 2	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Machinery (Industrial)	100 + 1000 + 2000 +	..	..	..	..	..	..	1	118	1	118
Cloth	100 + 1000 + 2000 +	..	..	..	..	6	8,363	11	11,726	17	20,089
Cement	100 + 1000 + 2000 +	..	..	..	..	5	7,389	4	7,626	9	15,015
Tea	100 + 1000 + 2000 +	..	..	..	..	..	..	2	4,593	2	4,593
Heavy chemicals	100 + 1000 + 2000 +	..	..	..	..	..	..	5	2,560	5	2,560
Generation of electricity	100 + 1000 + 2000 +	..	..	..	..	..	..	..	..	..	..
Coal, limestone and non-metallic mineral products	100 + 1000 + 2000 +	..	..	..	..	..	..	1	255	1	255
	100 + 1000 + 2000 +	..	..	..	..	..	..	..	..	..	..
	100 + 1000 + 2000 +	..	..	..	..	..	..	5	3,923	5	3,923
	100 + 1000 + 2000 +	..	..	..	..	..	..	2	2,756	2	2,756
	100 + 1000 + 2000 +	..	..	..	..	..	..	..	..	..	..
	100 + 1000 + 2000 +	..	..	..	..	..	..	4	800	4	800
	100 + 1000 + 2000 +	..	..	..	..	..	..	..	..	..	..
	100 + 1000 + 2000 +	..	..	..	..	..	..	13	3,411	13	3,411

STATEMENT IV.30

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 5.2 GUJARAT PLAIN AND DANGS

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
I	2	3	4	5	6	7	8	9	10	11	12	13	
II	.	.	1	..	..	1	3	1	..	..	..	1	-7
III	.	.	..	1	..	2	2	2	..	..	..	..	-7
IV	.	.	..	..	..	..	2	..	..	2	3	2	-7
V	.	.	..	..	..	2	..	..	..	..	3	2	-7
VI	.	.	..	..	..	1	..	..	..	1	3	2	-7
Total	..	1	1	..	6	5	5	5	..	1	9	7	

This Subregion although not as highly developed as Kutch and Kathiawar is still very promising. It has no district in the first or lowest level. There are only 2 districts in the second level, 3 in the third and 2 in the top. All the 3 districts in the third level and the 2 districts in the top level have, significantly enough, high values in blocks IV, V and VI.

STATEMENT IV. 30.1

Agricultural Processing Industries

5.2 GUJARAT PLAIN AND DANGS

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
1	2	3	4	5	6	7	8	9	10	11	12
Total of all Industries		..	..	62	5,207	1,274	69,925	1,270	202,694	2,606	277,826
Rice	20--99 100+	..	..	1	48 161	2	58	4	110	7	216
Atta	20--99 100+	..	..	3	174	..	..	4	210	7	384
Dal	20--99 100+	..	..	..	..	7	203	3	95	10	298
Sugarcane	20--99 100+	..	..	..	..	2	67	..	..	2	67
Edible oils	20--99 100+	..	..	13	338	24	932	9	312	46	1,582
Hydrogenated oils	20--99 100+	..	..	..	..	1	102	..	..	1	102
Jute and cotton ginning and pressing	20--99 100+	..	..	1	50	40	2,653	58	2,905	99	5,608
Tobacco	20--99 100+	..	..	3	464	57	10,903	54	9,703	114	21,070
						104	3,814	17	725	121	4,539
						4	459	..	..	4	459

STATEMENT IV. 30.II

Selected Industries Outside Agricultural Processing

5-2 GUJARAT PLAIN AND DANGS

[illegible]

STATEMENT IV.31

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 5.3 KONKAN COASTAL LOWLAND

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)							
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level				
	1	2	3	4	5	6	7	8	9	10	11	12		13		
II	.	.	.	1	1	..	1	..	..	..	..	..	..	..	3	
III	.	.	.	..	..	..	..	1	1	..	1	..	..	..	3	
IV	.	.	.	..	..	..	..	1	..	..	..	..	1	..	1	3
V	.	.	.	..	..	..	..	..	..	..	1	1	..	1	..	3
VI	.	.	.	..	..	..	..	1	1	..	..	..	..	1	..	3
Total		1	1	..	1	3	2	..	1	1	2	..	3	..		

Greater Bombay has been excluded from consideration because the district has no rural area.

This Subregion of 3 districts has 1 district each in the first, second and top levels of development. The district placed in the top level of development has high values in IV, V and VI.

Ratnagiri, in the first level, has only 1 tobacco factory but none of the selected non-agro industries.

Kolaba has 3 rice mills and 2 tobacco factories, 1 paper and paper products mill, 2 fine chemicals factories, 1 electricity

generating station and 1 coal, limestone and establishment.

Thana has a heavy concentration of 493 registered factories with 35,399 workers (in 1961). It has 2 small tobacco factories, 1 large steel rolling mill; 2 industrial machinery workshops of which 1 employs 2,320; 11 cloth mills of which 1 employs 2,068; 2 paper and paper products mills; 1 machine tools mill; 4 fine chemicals factories, 3 heavy chemicals factories; 1 electricity generating station employing 1,135 and 3 limestone and non-metallic mineral establishments. The district constitutes the first stage of the great overflow from Greater Bombay.

STATEMENT IV.32

Agricultural Processing Industries

5.3 KONKAN COASTAL LOWLAND

Industry	Size of employment	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				Total	
		1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level		
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
Total of all industries	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Rice	20-99	..	..	3	89	..	..	..	..	..	..	..	..	3	89
Tobacco	100+	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	20-99	1	54	2	140	..	..	..	..	2	44	5	238	..	..
	100+	..	..	..	..	..	..	..	..	..	..	..	..	..	..

STATEMENT IV.31.II

Selected Industries Outside Agricultural Processing

5.3 KONKAN COASTAL LOWLAND

5-3 KONKAN COAST												
Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total		
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers	
		2	3	4	5	6	7	8	9	10	11	12
1												
Steel	100 + 1000 + 2000 +	..	..	..	..	..	..	..	1	464	1	464
		..	..	..	..	..	..	..	..	..	..	..
Machinery (Industrial)	100 + 1000 + 2000 +	..	..	..	..	..	..	2	2,732	2	2,732	
		..	..	..	..	..	..	1	2,320	1	2,320	
		..	..	..	..	..	..	1	2,320	1	2,320	
Cloth	100 + 1000 + 2000 +	..	..	..	..	..	..	11	3,932	11	3,932	
		..	..	..	..	..	..	1	2,068	1	2,068	
		..	..	..	..	..	..	1	2,068	1	2,068	
Paper and paper products	100 + 1000 + 2000 +	..	..	1	249	..	..	2	485	3	734	
		..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	
Machine tools	100 + 1000 + 2000 +	..	..	..	..	..	..	1	197	1	197	
		..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	
Fine chemicals	100 + 1000 + 2000 +	..	..	2	355	..	..	4	815	6	1,170	
		..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	
Heavy chemicals	100 + 1000 + 2000 +	..	..	..	..	..	..	3	984	3	984	
		..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	
Generation of electricity	100 1000 2000	..	..	1	114	..	..	1	1,135	2	1,249	
		..	..	..	..	..	..	1	1,135	1	1,135	
		..	..	..	..	..	..	..	..	..	..	
Coal, limestone and non-metallic mineral product	100 + 1000 + 2000 +	..	..	1	391	..	..	3	712	4	1,103	
		..	..	..	..	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	

STATEMENT IV.32

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 5.4 KONKAN KERALA TRANSITION

SUBREGION : 5 4 KOREA													
Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)				
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	
	1	2	3	4	5	6	7	8	9	10	11	12	
I	2	3	4	5	6	7	8	9	10	11	12	13	14
II	2	3	4	5	6	7	8	9	10	11	12	13	14
III	2	3	4	5	6	7	8	9	10	11	12	13	14
IV	2	3	4	5	6	7	8	9	10	11	12	13	14
V	2	3	4	5	6	7	8	9	10	11	12	13	14
VI	2	3	4	5	6	7	8	9	10	11	12	13	14
Total	2	3	4	5	6	7	8	9	10	11	12	13	14

This Subregion has 2 districts, both placed in the third level of development, both having medium values in blocks II, III and VI and high values in IV and V.

The Subregion is far from being agriculturally rich except in cereals. There are 29 rice mills (2 employ 350), 11 atta

mills, 4 oil mills, and 25 tobacco factories (4 employ more than 125 each on the average). There is 1 cloth factory employing 100 persons (Mangalore), 1 paper mill (Dandeli in North Kanara) and 41 non-metallic mineral establishments. The Subregion is rich in forests wood and bamboo which feed the paper mill.

STATEMENT IV.32.I

Agricultural Processing Industries

5.4 KONKAN KERALA TRANSITION

Industry 1	Size of employ- ment 2	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries	..	..	..	..	..	353	28,405	..	..	353	28,405
Rice	20-99 100+	..	..	..	..	27	680	..	..	27	680
Atta	20-99 100+	..	..	..	..	2	350	..	..	2	350
Edible oils	20-99 100+	..	..	..	..	11	280	..	..	11	280
Tobacco	20-99 100+	..	..	..	..	4	110	..	..	4	110
		..	..	..	..	21	750	..	..	21	750
		..	..	..	..	4	550	..	..	4	550

STATEMENT IV.32.II

Selected Industries Outside Agricultural Processing

5.4 KONKAN KERALA TRANSITION

Industry 1	Size of employ- ment 2	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Cloth	100+ 1000+ 2000+	..	..	..	..	1	100	..	..	1	100
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	1	750	..	..	1	750
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	41	7,150	..	..	41	7,150

STATEMENT IV.33

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 5.5 KERALA COASTAL PLAINS—WESTERN AND SOUTHERN GHATS (SOUTH SAHYADRI)

Block 1	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	..	..	..	..	..	..	..	..
III	..	..	..	..	..	1	6	..	..	..	1	1
IV	..	..	..	..	..	1	1	1	..	..	..	..
V	..	..	..	..	..	..	..	..	..	1	7	1
VI	..	..	..	..	..	..	..	..	..	1	7	1
Total	..	..	6	..	..	1	7	1	..	..	15	3
						3	14	2	..	2	15	3

This Subregion has 9 districts of which none is placed in the first level. 1 is placed in the second, 7 in the third and 1 in the top. This betokens a fairly high level of achievement, short of the highest, particularly as all the 7 districts in the third level have high values in IV and V and medium values in VI. Again, of these 7 districts 6 have medium values and 1 has high value in block II. The single district in the top level has high values in blocks II, IV and V and medium value in III and VI. The Subregion, as a whole, therefore, has yet to make its mark in organised industry in the modern sector.

The single district in the second level of development, Palghat, has as many as 61

rice mills (of which 2 employ a total of 350), 4 oil mills and 28 tobacco factories (of which 4 employ a total of 550).

By contrast the 7 districts in the third level have only 43 rice mills (of which 4 employ a total of 550), 1 small atta mill, 1 large sugar mill (employment 900), 56 oil mills (of which 6 employ a total of 900), 1 hydrogenated oil mill employing 100, and 41 tobacco factories (of which 4 employ 100 persons each).

The single district in the top level has only 1 small oil mill by way of agro industries.

STATEMENT IV.33.I

Agricultural Processing Industries

5.5 KERALA COASTAL PLAINS—WESTERN AND SOUTHERN GHATS (SOUTH SAHYADRI)

Industry 1	Size of employ- ment 2	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries	..	..	..	215	11,551	1,968	224,569	229	16,841	2,412	252,961
Rice	20-99 100+	..	..	59	1,420	39	1,170	..	..	98	2,590
Atta	20-99 100+	..	..	..	..	1	20	..	..	1	20
Sugarcane	20-99 100+	..	..	..	..	1	900	..	..	1	900
Edible oils	20-99 100+	..	..	4	80	50	1,180	1	20	55	1,280
Hydrogenated oils	20-99 100+	..	..	..	..	1	100	..	..	1	100
Tobacco	20-99 100+	..	..	24	1,050	37	1,615	..	..	61	2,665
		..	..	4	550	4	470	..	..	8	950

STATEMENT IV.33.II

Selected Industries Outside Agricultural Processing

5.5 KERALA COASTAL PLAINS-- WESTERN AND SOUTHERN GHATS (SOUTH SAHYADRI)

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
Machinery (Electrical)	100 1000 2000	..	..	1	100	..	..	..	..	1	100
Cloth	100 1000 2000	..	..	..	..	..	..	..	..	..	..
Cement	100 1000 2000	..	..	..	..	62	17,300	..	..	62	17,300
Tea	100 1000 2000	..	..	..	..	..	..	1	500	1	500
Paper and paper products	100 1000 2000	..	..	2	350	12	1,600	89	9,650	73	11,600
Aluminium	100 1000 2000	..	..	..	..	1	750	..	..	1	750
Artificial fibre rayon etc.	100 1000 2000	..	..	..	..	2	1,250	..	..	2	1,250
Fertilizers	100 1000 2000	..	..	..	..	1	750	..	..	1	750
Machine tools	100 1000 2000	..	..	..	..	1	1,600	..	..	1	1,600
Fine chemicals	100 1000 2000	..	..	250	2	200	..	..	..	3	450
Heavy chemicals	100 1000 2000	..	..	..	..	3	700	..	..	3	700
Coal, limestone and non-metallic mineral products	100 1000 2000	..	..	..	..	1	500	..	..	1	500
		..	..	7	1,400	87	16,700	..	..	94	18,100

STATEMENT IV.3.4

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level 2	2nd level 3	3rd level 4	4th level 5	1st level 6	2nd level 7	3rd level 8	4th level 9	1st level 10	2nd level 11	3rd level 12	4th level 13
II	..	..	..	..	..	..	..	..	..	..	..	..
III	..	..	..	..	..	..	..	..	..	..	..	..
IV	..	..	..	1	..	..	..	..	..	..	4	3
V	..	..	..	..	..	..	3	3	..	..	..	..
VI	..	..	..	..	..	..	..	..	..	..	4	3
Total	..	..	1	..	..	..	1	..	..	..	3	3
	..	..	..	..	..	7	3	..	..	..	12	12

Madras Corporation has been excluded from this table because it has no rural area.

This Subregion of 7 districts shows high development. There are 4 districts in the third level and 3 in the fourth or top level. All the 7 districts in the third and top levels have high values in blocks II, IV and V (except for medium value

for 1 district in the third level). The values are also very favourable in block VI.

The strength of all these districts lies in their agricultural wealth and agro industries which provide the base and source of investments in industries in the non-agricultural sector. Because of the exclusion of Madras City the picture of non-agro industries in the Subregion is incomplete.

STATEMENT IV.34.I

Agricultural Processing Industries

6.1 TAMILNAD COASTAL PLAIN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
Total of all industries	..	..	..	..	..	1,107	53,713	1,608	44,247	2,175	97,985
Rice	20-99 100+	..	..	..	..	16	528	66	2,154	82	2,682
Dal	20-99 100+	..	..	..	..	4	99	3	118	7	217
Sugarcane	20-99 100+	..	..	..	..	1	2,101	4	1,982	5	4,083
Edible oils	20-99 100+	..	..	..	..	12	335	2	65	14	400
Hydrogenated oil	20-99 100+	..	..	..	..	..	..	1	200	1	200
Jute and cotton, ginning and pressing	20-99 100+	..	..	..	..	53	1,985	..	..	53	1,985
Tobacco	20-99 100+	..	..	..	..	4	193	9	365	13	558
		..	..	..	..	1	200	5	576	6	776

STATEMENT IV.34.II

Selected Industries Outside Agricultural Processing

6.1 TAMILNAD COASTAL PLAIN

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
Machinery (Electrical)	100+ 1000+ 2000+	..	..	..	..	..	..	2	652	2	652
Cloth	100+ 1000+ 2000+	..	..	..	..	21	16,539	7	3,880	28	20,419
Cement	100+ 1000+ 2000+	..	..	..	..	5	11,703	2	2,570	7	14,273
Fertilizers	100+ 1000+ 2000+	..	..	..	..	2	7,935	..	..	2	7,935
Leather and leather products	100+ 1000+ 2000+	..	..	..	..	2	1,012	1	1,650	3	2,662
Heavy chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	1	1,650	1	1,650
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	..	..	..	..	..	..
Leather and leather products	100+ 1000+ 2000+	..	..	..	..	..	..	1	364	1	364
Leather and leather products	100+ 1000+ 2000+	..	..	..	..	..	..	1	380	1	380
Leather and leather products	100+ 1000+ 2000+	..	..	..	..	..	..	3	1,261	3	1,261
Fine chemicals	100+ 1000+ 2000+	..	..	..	..	..	..	1	156	1	156
Heavy chemicals	100+ 1000+ 2000+	..	..	..	..	2	703	..	..	2	703
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	..	..	3	450	3	518	6	968

STATEMENT IV.35

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 6.2 ANDHRA COAST

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	1	2	3	4	5	6	7	8	9	10	11	12
II	..	..	..	..	..	..	1	..	..	..	2	3
III	..	..	..	..	..	..	3	3	1	..	..	..
IV	..	..	..	..	..	..	2	..	..	..	1	3
V	..	..	..	..	..	..	3	..	..	..	3	1
VI	..	..	..	..	..	..	1	1	1	..	2	2
Total	..	..	..	..	..	..	10	4	2	..	5	11

Of the 7 districts in this Subregion, 3 each are in the second and third levels and 1 in the top level. There is no district in the first level. All the districts in the third level have high values in blocks II, IV and V. In block VI, 1 district has medium value and 2 high values. The single district in the top level has high values in all blocks except III and VI. This shows that the Subregion has yet to make its proper mark in the field of organised industry in the modern sector.

This Subregion presents a picture of

much greater agricultural wealth than in the Tamilnad Coastal Plain Subregion. Almost the full range of processing industries of agricultural produce is present in all the three levels. But the Subregion is deficient in selected non-agro industries both in range and scale. Apart from 1 steel factory, 3 cement factories, 1 paper factory and 1 petroleum refinery 2 coal, limestone and non-metallic mineral factories for the entire Subregion the only other major selected industries process cotton (3 cotton mills) and jute (4 mills).

STATEMENT IV.35.1

Agricultural Processing Industries

6.2 ANDHRA COAST

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Total of all industries	..	..	..	675	23,583	1,639	104,649	390	11,928	2,704	140,160
Rice	20-99 100+	..	..	27	743	238	8,748	76	3,003	341	12,494
Atta	20-99 100+	..	..	1	32	..	..	..	..	1	32
Dal	20-99 100+	..	..	..	..	..	..	1	41	1	41
Sugarcane	20-99 100+	..	..	5	268	7	408	..	720	13	4,347
Edible oils	20-99 100+	..	..	31	1,058	26	1,167	17	650	74	2,875
Hydrogenated oils	20-99 100+	..	..	..	..	..	..	1	42	1	42
Jute and cotton ginning and pressing	20-99 100+	..	..	8	310	8	388	..	..	16	698
Tobacco	20-99 100+	..	..	12	516	185	9,143	..	1,623	122	61,753

STATEMENT IV.35.II

Selected Industries Outside Agricultural Processing

6.2 ANDHRA COAST

Industry	Size of employment	1st level		2nd level		3rd level		4th level		Total	
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers
		3	4	5	6	7	8	9	10	11	12
Steel	100+ 1000+ 2000+	..	..	1	365	..	..	..	..	1	365
Cloth	100+ 1000+ 2000+	..	..	..	..	3	1,278	..	..	3	1,278
Jute	100+ 1000+ 2000+	..	..	2	5,103	2	12,469	..	..	4	7,572
Cement	100+ 1000+ 2000+	..	..	..	..	2	1,010	1	536	3	1,546
Paper and paper products	100+ 1000+ 2000+	..	..	..	..	1	585	..	..	1	585
Petroleum	100+ 1000+ 2000+	..	..	1	419	..	..	..	..	1	419
Coal, limestone and non-metallic mineral products	100+ 1000+ 2000+	..	..	2	348	..	..	..	..	2	348

STATEMENT IV.36

Number of districts in each block arranged by (a) low, medium and high values in (b) each of the four levels of development

SUBREGION : 6.3 ORISSA COAST

Block	Part I A (Low value)				Part II B (Medium value)				Part III C (High value)			
	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level	1st level	2nd level	3rd level	4th level
	2	3	4	5	6	7	8	9	10	11	12	13
II	..	..	..	..	..	..	..	..	1	2	..	..
III	..	..	..	..	..	..	..	..	..	..	..	..
IV	..	..	..	..	..	..	..	..	1	2	..	..
V	..	..	..	..	..	..	..	..	..	..	..	..
VI	..	..	..	..	..	..	..	..	..	..	..	..
Total	2	4	..	..	1	2	..	..	2	4	..	..

All the 3 districts in this Subregion are confined to the first two levels of development. 1 district is in the first level and 2 in the second. They have high values in II and IV, medium values in V and low values in III and VI, all betokening tardiness in development.

The relationship between agro and non-

STATEMENT IV.36.1

Agricultural Processing Industries

6.3 ORISSA COAST

Industry	Size of employment	COSSA COAST										
		1st level		2nd level		3rd level		4th level		Total		
		No.	Workers	No.	Workers	No.	Workers	No.	Workers	No.	Workers	
1	2	3	4	5	6	7	8	9	10	11	12	
Total of all industries		26	851	174	15,305							
Rice	20-99	2	121	53	2,594							
	100+	..	..	3	419							
Alma	20-99	..	..	1	21					200	16,156	
	100+	..	..	..	..					55	2,715	
Tobacco	20-99	1	26	9	308					3	419	
	100+	..	..	..	..					1	21	
										..	..	
										10	334	
										..	..	

STATEMENT IV.36. II

6.3 ORISSA COASTAL

6.3 ORISSA COAST

[illegible]

The foregoing analysis supports several conclusions.

Firstly, it demonstrates strong and positive association between agricultural infrastructure, potential of human resources, distributive trade, manufacturing activity, social and economic infrastructure and organised industrial activity in the modern sector. Secondly, it demonstrates that however high the participation rates in the traditional sector of the economy, viz., agriculture, household industry, single and family worker categories, they seem to have no great positive association with, or causal organic contribution to, levels of development. It seems to follow that any labour intensive or employment oriented programmes in the household industries sector or rural works sector which do not contribute to or aim at strengthening the economic infrastructure will not have much self-generating effect on the levels of development. Thirdly,

the tables establish the association between improvements in agriculture, diversification of crops, savings on account of such improvement, their investment in social and economic infrastructure and their further investment in modern organised industry and mutually fertilising effect of the circuit they eventually establish, in the circuit's ability to achieve within itself the locationing of new industries and to attract new industrial licences. Fourthly, the tables establish the fact that wherever industries have been located in a district or tract on the logic of availability of raw materials, economy of transport and proximity of ultimate market or export point alone, without the agricultural and human base together with its social and economic infrastructure contributing to a sufficient degree to its investment, nourishment and growth, such industries, as in Singhbhum, have behaved like alien growths and failed to demonstrate fully their multiplier effects on the surroundings.

NON AGRO INDUSTRIES IN CASH CROP GROWING DISTRICTS

Brief comments may be in order of the association between the significant acreage and employment of factory labour in the growing and processing of cotton, oilseeds, sugarcane and jute on the one hand and the presence of capital goods and non agricultural tertiary manufacture on the other in the same district. It must however be borne in mind that the search for a too literal association between the two wings within the same district is not always either feasible or proper, because very

often agricultural raw materials are transported outside the district for final processing and conversion, and equally often are capital and tertiary goods manufactured in nodal points for marketing in surrounding districts. A too facile cause and effect relationship may suggest itself from the following presentation, which is not certainly intended. The following statement therefore should be read always keeping in mind the above cautionary remarks.

STATEMENT IV.37

Association between cash crops and certain industries

[manufactures in italic are first in order of employment in the district]

State 1	District 2	More than C value in both area and workers 3	Non-agro industries 4
Andhra Pradesh	Srikakulam . . .	Oilseeds	Basic metal industries, metal products
	Visakhapatnam . . .	Oilseeds and sugarcane	<i>Transport equipment</i> , textiles.
	Chittoor . . .	Oilseeds	Textiles, metal products.
	Cuddapah . . .	Oilseeds	Chemicals and chemical products, transport equipment, textiles.
	Anantapur . . .	Oilseeds	<i>Textiles</i> , miscellaneous industries.
	Kurnool . . .	Cotton and oilseeds	Textiles, printing and publishing.
	Nizamabad . . .	Sugarcane	Chemicals and chemical products.
	Khammam . . .	Oilseeds	Transport equipment, chemicals and chemical products, printing and publishing.
Bihar	Hyderabad . . .	Oilseeds	<i>Transport equipment</i> , metal products, machinery except electrical machinery.
	Saran . . .	Sugarcane	Metal products, printing and publishing.
	Champani . . .	Sugarcane	Miscellaneous industries, wood and cork except furniture.
	Muzaffarpur . . .	Sugarcane	Machinery except electrical machinery, printing and publishing.
	Darbhanga . . .	Sugarcane	Textiles, transport equipment.
Gujarat	Purnea . . .	Jute	<i>Textiles</i> .
	Panchmahals . . .	Oilseeds	<i>Transport equipment</i> , chemicals and chemical products.
	Amreli . . .	Oilseeds	Textiles, chemicals and chemical products, transport equipment.
	Sabarkantha . . .	Cotton and oilseeds	Transport equipment, printing and publishing.
	Mehsana . . .	Cotton	<i>Textiles</i> , wood and cork except furniture, miscellaneous industries.

STATEMENT IV.37

Association between cash crops and certain industries--contd.

State 1	District 2	More than C value in both area and workers 3	Non-agro industries 4
Gujarat— <i>concl.</i>	Kaira . . .	Cotton	<i>Textiles</i> , non-metallic mineral products.
	Broach . . .	Cotton	Textiles, chemicals and chemical products, non-metallic mineral products.
	Surat . . .	Cotton	<i>Textiles</i> , chemicals and chemical products.
	Jamnagar . . .	Oilseeds	Chemicals and chemical products, textiles.
	Rajkot . . .	Cotton and oilseeds	<i>Textiles</i> , transport equipment.
	Surendranagar . . .	Cotton	Textiles, chemicals and chemical products.
	Bhavnagar . . .	Cotton and oilseeds	<i>Textiles</i> , machinery except electrical machinery.
	Junagadh . . .	Cotton and oilseeds	Textiles, chemicals and chemical products.
	Ahmedabad . . .	Cotton	<i>Textiles</i> , machinery except electrical machinery, transport equipment.
	Baroda . . .	Cotton	<i>Textiles</i> , chemicals and chemical products, machinery except electrical machinery.
Kerala	Kozhikode . . .	Oilseeds	Textiles, wood and cork except furniture.
	Trichur . . .	Oilseeds	Textiles, machinery except electrical machinery.
	Ernakulam . . .	Oilseeds	<i>Textiles</i> , chemicals and chemical products, transport equipment.
	Alleppey . . .	Oilseeds	<i>Textiles</i> , rubber and rubber products, printing and publishing.
Madhya Pradesh	West Nimar . . .	Cotton and oilseeds	Textiles.
	Shajapur . . .	Cotton	..
	Mandsaur . . .	Oilseeds	Textiles, machinery except electrical machinery.
	Ratlam . . .	Cotton	<i>Textiles</i> , paper and paper products.
	Ujjain . . .	Cotton	<i>Textiles</i> , chemicals and chemical products.
	Indore . . .	Cotton	<i>Textiles</i> , metal products.
	East Nimar . . .	Cotton	Textiles, paper and paper products.
Madras	South Arcot . . .	Oilseeds	Electrical machinery, machinery except electrical machinery, textiles.
	Salem . . .	Oilseeds	<i>Textiles</i> , chemicals and chemical products, electrical machinery.
	Ramanathapuram . . .	Cotton	<i>Chemicals and chemical products</i> , textiles printing and publishing.
	Tirunelveli . . .	Cotton	<i>Textiles</i> , chemicals and chemical products, miscellaneous industries.
	Coimbatore . . .	Cotton and oilseeds	<i>Textiles</i> , machinery except electrical machinery, transport equipment.
	Madurai . . .	Cotton and oilseeds	<i>Textiles</i> , transport equipment, machinery except electrical machinery.
	Tiruchirapalli . . .	Oilseeds	<i>Textiles</i> , transport equipment printing and publishing.

STATEMENT IV.37

Association between cash crops and certain industries—contd.

State	District	More than C value in both area and workers	Non-agro industries
1	2	3	4
Maharashtra	Kolhapur	Oilseeds and sugarcane	Textiles, machinery except electrical machinery, transport equipment.
	Parbhani	Cotton and oilseeds	Transport equipment, electrical machinery.
	Bhir	Oilseeds	Transport equipment.
	Osmanabad	Oilseeds	Transport equipment.
	Aurangabad	Cotton and oilseeds	Textiles.
	Nanded	Cotton	Textiles, transport equipment.
	Buldhana	Cotton	Printing and publishing, basic metal industries.
	Yerotal	Cotton	..
	Wardha	Cotton	Textiles, machinery except electrical machinery.
	Nasik	Oilseeds	Printing and publishing, transport equipment.
	Dhulia	Cotton and oilseeds	Textiles, transport equipment.
	Jalgaon	Cotton and oilseeds	Textiles, miscellaneous industries.
	Ahmadnagar	Sugarcane	Machinery except electrical machinery, chemicals and chemical products.
	Sholapur	Oilseeds	Textiles, transport equipment.
	Akola	Cotton	Textiles, printing and publishing.
	Amravati	Cotton	Textiles, printing and publishing, miscellaneous industries.
	Nagpur	Cotton	Textiles, transport equipment, printing and publishing.
Mysore	Raichur	Cotton and oilseeds	Transport equipment, printing and publishing.
	Belgaum	Cotton and oilseeds	Textiles, transport equipment.
	Bijapur	Cotton and oilseeds	Transport equipment, textiles.
	Gulbarga	Oilseeds	Textiles.
	Bellary	Oilseeds	Machinery except electrical machinery, transport equipment, printing and publishing.
	Mandya	Sugarcane	Chemicals and chemical products.
	Dharwar	Cotton and oilseeds	Transport equipment, textiles.
	Chitradurga	Cotton and oilseeds	Textiles, machinery except electrical machinery.

STATEMENT IV.37

Association between cash crops and certain industries—contd.

State	District	More than C value in both area and workers	Non-agro industries
1	2	3	4
Orissa	..	..	..
Punjab	Ludhiana	Cotton	Textiles, machinery except electrical machinery, electrical machinery, transport equipment, metal products.
	Ferozepur	Cotton	Textiles, metal products.
	Amritsar	Cotton	Textiles, transport equipment.
Rajasthan	Bhilwara	Cotton	Textiles.
	Ganganagar	Cotton	Textiles.
Uttar Pradesh	Kheri	Sugarcane	Machinery except electrical machinery.
	Sitapur	Sugarcane	Machinery except electrical machinery, transport equipment, printing and publishing.
	Gonda	Sugarcane	Textiles, miscellaneous industries.
	Bara Banki	Sugarcane	Chemicals and chemical products, miscellaneous industries, machinery except electrical machinery, textiles.
	Basti	Sugarcane	Textiles, transport equipment, miscellaneous industries.
	Gorakhpur	Sugarcane	Transport equipment, textiles, machinery except electrical machinery, printing and publishing.
	Deoria	Sugarcane	Transport equipment.
	Shahjahanpur	Sugarcane	Transport equipment, miscellaneous industries, machinery except electrical machinery.
	Bijnor	Sugarcane	Miscellaneous industries, transport equipment.
	Moradabad	Sugarcane	Metal products, basic metals, miscellaneous industries.
	Rampur	Sugarcane	Textiles, miscellaneous industries, machinery except electrical machinery.
	Bareilly	Sugarcane	Transport equipment, chemicals and chemical products, textiles, machinery except electrical machinery.
	Pilibhit	Sugarcane	Chemicals and chemical products.
	Naini Tal	Sugarcane	Transport equipment, machinery except electrical machinery, miscellaneous industries.
	Saharanpur	Sugarcane	Textiles, paper and paper products, machinery except electrical machinery.

STATEMENT IV.37

Association between cash crops and certain industries—concl'd.

State	District	More than C value in both area and workers	Non-agro industries
1	2	3	4
Uttar Pradesh— <i>concl'd.</i>	Muzaffarnagar	Sugarcane	Machinery except electrical machinery basic metals, transport equipment.
	Meerut	Sugarcane	Textiles, machinery except electrical machinery, transport equipment, miscellaneous industries.
West Bengal	24-Parganas	Jute	Textiles, transport equipment, machinery except electrical machinery.
	Hooghly	Jute	Textiles, rubber and rubber products; transport equipment.

DISTRIBUTION OF PUBLIC SECTOR UNDERTAKINGS BY LEVELS OF DEVELOPMENT

Table IV.4 gives a list in two parts of all public sector undertakings engaged in industrial production, processing and repairs under the Government of India and the State Governments. Statement IV.39 below gives an analysis of a total of 54 Central Government undertakings in the States arranged according to levels of development. It brings out very clearly that despite the Government's declared aim to disperse government undertakings in the

interest of regional growth the computations of raw materials, production and managerial costs and markets still exert a strong pull in favour of location in districts in the higher levels of development. This pull is so strong that as many as 32 undertakings are concentrated in 18 districts in the top level of development; 10 undertakings in the 5 districts in the third level; 8 in 6 districts in the second level; and none in any district of the lowest level.

STATEMENT IV.38

Cotton					Oilseeds	
Group	Percentage of area under Cotton to gross area sown	Number of workers in		Percentage of area under oilseeds to gross area sown	Number of workers in oil mills	
		Textile (Cotton)	Gins and presses			
1	2	3	4	5	6	
A	..	..	..	..	..	
B	0.01 — 2.50	1 — 500	1 — 500	0.01 — 5.00	1 — 100	
C	2.51 — 5.00	501 — 2,000	501 — 1,000	5.01 — 10.00	101 — 250	
D	5.01 — 10.00	2,001 — 75,000	1,001 — 2,500	10.01 — 25.00	251 — 500	
E	10.01 — 25.00	75,001 — 12,500	2,501 — 4,000	25.01 — 40.00	501 — 1,000	
F	25.01 +	12,501 +	4,001 +	40.01 +	1,001 +	

STATEMENT IV.38 concl'd.

Group	1	Sugarcane		Jute	
		Percentage of area under Sugarcane to gross area shown	Number of workers in sugar and khandasari mills	Percentage of area under jute to gross area sown	Number of workers in
					Textile (Jute) Presses
		7	8	9	10 11
A	.	..	..	..	..
B	.	0.01—0.99	1—500	0.01—1.00	1—1,000
C	.	1.00—1.99	501—1,000	1.01—2.50	1,001—2,500
D	.	2.00—3.99	1,001—2,500	2.51—5.00	2,501—10,000
E	.	4.00—9.99	2,501—5,000	5.01—10.00	10,001—25,000
F	.	10.00 +	5,001 +	40.01 +	25,001 +

STATEMENT

Number of Central Government companies and
by levels of development

Level of development IV.			Level of development III		
State	District	No. of Units	State	District	No. of Units
1	2	3	4	5	6
Andhra Pradesh	Hyderabad	2	Assam	Kamrup	1
Bihar	Dhanbad	1	Kerala	Ernakulam	3
Gujarat	Jamnagar	1	Madhya Pradesh	Durg	1
	Bhavnagar	1	Madras	South Arcot	3
	Sub-total	2	Orissa	Sundargarh	2
Madhya Pradesh	Sehore	1	Total	5 districts	10
	East Nimar	1			
	Sub-total	2			
Madras	Nilgiri	1			
Maharashtra	Poona	1			
Mysore	Bangalore	5			
	Shimoga	2			
	Sub-total	7			
Rajasthan	Jaipur	1			
Uttar Pradesh	Dehra Dun	1			
West Bengal	24-Parganas	1			
	Burdwan	4			
	Sub-total	5			
Delhi	Delhi	2			
METROPOLITAN CITIES Greater Bombay		3			
	Madras	3			
	Calcutta	1			
	Sub-total	7			
Total	18 districts	32			

IV-39

Departmental undertakings (industrial only)
as in March, 1961

Level of development II			All levels of development		
State	District	No. of Units	State	No. of districts	No. of Units
7	8	9	10	11	12
Andhra Pradesh	Visakhapatnam	1	Andhra Pradesh	2	3
Bihar	Ranchi	1	Assam	1	1
Maharashtra	Kolaba	1	Bihar	2	2
Punjab	Hoshiarpur	1	Gujarat	2	2
Himachal Pradesh	Sirmur	3	Kerala	1	3
	Mandi	1	Madhya Pradesh	3	3
	Sub-total	4	Madras district	1	3
Total	6 districts	8	Madras (including Madras district)	3	7
			Greater Bombay	1	3
			Maharashtra (including Greater Bombay)	3	5
			Mysore	2	7
			Orissa	1	2
			Punjab	1	1
			Rajasthan	1	1
			Uttar Pradesh	1	1
			Calcutta	1	1
			West Bengal (including Calcutta)	3	6
			Delhi	1	2
			Himachal Pradesh	2	4
			Sub-total	29	50
UNSPECIFIED CASES					
Assam					2
Bihar					1
Kerala					1
Sub-total					4
Total including unspecified cases :					54

Similarly Statement IV.40 gives the distribution of a total of 122 State undertakings arranged according to levels of development. This statement reflects the

greater concern of State Governments to disperse their State undertakings in less developed areas. Thus 31 undertakings are located in 13 districts in the top level

STATEMENT
*Number of State Government companies
and by levels of development*

Level of development IV			Level of development III		
State	District	No. of Units	State	District	No. of Units
1	2	3	4	5	6
Andhra Pradesh	Hyderabad	10	Andhra Pradesh	Warangal	1
Bihar	Patna	1		East Godavari	1
	Dhanbad	1		Adilabad	3
	Sub-total	2		Nizamabad	4
				Sub-total	9
Kerala	Kottayam	2	Assam	Kamrup	1
Madhya Pradesh	Gwalior	2	Kerala	Quilon	5
Madras	Nilgiri	1		Kozhikode	4
	Coimbatore	1		Trivandrum	9
	Chingleput	1		Ernakulam	5
	North Arcot	1		Tricher	2
	Sub-total	4		Sub-total	22
Mysore	Bangalore	7	Madras	Ramanathapuram	1
Uttar Pradesh	Lucknow	1		Tirunelveli	1
				Sub-total	2
METROPOLITAN CITIES	Calcutta	2	Mysore	Bellary	1
	Madras	1		Mandya	1
	Sub-total	3		Mysore	1
				Sub-total	3
Total	13 districts	31	Orissa	Sundargarh	3
			Rajasthan	Ganginagar	1
			Uttar Pradesh	Bareilly	3
				Mirzapur	1
				Sub-total	
			Total	19 districts	45

of development. 45 undertakings are located in 19 districts of the third level of development. 33 undertakings are

located in 7 districts of the second level, and 8 units in 4 districts of the first or lowest level.

IV.40
*departmental undertakings (industrial only)
as in March 1961*

Level of development II			Level of development I			All levels of development		
State	District	No. of Units	State	District	No. of Units	State	No. of districts	No. of Units
7	8	9	10	11	12	13	14	15
Andhra Pradesh	Cuddapah	1	Bihar	Darbhangha	1	Andhra Pradesh	7	22
	Nellore	2	Orissa	Mayurbhanj	2	Assam	2	2
	Sub-total	3		Sambalpur	2	Bihar	3	3
				Puri	3	Kerala	6	24
Assam	Nowgong	1		Sub-total	7	Madhya Pradesh	1	2
Orissa	Ganjam	5	Total	4 districts	8	Madras district (including Madras district)	1	1
	Balasore	1				Mysore	4	10
	Dhenkanal	1				Orissa	8	39
	Cuttack	22				Rajasthan	1	1
	Sub-total	29				Uttar Pradesh	3	5
						Calcutta	1	2
Total 7 districts		33				West Bengal (including Calcutta)	1	2
						Sub-total	43	117
						UNSPECIFIED CASES		
						Bihar		1
						Kerala		3
						West Bengal		1
						Sub-total		5
						Total including unspecified cases		122

CHAPTER V

RELATIONSHIP BETWEEN PATTERNS OF SHIFT FROM AGRICULTURE TO NON-AGRICULTURE 1951-61 AND THE LEVELS OF DEVELOPMENT

IT MAY BE ASSUMED THAT the male participation rate gives a more stable and reliable index of economic activity than the overall crude activity rate, although even here it should be remembered that the participation of boys below the age of 15 is likely to vary sharply with the school enrolment age which must, since 1951, sharply and progressively rise. All the same, the following statements leave little room for doubt, first, that the 1951 and 1961 male activity rates are closely comparable, and, secondly, that the 1951 and 1961 rates in the majority of States follow the trend since 1901.

STATEMENT V.1

Participation rates in India and three Southern States, 1911-61

	All India minus Andhra Pradesh,		Andhra Pradesh Madras and Mysore combined	
	Madras and Mysore		Males Females	
	Males	Females	Males	Females
(a) Ratio of workers to total population				
1911	62.63	33.04	59.52	35.88
1921	62.02	32.93	55.70	31.87
1931	58.86	27.73	56.40	31.75
1951	55.58	25.33	48.97	17.01
1961	56.22	25.66	60.57	36.25
(b) Ratio of agricultural workers to total population				
1911	43.74	24.71	38.08	25.63
1921	44.42	25.62	35.44	21.83
1931	42.49	21.45	32.23	19.96
1951	37.75	19.65	30.79	12.47
1961	36.99	20.76	37.35	27.62
(c) Ratio of non-agricultural workers to total population				
1911	18.89	8.33	21.44	10.25
1921	17.60	7.31	20.26	10.04
1931	16.37	6.28	24.17	11.79
1951	17.83	5.68	18.18	4.54
1961	19.23	4.90	23.22	8.63

The closeness of the 1951 and 1961 participation rates in other States of India is well brought out in the following statement.

STATEMENT V.2

Participation rates in other States, 1951 and 1961

	1951		1961	
	M	F	M	F
Assam	53.60	30.18	54.10	0.91
Bihar	49.18	20.69	55.60	27.12
Gujarat and Maharashtra	55.08	31.60	55.72	34.59
Kerala	46.67	18.40	47.20	19.71
Madhya Pradesh	60.37	37.95	60.21	43.99
Orissa	56.34	18.80	60.75	26.58
Punjab	55.52	17.44	52.92	14.20
Rajasthan	59.60	38.37	58.14	35.89
Uttar Pradesh	58.25	23.66	58.19	18.14
West Bengal	54.24	11.64	53.98	9.43

Besides, the purpose of this chapter being an appraisal of sectoral shifts, any excess in the agricultural sector would tend to show off marginal increments in the non-agricultural sector more convincingly. The concept of family worker, by its very nature, is likely to swell the agricultural sector to a greater degree than the non-agricultural, particularly the wage sector.

These average crude participation rates were tested by a two-way process: building up from below from the level of the districts in terms of its nine industrial category components; breaking down from the State down to the level of the districts in terms

of the same nine components. This building up and breaking down faced a variety of difficulties posed by the different economic classifications at different censuses and by the jurisdictional changes of territorial units. The problems of reconciliation are niggling and various and call for a large mass of patient, if mechanical, shifting.

The nine census industrial categories of workers of 1961 mentioned in the last paragraph are (1) I Cultivators, (2) II Agricultural labourers, (3) III Workers engaged in Livestock, Forestry, Fishing, Hunting, etc., Plantations, Mining and Quarrying, (4) IV Workers engaged in Household Industry, (5) V Manufacturing other than in Household Industry, (6) VI Construction, (7) VII Trade and Commerce, (8) VIII Transport, Storage and Communications and (9) IX Other Services. They correspond to the Divisions of the standard Industrial Classification as follows:

Census Industrial Category 1961	Division of the Standard Industrial Category
Cultivator	I 0
Agricultural labourer	II 0
Mining, Quarrying, Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied activities	III Part of 0 and 1
Household Industry	IV Part of 0, 2 and 3
Manufacturing other than Household Industry	V Part of 0, 2 and 3
Construction	VI 4
Trade and Commerce	VII 6
Transport, Storage and Communications	VIII 7
Other Services	IX 5, 8 and 9

Having thus worked out two sets of figures for 1951 and 1961, the next question that may pertinently, further, will inevitably, arise is, has there been any shift from agriculture to non-agriculture in the last decade, 1951-61? In the next place,

if there has been a shift at all, in favour of which industrial categories has this shift occurred and what are the regions most affected by these shifts? For it must be remembered that the decade 1951-61 has seen the most massive investment ever in this country in non-agriculture as well as agriculture, that this investment must show objective measurable results by way of shifts, however small, in the different branches of industry, and if the shifts fail to show up, then either there must be something wrong in the measurement itself or the unit of measurement itself is not sensitive enough, for not even the uniqueness of India can defy the universal behaviour of production, savings and investment.

Before we go into the details of the shifts that may or may not have occurred in the various regions of India, we may remind ourselves once again of the truism that India is such a vast and populous country with such a wide range of non-development as well as development, that a general average rate is apt to conceal real and wide differences often between contiguous, not to speak of geographically remote territories. Secondly, the shifts themselves may be of two kinds: (1) those that are primarily a function of population growth and (2) those that are primarily due to economic growth. The first kind of shift which is primarily a function of population growth may reflect itself more in a strengthening of the Cultivators (I), a falling off in Agricultural labour (II) and a corresponding strengthening of unspecified general labour and Services in category IX, in a strengthening of Forestry, Fishing, Orchardry, Livestock, etc. (III), of Household Industry (IV), Trade (VII) and of Other Services (IX). In other words, population growth alone creates its own increases of employment in these traditional sectors by increasing the pressures on them. The second kind of shift, which is primarily a function of economic

growth, will reflect itself in a strengthening of Plantations, Mining and Quarrying (III), Household Industry (IV), Manufacturing (V), Construction (VI), Transport, Storage and Communications (VIII) and of Services (IX). In regions where shifts are noticed in favour of I, III and IV, VII and IX to a greater extent than in favour of IV & V, VI and VIII, such shifts may be regarded as comparatively unstable, the growth in the tertiary sector being induced more by population growth than by solid economic achievement. In regions where positive shifts are noticed generally more in favour of IV, V, VI and VIII and specified sectors of IX than I, III, IV, VII and the unspecified sectors of IX such shifts may be regarded as comparatively stable, the growth in the secondary and tertiary sectors being supported by solid economic achievement. V

II

But before one proceeds to observe the shifts that have occurred from one industrial category to another, a brief look at the changes in the average crude male participation rates at the level of districts may itself be rewarding.

Brief comments on the contents of Table V.I will be pertinent. In Andhra Pradesh, the coastal Andhra and Rayalaseema districts have increased at a faster rate than the Telengana ones, although the rate of population growth in several Telengana districts like Nizamabad (22.35), Adilabad (21.37), Khammam (30.88) and Nalgonda (22.36) is higher than in the remaining districts of Andhra Pradesh. The rate of population growth read with the direction and magnitude of shift will be another criterion of whether the shift is merely due to demographic growth or to the growth of the economy as well. A very general and preliminary reflection seems in order in respect of Andhra Pradesh: that the rise in the male participation rates of the coastal Andhra and Rayalaseema districts appears to be due not only to demographic but economic growth also,

whereas the increase in the Telengana districts seems more immediately due to demographic growth. An exception even in the Telengana districts seems to be Khammam, Adilabad, Nizamabad, Karimnagar and Nalgonda where economic forces are at work, mainly irrigation and extension of cultivation and growth of industries. In Assam the decline in Goalpara, Darrang, Lakhimpur and Sibsagar was partly due to the slump in the tea industry. Economic activity did not attain much momentum in Assam during the decade as will appear from a study of the Plan investments, and demographic growth appears to have been the chief contributing factor to the slow increases in participation rates. The Garo and United Mikir and North Cachar Hills experienced a comparatively high margin of economic activity in Assam because of their erstwhile backwardness. In Bihar participation rates have risen in almost every district, there being a general association between the rate of population growth and that of participation rate, although in Saran and Ranchi the participation rate seems to have kept comparatively ahead of the rate of population growth than in other districts. In Gujarat there has been an actual decline in the participation rates in several economically progressive districts like Rajkot, Kutch, Ahmedabad and Baroda. At the same time it is well to remember that a high proportion of urban population tends to depress the general participation rate. Gujarat has a high urban ratio, Ahmedabad and Rajkot enjoying two of the highest ratios in India. Kerala shows decline in the former Travancore-Cochin districts but some increase in the Malabar districts. Kerala and West Bengal are a class by themselves and present complexities which do not admit of simple explanations. In Madras, Madras Corporation alone has registered a small decrease, Nilgiri and Kanyakumari which have shown high rates of population growth (31.30 and 20.64 respectively) have shown small increases in participation rate. Kanyakumari accords

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more with the general picture of Southern Kerala to which it had belonged. All other districts of Madras have shown high increases in participation rates exceeding the decadal rates of population growth suggesting accelerated economic activity. The Maharashtra districts are divided between low decline in some and low increase in others and call for closer investigation. The general pattern in Mysore districts seems to be that the districts of high population growth have shown comparatively low increases in participation rates whereas it is mostly districts of comparatively low population growth that have shown high increases in participation rates. It is curious that Sambalpur in Orissa, with its growth of large industries and the establishment of the Hirakud Dam should show a small decrease in participation rates, an explanation for which will perhaps be later available. It is also significant that many districts of comparatively high increase in participation rates should also be districts where the rate of population growth has been below the State average. The districts of Uttar Pradesh again, with the solitary exception of Fatehpur, like those of Maharashtra, are neatly divided into two unequal blocks: 28 districts of low decrease in male participation rates and 25 districts of low increase. It is a point of interest that as many as 13 of the 28 districts which have shown decreases in participation rates have shown rates of population growth below the State average. As many as 8 out of 16 districts of West Bengal have shown declines in participation rates, while 5 have shown small increases and only 3 moderate increases.

III

To proceed now with the question of inter-category shifts. A uniform test has been applied for India as a whole and for each State. This test consists in observing

(a) the percentage of a certain category of male workers to total male workers in 1951, (b) the percentage of that category of male workers to total male workers in 1961 and (c) increase (or decrease) in male workers in that category 1951-61 expressed as percentage of total increase in male workers 1951-61. While (a) and (b) may be referred to as averages for each category for 1951 and 1961, (c) may be referred to as marginal changes for that category during 1951-61.

This (c) was an attempt at measurement of the intensity of the marginal change by expressing the difference between 1951-61 in a particular industrial category as a percentage of the total change in male workers during 1951-61. This index, which may be called the marginal index, was intended to bring out the share of change in a particular industrial category against the decadal increase in total male workers. It may be assumed that a positive sign of the marginal index reflects a strong and favourable structural shift in employment particularly where the sign of marginal change is also positive, whereas a negative sign reflects decline particularly where the population of workers in the category is marked by an absolute decline also.

IV

We shall first consider those districts in each of the four levels of development which show decreases in marginal index IV & V, VI, VII, VIII and IX.

The following statement (V. 3) gives the decreases in marginal index in industrial categories IV & V, VI, VII, VIII and IX in individual districts classified by levels of development. Concomitant marginal decrease in other categories is indicated simultaneously together with the extent of the decrease in each such category.

STATEMENT V.3

Decreases in marginal index in industrial categories IV & V, VI, VII, VIII and IX in individual districts classified by levels of development

IV & V—Decreases			Concomitant decrease in other categories				
Level I	Assam	Garohills	—0.02				
	Madhya Pradesh	Jhabua	—0.55				
		Seoni (including Chhindwara)	—4.87		VII —0.88		
	Manipur	Manipur	—14.77		VII —2.56		
	Sikkim	Sikkim	—0.55			VIII —12.58	
Level II	Assam	Cachar	—3.53				
		United Mikir and North Cachar Hills	—0.83				
	Gujarat	Dangs	—2.62				
	Madhya Pradesh	Rajgarh	—0.30				
		Shajapur	—5.80				
	Maharashtra	Bhandara	—13.94	VI —0.20	VII —0.11		
		Chanda	—13.96				
	Rajasthan	Dungarpur	—0.37				
Level III	Kerala	Quilon (including Alleppey)	—5.01			VIII —3.26	
		Trichur (including Ernakulam)	—1.89	VI —0.92		VIII —5.68	
		Trivandrum	—2.45			VIII —0.11	
	Madhya Pradesh	Hoshangabad (including Narsimhapur)	—7.39		VII —5.99		
		Vidisha	—2.45			VIII —0.37	
	Madras	Kanyakumari	—1.31			VII —7.47	VIII —0.78
	Rajasthan	Alwar	—11.04		VII —4.13		IX —0.16
Level IV	Rajasthan	Bharatpur	—13.88				
	West Bengal	Jalpaiguri	—2.33	VI —0.48			
VI Decreases						VIII —0.23	
Level I	Andhra Pradesh	Mahbubnagar	—1.05			VIII —0.16	
		Medak	—0.28				
	Mysore	Raichur	—12.61				
	Orissa	Bolangir	—0.30		VII —1.67	VIII —0.18	
		Boudh-Khondmals	—2.49		VII —7.90	VIII —0.03	
		Kalahandi	—0.66		VII —1.71		
		Mayurbhanj	—0.52		VII —1.45		
		Puri	—2.92		VII —4.31		
	Rajasthan	Banswara	—0.10		VII —4.92		IX —10.28
		Nagaur	—1.45				
	Uttar Pradesh	Ballia	—2.07		VII —0.84		
		Ghazipur	—3.28		VII —1.59	VII —1.51	IX —2.77
		Rae Bareilly	—25.55		VII —0.74		IX —8.09
		Unnao	—3.29				IX —4.85
Level II	Andhra Pradesh	Cuddapah	—1.03				
		Karimnagar	—0.31				
	Bihar	Monghyr	—0.52		VII —1.22		
		Saharsa	—0.25				
		Santal Parganas	—2.43				
	Maharashtra	Bhir	—1.57		VII —0.24		IX —5.59
		Osmanabad	—0.52				
	Orissa	Balasore	—0.26		VII —1.81		
		Ganjam	—0.54		VII —10.01		
	Rajasthan	Jhalawar	—3.46		VII —0.67		
	Uttar Pradesh	Shahjahanpur	—0.04				
	West Bengal	Murshidabad	—0.87		VII —1.29		

STATEMENT V.3

Decreases in marginal index in industrial categories IV & V, VI, VII, VIII and IX in individual districts classified by levels of development—contd.

VI—Decreases—concl'd.

Concomitant decrease in other categories

Level III	Andhra Pradesh	Adilabad	—0.92	VIII	—0.78	
		Anantapur	—0.32			
		Kurnool	—0.74			IX —4.06
	Bihar	Bhagalpur	—0.34	VIII	—5.68	
	Madhya Pradesh	Raisen	—2.80	VIII	—1.25	
	Maharashtra	Aurangabad	—0.12			
	Mysore	Bellary	—3.70			
		Kolar	—0.43			
	Rajasthan	Bundi	—0.06	VII	—1.11	
	Uttar Pradesh	Bijnor	—7.60			
		Varanasi	—0.15			
	West Bengal	Birbhum	—1.59			
Level IV	Andhra Pradesh	Hyderabad	—8.98	VII	—12.21	
	Madras	Nilgiri	—6.36			
	Maharashtra	Thana	—0.33			
	Punjab	Rohtak	—1.99			IX —7.86
	Delhi	Delhi	—2.25	VII	—9.00	

VII—Decreases

Level I	Madhya Pradesh	Mandla	—2.72	VIII	—1.04	
		Rewa	—2.20			
	Maharashtra	Ratnagiri	—0.19	VIII	—1.34	IX —.8
	Orissa	Keonjhar	—0.56			
		Koraput	—2.92			
		Sambalpur	—1.25			
	Punjab	Kangra (including Lahaul and Spiti)	—2.47			
	Rajasthan	Barmer	—0.22			
		Bhilwara	—2.54			IX —4.54
		Jaisalmer	—36.61			
	Uttar Pradesh	Bara Banki	—0.03			
		Fatehpur	—2.56			IX —13.02
		Hamirpur	—0.43			IX —5.85
		Jaunpur	—1.35			IX —8.26
	Himachal Pradesh	Chamba	—3.16	VIII	—0.78	
Level II	Madhya Pradesh	Betul	—2.42			
		Datia	—6.36			
		Dhar	—1.06			
		Shivpuri	—0.62			
		Tikamgarh	—0.31			
		Chhatarpur	—0.48			
	Orissa	Cuttack	—4.64			
		Dhenkanal	—2.87	VIII	—1.25	
	Punjab	Hoshiarpur	—124.56			
	Rajasthan	Chitorgarh	—1.57			IX —136.15
		Churu	—2.36			
		Jalor	—1.18			
		Jhunjhunu	—4.63			IX —4.66
		Pali	—4.32			IX —13.46
		Sawai Madhopur	—3.98			IX —12.97
		Sikar	—5.14			IX —1.50
		Tonk	—4.50			IX —5.47
		Udaipur	—2.40			IX —11.11
	Uttar Pradesh	Jalaun	—0.83			
		Mainpuri	—2.25			

STATEMENT V.3

Decreases in marginal index in industrial categories IV & V, VI, VII, VIII and IX in individual districts classified by levels of development—contd.

VII—Decreases—concl'd.

Concomitant decrease in other categories

Level II—concl'd.	West Bengal	Bankura	—0.45			
		Malda	—0.11			
		Midnapore	—1.90			
	Himachal Pradesh	Mandi	—3.27	VIII	—0.53	
		Sirmur	—5.21			
Level III	Gujarat	Anreli	—1.53			
	Madhya Pradesh	Mandsaur	—0.78			
		Sagar (including Damoh)	—1.21			
	Maharashtra	Wardha	—6.30			
	Punjab	Sangrur	—2.36	VIII	—9.94	
		Simla	—485.73	VIII	—554.38	IX —1,161.44
	Rajasthan	Bikaner	—14.62			IX —5.71
		Jodhpur	—2.74			IX —2.36
		Sirohi	—8.87			IX —2.10
	Uttar Pradesh	Jhansi	—1.88			
Level IV	Andhra Pradesh	Hyderabad	—12.21			IX —13.92
	Punjab	Amritsar	—15.42			IX —48.37
		Gurdaspur	—35.78			
		Jullundur	—0.83			
		Kapurthala	—82.15			
		Karnal	—1.24			IX —22.02
		Ludhiana	—17.84			IX —22.11
	Rajasthan	Ajmer	—18.30			
		Jaipur	—3.18			
		Kota	—1.14			
	Uttar Pradesh	Aligarh	—6.70	VIII	—2.98	
		Mathura	—1.83	VIII	—0.40	
	West Bengal	Calcutta	—134.61	VIII	—148.28	

VIII—Decreases

Level I	Madhya Pradesh	Bastar	—0.07			
	Uttar Pradesh	Budaun	—0.53			
	Himachal Pradesh	Kinnaur (including Mahasu)	—1.57			
Level II	Madhya Pradesh	Panna	—1.11			
	Mysore	Gulbarga	—0.75			
	Punjab	Mahendragarh	—3.18			
Level III	NIL					
Level IV	Punjab	Bhatinda	—3.35			
		Patiala	—11.18			
	West Bengal	Howrah	—6.65			
	Andaman and Nicobar Islands	Andaman and Nicobar Islands	—1.70			

IX—Decreases.

Level I	Madhya Pradesh	Bilaspur	—10.10			
	Uttar Pradesh	Azamgarh	—5.04			
		Basti	—8.83			
		Gonda	—6.87			
		Gorakhpur	—2.69			
		Kheri	—1.94			
		Sultanpur	—8.01			
	Laccadive, Minicoy and Amindivi Islands	Laccadive, Minicoy and Amindivi Islands	—101.67			
Level II	Andhra Pradesh	Chittoor	—3.47			
	Maharashtra	Kolaba	—2.28			
		Perbhani	—2.14			

STATEMENT V.3

Decreases in marginal index in industrial categories IV & V, VI, VII, VIII and IX in individual districts classified by levels of development—concl'd.

IX—Decreases—concl'd.

Level III	Gujarat	Broach	—10.51
		Kutch	—0.33
		Surat	—0.66
	Uttar Pradesh	Bareilly	—8.43
		Bulandshahr	—6.48
		Moradabad	—7.46
Level IV	Andhra Pradesh	Krishna	—2.66
	Gujarat	Baroda	—7.23
		Bhavnagar	—2.38
		Junagadh	—0.02
		Surendranagar	—5.66
	Madhya Pradesh	Gwalior	—5.72
		Ratlam	—2.51
	Maharashtra	Poona	—6.30
	Uttar Pradesh	Dehra Dun	—19.39
Lucknow		—2.36	

Concomitant decrease in other categories

The following Statement V.4 gives an abstract of the previous statement by arranging the number of districts showing

decreases in each category by levels of development.

STATEMENT V.4

Abstract of statement arranging the number of districts showing decreases in each category by levels of development

[Figures within brackets in each case indicate number of districts which have registered marginal decreases only in the categories mentioned in the first column]

	Level I	VI	VII	VIII	IX
IV & V	5	..	2	1	..
VI	14	..	9	5 (3)	3 (2)
VII	26	..	..	3	12 (2)
VIII	12	..	..	12	5
IX	8	..	..	..	12 (12)
	65				(8) 8 (8)
	Level II				
IV & V	8	1	1	..	..
VI	13	..	6	..	2 (6)
VII	32	..	..	2	8 (5)
VIII	5	..	..	7	9 (23)
IX	3	..	..	..	5 (5)
	61			3	3 (3)

STATEMENT V.4

Abstract of statement arranging the number of districts showing decreases in each category by levels of development—concl'd.

	Level III	VI	VII	VIII	IX
IV & V	7	1	2	5 (2)	..
VI	13	1	1	3	1
VII	13	..	..	3	5 (2)
VIII	10	..	..	(10)	..
IX	6	..	..	..	6
	49				6 (6)
	Level IV				
IV & V	2	1	1	..	1 (1)
VI	6	..	2	..	1
VII	15	..	..	4	4
VIII	8	..	..	8	..
IX	10	..	..	..	10
	41				10 (10)

It will be seen that at each level the number of districts showing marginal decreases in IV & V is the minimum. It is 5 in level I, 8 in II, 7 in III and as low as 2 in IV. In other words the decade 1951-61 has meant a substantial strengthening of the household industry and manufacturing centre almost everywhere except in the districts mentioned in the previous statement. Further that the levels to gain the most have been the lowest and the highest, whereas there are more pockets of depression in the intermediate levels II and III which are probably sufferers of a backwash effect.

In industrial category VI (Construction), the decreases are graduated—14 in level I, 13 each in II and III, and 6 in level IV—showing patches of depression in what is otherwise a picture of general buoyancy.

Category VII (Trade) presents a sector in which the number of districts showing decrease is the highest at each level. This itself may be interpreted as a hopeful sign

inasmuch as the decreases may mean a pruning of underemployment and marginal employment in retail trade, hawking etc. on the level of 'breaking the book'. The number of districts showing decrease is high in levels I (26) and II (32), but is low in levels III (13) and IV (15).

In category VIII (Storage and Transportation) decreases are noticed in the largest number of districts in level I (12). The number descends to 5 in level II, rises to 10 in level III and descends again to 8 in level IV. These fluctuations are also indicative of mopping up of primitive and labour intensive means of transport in backward pockets. Otherwise the general picture is one of much buoyancy.

Category IX is rendered uncertain by the inclusion of general and unspecified labour. The number of districts showing decrease in IX is 8 in level I, 3 in II, 6 in III and 10 in IV.

The total number of districts showing decline in one or other of the five sectors of industrial categories progressively declines with each rise in level of development. Thus it is 65 in I, 61 in II, 49 in III and 41 in IV. This provides statistical corroboration to the assumption that the rising levels of development should show a decreasing number of districts showing a decline in the non-agricultural categories.

Statement V.5 in a way is the complement of the above statements and shows the distribution of number of districts which have recorded increase in one or more of the non-agricultural categories.

The distribution is further arranged by number of districts under specified ranges of percentage marginal increase in each category. This very clearly shows the differences of behaviour in levels and how the ranges of marginal shifts are reflected in each shift in level of development. The statement speaks for itself. Thus the total number of districts which have registered increase goes up from 262 in level I to 340 in level II, 305 in level III and 368 in level IV. This suggests that the economy is bracing up quite appreciably even in districts of levels I and II, a fact which is supported by the aggregates of the number of districts in each percentage range of increase as follows:

STATEMENT V.5

Level of development	Total number of districts by range of percentage increase					
	Total	0—5	5—10	10—20	20—50	50+
I	262	157	26	40	26	13
II	340	206	46	57	27	4
III	305	161	58	51	27	5
IV	368	141	84	72	55	16

STATEMENT V.6

Districts showing increases in marginal index in non-agricultural categories arranged by percentage range of increase 1951-61

Industrial category	No. of districts with increase	No. of districts by range of percentage increase				
		0—5	5—10	10—20	20—50	50+
Level I						
IV & V	62	17	9	18	13	5
VI	53	42	1	5	2	3
VII	41	37	3	..	1	..
VIII	55	49	5	..	1	..
IX	51	12	8	17	9	5
	262	157	26	40	26	13

STATEMENT V.6

Districts showing increases in marginal index in non-agricultural categories arranged by percentage range of increase, 1951-61—concl.

Industrial category	No. of districts with increase	No. of districts by range of percentage increase					
		0—5	5—10	10—20	20—50	50+	
Level II							
IV & V		74	18	15	25	14	2
VI		69	58	6	3	1	1
VII		50	45	5	..	..	..
VIII		77	70	7	..	..	..
IX		70	15	13	29	12	1
		340	206	46	57	27	4
Level III							
IV & V		65	6	17	24	16	2
VI		59	45	9	4	..	1
VII		59	49	10	..	..	..
VIII		62	51	7	3	1	..
IX		60	10	15	20	10	5
		305	161	58	51	27	
Level IV							
IV & V		81	6	8	26	32	9
VI		77	45	20	9	2	1
VII		68	49	15	4	..	..
VIII		75	34	26	12	3	..
IX		67	7	15	21	18	6
		368	141	84	72	55	16

Andhra Pradesh

The first thing to notice about Andhra Pradesh is the absolute decline in the number of workers in the categories and districts noted below:

Category	District
II-Agricultural labour	Mahbubnagar, Medak, Nizamabad, Adilabad, Karimnagar, Warangal (including Khammam).
III-Forestry, Plantations, Mining, Quarrying, etc.	Chittoor, Mahbubnagar, Hyderabad, Karimnagar.
VI-Construction	Cuddapah, Anantapur, Kurnool, Mahbubnagar, Hyderabad, Medak, Adilabad, Karimnagar.
VII-Trade and Commerce	Hyderabad.
VIII-Transport, Storage and Communications	Medak, Adilabad.
IX-Other Services	Krishna, Chittoor, Cuddapah, Kurnool.

These absolute declines have necessarily been attended by declines in the marginal indices also

Positive values for marginal indices of cultivation are observed in all the districts of the State, whether they are on the west or in Rayalaseema or in Telengana thus reflecting the general extension of cultivation through colonisation, reclamation and irrigation that has occurred in these districts. Chiefly responsible for continued and fresh improvement in agriculture has been not only the existing productive irrigation systems in the Godavari and Krishna deltas, the Tungabhadra and Manjira basins and the Nellore delta area to the number of as many as 15, but the new irrigation projects in the three Plans notable among which are the projects in the districts of Srikakulam (Narayanpuram), Nalgonda (Musi and Nagarjunasagar), East Godavari (Thorrigedda), Hyderabad (Tutpa-

lli), Visakhapatnam (Thandava and Varaha), Nellore (Kanupur), Kurnool (Zurreru), Anantapur (TBPHLC, and Mid Pennar), Nizamabad (Swarna, Pochampadu, Kaddam and Godavari). It is interesting that the absolute and marginal declines in II-Agricultural labour in Mahbubnagar, Medak, Nizamabad, Adilabad, Karimnagar, Warangal and Khammam is complemented to a certain extent by marginal increase in IX-Other Services in them which suggests the possibility of interchangeability between a type of agricultural labour in 1951 and unspecified general labour in rural areas (Major Groups of I.S.I.C. 89 and 90) in 1961. Category III-Mining, Quarrying, Forestry, Orchardry, Plantations shows increments in marginal index in all but five districts. Chittoor, Mahbubnagar, Hyderabad, Karimnagar and Khammam alone show marginal declines. This reflects the striking growth in tobacco and coconut plantations, fruit orchards and mining and quarrying particularly in the coastal Andhra and Rayalaseema districts. IV & V Household Industry and Manufacture have shown encouraging growth in all districts. This category (IV & V) and VIII (Transport, Storage and Communications) are the crux of the marginal structural shifts reflecting economic growth that have occurred in Andhra Pradesh in the last decade. The low positive index observed for VIII in Nizamabad, Karimnagar and Nalgonda and the low negative indices for VIII in Medak and Adilabad are the only exceptions to a strong positive shift which underlines the role played by investment and economic growth in shifts in employment. This is evident in the increases in marginal indices for III, IV & V, VI and VIII for Andhra Pradesh as a whole.

Assam

The following districts have experienced absolute declines in workers in the

categories noted against them:

Category	District
II	United Khasi and Jaintia Hills.
III	Goalpara, Darrang, Lakhimpur, Sibsagar, Cachar, United Mikir and North Cachar Hills.
IV & V	Cachar, Garo Hills, United Mikir and North Cachar Hills.

Category I shows increases in Goalpara, Kamrup, Nowgong, Garo Hills, United Khasi and Jaintia Hills, United Mikir and North Cachar Hills and Mizo Hills. There have been numerous irrigation schemes in Goalpara, Darrang, Cachar and Kamrup districts. It is possible that operationally there was some interchange in certain districts between plantation labour in 1951 and agricultural labour and unspecified labour in 1961 because negative indices in III are matched by positive indices in both II and IX in the districts of Goalpara, Darrang, Sibsagar, Cachar and United Mikir and North Cachar Hills. IV & V register only marginal increases but, marginal decline in as many as 3 districts Cachar, Garo and United Mikir and North Cachar Hills. The real structural shifts, although they involve very small absolute populations and are therefore marginal, have occurred in VI Construction and VIII Transport, Storage and Communications, the marginal indices being positive everywhere in VI and VIII. In VII, the increases during 1951-61 are positive in each district. The general picture seems to be that the effect of economic growth in Assam on structural shifts has been weak, but there has been noticeable strengthening of the infrastructure in construction, transport, storage and communication. Population growth seems to have played a more positive role than economic growth in augmenting employment in Agriculture and Services. This is evident in increases in marginal indices for Assam as a whole in VI, VIII and IX.

Bihar

The following districts have experienced absolute declines in workers in the categories noted against them:

II	Singbhum.
VI	Monghyr, Bhagalpur, Saharsa, Santal Parganas.
VII	Santal Parganas.

Bihar presents a picture of structural shift from agriculture to non-agriculture. This is evident from the fact that although there have been substantial absolute increases in cultivation and agricultural labour the marginal indices in these two categories are mostly positive. The First Plan saw 20 irrigation schemes none of which except the commencement of Kosi were of great importance. The Second Plan saw 18 schemes the more important of which were the three Sone and the Khajia and Sikri schemes. The Third Plan has taken up 12 schemes of which the major ones are the Kosi Project (Western Kosi Canal) and irrigation of area between Kosi Eastern Embankment and Bhanga Dhar. On the contrary the marginal indices in III, IV & V, VIII and IX are high and positive in all districts, suggesting shifts in the economy. Even in VI the indices are high and positive in all districts except Monghyr, Bhagalpur, Saharsa and Santal Parganas districts which have also experienced absolute declines. In VII the marginal indices are positive, though low, in all districts except Santal Parganas.

This buoyancy of economic growth and structural shift is evident almost everywhere even to the naked eye. Plantations (chiefly sugarcane, tobacco, etc.), mining, quarrying, livestock, forestry, orchardry, have grown along with small and large industries. New constructions are visible in most places and transport and communication have improved. The Government have expanded Services through the anchals, development blocks

and a close network of school and medical services. This is evident in the positive marginal indices in all categories for the State as a whole, particularly in I, II, III, IV & V and IX.

Gujarat

The following districts have experienced absolute declines in workers in the categories noted against them:

- II . Jamnagar, Panchmahals.
- III . Jamnagar, Rajkot, Surendranagar, Bhavnagar, Amreli, Junagadh, Kutch, Banaskantha, Sabarkantha, Mehsana, Ahmedabad, Kaira, Baroda.
- IV & V . Dangs.
- VII . Amreli.
- VIII . Amreli.
- IX . Surendranagar, Amreli, Bhavnagar, Junagadh, Kutch, Baroda, Broach, Surat.

The growth of population undoubtedly has contributed to increases in marginal indices in I Cultivation which in Gujarat has assumed a decisive share in economic growth. There were as many as 33 irrigation schemes in the First Plan, 26 in the Second Plan, some of them continuing in the Third, distributed all over the State but none of them of sufficient magnitude to claim a major share in the marginal increase in I. Gujarat now has some of the richest agricultural tracts in India where inputs have joined hands with careful husbanding, diversification and multiplicity of crops, irrigation and better storage and marketing. This increase has been accompanied by a rise in the marginal index in II in Rajkot, Surendranagar, Bhavnagar, Kutch, Banaskantha, Mehsana, Ahmedabad and Kaira. There has been universal decline in the marginal index in III except in Panchmahals, Broach, Surat and Dangs. An adequate explanation for this is being sought in the sectors of livestock, fishing, animal husbandry etc., which may not have been brought out to

the fullest extent from under the cover of cultivation. The structural shifts are noticeable in IV & V, VI and VIII. The marginal indices are positive in IV & V in all districts except Dangs. VI shows positive indices in all districts although the values are weak in Mehsana, Panchmahals and Surat. VII shows positive indices in all districts except Amreli, although the marginal accretions are weak. VIII shows positive indices in all districts except Amreli, suggesting the same conclusion for these districts as in the case of VII. IX shows negative indices in the districts of Surendranagar, Bhavnagar, Amreli, Junagadh, Kutch, Baroda and Broach. The conclusion is that economic growth has made a far more positive contribution than population growth in Gujarat's structural shifts in employment. This is evident in the high positive marginal indices in I, IV & V, VI and VIII for Gujarat as a whole.

Kerala

The following areas have experienced absolute declines in workers in the categories noted against each:

- I . Kottayam.
- II . All areas.
- IV & V . Trichur (including Ernakulam), Quilon (including Alleppey), Trivandrum.
- VI . Trichur (including Ernakulam).
- VIII . Trichur (including Ernakulam), Quilon (including Alleppey), Trivandrum.

Kerala has had substantial accretions to category I but seems to have weaned away masses of agricultural labour from II to Major Groups 89 and 90 in IX (unspecified general labour). The districts which have benefited most from major irrigation schemes in the last ten years (8 in the First Plan and 5 in the Second) are Palghat, Trichur, Ernakulam, Alleppey and Trivandrum. There has been marked improvement in III (Forestry, Fishing, Plantations, Mining and Quarrying) in all districts. In IV & V the marginal

index is negative in Trichur (including Ernakulam), Quilon (including Alleppey) and Trivandrum. Even VI has low positive indices in most districts and has declined in absolute terms in Trichur (including Ernakulam). There has been a spectacular build up of industries in Trichur and Ernakulam in the last decade. The marginal indices for VII are positive for all districts. In VIII the marginal indices are positive but quite weak in Cannanore, Kozhikode, Palghat and Kottayam; being negative in the rest. There have been large accretions in IX. The conclusion seems to be that population growth has multiplied pressure on traditional avenues of employment, being unable to induce large shifts, economic growth having strengthened the existing pattern of employment.

Madhya Pradesh

There have been absolute declines in the following districts in respect of the categories noted against them:

- I . Raigarh.
- II . Bhind, Gwalior, Datia, Shivpuri, Guna, Tikamgarh, Chhatarpur, Satna, Mandasaur, Ujjain, Jhabua, Dewas, East Nimar, Rajgarh, Raisen, Hoshangabad-Narsimhapur, Betul, Sagar-Damoh, Jabalpur, Mandla, Chhindwara-Seoni, Balaghat, Surguja, Bilaspur, Raigarh, Durg, Raipur, Bastar.
- III . Morena.
- IV & V . Jhabua, Shajapur, Rajgarh, Vidisha, Hoshangabad-Narsimhapur, Chhindwara-Seoni.
- VI . Raisen.
- VII . Datia, Shivpuri, Tikamgarh, Chhatarpur, Rewa, Mandasaur, Dhar, Hoshangabad-Narsimhapur, Betul, Sagar-Damoh, Mandla, Chhindwara-Seoni.
- VIII . Panna, Rewa, Raisen, Mandla, Bastar.
- IX . Gwalior, Ratlam, Bilaspur.

Madhya Pradesh as a whole presents a picture of buoyancy as well as increasing pressure on land. The factor of buoyancy

has been contributed by extension of cultivation, by reclamation of land and by a number of major irrigation projects in the Five Year Plans. The 22 irrigation projects of the First Plan mainly concerned resuscitation of tanks, which also saw the beginning of the first phase of the Chambal Project. The Second Plan saw 32 schemes and the Third 2 more major schemes. The schemes are geographically well distributed throughout the State. It is possibly extension of cultivation which has been responsible in part for the negative index in II Agricultural labour for Madhya Pradesh as a whole. Forestry, plantations and mining have greatly increased particularly in the eastern, central and northeastern districts while Raipur, Bhopal, Indore and Jabalpur Divisions have seen not only rapid expansion in manufacturing industries but household industries as well. Construction (VI) and Transport, Storage and Communications (VIII) have enormously improved. The increase in services merely reflects the gains made in the primary and secondary sectors. Madhya Pradesh thus presents a picture of real structural shift in employment in the growth sectors, indicative of economic growth.

Madras

The following districts have experienced absolute declines in workers in the categories noted against each:

- I . Madras Corporation.
- II . Madras Corporation, North Arcot, Nilgiri, Kanyakumari.
- III . Madras Corporation.
- IV & V . Kanyakumari.
- VI . Nilgiri.
- VIII . Kanyakumari.

Category I has made substantial advance in the State. It is possible that workers returned in category II in 1951 have to a certain extent been returned in Major

Groups 89 and 90 (unspecified general labour) in IX in 1961. Population growth has brought considerable reinforcements to cultivation in the districts of North Arcot, South Arcot, Salem, Coimbatore, Nilgiri and Ramanathapuram where extension of irrigation, improvement of inputs and agricultural practices and diversification of crops are much in evidence. Although there has been no absolute decline in numbers II Agricultural labour shows declines in the marginal index in Madras, North Arcot, Nilgiri and Kanyakumari. Apart from as many as 16 existing productive irrigation schemes which brought extensive benefits in the past, the First Plan saw 10 new irrigation projects, the Second Plan saw 4 and the Third Plan is putting through 7 medium schemes. Forestry, Plantations, Mining, Quarrying etc. (III) have made substantial strides in all districts except in Madras where the index is negative. The index, though positive, is weak in Coimbatore and Ramanathapuram. The structural shifts are strong in IV & V and VIII. In IV & V the marginal indices are positive in all districts except Kanyakumari. In VI the marginal indices are positive but weak in all districts except Nilgiri where it is negative. The marginal indices are positive in all districts in respect of VII. In VIII a negative marginal index appears only in Kanyakumari. In VI Madras seems divided into two geographical blocks: the first consisting of Madras, Chingleput, North Arcot, South Arcot, Coimbatore, Madurai and Thanjavur shows high gains along with IV & V and VIII, while the second consisting of Salem, Nilgiri, Tiruchirapalli, Ramanathapuram and Tirunelveli shows weak gains, and even declines in some cases. The positive indices in IX are high and strident. The conclusion seems to be that economic growth is going ahead. This is evident in the positive marginal indices in III, IV & V, VI, VIII and IX for Madras as a whole.

Maharashtra

The following districts have experienced absolute declines in workers in the categories noted against each:

- II . Greater Bombay, Bhir, Buldhana, Akola, Amravati, Yeotmal, Wardha, Nagpur, Bhandara, Chanda.
- III . Satara, Sangli, Kolhapur.
- IV & V . Bhandara, Chanda.
- VI . Thana, Aurangabad, Bhir, Osmanabad, Bhandara.
- VII . Ratnagiri, Osmanabad, Wardha, Chanda.
- IX . Thana, Kolaba, Ratnagiri, Poona, Parbhani, Bhir.

The marginal indices for I are positive in all districts but particularly high in Ratnagiri, Ahmadnagar, Aurangabad, Parbhani, Bhir, Nanded, Osmanabad, Buldhana, Akola, Amravati, Yeotmal, Wardha, Nagpur, Bhandara and Chanda. These are mostly in the Marathawada, Vidarbha and Mahakoshal tracts. There were 18 irrigation projects in Maharashtra in the First Plan mostly in the peninsular districts and 31 in the Second Plan. There are 8 schemes in the Third Plan of which the major ones are Koyna and Bhima. In the Deccan and Peninsular districts population growth, by increasing pressure on land, has led to spectacular diversification of crops, particularly cash crops, extension of and reclamation and improvements in inputs and agricultural practices. There seems to have been a general swing of unspecified general labour (Major Groups of I.S.I.C. 89 and 90 of IX) in 1951 in the western districts in favour of accretion in Agricultural labour in 1961, and a general decline in marginal indices of Agricultural labour in the eastern districts. Plantations, Forestry, Livestock, Mining Quarrying (III) have improved in most districts except Satara and Sangli. The marginal index in IV & V is positive in all districts except Bhandara and Chanda. VI is up, too, in all districts except Thana, Aurangabad, Bhir,

Osmanabad and Bhandara. VIII shows a strident positive marginal index in all districts. VII shows negative in the districts of Ratnagiri, Osmanabad, Wardha and Chanda, and so does IX in the districts of Thana, Kolaba, Ratnagiri, Poona, Parbhani and Bhir. The general conclusion seems to be a marked marginal structural shift in employment in favour of IV & V, VI and VIII and a strengthening of I denoting sound overall improvement in the economy. This is evident in the positive indices for all categories for Maharashtra as a whole.

Mysore

The following districts have experienced absolute decline in workers in the categories noted against each :

- II . Hassan, Chikmagalur, Gulbarga, Bidar.
- III . Bangalore, Kolar, Gulbarga, Bidar, Raichur.
- VI . Kolar, Bellary, Raichur.
- VIII . Gulbarga, Raichur.

Population growth has contributed to a strengthening of I particularly in Tumkur, Kolar, Hassan, Mandya, Belgaum, Gulbarga, Bidar and Raichur, indicating that the pressure on land has intensified in these districts and is comparatively less in the remaining districts. There have been notable irrigation and drainage achievements during 1951-61 as follows:

- Raichur . . . Tungabhadra-Left and Right Bank Rajolibunda Division Kanakanala
- Bijapur . . . Ghataprabha II Ramanahalli Tank Areshankar Tank Kalascope Tank Nagathana
- Chikmagalur . . . Bhadra Jambadhalla
- Belgaum . . . Kolchi Weir
- Shimoga . . . Tunga Anicut Ambligola
- Mysore . . . Nugu Reservoir Chik Hole Kabini Hebbattalla

- Bellary . . . Tungabhadra Hagaribommanhalli
- Gulbarga . . . Hathi Koni
- North Kanara . . . Dharma
- Coorg . . . Laxamanathirta
- Tumkur . . . Mangala
- Bangalore . . . Arkavathi

Negative marginal indices in II appear in Hassan, Chikmagalur, Gulbarga and Bidar. Forestry, Plantation, Mining and Quarrying etc. (III) show negative marginal indices in Bangalore, Kolar, Gulbarga, Bidar and Raichur in all of which there have been absolute declines also. IV & V show positive marginal indices in all districts. VI Construction shows positive marginal indices in all districts except Kolar, Bellary and Raichur where the indices are negative. The indices though positive are weak in Hassan, Mandya and Belgaum. VIII shows positive marginal indices in all districts except Gulbarga and Raichur, where they are negative. VII shows a positive but generally weak marginal index in all districts. IX shows positive indices in all districts. The overall picture is one of economic growth and structural shift in employment. This appears in the positive marginal indices in all categories for Mysore as a whole.

Orissa

The following districts have experienced absolute declines in workers in the categories noted against each:

- II . . . Baudh-Khondmals.
- III . . . Kalahandi, Sambalpur, Bolangir, Baudh-Khondmals, Dhenkanal, Cuttack, Balasore.
- VI . . . Kalahandi, Bolangir, Baudh-Khondmals, Ganjam, Puri, Mayurbhanj, Balasore.
- VII . . . All districts except Sundargarh.
- VIII . . . Kalahandi, Baudh-Khondmals Dhenkanal.

The two main irrigation schemes in the First Plan were Hirakud Stage I and the Mahanadi Delta. There were 7 local schemes in the Second Plan and 5 in the Third Plan of which the major one was Birgovindpur. I shows high positive indices in all districts. II is positive but weak in the districts of Ganjam, Sundargarh, Dhenkanal and Puri and negative in Baudh-Khondmals. III is positive but weak in Koraput, Ganjam, Sundargarh, and Puri and negative in Kalahandi, Sambalpur, Bolangir, Baudh-Khondmals, Dhenkanal, Cuttack and Balasore, while it is strong and positive in Keonjhar and Mayurbhanj. IV & V is positive in all districts and relatively high in Ganjam, Sundargarh, Dhenkanal, Cuttack and Mayurbhanj. VI is weakly positive only in the districts of Koraput, Sambalpur, Sundargarh, Dhenkanal, Keonjhar and Cuttack. VII is negative in all districts except Sundargarh. VIII is negative in the districts of Kalahandi, Baudh-Khondmals and Dhenkanal and weakly positive in all other districts except Sundargarh. IX is positive in all districts but weak in Koraput, Mayurbhanj and Balasore. Sundargarh alone of all the districts exhibits a strong structural shift. For Orissa as a whole the gains are strongest in I, II and IX.

Punjab

The following districts have experienced marginal declines in workers in the categories noted against each:

- I . Amritsar, Kapurthala, Gurdaspur, Kangra (including Lahaul and Spiti).
- II . Hoshiarpur, Mahendragarh, Amritsar, Hissar, Rohtak, Gurdaspur, Gurgaon, Kapurthala, Kangra (including Lahaul and Spiti), Jullundur.
- III . Hoshiarpur, Kapurthala, Karnal, Amritsar, Gurdaspur, Gurgaon, Hissar, Jullundur, Mahendragarh, Sangrur, Simla, Rohtak.
- VI . Rohtak.
- VII . Hoshiarpur, Sangrur, Simla, Amritsar, Kangra (including Lahaul and Spiti), Gurdaspur, Jullundur, Kapurthala, Karnal, Rohtak, Ludhiana.

VIII . Mahendragarh, Sangrur, Simla, Bhatinda, Patiala, Kapurthala.

IX . Hoshiarpur, Simla, Amritsar, Ludhiana, Gurdaspur.

The most important events in the sphere of cultivation in the decade have been the Bhakra Nangal irrigation system, the extension of irrigation to the arid area of Jandiala and Gurdaspur Divisions of Upper Bari Doab, the Madhopur-Beas link, the remodelling of western Jamuna Canal, the Sirhind Feeder, and several other important schemes in the First Plan; the extension of irrigation to Rewari, the western Jamuna Feeders, the Gurgaon Canal, and extension of non-perennial irrigation to Upper Bari Doab in the Second Plan; the Beas project in two units (a) the Sutlej-Beas link the Pong Dam, expansion of the Sirhind feeder and remodelling of the Harike Headworks in the Third Plan. The marginal increases in IV & V, VI and VIII have been borne out by expansion in forestry, mining, and plantations, household and manufacturing industries, extensive construction activities and expansion of transport and communication network. The absolute increase and positive index in IX confirms the conclusion that the marginal shifts in employment have been due mainly to economic and not merely to population growth.

Rajasthan

The following districts show marginal declines in respect of the categories noted against them:

- II . Banswara, Bhilwara, Jaisalmer, Chitorgarh, Churu, Dungarpur, Jhalawar, Jhunjhunu, Sikar, Tonk, Udaipur, Alwar, Bikaner, Ajmer, Bharatpur, Jaipur, Kota.
- III . Barmer, Jaisalmer, Chitorgarh, Churu, Jalor, Jhalawar, Jhunjhunu, Pali, Sawai Madhopur, Sikar, Tonk, Udaipur, Alwar, Bikaner, Bundi, Ganganagar, Sirohi, Ajmer, Bharatpur, Kota.
- IV & V . Dungarpur, Alwar, Bharatpur.
- VI . Banswara, Nagaur, Jhalawar, Bundi.
- VII . Barmer, Bhilwara, Jaisalmer, Nagaur, Chitorgarh, Churu, Jalor, Jhalawar, Jhunjhunu, Pali, Sawai Madhopur, Sikar, Tonk, Udaipur, Alwar, Bikaner, Bundi, Jodhpur, Sirohi, Ajmer, Bharatpur, Jaipur, Kota.

VIII . Alwar.

IX . Barmer, Nagaur, Jalor, Jhunjhunu, Pali, Sawai Madhopur, Sikar, Tonk, Bikaner, Jodhpur, Sirohi, Ajmer, Bharatpur.

Rajasthan as a whole shows increase in employment in cultivation, to which the decade's irrigation projects have contributed in no mean measure. In the First Plan there were as many as 30 schemes, in the Second as many as 19, the pride of place going to Chambal Stage II (Rana Pratapsagar Dam) and Rajasthan Canal; in the Third as many as 10, the pride of place going to the Beas Project (Pong Dam) extension. The extension in irrigation and cultivation chiefly in the eastern, central and southern districts led to a rise in I and a decline in II, III and VII (Agricultural labour, Livestock, etc., and Trade and Commerce and Industry). The rise in IV & V has been substantial but the marginal increases in VI and VIII have been of a lower order, and there has been some marginal increase in IX.

Uttar Pradesh

The following districts have experienced absolute declines in workers in the categories noted against each:

- I . Faizabad, Sultanpur, Varanasi.
- II . Saharanpur, Muzaffarnagar, Agra, Etah.
- III . All districts, except the six highland districts—Tehri Garhwal, Uttar Kashi, Garhwal, Chamoli, Almora, Pithoragarh—Naini Tal, Bijnor, Rampur, Pilibhit, Kheri, Jaunpur Mirzapur.
- VI . Bijnor, Shahjahanpur, Unnao, Rae Bareilly, Ghazipur, Varanasi, Ballia.
- VII . Aligarh, Mathura, Mainpuri, Fatehpur, Jhansi, Jalaun, Hamirpur, Bara Banki, Jaunpur, Ballia, Ghazipur, Unnao.
- VIII . Budaun, Aligarh, Mathura, Ghazipur.
- IX . Moradabad, Bareilly, Dehra Dun, Bulandshahr, Fatehpur, Kheri, Unnao, Lucknow, Rae Bareilly, Gonda, Bara Banki, Sultanpur, Basti, Gorakhpur, Azamgarh, Jaunpur.

The marginal index in I is negative for the districts of Faizabad, Sultanpur and Varanasi only. Similarly, II has negative marginal indices only in the districts mentioned above. This unmistakably denotes increasing pressure on cultivation and swelling of the ranks of agricultural labourers, a sign of the strain population growth exerts in Uttar Pradesh. The decline in III shows regional geographical variations, the marginal index being positive in the highland districts of the northwest, Bijnor, Pilibhit, Kheri, Jaunpur and Mirzapur. IV & V show positive indices in all districts which indeed is very encouraging although the values are small in districts like Etah, Etawah, Jalaun, Kheri, Sitapur and Unnao. There has been tardy growth and in some districts actual decline in VI, although the highland districts of the northwest, Dehra Dun, Lucknow, Mirzapur and even Meerut show fairly high values. In VIII the eastern districts, the northern highlands and the western districts adjoining Punjab generally bear appreciable positive indices while the central land mass generally bears low values. In VIII the indices are negative in the 4 districts mentioned above and positive but low in all districts except Bareilly, Dehra Dun, Saharanpur, Agra, Jhansi, Lucknow and Varanasi where they are comparatively high. A very welcome sign of hope is in Eastern Uttar Pradesh where the entire group of 12 districts (Faizabad, Sultanpur, Pratapgarh, Basti, Gorakhpur, Deoria, Azamgarh, Jaunpur, Ballia, Ghazipur, Varanasi and Mirzapur) has shown much welcome shift in favour of IV & V although the pressure on land in these districts has simultaneously intensified, particularly aggravating the problem of agricultural labourers.

Uttar Pradesh as a whole presents a picture of high marginal increase in I. In the First Plan there were as many as 25 irrigation projects in Uttar Pradesh. The more important of them being the extension of the Sarda Canal, the Saprar

and Nangarh Dams, the remodelling of Upper Ganga, Agra, Banganga, Eastern Jamuna and Tanda Canals. In the Second Plan there were 10 schemes the more important of which were the Matatilla Dam and Sarda Sagar Stage II. In the Third Plan there are as many as 23 schemes, the major ones being Sarju and Gandak Canals. There has been a marked marginal rise in II and it is possible that there has been some transfer from general unspecified labour (Major Groups of I.S.I.C. 89 and 90 of 1951) to II in 1961. III has shown an absolute as well as marginal decline while IV & V shows an appreciable marginal increase. VI, VII and VIII show positive but low indices but a fair positive index in IX. The overall conclusion seems to be that economic growth has played a positive although limited, role in diversifying and increasing employment in the growth sectors.

West Bengal

The following districts have experienced absolute declines in workers in the categories noted against each:

- I . Calcutta.
- II . Darjeeling, Calcutta.
- III . Jalpaiguri, Malda, Calcutta.
- IV & V . Jalpaiguri.
- VI . Jalpaiguri, Murshidabad, Birbhum.
- VII . Malda, Murshidabad, Calcutta, Bankura, Midnapore.
- VIII . Calcutta, Howrah.

Population growth has intensified pressure on the land and cultivation. The indices in I and II have appreciably risen. A proportion of workers returned in plantation labour in 1951 in Jalpaiguri seems to have been returned in II Agricultural labour in 1961. Forestry, Plantations, Mining, Quarrying etc. (III) have registered increases in all districts except Jalpaiguri, Malda, and Calcutta, but the values for Cooch Behar, West Dinajpur

and Midnapore, although positive, are very low. IV & V have registered declines in marginal index in Jalpaiguri, and weak though positive indices in Darjeeling, Cooch Behar, West Dinajpur and Bankura. VI shows negative marginal index in Jalpaiguri, Murshidabad, Birbhum and positive but weak values in Darjeeling. VII shows negative indices in Malda, Murshidabad, Calcutta, Bankura and Midnapore and weak positive indices in West Dinajpur, Nadia, 24-Parganas, and Howrah. VIII shows negative marginal indices in Calcutta and Howrah and weak positive indices in Jalpaiguri, Cooch Behar, West Dinajpur, Malda, Murshidabad, Nadia, 24-Parganas, Birbhum, Bankura and Midnapore. All districts have positive indices in IX. Economic growth is strongly reflected in marked increases in the marginal index in 24-Parganas, Calcutta, Darjeeling, Howrah, Hooghly and Burdwan. There have been extensive and major irrigation projects in the districts of Birbhum (Mayurakshi), Burdwan, Hooghly, Bankura (D.V.C. and Suvankar Dams) and Midnapore (Kansavati) and drainage schemes in 24-Parganas (Sonarpur-Arapanch) in the last decade the effect of which is evident not only on the primary but also on the secondary and tertiary sectors. In the remaining districts population growth more than economic growth seems to have been responsible for augmenting existing pressures on employment. This is evident in the strong positive marginal indices which are observed only in I, II, III, IV & V and IX for West Bengal as a whole.

The Union Territories and Other Areas

The Andaman and Nicobar Islands and Sikkim have experienced high rises in I owing to colonisation, reclamation and extension of cultivation. Andaman and Nicobar Islands, Manipur and Tripura have shown increases in II but all other territories have shown absolute as well as marginal decreases. III shows absolute as well as marginal decreases in

Sikkim, but absolute marginal increases in Delhi and Himachal Pradesh. There have been absolute as well as marginal decreases in Laccadive, Minicoy and Amindivi Islands and Manipur. IV & V have increased in all other Union Territories but show negative marginal indices in Manipur and Sikkim. VI Construction shows high indices everywhere except in Delhi where there has been distinct falling off in construction activity in 1961 from 1951. VII shows high marginal increases only in Delhi, Laccadive, Minicoy and Amindivi Islands and Sikkim. VIII shows high positive indices in Delhi, Manipur and Tripura. Delhi, Himachal Pradesh and Manipur show high positive indices in IX.

On the whole the picture in the Union Territories is one of rapid build up of the infrastructure of growth.

All India

Taking India as a whole we find there have been marked marginal shifts in employment indicated by positive marginal indices, in favour of III, IV & V, VI and VIII, reflecting the effects of economic growth on employment in these growth sectors, together with a small marginal growth in the Service sector. There is comparatively less pressure on land than what might have been if the 1951 structural pattern had persisted in 1961.

CHAPTER VI

DISTRIBUTION OF INDUSTRIAL LICENCES AMONG DISTRICTS ARRANGED BY LEVELS OF DEVELOPMENT

ONE MAY NOW EXAMINE whether the districts in the different levels of development as delineated by the ranking device display differences in their respective absorptive capacities for industrial activity. This may be measured by the number, nature and range of industrial licences acquired by the blocks of districts in the four levels of development between 1953 and 1961 under the Industrial Licencing (Development and Regulation) Act.

Since a classified compilation of all licences issued since 1953 has not been published at all and since such a compilation has perhaps been comprehensively done for the first time in this office it is proposed to publish the full compilation in a separate Census Paper as soon as the main printing programme of the 1961 Census eases a little. But even an abstract such as is now published in Table VI.1 will be found of unique value as it gives the full range of licences issued under 36

different categories district by district. Table VI.2 gives the statewise abstract.

The lion's share claimed by the three cities of Greater Bombay (1,071), Calcutta (567) and Madras (140), making a total of 1,778 licences out of a grand total of 4,971 licences issued all over India will be immediately recognised. There is no disputing the fact that Bombay, Calcutta and Madras have more than their share of capital resources, raw material and transport mobilisation, entrepreneurial and managerial and banking resources and pools of skilled labour. In talking of absorptive capacity it is therefore advisable to leave Greater Bombay, Calcutta and Madras out of our reckoning.

The great differences in the four levels, in Table VI.1, hit the eye at once. These differences lie not only in the total number of licences issued but in the type and range of licences issued as the following statement will bear out.

STATEMENT VI.1

Abstract of licences distributed among all districts in India according to levels of development

Industry	Level of development					Greater Bombay, Calcutta, Madras
	Total	I	II	III	IV	
1 All Licences	4,971	84	170	637	2,293	1,778
2 Metallurgical industries	673	15	29	48	364	217
3 Fuels	32	3	6	3	13	7
4 Electrical equipment	413	1	16	26	149	221
5 Transportation (including railway wagons)	263	1	7	10	125	120

STATEMENT VI.1

Abstract of licences distributed among all districts in India according to levels of development—concl'd.

Industry	Total	Level of development				Greater Bombay, Calcutta, Madras
		I	II	III	IV	
6 Industrial machinery	228	3	7	7	66	145
7 Commercial, office and household equipment	43	1	2	1	15	24
8 Fertilizers	25	2	1	15	7	..
9 Chemicals	333	3	9	54	157	110
10 Textiles	798	4	20	116	449	209
11 Paper and paper products	169	6	14	29	90	30
12 Sugar	153	21	20	36	71	5
13 Fermentation industries	55	6	4	11	32	2
14 Food processing industries	168	2	5	130	29	2
15 Vegetable oils and vanaspati	217	4	11	41	109	52
16 Leather and leather products	28	1	..	2	20	5
17 Glass, ceramic and gypsum products	272	6	11	41	148	66
18 Timber products	67	5	5	28	20	9

It will thus be seen from the above statement which includes only those items on which at least one licence has been issued to a district in level I, that the districts in the first level of development did not find it possible to ask for more than 17 out of a total of 36 items under the Act, and even out of these 17 items no more than one licence each was issued for such modern lines of manufacture as electrical equipment, transportation (including railway wagons), commercial, office and household furniture and leather products. Of the remainder the bulk of the metallurgical industry licences which went to Orissa (12), fuels, fertilizers, textiles, paper and paper products, sugar, fermentation industries, food processing industries, vegetable oils and vanaspati, glass, ceramic and gypsum products and timber products are either raw material based or concerned with basic wage goods.

Of the more sophisticated lines of production districts in level II claimed the following additional items which were not claimed by any district in level I: machine tools (1 licence), drugs and pharmaceuticals (3), cement (6) and prime movers (2).

The following items of industrial licence turned out to be the exclusive preserve of districts in levels III and IV. Incidentally, districts in levels III and IV together (including Greater Bombay, Calcutta and Madras in level IV) claimed 10 licences for boilers, 177 for machine tools (7 in districts of level III and 170 in districts of level IV), 274 for drugs and pharmaceuticals (2 in level III and 272 in level IV) and 14 for cement (6 in level III and 8 in level IV) and 52 for prime movers (none in level III and all in level IV).

STATEMENT VI.2

Abstract of licences in industrial items which went exclusively to districts of levels III and IV

Industry	Total	III	IV	Greater Bombay, Calcutta, Madras
1 Telecommunications	91	..	47	44
2 Agricultural machinery	38	1	21	16
3 Earthmoving machinery	23	..	10	13
4 Miscellaneous mechanical and engineering industries	121	2	49	70
5 Medical and surgical appliances	4	..	..	4
6 Industrial instruments	29	..	14	15
7 Scientific instruments	22	..	15	7
8 Mathematical, surveying and drawing instruments	2	1	1	..
9 Photographic raw films and paper	1	..	1	..
10 Dyestuffs	41	12	17	12
11 Soaps, cosmetics and toilet preparations	43	1	10	32
12 Rubber goods	69	4	40	25
13 Glues and gelatine	8	2	6	..
14 Miscellaneous industries	3	1	..	2

The extreme concentration of all modern lines of industrial licences in districts of level IV and the 3 great cities is nowhere more forcefully brought out than in these two statements. Even districts in level III claim no more than a handful of licences in agricultural machinery, miscellaneous mechanical and engineering industries, mathematical, surveying and drawing instruments, soaps, cosmetics and toilet goods, rubber goods, glues and gelatine and miscellaneous industries, the total of all of which comes to only 12, while dyestuff alone claims as many licences.

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A Statewise narration of each item of licence may now be attempted, each State subclassified into districts in each of the 4 levels of development. The abstract is available in Table VI.2. We shall exclude Greater Bombay, Calcutta and Madras from this brief account.

1. Metallurgical industries.

The largest concentration of licences amounting to 20 or more occurs in the following States. We shall mention only those districts which took out 5 or more licences.

STATEMENT VI.3

Distribution of licences of metallurgical industries by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Bihar . . .	35			Shahabad	11			Singhbhum	16
Gujarat . . .	21							Ahmedabad	8
Madras . . .	24							Chingleput	7
								Coimbatore	9
Maharashtra . . .	38							Poona . . .	11
								Thana . . .	17
Mysore . . .	20							Shanoga	5
Orissa . . .	20			Cuttack	5			Bangalore	7
Punjab . . .	84								
								Patiala . . .	15
								Jullundur	9
								Ambala . . .	14
								Amritsar . . .	10
								Ludhiana . . .	9
								Gurgaon . . .	17
Uttar Pradesh . . .	52					Moradabad	5	Agra . . .	5
								Meerut . . .	12
								Kanpur . . .	16
West Bengal . . .	94							Burdwan . . .	9
								Hooghly . . .	5
								24-Parganas . . .	26
								Howrah . . .	54
Delhi . . .	22							Delhi . . .	22

2. Fuels.

We shall take those States which have taken more than 5 licences.

STATEMENT VI.4

Distribution of licences of fuels industries by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Bihar . . .	8			Monghyr	1	Hazaribagh	1	Dhanbad	3
				Ranchi	3				
West Bengal . . .	7							Darjeeling	1
								Jalpaiguri	1
								Burdwan	5

3. Boilers.

We shall take only those States which have taken 3 licences or more.

STATEMENT VI.5

Distribution of licences of boilers by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Maharashtra . . .	3							Poona . . .	3
West Bengal . . .	3							Burdwan . . .	1
								24-Parganas . . .	2

4. Prime movers.

Limiting ourselves only to those States which have taken a licence.

STATEMENT VI.6

Distribution of licences of prime movers by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh . . .	1							Hyderabad . . .	1
Gujarat . . .	7							Rajkot . . .	3
								Baroda . . .	1
								Ahmedabad . . .	3
Madras . . .	1							Coimbatore . . .	1
Maharashtra . . .	6			Kolhapur . . .	1			Poona . . .	4
								Thana . . .	1
Mysore . . .	4			Belgaum . . .	1			Bangalore . . .	3
Punjab . . .	6							Ambala . . .	1
								Gurgaon . . .	5
Uttar Pradesh . . .	1							Dehra Dun . . .	1
West Bengal . . .	3							24-Parganas . . .	3

5. Electrical equipment.

We shall take only those States which have taken 12 licences or more

STATEMENT VI.7

Distribution of licences of electrical equipment by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Bihar . . .	19			Ranchi . . .	1			Patna . . .	10
								Dhanbad . . .	3
								Singhbhum . . .	5
Gujarat . . .	15					Mehsana . . .	1	Rajkot . . .	1
						Surat . . .	2	Baroda . . .	8
								Ahmedabad . . .	3
Kerala . . .	16			Palghat . . .	1	Trivandrum . . .	4	Kottayam . . .	1
						Trichur . . .	1		
						Ernakulam . . .	3		
						Quilon . . .	6		
Madras . . .	20							Chingleput . . .	3
								Coimbatore . . .	17
Maharashtra . . .	13					Sangli . . .	1	Poona . . .	8
								Thana . . .	4
Mysore . . .	17							Bangalore . . .	17
Punjab . . .	26							Kapurthala . . .	4
								Patiala . . .	3
								Jullundur . . .	2
								Amritsar . . .	3
								Ludhiana . . .	1
								Gurgaon . . .	13
Uttar Pradesh . . .	30			Mainpuri . . .	13	Rampur . . .	1	Dehra Dun . . .	1
						Mirzapur . . .	3	Aligarh . . .	2
						Allahabad . . .	2	Agra . . .	1
								Meerut . . .	1
								Kanpur . . .	6
								Burdwan . . .	1
								24-Parganas . . .	6
								Howrah . . .	5
West Bengal . . .	12							Delhi . . .	12
Delhi . . .	12								

8. Industrial machinery.

We shall take only those States which have taken 3 or more licences.

STATEMENT VI.10

Distribution of licences of Industrial machinery by States and districts

	Total	<u>Level I</u>		<u>Level II</u>		<u>Level III</u>		<u>Level IV</u>	
State	number	District	No.	District	No.	District	No.	District	No.
Assam	4							Lakhimpur	4
Bihar	9	Muzaffarpur	1	Shahabad	1			Dhanbad	4
		Saran	1					Singhbhum	2
Gujarat	10							Baroda	4
								Ahmedabad	6
Maharashtra	4					Sangli	1	Poona	3
Mysore	10			Gulbarga	6			Bangalore	4
Punjab	7							Kapurthala	1
								Ambala	4
								Gurgaon	2
Uttar Pradesh	8	Deoria	1			Barcilly	2	Saharanpur	1
						Allahabad	1	Lucknow	1
								Agra	1
								Kanpur	1
West Bengal	20							Burdwan	3
								Hooghly	1
								24-Parganas	10
								Howrah	6
Delhi	3							Delhi	3

9. Machine tools.

We shall take only those States which have taken 3 licences or more.

STATEMENT VI.11

Distribution of licences of machine tools by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Gujarat . . .	8					Surat . . .	3	Surendranagar . . .	1
								Ahmedabad . . .	4
Madras . . .	12					Salem . . .	2	Coimbatore . . .	10
Maharashtra . . .	11					Sangli . . .	1	Poona . . .	7
								Thana . . .	3
Mysore . . .	7			Belgaum . . .	1			Chitradurga . . .	1
								Bangalore . . .	5
Punjab . . .	17							Gurdaspur . . .	2
								Ambala . . .	2
								Amritsar . . .	2
								Ludhiana . . .	3
								Gurgaon . . .	6
Uttar Pradesh . . .	5					Bareilly . . .	1	Aligarh . . .	1
								Saharanpur . . .	1
								Meerut . . .	1
								Kanpur . . .	1
West Bengal . . .	9							24-Parganas . . .	2
								Howrah . . .	7
Delhi . . .	3							Delhi . . .	3

17. Fertilizers.

STATEMENT VI.19

Distribution of licences of fertilizers by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	5			Visakhapatnam	1	Khammam	1		
						West Godavari	3		
Bihar	1							Dhanbad	1
Gujarat	3					Surat	1	Baroda	1
								Ahmedabad	1
Kerala	1					Ernakulam	1		
Madhya Pradesh	2					Hoshangabad	1		
						Durg	1		
Madras	3					South Arcot	2	Coimbatore	1
Maharashtra	1							Thana	1
Mysore	2					Mysore	2		
Rajasthan	1					Ganganagar	1		
Uttar Pradesh	6	Unnao	1			Allahabad	2	Kanpur	2
		Jaunpur	1						

18. Chemicals.

STATEMENT VI. 20

Distribution of licences of chemicals by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	9					Adilabad	1	Krishna	1
						East Godavari	2	Hyderabad	1
						West Godavari	2		
						Guntur	2		
Assam	4					Kamrup	4		
Bihar	8					Hazaribagh	4	Singbhum	4
Gujarat	50					Surat	6	Surendranagar	1
								Junagadh	4
								Bhavnagar	3
								Jamnagar	16
								Baroda	9
								Ahmedabad	11
Kerala	10					Trivandrum	1	Kottayam	1
						Trichur	1		
						Ernakulam	6		
						Quilon	1		
Madhya Pradesh	7			Betul	1			East Nimar	1
				Shahdol	1			Ujjain	2
								Gwalior	1
								Indore	1
Madras	23					South Arcot	1	Thanjavur	1
						Tirunelveli	3	North Arcot	4
						Salem	5	Chingleput	2
						Ramanathapuram	6	Coimbatore	1

STATEMENT VI.20

Distribution of licences of chemicals by States and districts—concl'd.

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Maharashtra	33			Kolaba	2			Jalgaon	1
				Kolhapur	1			Nagpur	4
								Ahmadnagar	1
								Poona	5
								Thana	19
Mysore	8					Mandya	2	Shimoga	1
						North Kanara	1	Chitradurga	1
						Mysore	1	Bangalore	1
						Dharwar	1		
Orissa	4	Sambalpur	1	Dhenkanal	1				
				Ganjam	1				
				Cuttack	1				
Punjab	12			Hoshiarpur	1			Karnal	1
								Hissar	1
								Patiala	1
								Amritsar	2
								Ludhiana	1
								Gurgaon	5
Rajasthan	3							Ajmer	1
								Kota	2
Uttar Pradesh	20	Faizabad	1			Varanasi	2	Dehra Dun	2
		Bara Banki	1			Bareilly	1	Lucknow	1
						Moradabad	1	Meerut	6
								Kanpur	5
West Bengal	24							Nadia	1
								Burdwan	2
								Hooghly	12
								24-Parganas	7
								Howrah	2
								Delhi	8
Delhi	8								

19. Photographic raw films and paper.

STATEMENT VI.21

Distribution of licences of photographic raw films and paper by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
West Bengal	1							Nadia	1

20. Dyestuffs.

STATEMENT VI.22

Distribution of licences of dyestuffs by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Gujarat	17					Kaira	11	Jamnagar	1
						Surat	1	Baroda	3
								Ahmedabad	1
Maharashtra	9							Poona	5
								Thana	4
								Amritsar	1
Punjab	1							Delhi	2
Delhi	2								

21. Drugs and pharmaceuticals.

STATEMENT VI.23

Distribution of licences of drugs and pharmaceuticals by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	15			Srikakulam	1			Krishna	1
								Hyderabad	13
Gujarat	50					Surat	1	Baroda	44
								Ahmedabad	5
Madras	3							North Arcot	1
								Chingleput	1
								Coimbatore	1
Maharashtra	7			Kolaba	1			Nagpur	1
								Poona	4
								Thana	1
								Bangalore	1
Mysore	1								
Punjab	5							Ambala	2
								Amritsar	2
								Gurgaon	1
Rajasthan	1			Udaipur	1				
Uttar Pradesh	4					Allahabad	1	Lucknow	1
								Meerut	1
								Kanpur	1
West Bengal	5							Hooghly	3
								24-Parganas	1
								Howrah	1
Delhi	4							Delhi	4

22. Textiles.

STATEMENT VI.24

Distribution of licences of textiles by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	12			Chittoor	3	Anantapur	1	Hyderabad	1
						Kurnool	2		
						East Godavari	2		
						West Godavari	2		
						Guntur	1		
Assam	4			Goalpara	1	Kamrup	3		
Bihar	4			Purnea	1			Patna	3
Gujarat	96			Panchmahals	1	Broach	3	Surendranagar	2
						Mehsana	2	Junagadh	1
						Kaira	1	Bhavnagar	3
						Surat	27	Jamnagar	2
								Baroda	6
								Ahmedabad	48
Kerala	14					Kozhikode	1		
						Trivandrum	2		
						Cannanore	3		
						Trichur	2		
						Ernakulam	6		
Madhya Pradesh	22					Dewas	1	East Nimar	3
						Durg	1	Ujjain	4
								Sehore	3
								Gwalior	6
								Indore	3
								Jabalpur	1

STATEMENT VI.24

Distribution of licences of textiles by States and districts—concl'd.

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Madras	188					Kanyakumari	1	North Arcot	1
						South Arcot	2	Tiruchirapalli	6
						Tirunelveli	15	Madurai	24
						Salem	5	Chingleput	2
						Ramanathapuram	12	Coimbatore	120
Maharashtra	22			Kolhapur	1	Aurangabad	1	Nasik	1
								Akola	1
								Nagpur	1
								Thana	17
Mysore	33			Bijapur	1	Mysore	4	Chitradurga	11
				Belgaum	3	Dharwar	5	Bangalore	9
Orissa	6	Sambalpur	1	Cuttack	3	Sundargarh	2		
Punjab	67							Ferozepur	1
								Karnal	2
								Hissar	5
								Kapurthala	4
								Ambala	1
								Amritsar	24
								Ludhiana	24
								Gurgaon	6
Rajasthan	18	Bhilwara	2	Jhalawar	1	Jodhpur	1	Ajmer	4
				Pali	3			Kota	3
								Jaipur	4
Uttar Pradesh	38			Etawah	1	Rampur	1	Dehra Dun	3
						Varanasi	3	Aligarh	2
						Mirzapur	1	Saharanpur	2
						Moradabad	1	Agra	2
						Allahabad	2	Meerut	7
								Kanpur	13
West Bengal	54			Bankura	1			Nadia	3
								Burdwan	1
								Hooghly	19
								24-Parganas	16
								Howrah	14
Delhi	10							Delhi	10
Himachal Pradesh	1	Chamba	1						

23. Paper and paper products.

STATEMENT VI.25

Distribution of licences of paper and paper products by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	5			Chittoor	1	Adilabad	3		
						East Godavari	1		
Assam	5			Nowgong	1	Sibsagar	1		
						Kamrup	3		

STATEMENT VI.25

Distribution of licences of paper and paper products by States and districts—concl'd.

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Bihar	2	Darbhanga	1					Patna	1
Gujarat	13			Dangs	1	Broach	1	Rajkot	3
						Kaira	1	Ahmedabad	4
						Surat	3		
Kerala	1					Trichur	1		
Madhya Pradesh	7	Bilaspur	1	Balaghat	1	Vidisha	1	Ratlam	1
								Ujjain	1
								Sehore	2
Madras	10					Tirunelveli	1	Thanjavur	1
						Salem	4	Madurai	1
								Chingleput	1
								Coimbatore	2
Maharashtra	19			Bhandara	1			Nagpur	1
				Chanda	1			Thana	12
				Kolaba	4				
Mysore	10			Belgaum	1	Mandya	1	Shimoga	2
						North Kanara	2	Chitradurga	1
						Mysore	2	Bangalore	1
Orissa	5	Kalahandi	1	Cuttack	2				
		Sambalpur	2						
Punjab	14	Kangra	1					Ambala	5
								Ludhiana	2
								Gurgaon	6
Rajasthan	4							Kota	2
								Jaipur	2
Uttar Pradesh	20					Varanasi	2	Muzaffarnagar	1
						Allahabad	2	Saharanpur	4
								Meerut	6
								Kanpur	5
West Bengal	19							Jalpaiguri	1
								Nadia	2
								Burdwan	3
								Hooghly	2
								24 Parganas	7
								Howrah	4
Delhi	4							Delhi	4
Himachal Pradesh	1			Sirmur	1				

24 Sugar.

STATEMENT VI.26

Distribution of licences of sugar by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	19			Chittoor	1	Anantapur	1	Krishna	4
				Srikakulam	2	East Godavari	4		
				Visakhapatnam	3	West Godavari	3		
						Guntur	1		
Assam	2					Sibsagar	2		

STATEMENT VI.26

Distribution of licences of sugar by States and districts—concl'd.

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Bihar	7	Champaran	2	Gaya	1				
		Muzaffarpur	1	Purnea	1				
		Saran	2						
Gujarat	3					Amreli	1		
						Surat	2		
Madhya Pradesh	3			Rajgarh	1			Ratlam	1
								Gwalior	1
Madras	13					South Arcot	1	Thanjavur	3
						Salem	1	Tiruchirapalli	5
								Chingleput	1
								Coimbatore	2
Maharashtra	31			Osmanabad	1	Satara	1	Nasik	2
				Kolhapur	6	Aurangabad	2	Sholapur	6
						Sangli	3	Ahmadnagar	7
								Poona	3
Mysore	9	Raichur	1	Belgaum	3	Mandya	1	Shimoga	1
						Bellary	3		
Orissa	2	Koraput	1	Ganjam	1				
Punjab	13					Sangrur	1	Karnal	1
								Gurdaspur	1
								Kapurthala	3
								Rohtak	2
								Jullundur	2
								Ambala	3
Rajasthan						Ganganagar	1		
Uttar Pradesh	43	Bahraich	1			Bulandshahr	1	Naini Tal	3
		Hardoi	1			Bijnor	2	Aligarh	1
		Bara Banki	1			Bareilly	2	Muzaffarnagar	5
		Gonda	2			Moradabad	2	Saharanpur	4
		Kheri	2					Meerut	8
		Deoria	2					Kanpur	1
		Gorakhpur	3						
		Sitapur	2						
West Bengal	2					Birbhum	1	Nadia	1

25. 25. Fermentation industries.

STATEMENT VI.27

Distribution of licences of fermentation industries by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	4			Srikakulam	1	Nizamabad	1		
				Visakhapatnam	1	West Godavari	1		
Bihar	1	Saran	1					Baroda	3
Gujarat	4							Ahmedabad	1
Madhya Pradesh	2							Ratlam	1
								Sehore	1
Maharashtra	9			Kolhapur	1	Sangli	1	Nasik	1
								Ahmadnagar	3
								Poona	3
								Bangalore	2
								Rohtak	1
Mysore	2								
Punjab	1								

Distribution of licences of fermentation industries by States and districts—concl'd.

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Rajasthan	1			Udaipur	1				
Uttar Pradesh	26	Gonda	1			Bijnor	2	Muzaffarnagar	6
		Kheri	1			Rampur	3	Lucknow	1
		Deoria	1			Bareilly	2	Meerut	6
		Gorakhpur	1			Moradabad	1		
		Sitapur	1						
West Bengal	3							Nadia	1
								Hooghly	1
								24-Parganas	1

26. Food processing industries.

STATEMENT VI.28

Distribution of licences of food processing industries by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	3					Anantapur	1		
						Guntur	2		
Assam	3			Cachar	1	Sibsagar	1		
						Kamrup	1		
Bihar	2							Patna	1
								Dhanbad	1
Gujarat	2					Kaira	1	Ahmedabad	1
Kerala	114					Alleppey	2	Kottayam	2
						Kozhikode	6		
						Trichur	5		
						Ernakulam	3		
						Quilon	96		
Madhya Pradesh	2							Sehore	1
								Indore	1
Madras	3					Kanyakumari	1	Tiruchirapalli	1
						Salem	1		
Maharashtra	5	Ratnagiri	2	Kolhapur	2	Sangli	1		
Mysore	10					South Kanara	7	Bangalore	3
Punjab	5							Ferozepur	1
								Hissar	1
								Rohtak	1
								Ambala	1
								Amritsar	1
Rajasthan	1							Jaipur	1
Uttar Pradesh	9			Etah	1	Rampur	1	Aligarh	1
						Moradabad	1	Saharanpur	1
								Lucknow	1
								Meerut	2
								Kanpur	1
West Bengal	2							Howrah	2
Delhi	4							Delhi	4
Himachal Pradesh	1			Mahasu	1				

27. Vegetable oils and vanaspati .

STATEMENT VI.29

Distribution of licences of vegetable oils and vanaspati by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	20			Cuddapah	3	Kurnool . West Godavari Guntur .	. . 2 2	Krishna . Hyderabad . Patna .	. . 7 . 1
Bihar . . .	1			Panchmahals	1	Amreli . . . Kaira . . . Surat . . .	. . 2 1	Junagadh . Bhavnagar . Rajkot . Jamnagar . Ahmedabad .	. . 6 . 9 . 6 . 2
Gujarat . . .	32								
Kerala . . .	11			Palghat	1	Alleppey . . . Trichur . . .	. . 6	Ratlam . . . East Nimar . Ujjain . . . Indore . . .	. . 2 . 1 . 5
Madhya Pradesh	11			Raipur	1				
Madras . . .	4					Salem . . . Ramanathapuram	. 1	Chingleput . Coimbatore .	. . 1
Maharashtra . . .	28					Wardha . . . Buldhana . . .	. 3	Amravati . . . Dhulia . . . Akola . . . Jalgaon . . . Thana . . .	. . 3 . 3 . 7 . 8
Mysore . . .	19	Raichur . . .	2	Tumkur . . . Gulbarga . . .	. 2	Mysore . . . Dharwar . . . South Kanara . Sangrur . . .	. . 6 1 1	Chitradurga . Ferozepur . Patiala . Ambala . Amritsar . Ludhiana .	. . 1 . 1 . 2 . 1 . 2
Punjab . . .	8								
Rajasthan . . .	1					Bikaner . . .	. 1		
Uttar Pradesh . . .	23	Gorakhpur . . . Sitapur . . .	. 1	Etah . . .	. 1	Allahabad . . .	. 1	Aligarh . . . Lucknow . . . Agra . . . Meerut . . . Kanpur . . . Hooghly . . . 24 Parganas . Howrah . . .	. . 1 . 2 . 5 . 10 . 1 . 1 . 1
West Bengal . . .	3								
Delhi . . .	4							Delhi . . .	. 4

28. Soaps, cosmetics and toilet preparations.

STATEMENT VI.30

Distribution of licences of soaps, cosmetics and toilet preparations by States and districts

[illegible]

29. Rubber goods.

STATEMENT VI.31

Distribution of licences of rubber goods by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Gujarat . . .	4							Bhavnagar	3
								Baroda	1
Kerala . . .	7					Alleppey	2	Kottayam	3
						Trivandrum	1		
						Ernakulam	1		
Madras . . .	5							Madurai	2
								Chingleput	1
								Coimbatore	2
Maharashtra . . .	4							Poona	3
								Thana	1
Mysore . . .	1							Bangalore	1
Punjab . . .	3							Rohtak	2
								Gurgaon	1
Uttar Pradesh . . .	3							Meerut	1
								Kanpur	2
West Bengal . . .	16							Hooghly	9
								24-Parganas	2
								Howrah	5
Delhi . . .	1							Delhi	1

30. Leather and leather products.

STATEMENT VI.32

Distribution of licences of leather and leather products by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Gujarat . . .	3					Kaira	2	Ahmedabad	1
Madhya Pradesh . . .	2							Sehore	1
								Gwalior	1
Madras . . .	8							North Arcot	1
								Tiruchirapalli	2
								Chingleput	5
Orissa . . .	1	Baudh-Khondmals	1						
Uttar Pradesh . . .	7							Agra	1
								Kanpur	6
West Bengal . . .	2							24-Parganas	1
								Howrah	1

31. Glues and gelatine.

STATEMENT VI.33

Distribution of licences of glues and gelatine by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Gujarat . . .	1					Kaira	1		
Kerala . . .	1					Cannanore	1		
Madhya Pradesh . . .	1							Jabalpur	1
Madras . . .	1							Chingleput	1
Maharashtra . . .	1							Poona	1
Uttar Pradesh . . .	1							Kanpur	1
West Bengal . . .	1							24-Parganas	1
Delhi . . .	1							Delhi	1

32. Glass ceramic and gypsum products.

STATEMENT VI.34

Distribution of licences of glass ceramic and gypsum products by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh . . .	4							Hyderabad	4
Bihar . . .	33			Ranchi	1	Hazaribagh	6	Patna	2
								Dhanbad	19
								Singhbhum	5
Gujarat . . .	18					Mehsana	1	Junagadh	1
						Kaira	3	Bhavnagar	1
								Rajkot	1
								Jamnagar	1
								Baroda	6
								Ahmedabad	4
Kerala . . .	6			Palghat	1	Kozhikode	1	Kottayam	1
						Trichur	1		
						Quilon	2		
Madhya Pradesh . . .	18	Mandla	2	Satna	2	Hoshangabad	1	Gwalior	2
						Durg	1	Jabalpur	10
Madras . . .	9					Salem	6	North Arcot	1
								Tiruchirapalli	1
								Chingleput	1
Maharashtra . . .	9							Poona	3
								Thana	6
Mysore . . .	7			Bijapur	1	Kolar	1	Bangalore	4
				Belgaum	1				
Orissa . . .	10	Mayurbhanj	2	Cuttack	5	Sundargarh	3		
Punjab . . .	13							Bhatinda	1
								Kapurthala	1
								Rohtak	3
								Gurgaon	8
Rajasthan . . .	5	Bhilwara	1					Bharatpur	1
								Kota	2
								Jaipur	1
Uttar Pradesh . . .	37	Jaunpur	1			Bulandshahr	2	Aligarh	3
						Varanasi	1	Agra	14
						Mirzapur	3	Meerut	3
						Moradabad	1	Kanpur	1
						Allahabad	8		
West Bengal . . .	24							Burdwan	10
								Hooghly	6
								24-Parganas	4
								Howrah	4
Delhi . . .	13							Delhi	13

33. Cement.

STATEMENT VI.35

Distribution of licences of cement by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh . . .	13			Cuddapah	1	Adilabad	2	Krishna	4
				Visakhapatnam	2	Kurnool	1		
						Guntur	3		
Bihar . . .	1			Ranchi	1			Junagadh	1
Gujarat . . .	2							Jamnagar	1
								Jabalpur	1
Madhya Pradesh . . .	1								

STATEMENT VI.35

Distribution of licences of cement by States and districts—concl'd.

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Madras	1							Coimbatore	1
Maharashtra	1			Chanda	1				
Mysore	1			Bijapur	1				

34. Timber products.

STATEMENT VI.36

Distribution of licences of timber products by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	2			Visakhapatnam	1			Krishna	1
Assam	14			Cachar	1	Sibsagar	5	Lakhimpur	3
Bihar	1	Muzaffarpur	1						
Gujarat	2					Surat	1	Ahmedabad	1
Kerala	10			Palghat	1	Trivandrum	1	Kottayam	2
						Cannanore	6		
Madras	9					Ramanathapuram	9		
Maharashtra	2							Poona	1
								Thana	1
Mysore	2					North Kanara	1		
						South Kanara	1		
Orissa	3	Koraput	1	Balasore	2				
Uttar Pradesh	9	Deoria	1			Bijnor	2	Dehra Dun	2
		Sitapur	2			Bareilly	2		
West Bengal	4							24-Parganas	2
								Howrah	2

35. Miscellaneous industries.

STATEMENT VI.37

Distribution of licences of miscellaneous industries by States and districts

State	Total number	Level I		Level II		Level III		Level IV	
		District	No.	District	No.	District	No.	District	No.
Andhra Pradesh	1					Guntur	1		

In conclusion it may be worthwhile to have a look at the licences taken out by each State as a tentative index of their absorptive capacities.

It is a matter of much interest that none of the districts in the first level of development in the States of Andhra Pradesh, Assam and West Bengal has taken out any licence of any sort. This is of particular significance for the State of West Bengal which is generally held to be industrialized. Of those States which have taken out licences for districts in level I, Bihar has taken out 11 (districts of Darbhanga 1, Champaran 2, Muzaffarpur 4, Saran 4), Madhya Pradesh 3 (districts of

Bilaspur 1, Mandla 2), Maharashtra 2 (district of Ratnagiri), Mysore 3 (district of Raichur), Orissa 27 (districts of Baudh-Khondmals 1, Kalahandi 1, Mayurbhanj 3, Koraput 4, Puri 4, Keonjhar 5, Sambalpur 9, Punjab 1 (district Kangra), Rajasthan 3 (district of Bhilwara), and Uttar Pradesh 33 (1 each in Bahraich, Ballia, Faizabad, Hardoi, Unnao, Bara Banki and Jaunpur 2, Gonda 3, Kheri 3, Deoria 5, Gorakhpur 6 and Sitapur 7) and Himachal Pradesh 1 (district of Chamba). This makes a total of only 84 licences in only 30 out of a total of 79 districts in the lowest level of development throughout India.

Of the 179 licences taken out by only 46 out of 88 districts in the second level of

development, the distribution by States is as follows:

STATEMENT VI.38

State	District	Number of licences
Andhra Pradesh	Cuddapah	4
	Chittoor	5
	Srikakulam	5
	Visakhapatnam	10
	Total	24
Assam	Goalpara	1
	Nowgong	1
	Cachar	2
	Total	4
Bihar	Gaya	1
	Santal Parganas	1
	Purnea	2
	Monghyr	7
	Ranchi	7
	Shahabad	12
	Total	30
Gujarat	Dangs	1
	Panchmahals	2
	Total	3
Kerala	Palghat	5
	Total	5
Madhya Pradesh	Balaghat	1
	Betul	1
	Rajgarh	1
	Shahdol	1
	Satna	2
	Raipur	3
	Total	9
Maharashtra	Osmanabad	1
	Bhandara	2
	Chanda	4
	Kolaba	7
	Kolhapur	12
	Total	26
Mysore	Tumkur	2
	Bijapur	3
	Gulbarga	8
	Belgaum	11
	Total	24

STATEMENT VI.38—concl'd.

State	District	Number of licences
Orissa	Dhenkanal	1
	Ganjam	2
	Balasore	4
	Cuttack	19
	Total	26
Punjab	Hoshiarpur	1
	Total	1
Rajasthan	Jhalawar	1
	Sawai Madhopur	2
	Udaipur	2
	Pali	3
	Total	8
Uttar Pradesh	Etawah	1
	Etah	2
	Mainpuri	13
	Total	16
West Bengal	Bankura	1
	Total	1
Himachal Pradesh	Mahasu	1
	Sirmur	1
	Total	2

Of the 637 licences taken out by 62 out of a total of 76 districts in the third level of development, the distribution by States is as follows:

STATEMENT VI.39

State	District	Number of licences
Andhra Pradesh	Khammam	1
	Nizamabad	1
	Anantapur	4
	Adilabad	6
	Kurnool	9
	East Godavari	12
	West Godavari	12
	Guntur	14
	Total	59
Assam	Sibsagar	9
	Kamrup	17
	Total	26

STATEMENT VI.39—cont'd.

State	District	Number of licences
Bihar	Bhagalpur	1
	Hazaribagh	12
	Total	13
Gujarat	Kutch	1
	Amreli	2
	Broach	4
	Mehsana	4
	Kaira	22
	Surat	51
	Total	84
Kerala	Alleppey	8
	Kozhikode	8
	Trivandrum	9
	Cannanore	10
	Trichur	18
	Ernakulam	27
	Quilon	109
	Total	189
Madhya Pradesh	Dewas	1
	Vidisha	1
	Hoshangabad	2
	Durg	4
	Total	8
Madras	Kanyakumari	2
	South Arcot	7
	Tirunelveli	20
	Salem	28
	Ramanathapuram	29
	Total	86
Maharashtra	Satara	1
	Wardha	2
	Aurangabad	3
	Buldhana	4
	Sangli	10
	Total	20
Mysore	Hassan	1
	Kolar	1
	Mandya	4
	Bellary	5
	North Kanara	6
	Mysore	11
	Dharwar	12
	South Kanara	12
	Total	52
Orissa	Sundargarh	12
	Total	12

STATEMENT VI.39—*concl'd.*

State	District	Number of licences
Punjab	Sangrur	2
	Total	2
Rajasthan	Bikaner	1
	Ganganagar	2
	Jodhpur	2
	Total	5
Uttar Pradesh	Jhansi	1
	Bulandshahr	3
	Bijnor	6
	Rampur	6
	Varanasi	9
	Mirzapur	10
	Bareilly	12
	Moradabad	12
	Allahabad	21
	Total	80
West Bengal	Birbhum	1
	Total	1

Of the 2,293 licences taken out by 75 out of a total of 81 (excluding districts of Greater Bombay, Madras and Calcutta of

this level) districts in the fourth or top level of development, the distribution by States is as follows:

STATEMENT VI.40

State	District	Number of licences
Andhra Pradesh	Krishna	15
	Hyderabad	43
	Total	58
Assam	Lakhimpur	18
	Total	18
Bihar	Patna	19
	Dhanbad	34
	Singhbhum	39
	Total	92
Gujarat	Surendranagar	5
	Junagadh	13
	Bhavnagar	22
	Rajkot	23
	Jamnagar	28
	Baroda	89
	Ahmedabad	110
	Total	290

STATEMENT VI.40—*cont'd.*

State	District	Number of licences
Kerala	Kottayam	11
	Total	11
Madhya Pradesh	Ratlam	5
	East Nimar	6
	Ujjain	8
	Sehore	9
	Gwalior	12
	Indore	13
	Jabalpur	13
	Total	66
Madras	Thanjavur	6
	North Arcot	8
	Tiruchirapalli	20
	Madurai	29
	Chingleput	34
	Coimbatore	176
	Total	273
Maharashtra	Amravati	2
	Dhulia	3
	Nasik	4
	Akola	5
	Sholapur	6
	Jalgaon	9
	Nagpur	10
	Ahmadnagar	12
	Poona	81
	Thana	106
	Total	238
Mysore	Shimoga	9
	Chitradurga	23
	Bangalore	80
	Total	112
Punjab	Bhatinda	2
	Ferozepur	4
	Karnal	5
	Gurdaspur	6
	Hissar	8
	Kapurthala	18
	Rohtak	18
	Patiala	21
	Jullundur	26
	Ambala	44
	Amritsar	49
	Ludhiana	55
	Total	358
Rajasthan	Bharatpur	7
	Ajmer	8
	Kota	13
	Jaipur	18
	Total	46

STATEMENT VI.40—*concl'd.*

State	District	Number of licences
Uttar Pradesh	Mathura	2
	Naini Tal	3
	Dehra Dun	9
	Aligarh	12
	Muzaffarnagar	12
	Saharanpur	13
	Lucknow	14
	Agra	27
	Meerut	66
	Kanpur	81
Total		239
West Bengal	Darjeeling	1
	Jalpaiguri	2
	Nadia	12
	Burdwan	37
	Hooghly	65
	24-Parganas	115
	Howrah	126
Total		358
Delhi	Delhi	134
	Total	134

The following abstract shows the relative positions of the States in the matter of industrial licences:

STATEMENT VI.41

Distribution of industrial licences issued to States, Madras, Greater Bombay and Calcutta districts

Less than 50	50—100	100—150	150—300	Over 300
Assam Himachal Pradesh	Madhya Pradesh Orissa Rajasthan	Andhra Pradesh Bihar Madras district Delhi	Kerala Maharashtra Mysore	Gujarat Madras Greater Bombay district Punjab Uttar Pradesh Calcutta district West Bengal

No licences have been taken out in respect of the following industries in the States noted against each:

STATEMENT VI.42

States which have taken out no industrial licences

Metallurgical industries	Himachal Pradesh
Fuels	Gujarat, Kerala, Madhya Pradesh, Mysore, Rajasthan, Uttar Pradesh, Delhi and Himachal Pradesh
Boilers	No licences in any State except Maharashtra, Punjab and West Bengal
Prime movers	Assam, Bihar, Kerala, Madhya Pradesh, Orissa, Rajasthan, Delhi and Himachal Pradesh
Electrical equipment	Assam and Himachal Pradesh
Telecommunications	Andhra Pradesh, Assam, Bihar, Kerala, Orissa, Rajasthan, Uttar Pradesh and Himachal Pradesh
Transportation (including railway wagon)	Kerala, Madhya Pradesh and Himachal Pradesh
Industrial machinery	Himachal Pradesh
Machine tools	Assam, Bihar, Kerala, Madhya Pradesh, Orissa, Rajasthan and Himachal Pradesh
Agricultural machinery	Andhra Pradesh, Assam, Bihar, Kerala, Madhya Pradesh, Orissa, and Himachal Pradesh.
Earthmoving machinery	Andhra Pradesh, Assam, Kerala, Madhya Pradesh, Mysore, Orissa, Punjab, Rajasthan, Uttar Pradesh and Himachal Pradesh
Miscellaneous mechanical engineering industries	Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and Himachal Pradesh
Commercial, office and household equipments	Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Mysore, Rajasthan, Uttar Pradesh and Himachal Pradesh
Medical and surgical appliances	No licences in any State except Maharashtra and West Bengal
Industrial instruments	Andhra Pradesh, Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Orissa, Delhi and Himachal Pradesh
Scientific instruments	Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Madras, Orissa and Himachal Pradesh
Mathematical surveying and drawing instruments	No licences in any State except Uttar Pradesh and Delhi

STATEMENT VI.42

States which have taken out no industrial licences—concl'd.

Fertilizers	Assam, Orissa, Punjab, West Bengal, Delhi and Himachal Pradesh
Chemicals	Himachal Pradesh
Photographic raw films and paper	No licences in any State except West Bengal
Dyestuffs	Andhra Pradesh, Assam, Bihar, Kerala, Madhya Pradesh, Madras, Mysore, Orissa, Rajasthan, Uttar Pradesh and Himachal Pradesh
Drugs and pharmaceuticals	Assam, Bihar, Kerala, Madhya Pradesh, Orissa and Himachal Pradesh
Sugar	Kerala, Delhi and Himachal Pradesh
Fermentation industries	Assam, Kerala, Orissa, Delhi and Himachal Pradesh
Food processing industries	Orissa
Vegetable oils and vanaspati	Assam, Orissa and Himachal Pradesh
Soaps, cosmetics and toilet preparations	Assam, Bihar, Madhya Pradesh, Orissa, Punjab, Rajasthan, Delhi and Himachal Pradesh
Rubber goods	Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and Himachal Pradesh
Leather and leather products	Andhra Pradesh, Assam, Bihar, Kerala, Mysore, Punjab, Rajasthan, Delhi and Himachal Pradesh
Glues and gelatine	Andhra Pradesh, Assam, Bihar, Mysore, Orissa, Punjab, Rajasthan and Himachal Pradesh
Glass, ceramics and gypsum products	Assam and Himachal Pradesh
Cement	Assam, Kerala, Orissa, Punjab, Rajasthan, Uttar Pradesh, West Bengal, Delhi and Himachal Pradesh
Timber products	Madhya Pradesh, Punjab, Rajasthan, Delhi and Himachal Pradesh
Miscellaneous industries	No licences in any State except Andhra Pradesh and Maharashtra

CHAPTER VII

CASES OF HIRE PURCHASE UNDER THE NATIONAL SMALL INDUSTRIES CORPORATION AMONG DISTRICTS ARRANGED BY LEVELS OF DEVELOPMENT

THE PRECEDING CHAPTER was concerned with the distribution of industrial licences relating to large factories among districts arranged by levels of development. A *Directory of machines supplied on Hire Purchase* issued by the National Small Industries Corporation in August, 1964 provided the occasion for investigating how much of the hire purchase benefits has been claimed by districts in the various levels of development. The Statistics presented in this Chapter have been based on this authoritative Directory alone.

The Directory gives us on the whole a picture of more equitable distribution of hire

purchase cases in the various levels of development than of industrial licences. This accords with the aims and objects of the National Small Industries Corporation, which are mainly designed to stimulate small industrial enterprise over as large an area as possible. But despite this effort there is a noticeable concentration of hire purchase cases in districts of the top or highest level of development and mainly in the three cities of Bombay, Calcutta and Madras, which provides proof of their absorptive capacities. Statement VII.1 gives an abstract of cases of hire purchase distributed among all districts according to levels of development.

STATEMENT VII.1

Abstract of cases of hire purchase distributed among all districts in India according to levels of development

Industry	Total	I	II	III	IV	Total of I to IV	Greater Bombay, Calcutta, Madras
Total	3,716	105	301	657	1,616	2,679	1,037
1 Agricultural implements	42	4	5	11	18*	38	4
2 Auto servicing	127	2	11	43	55	111	16
3 Building materials	67	1	17	17	18	53	14
4 Ceramics	13	1	1	3	4	9	4
5 Chemicals	126	3	6	22	41	72	54
6 Containers	38	..	2	7	7	16	22
7 Electrical goods	143	..	8	14*	73	95	48
8 Food products	116	17	10	32	45	104	12
9 Foundry	92	4	10	16	36	66	26
10 Leather	30	..	7	4	11	22	8
11 Light engineering	1,546	19	119	222†	711@	1,071	475

*Includes 1 unit for which hire purchase value is not available.
†Includes 4 units for which hire purchase value is not available.
@Includes 9 units for which hire purchase value is not available.

STATEMENT VII.1

Abstract of cases of hire purchase distributed among all districts in India according to levels of development—concl'd.

Industry	Total	I	II	III	IV	Total of I to IV	Greater Bombay, Calcutta, Madras
12 Metalware . . .	60	..	6	14	19	39	21
13 Plastic conversion . .	134	1	4	17	47	69	65
14 Printing and binding .	239	6	17*	47	115	185	54
15 Rubber based industry .	75	1	6	25	33	65	10
16 Scientific goods . .	92	..	2	8	45	55	37
17 Stationery . . .	120	3	1	18	45	67	53
18 Textiles . . .	64	..	8	6	34	48	16
19 Timber based industry .	282	31	45	98	75	249	33
20 Wearing apparel . .	99	1	2	7	77†	87	12
21 Miscellaneous industries .	211	11	14	26	107*	158	53

*Includes 1 unit for which hire purchase value is not available.

†Includes 3 units for which hire purchase value is not available.

The best distributed sectors are agricultural implements, auto servicing, building materials, ceramics, food products, foundry, chemicals, rubber based industry, timber based industry and miscellaneous industries. Industries which are heavily concentrated in districts of levels III and IV are chemicals, containers, electrical goods, leather, light engineering, metalware, plastic conversion, printing and binding, scientific goods, stationery, textiles and wearing apparel.

A picture of much heavier concentration in districts of levels III and IV and the three cities of Bombay, Calcutta and Madras, is however obtained in Statement VII. 2. The lines of heaviest concentration are auto servicing, chemicals, electrical goods, foundry, leather, light engineering, plastic conversion, printing and binding, rubber based industry, scientific goods, stationery, wearing apparel and miscellaneous

industries. It is noteworthy that no case of hire purchase has gone to a district of the first or lowest level of development in respect of containers, electrical goods, leather, metalware, scientific goods and textiles. The items leather, metalware and textiles are of particular moment as these industries are still regarded as traditional and, therefore, supposed to be universal. Both the number and value of hire purchase cases are particularly low in districts of level I in respect of auto servicing, ceramics, building materials, chemicals, foundry, light engineering, plastic conversion, printing and binding, rubber based industry, stationery, timber based industry, wearing apparel and miscellaneous industries. Similarly the number and value of cases are particularly low in districts of level II in respect of containers, food products, plastic conversion, rubber based industry, scientific goods, stationery and wearing apparel.

STATEMENT VII.2

Abstract of total value of cases of hire purchase distributed among all districts in India according to levels of development

Industry	Total	I	II	III	IV	Total of I to IV	Greater Bombay, Calcutta, Madras
Total	144,696,490	1,288,900	5,800,600	15,758,090	64,257,500	87,105,090	57,591,400
1 Agricultural implements	721,600	62,100	147,300	142,000	253,800	605,200	116,400
2 Auto servicing . .	3,655,690	48,200	350,100	741,690	1,893,500	3,033,490	622,200
3 Building materials .	1,777,500	23,800	386,900	454,000	507,900	1,372,600	404,900
4 Ceramics . . .	1,039,000	7,400	184,800	126,100	95,000	413,300	625,700
5 Chemicals . . .	5,209,900	25,800	392,600	635,700	1,343,700	2,397,800	2,812,100
6 Containers . . .	1,672,600	..	77,300	441,100	438,800	957,200	715,400
7 Electrical goods .	7,653,300	..	357,100	868,500	3,697,700	4,923,300	2,730,000
8 Food products .	3,298,800	406,200	248,700	611,800	1,676,000	2,942,700	356,100
9 Foundry . . .	3,431,600	67,100	188,900	258,400	1,319,800	1,834,200	1,597,400
10 Leather . . .	813,000	..	61,800	23,000	616,100	700,900	112,100
11 Light engineering .	70,344,900	175,600	2,092,200	6,845,900	34,419,600	43,533,300	26,811,600
12 Metalware . . .	2,010,000	..	167,900	159,600	527,100	854,600	1,155,400
13 Plastic conversion .	8,392,700	35,300	97,100	842,400	2,239,300	3,214,100	5,178,600
14 Printing and binding .	5,299,300	49,900	101,300	714,700	2,835,400	3,701,300	1,598,000
15 Rubber based industry	2,818,500	7,600	43,500	172,000	1,235,600	1,458,700	1,359,800
16 Scientific goods .	3,734,000	..	146,100	118,300	1,563,400	1,827,800	1,906,200
17 Stationery . . .	6,419,400	37,700	17,500	583,700	2,393,100	3,032,000	3,387,400
18 Textiles . . .	1,661,300	..	97,600	80,800	1,124,700	1,303,100	358,20
19 Timber based industry	5,253,200	177,900	434,500	1,177,700	1,483,600	3,273,700	1,979,500
20 Wearing apparel .	2,293,200	128,700	15,400	59,400	1,729,500	1,933,000	360,200
21 Miscellaneous industries	7,197,000	35,600	192,000	701,300	2,863,900	3,792,800	3,404,200

This shows that not only modern lines of small industry but even the traditional ones which lean on modern tools are concentrated in districts of levels III and IV.

A statewise narration of each item of hire purchase may now be attempted, each

State subclassified into districts in each of the four levels of development. We shall exclude Greater Bombay, Calcutta and Madras from this brief account. The first figure gives the number of cases of hire purchase and the second figure the total value (in rupees).

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)

State	Total		Level I		Level II		Level III		Level IV		
	Cases/	Value	District	Cases/	District	Cases/	District	Cases/	District	Cases/	Value
1	2	3	4	5	6	7	8	9	10		
I. Agricultural implements											
Andhra Pradesh	3/51,000			Srikakulam	1/2,500			Hyderabad	2/48,500		
Assam	1/3,900							Lakhimpur	1/3,900		
Gujarat	4/56,700							Junagadh	1/9,600		
								Baroda	1/42,500		
Kerala	4/122,000			Palghat	3/121,200						
Madhya Pradesh	4/26,200		Jhabua								
Madras	5/72,600		Seoni								
Maharashtra	5/57,400										
Mysore	7/90,500										
Orissa	1/23,600			Ganjam	1/23,600						
Uttar Pradesh	4/101,300		Deoria								
2. Auto Servicing											
Andhra Pradesh	3/92,100			Visakhapatnam	2/86,500						
Bihar	1/33,800			Ranch	1/33,800						
Gujarat	1/118,000										
Jammu and Kashmir	2/41,200										
Kerala	14/128,200										

*Includes 1 unit for which hire purchase value is not available.

STATEMENT VII. 3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—contd.

State	Total		Level I		Level II		Level III		Level IV	
	Cases/	Value	District	Cases/ Value	District	Cases/ Value	District	Cases/ Value	District	Cases/ Value
1	2		3	4	5	6	7	8	9	10
2. Auto Servicing—concd.										
Madhya Pradesh .	6/82,200		Rewa	2/48,200	Raipur	1/2,800	Durg	2/5,500	Schore .	1/25,700
Madras .	23/583,600						Tirunelveli	1/11,600	North Arcot .	3/172,100
							Salem	4/153,200	Madurai .	4/74,100
							South Arcot	4/44,100	Thanjavur .	1/3,000
									Tiruchirapalli	5/111,300
									Coimbatore .	1/14,200
Maharashtra .	9/108,500				Parbhani	1/2,300	Satara	1/31,600	Nasik .	1/14,600
					Kolhapur	1/5,400	Sangli	1/6,100	Nagpur .	1/3,400
									Sholapur .	1/34,300
									Poona .	2/10,800
Mysore .	23/560,290				Gulbarga	1/19,700	North Kanara	1/2,400	Coorg .	1/4,800
					Belgaum	2/101,000	Kolar	1/2,500	Shimoga	1/33,400
							South Kanara	5/133,500	Chitradurga	2/53,400
							Dharwar	4/53,590	Bangalore .	5/156,000
Punjab .	4/457,100								Patiala	1/51,000
									Rohtak .	1/265,200
									Ambala .	1/88,700
									Jullundur	1/52,200
Rajasthan .	3/135,400				Udaipur	1/57,000	Jodhpur	1/36,900	Jaipur .	1/41,500
Uttar Pradesh .	18/556,800						Jhansi	1/45,400	Naini Tal	1/62,400
							Varanasi	1/61,600	Saharanpur	1/14,200
									Aligarh .	2/52,100
									Dehra Dun	2/27,200
									Meerut .	3/50,000
									Agra .	6/239,700
									Kanpur	1/4,200
West Bengal .	1/41,600				Midnapore	1/41,600				
Delhi .	2/74,800								Delhi .	2/74,800
Tripura .	1/19,900						Tripura	1/19,900		

16.8 . Building material

State	Area	Population	Area	Population	Area	Population	Area	Population	Area	Population
Andhra Pradesh	7/126,700									
Kerala	15/458,100									
Madhya Pradesh	4/18,100									
Maharashtra	7/264,900									
Mysore	5/110,100									
Orissa	3/53,200									
Punjab	2/109,100									
Rajasthan	5/71,800									
4. Ceramics										
Jammu and Kashmir	1/1,600									
Kerala	1/13,400									
Orissa	1/184,800									
Punjab	1/71,300									
Uttar Pradesh	4/136,800									
West Bengal	1/5,400									
N.A. stands for not available.										

N.A. stands for not available.

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—contd.

State	Total		Level I		Level II		Level III		Level IV	
	Cases/Value		District	Cases/Value	District	Cases/Value	District	Cases/Value	District	Cases/Value
1	2	3	4	5	6	7	8	9	10	
5. Chemicals										
Andhra Pradesh	8/83,100			Chittoor	1/18,700	East Godavari Warangal Guntur	1/1,100 1/10,000 3/7,800	Hyderabad	2/45,500	
Assam	3/116,400			Cachar	2/59,000			United Khasi and Jaintia Hills Ahmedabad	1/57,400 4/63,100	
Gujarat	4/63,100									
Jammu and Kashmir	1/8,600	Baramulla	1/8,600							
Kerala	13/466,300			Palghat	1/10,000	Kozhikode Ernakulam Trivandrum Trichur Quilon	1/8,900 2/30,200 3/33,900 4/12,300 1/369,900	Kottayam	1/1,100	
Madhya Pradesh	2/20,000					South Arcot	1/1,000	Indore	2/20,000	
Madras	3/26,600							Chingleput Thanjavur	1/16,900 1/8,700	
Maharashtra	1/2,400							Nagpur	1/2,400	
Mysore	7/63,900					Mysore Dharwar	1/13,200 1/2,100	Bangalore	5/48,600	
Punjab	2/9,800							Jullundur	2/9,800	
Rajasthan	8/654,100			Udaipur	2/304,900	Bikaner Alwar	1/10,500 1/11,800	Kota Jaipur	1/7,400 3/319,500	
Uttar Pradesh	12/285,600	Banda Bahraich	1/11,400 1/5,800			Moradabad	1/123,000	Aligarh Lucknow Meerut Agra Kanpur Howrah	1/1,800 2/34,500 3/77,800 1/1,100 2/30,200 1/46,400	
West Bengal	1/46,400							Delhi	7/551,500	
Delhi	7/551,500									

6. Containers

Andhra Pradesh	1/2,700	Nizamabad	1/2,700	Ahmedabad	1/197,100
Gujarat	1/197,100				
Kerala	4/91,900	Palghat	1/1,400	Trivandrum Alleppey Quilon	1/33,800 1/22,900 1/33,800
Madras	3/15,500			Ramanathapuram	2/8,700
Maharashtra	1/9,200				
Mysore	2/217,800			Thanjavur	1/6,800
Orissa	1/75,900			Poona	1/9,200
Uttar Pradesh	3/347,100	Cuttack	1/75,900	Bangalore	2/217,800

7. Electrical goods

Andhra Pradesh	4/55,400	Alahabad	1/339,200	Agra Kanpur	1/3,100 1/4,800
Gujarat	4/216,300			Hyderabad	2/26,500
Jammu and Kashmir	1/267,200	Visakhapatnam	1/12,500	Kurnool	1/16,400
Kerala	4/196,400			Surat	1/151,700
Madhya Pradesh	3/16,100	Palghat	2/60,400	Cannanore Alleppey	1/129,100 1/6,900
Madras	12/277,900	Morena Chhindwara	1/5,700 1/600		
		Kolhapur	1/19,200	Sangli	1/29,700
Maharashtra	6/139,800				
Mysore	8/158,700	Tumkur	1/2,900	Mandya Mysore	1/2,700 1/5,700

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—contd.

State	Year	Population	Area	Population per sq. mile	Population per sq. km
Mysore	1951	8,341,600	1,600	1/7,300	1/16,400
Orissa	1951	1,600	1,600	1/12,500	1/12,500
Punjab	1951	5,314,300	1,600	1/10,500	1/10,500
Rajasthan	1951	1,9,100	1,600	1/10,500	1/10,500
Uttar Pradesh	1951	43,1,740,500	1,600	1/10,500	1/10,500
Delhi	1951	7,128,300	1,600	1/10,500	1/10,500
Goa	1951	5,56,800	1,600	1/10,500	1/10,500
Gujarat	1951	5,313,600	1,600	1/10,500	1/10,500
Kerala	1951	5,79,500	1,600	1/10,500	1/10,500
Madhya Pradesh	1951	2,16,700	1,600	1/10,500	1/10,500
Madras	1951	6,258,400	1,600	1/10,500	1/10,500
Maharashtra	1951	14,308,000	1,600	1/10,500	1/10,500
Mysore	1951	9,126,900	1,600	1/10,500	1/10,500

N.A. stands for not available.

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—contd.

State 1	Total		Level I		Level II		Level III		Level IV	
	Cases/Value 2	District 3	Cases/ Value 4	District 5	Cases/ Value 6	District 7	Cases/ Value 8	District 9	Cases/ Value 10	
9. Foundry—concd.										
Orissa	2/39,600	Mayurbhanj	1/21,000	Cuttack	. 1/18,600					
Punjab	7/409,500									
Rajasthan	1/24,000	Bhilwara	. 1/24,000							
Uttar Pradesh	6/129,500	Gorakhpur	. 1/8,400							
Delhi	4/71,700									
10. Leather										
Andhra Pradesh	2/3,800			Srinagar	. 1/5,500					
Jammu and Kashmir	1/5,500									
Kerala	1/18,600									
Madras	1/93,500									
Mysore	9/64,600			Bijapur Belgaum	. 1/500 .5/55,800					
Punjab	1/700									
Uttar Pradesh	5/475,200									
Delhi	2/39,000									
11. Light engineering										
Andhra Pradesh	91/3,339,800			Nellore . Srikakulam . Chittoor . Visakhapatnam . Cuddapah .	. 1/8,500 . 1/15,400 . 3/28,400 4/60,200 .13/105,000	Anantapur Nizamabad . East Godavari Warangal . Guntur .	2/26,200 3/11,400 4/39,500 7/63,000 .12/223,500	Krishna Hyderabad*	18/637,800 . 23/2,120,100	
Assam	15/475,600			Nowgong Goalpara . Cachar .	. 1/7,200 . 1/25,300 . 1/6,800	Sibsagar Kamrup	. 2/86,200 . 4/276,300	Lakhimpur	. 6/73,800	

*Includes 1 unit for which hire purchase value is not available.

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—contd.

State	Total		Level I		Level II		Level III		Level IV	
	Cases/Value	District	Cases/Value	District	Cases/Value	District	Cases/Value	District	Cases/Value	
1	2	3	4	5	6	7	8	9	10	
11. Light engineering—concl'd. Mysore	181/7,013,300									

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Delhi	126/7,641,400							Delhi	126/7,641,400
Himachal Pradesh	1/49,100	Chamba	1/49,100						
Tripura	1/3,500					Tripura	1/3,500		

12 Metalware

Andhra Pradesh	8/198,900			Visakhapatnam Cuddapah	1/1,100 2/130,000	Warangal Guntur	2/17,800 2/21,100	Hyderabad	1/28,900
Assam	1/3,100					Kamrup	1/3,100		
Gujarat	4/110,400								
Kerala	3/33,000					Alleppey Quilon	2/17,200 1/15,800	Baroda Ahmedabad	3/92,900 1/17,500
Madhya Pradesh	3/28,000					Durg	2/27,600	Indore	1/400
Madras	4/45,600							Thanjavur Coimbatore	3/29,500 1/16,100
Maharashtra	3/226,300					Sangli	1/11,100	Nagpur Poona	1/207,500 1/7,700
Mysore	6/93,300			Tumkur	2/11,900	Bellary Mysore	1/600 1/13,500	Bargal	2/67,300
Orissa	1/31,800					Sundargarh	1/31,800		
Punjab	1/4,300							Gurgaon	1/4,300
Rajasthan	2/14,700							Jaipur	2/14,700
Uttar Pradesh	1/24,900			Farrukhabad	1/24,900				
Delhi	2/40,300							Delhi	2/40,300

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*Includes 1 unit for which hire purchase value is not available.

†Includes 2 units for which hire purchase value is not available.

‡Includes 3 units for which hire purchase value is not available.

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—contd.

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4. Printing and binding

*Includes 1 unit for which hire purchase value is not available.

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964) —contd.

State	Total Cases/Value	Level I		Level II		Level III		Level IV	
		District	Cases/ Value	District	Cases/ Value	District	Cases/ Value	District	Cases/ Value
1	2	3	4	5	6	7	8	9	10
14. Printing and binding—contd.									
Uttar Pradesh	55 1,475,900	Hardoi	1/16,100	Mainpuri	1/2,700	Bulandshahr	1/7,200	Mathura	3 127,200
		Almora	1/11,700	Farrukhabad	1/1,900	Moradabad	1/12,800	Naini Tal	2/7,100
		Faizabad	1/6,300			Allahabad	14 392,000	Dehra Dun	1 6,000
		Fatehpur	1/5,500					Lucknow	7 227,400
		Pratapgarh	1/2,900					Meerut	1 30,600
West Bengal	1/4,400			West Dinajpur	1/4,400			Agra	8 364,300
Delhi	20 744,200					Tripura	1/6,800	Kanpur	10 254,200
Tripura	1 6,800							Delhi	20 744,200
15. Rubber based Industry									
Andhra Pradesh	2/4,100					East Godavari	1/2,900	Hyderabad	1/1,200
Bihar	2 115,000			Monghyr	1/15,000				
Gujarat	2 396,200							Baroda	1 47,900
Kerala	14 140,600			Palghat	1/5,500	Cannanore	3/13,000	Ahmedabad	1 348,300
						Kozhikode	3/21,800	Kottayam	1 51,500
						Ernakulam	3/35,400		
						Trivandrum	1/3,000		
						Quilon	2/10,400		
Madhya Pradesh	8 111,500					Mandsaur	1/4,200	Ujjain	1 900
						Durg	2/28,600	Sehore	1/6,200
						Vidisha	2 18,400	Indore	1 53,200
Madras	4/320,800					Salem	1/5,100	Coimbatore	3 315,700
Maharashtra	5/36,900			Kolhapur	1/7,200			Nasik	1/16,800
								Ahmadnagar	2 5,100
								Sholapur	1 7,800
Mysore	13/81,200			Tumkur	3/15,800	Bellary	1/5,000	Shimoga	3 23,700
						South Kanara	1/4,100	Chitradurga	2 15,400
						Mysore	1/7,700		
						Dharwar	2/9,500		

16. Scientific goods

Punjab	5,89,300					Patiala	1/3,100
						Gurgaon	1/1,200
						Jullundur	2/38,000
						Gurdaspur	1/47,000
Rajasthan	1/5,500					Bharatpur	1/5,500
Uttar Pradesh	5/191,000	Kheri	1/7,600			Allahabad	1/2,900
West Bengal	1/11,400					Darjeeling	1/11,400
Delhi	4/55,200					Delhi	4/55,200
16. Scientific goods							
Andhra Pradesh	2/70,400			Visakhapatnam	1/13,700	Hyderabad	1/56,700
Gujarat	2/173,600					Rajkot	2/173,600
Jammu and Kashmir	1/38,200					Jammu	1/38,200
Kerala	5/67,700					Trivandrum	1/29,900
						Alleppey	1/4,600
						Quilon	3/33,200
Madhya Pradesh	2/149,200					Indore	2/149,200
Madras	4/65,000					Salem	1/24,200
Maharashtra	1/3,800					Chingleput	1/14,300
Mysore	2/16,000					North Arcot	1/21,400
Punjab	14/274,500					Thanjavur	1/5,100
						Poona	1/3,800
Rajasthan	2/249,000			Udaipur	1/132,400	Bangalore	2/16,000
Uttar Pradesh	8/288,900					Amritsar	2/15,600
						Ambala	1/240,600
						Jullundur	1/18,300
						Jaipur	1/116,600
						Saharanpur	1/39,400
						Dehra Dun	1/30,200
						Agra	3/73,800
						Kanpur	1/119,100
Delhi	12/431,500						

Number of hire purchase cases and their total value arranged by selected industries by states and districts according to levels of development (upto August, 1964)—contd.

Madhya Pradesh	•	1/127,300							Indore	•	1/127,300
Madras	•	1/43,200							Tiruchirapalli	•	1/43,200
Maharashtra	•	10/225,800							Akola	•	1/124,200
									Sholapur	•	4/20,300
Mysore	•	23/306,800							Chitradurga	•	2/16,300
									Bangalore	•	16/231,400
Punjab	•	3/418,300							Amritsar	•	1/210,100
Rajasthan	•	1/15,400							Ludhiana	•	2/208,200
Uttar Pradesh	•	1/74,400							Saharanpur	•	1/74,400
Delhi	•	2/11,800							Delhi	•	2/11,800
19. Timber based industry											
Andhra Pradesh	•	21/353,600							Hyderabad	•	2/102,700
									Anantapur	•	5/71,900
									Nizamabad	•	2/19,700
									Warangal	•	1/1,600
									Guntur	•	3/30,800
									Cuddapah	•	2/5,800
Assam	•	4/50,400							Cachar	•	1/3,800
Bihar	•	4/30,600							Santal Parganas	•	1/2,900
									Monghyr	•	1/4,500
									Ranchi	•	1/9,700
Gujarat	•	4/109,000							Srinagar	•	3/73,000
Jammu and Kashmir	•	8/98,500							Palghat	•	4/29,400
Kerala	•	59/977,900							Cannanore	•	7/170,600
									Kozhikode	•	6/136,000
									Ernakulam	•	9/107,500
									Trivandrum	•	4/19,000
									Alleppey	•	5/15,800
									Trichur	•	8/108,900
									Quilon	•	6/11,600
Madhya Pradesh	•	39/224,100							Raisen	•	1/24,400
									Sagar	•	1/13,800
									Hoshangabad	•	2/5,600
									Durg	•	1/1,400
									Vidisha	•	5/22,500
									Ujjain	•	1/3,200
									Schore	•	1/3,000
									Indore	•	5/22,300

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—contd.

Total		Level I			Level II		Level III		Level IV	
		Cases/Value	District	Cases/Value	District	Cases/Value	District	Cases/Value	District	Cases/Value
1	2	3	4	5	6	7	8	9	10	
19. Timber based industries—concd.										
Madras	6,54,400					Kanya kumari South Arcot	1/6,900 1/3,000	North Arcot Madurai Coimbatore	1/3,300 2/7,300 1/33,900	
Maharashtra	12,60,800			Parbhani Kolhapur	1/2,700 5/26,400	Nanded Sangli	2/17,700 1/6,000	Sholapur Poona	1/3,700 2/4,300	
Mysore	38,586,400			Gulbarga Tumkur Belgaum	1/16,800 4/51,900 1/3,200	Hassan Bellary Mandya Kolar South Kanara Mysore Dharwar	1/7,000 1/3,100 2/7,000 2/7,600 2/163,500 9/125,300 3/13,700	Shimoga Chitradurga Bangalore	1/6,900 3/16,300 8,162,100	
Punjab	10,353,700							Karnal Rohtak Gurgaon	2/70,800 1/250,000 7/32,900	
Rajasthan	1/6,300							Jaipur	1/6,300	
Uttar Pradesh	34/212,400			Sultanpur Hamirpur Gorakhpur Kheri Pratapgarh Jaunpur Bahraich Rae Bareilly Deoria	1/1,800 1/10,300 1/5,400 2/16,000 1/8,600 1/800 2/12,600 8/55,900 5/17,000	Bulandshahr Aligarh	2/11,000 3/23,200	Muzaffarnagar Lucknow Meerut Agra Kanpur	1/10,000 1/11,200 1/7,100 2/4,500 2/17,000	
West Bengal	4/42,700							Darjeeling Burdwan 24 Parganas Delhi	1/15,000 1/5,700 2/22,000 4/108,000	
Delhi	4/108,000									
Manipur	1/4,900			Manipur	1/4,900			Hyderabad Patna	1/800 2/181,600	
20 Wearing apparel										
Andhra Pradesh	2/10,000									
Bihar	2/181,600									

163	Gujarat	1/7,300								Ahmedabad	1/7,300
164	Jammu and Kashmir	1/93,400								Jammu	1/93,400
165	Madras	2/44,100								Tiruchirapalli Coimbatore	1/12,200 1/31,900
166	Maharashtra	9/69,000				Parbhani	1/6,200	Satara	5/40,700	Sholapur Poona	1/9,300 2/12,800
167	Mysore	8/413,900						Dharwar	2/18,700	Bangalore	6/395,200
168	Punjab	36/660,600								Karnal Rohtak Amritsar Ludhiana*	1/8,700 1/20,800 1/241,000 33/390,100
169	Uttar Pradesh	6/207,900								Meerut* Agra	4/79,200 1/ N.A.
170	Delhi	20/245,200								Delhi	20/245,200
171	21. Miscellaneous industries										
172	Andhra Pradesh	4/211,500				Chittoor	1/24,900	East Godavari Guntur	1/1,600 1/111,500	Hyderabad	1/73,500
173	Bihar	3/11,700								Patna	3/11,700
174	Gujarat	4/181,200								Surendranagar Baroda Ahmedabad	1/11,700 2/67,900 1/101,600
175	Jammu and Kashmir	1/600								Jammu	1/600
176	Kerala	3/19,800						Kozhikode Alleppey	1/1,500 1/14,600	Kottayam	1/3,700
177	Madhya Pradesh	7/53,200				Sagar Hoshangabad	1/8,600 1/3,500			Gwalior Indore	1/6,600 2/6,900
178	Madras	6/285,900								North Arcot Madurai Tiruchirapalli	1/1,800 1/202,800 4/81,300
179	Maharashtra	11/486,700				Parbhani Kolhapur	1/400 1/5,000	Satara	1/1,300	Jalgaon Ahmadnagar Thana Sholapur Poona	1/5,600 1/800 1/16,700 1/31,700 4/425,200

*Includes 1 unit for which hire purchase value is not available.
N.A. stands for not available.

STATEMENT VII.3

Number of hire purchase cases and their total value arranged by selected industries by States and districts according to levels of development (upto August, 1964)—concl'd.

State	Total	Level I		Level II		Level III		Level IV	
		Cases/Value	District	Cases/Value	District	Cases/Value	District	Cases/Value	District
1	2	3	4	5	6	7	8	9	10
21. Miscellaneous industries—concl'd.									
Mysore	38 389,900			Tumkur Belgaum	3/31,800 5/39,100	Kolar South Kanara Mysore Dharwar	1/4,100 2/9,600 1/3,800 4/88,900	Shimoga Chitradurga Bangalore	4/21,200 2/12,300 16/179,100
Orissa	1,1,400	Puri	1,1,400						
Punjab	11 265,100								
Rajasthan	2 166,600								
Uttar Pradesh	45 902,800	Gonda Pithoragarh Basti Bara Banki Jaunpur Sitapur Bahraich Deoria	1/6,700 1/3,000 1/1,300 1/1,600 2/4,000 1/2,500 1/6,700 1/1,800	Etawah Farrukhabad	1/61,100 1/18,700	Jhansi Mirzapur Rampur Moradabad Allahabad	1/6,900 1/6,200 1/1,700 1/30,300 7/407,200	Ferozepur Amritsar Jullundur Gurdaspur Ludhiana*	2/12,300 1/18,700 1/98,200 1/1,300 6/134,600
		Jaipur						Jaipur	2/166,600
		Mathura Naini Tal Muzaffarnagar Saharanpur Aligarh Dehra Dun Lucknow Meerut Agra Kanpur						Mathura Naini Tal Muzaffarnagar Saharanpur Aligarh Dehra Dun Lucknow Meerut Agra Kanpur	1/8,100 1/1,000 2/8,200 1/6,800 1/2,200 4/50,700 1/6,200 3/56,500 5/167,700 4/45,700
West Bengal	1/800							Darjeeling	1/800
Delhi	21 815,600							Delhi	21 815,600

* Includes 1 unit for which no purchase value is yet available

* Includes 1 unit for which hire purchase value is not available.

Of the 105 cases of hire purchase worth 1,288,900 taken out by 37 out of 79 districts in the first level of development, the distribution by States is as follows:

STATEMENT VII.4

State	District	Number	Value (Rupees)
Bihar	Saran	1	800
	Muzaffarpur	1	1,500
	Total	2	2,300
Jammu and Kashmir	Baramulla	1	8,600
	Total	1	8,600
Madhya Pradesh	Mandla	2	13,100
	Bilaspur	3	47,800
	Rewa	4	57,300
	Jhabua	7	52,500
	Seoni	9	29,900
	Total	25	200,600
Orissa	Mayurbhanj	1	21,000
	Puri	2	21,200
	Total	3	42,200
Rajasthan	Nagaur	1	23,800
	Bhilwara	2	33,100
	Total	3	56,900
Uttar Pradesh	Sultanpur	1	1,800
	Pithoragarh	1	3,000
	Gonda	1	6,700
	Hamirpur	1	10,300
	Almora	1	11,700
	Hardoi	1	16,100
	Ghazipur	1	27,500
	Ballia	1	31,800
	Gorakhpur	2	13,800
	Banda	2	18,800
	Azamgarh	2	39,000
	Budaun	2	85,700
	Basti	3	37,600
	Faizabad	3	63,200
	Fatehpur	3	142,600
	Sitapur	4	18,200
	Kheri	4	26,500
	Pratapgarh	4	56,200
	Jaunpur	4	65,500
	Bara Banki	4	68,200
	Bahraich	7	61,000
	Rae Bareli	8	55,900
	Deoria	9	63,200
	Total	69	924,300
Himachal Pradesh	Chamba	1	49,100
	Total	1	49,100
Manipur	Manipur	1	4,900
	Total	1	4,900

Of the 301 cases of hire purchase worth 5,800,600 taken out by 45 districts out of 88 districts in the second level of

development, the distribution by States is as follows:

STATEMENT VII.5

State	District	Number	Value (Rupees)
Andhra Pradesh	Nellore	3	13,900
	Srikakulam	4	39,000
	Chittoor	8	130,600
	Visakhapatnam	15	308,800
	Cuddapah	18	256,400
	Total	48	748,700
Assam	Nowgong	1	7,200
	Goalpara	1	25,300
	Cachar	4	69,600
	Total	6	102,100
Bihar	Santal Parganas	1	2,900
	Monghyr	2	19,500
	Palamau	2	24,400
	Ranchi	4	259,400
	Total	9	306,200
Gujarat	Banaskantha	1	3,100
	Total	1	3,100
Jammu and Kashmir	Srinagar	8	199,000
	Total	8	199,000
Kerala	Palghat	17	280,500
	Total	17	280,500
Madhya Pradesh	Satna	1	800
	Morena	1	5,700
	Dhar	1	6,700
	Shahdol	1	29,400
	Shajapur	2	10,300
	Guna	3	12,300
	Chhindwara	4	9,300
	Betul	4	21,900
	West Nimar	4	78,800
	Raipur	14	142,100
	Total	35	317,300
Maharashtra	Bhandara	1	119,300
	Chanda	2	20,600
	Parbhani	5	12,300
	Kolhapur	66	1,005,500
	Total	74	1,157,700

STATEMENT VII.5—concl'd.

State	District	Number	Value (Rupees)
Mysore	Bijapur	4	47,800
	Gulbarga	5	63,900
	Tumkur*	23	262,900
	Belgaum	29	603,300
	Total	61	977,900
Orissa	Ganjam	4	45,500
	Cuttack	11	604,600
	Total	15	650,100
Punjab	Mahendragarh	2	109,100
	Total	2	109,100
Rajasthan	Chitorgarh	1	10,500
	Udaipur	6	520,600
	Total	7	531,100
Uttar Pradesh	Etawah	1	61,100
	Shahjahanpur	2	68,400
	Mainpuri	2	128,400
	Farrukhabad	8	86,300
	Total	13	344,200
West Bengal	West Dinajpur	1	4,400
	Murshidabad	1	4,900
	Midnapore	3	64,300
	Total	5	73,600

*Includes 1 unit for which hire purchase value is not available.

Of the 657 cases of hire purchase worth 15,758,090 taken out by 58 out of 76 districts in the third level of development, the distribution by States is as follows:

STATEMENT VII.6

State	District	Number	Value (Rupees)
Andhra Pradesh	Kurnool	1	16,400
	Nizamabad	8	66,600
	Anantapur	8	100,800
	East Godavari	9	82,300
	Warangal	13	99,800
	Guntur	28	435,300
	Total	67	801,200
Assam	Sibsagar	3	97,000
	Kamrup	9	315,900
	Total	12	412,900
Bihar	Hazaribagh	1	60,800
	Total	1	60,800

STATEMENT VII.6—*contd.*

State	District	Number	Value (Rupees)
Gujarat	Broach	1	9,000
	Mehsana	2	6,200
	Kaira	4	130,100
	Surat	7	618,000
	Total	14	763,300
Kerala	Cannanore	16	382,000
	Kozhikode	23	600,900
	Ernakulam	24	365,500
	Trivandrum	28	464,500
	Alleppey	34	336,200
	Trichur	35	593,200
	Quilon	40	995,100
	Total	200	3,737,400
Madhya Pradesh	Mandsaur	1	4,200
	Raisen	2	26,000
	Sagar	3	23,500
	Hoshangabad	5	15,900
	Vidisha	8	48,300
	Durg	8	112,700
	Total	27	230,600
Madras	Kanyakumari	2	10,300
	Tirunelveli	10	300,200
	Salem	14	326,300
	South Arcot	16	160,000
	Ramanathapuram	17	536,400
	Total	59	1,333,200
Maharashtra	Ycotmal	1	7,500
	Nanded	4	39,600
	Satara	18	520,000
	Sangli	28	473,300
	Total	51	1,040,400
Mysore	North Kanara	2	9,700
	Hassan	2	14,100
	Bellary	5	32,300
	Mandya	7	32,900
	Kolar	17	79,800
	South Kanara	21	456,800
	Mysore	24	446,800
	Dharwar *	35	628,290
	Total	113	1,700,690
Orissa	Sundargarh	4	317,400
	Total	4	317,400
Punjab	Simla	1	10,500
	Total	1	10,500

* Includes 1 unit for which hire purchase value is not available.

STATEMENT VII. 6—*concl.*

State	District	Number	Value (Rupees)
Rajasthan	Bikaner	1	10,500
	Alwar	2	16,400
	Jodhpur	6	601,100
	Total	9	628,000
Uttar Pradesh	Mirzapur	3	23,200
	Pilibhit	3	50,400
	Jhansi	3	54,900
	Rampur	4	49,300
	Bareilly	5	80,300
	Bulandshahr	8	65,000
	Varanasi†	12	316,200
	Moradabad	12	502,900
	Allahabad	46	3,549,300
	Total	96	4,691,500
Tripura	Tripura	3	30,200
	Total	3	30,200

†Includes 4 units for which hire purchase value is not available.

Of the 1,616 cases of hire purchase worth 64,257,500 taken out by 76 out of 84 (excluding 3 districts of Greater Bombay, Madras and Calcutta of this level) districts in the fourth level of development, the distribution by States is as follows:

STATEMENT VII. 7

State	District	Number	Value (Rupees)
Andhra Pradesh	Krishna	22	771,500
	Hyderabad*	47	3,109,300
	Total	69	3,880,800
Assam	United Khasi and Jaintia Hills	3	102,800
	Lakhimpur	9	94,800
	Total	12	197,600
Bihar	Patna	16	492,600
	Total	16	492,600
Gujarat	Junagadh	2	12,300
	Bhavnagar	3	197,900
	Surendranagar	4	45,500
	Jamnagar	4	71,400
	Rajkot	18	789,300
	Baroda	23	1,047,800
	Ahmedabad	34	1,774,400
	Total	88	3,938,600

*Includes 1 unit for which hire purchase value is not available.

STATEMENT VII. 7—*contd.*

State	District	Number	Value (Rupees)
Jammu and Kashmir	Jammu	14	531,700
	Total	14	531,700
Kerala	Kottayam	29	1,183,200
	Total	29	1,183,200
Madhya Pradesh	East Nimar	1	9,800
	Ratlam	3	11,200
	Jabalpur	3	66,900
	Ujjain	6	53,900
	Gwalior	6	105,500
	Schore	7	185,300
	Indore	37	1,785,600
	Total	63	2,218,200
Madras	Nilgiri	3	20,800
	Chingleput	8	359,100
	North Arcot	15	295,000
	Madurai	19	558,100
	Thanjavur	25	478,800
	Tiruchirapalli	28	669,200
	Coimbatore	58	1,951,800
	Total	156	4,332,800
Maharashtra	Jalgaon	1	5,600
	Dhulia	2	9,200
	Akola	2	245,600
	Nasik	4	35,200
	Ahmadnagar	7	207,800
	Amravati	7	451,300
	Thana	8	196,100
	Nagpur	14	632,900
	Sholapur	17	207,100
	Poona	56	1,661,000
	Total	118	3,651,800
Mysore	Coorg	1	4,800
	Chikmagalur	2	14,400
	Shimoga	16	165,100
	Chitradurga	30	801,000
	Bangalore*	206	7,621,900
	Total	255	8,607,200
Punjab	Hissar	1	5,800
	Kapurthala	1	70,200
	Ferozepur	5	50,100
	Karnal	7	199,200
	Patiala	8	437,500
	Amritsar	10	771,800
	Rohtak	10	846,000
	Gurgaon	15	137,600
	Jullundur	17	409,100
	Ambala	17	1,013,700
	Gurdaspur†	18	621,000
	Ludhiana‡	81	3,115,300
	Total	190	7,677,300

*Includes 1 unit for which hire purchase value is not available.
†Includes 2 units for which hire purchase value is not available.
‡Includes 5 units for which hire purchase value is not available.

STATEMENT VII.7—*concl.*

State	District	Number	Value (Rupees)
Rajasthan	Bharatpur	2	15,200
	Ajmer	2	253,200
	Kota	3	22,800
	Jaipur	23	1,365,400
	Total	30	1,656,600
Uttar Pradesh	Naini Tal	5	80,900
	Mathura	5	194,600
	Muzaffarnagar	7	161,700
	Saharanpur	7	247,800
	Aligarh	9	186,000
	Dehra Dun	14	533,200
	Lucknow	27	1,175,200
	Meerut *	40	1,008,500
	Agra *	52	1,820,400
	Kanpur	54	2,630,000
	Total	220	8,038,300
West Bengal	Hooghly	2	20,300
	Nadia	3	1,246,100
	Darjeeling	4	48,600
	Burdwan	6	372,500
	24-Parganas	16	614,500
	Howrah	33	1,472,900
	Total	64	3,774,900
Delhi	Delhi†	292	14,075,900
	Total	292	14,075,900

*Includes 1 unit for which hire purchase value is not available.
†Includes 3 units for which hire purchase value is not available.

The following abstract shows the relative positions of the States in the matter of cases of hire purchases:

STATEMENT VII.8

Total cases of hire purchases

Less than 25	26-100	101-200	201-300	Over 300
Jammu and Kashmir	Assam	Andhra Pradesh	Kerala	Greater Bombay
Orissa	Bihar	Gujarat	Madras	District
Himachal Pradesh	Rajasthan	Madhya Pradesh	Madras District	Mysore
Manipur	West Bengal	Punjab	Maharashtra	Uttar Pradesh
Tripura			Delhi	Calcutta District

STATEMENT VII.9

Total value of cases of hire purchases

Less than 1,000,000	0·1—0·5 Crores	0·6—1·0 Crores	1·1—1·5 Crores	Over 1·5 Crores
Assam	Gujarat	Andhra Pradesh	Madras District	Greater Bombay
Bihar	Madhya Pradesh	Kerala	Mysore	District
Jammu and Kashmir	Orissa	Madras	Uttar Pradesh	Calcutta District
Himachal Pradesh	Rajasthan	Maharashtra	Delhi	
Manipur	West Bengal	Punjab		
Tripura				

The following statement gives an abstract of those industries for which there has been no contract for any hire purchase case in respect of the States noted against them.

STATEMENT VII.10

No cases of hire purchase

Agricultural implements	Bihar, Jammu and Kashmir, Punjab, Rajasthan, Delhi, Himachal Pradesh, Manipur and Tripura
Auto servicing	Assam, Orissa, Himachal Pradesh and Manipur
Building material	Assam, Bihar, Gujarat, Jammu and Kashmir, Uttar Pradesh, Delhi, Himachal Pradesh, Manipur and Tripura
Ceramics	Andhra Pradesh, Assam, Bihar, Gujarat, Madhya Pradesh, Madras, Mysore, Rajasthan, Delhi, Himachal Pradesh, Manipur and Tripura
Chemicals	Bihar, Punjab, Himachal Pradesh, Manipur and Tripura
Containers	Assam, Bihar, Jammu and Kashmir, Madhya Pradesh, Punjab, Rajasthan, Delhi, Himachal Pradesh, Manipur and Tripura
Electrical goods	Assam, Bihar, Himachal Pradesh, Manipur and Tripura
Food products	Bihar, Jammu and Kashmir, Himachal Pradesh, Manipur and Tripura
Foundry	Assam, Bihar, Jammu and Kashmir, Himachal Pradesh, Manipur and Tripura
Leather	Assam, Bihar, Gujarat, Madhya Pradesh, Orissa, Rajasthan, Himachal Pradesh, Manipur and Tripura
Light engineering	Manipur
Metalwares	Bihar, Jammu and Kashmir, Himachal Pradesh, Manipur and Tripura
Plastic conversion	Assam, Jammu and Kashmir, Orissa, Rajasthan, Himachal Pradesh, Manipur and Tripura
Printing and binding	Rajasthan, Himachal Pradesh and Manipur
Rubber based industry	Assam, Jammu and Kashmir, Orissa, Himachal Pradesh, Manipur and Tripura
Scientific goods	Assam, Bihar, Orissa, Himachal Pradesh, Manipur and Tripura
Stationery	Assam, Kerala, Orissa, Himachal Pradesh, Manipur and Tripura
Textiles	Assam, Bihar, Jammu and Kashmir, Kerala, Orissa, Himachal Pradesh, Manipur and Tripura
Timber based industry	Orissa, Himachal Pradesh and Tripura
Wearing apparel	Assam, Kerala, Madhya Pradesh, Orissa, Rajasthan, Himachal Pradesh, Manipur and Tripura
Miscellaneous industries	Assam, Himachal Pradesh, Manipur and Tripura

CHAPTER VIII

THE FOURTH ESTATE AND THE LEVELS OF DEVELOPMENT

IT WOULD BE INTERESTING to find out whether there is any association between the activity of the opinion forming press (newspapers and journals) and districts in the various levels of development, whether newspaper publication increases in range and circulation with improving levels of development. All of us are generally agreed on the likelihood of positive association between the two, but no statistical analysis of association has yet been made to the writer's knowledge. The following brief analysis prepared from the 'Annual Report of the Registrar of Newspapers for India 1961' (tables appearing on pages 66-75 and 139-152) on which it is based might therefore be of interest.

Districts in the lowest level of development

The ranking device has placed 79 districts in the first or lowest level of development. Only 3 districts (Rewa, Faizabad and Manipur) produce 7 daily newspapers in all, none of which sell anything like 50,000 copies each. In fact, the circulation of 5 of them is small and unknown. Of these again, 4 are published from Manipur, 1 of which is bilingual. Gorakhpur produces 1 monthly journal in Hindi with a circulation of more than 50,000.

Districts in the second (lowest but one) level of development

A total of 88 districts have been placed in the second level of development. Out

of these 88 only 6 districts publish a total of 18 daily newspapers. Of these 18 again, 14 have circulations less than 50,000 each. The circulation of the remaining 4 is small and unknown. The districts publishing daily newspapers are Chittoor in Andhra Pradesh (English 1, Tamil 1, Telugu 1), Shajapur in Madhya Pradesh (Hindi 1) Raipur in Madhya Pradesh (Hindi 4), Kolhapur in Maharashtra (Marathi 3), Cuttack in Orissa (English 1, Oriya 5) and Etawah in Uttar Pradesh (Hindi 1). Etawah also publishes 1 monthly journal in Hindi with a circulation below 50,000.

Districts in the third level of development

A total of 76 districts have been placed in the third level of development. Of these only 32 districts produce any newspaper or journal at all. Only 1 daily newspaper claims a circulation of more than 50,000 in Kozhikode (Kerala). Only 1 weekly, again from Kozhikode, claims a circulation exceeding 50,000. There are 2 monthly journals from Allahabad (Uttar Pradesh) with a circulation exceeding 50,000. Detailed information about the languages in which the papers and journals are published will be found in the table.

The following is an abstract of daily newspapers published from districts in the third level of development of each State.

STATEMENT VIII.1

Number and circulation of daily newspapers

State	No. of districts	Total	Circulation over 50,000	Circulation less than 50,000	Small and unknown
1	2	3	4	5	6
Andhra Pradesh	1	6	..	5	1
Assam	1	2	..	2	..
Gujarat	2	10	..	6	4
Kerala	7	32	1	26	5
Madhya Pradesh	1	3	..	..	3
Madras	4	6	..	3	3
Maharashtra	2	4	..	3	1
Mysore	3	17	..	8	9
Rajasthan	3	3	..	2	1
Uttar Pradesh	5	21	..	13	8
Tripura	1	1	..	1	..
Total	30	105	1	69	35

Thus 105 daily newspapers are published in 30 districts of which only 1 has a circulation of more than 50,000; 69 have less than 50,000 each and as many as 35 have small and unknown circulations.

The following is an abstract of weekly papers:

STATEMENT VIII.2

Number and circulation of weekly papers

State	No. of districts	Total	Circulation over 50,000	Circulation less than 50,000	Circulation unknown
1	2	3	4	5	6
Assam	2	2	..	2	..
Kerala	5	6	1	5	..
Madras	1	1	..	1	..
Mysore	1	1	..	1	..
Uttar Pradesh	2	2	..	2	..
Total	11	12	1	11	..

The following is an abstract of the monthly journals:

STATEMENT VIII.3

Number and circulation of monthly journals

State	No. of districts	Total	Circulation over 50,000	Circulation less than 50,000	Circulation unknown
1	2	3	4	5	6
Kerala	1	1	..	1	..
Madras	1	1	..	1	..
Mysore	3	8	2	6	..
Uttar Pradesh	8	17	2	15	..
Total	8	17	2	15	..

Districts in the fourth or highest level of development

Of the 84 districts placed in the fourth or highest level of development as many as 49 districts publish daily newspapers.

Out of a total of 394 daily newspapers

18 have a circulation of more than 50,000, 237 have a circulation less than 50,000 and 139 have small and unknown circulations.

The following is an abstract for each State of daily newspapers:

STATEMENT VIII.4

Number and circulation of daily newspapers

State	No. of districts	Total	Circulation over 50,000	Circulation less than 50,000	Circulation unknown
1	2	3	4	5	6
Andhra Pradesh	2	28	..	15	13
Bihar	1	9	..	6	3
Gujarat	3	19	..	14	5
Kerala	1	7	1	5	1
Madhya Pradesh	6	36	..	23	13
Madras	4	35	4	22	9
Maharashtra	9	105	5	53	47
Mysore	4	19	..	14	5
Punjab	8	27	..	17	10
Rajasthan	3	12	..	7	5
Uttar Pradesh	6	32	..	24	8
West Bengal	1	30	4	17	9
Delhi	1	35	4	20	11
Total	49	394	18	237	139

The following abstract gives the distribution and circulation of weekly journals:

STATEMENT VIII.5

Number and circulation of weekly journals

State 1	No. of districts 2	Total 3	Circulation over 50,000 4	Circulation less than 50,000 5	Circulation unknown 6
Andhra Pradesh	1	1	..	1	..
Bihar	1	2	..	2	..
Gujarat	1	8	..	8	..
Kerala	1	1	1	..	..
Madhya Pradesh	1	1	..	1	..
Madras	1	20	4	16	..
Maharashtra	2	15	4	11*	..
Mysore	1	4	..	4	..
Rajasthan	1	1	..	1	..
Uttar Pradesh	1	2	..	2	..
West Bengal	1	9	1	8	..
Delhi	1	3	..	3	..
Total	13	67	10	57	..

*Includes 1 biweekly and 1 triweekly.

The following is an abstract of fortnightly publications:

STATEMENT VIII.6

Number and circulation of fortnightly journals

State 1	No. of districts 2	Total 3	Circulation over 50,000 4	Circulation less than 50,000 5	Circulation unknown 6
Madras	1	12	..	12	..
Maharashtra	2	4	1	3	..
West Bengal	1	2	1	1	..
Delhi	1	1	..	1	..
Total	5	19	2	17	..

The following is an abstract of monthly journals:

STATEMENT VIII.7

Number and circulation of monthly journals

State 1	No. of districts 2	Total 3	Circulation over 50,000 4	Circulation less than 50,000 5	Circulation unknown 6
Andhra Pradesh	1	2	..	2	..
Gujarat	3	5	..	5	..
Kerala	1	2	..	2	..
Madras	3	25	2	23	..
Maharashtra	4	17	2	15*	..
Punjab	2	3	..	3	..
Rajasthan	1	1	..	1	..
Uttar Pradesh	3	4	..	4	..
West Bengal	1	12	..	12	..
Delhi	1	19	2	17	..
Total	20	90	6	84	..

*Includes 1 published yearly and 1 for which period is not stated.

The above brief analysis testifies to the concentration of opinion forming organs in districts of the two top levels of development, particularly in the highest level. This leadership in news distribution and opinion formation may be used both for altruistic and other purposes. In any case it is indicative of the heavy dependence of districts

in the lower levels of economic development on geographically concentrated sources of news and opinion dissemination. Such a situation, again, sometimes makes it difficult for the case of economically backward areas to be presented and pressed in the correct perspective.

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STATEMENT IX.1

Distribution of districts in each of the four levels of development by (a) number of districts where no votes were polled by a party (b) number of districts showing increases in percentage of votes polled 1957-62 : (c) number of districts showing decreases in percentage of votes polled 1957-62—concl'd.

1957-62— contd.				No. of districts having nil value both in 1957 and 1962	Total	1-1.99	2.00- 4.99	5.00- 6.99	7.00- 9.99	10.00- 19.99	20+
Level of development				2	3	4	5	6	7	8	9
I				2	3	4	5	6	7	8	9
						<i>Other Parties</i>					
I	.	.	.	..	23	5	6	1	5	3	3
II		.	.	..	45	9	9	4	10	6	7
III	.	.	.	..	28	4	7	..	3	8	6
IV	.	.	.	..	25	5	4	6	3	7	..
						<i>Independents</i>					
I	.	.	.	..	44	2	3	3	6	12	18
II	.	.	.	..	58	6	10	3	7	17	15
III	.	.	.	..	47	5	6	7	6	6	17
IV	.	.	.	..	57	4	6	6	3	19	19

NOTE: Swatantra did not contest the 1957 election.

NOTE: Swatantra did not contest the 1962 election.

Another type of exercise was attempted in which the increase or decrease in votes polled between 1957 and 1962 by the Congress party on the one hand and all other parties including Other Parties and Independents on the other was expressed in terms of percentage of the votes polled in 1957. This suggested that the results might be classified into four groups as follows:

- A. Districts in which both Congress and Other Parties have polled a large number of votes from 1957 to 1962. This might be taken to signify an intensification of political contest.
- B. Districts in which Congress has experienced an increase from 1957 to 1962 but all other parties together have polled a decrease. This would signify that the Congress was gaining at the cost of other parties.

Districts in which Congress has experienced a decrease from

1957 to 1962 but all other parties together have polled an increase. This would signify the emerging strength of other political parties at the cost of the Congress.

- D. Districts in which both Congress and all other parties combined have each experienced a decrease. This would signify growing apathy all round towards the elections.

The four groups of results were in the next place arranged in two ways. First, where any of the four characteristics (A, B, C and D) mentioned above are observed in medium and large clusters of contiguous districts, thus forming large patches of territory. Secondly, where any of the four characteristics are observed only in isolated districts or very small clusters of districts.

The four groups of results classified again into clusters of contiguous districts or spots of isolated districts are presented in Table IX.2. The following is an abstract of the results obtained in Table IX.2.

STATEMENT IX.2

Distributions of districts (a) by levels of development and (b) by extent of votes polled
by Congress and Other Parties between 1957 and 1962

	I Lowest	II Second	III Third	IV Highest	Total
A. Congress+ Other Parties+	7	13	18	21	59
B. Congress+ Other Parties—	10	12	11	10	43
C. Congress— Other Parties+	14	28	22	34	98
D. Congress— Other Parties—	28	30	23	16	97

Only very tentative and broad conclusions are permissible. Firstly, political contest seems to intensify with increasing level of development. Secondly, Congress seems to be gaining at the expenses of Other Parties more in the intermediate levels of development. Thirdly, the greater gains of Other Parties in the second, third and top levels of development seem expressive

of a desire for multiple choice. Finally, if the decline in both Congress and Other Parties votes from 1957 to 1962 were to be construed as apathy, the latter seems to be highest in the bottom and second levels of development, being progressively on the decline in the third and highest levels of development.

Rest.)

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(Rest.)

LIST OF AGENTS FOR THE SALE OF GOVERNMENT OF INDIA PUBLICATIONS

(as on 17 February, 1964)

AGARTALA—Laxmi Bhandar Books & Scientific Sales . . . (Rest.)

AGRA—

- 1 National Book House, Jeoni Mandi . . . (Reg.)
- 2 Wadhwa & Co., 45, Civil Lines . . . (Reg.)
- 3 Banwari Lal Jain, Publishers, Moti Katra . . . (Rest.)
- 4 English Book Depot, Sadar Bazar, Agra Cantt. . . (Rest.)

AHMADNAGAR—V.T. Jorakar, Prop., Rama General Stores, Navi Path . . . (Rest.)

AHMEDABAD—

- 1 Balgovind Kuber Dass & Co., Gandhi Road . . . (Reg.)
- 2 Chandra Kant Chiman Lal Vora, Gandhi Road . . . (Reg.)
- 3 New Order Book Co., Ellis Bridge . . . (Reg.)
- 4 Mahajan Bros., Opp. Khadia Police Gate . . . (Rest.)
- 5 Sata Kitab Ghar, Near Relief Talkies, Patthar Kuva, Relief Road . . . (Reg.)

AJMER—

- 1 Book-Land, 6-3, Madar Gate . . . (Reg.)
- 2 Rajputana Book House, Station Road . . . (Reg.)
- 3 Law Book House, 271, Hathhi Bhata . . . (Reg.)
- 4 Vijay Bros., Kutchery Road . . . (Rest.)
- 5 Krishna Bros., Kutchery Road . . . (Rest.)

ALIGARH—Friends' Book House, Muslim University Market . . (Reg.)

ALLAHABAD—

- 1 Superintendent, Printing & Stationery, U.P.
- 2 Kitabistan, 17-A, Kamla Nehru Road . . . (Reg.)
- 3 Law Book Co., Sardar Patel Marg, P. Box 4 . . . (Reg.)
- 4 Ram Narain Lal Beni Madho, 2-A, Katra Road . . . (Reg.)
- 5 Universal Book Co., 20, M.G. Road . . . (Reg.)
- 6 The University Book Agency (of Lahore), Elgin Road . . (Reg.)
- 7 Wadhiwa & Co., 23, M.G. Marg . . . (Rest.)
- 8 Bharat Law House, 15, Mahatma Gandhi Marg . . . (Rest.)
- 9 Ram Narain Lal Beni Prashad, 2-A, Katra Road . . . (Rest.)

AMBALA—

- 1 English Book Depot, Ambala Cantt. (Reg.)
- 2 Seth Law House, 8719, Railway Road, Ambala Cantt. . . (Rest.)

AMRITSAR—

- 1 The Law Book Agency, G.T. Road, Patilgarh . . . (Reg.)
- 2 S. Gupta, Agent, Government Publications, Near P.O. Majith Mandi . . . (Reg.)
- 3 Amar Nath & Sons, Near P.O. Majith Mandi . . . (Reg.)

ANAND—

- 1 Vijaya Stores, Station Road (Rest.)
- 2 Charto Book Stall, Tulsi Sadan, Stn. Road (Rest.)

ASANSOL—D.N. Roy & R.K. Roy, Booksellers, Atwal Building . (Rest.)

BANGALORE—

- 1 The Bangalore Legal Practitioner Co-op Society Ltd., Bar Association Building (Reg.)
- 2 S.S. Book Emporium, 118, Mount Joy Road (Reg.)
- 3 The Bangalore Press, Lake View, Mysore Road, P.O. Box 507 . (Reg.)
- 4 The Standard Book Depot, Avenue Road (Reg.)
- 5 Vichara Sahitya Private Ltd., Balepet (Reg.)
- 6 Makkala Pustaka Press, Balamandira, Gandhinagar . . . (Reg.)
- 7 Maruthi Book Depot, Avenue Road (Rest.)
- 8 International Book House, P. Ltd., 4-F, Mahatma Gandhi Road (Reg.)
- 9 Navakarnataka Pubns. Private Ltd., Majestic Circle . . (Rest.)

BAREILLY—Agarwal Brothers, Bara Bazar (Reg.)

BARODA—

- 1 Shri Chandrakant Mohan Lal Shah, Raopura (Rest.)
- 2 Good Companions Booksellers, Publishers & Sub-Agent . (Rest.)
- 3 New Medical Book House, 540, Madan Zampa Road . . . (Rest.)

BEAWAR—The Secretary, S.D. College, Co-operative Stores Ltd. (Rest.)

BELGHARIA—Granthlok, Antiquarian Booksellers & Publishers (24 Parganas), 5/1, Amlica Mukherjee Road (Reg.)

BAGALPUR—Paper Stationery Stores, D. N. Singh Road . . . (Reg.)

BHOPAL—

- 1 Superintendent, State Government Press
- 2 Lyall Book Depot, Mohd. Din Building, Sultanian Road . . (Reg.)
- 3 Delite Books, Opp. Bhopal Talkies (Rest.)

BHUBANESWAR—Ekamra Vidyabhaban, Eastern Tower, Room No. 3 (Rest.)

BIJAPUR—Shri D.V. Deshpande, Recognised Law Booksellers, Prop. Vinod Book Depot, Near Shirasetti Chowk (Rest.)

BIKANER—Bhandani Bros. (Rest.)

BILASPUR—Sharma Book Stall, Sadar Bazar (Rest.)

BOMBAY—

- 1 Supdt. Printing and Stationery, Queens Road
- 2 Charles Lambert and Co., 101, Mahatma Gandhi Road . . (Reg.)
- 3 Co-operator's Book Depot, 5/32 Ahmed Sailor Bldg., Dadar . (Reg.)
- 4 Current Book House, Maruti Lane, Raghunath Dadaji St. . (Reg.)
- 5 Current Technical Literature Co. P. Ltd., India House, 1st Floor (Reg.)
- 6 International Book House Ltd., 9, Ash Lane, M.G. Road . . (Reg.)
- 7 Lakkani Book Depot, Girgaum (Reg.)
- 8 Elpees Agencies, 24, Bhangwadi, Kalbadevi (Reg.)
- 9 P.P.H. Book Stall, 190-B, Khetwadi Main Road (Reg.)
- 10 New Book Co., 188-190, Dr. Dadabhai Naoroji Road . . . (Reg.)
- 11 Popular Book Depot, Lamington Road (Reg.)
- 12 Sunder Das Gian Chand, 601, Girgaum Road, Near Princess Street (Reg.)
- 13 D.B. Taraporewala Sons and Co. (P) Ltd., 210, Dr. Dadabhai Naoroji Road (Reg.)
- 14 Thacker and Co., Rampart Row (Reg.)
- 15 N.M. Tripathi Private Ltd., Princess Street (Reg.)
- 16 The Kothari Book Depot, King Edward Road (Reg.)
- 17 P.H. Rama Krishna and Sons, 147, Rajaram Bhuvan, Shivaji Park Road, No. 5 (Rest.)
- 18 C. Jamnadas and Co., Booksellers, 146-C, Princess St. . . (Reg.)
- 19 Indo Nath and Co., A-6, Daulat Nagar Borivli (Reg.)
- 20 Minerva Book Shop, Shop No. 1/80, N. Subhas Road . . . (Reg.)
- 21 Academic Book Co., Association Building, Girgaum Road . (Rest.)
- 22 Dominion Publishers, 23, Bell Building, Sir P.M. Road . . (Rest.)
- 23 Bombay National History Society, 91 Walkeshwar Road . . (Rest.)
- 24 Downadeo and Co. 16, Nazaria Building, Ballard Estate . . (Rest.)
- 25 Asian Trading Co., 310, the Miraball, P.B. 1505 (Rest.)

CALCUTTA—

- 1 Chatterjee and Co., 3/1, Bacharam Chatterjee Lane . . . (Reg.)
- 2 Dass Gupta and Co. Ltd., 54/3, College Street (Reg.)
- 3 Hindu Library, 69-A, Bolaram De Street (Reg.)
- 4 S.K. Lahiri and Co. Private Ltd., College Street (Reg.)
- 5 M.C. Sarkar and Sons Private Ltd., 14, Bankim Chatterjee Street (Reg.)
- 6 W. Newman and Co. Ltd., 3, Old Court House Street . . . (Reg.)
- 7 Oxford Book and Stationery Co., 17, Park Street (Reg.)
- 8 R. Chambray and Co. Ltd., Kent House, P.33, Mission Road Extension (Reg.)
- 9 S.C. Sarkar and Sons Private Ltd., J.C. College Square . . (Reg.)
- 10 Thacker Spink and Co. (1933) P. Ltd., 3, Esplanade East . . (Reg.)
- 11 Firma K.L. Mukhopadhyaya, 6/1A, Bancha Ram Akbar Lane . (Reg.)
- 12 K.K. Roy, P. Box No. 10210, Calcutta-19 (Rest.)
- 13 Sm. P.D. Upadhyay, 77, Mukhtaram Babu Street (Rest.)
- 14 Universal Book Dist., 8/2, Hastings Street (Rest.)
- 15 Modern Book Depot, 9, Chowringhee Centre (Rest.)
- 16 Soor and Co., 125, Canning Street (Reg.)
- 17 S. Bhattacharjee, 49 Dharamtala Street (Rest.)
- 18 Mukherjee Library, 10 Sarba Khan Road (Reg.)
- 19 Current Literature Co. 208, Mahatma Gandhi Road . . . (Reg.)
- 20 The Book Depository, 4/1, Madan Street (1st Floor) . . . (Rest.)
- 21 Scientific Book Agency, Netaji Subhas Road (Rest.)
- 22 Reliance Trading Co., 17/1 Banku Bihari Ghose Lane, District Howrah (Rest.)
- 23 Indian Book Dist. Co., 6512 Mahatma Gandhi Road . . . (Rest.)

CALICUT—Touring Book Stall.

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CHANDIGARH—

- 1 Supdt. Govt. Printing and Stationery, Punjab (Reg.)
- 2 Jain Law Agency, Flat No. 8, Sector No. 22 (Reg.)
- 3 Rama News Agency, Bookseller, Sector No. 22 (Reg.)
- 4 Universal Book Store, Booth 25, Sector 22D (Rest.)
- 5 English Book Shop, 34, Sector 22D (Rest.)
- 6 Mehta Bros., 15-Z, Sector 22B (Rest.)
- 7 Tandan Book Depot, Shopping Centre, Sector 16 (Rest.)
- 8 Kailash Law Publishers, Sector 22B (Rest.)

CHHINDWARA—

- 1 The Verma Book Depot (Rest.)

COCHIN—

- 1 Saraswat Corporation Ltd., Palliarakav Road (Reg.)

CUTTACK—

- 1 Press Officer, Orissa Sectt. (Reg.)
- 2 Cuttack Law Times (Reg.)
- 3 Prabhat K. Mahapatra, Mangalabag, P.B. 35 (Reg.)
- 4 D. P. Sur & Sons, Mangalabag (Rest.)
- 5 Ukal Stores, Balu Bazar (Rest.)

DEHRA DUN—

- 1 Jugal Kishore & Co., Rajpur Road (Reg.)
- 2 National News Agency, Paltan Bazar (Reg.)
- 3 Bishan Singh and Mahendra Pal Singh, 318, Chukhuwala (Reg.)
- 4 Utam Pustak Bhandar, Paltan Bazar (Rest.)

DELHI—

- 1 J.M. Jaina & Brothers, Mori Gate (Reg.)
- 2 Atma Ram & Sons, Kashmere Gate (Reg.)
- 3 Federal Law Book Depot, Kashmere Gate (Reg.)
- 4 Bahri Bros., 188, Lajpat Rai Market (Reg.)
- 5 Bawa Harkishan Dass Bedi (Vijaya General Agencies) P.B. 2027, Ahata Kedara, Chamalian Road (Reg.)
- 6 Book-Well, 4, Sant Narankari Colony, P.B. 1565 (Reg.)
- 7 Imperial Publishing Co., 3, Faiz Bazar, Daryaganj (Reg.)
- 8 Metropolitan Book Co., 1, Faiz Bazar (Reg.)
- 9 Publication Centre, Subzimandi (Reg.)
- 10 Youngman & Co., Nai Sarak (Reg.)
- 11 Indian Army Book Depot, 3, Daryaganj (Reg.)
- 12 All India Educational Supply Co., Shri Ram Buildings, Jawahar Nagar (Rest.)
- 13 Dhanwant Medical & Law Book House, 1522, Lajpat Rai Market (Rest.)
- 14 University Book House, 15, U.B., Bangalore Road, Jawahar Nagar (Rest.)
- 15 Law Literature House 2646, Balimaran (Rest.)
- 16 Summer Brothers, P.O. Birla Lines (Rest.)
- 17 Universal Book & Stationery Co., 16 Netaji Subhash Marg (Reg.)
- 18 B. Nath & Bros., 3808, Charkhawalan (Chowri Bazar) (Rest.)
- 19 Rajkamal Prakashan P. Ltd., 8, Faiz Bazar (Reg.)
- 20 Premier Book Co., Printers, Publishers & Booksellers, Nai Sarak (Rest.)
- 21 Universal Book Traders, 80, Gokhale Market (Reg.)
- 22 Tech. & Commercial Book Coy., 75, Gokhale Market (Rest.)
- 23 Saini Law Publishing Co., 1416, Chabiganj, Kashmere Gate (Rest.)
- 24 G.M. Ahuja, Booksellers & Stationers, 309, Nehru Bazar (Rest.)
- 25 Sat Narain & Sons, 3141, Mohd. Ali Bazar, Mori Gate (Rest.)
- 26 Kitab Mahal (Wholesale Div.) P. Ltd., 28, Faiz Bazar (Reg.)
- 27 Hindu Sahitya Sansar, Nai Sarak (Rest.)
- 28 Munshi Ram Manohar Lal Oriental Booksellers & Publishers, P. B. 1165, Nai Sarak (Rest.)
- 29 K. L. Seth, Suppliers of Law, Commercial Tech. Books, Shanti Nager, Ganeshpura (Rest.)
- 30 Adarsh Publishing Service, 5A/10, Ansari Road (Rest.)

DHANBAD—

- 1 Ismag Co-operative Stores Ltd., P.O. Indian School of Mines (Reg.)
- 2 New Sketch Press, Post Box 26 (Rest.)

DHARWAR—

- 1 The Agricultural College Consumers Co-op. Society (Rest.)
- 2 Rameshraya Book Depot, Subash Road (Rest.)
- 3 Karnatakaya Sahitya Mandir of Publishers and Booksellers (Rest.)

ERNAKULAM—

- 1 Pai & Co., Cloth Bazar Road (Rest.)
- 2 South India Traders C/o, Constitutional Journal (Reg.)

- 1 FEROPUR—English Book Depot, 78, Jhoke Road (Reg.)
- 2 GAUHATI—Mokshada Pustakalaya (Reg.)
- 3 GAYA—Sahitya Sadan, Gautam Budha Marg (Reg.)
- 4 GHAZIABAD—Jayana Book Agency (Rest.)
- 5 GORAKHPUR—Vishwa Vidyalyaya Prakashan, Nakhes Road (Reg.)
- 6 GUDUR—The General Manager, The N.D.C. Publishing & Ptg. Society Ltd. (Rest.)
- 7 GUNTUR—Book Lovers Private Ltd., Kadriguda, Chowrasta (Reg.)
- 8 GWALIOR—

- 1 Supdt., Printing & Stationery, M.B. (Reg.)
- 2 Loyal Book Depot, Patankar Bazar, Lashkar (Reg.)
- 3 M. C. Daftari, Prop. M.B. Jain & Bros., Booksellers, Sarafa Lashkar (Rest.)

- 1 HUBLI—Pervaje's Book House, Koppikar Road (Reg.)

HYDERABAD—

- 1 Director, Govt. Press (Reg.)
- 2 The Swaraj Book Depot, Lakdikapul (Rest.)
- 3 Book Lovers Private Ltd. (Rest.)
- 4 Labour Law Publications, 873, Sultan Bazar (Rest.)

- 1 IMPHAL—Tikendra & Sons Booksellers (Rest.)

INDORE—

- 1 Wadhawa & Co., 56, M.G. Road (Reg.)
- 2 Swarup Brothers, Khajuri Bazar (Reg.)
- 3 Madhya Pradesh Book Centre, 14, Ahilya Pura (Rest.)
- 4 Modern Book House, Shiv Vilas Palace (Rest.)
- 5 Navyug Sahitya Sadan, Publishers & Booksellers, 10, Khajuri Bazar (Rest.)

JABALPUR—

- 1 Modern Book House, 286, Jawaharganj (Reg.)
- 2 National Book House, 135, Jai Parkash Narain Marg (Rest.)

JAIPUR—

- 1 Government Printing and Stationery Department, Rajasthan (Reg.)
- 2 Bharat Law House, Booksellers & Publishers, Opp. Prem Prakash Cinema (Reg.)
- 3 Garg Book Co., Tripolia Bazar (Reg.)
- 4 Vani Mandir, Sawai Mansingh Highway (Reg.)
- 5 Kalyan Mal & Sons, Tripolia Bazar (Reg.)
- 6 Popular Book Depot, Chaura Rasta (Rest.)
- 7 Krishna Book Depot, Chaura Rasta (Rest.)
- 8 Dominion Law Depot, Shah Building, P.B. No. 23 (Rest.)

- 1 JAMNAGAR—Swadeshi Vastu Bhandar (Reg.)

JAMSHEDPUR—

- 1 Amar Kitab Ghar, Diagonal Road, P.B. 78 (Reg.)
- 2 Gupta Stores, Dhatkidih (Reg.)
- 3 Sanyal Bros, Booksellers & News Agents, Bistapur Market (Rest.)

- 1 JAWALAPUR—Sahyog Book Depot (Rest.)

JHUNJHUNU—

- 1 Shashi Kumar Sarat Chand (Rest.)
- 2 Kapram Prakashan Prasaran, 1/90, Namdha Niwas Azad Marg (Reg.)

JODHPUR—

- 1 Dwarka Das Rathi, Wholesale Books and News Agents (Reg.)
- 2 Kitab-Ghar, Sojati Gate (Reg.)
- 3 Choppra Brothers, Tripolia Bazar (Rest.)

JULLUNDUR—

- 1 Hazooria Bros., Mai Hiran Gate (Rest.)
- 2 Jain General House, Bazar Bansanwala (Reg.)
- 3 University Publishers, Railway Road (Rest.)

KANPUR—

- 1 Advani & Co., P. Box. 100, The Mall (Reg.)
- 2 Sahitya Niketan, Shradhanand Park (Reg.)
- 3 The Universal Book Stall, The Mall (Reg.)
- 4 Raj Corporation, Raj House, P.B. 200, Chowk (Rest.)

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- 1 KARUR—Shri V. Nagaraja Rao, 26, Srinivasapuram (Rest.)

- 2 KODARMA—The Bhagwati Press, P.O. Jhumri Tilaiya, Dt. Hazaribagh (Reg.)

- 3 KOLHAPUR—Maharashtra Granth Bhandar, Mahadwar Road (Rest.)

- 4 KOTA—Kota Book Depot (Rest.)

- 5 KUMTA—S.V. Kamat, Booksellers & Stationers (N. Kanara) (Reg.)

LUCKNOW—

- 1 Soochna Sahitya Depot (State Book Depot) (Reg.)
- 2 Balkrishna Book Co. Ltd., Hazratganj (Reg.)
- 3 British Book Depot, 84, Hazratganj (Reg.)
- 4 Ram Advani, Hazratganj, P.B. 154 (Reg.)
- 5 Universal Publishers (P) Ltd., Hazratganj (Reg.)
- 6 Eastern Book Co., Lalbagh Road (Reg.)
- 7 Civil & Military Educational Stores, 106/B, Sadar Bazar (Rest.)
- 8 Acquarium Supply Co., 213, Faizabad Road (Rest.)
- 9 Law Book Mart, Amin-Ud-Daula Park (Rest.)

LUDHIANA—

- 1 Lyall Book Depot, Chaura Bazar (Reg.)
- 2 Mohindra Brothers, Katcheri Road (Rest.)
- 3 Nanda Stationery Bhandar, Pustak Bazar (Rest.)
- 4 The Pharmacy News, Pindi Street (Rest.)

MADRAS—

- 1 Supdt., Govt. Press, Mount Road (Reg.)
- 2 Account Test Institute, P.O. 760, Emgore (Reg.)
- 3 C. Subbiah Chetty & Co., Triplicane (Reg.)
- 4 K. Krishnamurthy, Post Box 384 (Reg.)
- 5 Presidency Book Supplies, 8, Pycrofts Road, Triplicane (Reg.)
- 6 P. Vardachary & Co., 8, Linghi Chetty Street (Reg.)
- 7 Palani Parchuram, 3, Pycrofts Road, Triplicane (Reg.)
- 8 NCBH Private Ltd., 199, Mount Road (Rest.)
- 9 V. Sadanand. The Personal Bookshop, 10, Congress Building, 111, Mount Road (Rest.)

MADUARI—

- 1 Oriental Book House, 258, West Masi Street (Reg.)
- 2 Vivekananda Press, 48, West Masi Street (Reg.)

MANDYA SUGAR TOWN—

- 1 K.N. Narimhe Gowda & Sons (Reg.)

MANGALORE—

- 1 U.R. Shenoye Sons, Car Street, P. Box. 128 (Reg.)

MANJESHWAR—

- 1 Mukenda Krishna Nayak (Rest.)

MATHURA—

- 1 Rath & Co., Tilohi Building, Bengali Ghat (Rest.)

MEERUT—

- 1 Prakash Educational Stores, Subhas Bazar (Reg.)

- 2 Hind Chitra Press, West Kutchery Road (Reg.)

- 3 Loyal Book Depot, Chhippi Tank (Reg.)

- 4 Bharat Educational Stores, Chhippi Tank (Rest.)

- 5 Universal Book Depot, Booksellers & News Agents (Rest.)

MONGHYR—

- 1 Anusandhan, Minerva Press Building (Rest.)

MUSOORIE—

- 1 Cambridge Book Depot, The Mall (Rest.)

- 2 Hind Traders (Rest.)

MUZAFFARNAGAR—

- 1 Mittal & Co., 85-C, New Mandi (Rest.)

- 2 B.S. Jain & Co., 71, Abupura (Rest.)

MUZAFFARPUR—

- 1 Scientific & Educational Supply Syndicate (Reg.)

- 2 Legal Corner, Tikmanio House, Amgola Road (Rest.)

- 3 Tirhut Book Depot (Rest.)

MYSORE—

- 1 H. Venkataramiah & Sons, New Statue Circle (Reg.)

- 2 Peoples Book House, Opp. Jagan Mohan Palace (Reg.)

- 3 Geeta Book House, Booksellers & Publishers, Krishnamurthipuram (Rest.)

- 4 News Paper House, Lansdowne Building (Rest.)

- 5 Indian Mercantile Corporation, Toy Palace Ramvilas (Rest.)

NADIAD—

- 1 R.S. Desay, Station Road (Rest.)

NAGPUR—

- 1 Supdt., Govt. Press & Book Depot (Reg.)
- 2 Western Book Depot, Residency Road (Reg.)
- 3 The Asstt. Secretary, Mineral Industry Association, Mineral House (Rest.)

NAINI TAL—

- 1 Coural Book Depot, Bara Bazar (Rest.)

NANDED—

- 1 Book Centre, College Law General Books, Station Road (Rest.)
- 2 Hindustan General Stores, Paper & Stationery Merchants, P.B. No. 51 (Rest.)
- 3 Sanjoy Book Agency, Vazirabad (Rest.)

NEW DELHI—

- 1 Amrit Book Co., Connaught Circus (Reg.)
- 2 Bhawani & Sons, 8F, Connaught Place (Reg.)
- 3 Central News Agency, 23/90, Connaught Circus (Reg.)
- 4 Empire Book Depot, 278, Aliganj (Reg.)
- 5 English Book Stores, 7-L, Connaught Circus, P.O.B. 328 (Reg.)
- 6 Faqir Chand & Sons, 15-A, Khan Market (Reg.)
- 7 Jain Book Agency, C-9, Prem House, Connaught Place (Reg.)
- 8 Oxford Book & Stationery Co., Scindia House (Reg.)
- 9 Ram Krishna & Sons (of Lahore), 16/B, Connaught Place (Reg.)
- 10 Sikh Publishing House, 7-C, Connaught Place (Reg.)
- 11 Suneja Book Centre, 24/90, Connaught Circus (Reg.)
- 12 United Book Agency, 31, Municipal Market, Connaught Circus (Reg.)
- 13 Jayana Book Depot, Chhaparwala Kuan, Karol Bagh (Reg.)
- 14 Navayug Traders, Desh Bandhu Gupta Road, Dev Nagar (Reg.)
- 15 Saraswati Book Depot, 15, Lady Harding Road (Reg.)
- 16 The Secretary, Indian Met. Society, Lodi Road (Reg.)
- 17 New Book Depot, Latest Books, Periodicals, Sty. & Novelles P.B. 96, Connaught Place (Reg.)
- 18 Mehra Brothers, 50-G, Kalkaji (Reg.)
- 19 Luxmi Book Stores, 42, Janpath (Rest.)
- 20 Hindi Book House, 82, Janpath (Rest.)
- 21 People Publishing House (P) Ltd., Rani Jhansi Road (Reg.)
- 22 R.K. Publishers, 23, Beadon Pura, Karol Bagh (Rest.)
- 23 Sharma Bros., 17, New Market, Moti Nagar (Reg.)
- 24 Aapki Dukan, 5/5777, Dev Nagar (Rest.)
- 25 Sarvodaya Service, 66A-1, Rohtak Road, P.B. 2521 (Rest.)
- 26 H. Chandson, P.B. No. 3034 (Rest.)
- 27 The Secretary, Federation of Association of Small Industry of India, 23-B/2, Rohtak Road (Rest.)
- 28 Standard Booksellers & Stationers, Palam Enclave (Rest.)
- 29 Lakshmi Book Depot, 57, Regarpura (Rest.)
- 30 Sant Ram Booksellers, 16, New Municipal Market, Lody Colony (Rest.)

PANJIM—

- 1 Singhals Book House, P.O.B. 70, Near the Church (Rest.)
- 2 Sagoon Gaydev Dhoud, Booksellers, 5-7 Rua 3 Ide Jameria (Rest.)

PATHANKOT—

- 1 The Krishna Book Depot, Main Bazar (Rest.)

PATIALA—

- 1 Supdt., Bhupendra State Press (Reg.)
- 2 Jain & Co., 17, Shah Nashin Bazar (Reg.)

PATNA—

- 1 Supdt., Govt. Printing (Bihar) (Reg.)
- 2 J.N.P. Agarwal & Co., Padri-Ki-Haveli, Raghunath Bhawan (Reg.)
- 3 Luxmi Trading Co., Padri-Ki-Haveli (Reg.)
- 4 Moti Lal Banarsi Dass, Bankipore (Reg.)
- 5 Bengal Law House, Chowhatta (Rest.)

PITHORGARH—

- 1 Maniram Punetha & Sons (Rest.)

PONDICHERY—

- 1 M/s. Honesty Book House, 9 Rue Duplix (Rest.)

POONA—

- 1 Deccan Book Stall, Deccan Gymkhana (Reg.)
- 2 Imperial Book Depot, 266, M.G. Road (Reg.)
- 3 International Book Service, Deccan Gymkhana (Reg.)
- 4 Raka Book Agency, Opp. Natu's Chawl, Near Appa Balwant Chowk (Reg.)
- 5 Utility Book Depot, 1339, Shivaji Nagar (Rest.)

PUDUKOTTAI—

- 1 Shri P.N. Swaminathan Sivam & Co., East Main Road (Rest.)

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RAJKOT—Mohan Lal Dasaabhai Shah, Booksellers and Sub-Agents (Reg.)

RANCHI—

- 1 Crown Book Depot, Upper Bazar (Reg.)
- 2 Pustak Mahal, Upper Bazar (Rest.)

REWA—Sundt., Govt. State Emporium V.P. (Rest.)

ROURKELA—The Rourkela Review (Rest.)

SAHARANPUR—Chandra Bharata Pustak Bhandar, Court Road (Reg.)

SECUNDERABAD—Hindustan Diary Publishers, Market Street (Rest.)

SILCHAR—Shri Nishit Sen Nazirpatti (Rest.)

SIMLA—

- 1 Supdt., Himachal Pradesh Govt. (Reg.)
- 2 Minerva Book Shop, The Mall (Reg.)
- 3 The New Book Depot, 79, The Mall (Rest.)

SINNAR—Shri N.N. Iakhadi, Agent, Times of India, Sinnar (Nasik) (Rest.)

SHILLONG—

- 1 The Officer-in-Charge, Assam Govt. B.D. (Rest.)
- 2 Chapla Bookstall, P.B. No. 1 (Reg.)

SONEPAT—United Book Agency (Reg.)

SRINAGAR—The Kashmir Bookshop, Residency Road (Reg.)

SURAT—Shri Gajanan Pustakalaya, Tower Road (Reg.)

TIRUCHIRAPALLI—

- 1 Kalpana Publishers, Wosiur (Reg.)
- 2 S. Krishnaswami & Co., 35, Subhash Chander Bose Road (Reg.)
- 3 Palaniappa Bros. (Rest.)

TRIVANDRUM—

- 1 International Book Depot, Main Road (Reg.)
- 2 Reddear Press & Book Depot, P.B. No. 4 (Rest.)

TUTICORIN—Shri K. Thiagarajan, 10-C, French Chapal Road (Rest.)

UDAIPUR—

- 1 Jagdish & Co., Inside Surajapole (Rest.)
- 2 Book Centre, Maharana, Bhopal Consumers' Co-op. Society Ltd. (Rest.)

UJJAIN—Manak Chand Book Depot, Sati Gate (Rest.)

VARANASI—

- 1 Students, Friends & Co., Lanka (Rest.)
- 2 Chowkhamba Sanskrit Series Office, Gopal Mandir Road, P.B. 8 (Reg.)
- 3 Globe Book Centre (Rest.)
- 4 Kohinoor Stores, University Road, Lanka (Reg.)
- 5 B.H.U. Book Depot (Rest.)

VELLORE—A. Venkatasubhan, Law Booksellers (Reg.)

VIJAYAWADA—The Book & Review Centre, Eluru Road, Government (Rest.)

VISAKHAPATNAM—

- 1 Gupta Brothers, Vizia Building (Reg.)
- 2 Book Centre, 11/97, Main Road (Reg.)
- 3 The Secy., Andhra University, General Co-op. Stores Ltd. (Rest.)

VIZIANAGARAM—Sarda & Co. (Rest.)

WARDHA—Swarajeya Bhandar, Bhorji Market (Reg.)

Railway Bookstall Holders

- 1 S/S. A.H. Wheeler & Co., 15, Elgin Road, Allahabad
- 2 Gahlot Bros., K. E. M. Road, Bikaner
- 3 Higginbothams & Co. Ltd., Mount Road, Madras
- 4 M. Gulab Singh & Sons Private Ltd., Mathura Road, New Delhi

Foreign

- 1 S/S Education Enterprise Private Ltd., Kathumandu (Nepal)
- 2 S/S. Aktie Bologat, C.E. Frizes Kungl. Hovobokhandel, Fredsgatan-2 Box 1656, Stockholm-16 (Sweden).
- 3 Reise-und Verkehrsverlag Stuttgart, Post 730, Gutenbergstra 21, Stuttgart No. 11245, Stuttgart den (Germany West)
- 4 Shri Iswar Subramanyam 452, Reversite Driv Apt. 6, New York, 27 NWY
- 5 The Proprietor, Book Centre, Lakshmi Mansons, 49, The Mall, Lahore (Pakistan)

On S. and R. Asia

- 1 The Head Clerk, Govt. Book Depot, Ahmedabad
- 2 The Asstt. Director, Extension Centre, Kapileswar Road, Belgaum
- 3 The Employment Officer, Employment Exchange, Dhar
- 4 The Asstt. Director, Footwear Extension, Centre, Polo Ground No. 1, Jodhpur
- 5 The O.I/C., Extension Centre, Club Road, Muzaffarpur.
- 6 The Director, Indian Bureau of Mines, Govt. of India, Ministry of Mines and Fuel, Nagpur
- 7 The Asstt. Director, Industrial Extension Centre, Nadiad (Gujarat)
- 8 The Head Clerk, Photocopyographic Press, 5, Finance Road, Poona
- 9 Govt. Printing & Stationery, Rajkot
- 10 The O. I/C. Extension Centre, Industrial Estate, Kokar, Ranchi
- 11 The Director, S.I.S. Industrial Extension Centre, Udhna, Surat.
- 12 The Registrar of Companies, Narayani Building, 27, Erabourne Road Calcutta-1
- 13 The Registrar of Companies, Kerala, 350, Feet Road, Ernakulam.
- 14 The Registrar of Companies, H. No. 3-5-83, Hyderguda, Hyderabad
- 15 The Registrar of Companies, Assam, Manipur and Tripura, Shillong
- 16 The Registrar of Companies, Sunlight Insurance Building, Ajmeri Gate Extension, New Delhi.
- 17 The Registrar of Companies, Punjab and Himachal Pradesh, Link Road, Jullundur City.
- 18 The Registrar of Companies, Bihar, Jamal Road, Patna-1
- 19 The Registrar of Companies, Raj & Ajmer; Sri Kamta Prasad House, 1st Floor 'C' Scheme, Ashok Marg, Jaipur
- 20 The Registrar of Companies, Andhra Bank Building, 6, Linghi Chetty Street, P.B. 1530, Madras
- 21 The Registrar of Companies, Mahatma Gandhi Road, West Cott. Bldg. P.B. No. 334, Kanpur
- 22 The Registrar of Companies, Everest 100, Marine Drive, Bombay
- 23 The Registrar of Companies, 162, Brigade Road, Bangalore
- 24 The Registrar of Companies, Gwalior
- 25 The Asstt. Director, Extension Centre, Bhuli Road, Dhanbad
- 26 The Registrar of Companies, Orissa, Cuttack Chandi, Cuttack
- 27 The Registrar of Companies, Gujarat State, Gujarat Samachar Building, Ahmedabad
- 28 Publication Division, Sale Depot, North Block, New Delhi
- 29 The Development Commissioner, Small Scale Industries, New Delhi
- 30 The O. I/C., University Employment Bureau, Lucknow
- 31 O. I/C. S.I.S.I. Extension Centre, Malda
- 32 O. I/C. S.I.S.I. Extension Centre, Habra, Tabaluria, 24-Parganas
- 33 O. I/C. S.I.S.I. Model Carpentry Workshop, Piyali Nagar, P.O. Burni-pur
- 34 O. I/C. S.I.S.I. Chrontanning Extension Centre Tangra 33, North Topsia Road, Calcutta-46.
- 35 O. I/C. S.I.S.I. Extension Centre (Footwear), Calcutta
- 36 Asstt. Director, Extension Centre, Hyderabad
- 37 Asstt. Director, Extension, Centre, Krishna Distt. (A.P.)
- 38 Employment Officer, Employment Exchange, Jhabua
- 39 Dy. Director Incharge, S.I.S.I., C/o Chief Civil Admn. Goa, Panjim
- 40 The Registrar of Trade Unions, Kanpur.
- 41 The Employment Officer, Employment Exchange, Gopal Bhavan, Morina
- 42 The O. I/C. State Information Centre, Hyderabad
- 43 The Registrar of Companies, Pondicherry.
- 44 The Asstt. Director of Publicity and Information, Vidhana Sabha (P.B. 271) Bangalore

For Local Sale

- 1 Govt. of India, Kitab Mahal, Janpath, Opp. India Coffee House, New Delhi
- 2 Govt. of India Book Depot, 8, Hastings Street, Calcutta
- 3 High Commissioner for India in London, India House, London, W.C. 2.