सत्यमेव जयते

CENSUS OF INDIA 1961

VOLUME IV

BIHAR

C

PART IX

CENSUS ATLAS OF BIHAR

S. D. PRASAD

OF THE INDIAN ADMINISTRATIVE SERVICE

Superintendent of Census Operations, Bihar

R 1023

With the compliments of

The Superintendent of Census Operations, Bihar

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1961 CENSUS PUBLICATIONS BIHAR

(All the Census Publications of this State will bear Vol. No. IV)

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PART I-B	..	Report on Vital Statistics of Bihar, 1951—60
PART I-C	..	Subsidiary Tables of 1961 including reprints, if any, from previous Census reports†
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PART II-B (i)	..	Economic Tables (B-I to B-IV and B-VII)†
PART II-B (ii)	..	Economic Tables (B-V, B-VI, B-VIII and B-IX)†
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PART II-D	..	Migration Tables†
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PART III (ii)	..	Household Economic Tables (B-XV to B-XVII)†
PART IV-A	..	Report on Housing and Establishments†
PART IV-B	..	Housing and Establishment Tables†
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PART V-B	..	Ethnographic Notes on Scheduled Castes and Scheduled Tribes
PART VI	..	Village Surveys ‡ (Monographs on 37 selected villages)
PART VII-A	..	Selected Crafts of Bihar
PART VII-B	..	Fairs and Festivals of Bihar
PART VIII-A	..	Administration Report on Enumeration† } (Not for sale)
PART VIII-B	..	Administration Report on Tabulation* } (Not for sale)
PART IX	..	Census Atlas of Bihar **

State Government Publications

17 Volumes of District Census Handbooks $

* In Press
† Already printed
‡ Nos. 1—4 of the series already printed and 5—8 in the Press
** Present Volume
$ The Handbooks of Patna, Gaya, Shahabad, Saran, Champaran, Muzaffarpur, Monghyr, Bhagalpur, Saharsa, Santal Parganas, Palamau, Hazaribagh, Dhanbad and Singhbhum already printed and those of Darbhanga, Purnea and Ranchi under print.

FOREWORD

Few people realise, much less appreciate, that apart from the Survey of India and the Geological Survey, the Census of India had been perhaps the largest single producer of maps of the Indian subcontinent. Intimate collaboration between geographer and demographer began quite early in the modern era, almost two centuries before the first experiments in a permanent decennial census were made in the 1850's. For example, the population estimates of Fort St. George, Madras, made in 1639 and 1648, and of Masulipatnam and Bombay by Dr. John Fryer around 1672-73 were supported by cartographic documents of no mean order. The first detailed modern maps, the results of Major James Rannell's stupendous Survey of 1767—74, were published in 1778—1780 and Henry Taylor Colebrooke, almost our first systematic demographer, was quick to make good use of them by making estimates of population in the East India Company's Possessions in the 1780's. Upjohn's map of Calcutta City, drawn in 1792-93, reprinted in the Census Report of Calcutta for 1951, gives an idea of the standards of cartographic excellence reached at that period. In the first decade of the nineteenth century, Francis Buchanan Hamilton improved upon Colebrooke's method in which he was undoubtedly helped by the improved maps prepared for the areas he surveyed.

It is possible that the Great Revenue Survey, begun in the middle of the last century, offered the best guarantee of the success of decennial population censuses proposed shortly before the Mutiny of 1857. In the experimental censuses organised between 1865 and 1872 the Survey of India, the Provincial Surveys and Census of India struck an informal but stable partnership which has been fascinatingly described by R. H. Phillimore in his monumental four-volume work on the *Historical Records of the Survey of India*. This partnership continues to this day. On the eve of each census, the Census of India proceeds by making use of (*a*) the cadastral surveys prepared by the Provincial (now State) Surveys and (*b*) the topographical surveys of the Survey of India. In the course of its decennial operation, the Census of India begins by revising and bringing up-to-date the minute jurisdictional changes made during the decade. Next, and equally important, it revises the lists of inhabited and uninhabited villages and of towns and cities. These are placed at the disposal of the Survey of India. Thirdly, at each decade the Census of India itself produces maps of its own which serve to strengthen the study of geography at official and academic levels. These are both numerous and of great range and variety. What is more, they are often unsurpassed for their wealth of authentic regional detail. For proof, if proof were needed, one has only to turn to the geographical maps published in the 1872 Census Reports of North-West Provinces, Cochin, Bengal and the very excellent volume of maps of different Collectorates of the Bombay Presidency, published as Part IV of the 1872 Census Report of Bombay, or the fine taluk maps of Mysore State published in the Census Report of 1891. The high

watermark of a skilful fusion of topographical and thematic maps was reached in maps published in the encyclopaedic Linguistic Survey of India and the State Census Reports of 1931 and the special All India Ethnographic Appendix published in 1933. In fact, the particular genius of the Census of India seems to lie as much in the high quality of its themato-topographic maps as in the pure thematic maps so essential for census analysis and presentation.

The restricted programme in 1941 on account of World War II temporarily restrained the cartographic activities of the Census of India, although several excellent contributions were made. One of the major contributions of the 1951 Census was the excellence of detail achieved in the great bulk of taluk/tehsil maps published in the District Handbooks.

The Census of India has been a discontinuous affair upto 1961. The Census Commissioner for India in 1941 compared it to the mythical phoenix. The census starts every time with a very limited assignment, but ends up, thanks to the vistas that open up with the progress of the work and the hunger they stimulate, by becoming the most fruitful single source of information about the country.

The seeds of the 1961 Census Atlas Project were unobtrusively sown in para 42 of the Registrar General's first 1961 Census circular of March, 1959 to State Census Superintendents as follows :

> It will be very useful to have a map for every village and ward of a town showing the broad layout of the village and the house numbers shown therein. The map need not be drawn to scale but a map large enough to show the house numbers would be sufficient. A map of this kind, if prepared, will also help the maintenance of house numbers.

This suggestion was wholly accepted in the First Conference of State Census Superintendents held in September, 1959, which authorise State Census Offices "to appoint one or two good draftsmen for the preparation of experimental maps, charts, graphs and histograms for their own use". Note was taken of 'the serious but avoidable blemish' left in some census years on account of 'the lack of good maps and charts'.

That the seeds did not fall on stony ground was evident from the enthusiasm with which the States welcomed the Registrar General's next circular laying down the details to be incorporated in the village maps. It caught their imagination so well that many State Census Superintendents added of their own accord to the details stipulated by the Registrar General's Office. A zest was thus created which whetted the appetite it fed.

By August, 1960 several State Census Superintendents had set up their own Map Sections. The experience and confidence gained in the process encouraged a

general desire at the Second Census Conference in August, 1960 to go in for a much enlarged programme of map production than had been originally proposed. It was no longer a question of selling an idea but of feeding the organisation with a project that would be worth working for.

The satisfactory progress of the sorting and tabulation programme placed at the disposal of my colleagues an exciting world of possibilities. On the eve of the Third Census Conference in February, 1962 the map project had passed its tentative stage. All Census Superintendents were now thinking of producing enough maps to fill a sizeable atlas.

The Registrar General's circular of September, 1961 had already anticipated the general desire by proposing that Part IX of the State Census Series should take the form of an atlas. This was followed up by two circulars in November, 1961 giving details of the contents of the projected atlases and the method by which each map was to be produced. This was in turn followed up some time later by a third circular in September, 1962 suggesting the levels to which analysis of data should be carried out for the purpose of each map.

Inquiries had in the meantime been made of the Survey of India and the National Atlas Organisation on the extent to which either would be prepared to share the task with the Census of India. The Director of the National Atlas Organisation was good enough to undertake the preparation on 1 : 1M scale of population maps for 1961. Similar maps containing the 1951 data had meanwhile been completed which the Government published at the Registrar General's request.

A chance meeting in the middle of July, 1959 with Dr. Joseph E. Schwartzberg of the University of Wisconsin proved of great profit to the 1961 project. I am under a personal debt to Dr. Schwartzberg for his very thoughtful and detailed memorandum which he was good enough to send me in September, 1959 on the kind of maps that should be incorporated in census volumes. He was even more helpful when I gave him the outline of a full Atlas Project. The Project owes much to the readiness with which he placed himself at my disposal to the detriment no doubt of his own work, in November, 1962, when he and I, with Miss Sen Gupta joining in toward the end, went over every item and worked out many improvements. The contents of the State Atlases will explain the scope and purpose of the project and its claims to uniqueness.

The Government of India had meanwhile accepted the Census Atlas proposals and sanctioned the staff and funds.

Dr. Miss P. Sen Gupta, Map Officer to the Registrar General, joined at the end of November, 1962 and immediately applied herself to several tasks at once. She instilled purpose and dedication into her rapidly expanding staff and in the course

of a strenuous three-month seminar trained and equipped the staff from the State Census Offices. She followed it up with extensive tours to all State Census Offices and helped them to achieve uniformity of quality and presentation.

The 1961 Census Atlas Project is now mainly in the hands of young, gifted and trained staff in every State. Their greatest contribution may yet prove to be the District and Tehsil maps which have been brought up-to-date with the latest administrative and demographic detail. No less significant will be the village and town maps which have opened up new vistas for the study of comparative rural and urban geography.

I would like to close this short account by quoting an extract from my colleague, Sri M. Ahmad of Orissa, which, if anything is an understatement of what many of my colleagues cheerfully accepted in order to accomplish a task that was no part of their original assignment and yet on which they poured the ardour of pioneers.

> Things, however, did not wait. Manpower was drawn just from the street, ... for not a single qualified draftsman was available on deputation from the State Government in spite of requisitions and personal contact. Among the equipment to start with were some locally purchased drawing and survey instruments and a few cheap items of furniture, accommodated in the temporary barrack with asbestos-sheeted roof, lighted with temporary electric fittings. There was, however, a sufficiency of light points, not only from the ceiling but also under glasstopped tables meant for tracing work. With these lights burning over the head and under the tables during working hours at daytime, and with inadequate provision of fans, the hot roof of asbestos sheets made matters pretty unbearable particularly during summer months. But the atmosphere was already surcharged with enthusiasm and there was the will and earnestness to produce something new. The young recruits magnificently responded to an appeal to earn distinction for themselves by building up things which did not exist.

NEW DELHI,
The 12th June, 1964.

ASOK MITRA,
Registrar General, India.

PREFACE

For the first time in the census history of Bihar, an Atlas Volume is being presented as a part of the census publications. It is designed to portray, in the main, various facets of physical, demographic, economic and socio-cultural features of the State in 1961. While much of the data has been obtained from the Census of 1961, non-census data have also been liberally drawn upon, wherever necessary.

The project was first mooted towards the end of 1961. Subsequently, the work was reorganised under the guidance of Map Officer to the Registrar General. The preparation of the present series of maps was taken up in this office in April, 1963 and largely completed by February, 1966.

The Census Atlas contains 160 maps divided into six sections, each containing the number of maps indicated within brackets below :

(*i*) Orientation (3),
(*ii*) Physical conditions (8),
(*iii*) Demographic structure and trends (33),
(*iv*) Economic aspects (77),
(*v*) Socio-cultural aspects (37), and
(*vi*) Demographic regions (2).

The maps follow the general pattern laid down for the country as a whole. 120 maps have been plotted by districts, 12 by subdivisions, and 19 by anchals. In the remaining, the relevant features have been shown for the State. 56 maps are in colour and the others in black and white.

Each map is followed by a brief explanatory note which, besides specifying the purpose and methodology, highlights the salient features and gives the basic data used in the presentation of the map. The presentation of the maps and the explanatory notes side by side should enable a more facile reference than otherwise.

The Census Atlas is but a manifestation of the great vision and zeal of Sri A. Mitra, Registrar General, India, for widening and enriching the scope of the census in a hundred ways. I am greatly indebted to him for the unfaltering inspiration behind this volume, and his constant guidance and initiative. It is no exaggeration to say that but for him, this volume would have never seen the light of the day. I am also grateful to Dr. (Miss) P. Sen Gupta for the technical supervision and guidance always so readily and promptly provided in regard to both cartographic details and explanatory notes. I also owe a word of gratefulness to Sri Ranchor Prasad, Development Commissioner, Bihar for

the keen and kindly interest shown by him in this work towards its final stages and for some valuable suggestions for improvement.

The maps were prepared by a number of cartographers and draftsmen in the census office under the able supervision and control of Sri K. K. Chakravorty, Deputy Superintendent of Census Operations. After his reversion, Sri R. N. Misra took over the burden and helped me greatly in the preparation of explanatory notes and in putting through the printing work in all its stages. But for his able assistance in this regard, the publication of this volume would have been further delayed as a result of my deputation to the United Kingdom on a Nuffield Foundation Fellowship for six months from the middle of April this year. I place on record my appreciation of the services of both Sri Chakravorty and Sri Misra in the preparation of this volume.

From the beginning, great difficulty was experienced in recruiting, training and retaining a band of trained and skilled workers on account of the temporary nature of the posts. Quite a few came and left in the midst of the work. All this naturally hampered the progress and affected its quality. At no time did we have more than 2 cartographers and 1 draftsman engaged on this work. The sanctioned strength was 4 cartographers and 2 draftsmen. A list of the staff engaged on this project since the beginning is given on the opposite page. While I am indebted to all of them, I should like to mention, in particular, Sri M. Abbas, Cartographer, who worked from the very beginning of the project and was most concerned with almost every aspect of this work. A great measure of the credit for this work must, therefore, go to him.

My thanks are also due to M/S. Commercial Reproduction Private Ltd., for the quality of blocks and the speed at which they worked in spite of their other commitments. Last but far from least, Sri S. N. Chatterji, Superintendent, Secretariat Press, Bihar and his staff deserve my most grateful thanks for the meticulous care they have taken in the printing of this volume.

LONDON :
The 15th August, 1967

S. D. PRASAD
Superintendent of Census Operations, Bihar

I wish to place on record my grateful appreciation of the useful services rendered by the following members of census staff in the preparation of this volume :

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CONTENTS

Map no.	Title of the map	PAGE
	1. ORIENTATION	
1	Position of Bihar State in India..	2
2	Administrative Divisions, 1961	6
3	Changes in Administrative Boundaries, 1951—61	8
	2. PHYSICAL CONDITIONS	
4	Physiography	12
5	Geology	14
6	Minerals	16
7	Normal Monthly and Annual Rainfall	20
8	Rainfall Reliability, 1901—50	22
9	Rainfall Regions by Extent of Precipitation and Reliability (Related to Irrigational Needs).	24
10	Soils	26
11	Forests	30
	3. DEMOGRAPHIC STRUCTURE AND TRENDS	
	Distribution, Density and Growth Character	
12	Distribution of Population, 1961	34
13	Density of Population, 1961	36
14	Variation in Density of Population, 1951—61	38-39
15	Intercensal Changes in Population by Subdivisions , 1901—21 ..	42
16	Intercensal Changes in Population by Subdivisions, 1921—51 ..	44
17	Intercensal Changes in Population by Subdivisions, 1901—61 ..	46
18	Intercensal Changes in Population by Subdivisions, 1951—61 ..	48
19	Growth of Population, 1951—61 (Districtwise)	50
20	Intercensal Changes in Rural Population, 1951—61	54
21	Intercensal Changes in Urban Population, 1951—61	56
22	Immigrants (Proportion of Immigrants to Total Population) ..	60
	Fertility	
23	Fertility Rate, 1961	62
	Sex and Age Structure	
24	Sex Ratio, 1961 (Number of Females, per 1,000 Males) ..	64
25	Changing Pattern of Sex Ratio, 1951—61	66-67
26	Sex Ratio in Rural Population, 1961	70

Map no.	Title of the map	Page
27	Sex Ratio in Urban Population, 1961	72
28	Sex and Age Structure, 1961	74
29	Youthfulness of Population (Percentage of Population in age group 5—14), 1961.	76
30	Proportion of Male Population in working Age group 15—59, 1961.	78
31	Proportion of Female Population in working Age group 15—59, 1961.	80
32	Proportion of Male Population in working Age group 15—59 in Rural Areas, 1961.	82
33	Proportion of Female Population in working Age group 15—59 in Rural Areas, 1961.	84
34	Proportion of Male Population in working Age group 15—59 in Urban Areas, 1961.	86
35	Proportion of Female Population in working Age group 15—59 in Urban Areas, 1961.	88
	Urban Development	
36	Rural and Urban Population, 1961	90
37	Progress of Urbanization, 1901—61	92
38	Degree of Urbanization, 1961	94
39	Urban Concentration, 1961	96
40	Chronological Distribution of Towns, 1901—61	98
41	Chronological Distribution of Towns which lost urban status in any of the years, 1901—61.	100
42	Cities and Town-groups with population over 50,000 according to their predominant functional character, 1961.	102
43	Towns with Population 20,000—50,000 according to their predominant functional character, 1961.	106
44	Towns with Population below 20,000 according to their predominant functional character, 1961.	108

4. ECONOMIC ASPECTS

	Agriculture	
45	Land Utilisation, 1960-61	112
46	Intensity of Cropping, 1960-61	114
47	Acreage under Major Cereals, 1960-61 (rice, wheat and millet) ..	116
48	Acreage under Pulses and Oilseeds, 1960-61	118
49	Acreage under Commercial Crops, 1960-61	120
50	Yield per acre of Rice, Millet, Wheat and Pulses (Average of 1960—61).	122
51	Area Irrigated by various sources, 1960-61	124

Map no.	Title of the map	Page
52	Major Irrigation Systems, 1961	126
53	Cropping Pattern of Irrigated and Non-irrigated Areas, 1960-61	128
54	Gross Value of Agricultural output per acre of Cropped Area, 1960-61.	130
55	Gross Value of Agricultural output per Cultivating Household, 1960-61.	132
56	Gross Value of Agricultural output per Cultivator, 1960-61 ..	134
57	Agricultural Holding per Cultivating Household, 1961 ..	136
58	Agricultural Holding per capita in Rural Areas, 1961 ..	138
59	Agricultural Holding per Male Cultivator, 1961	140
60	Per Capita requirement and supply of staple food crops (cereals and pulses), 1961.	142
	The 1961 Census Industrial Categories	
61	Proportion of Total Workers and Non-workers to the total Population, 1961.	144
62	Proportion of Rural Workers and Non-workers to the total Rural Population, 1961.	146
63	Proportion of Urban Workers and Non-workers to the total Urban Population, 1961.	148
64	Proportion of Male Workers to the Total Male Population in Rural Areas, 1961.	150
65	Proportion of Male Workers to the Total Male Population in Urban Areas, 1961.	152
66	Proportion of Female Workers to the Total Female Population in Rural Areas, 1961.	154
67	Proportion of Female Workers to the Total Female Population in Urban Areas, 1961.	156
68	Proportion of Workers and Non-workers to the Total Employable Population of Age group 15—59, 1961.	158
69	Industrial Structure of Male and Female Population, 1961 ..	162
70	Industrial Structure of Rural Population, 1961	164
71	Industrial Structure of Urban Population, 1961	168
	Population employed in Cultivation, Agricultural Labour, Livestock, Forests, Fishing, Hunting, Plantations, Orchards and Allied activities	
72	Proportion of Cultivators to Total Workers in Age group 15—59, 1961.	170
73	Proportion of Cultivators to Total Rural Population, 1961 ..	172
74	Proportion of Male Cultivators to Total Male Workers in Age group 15—59, 1961.	174
75	Proportion of Female Cultivators to Total Female Workers in Age group 15—59, 1961.	176

Map no.	Title of the map	Page
76	Percentage of Agricultural Labourers to total Agricultural Workers (Cultivators and Agricultural Labourers) in Age group 15—59, 1961.	178
77	Proportion of Non-agricultural Workers to the Total Workers in the Primary Sector, 1961.	180
	Population employed in Mining, Quarrying, Household Industry and Manufacturing	
78	Proportion of Workers in Mining, Quarrying, Household Industry and Manufacturing to the Total Working Population, 1961.	182
79	Household Industries classified by Types and Size of Employment, 1961.	184
80	Factory Industries classified by Types and Size of Employment, 1961.	188
81	Distribution of Factories and Workshops by size of Employment, 1961.	190
82	Distribution of Food-processing Industries, 1961	194-195
83	Distribution of Beverage and Tobacco Industries, 1961 ..	196
84	Distribution of Textile Industries, 1961	198
85	Distribution of Wood-based Industries, 1961	200
86	Distribution of Leather Industries, 1961	202
87	Distribution of Metal-based Industries, 1961	204
88	Distribution of Non-Metallic Mineral-based Industries, 1961 ..	206
89	Distribution of Engineering Industries, 1961	208
90	Distribution of Transport Equipment Industries, 1961 ..	210
91	Distribution of Chemical Industries, 1961	212
	Electricity	
92	Distribution of Existing and proposed Electricity Generating Stations, 1961.	214
93	Transmission Net-work of Electricity, 1961	216
94	Generation Pattern of Electricity, 1961	218
95	Consumption Pattern of Electricity, 1961	220
96	Per Capita Generation of Electricity, 1961	222
97	Intercensal Change in Per Capita Generation of Electricity, 1951—61.	224
98	Per Capita Power Consumption, 1961	226
99	Intercensal Change in Per Capita Consumption of Electricity, 1951—61.	228
100	Distribution of Electrified and Non-electrified Towns with Population of 20,000 and above.	230
101	Distribution of Electrified and Non-electrified Towns with Population below 20,000.	232
102	Proportion of Rural Population living in Electrified Villages, 1961	234
103	Proportion of Urban Population living in Electrified Towns, 1961	236

Map no.	Title of the map	Page
	Population engaged in Construction, Transport and Communications	
104	Percentage of workers engaged in Construction, Transport, Storage and Communication activities to total workers in Rural Areas, 1961.	238
105	Percentage of Workers engaged in Construction, Transport, Storage and Communication activities to total workers in urban Areas, 1961.	240
106	Density of Railways, 1961 (Kilometres of Railways per 10,000 sq. kilometres of Area).	242
107	Kilometres of Railways per 10,000 Population, 1961 ..	244
108	Accessibility to Railways, 1961	246
109	Availability of Railways in kilometres per 100,000 of population per 1,000 sq. kilometres of Area, 1961.	248
110	Density of Surfaced Roads, 1961 (Kilometres of Surfaced Roads per 10,000 sq. kilometres).	250
111	Kilometres of Surfaced Roads per 10,000 of Population, 1961 ..	252
112	Availability of Surfaced Roads per 100,000 of Population per 1,000 sq. kilometres of Area, 1961	254
113	Accessibility to Surfaced Road, 1961	256
114	Number of Passengers Originating per route kilometre per day, on Railways, 1961.	258
115	Number of Motor Vehicles registered per 10,000 of Population, 1961.	260
	Trade and Commerce	
116	Percentage of Workers engaged in Trade and Commerce to total working Population, 1961.	262
117	Percentage of Workers engaged in Wholesale Trade, Retail Trade and Miscellaneous Trade to total workers in Trade and Commerce.	264
	Services	
118	Percentage of Workers engaged in Services to total Working Population, 1961.	266
119	Percentage of Workers engaged in Educational and Scientific Services to Total Workers in Services, 1961.	268
120	Percentage of Workers in Medical and Health Services to Total Workers in Services, 1961.	270
121	Percentage of Workers in Personal and other Miscellaneous Services to Total Workers in Services, 1961.	272
	5. SOCIO-CULTURAL ASPECTS	
	Castes and Tribes	
122	Percentage of Scheduled Castes to the Total Population, 1961 ..	274
123	Percentage of Scheduled Tribes to the Total Population, 1961 ..	276
124	Distribution of numerically Major Scheduled Castes, 1961 ..	278

Map no.	Title of the map	Page
125	Distribution of numerically Minor Scheduled Castes, 1961 ..	280
126	Distribution of numerically Major Scheduled Tribes, 1961 ..	282
127	Distribution of numerically Minor Scheduled Tribes, 1961 ..	284
128	Distribution of the first fifteen numerically strong Scheduled Castes of India, 1961.	286
129	Distribution of the first fifteen numerically strong Scheduled Tribes of India, 1961.	288
Religion		
130	Distribution of Major Religion, 1961	290
Languages		
131	Distribution of Population speaking Languages other than State Language as their Mother-tongue, 1961.	292
132	Distribution of three numerically strongest languages in the State, 1961.	294
Education		
133	Literacy, 1961 (Percentage of Literates to Total Population excluding Age group 0—4).	296
134	Male Literacy, 1961 (Percentage of Male Literates to Total Male Population excluding Age group 0—4).	300
135	Female Literacy, 1961 (Percentage of Female Literates to Total Female Population excluding Age group 0—4).	302
136	Male Literacy in Rural Areas, 1961 (Percentage of Male Literates to Total Male Population excluding Age group 0—4 in Rural Areas).	306
137	Male Literacy in Urban Areas, 1961 (Percentage of Male Literates to Total Male Population excluding Age group 0—4 in Urban Areas).	308
138	Female Literacy in Rural Areas, 1961 (Percentage of Female Literates to Total Female Population excluding Age group 0—4 in Rural Areas).	312
139	Female Literacy in Urban Areas, 1961 (Percentage of Female Literates to Total Female Population excluding Age-group 0—4 in Urban Areas).	314
140	Primary School Enrolment, 1961 (Proportion of Children of Age group 5—14 at the Level of Primary Education).	316
141	Primary School Enrolment of Boys, 1961 (Proportion of Boys of Age group 5—14 at the Level of Primary Education).	318
142	Primary School Enrolment of Girls, 1961 (Proportion of Girls of Age group 5—14 at the Level of Primary Education).	320
143	Post Primary Educational Enrolment of Population of Age group 15—29, 1961 (Percentage of Population in Age group 15—29 at the Level of Secondary and Higher Education).	322
144	Post Primary Educational Enrolment of Male Population in Age group 15—29, 1961 (Percentage of Male Population in Age group 15—29 at the Level of Secondary and Higher Education).	324
145	Post Primary Educational Enrolment of Female Population in Age group 15—29, 1961 (Percentage of Female Population in Age group 15—29 at the Level of Secondary and Higher Education).	326
146	Number of Teachers per 1,000 Students at the Primary Level of Education, 1961.	328
147	Number of Teachers per 1,000 Students at the Secondary Level of Education, 1961.	330
148	Number of Teachers per 1,000 Students at the University Level of Education, 1961.	332
Housing		
149	House types	334
150	Percentage of Rural Population living in villages containing less than 5, 6—16, 16—25, 26—35, 36—50, 51—100 and above 100 houses, 1961.	336
151	Percentage of Households occupying one, two, three, or more than three rooms, 1961.	338
152	Proportion of households occupying one room, two rooms, three rooms, and more than three rooms in rural areas, 1961.	340
153	Proportion of households occupying one room, two rooms, three rooms, and more than three rooms in urban areas, 1961.	342
154	Distribution of Households by Predominant Wall and Roof materials (Rural).	344
155	Distribution of Households by Predominent Wall and Roof materials (Urban).	348
156	Number of Medical Institutes per 10,000 of Census Houses, 1961	350
157	Number of Hospital Beds per 100,000 of Population, 1961 ..	352
158	Number of Medical doctors per 100,000 of Population, 1961 ..	354

6. DEMOGRAPHIC REGIONS

159	Socio-cultural Demographic Regions, 1961	358
160	Economic Demographic Regions, 1961	362

ANNEXURES

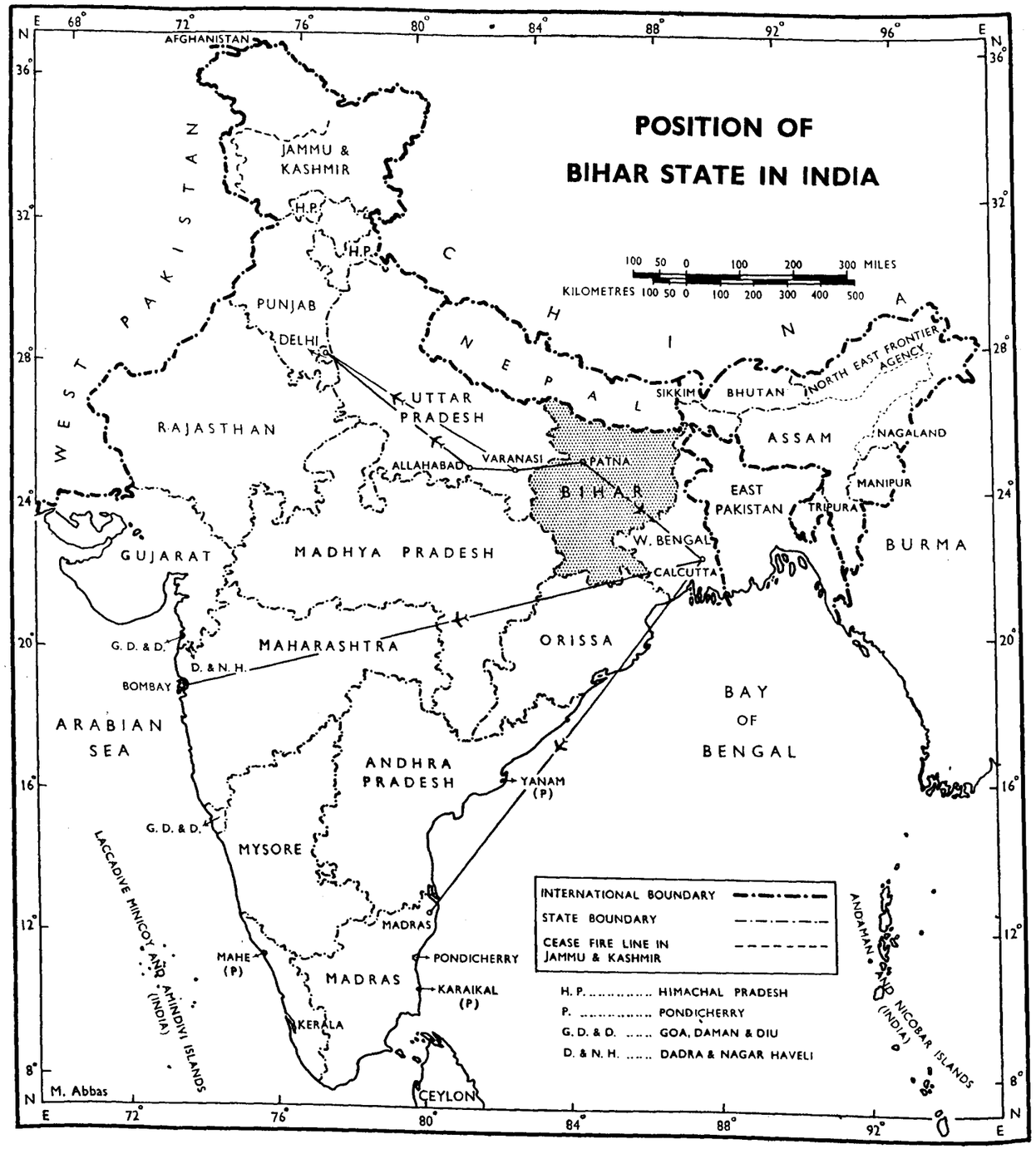
Annexure I—Anchals	364
Annexure II—Soil Association	370

APPENDICES

Appendices I to XVI—	
Data relating to Map nos. 28, 45, 53, 54, 61, 62, 63, 77, 82, 84, 87, 90, 91, 123 and 152	377—388
Appendix XVII—	
Data relating to Map nos. 15, 16, 17, 18, 64, 65, 66, 67 and 73 ..	389—390
Appendix XVIII—	
Data relating to Map nos. 13, 25, 26, 133, 134, 135, 136 and 138 ..	391—409
Appendix XIX—	
Data relating to Map nos. 27, 137 and 139	410—412

1. ORIENTATION

MAP NO. 1



MAP NO. 1

POSITION OF BIHAR STATE IN INDIA

Purpose

This map shows the location of Bihar State within the Indian Union.

Method

All the States and Union Territories of India have been shown in the map. The location of Bihar State is marked by giving a dark screen. The map also shows how Patna, the capital city of Bihar, is connected by air with Delhi, Bombay, Madras and Calcutta, the four metropolitan cities of India.

Location

Bounded on the north by the kingdom of Nepal, on the south by the State of Orissa, on the east by the State of West Bengal and on the west by the States of Uttar Pradesh and Madhya Pradesh, the State of Bihar is situated within longitudes 83°19′50″ and 88°17′40″ East and latitudes 21°58′10″ and 27°31′15″ North.

Salient Features

At sunrise on the 1st March, 1961, the State of Bihar had a population of 46,455,610 persons, consisting of 23,301,449 males and 23,154,161 females. It extended over an area of 67,196 sq. miles or 174,038 sq. kms. With only 5.31 per cent of the Union's land area, Bihar contains 10.58 per cent of its entire population. It is the second most populous State in the country. In terms of area, however, it ranks eighth. The table below gives comparative statistics for different States of India:

State or Union Territory	Area in sq. miles	Population	Population per sq. mile	Percentage of India's population	Percentage of India's area
1	2	3	4	5	6
INDIA	**1,264,341**	**439,234,771**	**358**	**100**	**100**
Uttar Pradesh	113,879	73,746,401	648	16.79	8.99
Bihar	66,936	46,455,610	694	10.58	5.31
Maharashtra	118,280	39,553,718	334	9.00	9.39
Andhra Pradesh	106,053	35,983,447	339	8.19	8.41
West Bengal	34,194	34,926,279	1,021	7.95	2.68
Madras	50,154	33,686,953	672	7.67	3.98
Madhya Pradesh	169,042	32,372,408	192	7.37	13.54
Mysore	73,846	23,586,772	319	5.37	5.87
Gujarat	71,056	20,633,350	290	4.70	5.71
Punjab	47,305	20,306,812	429	4.62	3.73
Rajasthan	131,890	20,155,602	153	4.59	10.45
Orissa	60,172	17,548,846	292	4.00	4.76
Kerala	15,003	16,903,715	1,127	3.85	1.19
Assam	47,257	11,872,772	251	2.70	3.72
Jammu and Kashmir ..	*53,665	3,560,976	66	0.81	6.80

State or Union Territory	Area in sq. miles	Population	Population per sq. mile	Percentage of India's population	Percentage of India's area
1	2	3	4	5	6
Union territories and other areas—					
Delhi	573	2,658,612	4,640	0.61	0.05
Himachal Pradesh	10,702	1,351,144	126	0.31	0.86
Tripura	4,116	1,142,005	277	0.26	0.32
Manipur	8,628	780,037	90	0.18	0.68
Nagaland	6,366	369,200	58	0.08	0.50
Pondicherry	181	369,079	2,040	0.08	0.01
North East Frontier Agency ..	*31,438	336,558	11	0.08	2.49
Sikkim	2,818	162,189	58	0.04	0.22
Andaman and Nicobar Islands..	*3,215	63,548	20	0.01	0.25
Dadra and Nagar Haveli ..	191	57,963	303	0.01	0.01
Laccadive, Minicoy and Amindivi Islands.	11	24,108	2,241	0.01	Negligible
Goa, Daman and Diu ..	1,431	626,667	438	0.14	0.11

NOTE : *1. The Surveyor General's area has been taken into account for calculating the percentage of India's area and density as the State Survey figures are not available.

2. In case of India and Jammu and Kashmir the density has been calculated on the area which excludes the States non-censused area 32,358 sq. miles.

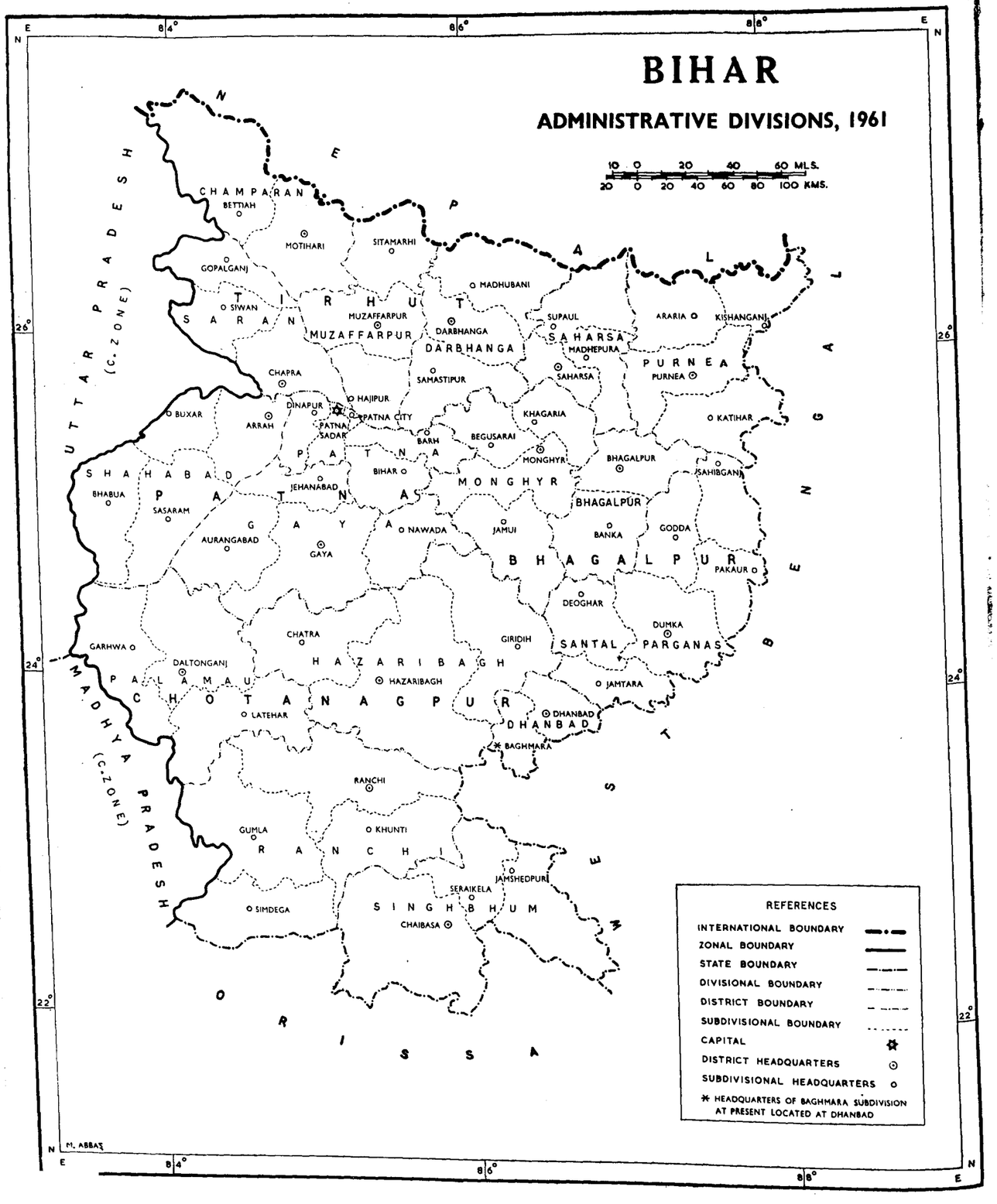
3. The total of figures under last column will not add up to 100 as the sum of areas of individual States and Union Territories exceeds the total area of India (1,264,341 sq. miles), by 578 sq. miles.

There are 67,665 inhabited and 10,428 uninhabited villages in Bihar. The number of towns in the State is 153. Seven of them, viz., Patna, Gaya, Muzaffarpur, Darbhanga, Bhagalpur, Ranchi and Jamshedpur are cities (towns having population of one lakh or more each). The density of population in Bihar is 694 persons per sq. mile. A few other demographic, social, and economic characteristics of the State's population are indicated below:

Characteristic	Figures for the State
1. Expectation of life (1961)	37.6 years
2. Number of occupied residential houses	6,885,541
3. Number of households	8,352,712
4. Persons per occupied residential house—	
(*a*) Total	6.75
(*b*) Rural	6.79
(*c*) Urban	6.30
5. Percentages of rural and urban population to total population—	
(*a*) Rural	91.57
(*b*) Urban	8.43
6. Sex ratio (number of females per 1,000 males)—	
(*a*) Total	994
(*b*) Rural	1,012
(*c*) Urban	811
7. Percentage of Scheduled Castes.	14.07
8. Percentage of Scheduled Tribes.	9.05
9. Migration—	
(*a*) Total immigrants	(+) 850,956
(*b*) Total emigrants ..	(—)2,042,685
(*c*) Balance of migration	(—)1,191,729
10. Proportion of workers and non-workers among 1,000 persons, males and females—	
Persons—	
(*a*) Workers ..	414
(*b*) Non-workers ..	586
Males—	
(*a*) Workers ..	556
(*b*) Non-workers ..	444
Females—	
(*a*) Workers ..	271
(*b*) Non-workers ..	729
11. Percentage to total workers—	
(*a*) Cultivators ..	53.9
(*b*) Agricultural labourers.	23.0
(*c*) Workers at Household industry.	5.5

SOURCE: (1) Map of India—Office of the Registrar General, India.
(2) Census of India, 1961, Vol. I, Part II-A and Vol. IV, Part II-A.
(3) Vital Statistics of India for 1961.

MAP NO. 2



MAP NO. 2

ADMINISTRATIVE DIVISION, 1961

Purpose

This map shows the various administrative divisions of the State of Bihar.

Method

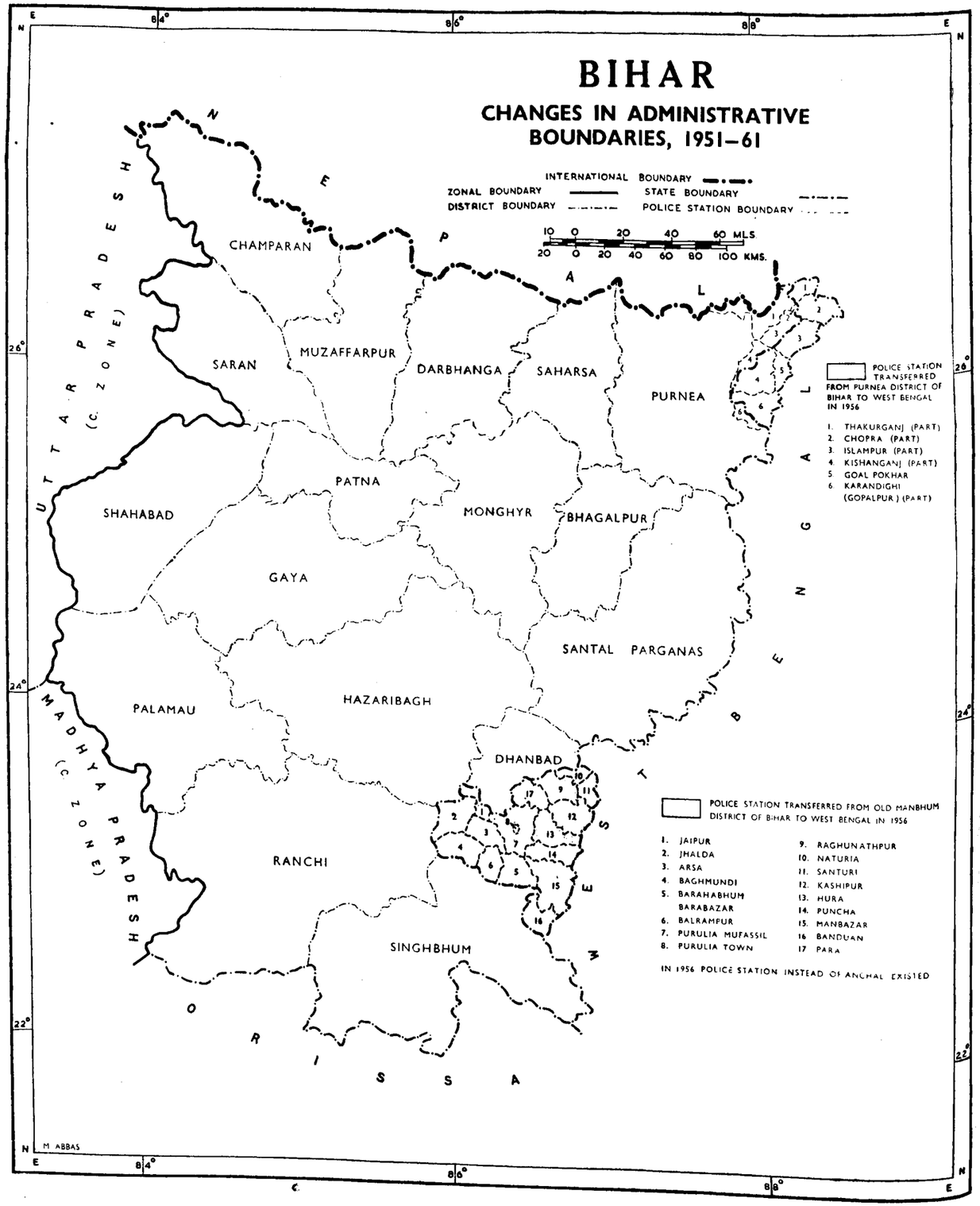
Besides giving the international, zonal and State boundaries, the map also delineates the divisional, district and subdivisional boundaries, and gives their names. The State capital and the district and subdivisional headquarters have also been shown by suitable legends.

Salient Features

For administrative purposes, Bihar is divided into four Commissioner's divisions, seventeen districts, and fifty eight subdivisions. Below the subdivision, there are 471 police stations and 575 anchal-*cum*-development blocks. Because of their large numbers, they have not been shown on this map but may be seen elsewhere in this volume.

The Commissioner is incharge of a division and exercises control and supervision over the District Officers in his division. The District Officer is the head of the civil, revenue and criminal administration of the district. He is also the chief pilot of all development activities in the district. Below him are the Subdivisional Officers who perform duties and functions similar to those of District Officers at the subdivisional level.

SOURCE : Deputy Director of Surveys, Bihar.



CHANGES IN ADMINISTRATIVE BOUNDARIES, 1951—61

Purpose

This map depicts changes in the administrative boundaries of Bihar in the last decade 1951—61, during which parts of Purnea and Manbhum districts were transferred to West Bengal.

Method

The map of Bihar has been drawn initially according to its present jurisdiction. Portions transferred to West Bengal are shown on the map and shaded in red in order to distinguish them from the present jurisdiction of the State. The areas transferred to West Bengal have been shown by police stations and their names indicated on the map in the form of an index.

Salient Features

In pursuance of the Bihar and West Bengal (Transfer of Territories) Act, 1956, an area of 2,407 sq. miles of the earstwhile Manbhum district and 732.88 sq. miles of the Purnea district were transferred to West Bengal. The following is the list of police stations thus transferred in 1956 :

Police Stations Tansferred

From old Manbhum district to West Bengal—

1. Jaipur
2. Jhalda
3. Arsa
4. Baghmundi
5. Barahabhum Barabazar
6. Balarampur
7. Purulia (Mufassil)
8. Purulia Town
9. Raghunathpur
10. Naturia
11. Santuri
12. Kashipur
13. Hura
14. Puncha
15. Manbazar
16. Banduan
17. Para

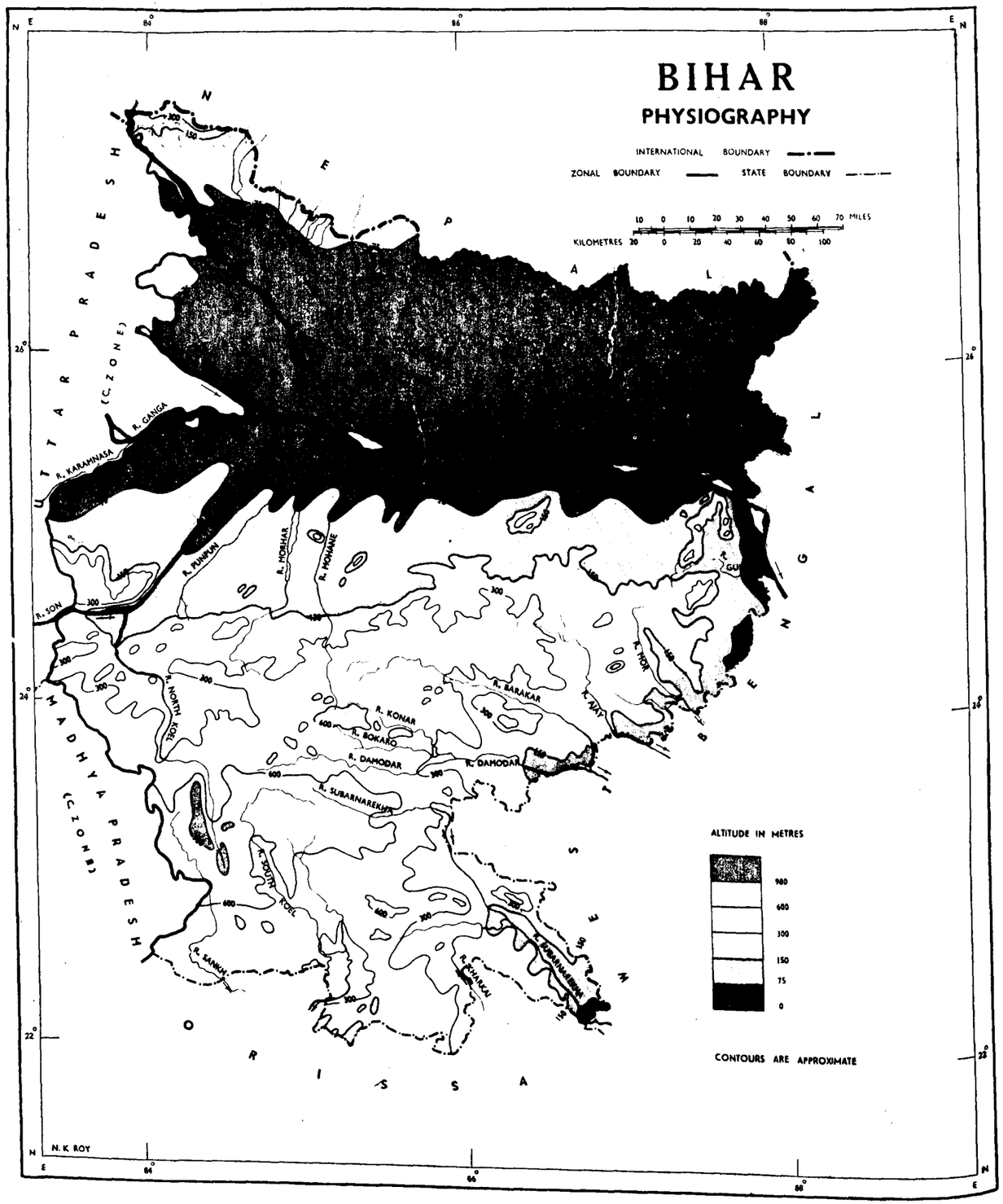
From Purnea district to West Bengal—

1. Thakurganj (Part)
2. Chopra (Part)
3. Islampur (Part)
4. Kishanganj (Part)
5. Goal Pokhar
6. Karandighi (Gopalpur) (Part).

SOURCE : (1) Political Department, Government of Bihar.
(2) Deputy Director of Surveys, Bihar.

2. PHYSICAL CONDITIONS

MAP NO. 4



MAP NO. 4

PHYSIOGRAPHY

Purpose

This map shows the physiography of Bihar State.

Method

The variations in altitude are represented by a colour scheme representing 6 ranges of altitudes, viz.,

(*i*) 0—75 metres, (*iv*) 301—600 metres,
(*ii*) 76—150 metres, (*v*) 601—900 metres, and
(*iii*) 151—300 metres, (*vi*) over 900 metres,

and shown in deep green, green, light green, yellow, light brown and brown colours respectively.

Salient Features

Bihar can be divided into 3 natural regions, viz.,

(*i*) The Himalayan foot-hills.

(*ii*) The Gangetic Plain.

(*iii*) The Chotanagpur Plateau.

(*i*) *The Himalayan foot-hills* : In the extreme north-west, bordering Nepal in Champaran district, there are the Dun and Sumeshwar ranges comprising the outer range of the Himalayan system and consisting largely of Siwalik rocks. The Dun range is about 32 kms. long, while the Sumeshwar runs along 72 kms., at an average height of 450 m.

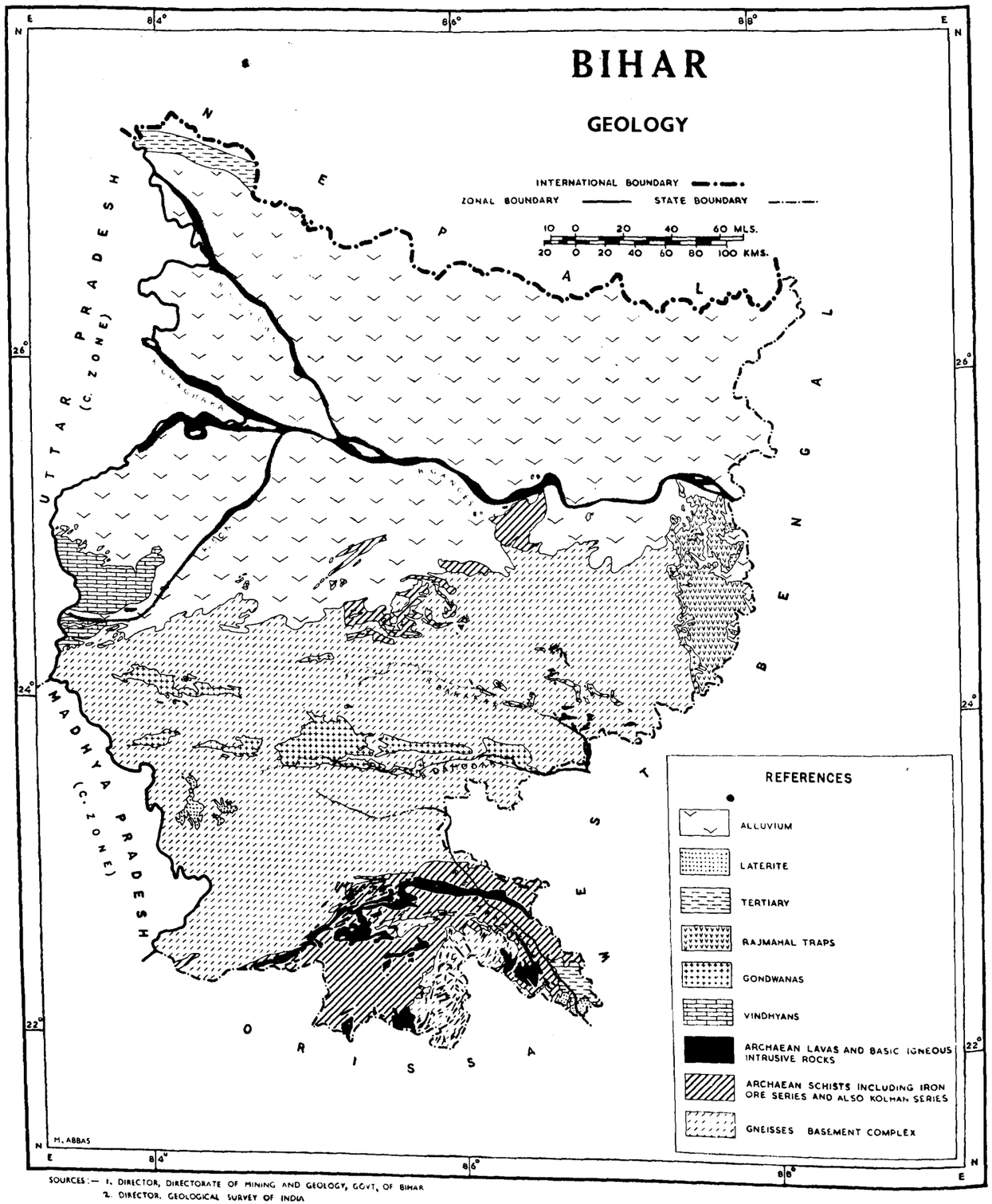
(*ii*) *The Gangetic Plain* : Except for the Himalayan foot-hills, the entire area north of the Ganges is comprised of plains. South of river, the extent of the plains region is roughly earmarked by the 150 metre contour. The northern plain consists exclusively of alluvial soil. Its general slope is from north-west to south-east, the direction followed by the major rivers, viz., Ghaghra, Gandak, Burhi Gandak, Kosi and Mahananda, all of which originate in the snow-fed Himalayas and flow to join the Ganges.

The main rivers of southern plain are the Son, Punpun, Morhar and Mohane.

Isolated ranges, e.g., the Barabar hills in Gaya district and the Kharagpur hills in Monghyr district are met with in the southern Gangetic Plain. The hills of Rajgir have an average elevation of 446 m. while the Kharagpur range is at an average of 300 m. above mean sea level. The projection of the latter to the north causes a sharp bend in the course of the Ganges near Monghyr town.

(*iii*) *The Chotanagpur Plateau* : The Chotanagpur Plateau may be sub-divided into four distinct regions with varying altitudes, viz., (*a*) The western Ranchi Plateau with an average height of about 600 m., comprised of high plateaus called pats. Their formation is of Deccan lava later turned into laterite and bauxite. The Sankh and South Koel rivers originate here and flow towards the south. The North Koel river flows towards the north and the Damodar and Subarnarekha flow eastward in their upper courses. (*b*) The remaining portions of Ranchi district and part of southern Hazaribagh comprise the next sub-region with an altitude of about 600 m. The formation of this area is mostly gneiss and granite. (*c*) The lower Chotanagpur Plateau, averages 300 m. above mean sea level. It girdles the Ranchi Plateau from Palamau to Hazaribagh and extends down to Singhbhum. The formation is largely gneiss and granite and partly of schists and Dharwar rocks. (*d*) The north-eastern Santal Parganas and southern Shahabad which vary in altitude between 150 and 300 m., are chiefly formed of gneiss and granite.

MAP NO. 5



MAP NO. 5

GEOLOGY

Purpose

This map shows the geology of the State according to nine main divisions.

Method

The following are the nine geological divisions graded in order of age from recent to the oldest :

(*i*) Alluvium,
(*ii*) Laterite,
(*iii*) Tertiary,
(*iv*) Rajmahal traps,
(*v*) Gondwanas,
(*vi*) Vindhyans,
(*vii*) Archaean lavas and basic igneous intrusive rocks,
(*viii*) Archaean schists including iron-ore series and also Kolhan series, and
(*ix*) Gneisses-basement complex.

These types have been plotted in the various regions on the basis of the map supplied by the Directorate of Mines and Geology, Bihar and the Geological Survey of India, with separate shading or symbol for each type.

Salient Features

Except for a small strip of tertiary formation in Champaran district, the entire North Bihar Plain consists of recent alluvium, which extends to a large part of the South Bihar Plain as well.

Laterite is found in the Netarhat Plateau, western Ranchi, eastern Rajmahal in the Santal Parganas district, and south-eastern part of the Singhbhum district. Laterite does not occur in large areas.

Tertiary rocks are met with in the Siwalik Range in north-west Champaran and in south-eastern Singhbhum.

Rajmahal traps are found in the Rajmahal hills in eastern Santal Parganas.

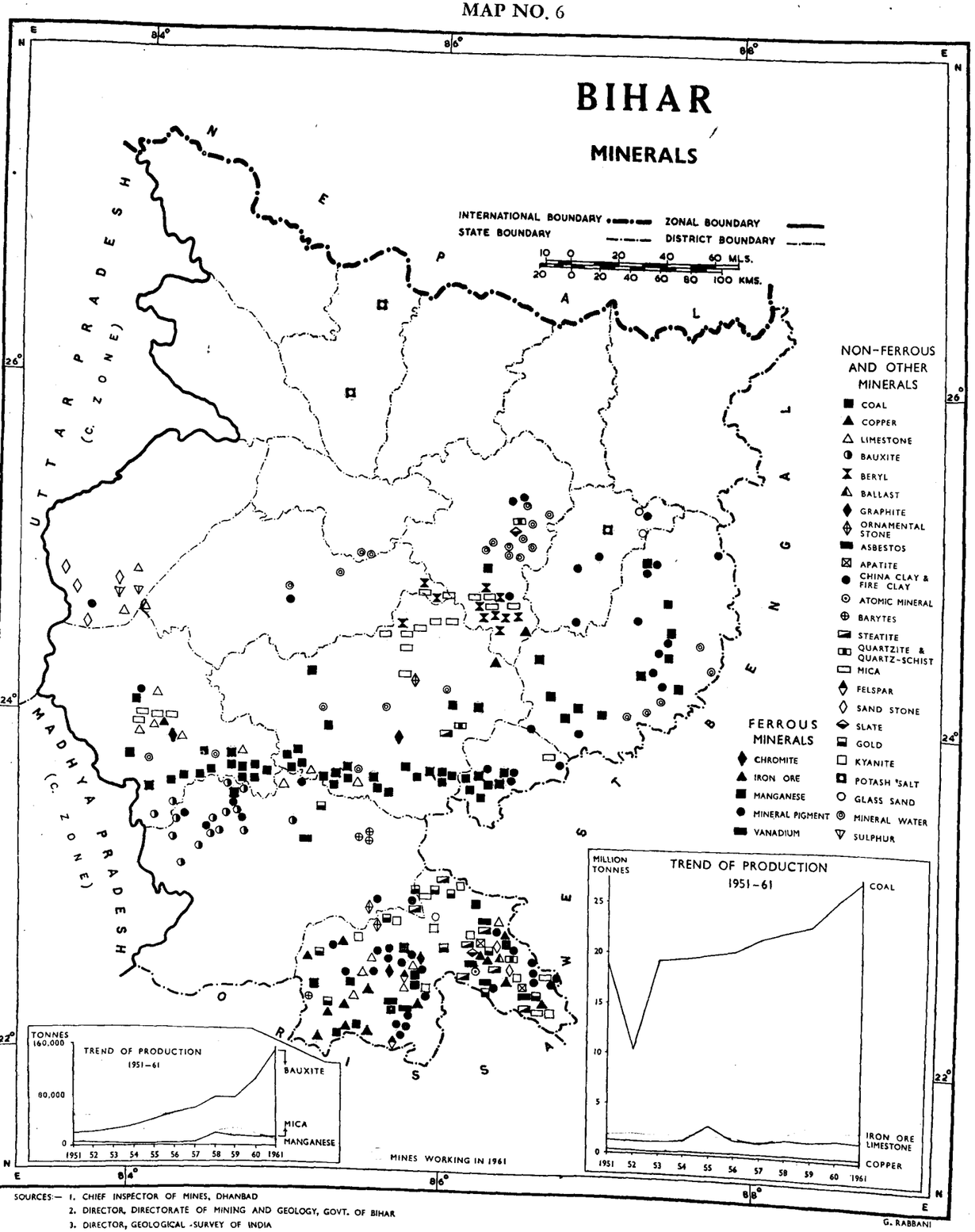
Gondwanas occur in isolated but large patches across the central portion of the Chotanagpur Plateau and in the Santal Parganas along the western side of Rajmahal traps.

Vindhyans are confined to south western Shahabad and north-western Palamau only.

Archaean lavas, schists and gneisses cover the Singhbhum district.

SOURCE : (1) Director of Mines and Geology, Bihar.
(2) Director of Geological Survey of India.

MAP NO. 6



SOURCES:— 1. CHIEF INSPECTOR OF MINES, DHANBAD
2. DIRECTOR, DIRECTORATE OF MINING AND GEOLOGY, GOVT. OF BIHAR
3. DIRECTOR, GEOLOGICAL SURVEY OF INDIA

G. RABBANI

MAP NO. 6

MINERALS

Purpose

This map indicates the location of minerals in the State.

Method

The occurrence of 5 ferrous and 25 non-ferrous minerals has been shown by suitable symbols in two colours. Only the mines working in 1961 have been included.

Salient Features

Bihar is the richest State in India in regard to mineral resources. The main deposits occur in the Chotanagpur Plateau. The chief minerals are :

Coal—Bihar is the largest producer of high grade coal in India. In 1961, its output was of the order of 27.16 million tonnes, or a little over 48 per cent of the country's total production. Coal occurs exclusively in the Barakar and Raniganj stages of Damuda series of Gondwanas. Jharia, Bokaro, Ramgarh, Giridih and Karanpura are among the important coal-fields. The coal-fields of Santal Parganas yield smaller quantities of inferior grade coal. The prominent mining centres are Jharia, Chandrapura, Bokaro, Ramgarh, Giridih, South Karanpura, North Karanpura, Itkhori, Chope, Auranga, Hutar and Daltonganj.

Iron-ore—Bihar is an important iron-ore producing State in India. In 1961, it ranked next only to Orissa in the production of iron ore. Its total output in that year was of the order of 2.95 million tonnes. The mining of iron-ore is confined to the Dharwar tracts of Singhbhum district. The ore is largely of high grade with about 64 per cent of iron content. Gua and Noamundi are the chief mining centres.

Limestone—The State has vast resources of limestone. The important mining centres are Bundu-Basaria, Kurkuta, Bhurkunda and Hosir in Hazaribagh; Babhane, Hoyar, Khelari in Ranchi; Jagannathpur and Rajaulia in Singhbhum and Rohtasgarh, Chunhattan to Ramdihra on-Son, Dumarkhar, Baulia and Banjari in Shahabad district. The total output of limestone in Bihar was 2,036,227 tonnes in 1961.

Copper—In India so far, copper is produced only in Bihar. The total output was 423,270 tonnes in 1961. The important centres of copper-ore mining, are Mosabani, Surda, Pathargora and Kendodih in the district of Singhbhum.

Bauxite—This mineral is used mainly for the production of aluminium. Bihar is an important producer of bauxite. The ore occurs mostly in Lohardaga region in Ranchi district and extends into Palamau district. The total output of Bihar in 1961 was 155,660 tonnes.

Manganese—Manganese-ore occurs along with iron-ore deposits in the northern extension of Keonjhar-Bonai region extending towards south from Gua to Limtu and between Chaibasa and Jamda and between Jamda and Noamundi. The output of Bihar State in 1961 was 8,826 tonnes.

Kyanite—It is an aluminium silicate and a most valuable refractory material. The deposit of Kyanite at Lapsa Buru near Raj Kharsawan is of good quality and one of the largest in the world. The production of Kyanite in 1961 was 27,093 tonnes.

Beryl—Beryl, a silicate of beryllium, is a valuable mineral. It is found in

the mica belt of Hazaribagh district in small quantities.

Mica—Bihar is endowed with the richest mica tract in India. Ruby mica, produced in Bihar occupies a unique position in the world. Mica is mainly produced in Gaya and North Hazaribagh. It also occurs in parts of South Monghyr. The production of mica in Bihar in 1961 was 13,559 tonnes.

Chromite—It is a useful refractory material and is also utilised in the manufacture of chemicals. Chromite deposits are found near Jojohatu in Singhbhum district. In 1961, 4,703 tonnes of chromite were mined in Bihar.

Clay—There are varieties of clays. Pure white clay, known as china-clay, is used for making porcelain goods and potteries. Bihar has large reserves of high grade china-clay. Important deposits occur in the districts of Singhbhum, Ranchi, Santal Parganas, Monghyr and Bhagalpur.

Fire-clay occurs in between the coal seams. Important deposits of fire-clay are found in the Jharia coal-field and Hazaribagh district.

In Bihar 132,987 tonnes of china-clay and 58,310 tonnes of fire-clay was mined in 1961.

Graphite—Graphite occurs in Palamau near Daltonganj. Only a small quantity of graphite is mined at present.

Barytes—It is an uncommon heavy mineral and its uses are of specialised nature. Barytes occurs in Kolpothe in Singhbhum and in Ranchi districts.

Apatite—Apatite has many uses, its main use, however, lies in the manufacture of superphosphate, an important fertiliser. It occurs in the southern part of Singhbhum district. The total output in 1961 was 19,498 tonnes.

Asbestos—Asbestos occurs in nature as a silky fibrous material. In Bihar it is found mainly in Singhbhum district. Small deposits are also found in Ranchi district. Only 90 tonnes were mined in 1961.

Vanadium—It is a white, silvery metal found associated with magnetic iron-ore in Dulbara and adjoining areas of Singhbhum district.

Sulphur—In natural state, sulphur is found in the form of yellow glistening crystals. It occurs in combination with other metals such as pyrites, chalcopyrites and galena.

Pyrites occur in Amjor in the district of Shahabad.

SOURCE : (1) Director of Mines and Geology, Bihar.
(2) Director, Geological Survey of India.
(3) Chief Inspector of Mines, Dhanbad.
(4) Director of Statistics, Bihar.

MAP NO. 7

NORMAL MONTHLY AND ANNUAL RAINFALL

Purpose

This map shows the normal monthly and annual rainfall recorded in seven selected stations representing zonal variations.

Method

The normal monthly rainfall of the following seven stations has been shown by bars:

(*i*) Siwan,
(*ii*) Kishanganj,
(*iii*) Barh,
(*iv*) Amrapara,
(*v*) Hazaribagh,
(*vi*) Netarhat, and
(*vii*) Jamshedpur.

Normal annual rainfall has been shown by isohyets which have been drawn to depict zones of normal annual rainfall in the following seven ranges:

(*i*) Below 1,000 mm.,
(*ii*) 1,000—1,200 mm.,
(*iii*) 1,200—1,400 mm.,
(*iv*) 1,400—1,600 mm.,
(*v*) 1,600—1,800 mm.,
(*vi*) 1,800—2,000 mm., and
(*vii*) above 2,000 mm.

The various zones have been marked by suitable grades of hatching ranging from high to low. The selected centres have also been indicated in the map.

Salient Features

Bihar gets most of its rain from the south-west monsoon which sets in the first-half of June and lasts till September.

The normal annual rainfall exceeds 2,000 mm. in the north-eastern Purnea and the Himalayan foot-hills in north-west Champaran, and is between 1,600 and 2,000 mm. in contiguous areas. The only other areas with over 1,600 mm. of annual rainfall are the Netarhat Plateau and a small zone near Khunti. The rainfall is 1,200—1,600 mm. in the northern, eastern and southern parts of the State. It falls below 1,200 mm. in Saran, South Muzaffarpur, Patna, Gaya, Shahabad and Monghyr. In these areas it is lower than the State average of 1,272 mm.

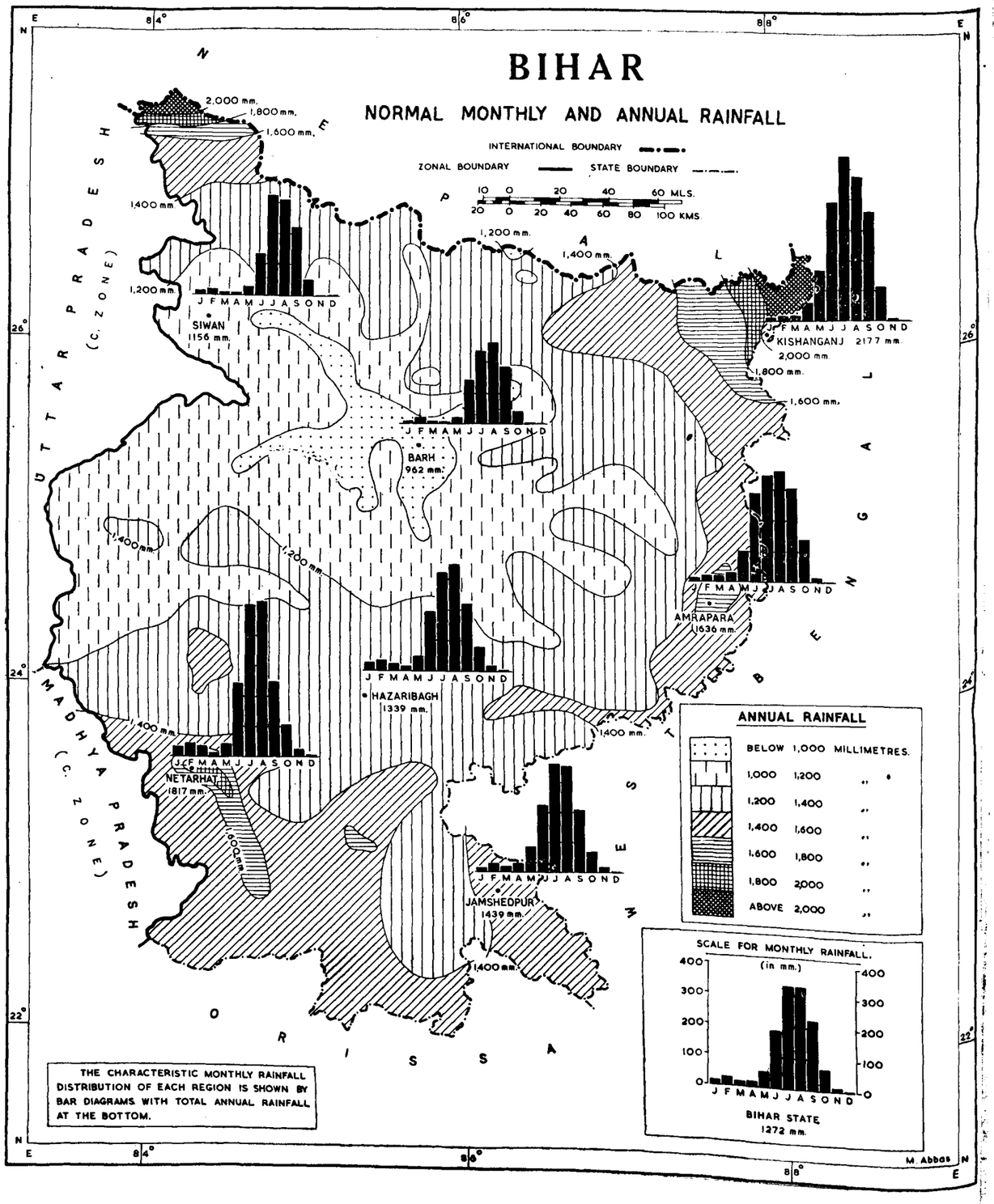
TABLE

NORMAL MONTHLY AND ANNUAL RAINFALL IN SEVEN SELECTED STATIONS

(*Figures in millimetre*)

Station	January	February	March	April	May	June	July
1	2	3	4	5	6	7	8
Siwan ..	14.7	18.5	10.2	9.7	30.5	136.4	327.9
Kishanganj ..	11.9	17.5	18.8	60.2	167.4	393.2	543.3
Barh ..	12.5	20.3	9.1	8.1	26.9	140.2	238.8
Amrapara ..	12.2	20.3	19.8	29.7	100.6	288.0	344.7
Hazaribagh ..	26.2	35.3	24.9	15.7	48.5	194.3	321.8
Netarhat ..	32.0	42.9	33.3	13.2	42.4	243.8	504.2
Jamshedpur ..	16.5	31.2	19.1	31.0	87.6	224.8	366.5

MAP NO. 7

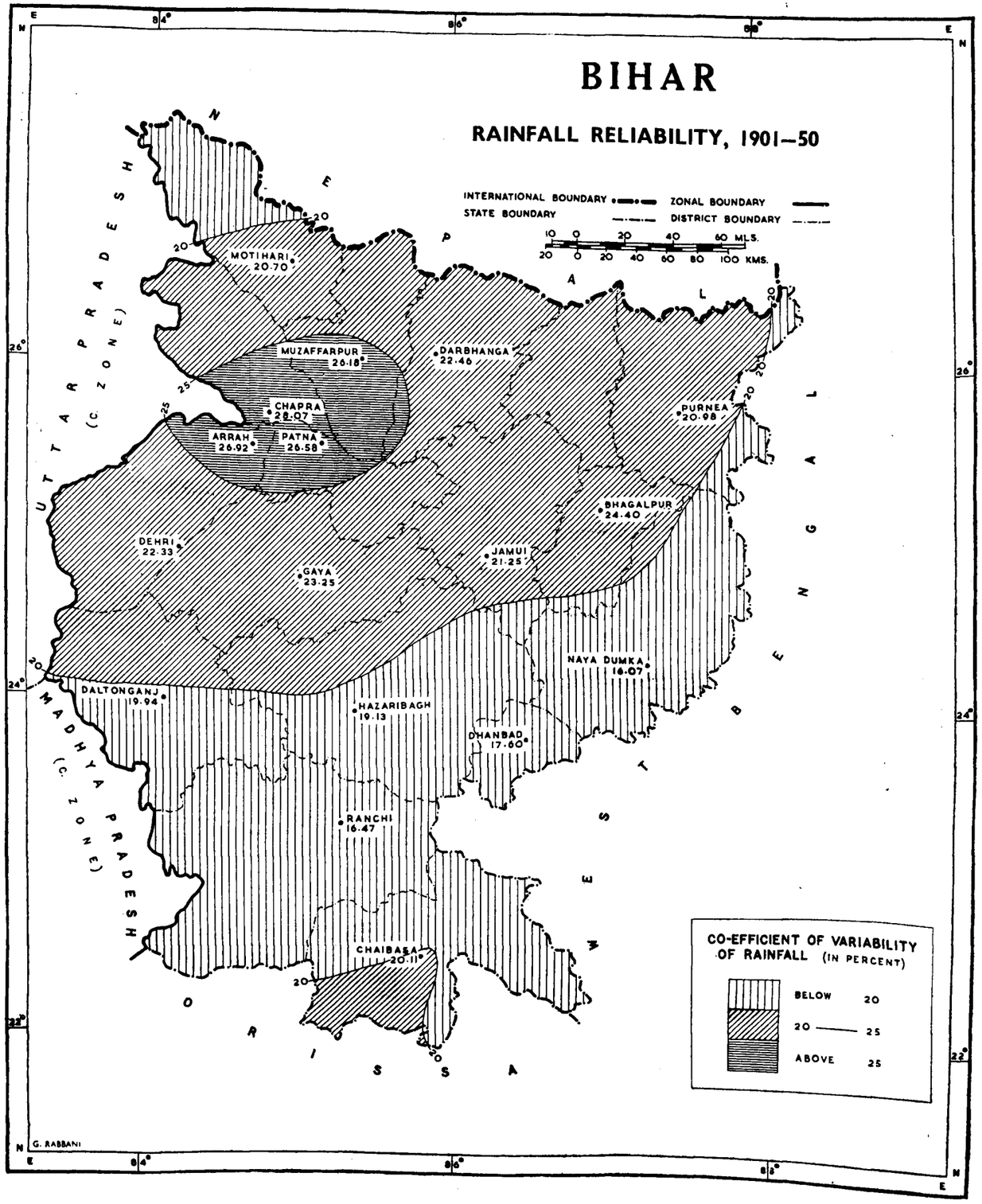


NORMAL MONTHLY AND ANNUAL RAINFALL IN SEVEN SELECTED STATIONS—*concld.*

(*Figures in millimetre*)

Station	August	September	October	November	December	Annual
1	9	10	11	12	13	14
Siwan	314.2	225.8	57.7	5.6	4.6	1,155.8
Kishanganj	476.3	363.5	112.8	9.4	3.1	2,177.4
Barh	265.4	185.4	43.9	8.6	3.3	962.5
Amrapara	358.7	304.5	138.2	15.5	3.8	1,636.0
Hazaribagh	349.0	219.7	79.5	18.0	5.8	1,338.7
Netarhat	511.6	251.2	108.7	26.2	7.9	1,817.4
Jamshedpur	358.7	209.0	70.9	19.6	4.6	1,439.5

SOURCE : Memoirs of the India Meteorological Department, Vol. XXXI, Part III.



RAINFALL RELIABILITY, 1901—50

Purpose

This map shows the regional variations in the degree of reliability of annual rainfall in the State. Reliability is measured by the coefficient of variability and is the inverse of variability.

Method

The map is based on data for mean annual rainfall for the fifty years 1901—50. The coefficient of variability is calculated on the formula $CV = S/M \times 100$, where CV is the coefficient of variability. S is the standard deviation and M is the mean annual rainfall for fifty years. The coefficient of variability is determined for 17 stations and isopleths are drawn for delimiting the State into three ranges with coefficients of variability as (*i*) below 20 per cent; (*ii*) 20—25 per cent; and (*iii*) above 25 per cent. The areas falling in each of the classes have been shaded by different grades of hatches.

The seventeen stations for which the rainfall figures have been used and the actual coefficient of variability for each have been shown in the map.

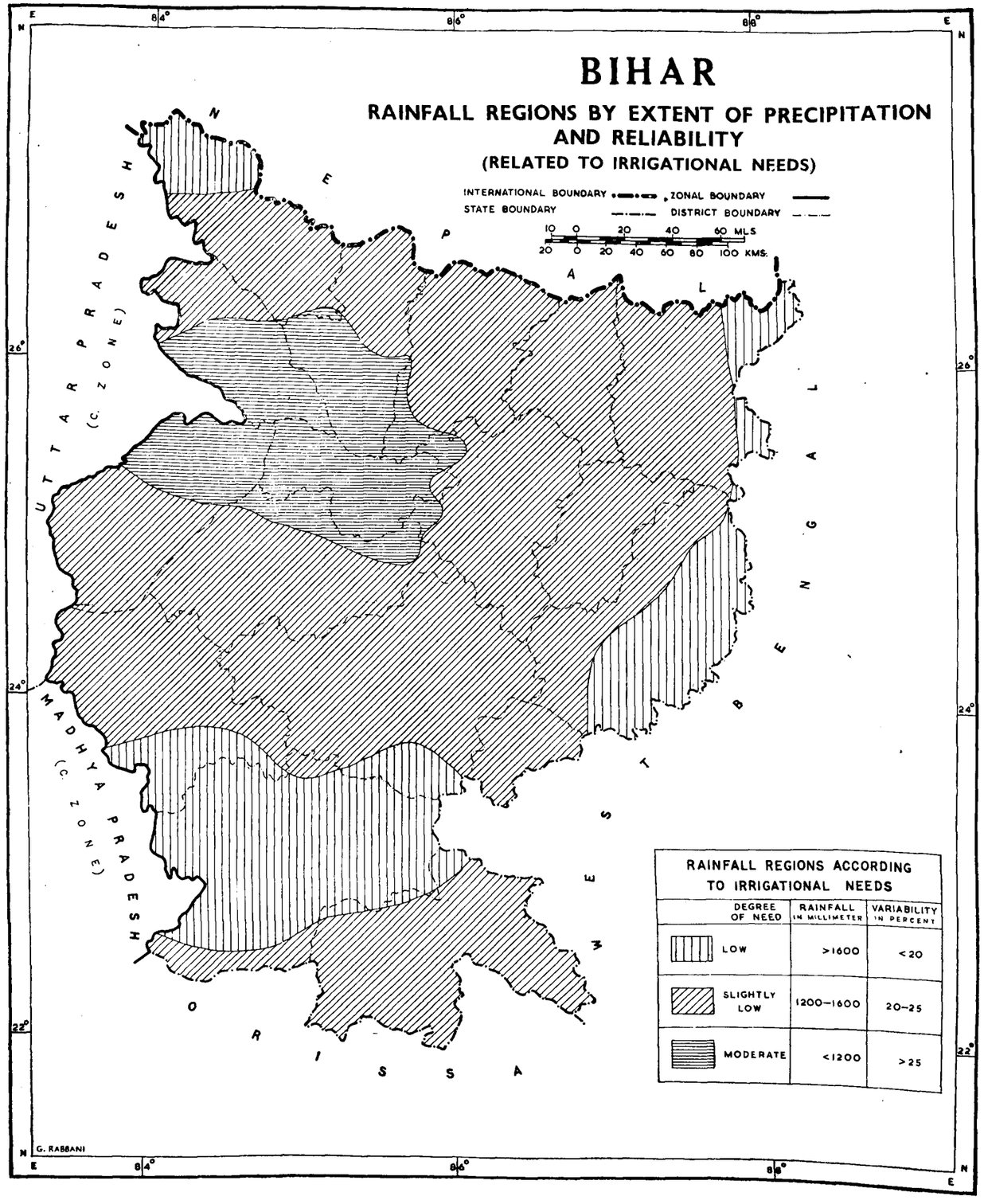
Salient Features

Reliability is the inverse of variability and hence where variability is greatest, reliability is least.

The coefficient of variability of annual rainfall is high in western Patna, north-eastern Shahabad, South Saran and South Muzaffarpur, which together comprise one zone, the only one of its kind in the State. Around this zone is a belt of moderate variability (20 to 25 per cent) comprising, besides the remaining parts of Patna, Shahabad, Saran and Muzaffarpur districts, the entire districts of Darbhanga, Saharsa and Gaya, as well as the southern part of Champaran, the greater part of Purnea and Bhagalpur, and the northern parts of Hazaribagh and Palamau. This belt also covers a small part of north-western Santal Parganas. In the same range, but isolated from this belt, lies the south-western part of Singhbhum. The remaining parts of the State have coefficients of variability below 20 per cent; in these parts the reliability of rainfall is relatively greater.

SOURCE : Office of the Registrar General, India.

MAP NO. 9



MAP NO. 9

RAINFALL REGIONS BY EXTENT OF PRECIPITATION AND RELIABILITY (RELATED TO IRRIGATIONAL NEEDS)

Purpose

This map depicts the irrigational needs of various regions in the State, classified by the extent of rainfall, and the degree of reliability.

Method

The coefficients of variability of rainfall have been obtained (as detailed in the Note to Map no. 8) and grouped under three categories. The extent of precipitation of rain has been plotted by means of isohyet which was superimposed on the isopleths of coefficient of variability. Three distinct regions were thus obtained, viz.,

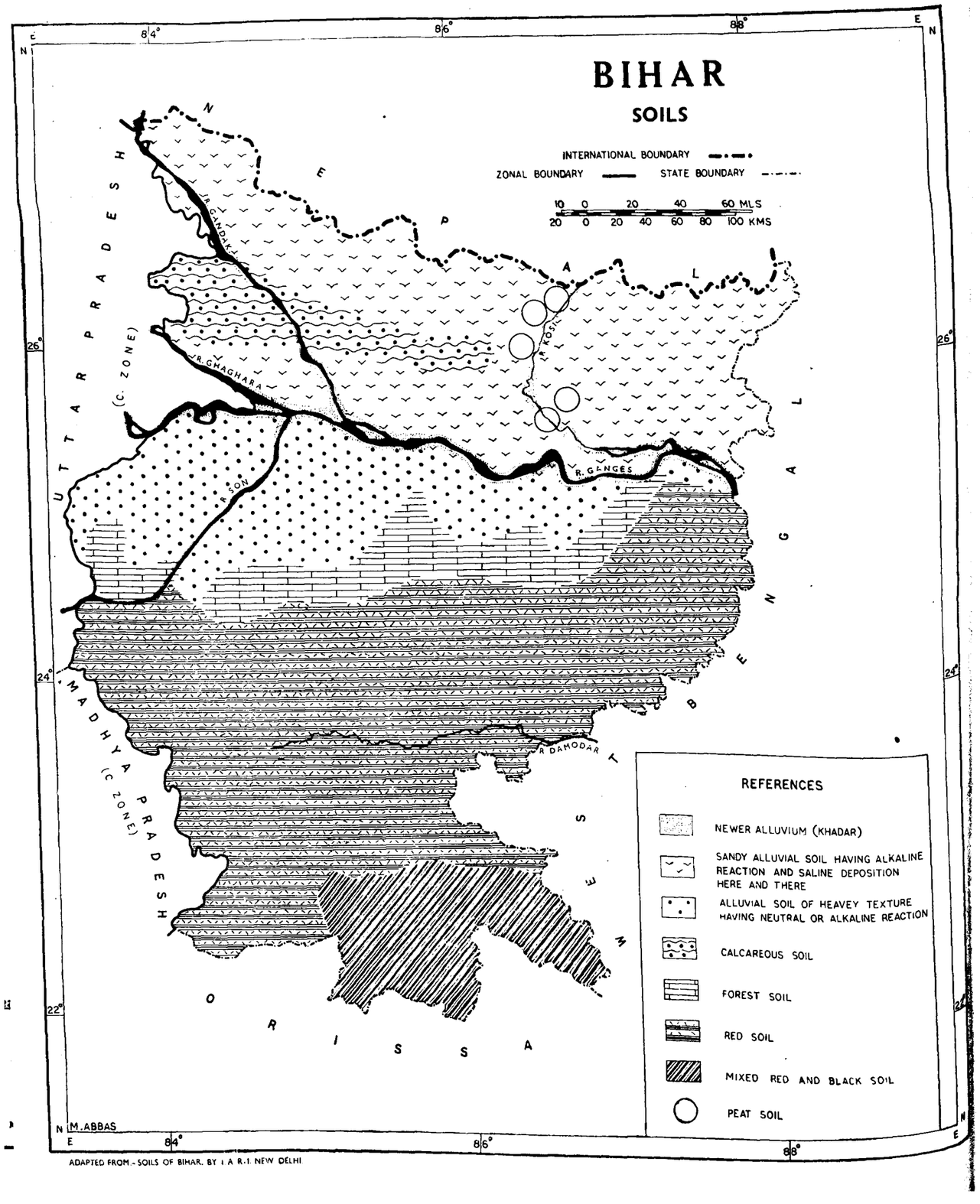
Degree of irrigational need	Rainfall in millimetres	Percentage coefficient variability of rainfall
1. Low ..	Over 1,600	Up to 20 per cent
2. Slightly low ..	1,200 to 1,600	20 to 25 per cent
3. Moderate ..	Less than 1,200	Over 25 per cent

Salient Features

The compact block comprising Patna, north-east Shahabad and southern parts of Saran and Muzaffarpur has the greatest irrigational need; while the extent of precipitation in this area is relatively small, the reliability of rainfall is also not very great. The regions having low need of irrigation are comprised of the extreme eastern portions of Purnea district, the eastern half of Santal Parganas, the bulk of Ranchi and small portions of South Palamau and South Hazaribagh. In the remaining areas of the State the irrigational needs are comparatively less.

SOURCE : (1) Memoirs of the India Meteorological Department, Vol. XXXI, Part III.
(2) Office of the Registrar General, India.

MAP NO. 10



MAP NO. 10

SOILS

Purpose

This map shows the occurrence of various types of soil in the State.

Method

The type of soils found in Bihar have been classified into the following eight broad categories explained in the legend :

(*i*) Newer Alluvium (Khadar),

(*ii*) Sandy alluvial soil having alkaline reaction and saline deposition here and there,

(*iii*) Alluvial soil of heavy texture having neutral or alkaline reaction,

(*iv*) Calcareous soil,

(*v*) Forest soil,

(*vi*) Red soil,

(*vii*) Mixed red and black soil, and

(*viii*) Peat soil.

Salient Features

Soil is the loose material which forms the upper layer of the mantle rock and consists mainly of very small particles.

Newer Alluvium (Khadar) is generally found along the thin strip of the country a few miles on either side of the rivers in the plains. This type of soil, besides occurring on either bank of the Ganges is also found on the lower reaches of the Son, the Gandak and the Kosi. Newer alluvium soil is highly leached and contains a little humus, nitrogen and lime. Since it contains a high proportion of sand, there is no waterlogging in such soil, though even in the dry season it gets moisture from the rivers by capillary action. The soil is particularly suited to cultivation of root crops.

Sandy alluvial soil is the main characteristic of the plains north of the Ganges. It is spread over the entire North Bihar Plain except the mid-western portion which contains calcareous soil. Sandy alluvial soil has been brought down by the rivers of North Bihar and deposited in the ancient basin. This soil is rich in lime and often contains high proportion of clay making it sticky and non-porous. It is suited to cultivation of paddy.

Alluvial soil of heavy texture is the main characteristic of the South Bihar Plain particularly in areas bordering the rivers Ganges and the Son. This soil has varying colour and texture from light greyish loam to heavy dark clay.

Calcareous soil containing a high content of carbonate of lime is found in a patch in the mid-western portion of North Bihar Plain. The area corresponds roughly to a triangle with its base on the western border of the State between the Gandak and Ghaghra rivers and its apex towards the middle of Darbhanga district. The area thus includes parts of Saran, Champaran, Muzaffarpur and Darbhanga districts. This soil is suited to cultivation of paddy.

Forest soil is generally sandy (except in valleys which have rich deposits of vegetable matter) and contains considerable quantity of ferruginous materials. It has varying texture, often being coarse and gravelly and sometimes stiff and shallow red clay. Forest soil occurs in the South Bihar Plain adjoining the Chotanagpur Plateau and also in the northern fringes of the plateau itself, extending from South Shahabad through Gaya and Monghyr to Bhagalpur. This soil is not very suited to cultivation and the crop yields are poor.

Red soil covers almost the entire Chotanagpur Plateau except Singhbhum district. Small portions in south-west Ranchi and North Santal Parganas also

contain different soils. The red soil is highly ferruginous and its composition and texture differ from place to place depending on the parent rock, topography, leaching and temperature. In the uplands the soil is reddish, porous and acidic being conducive to growth of forests. The lands at lower elevation contain darker clayey soil with neutral reaction. Laterite generally occurs on tops of higher plateaus but is also found in certain valleys.

Mixed red and black soil occur in Singhbhum and parts of south-eastern Ranchi. These areas are occupied by schistose rocks from which this soil is derived and hence it is highly ferruginous. The soil is poor and gravelley and with light hues in the uplands. The soil in the lowlands is more fertile and darker in colour.

Peat soil is found along the banks of the Kosi in Saharsa and Darbhanga districts in the North Bihar Plain. It contains a high proportion of decomposed vegetable matter.

SOURCE : (1) Indian Agriculture Research Institute, New Delhi.
(2) 'Bihar' by Dr. E. Ahmad.

MAP NO. 11

FORESTS

Purpose

This map shows the distribution of forests in Bihar by twelve types. An inset map further shows the districtwise classification into (*i*) reserved, and (*ii*) unreserved forests.

Method

The occurrence of each of the twelve types of forests has been shown by a separate colour. In the inset map the districtwise forest area has been shown by proportionate circles, and the percentages of reserved and unreserved forests are shown by sectors in each circle.

Salient Features

Forests cover 12,105.4 sq. miles or 18.01 per cent of the total geographical area of the State. While 13.02 per cent of the forests are reserved, 86.98 per cent are comprised of unreserved and other forests.

The forests are mainly confined to the Chotanagpur Plateau. In the North Bihar Plain, there are only 356.15 sq. miles of forests in north-west Champaran and 4.03 sq. miles of planted forests in Purnea. The districts of Saran, Muzaffarpur, Darbhanga and Saharsa are altogether devoid of forests.

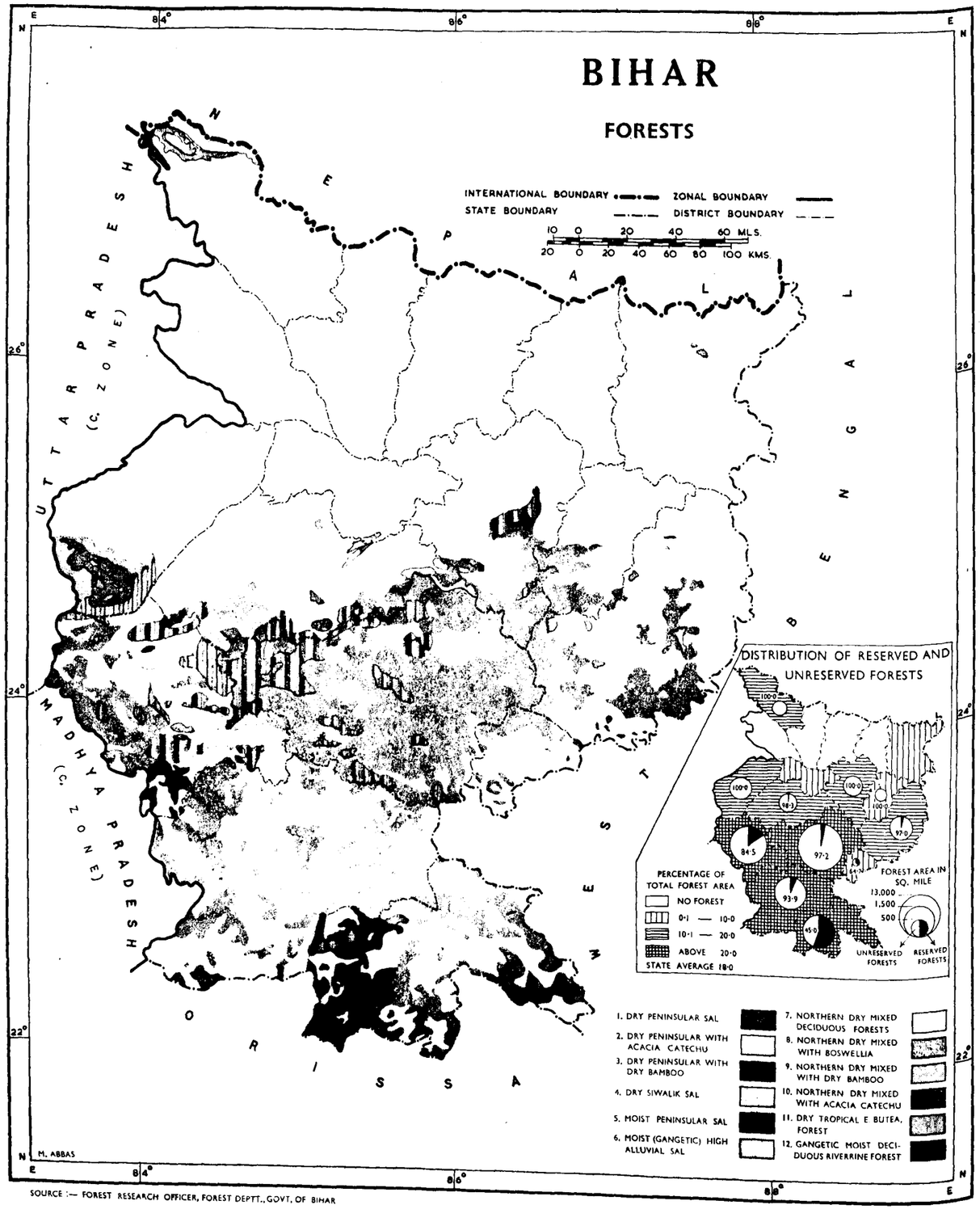
In the South Bihar Plain, however, each district has some forests occurring mostly in the southern parts adjoining the Chotanagpur Plateau. Patna has 17.9 sq. miles of forests in the Rajgir hills region, and Gaya 606.22 sq. miles. The Kaimur Plateau in South Shahabad contains most of its 689.95 sq. miles of forests. South Monghyr and Bhagalpur have 503.89 and 156.85 sq. miles respectively.

The Chotanagpur Plateau contains over four-fifths of the entire forest area in the State. More than 45 per cent of the areas of Palamau and Hazaribagh districts are under forests, the corresponding percentages being 33.92 for Singhbhum and 23.83 for Ranchi.

The forests of Bihar have been classified into 12 types after Champion. These, along with areas in which they occur, are indicated below :

1. *Dry Peninsular Sal* occurs in all districts south of the Ganges, except Patna.
2. *Dry Peninsular Forest with Acacia Catechu* is found in North Hazaribagh, North Ranchi and in Palamau districts.
3. *Dry Peninsular Forest with Dry Bamboo* occurs in Hazaribagh, Palamau and Singhbhum districts.
4. *Siwalik Sal* is confined to the Siwalik hills in north-western Champaran.
5. *Moist Peninsular Sal* is found in South Palamau and west and south-east Singhbhum.
6. *Moist (Gangetic) High Alluvial Sal* occurs in north-western Champaran only.
7. *Northern Dry Mixed Deciduous forest* is confined to Gaya district.
8. *Northern Dry Forest mixed with Boswellia* occurs in association with dry bamboo and *acacia catechu* in Gaya, Shahabad, Monghyr, Palamau and Ranchi. It is also found in Bhagalpur and parts of Ranchi district.
9. *Northern Dry Forest mixed with Bamboo* is found in Gaya, Shahabad, Monghyr, Santal Parganas, Hazaribagh and Singhbhum, generally in association with either *boswellia* or *acacia catechu* or both.
10. *Northern Dry Forest mixed with Acacia Catechu* occurs in association with dry bamboo and *boswellia* in Gaya, Monghyr, Hazaribagh and Palamau.

MAP NO. 11



SOURCE :— FOREST RESEARCH OFFICER, FOREST DEPTT., GOVT. OF BIHAR

11. *Dry Tropical and Butea Forest* occurs in Gaya, Santal Parganas and Palamau.

12. *Gangetic moist Deciduous Riverine Forest* is found only in north-western Champaran.

Forests yield varieties of timber, firewood, bamboos, *kendu* leaves (used in making *biri*), *sabai* grass (used in making paper), fodder, lac, myrabolan and medicinal herbs. The total forest produce in 1961-62 was valued at Rs. 48.17 lakhs.

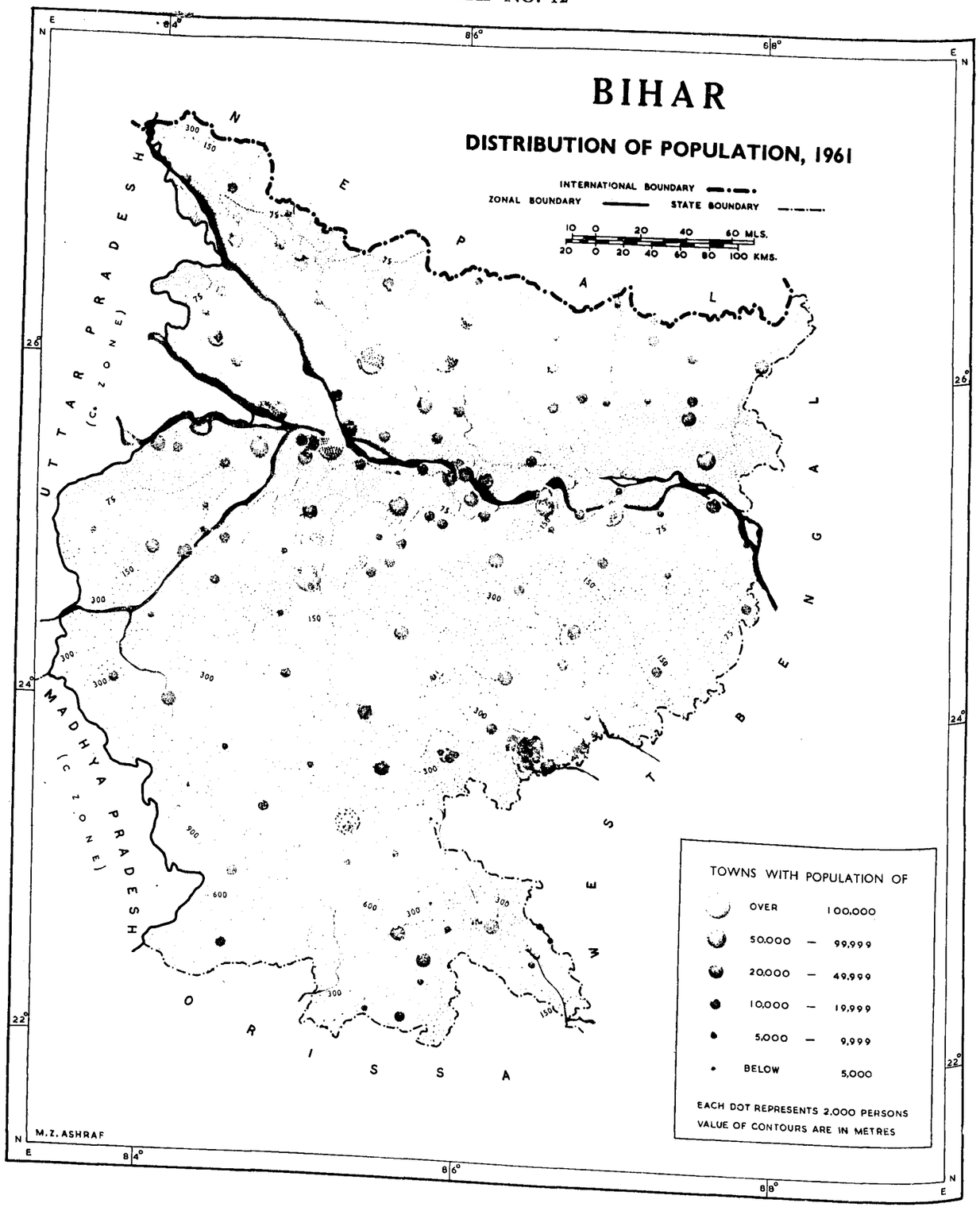
TABLE

FOREST AREA BY DISTRICTS

State/District	Total area (sq.miles)	Forest area (sq.miles)	Reserved forest (sq. miles)	Unreserved forest (sq. miles)	Percentage of forest area to total area of the district
1	2	3	4	5	6
BIHAR	**67,196**	**12,105.38**	**1,575.82**	**10,529.56**	**18.01**
Patna	2,164	17.91	..	17.91	0.83
Gaya	4,766	606.22	10.50	595.72	12.72
Shahabad	4,408	689.95	..	689.95	15.65
Saran	2,669	..	..	..	..
Champaran	3,553	356.15	..	356.15	10.02
Muzaffarpur	3,018	..	..	..	..
Darbhanga	3,345	..	..	..	..
Monghyr	3,975	503.89	..	503.89	12.68
Bhagalpur	2,183	156.85	..	156.85	7.18
Saharsa	2,093	..	..	..	..
Purnea	4,259	4.03	..	4.03	0.09
Santal Parganas	5,470	803.56	24.15	779.41	14.69
Palamau	4,925	2,224.91	344.01	1,880.90	45.17
Hazaribagh	7,016	3,197.09	89.03	3,108.06	45.57
Ranchi	7,047	1,679.18	102.18	1,577.00	23.83
Dhanbad	1,114	104.97	37.05	67.92	9.42
Singhbhum	5,191	1,760.67	968.90	791.77	33.92

SOURCE : Forest Research Officer, Bihar.

3. DEMOGRAPHIC STRUCTURE AND TRENDS



MAP NO. 12

DISTRIBUTION OF POPULATION, 1961

Purpose

This map shows the distribution of rural and urban population in the State in the background of its physiography and drainage.

Method

The rural population has been depicted by green dots, each representing 2,000 persons. These have been plotted anchal-wise though no administrative divisions have been shown in the map. The urban population has been shown by spheres proportional in size to the class of the town/city concerned.

The background is provided by contours showing elevations of 75, 150, 300, 600 and 900 metres above mean sea level and the courses of the main rivers.

Salient Features

The plains regions are naturally more densely populated than the plateau. The most thickly populated areas are *(i)* the central portion of the North Bihar Plain between the Gandak and Kosi rivers, and *(ii)* the plains just south of the Ganges. Ranchi and Palamau districts are more sparsely populated than even Singhbhum and Dhanbad in the same region.

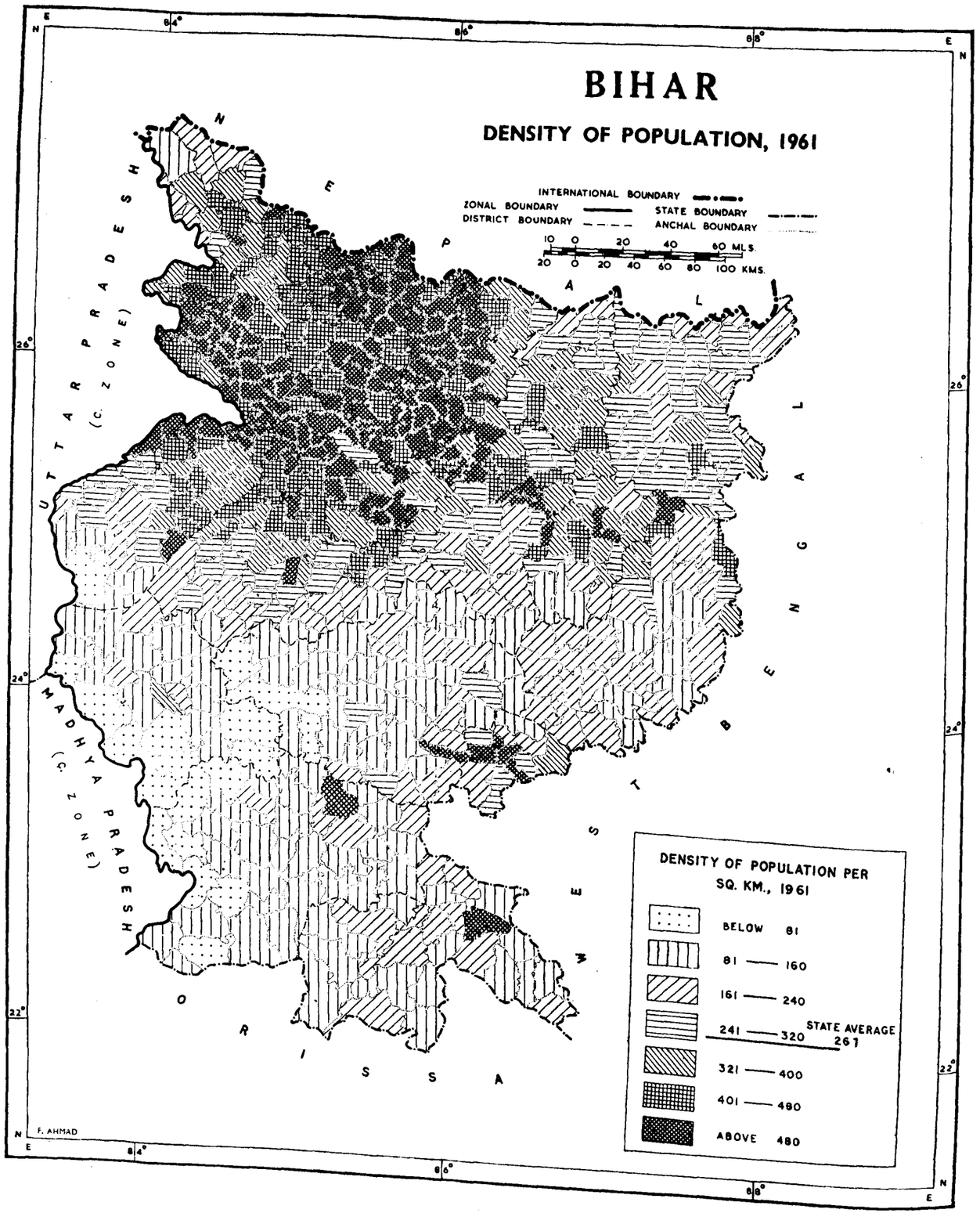
A good many towns lie along the course of the Ganges and are indicative of the importance of river-borne traffic in the past. Dhanbad has the largest conglomeration of towns, obviously the outcome of mining and industrial development in the district. The seven cities of Bihar are distributed in the three natural divisions of the State.

TABLE

RURAL AND URBAN POPULATION BY DISTRICTS, 1961

Rank	State/District	Population		
		Total	Rural	Urban
1	2	3	4	5
	BIHAR	**46,455,610**	**42,541,690**	**3,913,920**
1	Darbhanga	4,413,027	4,222,472	190,555
2	Muzaffarpur	4,118,393	3,929,573	188,825
3	Gaya	3,647,892	3,382,794	265,098
4	Saran	3,584,918	3,435,002	149,916
5	Monghyr	3,387,082	3,011,883	375,199
6	Shahabad	3,218,017	2,986,316	231,701
7	Purnea	3,089,128	2,903,531	185,597
8	Champaran	3,006,211	2,860,566	145,645
9	Patna	2,949,746	2,355,850	593,896
10	Santal Parganas	2,675,203	2,532,251	142,952
11	Hazaribagh	2,396,411	2,195,227	201,184
12	Ranchi	2,138,565	1,936,087	202,478
13	Singhbhum	2,049,911	1,609,260	440,651
14	Saharsa	1,723,566	1,656,139	67,427
15	Bhagalpur	1,711,136	1,524,417	186,719
16	Palamau	1,187,789	1,131,625	56,164
17	Dhanbad	1,158,610	868,697	289,913

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-I.



DENSITY OF POPULATION, 1961

Purpose

This map shows the anchalwise density of population in terms of the number of persons per sq. km. of area in 1961.

Method

Density per sq. km. has been calculated for each anchal. These have been grouped into seven ranges, three above and three below the range for the State average, as follows:

(*i*) Below 81,
(*ii*) 81—160,
(*iii*) 161—240,
(*iv*) 241—320,
(*v*) 321—400,
(*vi*) 401—480, and
(*vii*) above 480.

The anchals have been shaded by suitable grades of hatching ranging from high to low.

Salient Features

The average density of population in the State is 267 persons per sq. km. It is appreciably higher than the all-India average of 144 persons per sq. km.

There are wide variations in the density of population among the natural divisions of the State. The average density in the North Bihar Plain is 408 and in the South Bihar Plain 324 as against only 146 in the Chotanagpur Plateau.

Out of 575 anchals in the State, the densities are above 463 persons per sq. km. (corresponding to 1,185 persons per sq. mile) in 135 anchals. Of these, 119 comprise a compact block extending over portions of the districts of Saran, Muzaffarpur, Darbhanga, Champaran, Monghyr (North), Patna and Shahabad. These anchals, occupying less than one-eighth of the land area, contain more than one-fourth of the total population of the State, and comprise one of the largest and most densely populated tracts in the country.

Out of 185 anchals in the six districts of the Chotanagpur Plateau, the density of population is below the State average in 164 anchals. 8 of the 21 anchals having higher than average densities in this region lie in Santal Parganas and 6 in Dhanbad district.

The lowest density zone is situated near the south-western border of the State. It is comprised of Simdega subdivision in Ranchi district and parts of Palamau and Hazaribagh districts.

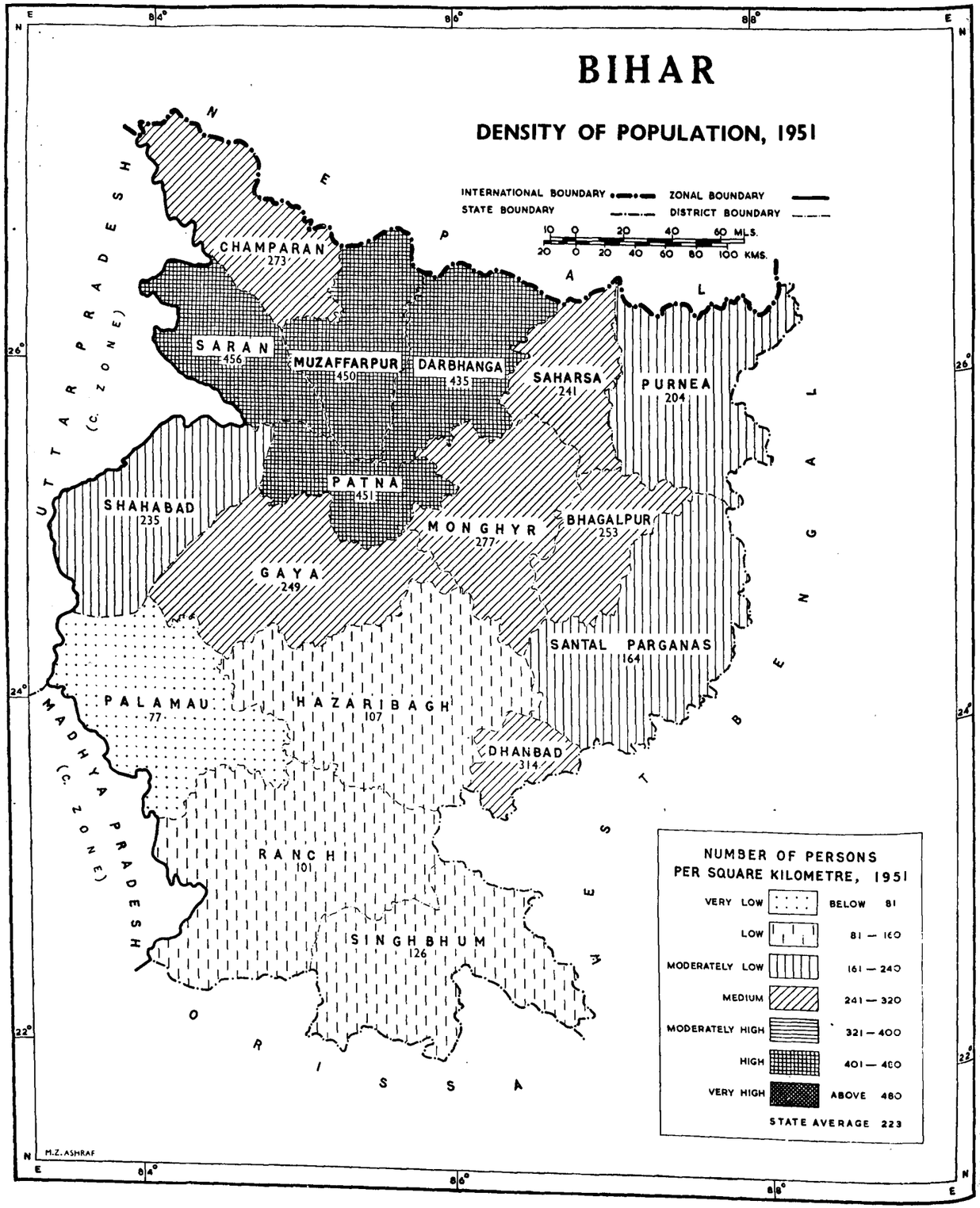
The anchalwise density of population varies from a minimum of 18 persons per sq. km. in Adhaura (Shahabad) to 2,779 persons in Patna Rural anchal which contains the State capital. Among the entire rural anchals, the density is highest in Bidupur (Muzaffarpur) which has 738 persons per sq. km.

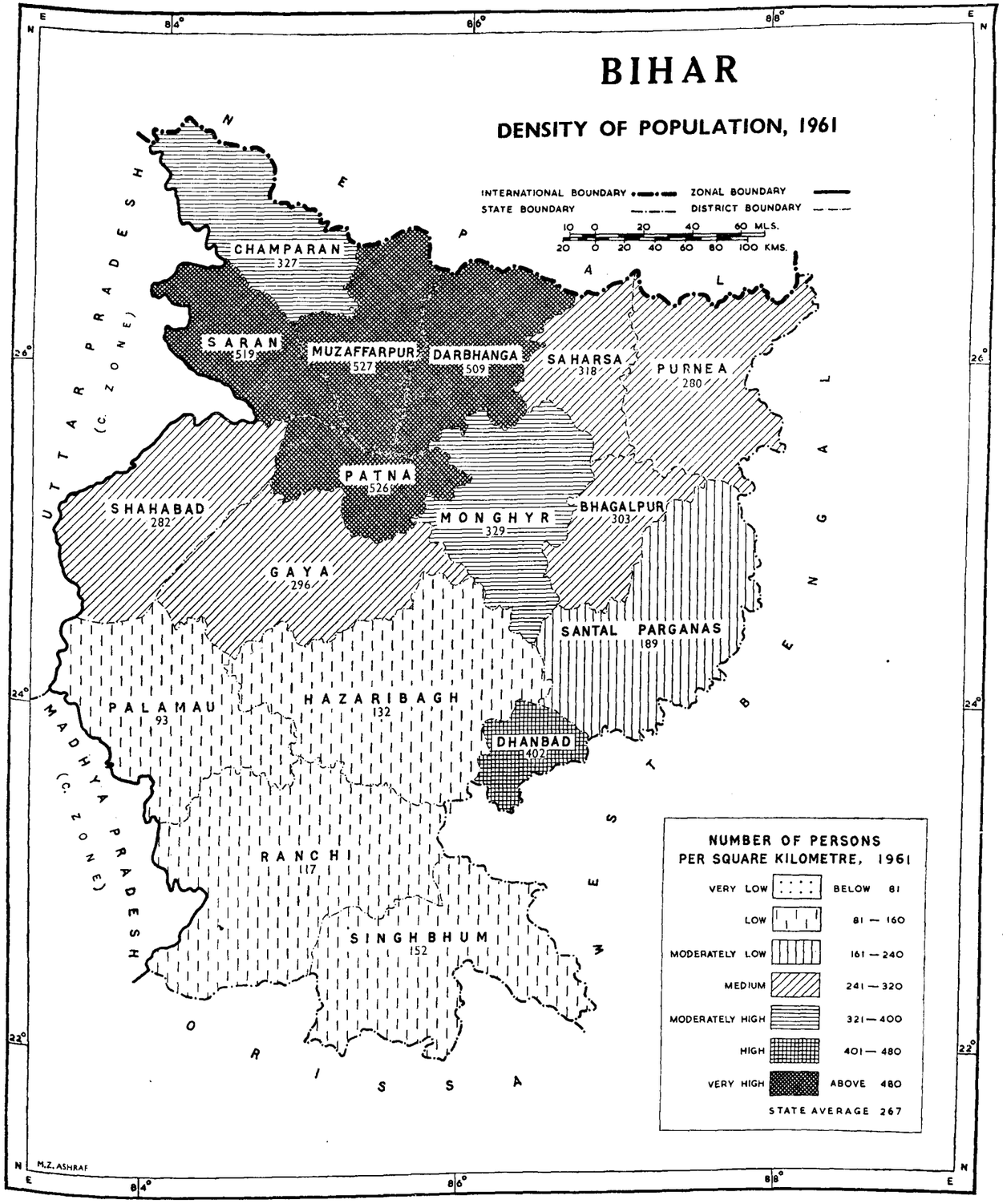
TABLE

DENSITY OF POPULATION PER SQ. KM., 1961

Rank	State/District	Density per sq. km.	Rank	State/District	Density per sq. km.
1	Muzaffarpur	527	10	Gaya	296
2	Patna	526	11	Shahabad	282
3	Saran	519	12	Purnea	280
4	Darbhanga	509		**BIHAR**	**267**
5	Dhanbad	402	13	Santal Parganas	189
6	Monghyr	329	14	Singhbhum	152
7	Champaran	327	15	Hazaribagh	132
8	Saharsa	318	16	Ranchi	117
9	Bhagalpur	303	17	Palamau	93

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-I.


BIHAR
DENSITY OF POPULATION, 1951
INTERNATIONAL BOUNDARY
STATE BOUNDARY
ZONAL BOUNDARY
DISTRICT BOUNDARY
10 0 20 40 60 MLS.
20 0 20 40 60 80 100 KMS.
UTTAR PRADESH (C. ZONE)
BENGAL
BIHAR
ORISSA
MADHYA PRADESH (C. ZONE)
CHAMPARAN 273
SARAN 456
MUZAFFARPUR 450
DARBHANGA 435
SAHARSA 241
PURNEA 204
PATNA 451
SHAHABAD 235
MONGHYR 277
BHAGALPUR 253
GAYA 249
SANTAL PARGANAS 164
PALAMAU 77
HAZARIBAGH 107
DHANBAD 314
RANCHI 101
SINGHBHUM 126
NUMBER OF PERSONS PER SQUARE KILOMETRE, 1951
VERY LOW BELOW 81
LOW 81 — 160
MODERATELY LOW 161 — 240
MEDIUM 241 — 320
MODERATELY HIGH 321 — 400
HIGH 401 — 480
VERY HIGH ABOVE 480
STATE AVERAGE 223
M.Z. ASHRAF
84° 86° 88°
26° 24° 22°


BIHAR
DENSITY OF POPULATION, 1961
INTERNATIONAL BOUNDARY
STATE BOUNDARY
ZONAL BOUNDARY
DISTRICT BOUNDARY
10 0 20 40 60 MLS.
20 0 20 40 60 80 100 KMS.
UTTAR PRADESH (C. ZONE)
BENGAL
BIHAR
ORISSA
MADHYA PRADESH (C. ZONE)
CHAMPARAN 327
SARAN 519
MUZAFFARPUR 527
DARBHANGA 509
SAHARSA 318
PURNEA 280
PATNA 526
SHAHABAD 282
MONGHYR 329
BHAGALPUR 303
GAYA 296
SANTAL PARGANAS 189
PALAMAU 93
HAZARIBAGH 132
DHANBAD 402
RANCHI 117
SINGHBHUM 152
NUMBER OF PERSONS PER SQUARE KILOMETRE, 1961
VERY LOW BELOW 81
LOW 81 — 160
MODERATELY LOW 161 — 240
MEDIUM 241 — 320
MODERATELY HIGH 321 — 400
HIGH 401 — 480
VERY HIGH ABOVE 480
STATE AVERAGE 267
M.Z. ASHRAF
84° 86° 88°
26° 24° 22°

MAP NO. 14

VARIATION IN DENSITY OF POPULATION, 1951—61

Purpose

With the number of persons per sq. km. indicating the density of population, changes in the districtwise densities between 1951 and 1961 are depicted in two separate maps for 1951 and 1961.

Method

Density for each district has been calculated for 1951 and 1961. The statistics of population and area of the districts in 1951 have been adjusted according to their jurisdictions in 1961. The data have been grouped into seven ranges as follows :

(*i*) Below 81,

(*ii*) 81—160,

(*iii*) 161—240,

(*iv*) 241—320,

(*v*) 321—400,

(*vi*) 401—480, and

(*vii*) above 480.

The districts have then been shaded by suitable grades of hatching ranging from high to low.

Salient Features

The density of population in the State has risen from 223 per sq. km. in 1951 to 267 per sq. km. in 1961. But there has been no appreciable change in the pattern of distribution of population but variations in the densities of a few districts have been wide.

In the ranking of districts in order of density, twelve out of seventeen districts have retained their relative positions both in 1951 and 1961. These districts include all the six in Chotanagpur Plateau and Patna, Shahabad, Champaran, Darbhanga, Monghyr, and Purnea districts.

The three most densely populated districts in Bihar in 1951 were (*i*) Saran, (*ii*) Patna, and (*iii*) Muzaffarpur (in the same order). In 1961 Muzaffarpur has changed places with Saran. The only other district to improve its relative ranking was Saharsa which has come up to eighth position in 1961 from tenth position in 1951. On the other hand, both Gaya and Bhagalpur have gone down by one place each between 1951 and 1961.

Thus, though a depletion has taken place in the ranks of low density districts due to a large increase of population in 1951—61, the overall pattern of distribution of population has remained largely unaffected.

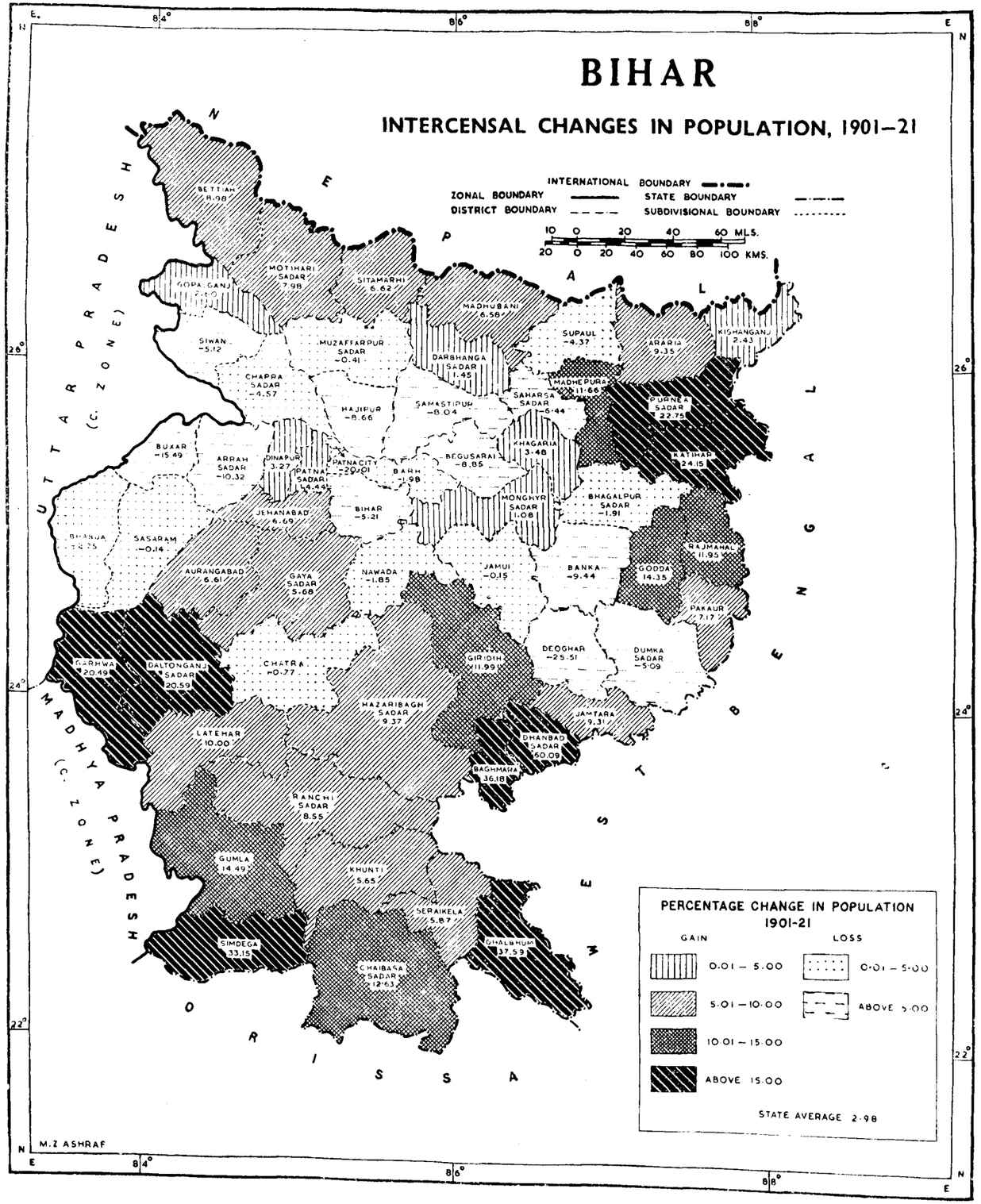
TABLE

DENSITY OF POPULATION, 1951 AND 1961

State/District		*Area (Sq.Kms.)	1951			1961		
			Population	Density	Rank	Population	Density	Rank
1		2	3	4	5	6	7	8
BIHAR	..	**174,038**	**38,786,184**	**223**	..	**46,455,610**	**267**	..
Muzaffarpur	..	7,817	3,520,739	450	3	4,118,398	527	1
Patna	..	5,605	2,528,272	451	2	2,949,746	526	2
Saran	..	6,913	3,155,144	456	1	3,584,918	519	3
Darbhanga	..	8,663	3,769,534	435	4	4,413,027	509	4
Dhanbad	..	2,885	905,783	314	5	1,158,610	402	5
Monghyr	..	10,295	2,849,127	277	6	3,387,082	329	6
Champaran	..	9,202	2,515,343	273	7	3,006,211	327	7
Saharsa	..	5,421	1,308,198	241	10	1,723,566	318	8
Bhagalpur	..	5,654	1,429,069	253	8	1,711,136	303	9
Gaya	..	12,344	3,070,499	249	9	3,647,892	296	10
Shahabad	..	11,417	2,688,440	235	11	3,218,017	282	11
Purnea	..	11,031	2,254,565	204	12	3,089,128	280	12
Santal Parganas	..	14,167	2,322,092	164	13	2,675,203	189	13
Singhbhum	..	13,445	1,700,590	126	14	2,049,911	152	14
Hazaribagh	..	18,171	1,937,210	107	15	2,396,411	132	15
Ranchi	..	18,252	1,845,812	101	16	2,138,565	117	16
Palamau	..	12,756	985,767	77	17	1,187,789	93	17

*Area figures are for jurisdictions as on 1st March, 1961.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A., Table A-I.



MAP NO. 15

INTERCENSAL CHANGES IN POPULATION BY SUBDIVISIONS, 1901—21

Purpose

This map shows the variation in population in each subdivision of the State during the period 1901—21.

Method

The per cent increase or decrease of population from 1901 to 1921 has been calculated for each subdivision as constituted in 1961. The data have been grouped into two broad categories indicating (*i*) gain and (*ii*) loss. Four ranges for gain and two ranges for loss have been prepared as follows :

Gain (*per cent*)	*Loss* (*per cent*)
(*i*) 0.01—5.00	(*i*) 0.01—5.00
(*ii*) 5.01—10.00	(*ii*) Above 5.00
(*iii*) 10.01—15.00	
(*iv*) Above 15.00	

The subdivisions which recorded gain have been shaded by suitable grades of hatching ranging from high to low in black. Those which recorded loss are similarly shaded in red. For facility of reference, the per cent variation in population in each subdivision has also been shown in the map.

Salient Features

The population of Bihar increased from 27,314,210 in 1901 to 28,129,208 in 1921, or by a mere 2.98 per cent. The comparative rate for India as a whole during the corresponding period was 5.35 per cent. Ravages caused by outbreaks of epidemics such as plague, influenza, cholera and smallpox during the period left their imprint on population growth, particularly in areas outside the Chotanagpur Plateau.

The population increased in all subdivisions of Palamau, Ranchi, Dhanbad, Singhbhum and Purnea districts, the growth being over 15 per cent in Daltonganj Sadar, Garhwa, Simdega, Dhalbhum, Dhanbad Sadar, Baghmara, Purnea Sadar and Katihar subdivisions.

There was loss of population in all the subdivisions of Shahabad and Bhagalpur districts. Among other districts the population increased in some subdivisions and fell in others.

The subdivisions in the North Bihar Plain generally recorded loss of population except on the extreme northern border.

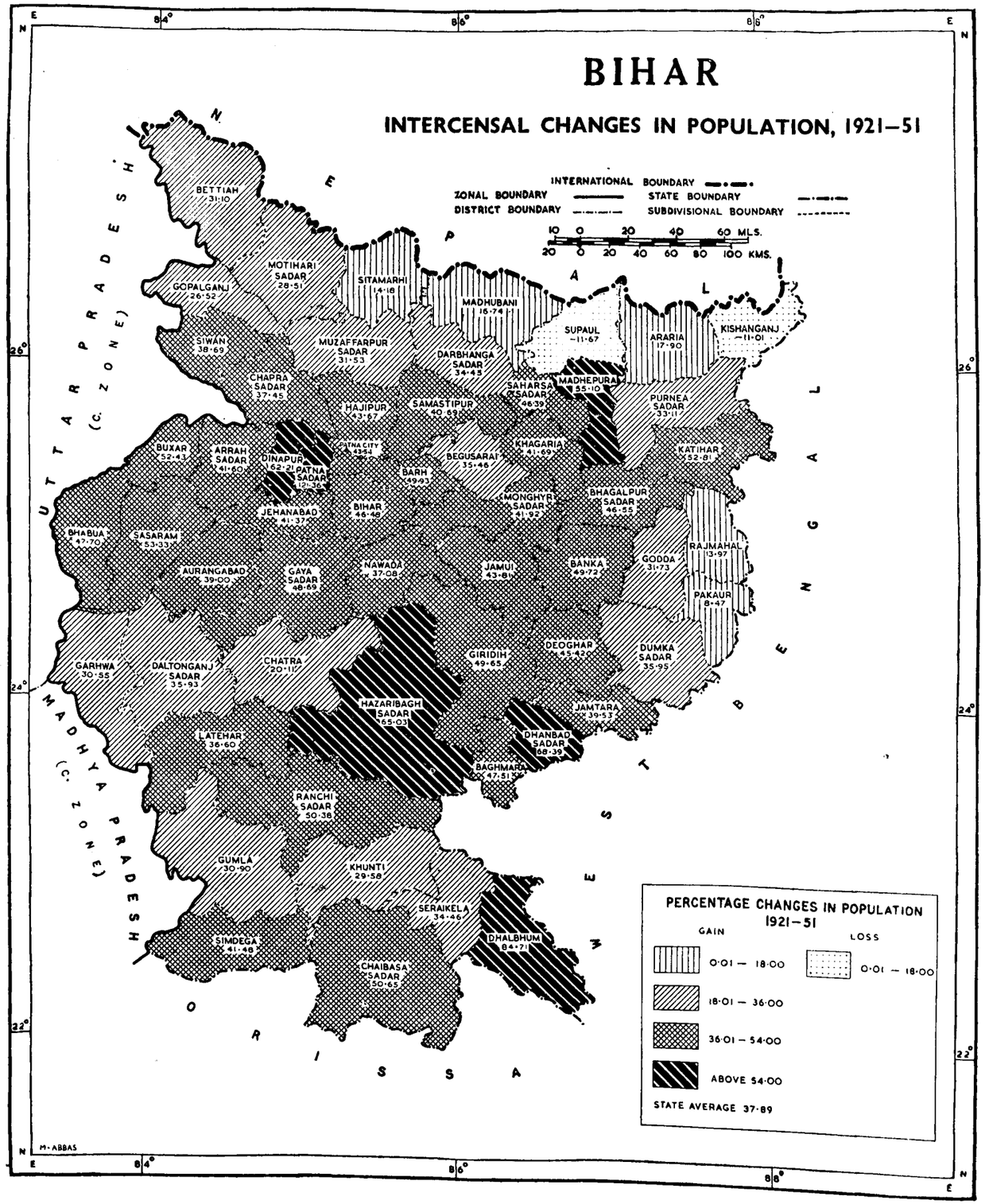
The Dhanbad Sadar subdivision witnessed the highest rate of growth (60.09 per cent) during this period, evidently due to its coal-fields and other industrial developments. On the other hand, the decline in population was greatest in the Deoghar subdivision (*minus* 25.51 per cent).

TABLE

INTERCENSAL CHANGES IN POPULATION, 1901—21

Rank	State/District	Percentage Increase(+) or Decrease(—)	Rank	State/District	Percentage Increase(+) or Decrease(—)
1	Dhanbad	+49.58	9	Darbhanga	+0.03
2	Palamau	+18.27	10	Muzaffarpur	—0.04
3	Singhbhum	+18.09	11	Saharsa	—0.29
4	Purnea	+14.78	12	Santal Parganas	—0.60
5	Ranchi	+12.38	13	Monghyr	—1.94
6	Hazaribagh	+8.40	14	Saran	—2.87
	Champaran	+8.40	15	Patna	—2.92
8	Gaya	+4.42	16	Bhagalpur	—5.11
	BIHAR	**+2.98**	17	Shahabad	—7.43

SOURCE : Census of India, (1) 1901, Vol. VI-B, (2) 1921, Vol. VII.



INTERCENSAL CHANGES IN POPULATION BY SUBDIVISIONS, 1921—51

Purpose

This map shows the variation in population in each subdivision of the State during the period 1921—51.

Method

The per cent increase or decrease of population from 1921 to 1951 has been calculated for each subdivision as constituted in 1961. The data have been grouped into two broad categories indicating (*i*) gain and (*ii*) loss. Four ranges for gain and one for loss have been prepared as follows :

Gain (*per cent*)	*Loss* (*per cent*)
(*i*) 0.01—18.00	(*i*) 0.01—18.00
(*ii*) 18.01—36.00	
(*iii*) 36.01—54.00	
(*iv*) Above 54.00	

The subdivisions which recorded gain have been shaded by suitable grades of hatching ranging from high to low in black. Those which recorded loss are similarly shaded in red. For facility of reference, the per cent variation in population, in each subdivision has also been shown in the map.

Salient Features

The population of Bihar increased from 28,129,208 in 1921 to 38,786,184 in 1951, or by as much as 37.89 per cent. As in the country, so in Bihar, this period was marked by a very high rate of growth. The rate of increase in Bihar was, however, much lower than in India (43.68 per cent).

Out of 58 subdivisions in Bihar, population decreased only in two, viz., Supaul (Saharsa) and Kishanganj (Purnea). This was apparently due to the ravages of river Kosi, which at one time was called the 'river of sorrow' in North Bihar. On account of increases in the populations of other subdivisions of Saharsa and Purnea districts, however, these districts showed overall increase in their populations during the period. Five subdivisions, viz., Sitamarhi (Muzaffarpur), Madhubani (Darbhanga), Araria (Purnea), Rajmahal and Pakur (both in Santal Parganas) recorded comparatively slower rates of growth (less than 18 per cent).

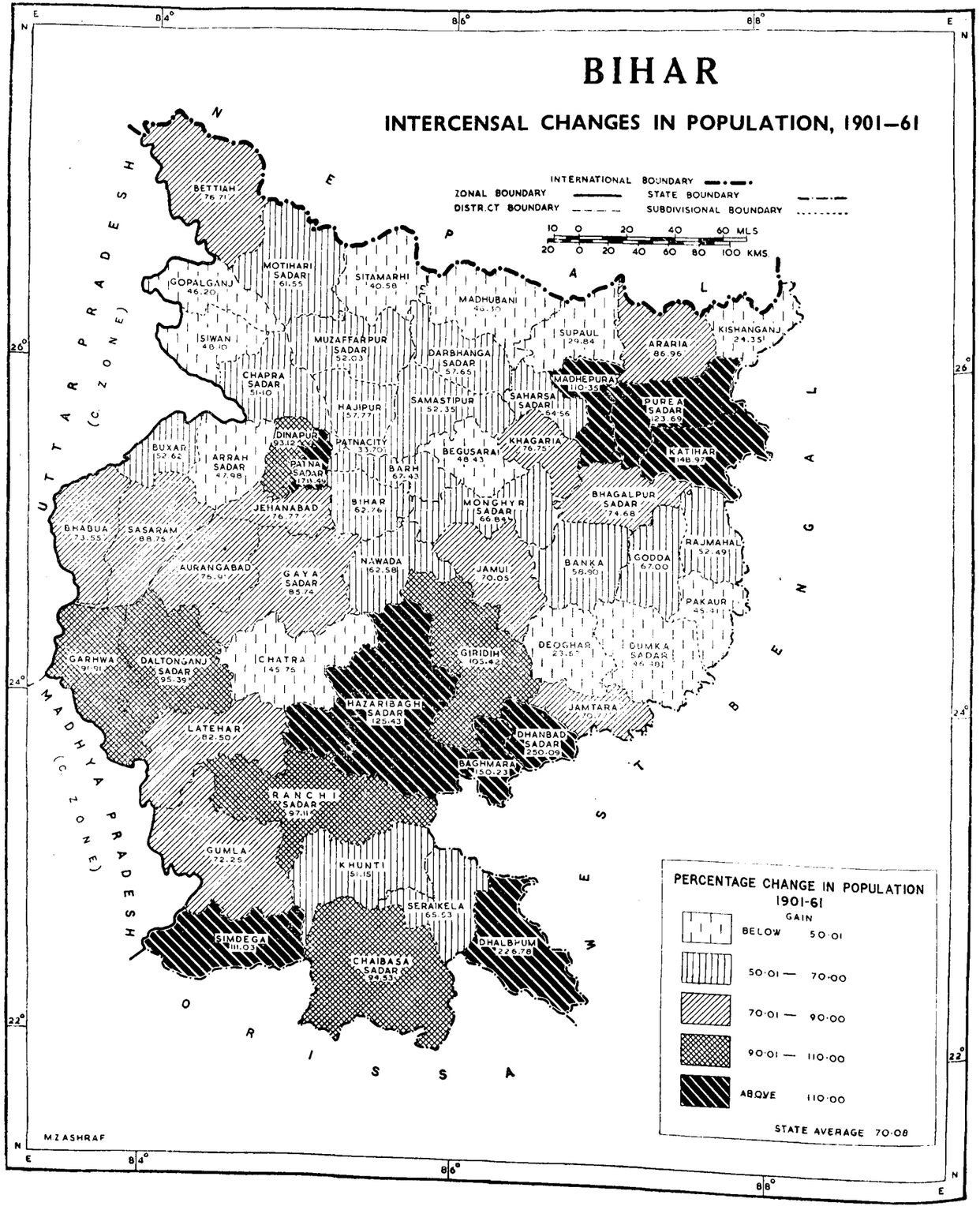
The rate of growth was relatively high in the Patna Sadar and Dinapur subdivisions, presumably because of proximity to the State capital. On the other hand, industrial developments in the subdivisions of Dhalbhum (Singhbhum), Dhanbad Sadar and Hazaribagh Sadar are apparently reflected in their high rates of growth. Madhepura subdivision (Saharsa) showed striking high rate of increase (55.10 per cent) in its population when Supaul, another subdivision to its immediate north, recorded a decrease of 11.67 per cent.

TABLE

INTERCENSAL CHANGES IN POPULATION 1921—51

Rank	State/District	Percentage increase	Rank	State/District	Percentage increase
1	Patna	60.33		**BIHAR**	**37.89**
2	Dhanbad	60.03	10	Saran	34.82
3	Singhbhum	58.30	11	Palamau	34.41
4	Hazaribagh	51.71	12	Champaran	29.60
5	Shahabad	48.19	13	Santal Parganas	29.46
6	Bhagalpur	47.84	14	Darbhanga	29.38
7	Gaya	42.62	15	Muzaffarpur	27.80
8	Monghyr	40.35	16	Purnea	24.97
9	Ranchi	39.47	17	Saharsa	22.59

SOURCE : Census of India, (1) 1921, Vol. VII, (2) 1951, Vol. V.



MAP NO. 17

INTERCENSAL CHANGES IN POPULATION BY SUBDIVISIONS, 1901—61

Purpose

This map shows the variation in population in each subdivision of the State during the sixty years from 1901 to 1961.

Method

The per cent increase of population from 1901 to 1961 has been calculated for each subdivision as constituted in 1961. There is no subdivision in which the population decreased during this period. The data have been grouped into five ranges as follows :

(*i*) Below 50.01,
(*ii*) 50.01—70.00,
(*iii*) 70.01—90.00,
(*iv*) 90.01—110.00, and
(*v*) above 110.00.

These ranges are shown by suitable grades of hatching from high to low. For facility of reference, the per cent variation in each subdivision has also been shown in the map.

Salient Features

The population of Bihar rose from 27,314,210 in 1901 to 46,455,610 in 1961, or by 70.08 per cent during the entire period of sixty years. This rate, be it noted, is somewhat lower than the all-India average of 85.89 per cent.

The increase has been highest in Dhanbad district which has both its subdivisions in the highest range. As in Dhanbad, mining and industry appear to be the main factors responsible for high increases in the populations of Hazaribagh Sadar and Dhalbhum subdivisions which have more than doubled in the sixty years period. The high increase in Patna Sadar is obviously due to its proximity to the State capital.

The growth in Simdega and a contiguous group of three subdivisions comprising Madhepura (Saharsa), Purnea Sadar and Katihar (Purnea) is not apparently associated with any marked industrial development.

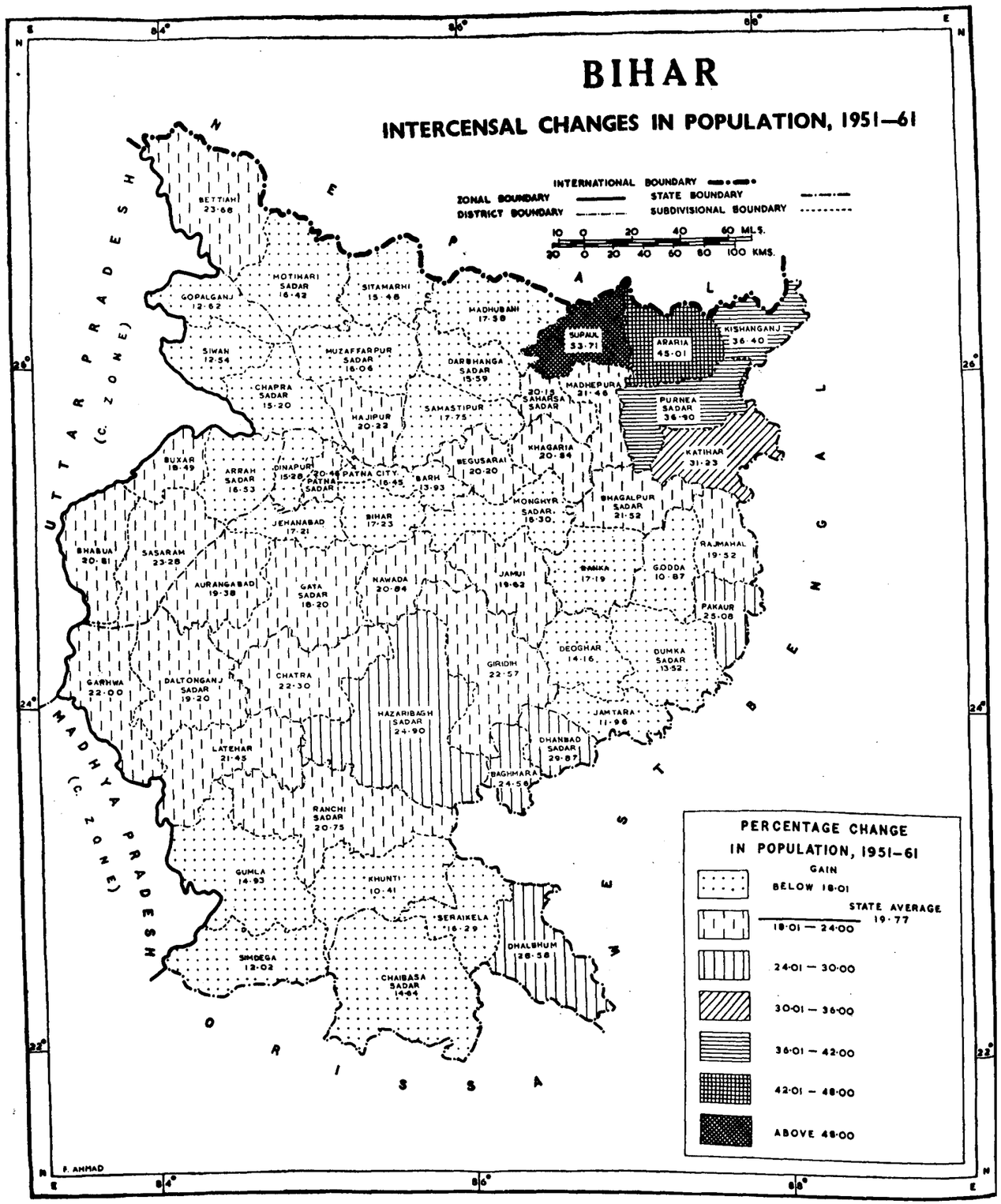
Population growth has been comparatively slow (below 50 per cent) in Sitamarhi, Madhubani, Supaul and Kishanganj subdivisions, all lying on the northern border; Deoghar, Dumka and Pakur subdivisions in the Santal Parganas; and Arrah Sadar, Siwan and Gopalganj subdivisions in the north-western part of the State. Begusarai (Monghyr) and Chatra (Hazaribagh) are isolated subdivisions in this range.

TABLE

INTERCENSAL CHANGES IN POPULATION, 1921—51

Rank	State/District	Percentage increase
1	Dhanbad	206.20
2	Singhbhum	125.35
3	Hazaribagh	103.44
4	Purnea	96.47
5	Palamau	91.55
6	Patna	81.61
7	Ranchi	81.60
8	Gaya	76.92
	BIHAR	**70.08**
9	Bhagalpur	67.97
	Champaran	67.97
11	Shahabad	64.19
12	Monghyr	63.61
13	Saharsa	61.05
14	Darbhanga	51.51
15	Muzaffarpur	49.43
16	Saran	48.79
17	Santal Parganas ..	48.25

SOURCE : Census of India, (1) 1901, Vol. VI-B, (2) 1961, Vol. IV.



INTERCENSAL CHANGES IN POPULATION BY SUBDIVISIONS, 1951—61

Purpose

This map shows the variation in population in each subdivision of the State during the decade 1951—61.

Method

The per cent increase of population from 1951 to 1961 has been calculated for each subdivision as constituted in 1961. The data have been grouped into seven ranges as follows :

(*i*) Below 18.01, (*iv*) 30.01—36.00,
(*ii*) 18.01—24.00, (*v*) 36.01—42.00,
(*iii*) 24.01—30.00, (*vi*) 42.01—48.00, and
(*vii*) above 48.00.

These ranges are shown by suitable grades of hatching ranging from high to low. For facility of reference, the per cent variation in each subdivision has also been shown in the map.

Salient Features

The population of Bihar increased from 38,786,184 in 1951 to 46,455,610 in 1961 or by 19.77 per cent. The population growth in the decade was higher than ever before, but slightly lower than the all-India average of 21.50 per cent.

The rate of increase was higher than the State average in 25 out of 58 subdivisions. Supaul (Saharsa) recorded the highest increase of 53.71 per cent. It is noteworthy that Supaul was one of the two subdivisions which recorded an overall decrease of population during the period 1901—51. The four subdivisions of Purnea district and Supaul form a compact block in the north-eastern part of the State in which the rate of population increase has been over 30 per cent. No other area in the State has shown as high a rate of growth.

The rate of growth is below the State average in the subdivisions of Saran, Champaran, Muzaffarpur and Darbhanga districts, except Bettiah and Hajipur. In the North Bihar Plain, therefore, two zones are clearly discernible, viz., one zone of low growth areas comprising the four aforesaid districts lying in the western half of the area, and another zone comprising of North Monghyr, Saharsa and Purnea on the eastern side in which the rate of growth was higher.

The South Bihar Plain is marked by a relatively lower rate of growth. Only Bhabua, Sasaram, Patna Sadar, Nawada and Bhagalpur Sadar subdivisions have recorded rates above the State average.

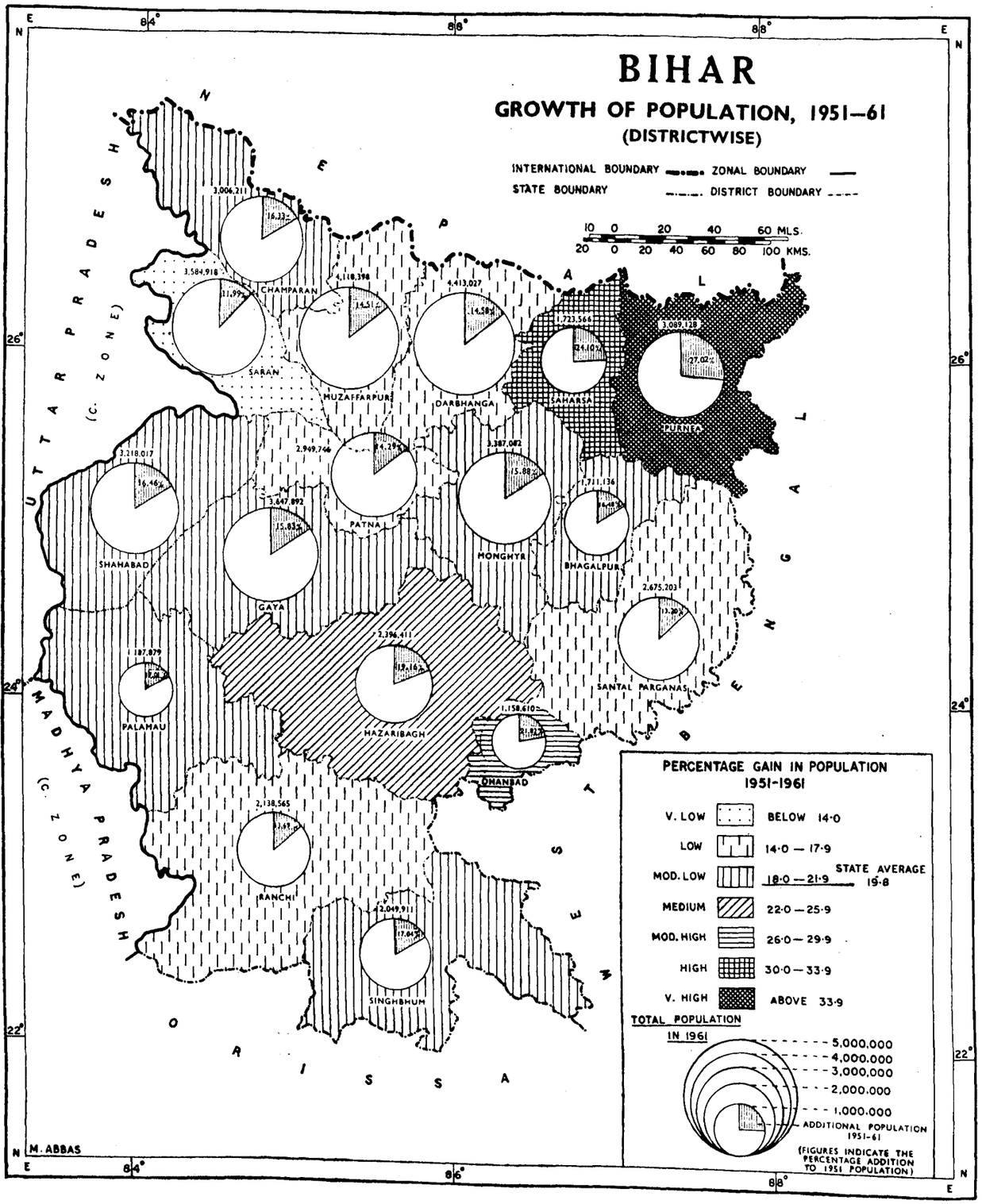
In the Chotanagpur Plateau the rate of growth has been above the average in a compact block comprising Dhanbad Sadar, Baghmara, Giridih, Hazaribagh Sadar, Ranchi Sadar, Chatra, Latehar and Garhwa subdivisions, as also in isolated regions of Pakur and Dhalbhum. Thus, in broad terms, the northern half of the Plateau has shown higher rate of growth than its southern half.

TABLE

INTERCENSAL CHANGES IN POPULATION, 1951—61

Rank	State/District	Percentage increase
1	Purnea	37.02
2	Saharsa	31.75
3	Dhanbad	27.91
4	Hazaribagh	23.70
5	Singhbhum	20.54
6	Palamau	20.49
	BIHAR	**19.77**
7	Bhagalpur	19.74
8	Shahabad	19.70
9	Champaran	19.51
10	Monghyr	18.88
11	Gaya	18.80
12	Darbhanga	17.07
13	Muzaffarpur	16.98
14	Patna	16.67
15	Ranchi	15.86
16	Santal Parganas ..	15.21
17	Saran	13.62

SOURCE : Census of India, (1) 1951, Vol. V, (2) 1961, Vol. IV.



GROWTH OF POPULATION, 1951—61

Purpose

This map shows for each district of Bihar the intercensal growth of population in the decade, 1951—61. This is done by depicting two main features of growth, viz., (*i*) per cent increase of population during 1951—61 with reference to population in 1951, and (*ii*) per cent accretion of population during 1951—61 with reference to population in 1961.

Method

The data relating to per cent increase in population have been grouped into seven categories above and below the State average, viz.,

(*i*) Below 14.0,
(*ii*) 14.0—17.9,
(*iii*) 18.0—21.9—State average 19.8 per cent,
(*iv*) 22.0—25.9,
(*v*) 26.0—29.9,
(*vi*) 30.0—33.9, and
(*vii*) above 33.9.

The districts are shaded according to these ranges from high to low.

The accretion of population is shown by means of pie-diagrams superimposed on the background of districts shaded as above. The size of each circle is proportionate to the total population of the district in 1961. The shaded portion of the circle represents the addition of population in 1951—61 expressed as percentage of the district population in 1961.

For facility of reference, figures for total population of the district in 1961 as well as the per cent accretion to it have been indicated on the map itself in each district.

Salient Features

During 1951—61 the population of Bihar increased from 38.79 million to 46.46 million indicating an increase of 19.8 per cent. The overall growth rate of Bihar in the last decade though lower than the all-India average of 21.5 per cent, was phenomenal and higher than the rate recorded on any of the previous censuses.

The map, however, brings forth wide regional variations in growth rates within the State. The district of Purnea in the extreme north-east is characterised by the highest growth rate (37.0 per cent), and is followed by Saharsa (31.8 per cent), Dhanbad (27.8 per cent) and Hazaribagh (23.7 per cent). These four districts, it may be noted, are the sole representatives in each of the four top ranges of percentage increase in population. The five districts of Palamau, Shahabad, Gaya, Monghyr and Bhagalpur constitute a compact block having their growth rates below but nearer to the State average (between 18.0—21.9 per cent). Champaran and Singhbhum, though belonging to this group, stand isolated at two extremities of the State—one in the north-west and other in the south-east. The districts of Patna, Muzaffarpur and Darbhanga come next, comprising another compact block, but of low growth rate districts (14.0—17.9 per cent). Ranchi and Santal Parganas also belong to this group but do not form part of the block. Saran is the district with the lowest rate of growth (18.6 per cent) in the last decade.

The values of per cent accretions are naturally lower than those of per cent increases, but they represent a similar trend. The table below compares the two sets of figures :

TABLE

GROWTH OF POPULATION, 1951—61

Rank	State/District	Intercensal (1951—61) variation as percentage of 1951 population	Intercensal (1951—61) variation as percentage of 1961 population
1	Purnea ..	37.0	27.02
2	Saharsa ..	31.8	24.10
3	Dhanbad ..	27.9	21.82
4	Hazaribagh ..	23.7	19.16
5	Singhbhum ..	20.5	17.04
	Palamau ..	20.5	17.01
	**BIHAR .. **	**19.8**	**16.51**
7	Bhagalpur ..	19.7	16.48
	Shahabad ..	19.7	16.46
9	Champaran ..	19.5	16.33
10	Monghyr ..	18.9	15.88
11	Gaya ..	18.8	15.83
12	Darbhanga ..	17.1	14.58
13	Muzaffarpur ..	17.0	14.51
14	Patna ..	16.7	14.29
15	Ranchi ..	15.9	13.69
16	Santal Parganas	15.2	13.20
17	Saran ..	13.6	11.99

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A.

MAP NO. 20

INTERCENSAL CHANGES IN RURAL POPULATION, 1951—61

Purpose

This map, similar to Map no. 19, shows for each district of Bihar the intercensal change in rural population in the decade 1951—61. This is done by depicting two main features of growth, viz., (*i*) per cent change in rural population during 1951—61 with reference to population in 1951, and (*ii*) per cent accretion of rural population during 1951—61 with reference to rural population in 1961.

Method

The data relating to per cent changes in rural population have been grouped into six categories, viz.,

(*i*) Below 10.0,

(*ii*) 10.0—12.9,

(*iii*) 13.0—15.9,

(*iv*) 16.0—18.9—State average 17.5 per cent,

(*v*) 19.0—21.9, and

(*vi*) above 21.9.

The districts are shaded according to these ranges from high to low.

The accretion of population is shown by means of pie-diagrams superimposed on the background of districts shaded as above. The size of each circle is proportionate to the total rural population of the district in 1961. The shaded portion of the circle represents the addition of rural population during 1951—61 expressed as percentage of rural population of the district in 1961.

For facility of reference, figures for rural population of the district in 1961 as well as per cent accretion to it have been indicated on the map itself in each district.

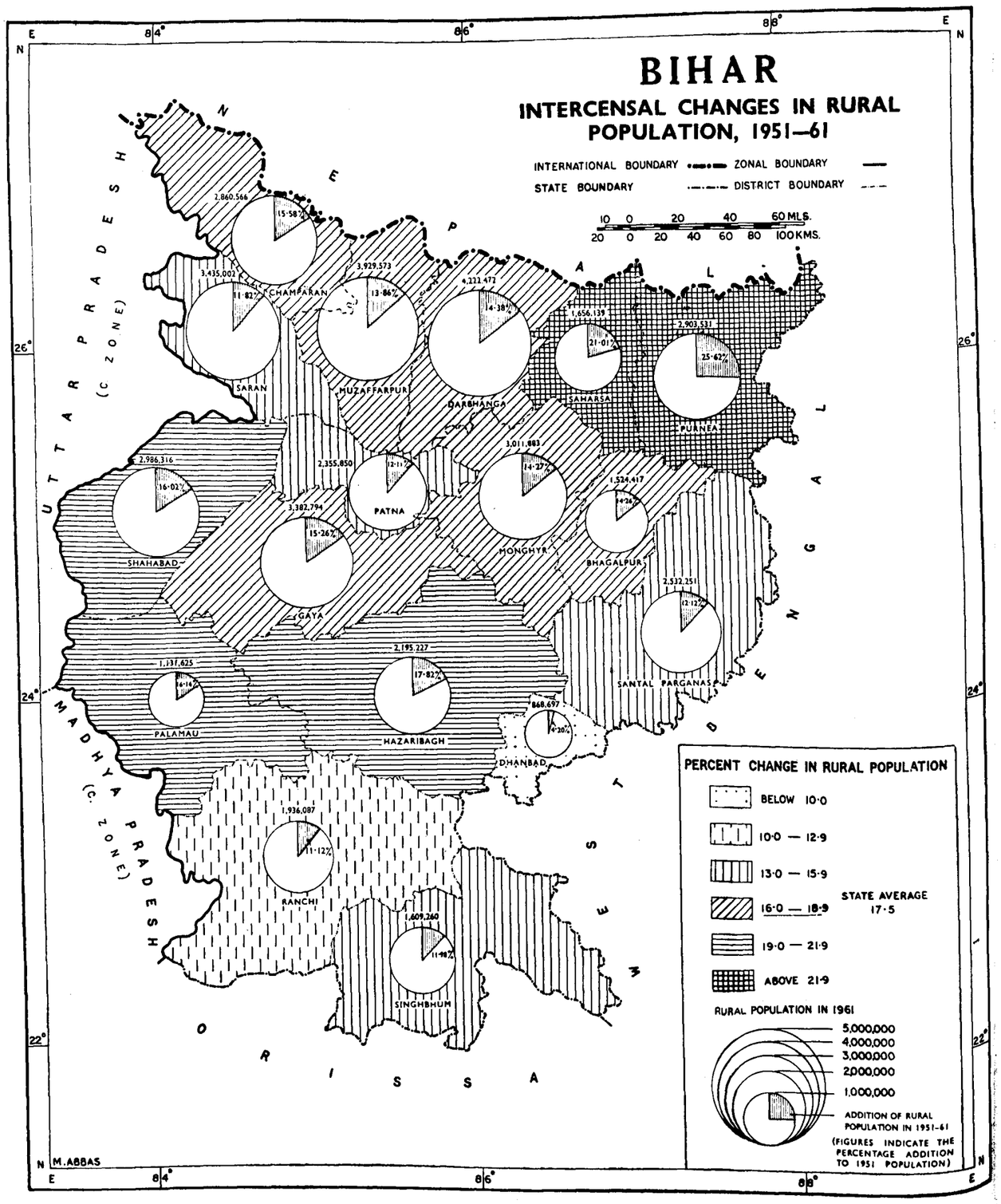
Salient Features

During 1951—61 the rural population of Bihar increased from 36.16 million to 42.54 million indicating an increase of 17.5 per cent. The overall rural growth rate of Bihar in the last decade, though lower than the corresponding all-India average of 20.6 per cent, was higher than the rate recorded at any previous census.

The map, however, brings forth wide regional variations in rural growth rates within the State. While the districts of Purnea and Saharsa in the north-east are characterised by very high growth rates (34.4 and 26.6 per cent respectively), the district of Dhanbad with an increase of 4.4 per cent only stands at the other extreme. Among the remaining districts three distinct regions can be easily marked out. The first one consists of Hazaribagh, Palamau and Shahabad which have registered fairly high rural growth rates (between 19.0—21.9 per cent). The second region, which is the largest, includes Champaran, Muzaffarpur, Darbhanga, Monghyr, Bhagalpur and Gaya. The rates in these districts vary between 16.0—18.9 per cent and are nearer the State average. The third region comprising Saran and Patna districts is the smallest unit. The rural growth rate in it is rather low (between 13.0—15.9 per cent). The districts of Santal Parganas and Singhbhum, though falling in this group statistically, are isolated geographically. Ranchi with a lower rural growth rate of 12.5 per cent only is a group by itself. So is Dhanbad with the lowest rural growth rate of 4.4 per cent only.

The values of per cent accretion to rural population are naturally lower than those of per cent increases, but they represent similar trend. The relevant figures are given in the table at page 55. One more column has been added to give information relating to per capita availability of land for the rural population in each district. The districts of

MAP NO. 20



Darbhanga and Muzaffarpur, followed closely by Saran and Patna, have the lowest availability of cultivable land per capita in the State. These are also the districts with highest densities of population. It is true that the significance of such data is limited to some extent because of the varying productivity of cultivable land in different parts of the State.

TABLE

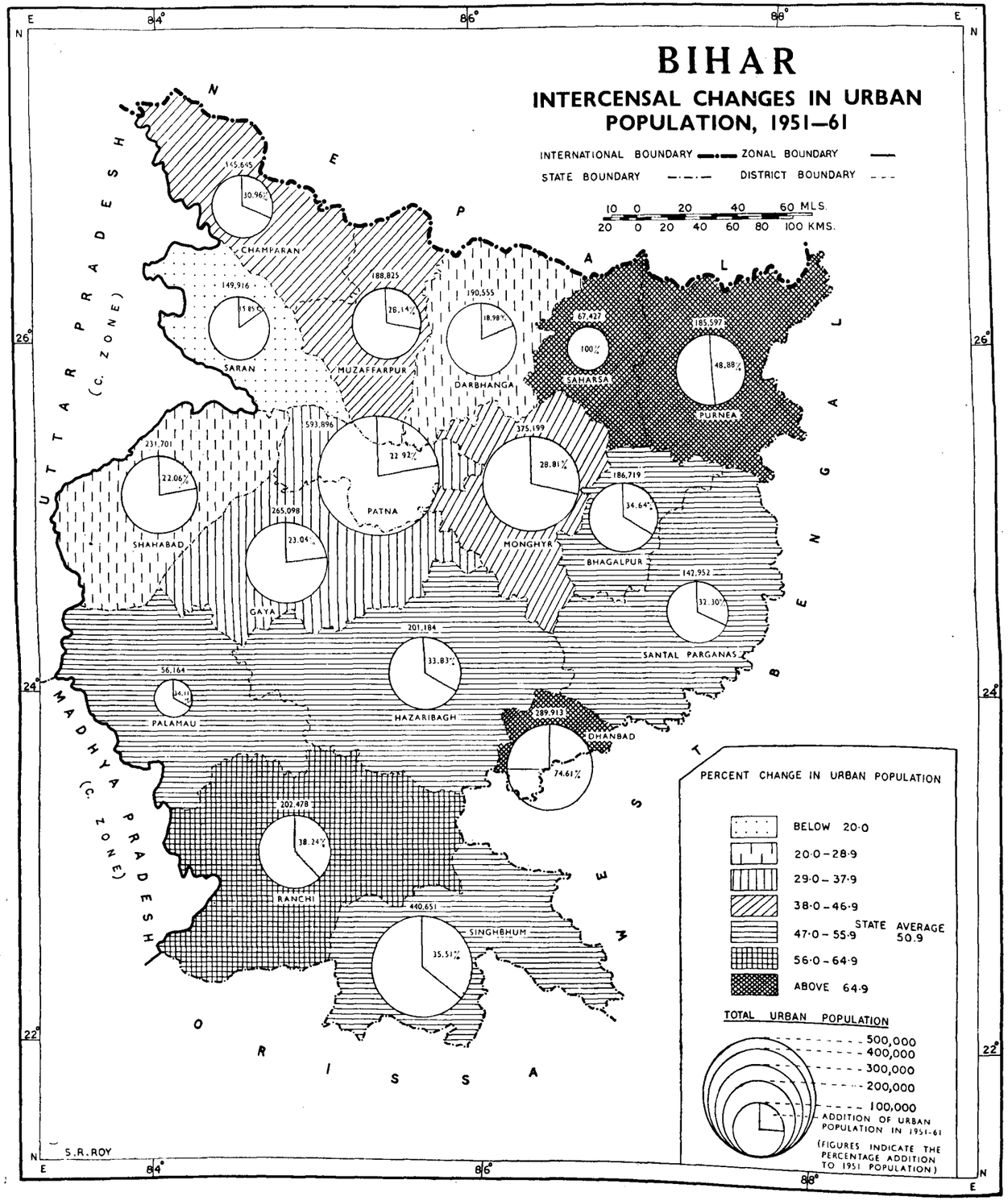
INTERCENSAL CHANGES IN RURAL POPULATION, 1951—61

Rank	State/District	Intercensal (1951—61) variation as percentage of 1951 rural population	Intercensal (1951—61) variation as percentage of 1961 rural population	Per capita availability of cultivable land for the rural population in 1961 (in acres)
1	2	3	4	5
1	Purnea ..	34.4	25.62	0.74
2	Saharsa ..	26.6	21.01	0.65
3	Hazaribagh ..	21.7	17.82	0.86
4	Palamau ..	19.3	16.16	1.18
5	Shahabad ..	19.0	16.02	0.62
6	Champaran ..	18.5	15.58	0.63
7	Gaya ..	18.0	15.26	0.59
	BIHAR ..	**17.5**	**14.92**	**0.66**
8	Darbhanga ..	16.8	14.38	0.43
9	Monghyr ..	16.7	14.27	0.60
10	Bhagalpur ..	16.6	14.26	0.66
11	Muzaffarpur ..	16.1	13.86	0.43
12	Santal Parganas ..	13.8	12.12	0.91
	Patna ..	13.8	12.11	0.48
14	Singhbhum ..	13.6	11.98	0.85
15	Saran ..	13.4	11.82	0.44
16	Ranchi ..	12.5	11.12	1.46
17	Dhanbad ..	4.4	4.20	0.48

NOTE : Cultivable land means net area sown *plus* cultivable waste.

SOURCE : (1) Census of India, 1961, Vol. IV, Bihar, Part II-A.
(2) The Statistical Handbook, 1960, Director of Statistics, Bihar.

MAP NO. 21



MAP NO. 21

INTERCENSAL CHANGES IN URBAN POPULATION, 1951—61

Purpose

This map, similar to Map no. 19, shows for each district of Bihar the intercensal change in urban population in the decade 1951—61. This is done by depicting two main features of growth, viz., (*i*) per cent increase of urban population during 1951—61 with reference to urban population in 1951, and (*ii*) per cent accretion of urban population during 1951—61 with reference to urban population in 1961.

Method

The data relating to per cent increase in urban population have been grouped into seven categories, viz.,

(*i*) Below 20.0,

(*ii*) 20.0—28.9,

(*iii*) 29.0—37.9,

(*iv*) 38.0—46.9,

(*v*) 47.0—55.9—State average 50.9 per cent,

(*vi*) 56.0—64.9, and

(*vii*) above 64.9.

The districts have been shaded according to these ranges from high to low.

The accretion of urban population is shown by means of pie-diagrams superimposed on districts shaded as above. The size of each circle is in proportion to the urban population of the district in 1961. The shaded portion of the circle represents the addition of population in 1951—61 expressed as percentage of urban population of the district in 1961.

For facility of reference, figures for urban population of the district in 1961 as well as the per cent accretion have been indicated on the map itself in each district.

Definition of Town

In the Census of 1961, a town was defined so as to include every municipality, notified area, civil lines and cantonment irrespective of their size, density of population or livelihood pattern. Certain other places without municipal administration were also treated as towns provided they fulfilled certain criteria laid down for the purpose. These visualised that such places must ordinarily have (*a*) a population of not less than 5,000, (*b*) density not less than 1,000 persons per sq. mile, and (*c*) at least three-fourths of the adult male population engaged in non-agricultural livelihoods.

It may be noted that the definition of town in 1961 was virtually the same as in 1951; only the prescribed standards were applied more strictly and uniformly in 1961 than before. As a result, six towns of 1951 got declassified and 51 new towns were added to the urban list in 1961.

Salient Features

During 1951—61 the urban population of Bihar increased from 2.59 million to 3.91 million, indicating an increase of 50.9 per cent. The overall urban growth rate in Bihar in the last decade was not only higher than the corresponding all-India average of 26.4 per cent, but also the highest yet recorded at any previous census in Bihar.

Saharsa district had no town in 1951. Its urban population of 67,429 in six towns is thus entirely an accretion of the 1961 Census. The most spectacular increase of nearly 300 per cent has occurred in the urban population of Dhanbad district which is well known for its extensive coal-mining and ancillary industries. The phenomenal urban growth in this district is, however, due to rapid increase in the population of old towns as well as inclusion of as many as 16 new towns in 1961.

While the districts of Saharsa, Dhanbad and Purnea are characterised by very high urban growth rates (above 95 per cent), the district of Saran with a decadal increase of 18.8 per cent only is at the other extreme. Ranchi with an urban increase of 61.9 per cent is a group unto itself. The four districts of Palamau, Hazaribagh, Santal Parganas and Bhagalpur comprise a compact block in which the urban growth, varying between 47 and 55 per cent, approximates to the State average. The contiguous districts of Champaran and Muzaffarpur, together with Monghyr district, belong to another group showing rather low urban increase (between 38 and 46 per cent). In the districts of Patna and Gaya, the rates are lower (between 29 and 37 per cent). Shahabad and Darbhanga, which belong to the last but one group, have still lower rates (20—28 per cent). Saran, as stated earlier, comes last of all.

The values of per cent accretions are naturally lower than those of per cent increases, but they represent a similar trend. The table below compares the two sets of figures and relates them to the number of towns in 1951 and 1961 :

TABLE

INTERCENSAL CHANGES IN URBAN POPULATION, 1951—61

Rank	State/District	Intercensal (1951—61) variation as percentage of 1951 urban population*	Intercensal (1951—61) variation as percentage of 1961 urban population	No. of towns 1961	No. of towns 1951
1	2	3	4	5	6
1	Saharsa ..	†	100.00	6	Nil
2	Dhanbad ..	293.9	74.61	19	4
3	Purnea ..	95.6	48.88	8	4
4	Ranchi ..	61.9	38.24	9	3
5	Singhbhum ..	55.1	35.51	12	10
6	Bhagalpur ..	53.0	34.64	5	2
7	Palamau ..	51.8	34.11	5	3
8	Hazaribagh ..	51.1	33.83	10	8
	BIHAR ..	**50.9**	**33.75**	**153**	**108**
9	Santal Parganas	47.7	32.30	10	7
10	Champaran ..	44.8	30.96	9	10
11	Monghyr ..	40.5	28.81	13	13
12	Muzaffarpur ..	39.2	28.14	6	6
13	Gaya ..	29.9	23.04	10	10
14	Patna ..	29.7	22.92	10	8
15	Shahabad ..	28.3	22.06	9	8
16	Darbhanga ..	23.4	18.98	6	7
17	Saran ..	18.8	15.85	6	5

*The percentage of urban population has been arrived at after deducting the 1951 population of those towns which were towns in 1951 but declassified in 1961.

†Saharsa had no town in 1951.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A.

MAP NO. 22

IMMIGRANTS
(PROPORTION OF IMMIGRANTS TO TOTAL POPULATION)

Purpose

The map on the following page shows the extent of immigration in each district of the State and the State-wide distribution of immigrants from other States.

Method

The percentages of immigrants from other States and Union Territories of India and foreign countries to the total population of each district have been grouped into three ranges, viz. (*i*) below 2.01, (*ii*) 2.01—4.00 and (*iii*) above 4.00.

The districts have then been shaded by hatches ranging from high to low.

Squares proportional to the immigrant population from other parts of the country have been drawn in each district. The percentage shares of immigrants from 12 States and the Union Territory of Delhi, from each of which immigrants comprise at least 1 per cent of the total population of any district, have been shown in different colours.

Salient Features

Immigrants from outside the State comprise only 2.36 per cent of its total population. Dhanbad (12.86) and Singhbhum (10.34) have very high proportions, those in Purnea, Ranchi and Hazaribagh also being somewhat higher than the State average. The proportion of immigrants is less than 1 per cent in Gaya, Monghyr, Bhagalpur and Darbhanga districts.

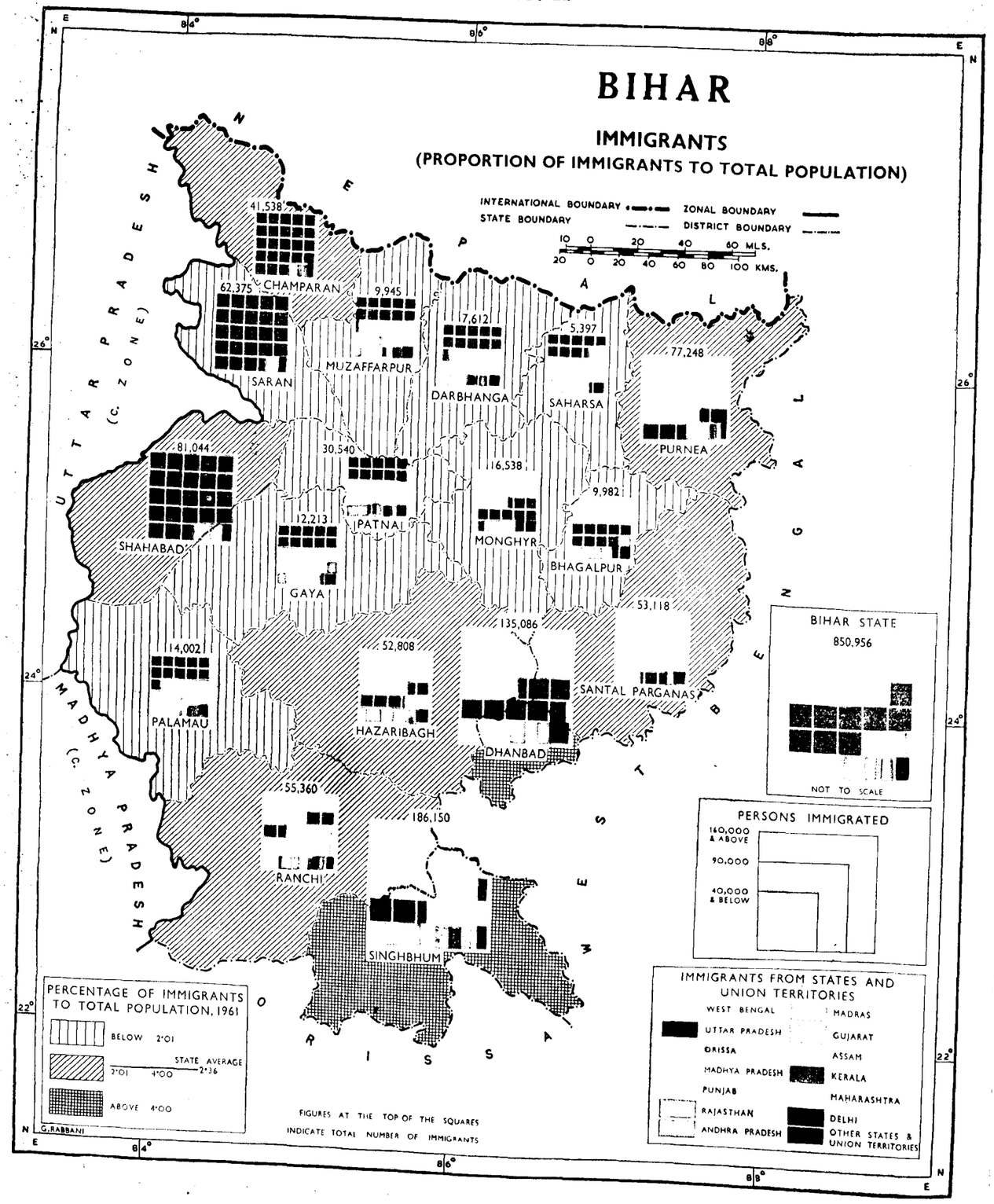
The distribution of immigrants by States of their birth shows that over 58 per cent of the immigrants to Singhbhum were born in the adjoining States of West Bengal (33.2 per cent) and Orissa (25.3 per cent). 11 per cent of immigrants to Singhbhum were born in Uttar Pradesh.

While the adjacent State of West Bengal accounts for over half (50.4 per cent) of immigrants into Dhanbad, the second place is taken by Uttar Pradesh (28.09 per cent).

Immigrants into Gaya, Monghyr, Bhagalpur and Darbhanga districts (which have very low proportions) are comprised mainly of persons from West Bengal, Uttar Pradesh and Rajasthan.

Immigrants from Rajasthan and Punjab are found throughout the State and constitute population of each district except Saran.

MAP NO. 22

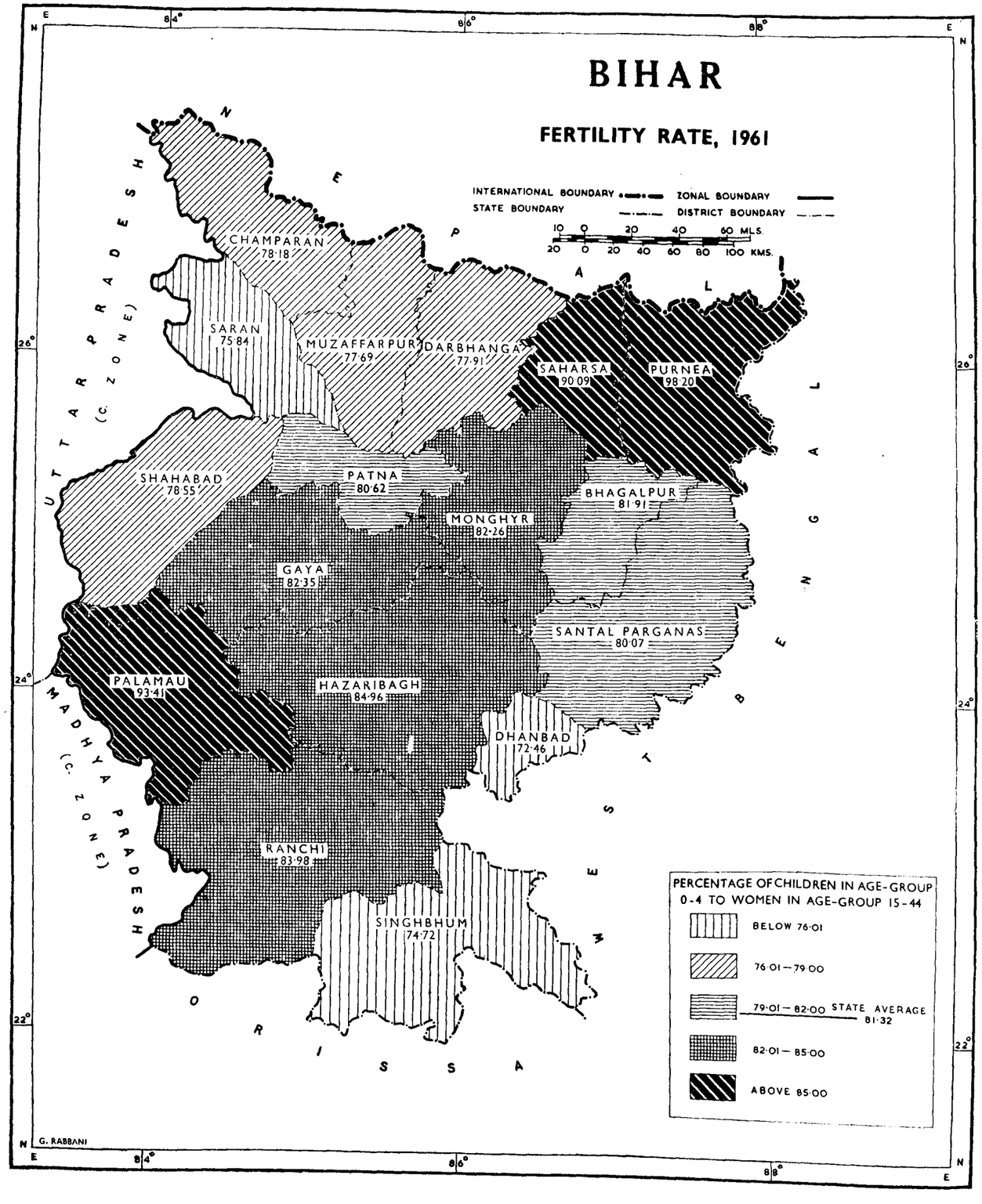


TABLE

IMMIGRANTS

State/District		Total population	International immigrants	Inter-State immigrants	Total immigrants	Percentage of immigrants to total population	Intra-district migrants	Inter-district migrants	Persons born at place of enumeration
1		2	3	4	5	6	7	8	9
BIHAR	..	**46,455,610**	**214,460**	**882,581**	**1,097,041**	**2.4**	**10,951,167**	**2,211,037**	**14,259,245**
Patna	..	2,949,746	7,085	32,107	39,192	1.3	620,308	222,970	882,470
Gaya	..	3,647,892	2,348	16,623	18,971	0.5	857,923	148,191	1,025,085
Shahabad	..	3,218,017	1,824	82,495	84,319	2.6	820,949	91,469	996,737
Saran	..	3,584,918	1,493	65,189	66,682	1.9	940,288	50,412	1,057,382
Champaran	..	3,006,211	40,015	42,093	82,108	2.7	760,744	75,915	918,767
Muzaffarpur	..	4,118,398	28,369	13,789	42,158	1.0	1,021,011	165,573	1,228,742
Darbhanga	..	4,413,027	27,495	7,868	35,363	0.8	1,067,801	159,280	1,262,444
Monghyr	..	3,387,082	3,235	17,308	20,543	0.6	782,712	193,873	997,128
Bhagalpur	..	1,711,136	2,562	12,072	14,634	0.9	359,293	116,827	490,754
Saharsa	..	1,723,566	9,081	7,041	16,122	0.9	387,789	140,823	544,734
Purnea	..	3,089,128	32,449	78,178	110,627	3.6	693,943	244,553	1,049,123
Santal Parganas	..	2,675,203	6,831	54,032	60,863	2.3	620,204	88,567	769,634
Palamau	..	1,187,789	783	14,238	15,021	1.3	311,417	43,167	369,605
Hazaribagh	..	2,396,411	6,187	55,006	61,193	2.6	585,721	120,117	767,031
Ranchi	..	2,138,565	711	61,256	68,267	3.2	498,717	59,190	626,174
Dhanbad	..	1,158,610	13,628	135,419	149,047	12.9	201,668	212,756	563,471
Singhbhum	..	2,049,911	24,064	187,867	211,931	10.3	420,679	77,354	709,964

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-D, Table D-II.



MAP NO. 23

FERTILITY RATE, 1961

Purpose

Fertility rate has several connotations. For the purpose of this map, it has been determined by the percentage of children in the age group 0—4 to the number of women in the age group 15—44 (which covers the main reproductive period among women). Relevant figures have been taken from the 1961 Census. It is important to note (*i*) that the fertility rate, as arrived at here, could more aptly be described also as maternity rate, and (*ii*) that the rates do not give values for any particular year but indicate the position as the outcome of reproductive activity over a number of years, as revealed by the 1961 Census. The map shows the position in each district of Bihar.

Method

Graduated figures of children in the age group 0—4 at State level have been redistributed among the districts in the proportion of districtwise totals to the State total population. As the age group 15—44 is sufficiently broad figures for women in this age group have been taken as returned at the 1961 Census, and not the graduated figures.

Percentages of children in the age group 0—4 (on the basis of adjusted figures) to women in the age group 15—44 have been calculated for each district and grouped into five categories, viz.,

(*i*) Below 76.01,
(*ii*) 76.01—79.00,
(*iii*) 79.01—82.00,
(*iv*) 82.01—85.00, and
(*v*) above 85.00.

The districts have been shaded according to their values with suitable grades of hatching ranging from high to low.

Salient Features

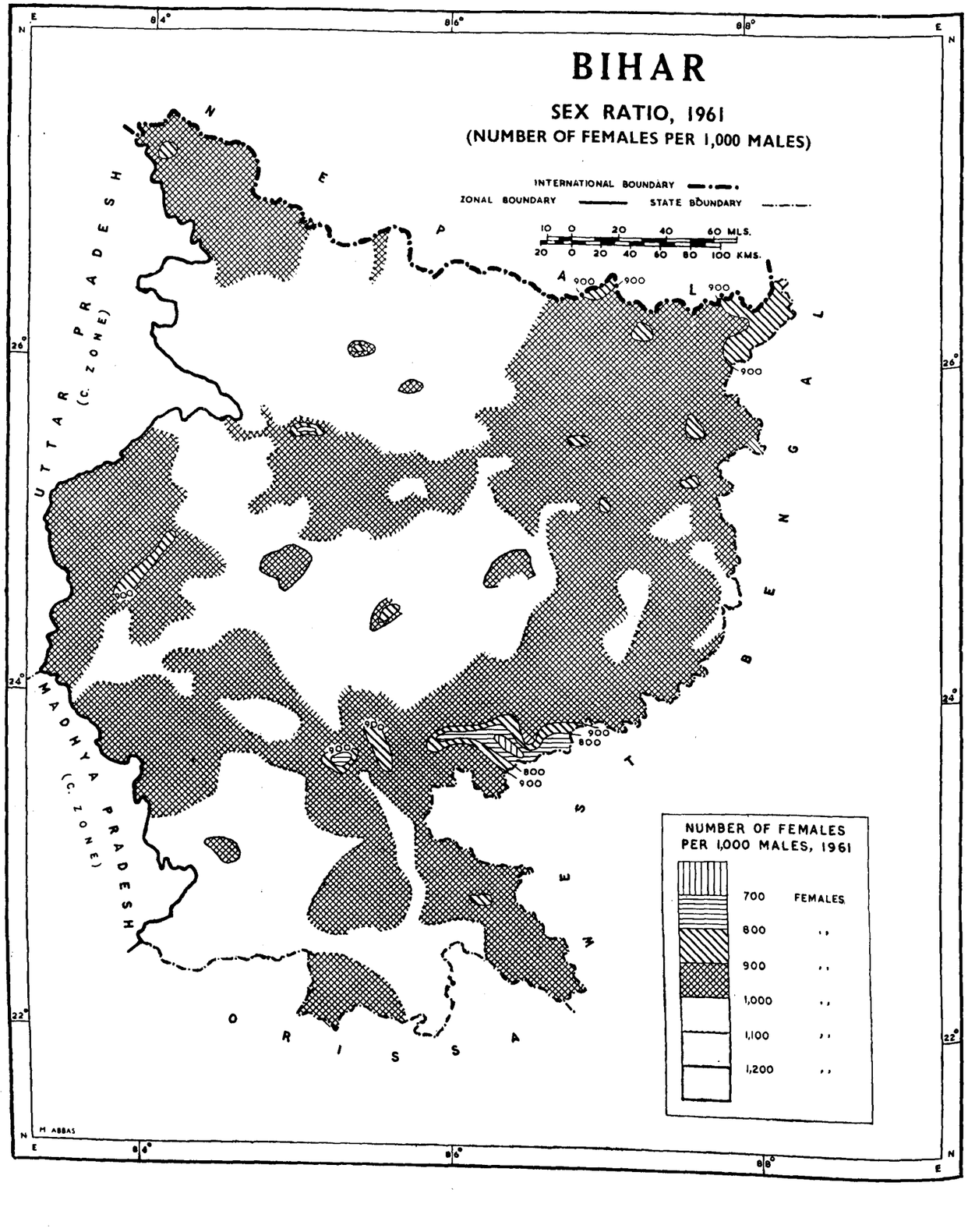
There are in all 8,019,100 children in the age group 0—4, while the number of women in the reproductive age group (15—44) is 9,861,399. The State average in respect of fertility rate is 81.32 per cent. As many as eleven districts out of seventeen have fertility rates below the State average. The lowest among them is in Dhanbad district (72.46 per cent) and the highest in Purnea district (98.20 per cent) followed by Palamau and Saharsa. Other districts recording higher rates than the State average are Hazaribagh, Ranchi and Gaya.

TABLE

PERCENTAGE OF CHILDREN IN THE AGE GROUP 0—4 TO WOMEN IN THE AGE GROUP 15—44

Rank	State/District	Percentage
1	Purnea	98.20
2	Palamau	93.41
3	Saharsa	90.09
4	Hazaribagh ..	84.96
5	Ranchi	83.98
6	Gaya	82.35
	BIHAR ..	**81.32**
7	Monghyr	82.26
8	Bhagalpur	81.91
9	Patna	80.62
10	Santal Parganas ..	80.07
11	Shahabad	78.55
12	Champaran ..	78.18
13	Darbhanga	77.91
14	Muzaffarpur ..	77.69
15	Saran	75.84
16	Singhbhum	74.72
17	Dhanbad	72.46

SOURCE : (1) Census of India, 1961, Vol. I, Paper No. 2 of 1963.
(2) Census of India, 1961, Vol. IV, Bihar, Part II-C, Table C-III Part A.



SEX RATIO, 1961
(NUMBER OF FEMALES PER 1,000 MALES)

Purpose

This map shows the sex ratio, or the number of females per 1,000 males, in different regions of the State.

Method

The sex ratio in each anchal was plotted in the State map and isopleths of 700, 800, 900, 1,000, 1,100 and 1,200 were drawn, 1,000 being the line of equality. The intervening spaces between two isopleths have been shown by different hatches. Values above 1,000 have been shown in red.

Salient Features

The sex ratio for the entire State is 994. It is almost balanced and considerably higher than that of India (941).

The map clearly shows that a greater part of the State is comprised of places with sex ratios ranging from 900 to 1,000. The sex ratio is over 1,000 in a large belt comprising the greater part of Saran and the mid-western part of Muzaffarpur district. It even exceeds 1,200 at some places in this belt. There are isolated areas of high sex ratio in the North Bihar Plain in Muzaffarpur and Darbhanga districts also, which are known for their emigrant male labour.

High sex ratios are less evident in the South Bihar Plain and the Chotanagpur Plateau. Two such zones in the Nawada subdivision of Gaya district and in Hazaribagh district are contiguous to the coal-mining area of Dhanbad which draws large male emigrant labour. Similarly, the small zone in South Singhbhum having a sex ratio of over 1,000 presumably sends out male labour to the industrial city of Jamshedpur in the same district.

Areas with sex ratios lower than 900 are, in most cases, isolated and small. The Dhanbad coal-field area, extending into south-eastern Hazaribagh, has the lowest sex ratio in the State, falling to lower than even 700. Other significant areas of low sex ratios are north-east Purnea and a long strip in the south-east extremity of Shahabad district.

The following table shows the sex ratio for each district, arranged in descending order :

TABLE

SEX RATIO, 1961

Rank	State/District	No. of females per 1,000 males
1	Saran	1,137
2	Darbhanga ..	1,059
3	Muzaffarpur ..	1,047
4	Gaya	1,010
	BIHAR	**994**
5	Hazaribagh ..	991
6	Shahabad	990
7	Monghyr	989
8	Ranchi	987
9	Palamau	984
10	Santal Parganas ..	980
11	Champaran ..	978
12	Singhbhum	960
13	Bhagalpur	951
14	Saharsa	944
15	Patna	937
16	Purnea	922
17	Dhanbad	792

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.

BIHAR

SEX RATIO, 1951

(NUMBER OF FEMALES PER 1,000 MALES)

INTERNATIONAL BOUNDARY
ZONAL BOUNDARY — STATE BOUNDARY
DISTRICT BOUNDARY — ANCHAL BOUNDARY

10 0 20 40 60 MLS.
20 0 20 40 60 80 100 KMS.

NUMBER OF FEMALES PER 1,000 MALES IN 1951

BELOW 950
950 — 999
1,000 — 1,049
1,050 — 1,099
ABOVE 1,099

STATE AVERAGE 990

J.N.RAI

BIHAR

SEX RATIO, 1961

(NUMBER OF FEMALES PER 1,000 MALES)

INTERNATIONAL BOUNDARY
ZONAL BOUNDARY — STATE BOUNDARY
DISTRICT BOUNDARY — ANCHAL BOUNDARY

10 0 20 40 60 MLS.
20 0 20 40 60 80 100 KMS.

NUMBER OF FEMALES PER 1,000 MALES IN 1961

BELOW 950
950 — 999
1,000 — 1,049
1,050 — 1,099
ABOVE 1,099

STATE AVERAGE 994

J.N.RAI

MAP NO. 25

CHANGING PATTERN OF SEX RATIO, 1951—61

Purpose

The variations in anchalwise sex ratios in the last decade are depicted by means of two separate maps for 1951 and 1961, reproduced on the preceding pages.

Method

The anchalwise sex ratios have been grouped under the following five ranges :

(*i*) Below 950,
(*ii*) 950—999,
(*iii*) 1,000—1,049,
(*iv*) 1,050—1,099, and
(*v*) above 1,099.

Anchals falling in different ranges have been suitably hatched ranging from high to low. Ranges with sex ratios above 999 have been shaded in red.

Salient Features

The sex ratio in Bihar rose from 990 in 1951 to 994 in 1961, though during the same period it dropped from 946 to 941 in the country as a whole. Thus, the sex ratio in the State has become comparatively more favourable during the last decade.

Changes in the districts show that their relative rankings in regard to sex ratio have remained unaltered. Saran, Darbhanga, Muzaffarpur and Gaya continue to have more females than males. They are the only districts with sex ratios above the State average, both in 1951 and 1961. While the sex ratio has become more favourable in the first eleven districts, it has fallen in the remaining five, Purnea being the only exception. Thus, regional variations have been further accentuated. Table I below gives the relevant statistics:

TABLE I

DISTRICTWISE CHANGES IN SEX RATIO, 1951—61

State/District	1951 Sex ratio	1951 Rank	1961 Sex ratio	1961 Rank	State/District	1951 Sex ratio	1951 Rank	1961 Sex ratio	1961 Rank
1	2	3	4	5	1	2	3	4	5
Saran ..	1,102	1	1,137	1	Palamau ..	979	9	984	9
Darbhanga ..	1,044	2	1,059	2	Santal Parganas ..	977	10	980	10
Muzaffarpur ..	1,034	3	1,047	3	Champaran ..	974	11	978	11
Gaya ..	1,000	4	1,010	4	Singhbhum ..	970	12	960	12
BIHAR ..	**990**	..	**994**	..	Bhagalpur ..	961	13	951	13
Hazaribagh ..	986	5	991	5	Saharsa ..	949	14	944	14
Shahabad ..	985	6	990	6	Patna ..	945	15	937	15
Monghyr ..	984	7	989	7	Purnea ..	916	16	922	16
Ranchi ..	980	8	987	8	Dhanbad ..	819	17	792	17

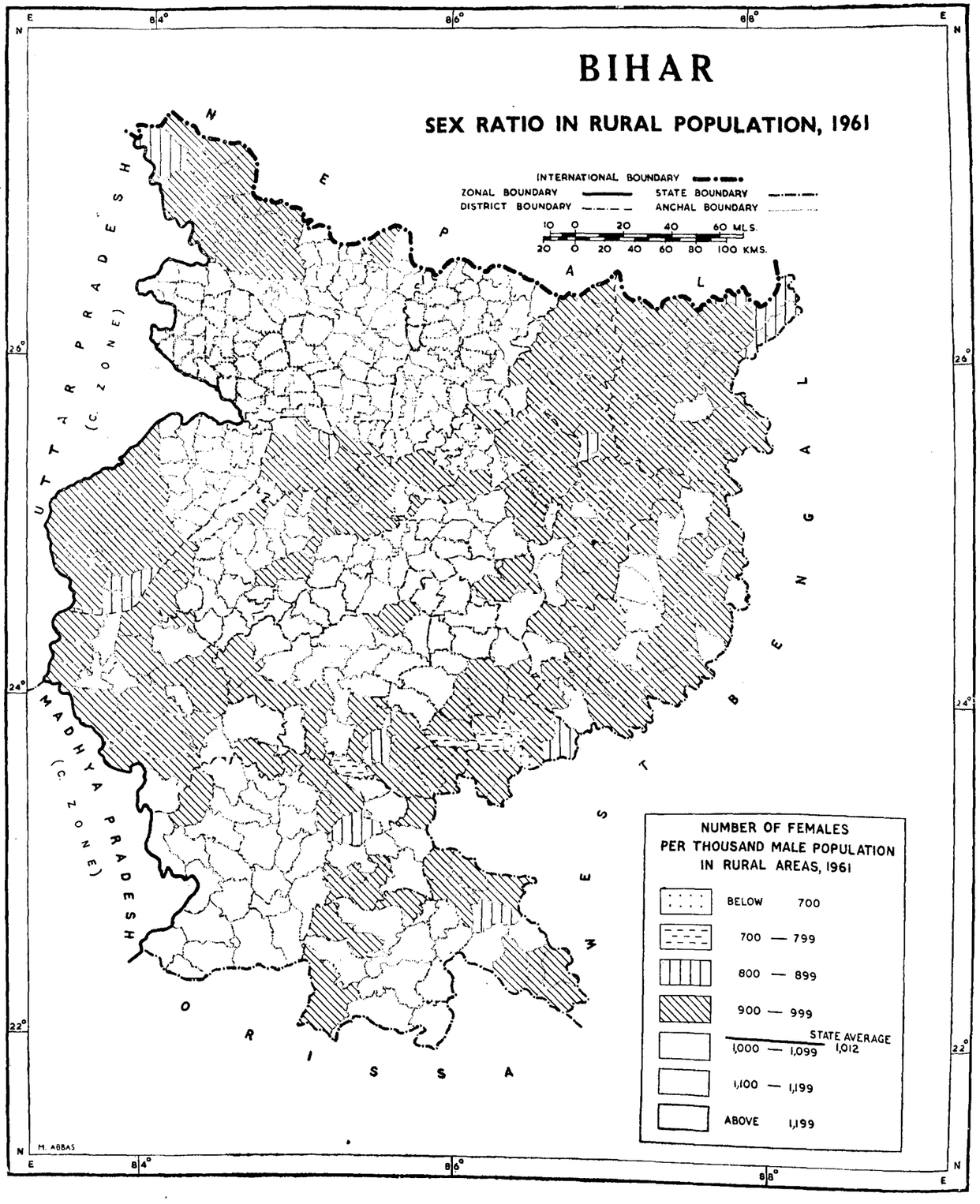
Another table showing the changes different ranges of sex ratio is given in the distribution of anchals by below :

TABLE II

DISTRIBUTION OF NUMBER OF ANCHALS BY SEX RATIO, 1951 AND 1961

State/District	Number of anchals	Number of anchals in range: Below 950		950—999		1,000—1,049		1,050—1,099		Over 1,099	
		1951	1961	1951	1961	1951	1961	1951	1961	1951	1961
1	2	3	4	5	6	7	8	9	10	11	12
BIHAR ..	**575**	**115**	**113**	**213**	**190**	**140**	**140**	**69**	**74**	**38**	**58**
Patna ..	28	3	8	24	16	1	4	..	..	..	..
Gaya ..	46	1	1	22	12	16	23	6	8	1	2
Shahabad ..	41	11	7	20	17	8	13	2	3	..	1
Saran ..	40	..	..	2	2	9	1	8	5	21	32
Champaran ..	36	11	12	12	13	7	5	5	6	1	..
Muzaffarpur ..	40	1	1	6	4	17	12	13	16	3	7
Darbhanga ..	44	1	1	5	3	12	13	23	18	3	9
Monghyr ..	39	6	8	17	14	12	13	3	4	1	..
Bhagalpur ..	21	5	7	12	11	4	3	..	..	..	..
Saharsa ..	21	10	10	8	9	3	2	..	..	..	..
Purnea ..	38	29	28	9	10	..	..	..	..	..	..
Santal Parganas ..	41	7	4	22	29	11	8	..	..	1	..
Palamau ..	25	6	3	12	16	6	5	1	1	..	..
Hazaribagh ..	42	12	11	9	9	11	8	4	8	6	6
Ranchi ..	38	3	4	19	6	13	25	3	3	..	..
Dhanbad ..	10	6	5	3	5	1	..	..	..	..	..
Singhbhum ..	25	3	3	11	14	9	5	1	2	1	1

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.



SEX RATIO IN RURAL POPULATION, 1961

Purpose

This map shows the sex ratio, or the number of females per 1,000 males, in the rural area of each anchal in the State.

Method

The rural sex ratios for each anchal have been grouped into the following seven ranges :

(*i*) Below 700,
(*ii*) 700 to 799,
(*iii*) 800 to 899,
(*iv*) 900 to 999,
(*v*) 1,000 to 1,099,
(*vi*) 1,100 to 1,199, and
(*vii*) above 1,199.

The anchals falling under different ranges have been suitably hatched. Ranges with sex ratios above 999 have been shown in red.

Salient Features

The overall sex ratio in rural population of the State is favourable at 1,012. The corresponding all-India average is only 963.

The rural sex ratio exceeds 1,199 in a compact group of 7 anchals of Saran district, viz., Jalalpur, Baniapur, Manjhi, Ekma, Mashrakh, Ehagwanpur and Maharajganj ; as also in one other anchal in the State, viz., Singhwara in Darbhanga district. It is between 1,100 and 1,199 over the greater part of Saran district, mid-western Muzaffarpur and central Darbhanga in the North Bihar Plain, as also in mid-eastern Hazaribagh in the Chotanagpur Plateau.

Sex ratios below 700 are met with only in Jharia and Dhanbad anchals, which have several coal-mining centres even in so-called rural areas.

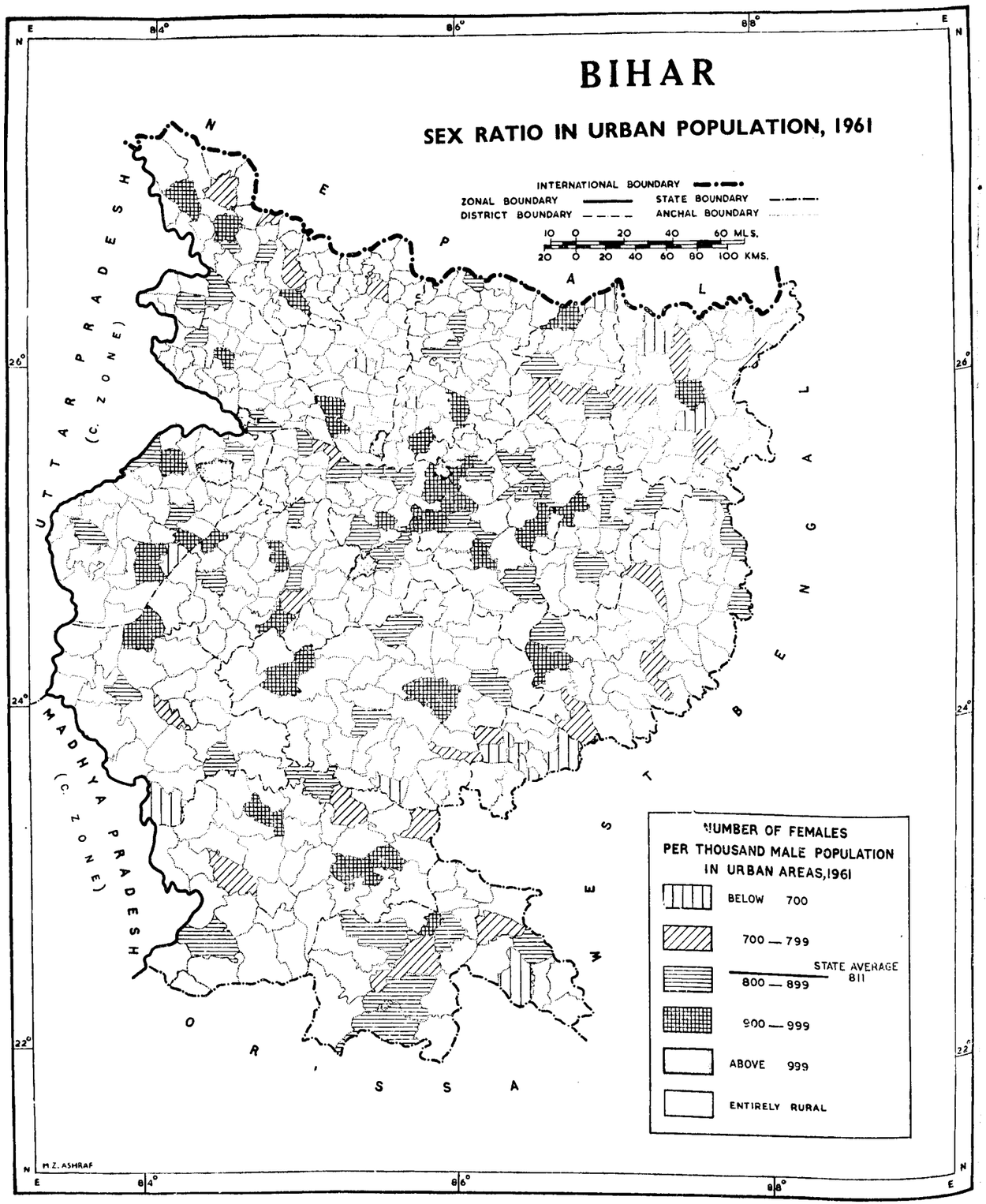
In the next higher range (700 to 799), there is again one anchal (Katras) in Dhanbad district and another (Patratu) in Hazaribagh district.

TABLE

SEX RATIO IN RURAL POPULATION, 1961

Rank	State/District	No. of females per 1,000 males
1	Saran	1,150
2	Darbhanga ..	1,070
3	Muzaffarpur ..	1,062
4	Gaya	1,023
	BIHAR	**1,012**
5	Singhbhum	1,010
6	Hazaribagh ..	1,009
7	Ranchi	1,007
8	Shahabad	1,003
9	Monghyr	1,000
10	Palamau	993
11	Santal Parganas ..	989
12	Champaran ..	986
13	Patna	971
14	Bhagalpur	967
15	Saharsa	951
16	Purnea	936
17	Dhanbad	846

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.



MAP NO. 27

SEX RATIO IN URBAN POPULATION, 1961

Purpose

This map shows the sex ratio, or the number of females per 1,000 males, in the urban areas of each anchal in the State.

Method

The urban sex ratios for each anchal have been arranged in the following five ranges :

(*i*) Below 700,
(*ii*) 700 to 799,
(*iii*) 800 to 899,
(*iv*) 900 to 999, and
(*v*) above 999.

The anchals falling under different ranges have been suitably hatched. Ranges with sex ratio above 999 have been shown in red. Anchals having no urban population have not been hatched at all.

Salient Features

The overall sex ratio in urban population of the State is unfavourable, there being 811 females for every 1,000 males. This is considerably lower than the corresponding all-India average of 845.

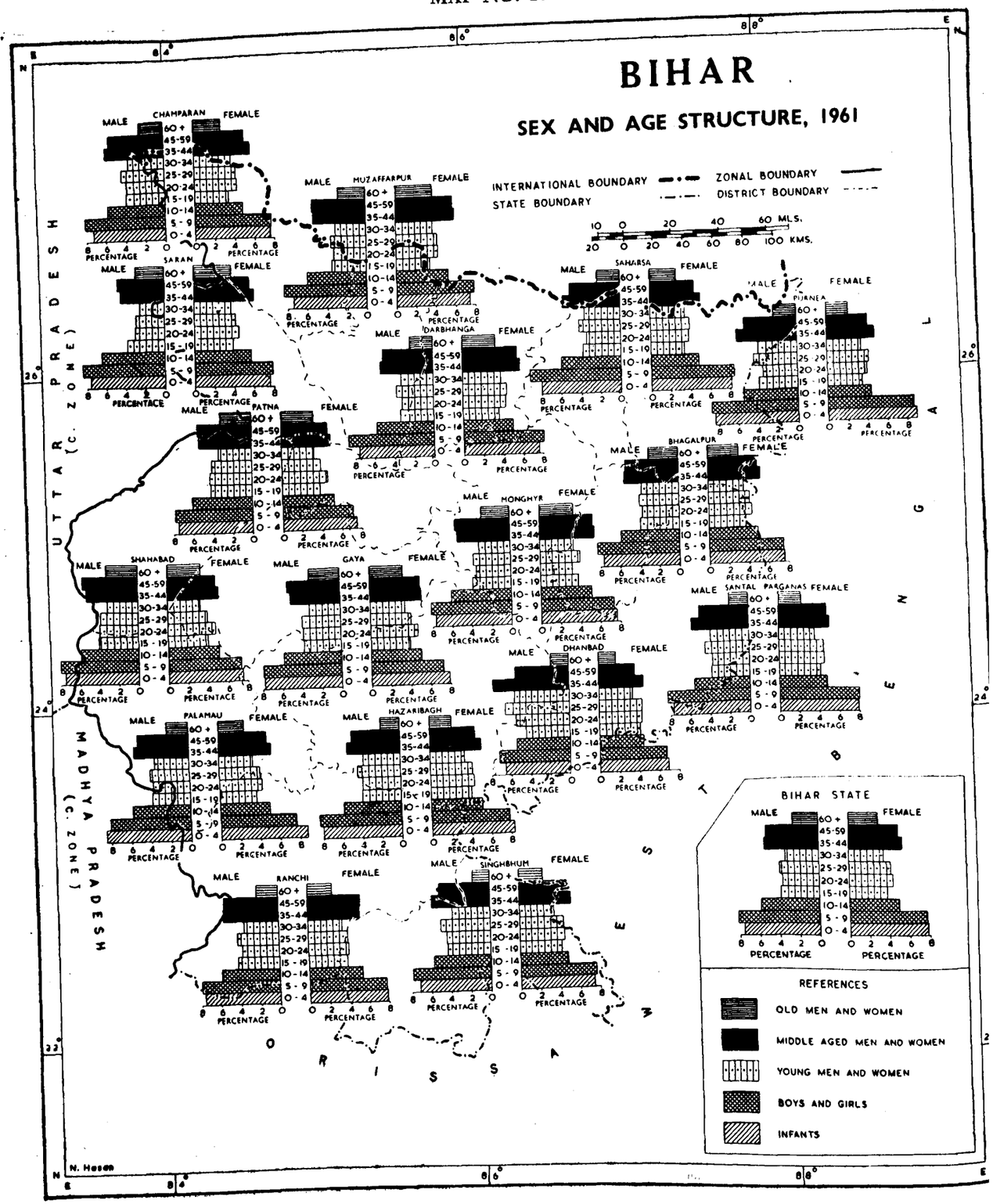
There are five anchals in which the urban sex ratio is over 999. Urban areas generally have adverse sex ratios. The only towns with favourable sex ratios are Jagdishpur in Shahabad district, Hisua in Gaya district, Revelganj in Saran district, Mahnar in Muzaffarpur district and Teghra in Monghyr district.

TABLE

SEX RATIO IN URBAN POPULATION, 1961

Rank	State/District	No. of females per 1,000 males
1	Monghyr	903
2	Saran	871
3	Gaya	861
4	Darbhanga ..	854
5	Shahabad	846
6	Champaran ..	832
	Bhagalpur	832
8	Palamau	830
9	Santal Parganas ..	825
10	Ranchi	817
11	Hazaribagh ..	815
12	Patna	813
	BIHAR	**811**
13	Singhbhum	797
14	Saharsa	793
15	Muzaffarpur ..	777
16	Purnea	724
17	Dhanbad	647

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.



SEX AND AGE STRUCTURE, 1961

Purpose

This map portrays the composition of population in each district by sex and age group.

Method

The population has been divided into ten age groups, viz., 0—4, 5—9, 10—14, 15—19, 20—24, 25—29, 30—34, 35—44, 45—59 and 60+. These have been further regrouped into the five broad categories as below :

(*i*) Infants 0—4,
(*ii*) boys and girls 5—14,
(*iii*) young men and women 15—34,
(*iv*) middle-aged men and women 35—59, and
(*v*) old men and women 60+.

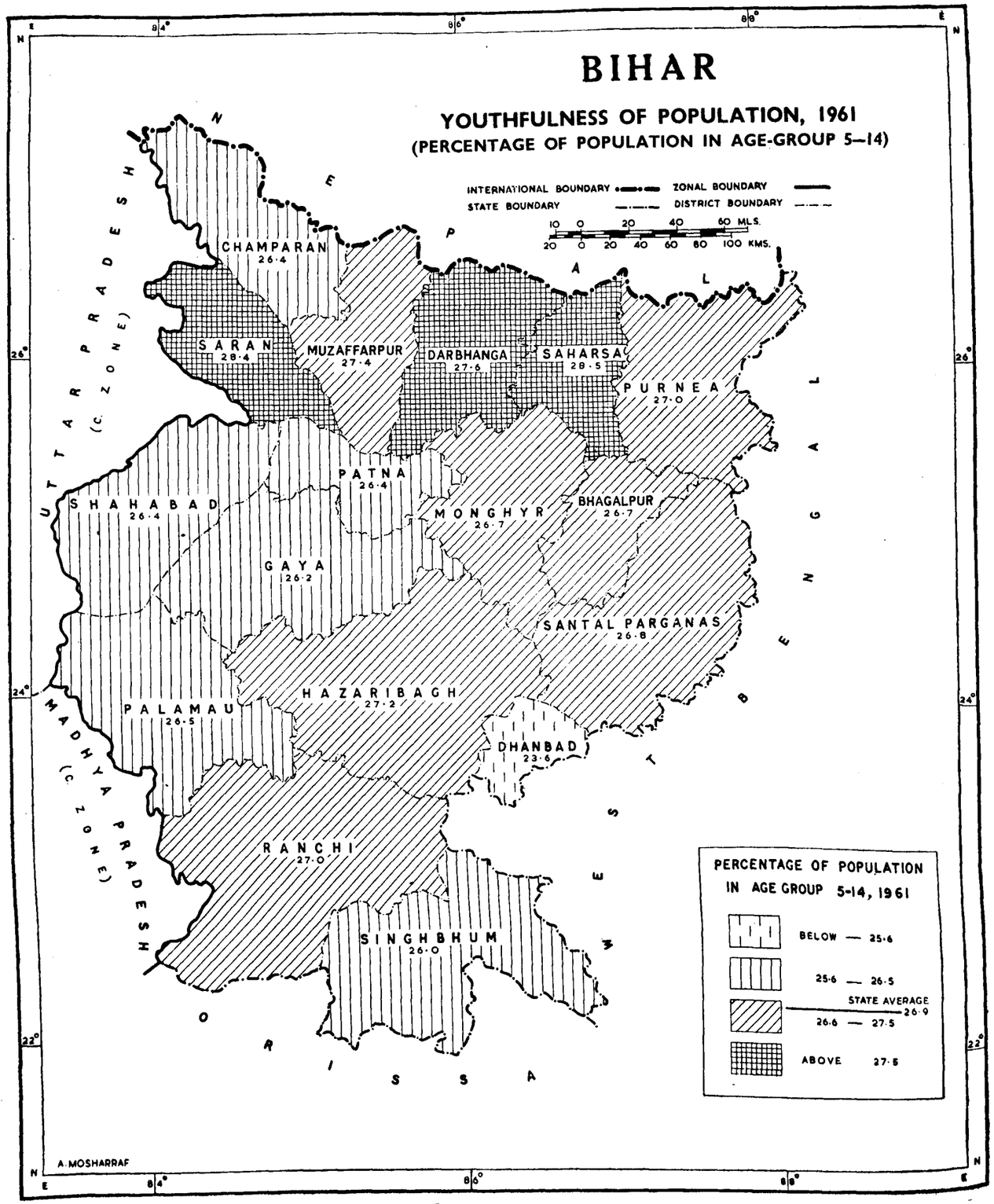
Assuming the total population of a district to be 100, percentages have been calculated of males and females separately in each of the aforesaid ten age groups. The data thus obtained have been shown by a pyramidal diagram in each district. Vertical columns, one for male and another for female, have been drawn in respect of each district. The age group ranges have been indicated in between. Horizontal bars proportionate to the percentage figures have been drawn on either side of the vertical column separately for males and females. These bars have been shaded in five ranges corresponding to each of the five broad age categories indicated above. The corresponding structure for the State has been shown in the right hand bottom corner to facilitate comparison of salient features.

Salient Features

The age groups 0—4 and 5—9 comprise the broadest bars in all districts. This is the consequence of high birth rate. In a natural population uninfluenced by factors, e. g., migration, severe epidemics or other natural calamities, there should be a gradual tapering of horizontal bars as one proceeds from lower to higher age groups, because of losses due to death. In many districts, it is however found that the bar for the age group 5—9 is wider than that for the age group 0—4. The same observation holds good in respect of bars representing age groups between 15 and 34. There is, however, a substantial reduction in the bar-size for the age group 10—14. The reason why bars representing age groups between 35 and 59 are wider than those below is that these represent decennial age groups and not quinquennial ones as in the case of age groups below this category.

The population of the State is broadly composed of : infants 15.40 per cent, boys and girls 26.90 per cent, young men and women 30.86 per cent, middle-aged men and women 21.20 per cent, and old men and women 5.64 per cent. It may be noted that these percentages are not comparable *inter se*, for the age categories are not equal. Their usefulness lies mainly in giving an idea of the general structure of population.

The table used for the map is given as Appendix I at the end of the volume.



YOUTHFULNESS OF POPULATION, 1961
(PERCENTAGE OF POPULATION IN AGE GROUP 5—14)

Purpose

This map depicts the youthfulness of population in each district of the State, as assessed by the percentage of children in the age group 5—14 to the total population.

Method

The percentages of children in the age group 5—14 to the total population of each district have been grouped under the following four ranges :

(*i*) Below 25.6,
(*ii*) 25.6—26.5,
(*iii*) 26.6—27.5, and
(*iv*) above 27.5.

The districts have then been shaded by four grades of hatching ranging from high to low. For facility of reference, the district percentages have also been shown in the map.

Salient Features

Young persons in the age group 5—14 number 12,495,293 in all, and comprise 26.9 per cent of total population of the State. Districtwise variations are appreciable. The highest percentage is met with in Saharsa (28.5) and the lowest in Dhanbad (23.6).

The proportion is higher than the State average in all districts of the North Bihar Plain except Champaran. On the other hand, the proportions are lower in the districts of the South Bihar Plain and the Chotanagpur Plateau except Hazaribagh and Ranchi.

There is a compact block of six districts with percentages varying between 26.7 and 27.2. It consists of Purnea in the north-east, and runs through Monghyr, Bhagalpur and the Santal Parganas to Hazaribagh and Ranchi. In another smaller block of four districts, viz., Patna, Gaya, Shahabad and Palamau, the percentages vary between 26.2 and 26.5.

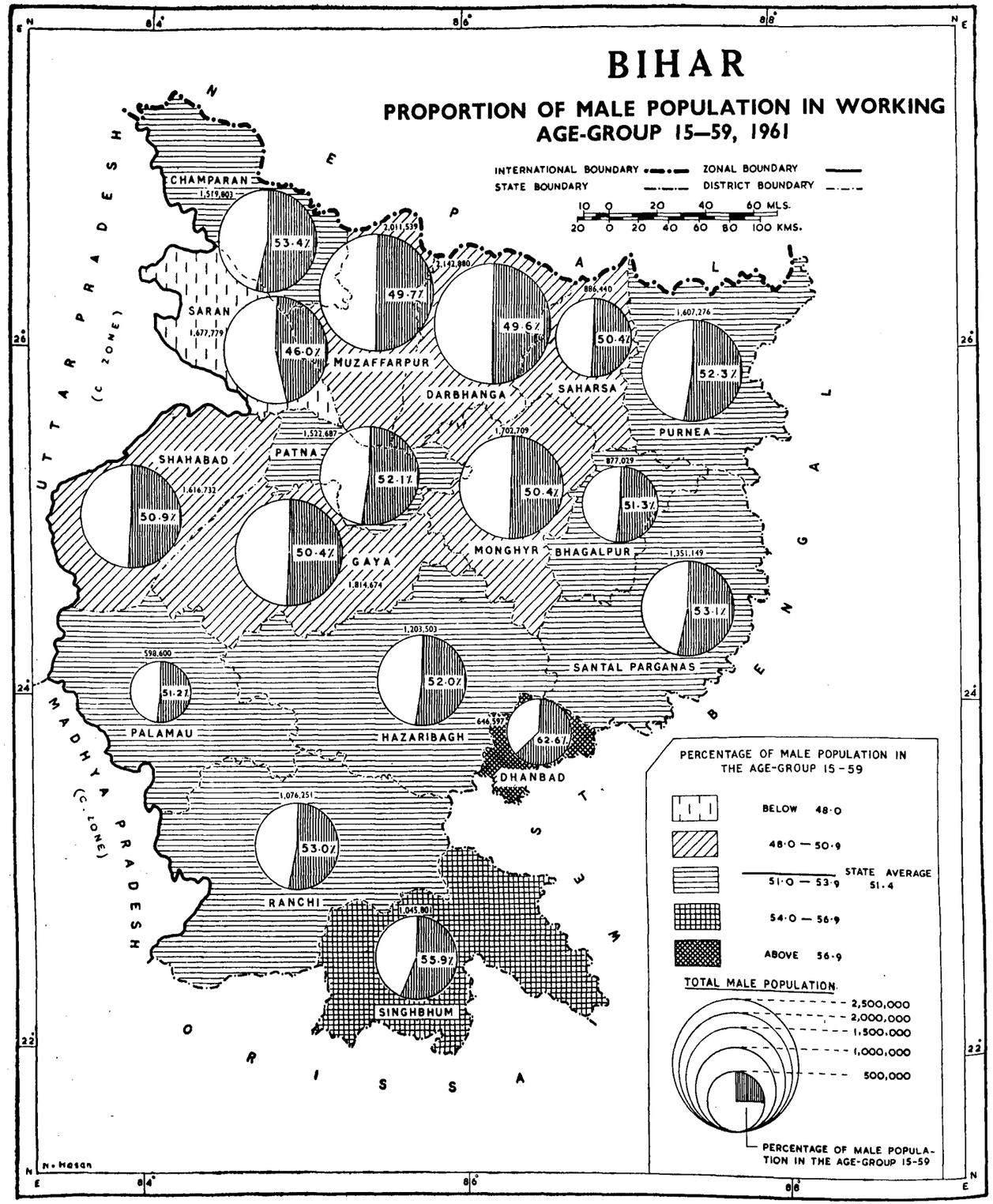
TABLE

PERCENTAGE OF CHILDREN IN THE AGE GROUP 5—14 TO THE TOTAL POPULATION, 1961

Rank	State/District	Percentage
1	Saharsa	28.5
2	Saran	28.4
3	Darbhanga	27.6
4	Muzaffarpur ..	27.4
5	Hazaribagh	27.2
6	Purnea	27.0
	Ranchi	27.0
	BIHAR ..	**26.9**
8	Santal Parganas ..	26.8
9	Monghyr	26.7
	Bhagalpur	26.7
11	Palamau	26.5
12	Patna	26.4
	Shahabad	26.4
	Champaran ..	26.4
15	Gaya	26.2
16	Singhbhum	26.0
17	Dhanbad	23.6

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C.

MAP NO. 30



MAP NO. 30

PROPORTION OF MALE POPULATION IN WORKING AGE GROUP 15—59, 1961

Purpose

This map is intended to show the percentage of male population in the working age group 15—59 to the total male population recorded in 1961.

Method

The percentages of male population in the working age group 15—59 to the total male population for all districts have been divided into five categories, viz.,

(*i*) Below 48.0,
(*ii*) 48.0—50.9,
(*iii*) 51.0—53.9,
(*iv*) 54.0—56.9, and
(*v*) above 56.9.

The districts have been then shaded by five grades of hatching ranging from high to low.

Circles have been drawn within each district proportionate to its total male population. The proportion of male population in the working age group 15—59 is represented by the shaded sector of each circle.

Figures outside the circles, generally on the top, represent the total male population of the districts.

Salient Features

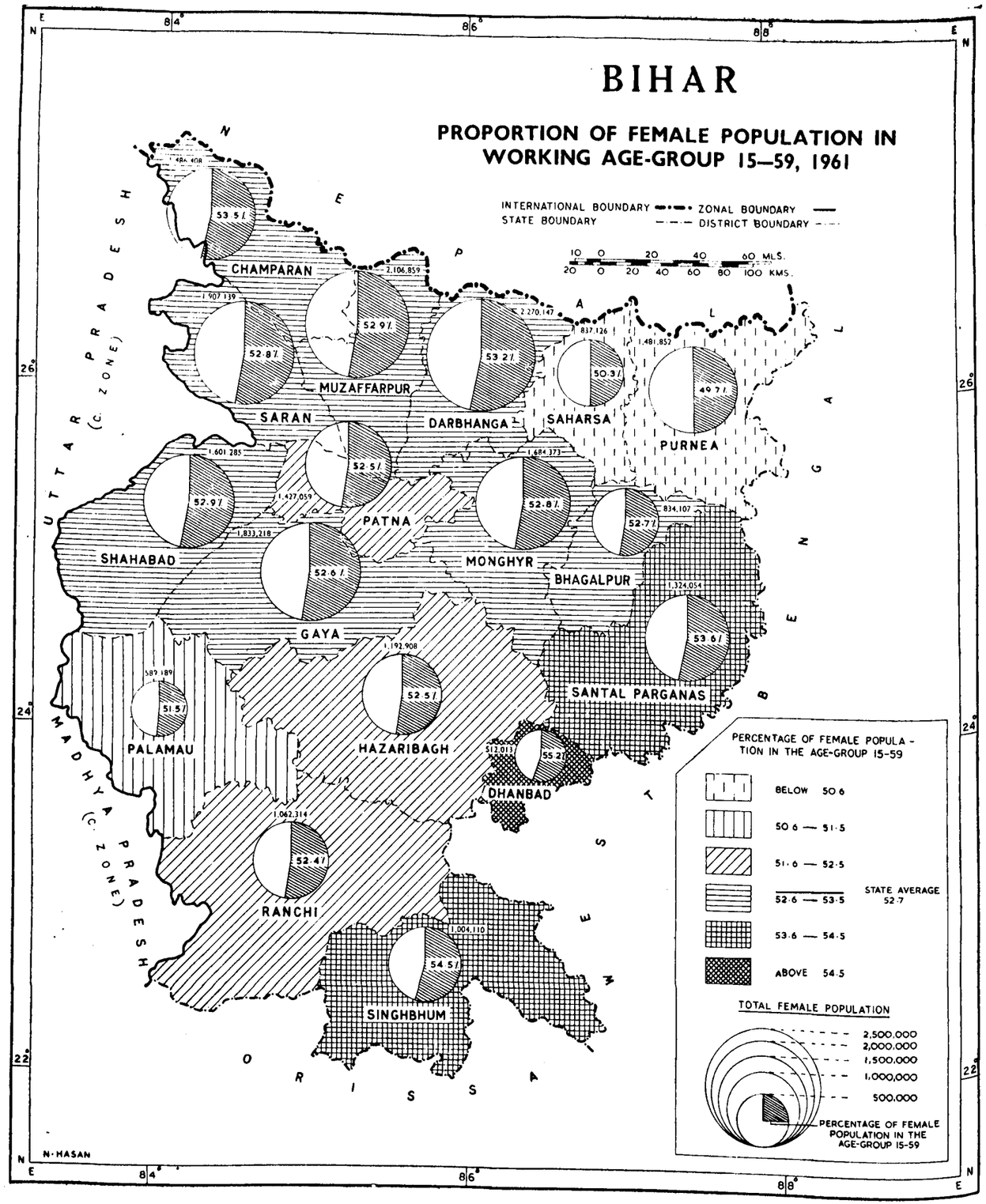
Bihar has a total male population of 23,301,449. Of them, 11,983,298 males or 51.4 per cent belong to the working age group 15—59. As many as nine districts have percentages below the State average. All of them except Palamau are in the plains. Among the districts with higher percentages than the State average, all except Champaran and Purnea belong to the Chotanagpur Plateau region. The district of Dhanbad has the largest proportion (62.6 per cent) of males in the working age group. This should cause no surprise as the various coal mines and ancillary industries in this district attract a large number of workers from within and outside the State. Saran is a district whose inhabitants, particularly males, are noted for their habits of emigrating to other parts of the State and even outside. Naturally it is at the lowest end of the table with only 46.0 per cent of its male population in the working age group.

TABLE

PERCENTAGE OF MALE POPULATION IN THE WORKING AGE GROUP 15—59 TO THE TOTAL MALE POPULATION, 1961

Rank	State/District	Percentage
1	Dhanbad	62.6
2	Singhbhum	55.9
3	Champaran ..	53.4
4	Santal Parganas ..	53.1
5	Ranchi	53.0
6	Purnea	52.3
7	Patna	52.1
8	Hazaribagh ..	52.0
	BIHAR ..	**51.4**
9	Bhagalpur	51.3
10	Palamau	51.2
11	Shahabad	50.9
12	Gaya	50.4
	Monghyr	50.4
	Saharsa	50.4
15	Muzaffarpur ..	49.7
16	Darbhanga ..	49.6
17	Saran	46.0

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C.



MAP NO. 31

PROPORTION OF FEMALE POPULATION IN WORKING AGE GROUP 15—59, 1961

Purpose

This map shows the percentage of female population in the working age group 15—59 to the total female population recorded in 1961.

Method

The percentages of female population in the working age group 15—59 to the total female population for all districts have been divided into six categories, viz.,

(*i*) Below 50.6,
(*ii*) 50.6—51.5,
(*iii*) 51.6—52.5,
(*iv*) 52.6—53.5,
(*v*) 53.6—54.5, and
(*vi*) above 54.5.

The districts have then been shaded by six different grades of hatching ranging from high to low.

Circles have been drawn within each district proportionate to its total female population. The proportion of female population in the working age group 15—59 is represented by the shaded sector of each circle.

Figures outside the circles, generally on the top, represent the total female population of the districts.

Salient Features

Bihar has a total female population of 23,154,161. Of them, 12,198,081 or 52.7 per cent belong to the working age group 15—59.

As in the case of males, Dhanbad district has the largest proportion (55.2 per cent) of females in the working age group 15—59. This may be due to two factors, (*i*) females in the working age group 15—59 migrate into Dhanbad to live with their men folk employed there, and (*ii*) female labourers being attracted by the ancillary industries in the district. Purnea is at the other end with only 49.7 per cent of its female population in the working age group 15—59.

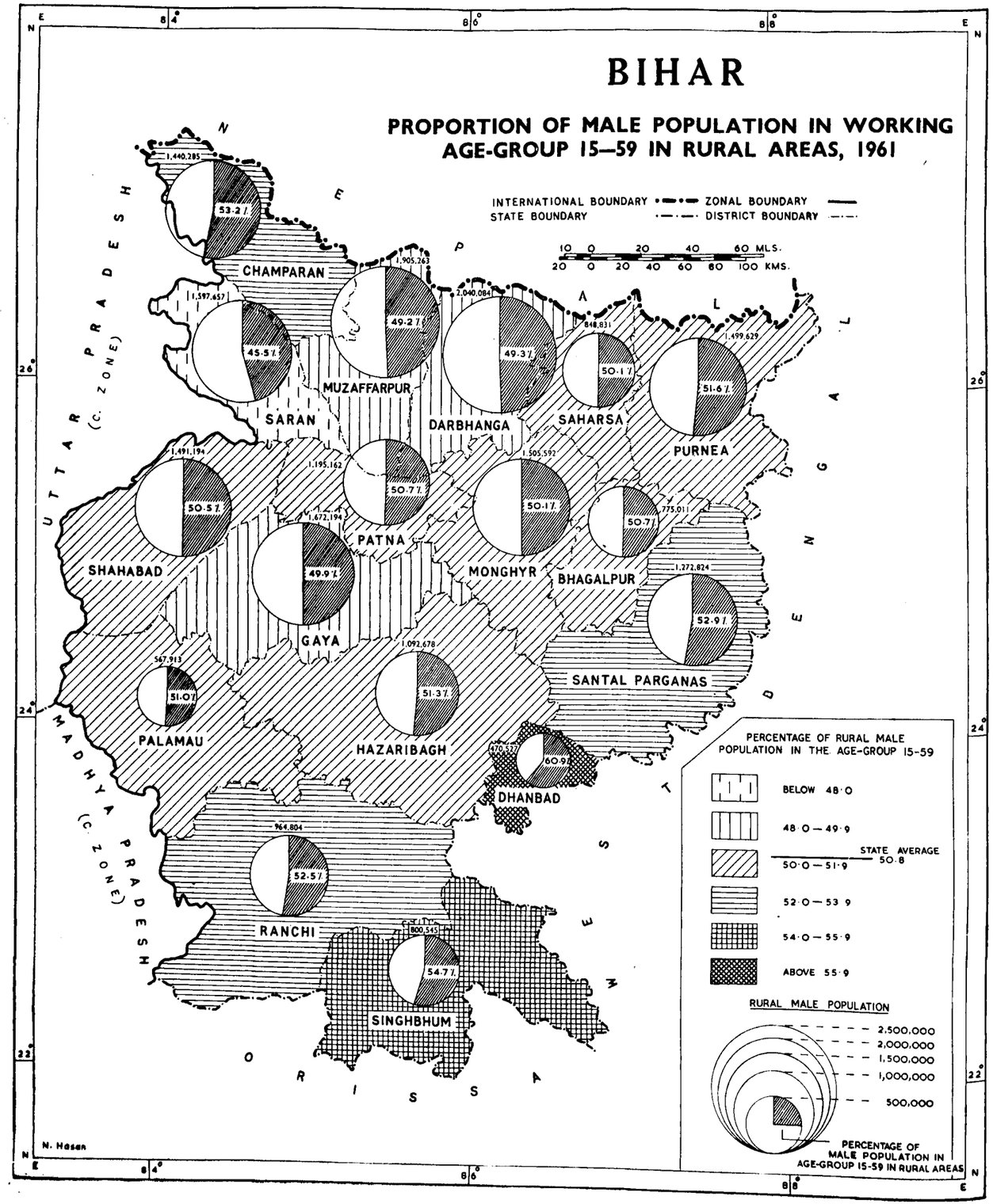
Unlike males among whom the percentages oscillate between 46.0 and 62.6, the percentages of female population in the working age group 15—59 lie between 49.7 and 55.2 only.

TABLE

PERCENTAGE OF FEMALE POPULATION IN THE WORKING AGE GROUP 15—59 TO THE TOTAL FEMALE POPULATION, 1961

Rank	State/District	Percentage
1	Dhanbad	55.2
2	Singhbhum	54.5
3	Santal Parganas ..	53.6
4	Champaran ..	53.5
5	Darbhanga ..	53.2
6	Muzaffarpur ..	52.9
	Shahabad	52.9
8	Saran	52.8
	Monghyr	52.8
	BIHAR ..	**52.7**
10	Bhagalpur	52.7
11	Gaya	52.6
12	Patna	52.5
	Hazaribagh ..	52.5
14	Ranchi	52.4
15	Palamau	51.5
16	Saharsa	50.3
17	Purnea	49.7

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C,



PROPORTION OF MALE POPULATION IN WORKING AGE GROUP 15—59 IN RURAL AREAS, 1961

Purpose

This map shows the percentage of male population in the working age group 15—59 to total male population in rural areas of each district.

Method

The percentages of male population in the working age group 15—59 to total male population in rural areas of the district have been divided into six categories, viz.,

(*i*) Below 48.0,
(*ii*) 48.0—49.9,
(*iii*) 50.0—51.9,
(*iv*) 52.0—53.9,
(*v*) 54.0—55.9, and
(*vi*) above 55.9.

The districts have then been shaded by six grades of hatching ranging from high to low.

Circles have been drawn within each district proportionate to its total male population in rural areas. The proportion of male population in the working age group 15—59 has been shown by the shaded sector of each circle.

Figures outside the circles, generally on the top, represent the total male population in rural areas of the district.

Salient Features

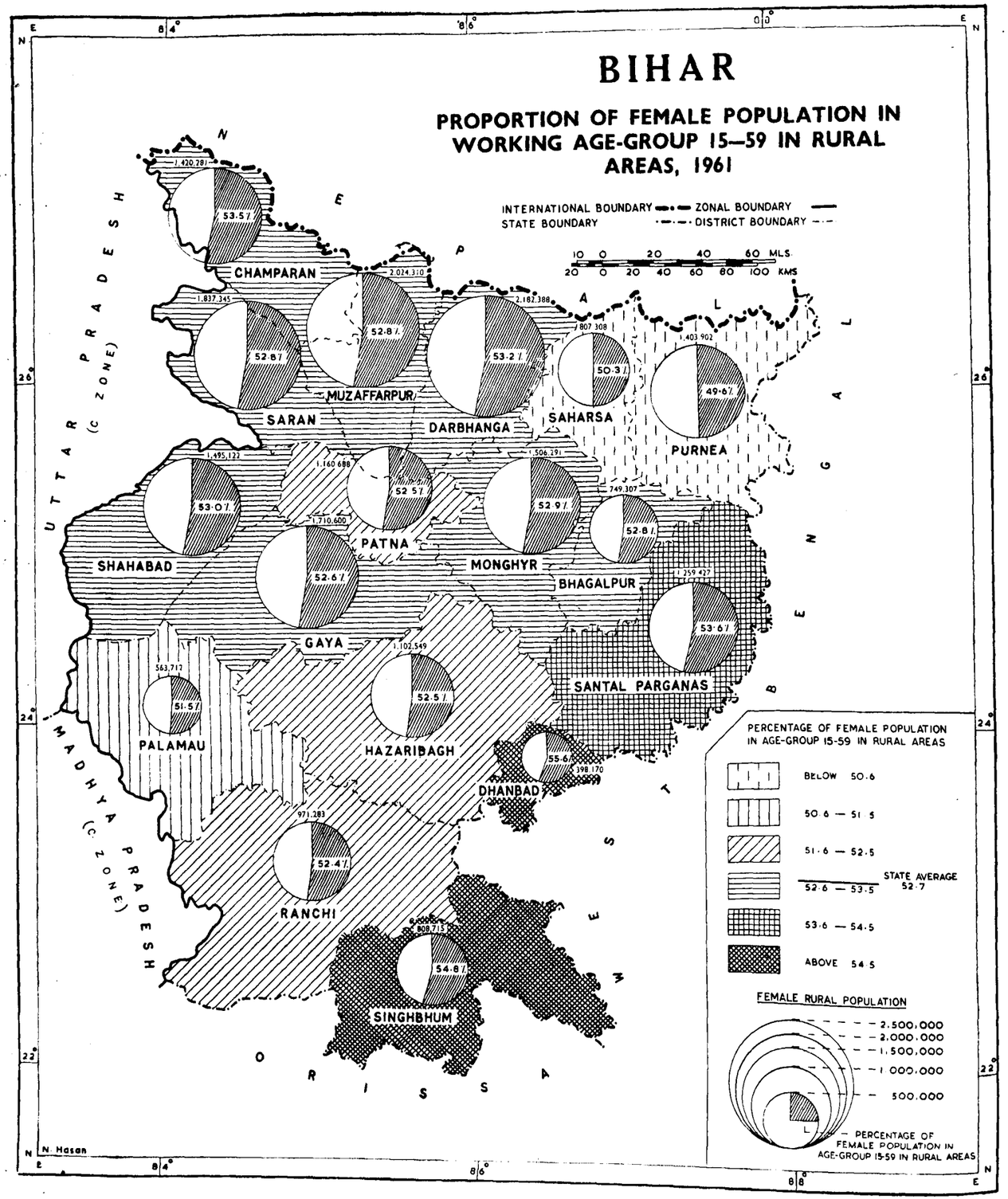
Bihar has a total population of 21,140,292 males in rural areas of the State. Of them, 10,731,037 males comprising 50.8 per cent of the male population are in the working age group 15—59. As many as 9 districts have recorded figures below the State average. They are all in the Gangetic Plain (North Bihar and South Bihar). Among the districts with higher percentages than the State average, all except Champaran and Purnea belong to the Chotanagpur Plateau region. The district of Dhanbad has the highest proportion, followed by Singhbhum and Champaran. Saran is at the other end.

TABLE

PERCENTAGE OF MALE POPULATION IN THE WORKING AGE GROUP 15—59 IN RURAL AREAS, 1961

Rank	State/District	Percentage
1	Dhanbad	60.9
2	Singhbhum	54.7
3	Champaran ..	53.2
4	Santal Parganas ..	52.9
5	Ranchi	52.5
6	Purnea	51.6
7	Hazaribagh ..	51.3
8	Palamau	51.0
	BIHAR ..	**50.8**
9	Patna	50.7
	Bhagalpur	50.7
11	Shahabad	50.5
12	Monghyr	50.1
	Saharsa	50.1
14	Gaya	49.9
15	Darbhanga ..	49.3
16	Muzaffarpur ..	49.2
17	Saran	45.5

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C.



PROPORTION OF FEMALE POPULATION IN WORKING AGE GROUP 15—59 IN RURAL AREAS, 1961

Purpose

This map represents the proportion of female population in the working age group 15—59 to total female population in rural areas of each district.

Method

The percentages of female population in the working age group 15—59 to total female population in rural areas of the districts have been divided into six categories, viz.,

(*i*) Below 50.6,
(*ii*) 50.6—51.5,
(*iii*) 51.6—52.5,
(*iv*) 52.6—53.5,
(*v*) 53.6—54.5, and
(*vi*) above 54.5.

The districts have then been shaded by six grades of hatching ranging from high to low.

Circles have been drawn within each district proportionate to its total female population in rural areas. The proportion of female population in the working age group 15—59 has been shown by the shaded sector of each circle.

Figures outside the circles, generally on the top, represent the total female population in rural areas of the district.

Salient Features

Bihar has a total population of 21,401,398 females in rural areas of the State. Of them, 11,276,903 females comprising 52.7 per cent of the female population are in the working age group 15—59. Unlike males, the proportions of females in the working age group 15—59 are higher than the State average in as many as 7 districts of the plains region (North Bihar and South Bihar). Only three districts of the Chotanagpur Plateau region, viz., Santal Parganas, Dhanbad and Singhbhum have recorded proportions higher than the State average.

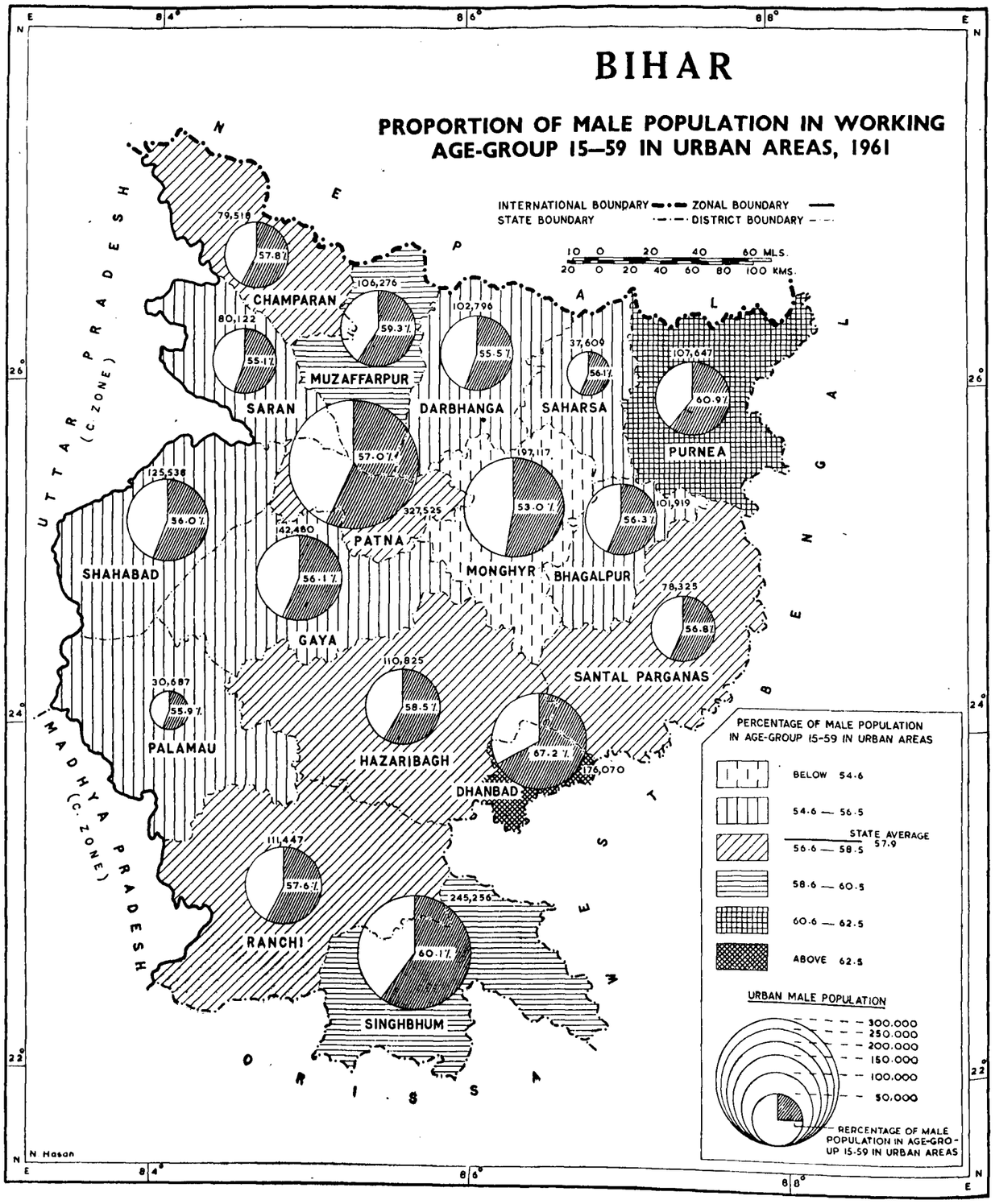
Dhanbad is again at the top with 55.6 per cent of its female population in rural areas in the working age group 15—59. Singhbhum follows with 54.8 per cent. Purnea stands in the rear with 49.6 per cent followed closely by Saharsa with 50.3 per cent.

TABLE

PERCENTAGE OF FEMALE POPULATION IN THE WORKING AGE GROUP 15—59 IN RURAL AREAS, 1961

Rank	State/District	Percentage
1	Dhanbad	55.6
2	Singhbhum	54.8
3	Santal Parganas ..	53.6
4	Champaran ..	53.5
5	Darbhanga ..	53.2
6	Shahabad	53.0
7	Monghyr	52.9
8	Saran	52.8
	Muzaffarpur ..	52.8
	Bhagalpur	52.8
	BIHAR ..	**52.7**
11	Gaya	52.6
12	Patna	52.5
	Hazaribagh ..	52.5
14	Ranchi	52.4
15	Palamau	51.5
16	Saharsa	50.3
17	Purnea	49.6

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part, II-C.



PROPORTION OF MALE POPULATION IN WORKING AGE GROUP 15—59 IN URBAN AREAS, 1961

Purpose

This map shows the proportion of male population in the working age group 15—59 to total male population in urban areas of each district.

Method

The percentages of male population in the working age group 15—59 to total male population in urban areas of the districts have been divided into six categories, viz.,

(*i*) Below 54.6,
(*ii*) 54.6—56.5,
(*iii*) 56.6—58.5,
(*iv*) 58.6—60.5,
(*v*) 60.6—62.5, and
(*vi*) above 62.5.

The districts have then been shaded by six grades of hatching ranging from high to low.

Circles have been drawn within each district proportionate to its total male population in urban areas. The shaded sector of each circle shows the proportion of male population in the working age group 15—59.

Figures outside the circles, generally on the top, represent the total male population in urban areas of the district.

Salient Features

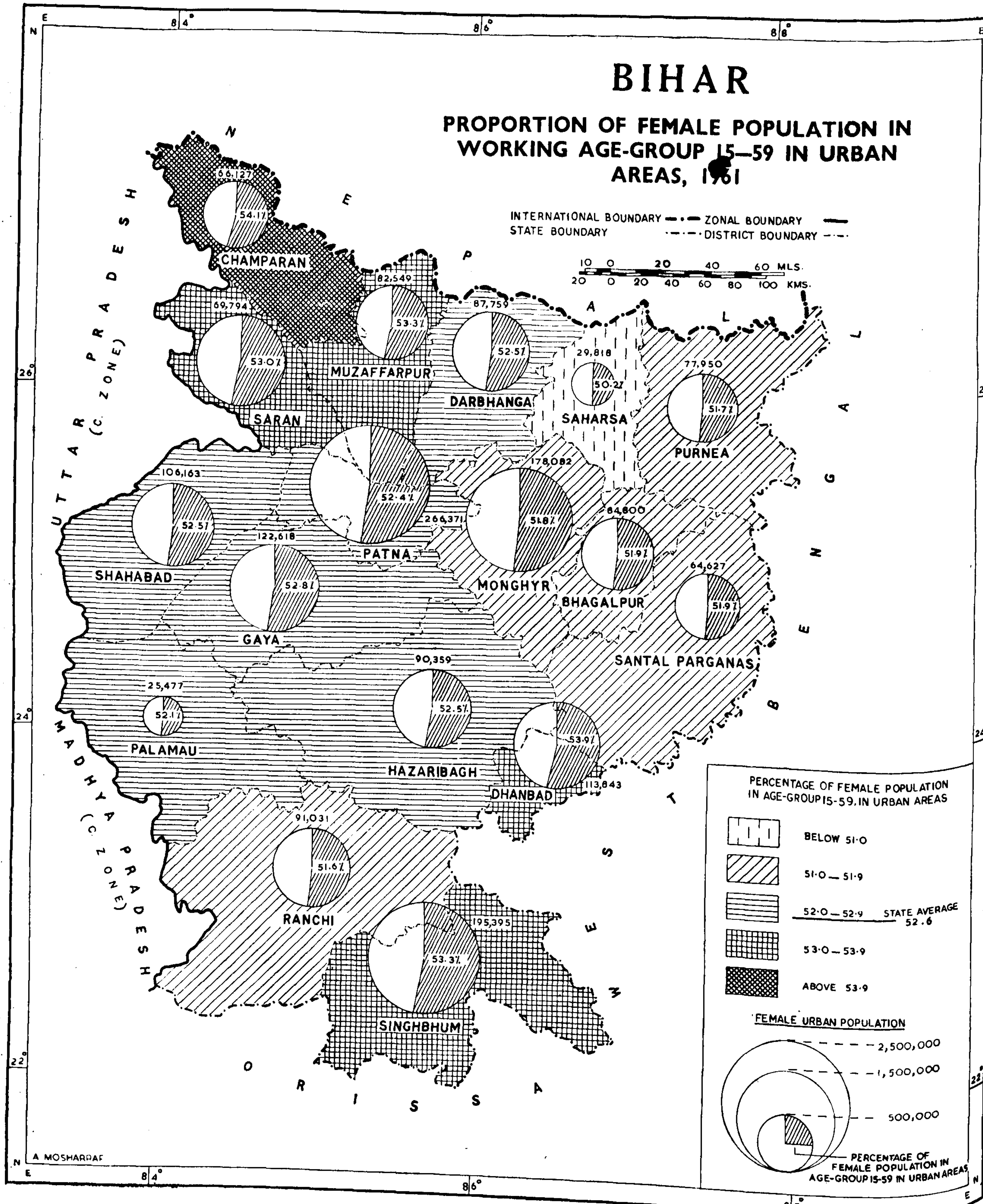
Bihar has a total population of 2,161,157 males in urban areas of the State. Of them, 1,252,261 males comprising 57.9 per cent of the male population belong to the working age group 15—59. Only five districts, viz., Dhanbad, Purnea, Singhbhum, Muzaffarpur and Hazaribagh have recorded higher proportions of urban male population in the working age group 15—59 than the State average. The districts of Hazaribagh, Ranchi and Santal Parganas comprise one block representing the range in which the State average lies. Champaran and Patna, though geographically apart, belong to this group. The districts with low proportion (between 54.6 and 56.5 per cent) are divided into two compact blocks—one in the west comprising Palamau, Gaya, Shahabad, Saran and the other in north-east consisting of Darbhanga, Saharsa and Bhagalpur. Monghyr is the only district in the lowest range.

TABLE

PERCENTAGE OF MALE POPULATION IN THE WORKING AGE GROUP 15—59 IN URBAN AREAS, 1961

Rank	State/District	Percentage
1	Dhanbad	67.2
2	Purnea	60.9
3	Singhbhum	60.1
4	Muzaffarpur ..	59.3
5	Hazaribagh ..	58.5
	BIHAR ..	**57.9**
6	Champaran ..	57.8
7	Ranchi	57.6
8	Patna	57.0
9	Santal Parganas ..	56.8
10	Bhagalpur	56.3
11	Gaya	56.1
	Saharsa	56.1
13	Shahabad	56.0
14	Palamau	55.9
15	Darbhanga ..	55.5
16	Saran	55.1
17	Monghyr	53.0

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C.



MAP NO. 35

PROPORTION OF FEMALE POPULATION IN WORKING AGE GROUP 15—59 IN URBAN AREAS, 1961

Purpose

This map delineates the percentage of female population in the working age group 15—59 to the total female population in the urban area of each district.

Method

The percentages of female population in the working age group 15—59 have been divided into five categories, viz.,

(*i*) Below 51.0,

(*ii*) 51.0—51.9,

(*iii*) 52.0—52.9,

(*iv*) 53.0—53.9, and

(*v*) above 53.9.

The districts have then been shaded by five grades of hatching ranging from high to low.

A circle has also been drawn in each district proportionate to its total female population in the urban area. The shaded sector of each circle represents the proportion of female population in the working age group 15—59.

Figures outside the circles, generally on the top, represent the total female population in urban areas of the districts.

Salient Features

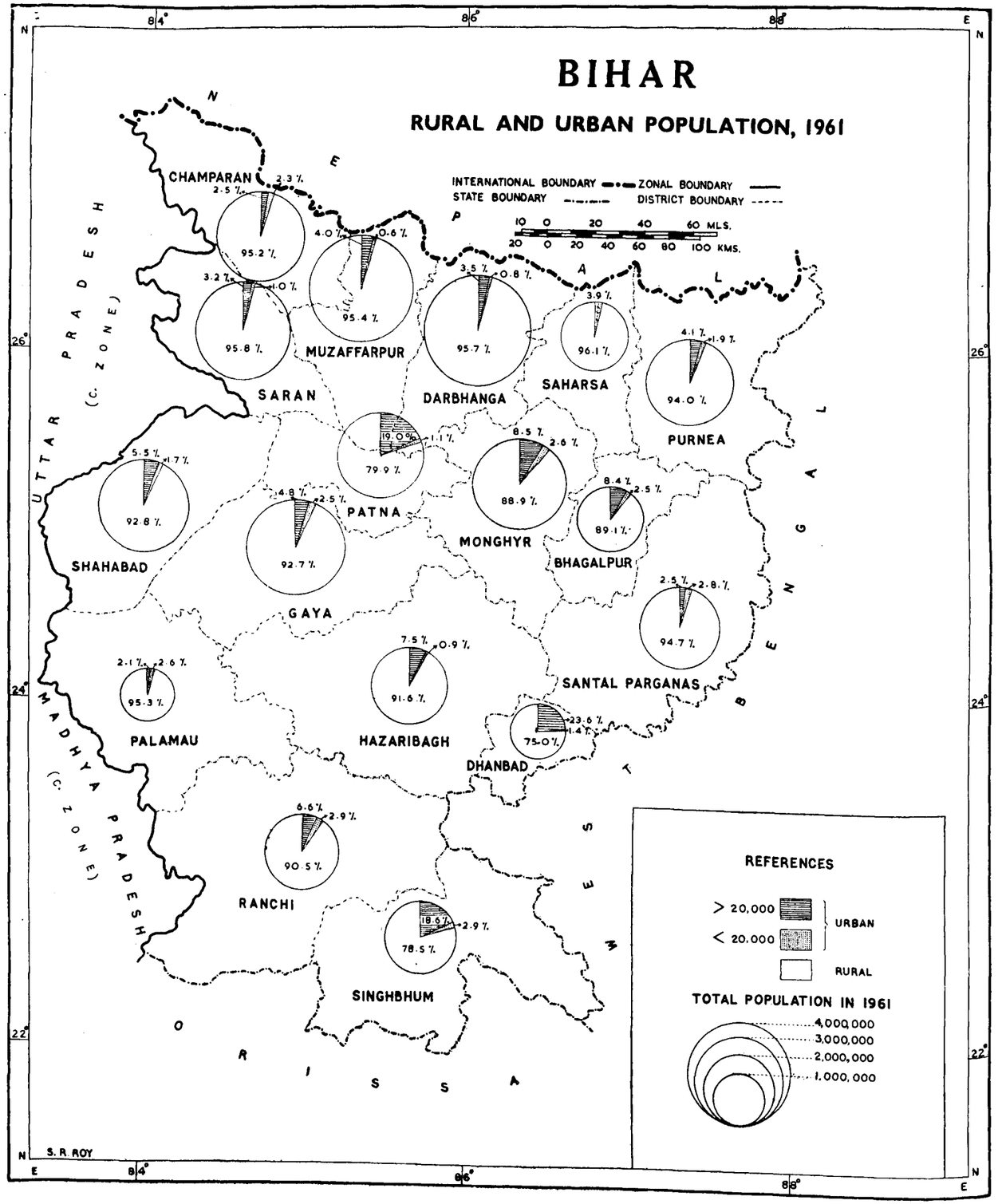
Bihar has a total population of 1,752,763 females in urban areas of the State. Of them, 921,178 females comprising 52.6 per cent of the female population are in the working age group 15—59. Champaran ranks first with 54.1 per cent of its urban females in the working age group 15—59 followed by Dhanbad with 53.9 per cent. Muzaffarpur and Singhbhum occupy the next place, each having 53.3 per cent. The lowest percentage has been recorded in Saharsa (50.2). It is noteworthy that the extent of variation is comparatively small.

TABLE

PERCENTAGE OF FEMALE POPULATION IN THE WORKING AGE GROUP 15—59 IN URBAN AREAS, 1961

Rank	State/District		Percentage
1	Champaran	..	54.1
2	Dhanbad ..	..	53.9
3	Muzaffarpur	..	53.3
	Singhbhum..	..	53.3
5	Saran ..	..	53.0
6	Gaya ..	..	52.8
	BIHAR ..	..	**52.6**
7	Shahabad ..	..	52.5
	Darbhanga	..	52.5
	Hazaribagh	..	52.5
10	Patna ..	..	52.4
11	Palamau ..	..	52.1
12	Bhagalpur ..	..	51.9
	Santal Parganas	..	51.9
14	Monghyr ..	..	51.8
15	Purnea ..	..	51.7
16	Ranchi ..	..	51.6
17	Saharsa ..	..	50.2

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C.



RURAL AND URBAN POPULATION, 1961

Purpose

This map shows the proportion of rural and urban population to total population in each district of the State. The proportion of urban population is broken up into (*i*) those living in towns having population of 20,000 or more, and (*ii*) those living in towns having population below 20,000.

Method

A circle proportionate to the total population has been drawn inside each district, and within the circle the percentage shares of rural and urban population have been shown by sectors. The unshaded sector represents rural population. Of the shaded sector, the darker portion refers to the proportion of population in large towns (20,000 or more), and the lighter portion to those in small towns (less than 20,000).

Salient Features

Of the total population of 46.46 million in Bihar in 1961, 42.54 million lived in rural areas and 3.91 million in urban areas. In other words, 91.57 per cent of the total population was found in villages and a mere 8.43 per cent in towns.

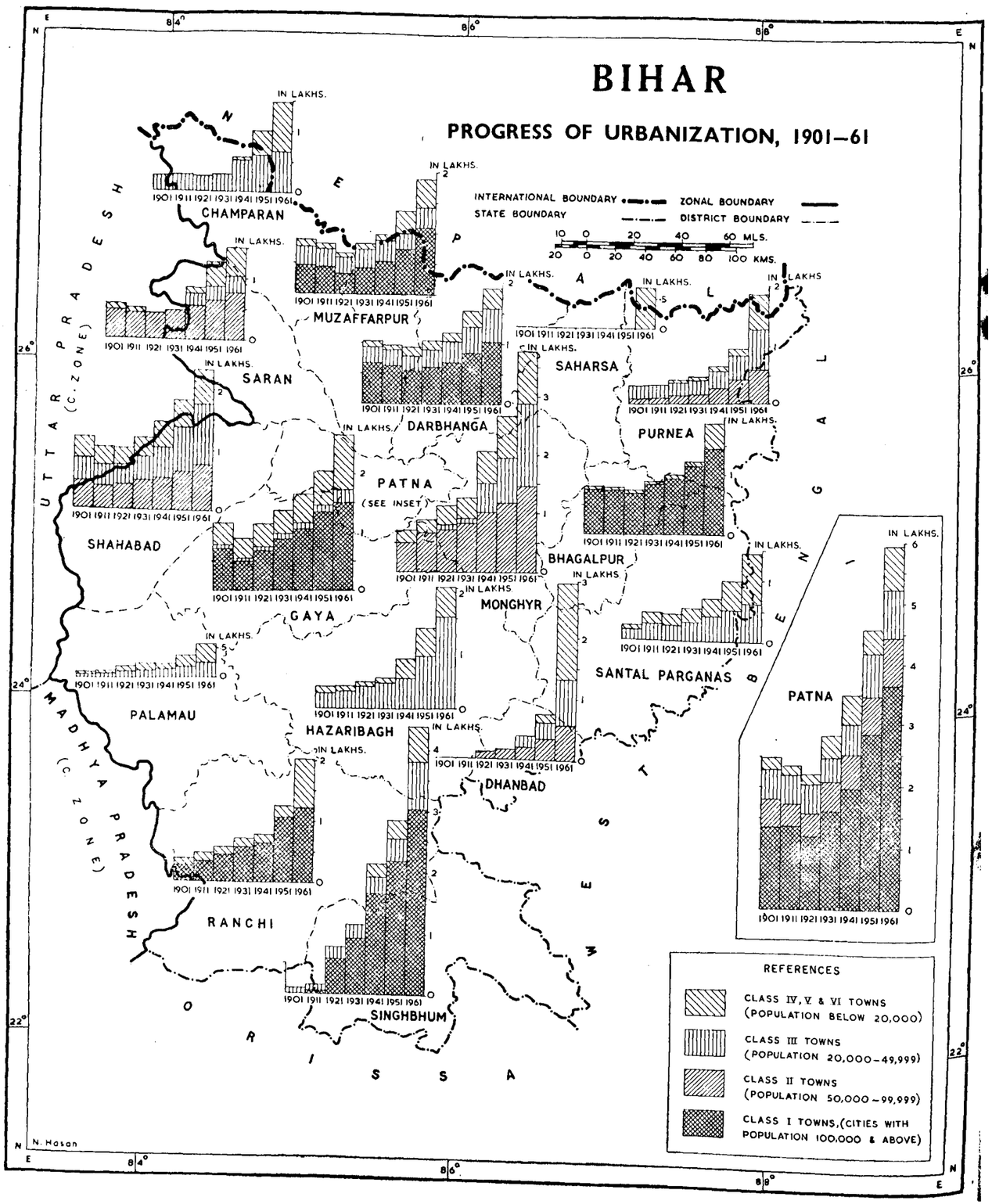
Only six districts have higher urban proportion than the State average. While Dhanbad has the highest urban percentage (25.02), Singhbhum and Patna also have more than 20 per cent of their population as urban. Saharsa has the lowest urban proportion. In most districts except Santal Parganas, Palamau, Saharsa and Champaran the proportion of urban population living in smaller towns is very small in comparison to the population in larger towns.

TABLE

DISTRIBUTION OF RURAL AND URBAN POPULATION, 1961

Rank	State/District	Percentage of rural population	Percentage of urban population living in larger towns	Percentage of urban population living in smaller towns
1	2	3	4	5
1	Dhanbad ..	74.98	23.57	1.45
2	Singhbhum ..	78.50	18.58	2.92
3	Patna ..	79.87	19.04	1.09
4	Monghyr ..	88.92	8.54	2.54
5	Bhagalpur ..	89.09	8.40	2.51
6	Ranchi ..	90.53	6.55	2.92
	BIHAR ..	**91.57**	**6.01**	**2.42**
7	Hazaribagh ..	91.60	7.50	0.90
8	Gaya ..	92.73	4.77	2.50
9	Shahabad ..	92.80	5.46	1.74
10	Purnea ..	93.99	4.10	1.91
11	Santal Parganas ..	94.66	2.48	2.86
12	Champaran ..	95.16	2.48	2.36
13	Palamau ..	95.27	2.12	2.61
14	Muzaffarpur ..	95.42	3.99	0.59
15	Darbhanga ..	95.68	3.55	0.77
16	Saran ..	95.82	3.22	0.96
17	Saharsa ..	96.09	..	3.91

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A.



PROGRESS OF URBANIZATION, 1901—61

Purpose

This map shows the variation in urban population of each district at each of the seven censuses from 1901 to 1961.

Method

Seven histograms representing the urban population at each census from 1901 to 1961 have been drawn for each district. Each histogram has further been shaded by four different types of hatches separately for the proportion of urban population contained in each class of towns from classes I to III and in classes IV to VI. The towns have been divided into six classes on the basis of population as follows :

(*i*) Class I	..	100,000 and above
(*ii*) Class II	..	50,000—99,999
(*iii*) Class III	..	20,000—49,999
(*iv*) Class IV	..	10,000—19,999
(*v*) Class V	..	5,000—9,999
(*vi*) Class VI	..	Below 5,000

Salient Features

The urban population of the State increased by 259 per cent during the period 1901—1961. The increase has been most spectacular in the district of Singhbhum where the urban population has increased by nearly 50 times since 1901. Dhanbad, which had no town till 1911, started with an urban population of 11,973 in 1921. In forty years, this figure has multiplied by more than 24 times. The urban populations of Santal Parganas, Palamau and Purnea districts have gone up by five times while those of Hazaribagh, Ranchi and Monghyr have increased by over four times.

The rate of urbanisation has generally been rapid in the Chotanagpur Plateau as a whole while in the North Bihar Plain it has been particularly sluggish. During the entire sixty years, Darbhanga had the lowest urban growth (84.30 per cent) and Saran followed next (84.81 per cent).

The towns in the North and South Bihar Plains are generally the old ones with few industries accounting for relatively low rates of urban increase.

The bulk of urban population of districts containing cities is contained in the cities themselves.

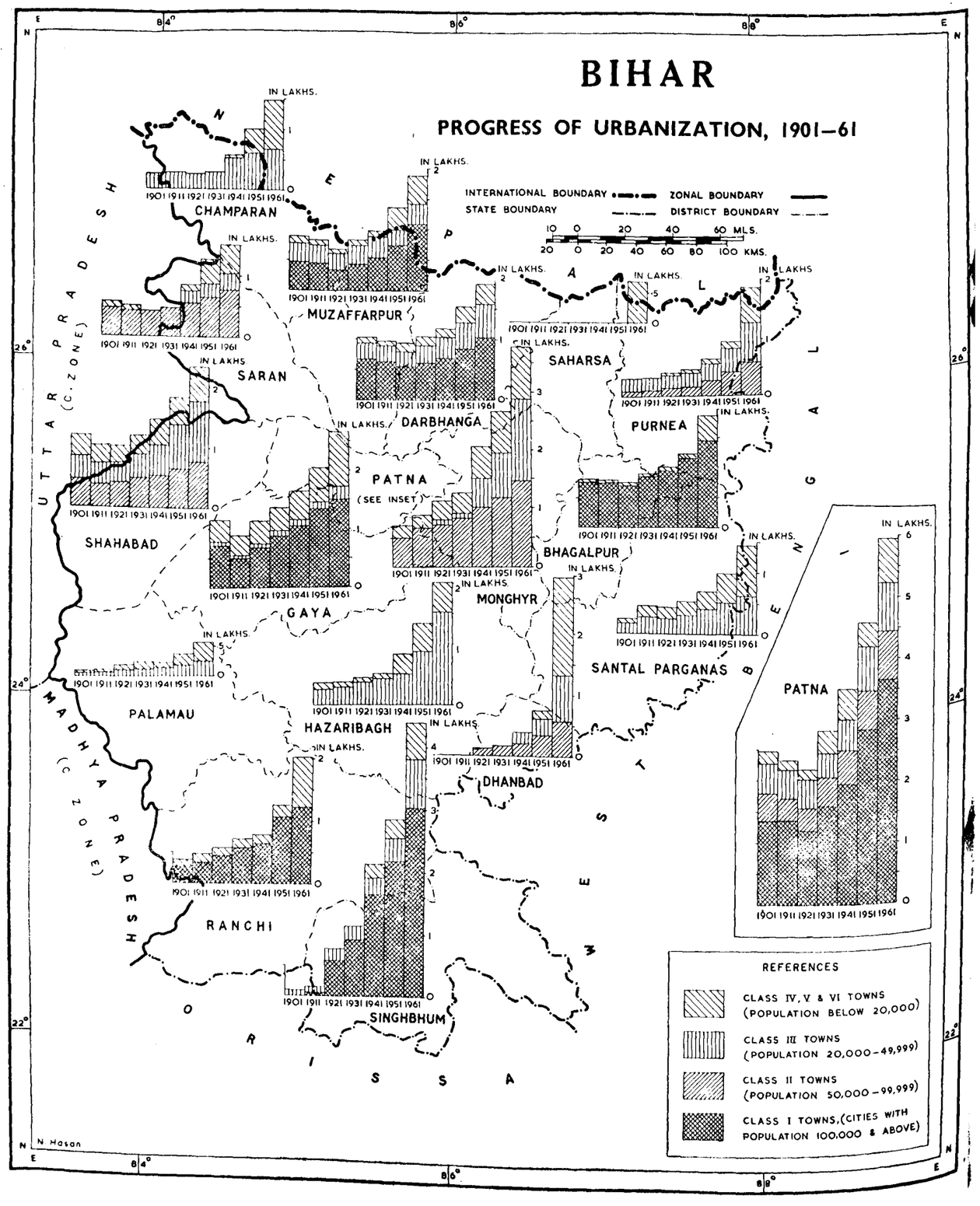
It is noteworthy that Saharsa had no town till 1951.

TABLE

PERCENTAGE OF POPULATION IN EACH CLASS OF TOWNS TO TOTAL URBAN POPULATION IN BIHAR, 1901—1961

Year	Class I	Class II	Class III	Class IV	Class V	Class VI
1	2	3	4	5	6	7
1901	12.29	19.44	31.73	19.48	15.46	1.60
1911	12.63	12.71	36.18	20.00	16.46	2.02
1921	10.29	21.23	29.28	19.97	17.31	1.92
1931	11.23	29.50	23.62	20.71	14.66	0.28
1941	22.60	26.56	17.34	22.27	10.28	0.95
1951	32.62	16.16	21.48	19.63	8.50	1.61
1961	33.15	12.63	25.60	18.68	9.17	0.77

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-IV.



PROGRESS OF URBANIZATION, 1901—61

Purpose

This map shows the variation in urban population of each district at each of the seven censuses from 1901 to 1961.

Method

Seven histograms representing the urban population at each census from 1901 to 1961 have been drawn for each district. Each histogram has further been shaded by four different types of hatches separately for the proportion of urban population contained in each class of towns from classes I to III and in classes IV to VI. The towns have been divided into six classes on the basis of population as follows :

(*i*) Class I .. 100,000 and above
(*ii*) Class II .. 50,000—99,999
(*iii*) Class III .. 20,000—49,999
(*iv*) Class IV .. 10,000—19,999
(*v*) Class V .. 5,000—9,999
(*vi*) Class VI .. Below 5,000

Salient Features

The urban population of the State increased by 259 per cent during the period 1901—1961. The increase has been most spectacular in the district of Singhbhum where the urban population has increased by nearly 50 times since 1901. Dhanbad, which had no town till 1911, started with an urban population of 11,973 in 1921. In forty years, this figure has multiplied by more than 24 times. The urban populations of Santal Parganas, Palamau and Purnea districts have gone up by five times while those of Hazaribagh, Ranchi and Monghyr have increased by over four times.

The rate of urbanisation has generally been rapid in the Chotanagpur Plateau as a whole while in the North Bihar Plain it has been particularly sluggish. During the entire sixty years, Darbhanga had the lowest urban growth (84.30 per cent) and Saran followed next (84.81 per cent).

The towns in the North and South Bihar Plains are generally the old ones with few industries accounting for relatively low rates of urban increase.

The bulk of urban population of districts containing cities is contained in the cities themselves.

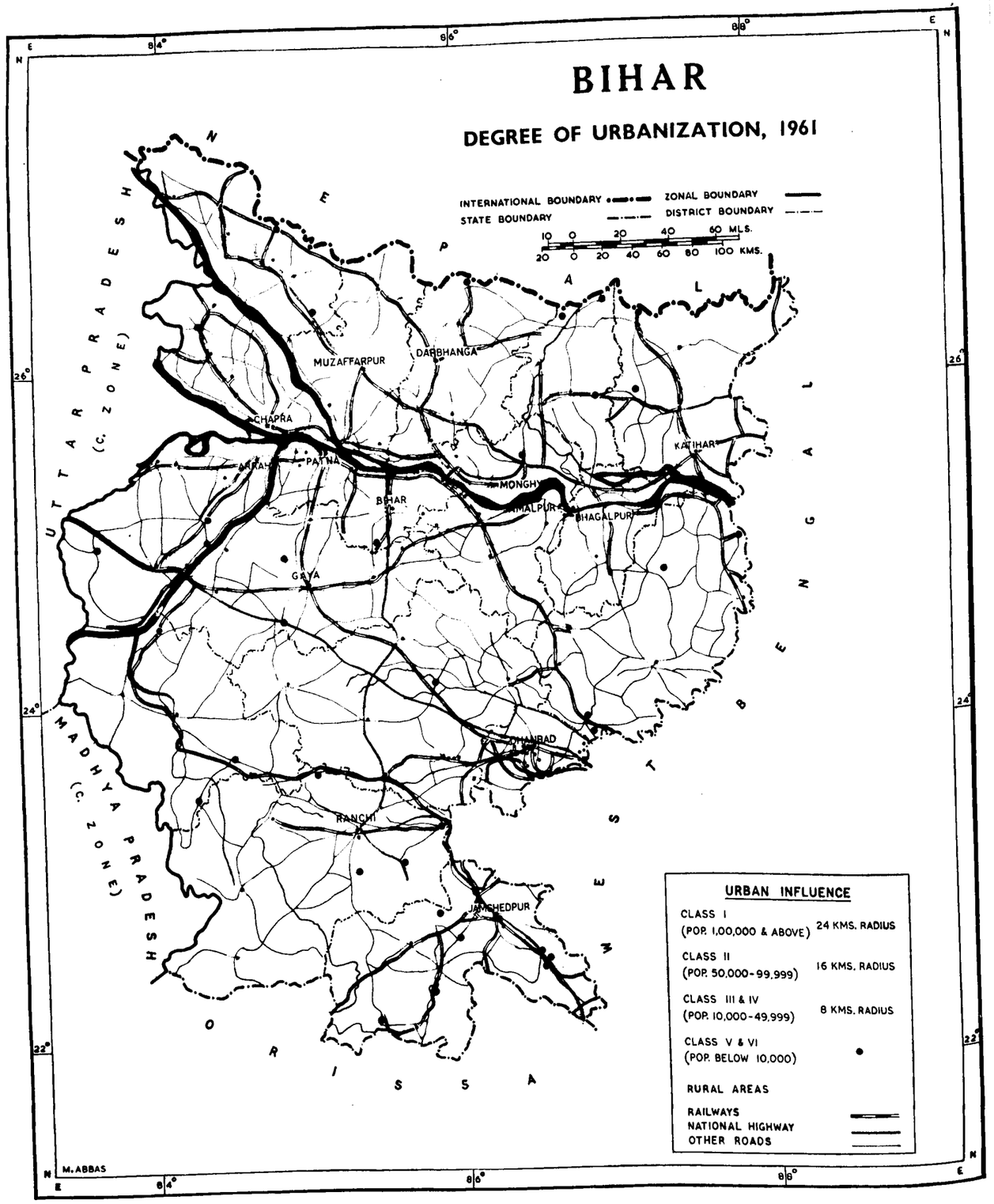
It is noteworthy that Saharsa had no town till 1951.

TABLE

PERCENTAGE OF POPULATION IN EACH CLASS OF TOWNS TO TOTAL URBAN POPULATION IN BIHAR, 1901—1961

Year	Class I	Class II	Class III	Class IV	Class V	Class VI
1	2	3	4	5	6	7
1901	12.29	19.44	31.73	19.48	15.46	1.60
1911	12.63	12.71	36.18	20.00	16.46	2.02
1921	10.29	21.23	29.28	19.97	17.31	1.92
1931	11.23	29.50	23.62	20.71	14.66	0.28
1941	22.60	26.56	17.34	22.27	10.28	0.95
1951	32.62	16.16	21.48	19.63	8.50	1.61
1961	33.15	12.63	25.60	18.68	9.17	0.77

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-IV.



MAP NO. 38

DEGREE OF URBANIZATION, 1961

Purpose

This map shows the extent of area over which the cities and towns of the State exercise their influence.

Method

The cities and towns have been depicted by circles proportional to their population range, as follows :

Class of town	*Radius of circle*
(*i*) Class I cities with population 100,000 and above.	24 Kms.
(*ii*) Class II towns with population 50,000—99,999.	16 Kms.
(*iii*) Class III and IV towns with population 10,000—49,999	8 Kms.
(*iv*) Class V and VI towns with population below 10,000.	Solid black circles.

Where the circles overlap, their arcs are joined. The areas outside the circles have been coloured in yellow to differentiate the rural areas from those with some urban influence. Railways and important roads have also been shown in the map.

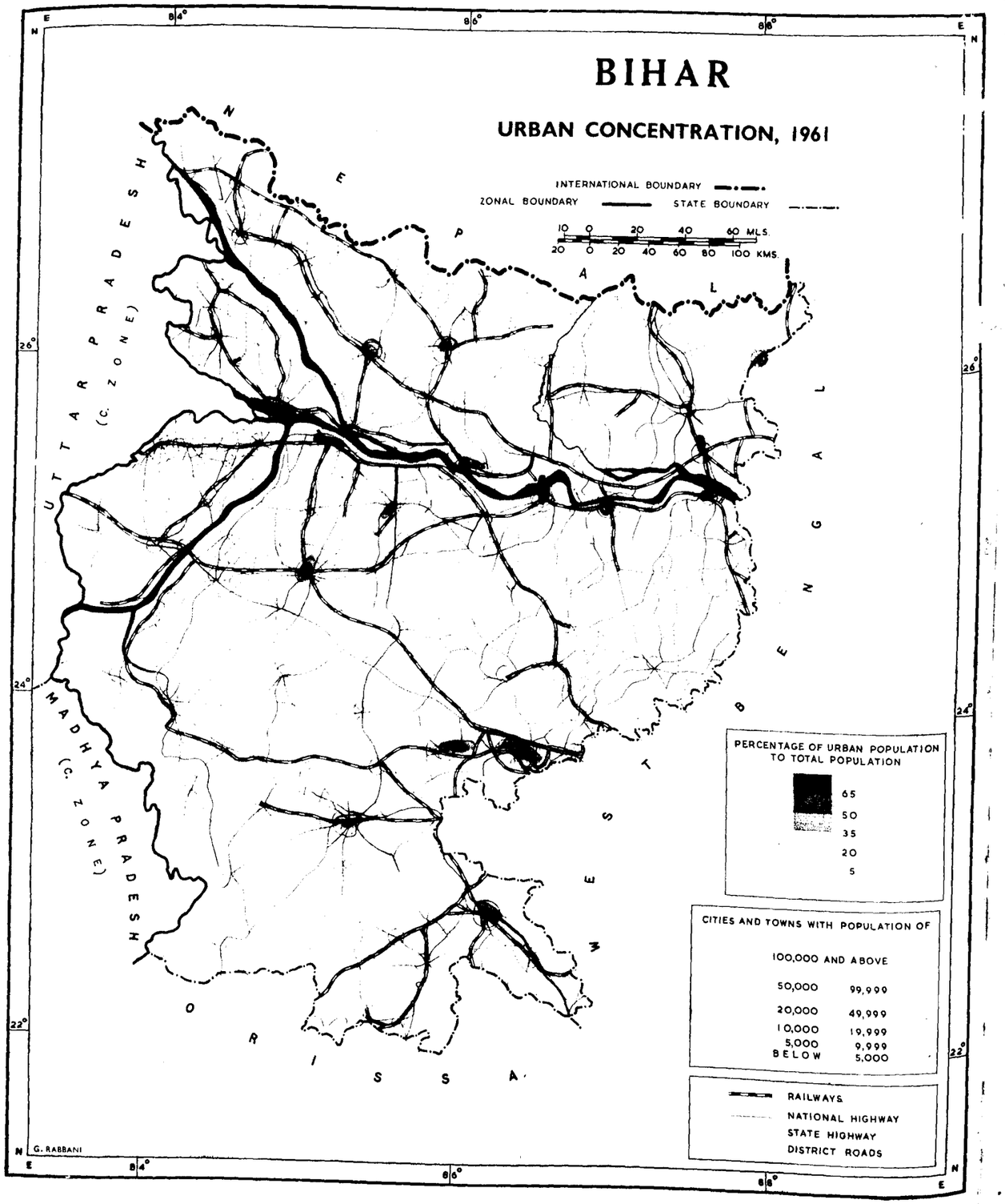
Salient Features

The largest city of Patna extends its influence to four towns, Dinapur Nizamat, Dinapur Cantonment, Khagaul and Fatwah. Its area of influence merges with that of Chapra in Saran district. Chapra, on the other hand merges with Arrah in Shahabad district.

Although there is no city in Dhanbad district, it presents an area of high urbanisation. 13 out of its 19 towns form a compact zone and 5 others constitute a separate zone.

The six cities other than Patna do not disclose any appreciable degree of urbanisation in areas contiguous to them except in regard to satellites such as Jugsalai (near Jamshedpur) and Doranda (near Ranchi) which are separate from the main cities only in a strictly technical sense.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-IV.



URBAN CONCENTRATION, 1961

Purpose

This map shows the concentration of urban population in different regions of the State.

Method

Percentages of urban population to the total population in each anchal containing towns were plotted in the State map. Isopleths were then drawn for 5, 20, 35, 50 and 65 per cent of the urban population. The intervening spaces between two isopleths have been shown in different colours ranging from light to deep, depending on the range. Railways and important roads have also been shown in the map. The rural areas have not been shaded.

Salient Features

The zones of urban concentration as depicted in the map, show that such zones exist along the river Ganges in the districts of Shahabad, Saran, Patna, Monghyr, Bhagalpur and the Santal Parganas.

There are several nuclei of urban concentration in the Chotanagpur Plateau. A highly concentrated zone of urban population is found in central Dhanbad extending westward to Hazaribagh. This zone covers the rich coal-mining areas. There are two distinct zones in Singhbhum. The one on the east is comprised of the mining towns of Ghatsila, Maubhandar and Jamshedpur. Kharsawan, Seraikela, Jhinkpani, Noamundi, Gua, Chakradharpur and Chaibasa form the other zone with relatively moderate concentration of urban population. The service town of Ranchi, now fast growing into an industrial city, is at the centre of another zone in Ranchi district. In the plains, there are several pockets of urban concentration but their extent is comparatively small.

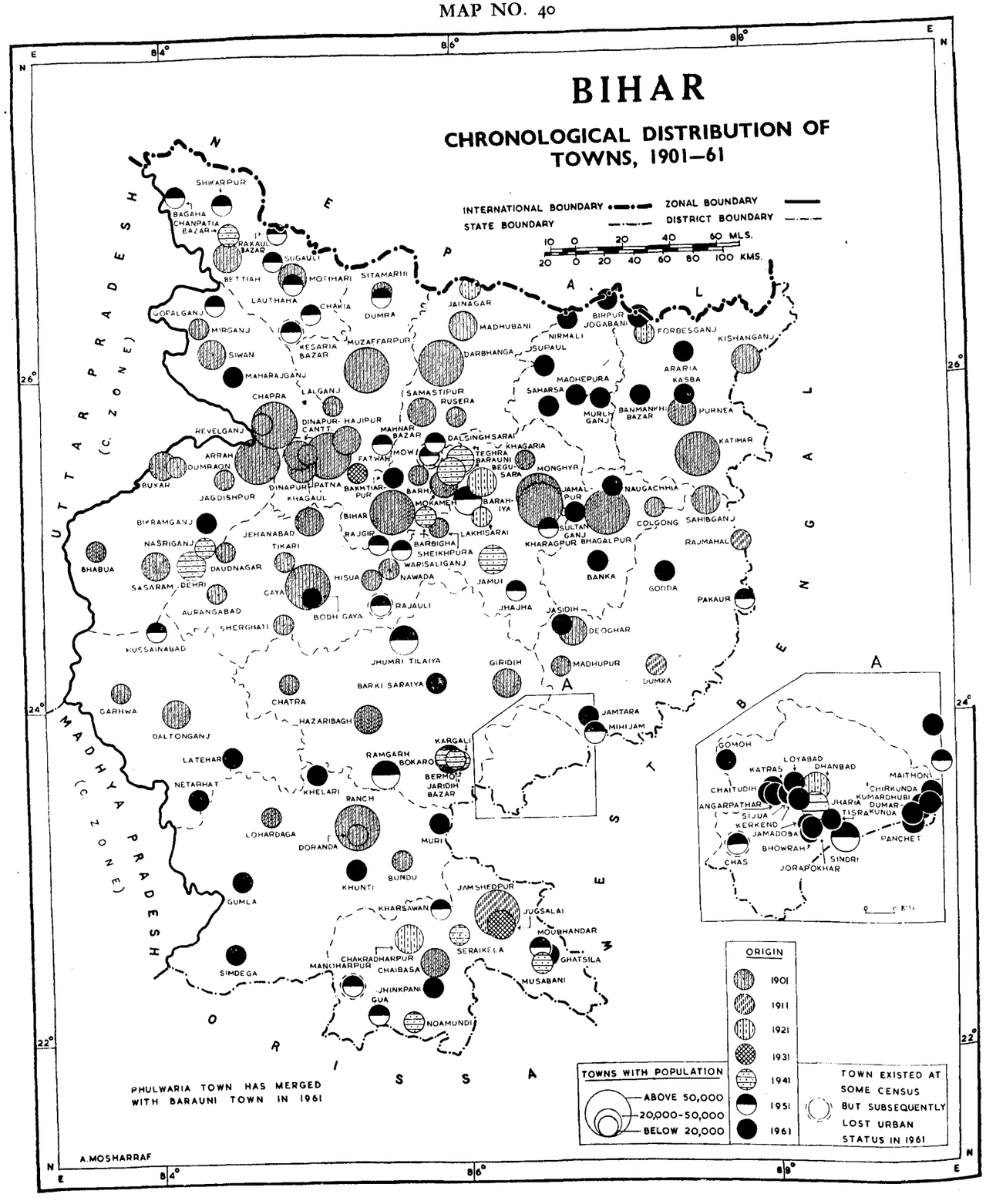
It is noteworthy that only 125 out of 575 anchals in the State have urban population which comprises nearly 30 per cent of their total population.

TABLE

URBAN CONCENTRATION, 1961

State/District	No. of anchals with towns	Urban population (in *mille*)	Percentage of urban population to total population of anchals containing towns
BIHAR ..	125	3,914	29.77
Patna ..	8	594	46.77
Gaya ..	10	265	28.11
Shahabad ..	9	232	23.43
Saran ..	6	150	31.42
Champaran ..	8	146	19.18
Muzaffarpur ..	5	189	29.35
Darbhanga ..	6	191	25.08
Monghyr ..	13	375	27.85
Bhagalpur ..	5	187	32.60
Saharsa ..	6	67	13.43
Purnea ..	7	186	24.22
Santal Parganas	8	143	20.07
Palamau ..	5	56	18.61
Hazaribagh ..	7	201	32.41
Ranchi ..	8	202	31.26
Dhanbad ..	5	290	37.46
Singhbhum ..	9	441	41.46

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



MAP NO. 40

CHRONOLOGICAL DISTRIBUTION OF TOWNS, 1901—61

Purpose

This map shows the chronological distribution of towns over a period of sixty years from 1901 to 1961.

Method

The towns have been classified into three groups according to their population as follows :

(*i*) Above 50,000,

(*ii*) 20,000—50,000, and

(*iii*) below 20,000.

Circles of three sizes have been drawn to represent towns in each of the above groups. The circles have been hatched in seven shades to indicate their origin in each of the census years from 1901 to 1961. Towns which lost their urban status in 1961 have been shown by broken rings around their circles.

Salient Features

The number of towns in the State rose from 57 in 1901 to 153 in 1961. Patna, Gaya and Shahabad were the most urbanised parts of the State in 1901, while Chotanagpur was predominantly rural. With the growth of mining establishments and industrial development in Singhbhum, Dhanbad, Hazaribagh and Ranchi, the Chotanagpur area has forged ahead in regard to urbanisation.

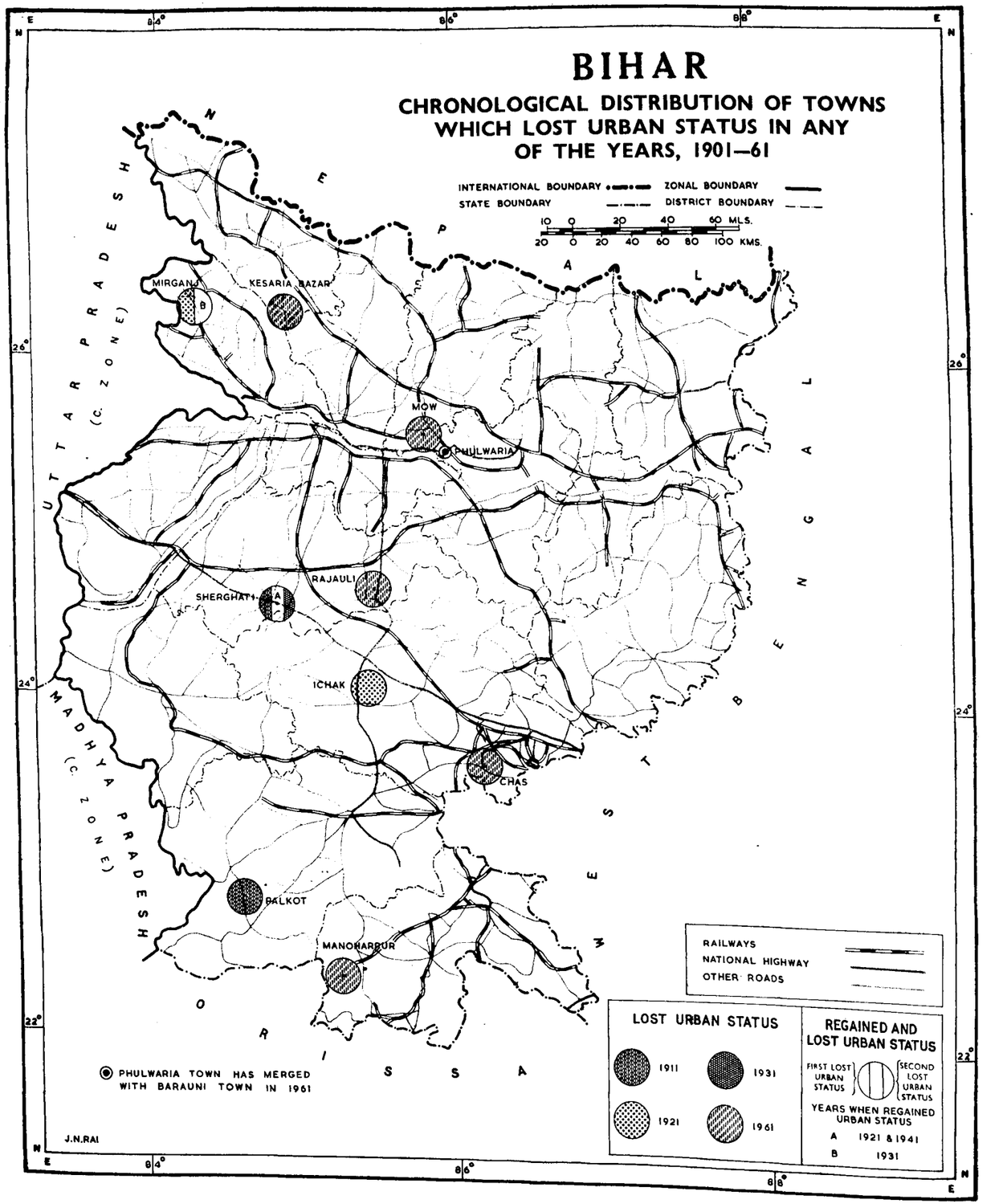
While only 5 towns of 1951 were delisted in 1961, as many as 48 places were treated as new towns. Dinapur Cantonment, Doranda and Jugsalai were treated as separate towns. Of the new towns, notified area committees had been constituted for 8 places and were proposed to be set up in 11 others. In addition, the population of 20 such places (mainly in Dhanbad district) were predominantly non-agricultural. 9 other places, including 3 subdivisional headquarters with pronounced urban characteristics or of tourist interest were also added in 1961.

TABLE

NUMBER OF TOWNS, 1901—61

State/District	1901	1911	1921	1931	1941	1951	1961
1	2	3	4	5	6	7	8
BIHAR ..	**57**	**59**	**63**	**66**	**84**	**108**	**153**
Patna ..	7	7	6	8	9	8	10
Gaya ..	8	7	8	7	8	10	10
Shahabad ..	6	6	6	6	8	8	9
Saran ..	4	4	3	3	3	5	6
Champaran	2	2	2	2	3	10	9
Muzaffarpur	4	4	4	5	5	6	6
Darbhanga	4	4	5	5	6	7	6
Monghyr	4	4	6	6	10	13	13
Bhagalpur	2	2	2	2	2	2	5
Saharsa ..	..	..	..	..	..	..	6
Purnea ..	3	3	4	4	4	4	8
Santal Parganas	3	5	5	5	5	7	10
Palamau ..	2	2	2	2	2	3	5
Hazaribagh	3	4	3	3	6	8	10
Ranchi ..	4	3	3	3	3	3	9
Dhanbad ..	..	..	1	1	2	4	19
Singhbhum	1	2	3	4	8	10	12

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-IV.



CHRONOLOGICAL DISTRIBUTION OF TOWNS WHICH LOST URBAN STATUS IN ANY OF THE YEARS, 1901—61

Purpose

This map shows the chronological distribution of towns which lost urban status in any of the years 1901—61.

Method

Towns which lost urban status in any of the censuses between 1901 and 1961 have been depicted by circles of uniform size, each of them representing population below 20,000. Phulwaria town, which was merged with Barauni in 1961, has also been shown.

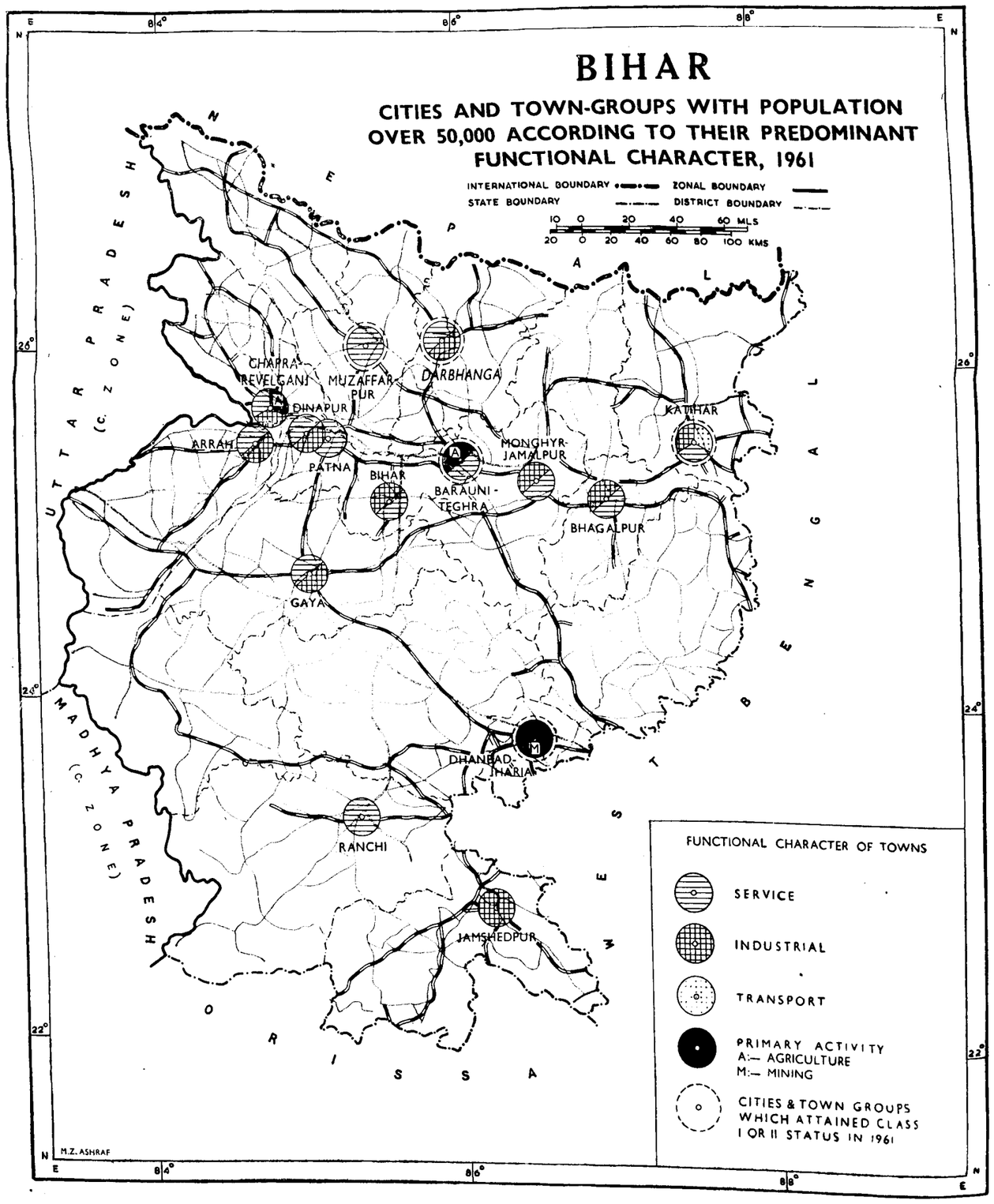
Salient Features

Of the towns existing in 1901 or constituted later, Palkot in Ranchi district lost its urban status in 1911. Ichak in Hazaribagh district did likewise in 1921. These two towns did not regain their urban status at any time later. Sherghati in Gaya district lost its urban status in 1911 but was classified as town in 1921 only to be declassified again in 1931. Mirganj in Saran district was declassified in 1921 but regained its urban status in 1931 and has continued as such ever since.

5 towns of 1951 were declassified in 1961. These were Rajauli in Gaya district, Kesaria Bazar in Champaran district, Mow in Darbhanga district, Chas in Dhanbad district and Manoharpur in Singhbhum district. The livelihood pattern in these towns in 1951 showed predominant proportions of males in agricultural livelihood which justified their declassification in 1961.

SOURCE : Census of India, (1) 1901, Vol. VI-B, (2) 1911, Vol. V, (3) 1921, Vol. VII, (4) 1961, Vol. IV.

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CITIES AND TOWN-GROUPS WITH POPULATION OVER 50,000 ACCORDING TO THEIR PREDOMINANT FUNCTIONAL CHARACTER, 1961

Purpose

This map shows the cities and town-groups with population over 50,000 classified according to their predominant functional character on the basis of industrial classification of their working population in 1961.

Method

There are 15 cities and town-groups in Bihar having population over 50,000 (i.e., towns of classes I and II). These have been shown by circles with uniform radius. The circles have been shaded by different kinds of hatches according to their predominant functional character, which was determined in the manner indicated below.

The nine industrial categories of workers adopted in the Census of 1961 were grouped into the following five sectors :

Sector	*Industrial categories*
(1) Agriculture and allied activities	I, II and III
(2) Industries including construction	IV, V and VI
(3) Trade and commerce	VII
(4) Transport, storage and communications	VIII
(5) Other services ..	IX

On the basis of the percentage of workers under each of the above groups to total working population, the towns were classified into (1) primary activity towns, (2) industrial towns, (3) commercial towns, (4) transport towns, and (5) service towns, on the following principles :

(*i*) If any one sector of the economy absorbed more than 40 per cent of the total working population of the town, then the town was designated by that category which was predominant.

(*ii*) If the percentage was less than 40, then the next predominant industrial category was taken into account, so that their total reached 60 per cent of the working population. Such a town was designated as industrial-*cum*-service town or commercial-*cum*-transport town, as warranted by the figures.

(*iii*) If the total of two categories did not come up to 60 per cent, then the third predominant industrial category was taken into account and such town was designated as industrial-*cum*-service-*cum*-transport town and so on.

Primary activity towns were further distinguished according as they were mainly agricultural or mining towns.

The railways and principal roadways are also shown in the map.

Salient Features

It may be noted at the outset that the functional character has been shown in this map on the basis of 1961 Census statistics. Many urban areas are prone to rapid changes in their functional character. Thus, the picture emerging out of this map may, in some cases, have undergone significant changes within the last 5 or 6 years.

Of the fifteen cities and town-groups with population over 50,000, only 5 have one single predominant function. Patna, Ranchi and Muzaffarpur are service towns while Jamshedpur-*cum*-Jugsalai is an

industrial town and Dhanbad-Jharia-Sindri town-group is a mining town.

Seven other cities and town-groups have significant proportions of workers in 'other services', but below 40 per cent in each so that they have been designated with two functions. Gaya, Darbhanga, Arrah and Dinapur town-group belong to the category of service-*cum*-industrial towns, while Monghyr-Jamalpur town-group, Bhagalpur and Bihar are industrial-*cum*-service towns. Barauni-Teghra town-group belongs to the category of agro-*cum*-service towns. The agricultural bias of Barauni-Teghra town-group in 1961 was largely contributed by Teghra town. Barauni had not developed fully till then. The position has changed considerably since then. Now it has one of the largest railway marshalling yards in the country. With the establishment of the Oil Refinery and a big Thermal Power Station there, Barauni is now well on way to becoming one of the most important industrial centres in the country.

Katihar is an industrial-*cum*-transport-*cum*-service town, while Chapra-Revelganj town-group is a service-*cum*-agriculture-*cum*-industrial town.

TABLE

PREDOMINANT FUNCTIONAL CHARACTER OF CITIES/TOWN-GROUPS

Predominant functional character	No. of cities/towns	Name of cities/towns/town-groups
I. ONE CHARACTERISTIC—		
1. Industrial ..	1	Jamshedpur-Jugsalai town-group.
2. Service	3	Patna, Ranchi and Muzaffarpur.
3. Primary activity (Mining).	1	Dhanbad-Jharia-Sindri town-group.
II. TWO CHARACTERISTICS—		
1. Service-*cum*-Industrial	4	Gaya, Darbhanga, Arrah and Dinapur town-group.
2. Industrial-*cum*-Service	3	Monghyr-Jamalpur town-group, Bhagalpur and Bihar.
3. Agro-*cum*-Service ..	1	Barauni-Teghra town-group.
III. THREE CHARACTERISTICS—		
1. Service-*cum*-Agriculture-*cum*-Industrial.	1	Chapra-Revelganj town-group.
2. Industrial-*cum*-Transport-*cum*-Service.	1	Katihar.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.

MAP NO. 43

TOWNS WITH POPULATION 20,000—50,000 ACCORDING TO THEIR PREDOMINANT FUNCTIONAL CHARACTER, 1961

Purpose

The map on the following page shows the towns with population between 20,000 and 50,000 classified according to their predominant functional character on the basis of industrial classification of the working population.

Method

There are 33 towns in Bihar having population between 20,000 and 50,000 (i.e., towns of class III). These have been shown by circles with uniform radius. The circles have been shaded by different kinds of hatches according to their predominant functional character, which was determined in the manner indicated below.

The nine industrial categories of workers adopted in the Census of 1961 were grouped into the following five sectors :

Sector	*Industrial categories*
(1) Agriculture and allied activities	I, II and III
(2) Industries including construction	IV, V and VI
(3) Trade and commerce	VII
(4) Transport, storage and communications	VIII
(5) Other services ..	IX

On the basis of the percentage of workers under each of the above groups to total working population, the towns were classified into (1) primary activity towns, (2) industrial towns, (3) commercial towns, (4) transport towns, and (5) service towns, on the following principles :

(*i*) If any one sector of the economy absorbed more than 40 per cent of the total working population of the town, then the town was designated by that category which was predominant.

(*ii*) If the percentage was less than 40, then the next predominant industrial category was taken into account, so that their total reached 60 per cent of the working population. Such a town was designated as industrial-*cum*-service town or commercial-*cum*-transport town, as warranted by the figures.

(*iii*) If the total of two categories did not come up to 60 per cent, then the third predominant industrial category was taken into account and such town was designated as industrial-*cum*-service-*cum*-transport town and so on.

Primary activity towns were further distinguished according as they were mainly agricultural or mining towns.

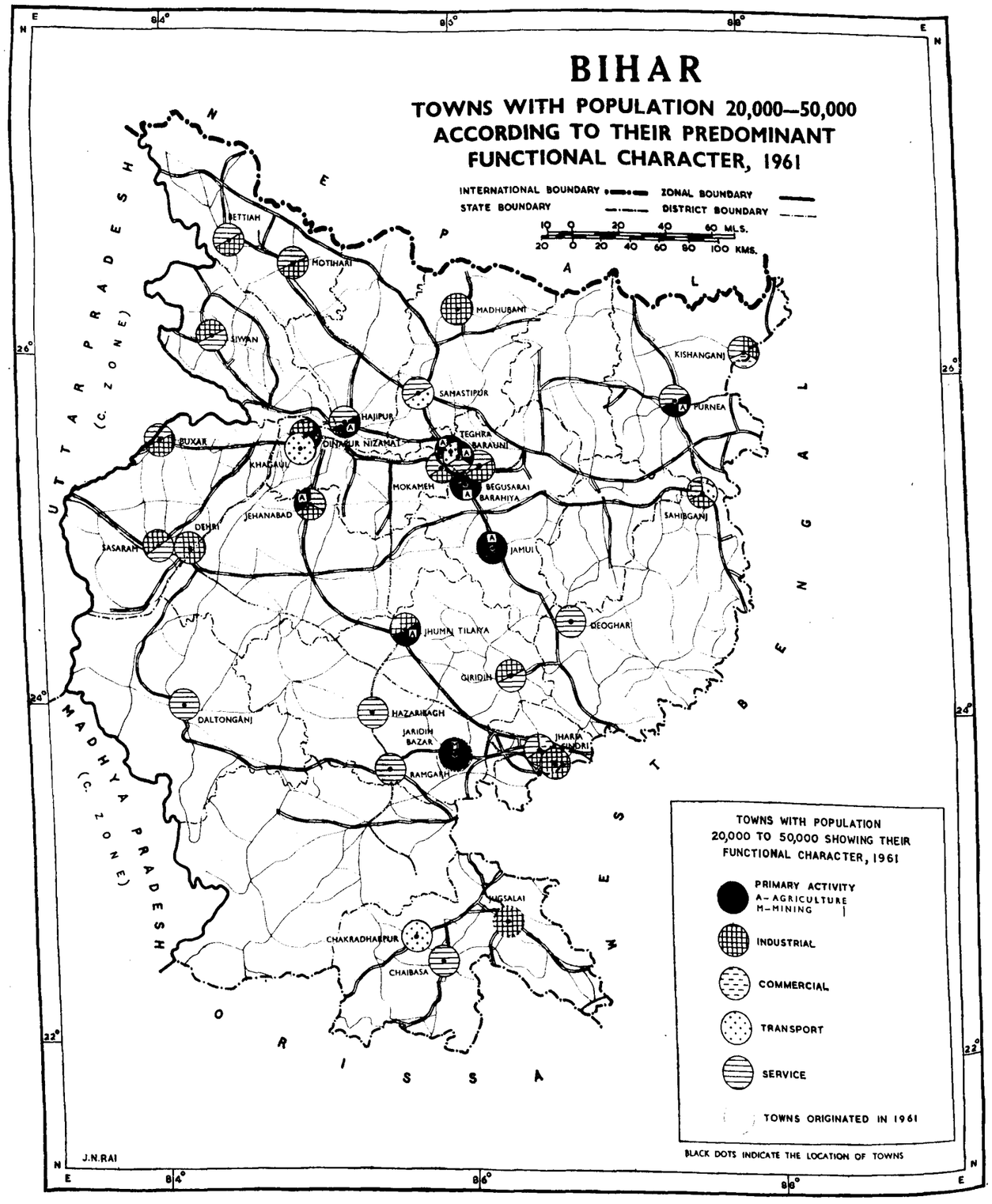
The railways and principal roadways are also shown in the map.

Salient Features

Of the 33 class III towns only 15 have a single predominant function. Daltonganj, Hazaribagh, Deoghar, Ramgarh and Chaibasa are service towns. Khagaul and Chakradharpur are transport towns, and Madhubani, Sindri, Jugsalai and Dehri are industrial towns. Four towns, viz., Jamui, Jaridih Bazar, Teghra and Barahiya are primary activity towns of which only Jaridih Bazar is mining while the rest are agricultural towns.

There are 12 towns with two significant characters of which Dinapur Nizamat and Jhumri-Tilaiya are industrial-*cum*-primary activity towns. Siwan, Sasaram and Giridih are industrial-*cum*-service towns. Bettiah, Motihari, Buxar and Begusarai are service-

MAP NO. 43



cum-industrial towns while Hajipur and Purnea are service-*cum*-primary activity towns. Samastipur is the only service-*cum*-transport town.

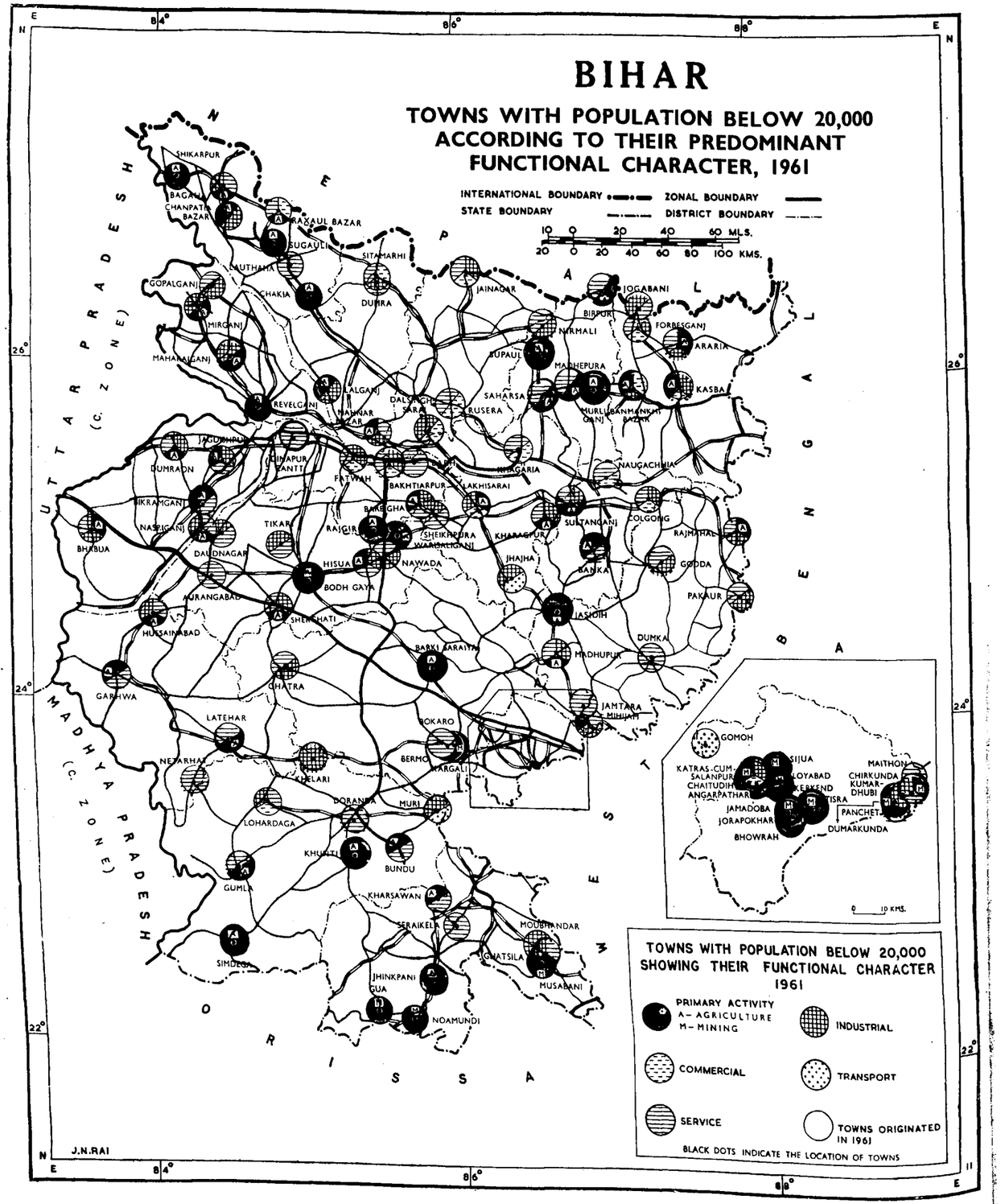
Towns with three characters are the least in number. There are six such towns, each with a different multiple character.

TABLE

PREDOMINANT FUNCTIONAL CHARACTER OF TOWNS WITH POPULATION 20,000—50,000

Predominant functional character	No. of towns	Name of towns
I. One Characteristic—		
1. Primary activity ..	4	Jamui, Jaridih Bazar, Teghra and Barahiya.
2. Industrial ..	4	Madhubani, Sindri, Jugsalai and Dehri.
3. Transport ..	2	Khagaul and Chakradharpur.
4. Service	5	Daltonganj, Hazaribagh, Deoghar, Ramgarh and Chaibasa.
II. Two Characteristics—		
1. Industrial-*cum*-Primary activity	2	Dinapur Nizamat and Jhumri-Tilaiya.
2. Industrial-*cum*-Service	3	Siwan, Sasaram and Giridih.
3. Service-*cum*-Industrial	4	Bettiah, Motihari, Buxar and Begusarai.
4. Service-*cum*-Primary activity	2	Hajipur and Purnea.
5. Service-*cum*-Transport	1	Samastipur.
III. Three Characteristics—		
1. Service-*cum*-Primary activity-*cum*-Industrial	1	Mokameh.
2. Primary activity-*cum*-Service-*cum*-Industrial	1	Jehanabad.
3. Transport-*cum*-Primary activity-*cum*-Service	1	Barauni.
4. Service-*cum*-Industrial-*cum*-Commercial	1	Kishanganj
5. Service-*cum*-Transport *cum*-Industrial	1	Sahibganj.
6. Service-*cum*-Commercial-*cum*-Industrial	1	Jharia.

Source : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



TOWNS WITH POPULATION BELOW 20,000 ACCORDING TO THEIR PREDOMINANT FUNCTIONAL CHARACTER, 1961

Purpose

This map shows the towns with population below 20,000 classified according to their predominant functional character on the basis of the industrial classification of the working population.

Method

There are 106 towns in Bihar having population below 20,000 (i.e., towns of classes IV to VI). These have been shown by circles with a uniform radius. The circles have been shaded by different kinds of hatches according to their predominant functional character, which was determined in the manner indicated below.

The nine industrial categories of workers adopted in the Census of 1961 were grouped into the following five sectors :

Sector	*Industrial categories*
(1) Agriculture and allied activities	I, II and III
(2) Industries including construction	IV, V and VI
(3) Trade and commerce	VII
(4) Transport, storage and communications	VIII
(5) Other services	IX

On the basis of the percentage of workers under each of the above groups to total working population, the towns were classified into (1) primary activity towns, (2) industrial towns, (3) commercial towns, (4) transport towns, and (5) service towns, on the following principles :

(*i*) If any one sector of the economy absorbed more than 40 per cent of the total working population of the town, then the town was designated by that category which was predominant.

(*ii*) If the percentage was less than 40, then the next predominant industrial category was taken into account, so that their total reached 60 per cent of the working population. Such a town was designated as industrial-*cum*-service town or commercial-*cum*-transport town, as warranted by the figures.

(*iii*) If the total of two categories did not come up to 60 per cent then the third predominant industrial category was taken into account and such town was designated as industrial-*cum*-service-*cum*-transport town and so on.

Primary activity towns were further distinguished according as they were mainly agricultural or mining towns.

The railways and principal roadways are also shown in the map.

Salient Features

Of the 106 towns with population below 20,000, 46 have a single predominant functional character. Of them, 13 are service towns, 1 transport town, 3 industrial towns, and 29 primary activity towns. Out of 29 primary activity towns, 15 are mining towns lying in the districts of Dhanbad, Singhbhum and Hazaribagh.

There are 30 towns with two significant functional characters. They are divided into 8 groups, of which 6 towns are service-*cum*-industrial, 4 service-*cum*-commercial,

5 service-*cum*-primary activity, 2 primary activity-*cum*-industrial, 5 primary activity-*cum*-service, 2 industrial-*cum*-transport, 2 industrial-*cum*-primary activity and 4 industrial-*cum*-service.

There are 30 towns which have three characters. These are divided into 13 groups of multiple characters. Out of 30, 8 are in the Chotanagpur Plateau while the rest are in the Plains.

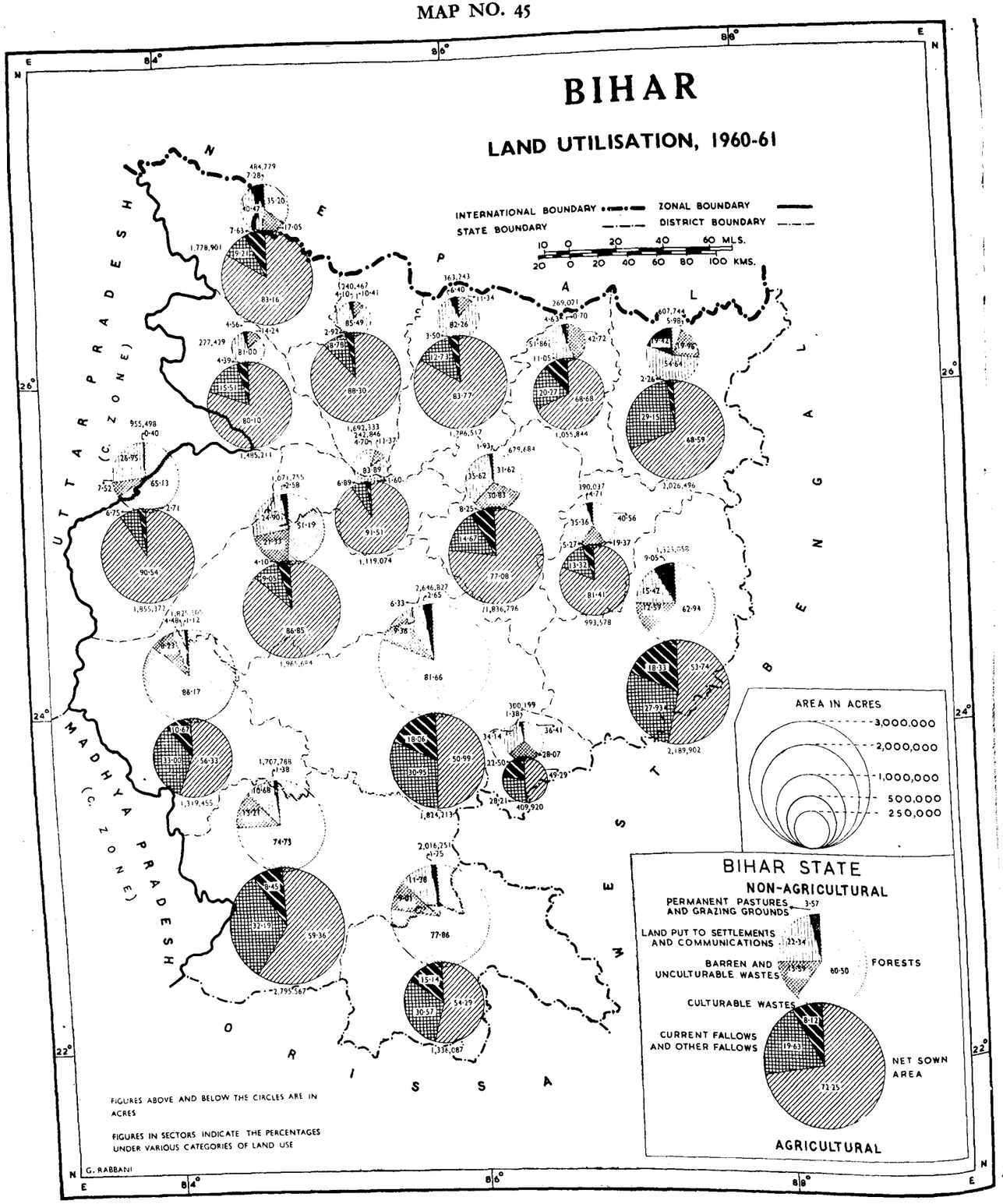
TABLE

PREDOMINANT FUNCTIONAL CHARACTER OF TOWNS WITH POPULATION BELOW 20,000

Predominant functional character	No. of towns	Name of towns
I. ONE CHARACTERISTIC—		
1. Primary activity	29	Bagaha, Supaul, Jorapokhar, Bermo, Noamundi, Warisaliganj, Revelganj, Loyabad, Bhowrah, Sugauli Bazar, Simdega, Sijua, Murliganj, Kargali, Rajgir, Barki Saraiya, Dumarkunda, Gua, Khunti, Musabani, Tisra, Jamadoba, Chaitudih, Kerkend, Jhinkpani, Bodh Gaya, Angar Pathar, Chakia Bazar and Jasidih.
2. Industrial	3	Maubhandar, Khelari and Kumardhubi.
3. Commercial	Nil	
4. Transport	1	Gomoh.
5. Service	13	Barh, Dumka Doranda, Dinapur Cantonment, Aurangabad, Maithon, Jamtara, Seraikela, Bokaro, Panchet, Dumra, Netarhat and Lauthaha.
II. TWO CHARACTERISTICS—		
1. Service-*cum*-Industrial	6	Nawada, Gopalganj, Chatra, Pakaur, Godda and Nirmali.
2. Service-*cum*-Commercial	4	Khagaria, Dalsinghsarai, Naugachhia and Rosera.
3. Service-*cum*-Primary activity	5	Saharsa, Gumla, Madhepura, Birpur and Latehar.
4. Primary activity-*cum*-Industrial	2	Chanpatia Bazar and Lalganj.
5. Primary activity-*cum*-Service	5	Banka, Garhwa, Bundu, Bikramganj and Kharsawan.
6. Industrial-*cum*-Transport	2	Jhajha and Muri.
7. Industrial-*cum*-Primary activity	2	Maharajganj and Mirganj.
8. Industrial-*cum*-Service	4	Jogabani, Tikari, Sheikhpura and Daudnagar.
III. THREE CHARACTERISTICS—		
1. Service-*cum*-Industrial-*cum*-Primary activity ..	5	Dumraon, Madhupur, Sultanganj, Kharagpur and Sherghati.
2. Service-*cum*-Commercial-*cum*-Industrial ..	1	Sitamarhi.
3. Service-*cum*-Primary activity-*cum*-Industrial ..	3	Araria, Bhabua and Rajmahal.
4. Service-*cum*-Industrial-*cum*-Commercial ..	5	Forbesganj, Fatwah, Colgong, Jainagar and Bakhtiarpur.
5. Service-*cum*-Commercial-*cum*-Primary activity ..	1	Raxaul Bazar.
6. Industrial-*cum*-Primary activity-*cum*-Commercial	1	Lakhisarai.
7. Industrial-*cum*-Service-*cum*-Commercial ..	1	Lohardaga.
8. Industrial-*cum*-Service-*cum*-Primary activity ..	4	Shikarpur Bazar, Hussainabad, Nasriganj and Ghatsila.
9. Industrial-*cum*-Primary activity-*cum*-Service ..	1	Chirkunda.
10. Primary activity-*cum*-Commercial-*cum*-Industrial	1	Banmankhi Bazar.
11. Primary activity-*cum*-Service-*cum*-Industrial ..	2	Mahnar Bazar and Mihijam.
12. Primary activity-*cum*-Industrial-*cum*-Service ..	3	Barbigha, Jagdishpur and Hisua.
13. Primary activity-*cum*-Industrial-*cum*-Commercial	2	Katras-*cum*-Salanpur and Kasba.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.

4. ECONOMIC ASPECTS



LAND UTILISATION, 1960-61

Purpose

This map shows for each district the various uses, to which land is put, in two broad categories, viz., agricultural and non-agricultural.

Method

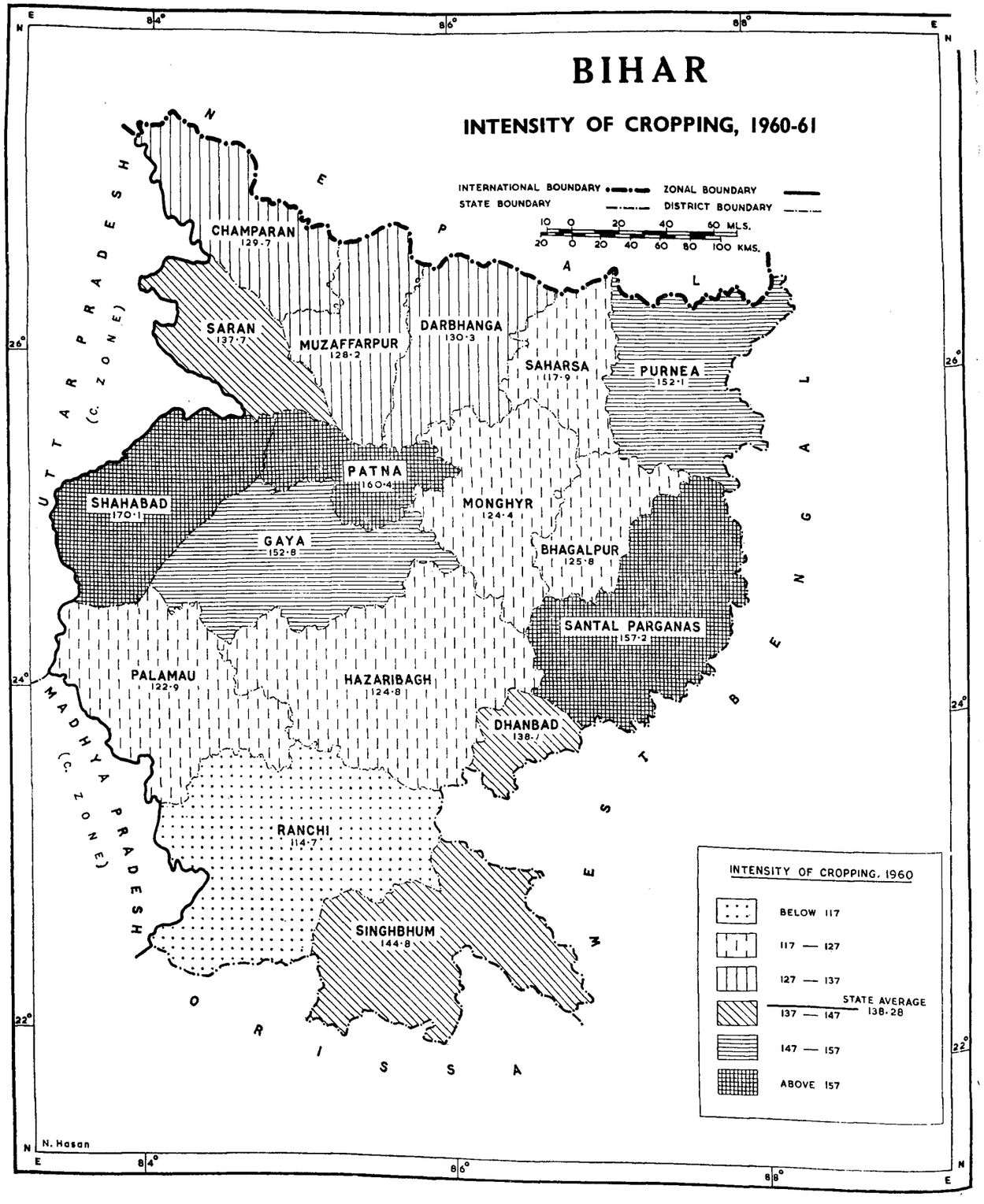
Two circles have been drawn for each district proportionate to the acreage of land under agricultural use and non-agricultural use. The black circles represent land put to agricultural use. They are divided into sectors showing the percentage shares of the following categories of land area : *(i)* net area sown, *(ii)* current fallows and other fallows, and *(iii)* culturable wastes. The red circles, representing land put to non-agricultural uses, have similarly been divided into sectors showing percentage shares of *(i)* forests, *(ii)* barren and unculturable wastes, *(iii)* land put to settlements and communications, and *(iv)* permanent pastures and grazing grounds. Each sub-category has been suitably hatched. For facility of reference, the total acreages of land put to agricultural and non-agricultural uses have been given for each district, as also the percentage of each category in the circles.

Salient Features

Agricultural land covers the largest areas in the bigger districts of Ranchi, Santal Parganas and Purnea, and smallest areas in Bhagalpur and Dhanbad. However, the percentage of net area sown is higher than the State average in 9 out of 17 districts. All the six districts of Chotanagpur Plateau along with Saharsa and Purnea in the North Bihar Plain have lower percentages. Patna (91.51 per cent), Shahabad (90.54 per cent) and Muzaffarpur (88.30 per cent) have the highest proportions of net area sown to the total agricultural area. The proportion is the least (49.29 per cent) in Dhanbad.

The extent of land area put to non-agricultural uses is highest in Hazaribagh, Singhbhum, Palamau, Ranchi and Santal Parganas districts, all in the Chotanagpur Plateau. This is evidently due to large areas being under forest in these districts. Over two-thirds of the non-agricultural land in these districts are comprised of forests. Permanent pastures and grazing grounds comprise 19.42 per cent of non-agricultural land in Purnea district as against the State average of 3.57 per cent. In the districts having high densities of population, namely, Patna, Saran, Muzaffarpur and Darbhanga, over four-fifths of non-agricultural land are used for settlements and communications.

The statistics on which this map has been prepared are given in Appendix II at the end of the volume.



MAP NO. 46

INTENSITY OF CROPPING, 1960-61

Purpose

This map depicts the intensity of cropping in the districts of Bihar in 1960-61.

Method

An idea of the intensity of cropping in any area can be derived from the ratio of gross area sown to net area sown. Thus, the intensity index is determined by working out the ratio, $\frac{\text{gross area sown} \times 100}{\text{net area sown}}$, for each district. The indices thus obtained have been grouped into six categories, viz., below 117, 117—127, 127—137, 137—147, 147—157, and above 157. The districts coming under different categories have then been hatched in suitable shades from high to low.

The intensity indices have been indicated for each district on the map itself.

Salient Features

For the State as a whole, the intensity index is 138.3. This implies that 38.3 per cent of the net area sown in Bihar is added to the total cropped area on account of double or multiple cropping. In six districts, the proportions are higher still. Shahabad, Patna and Gaya are at the top, which is obvious because of the better soil conditions and widespread irrigation facilities provided by the Son Canal System, a network of tube-wells and other irrigation projects. That Santal Parganas and Singhbhum also have higher indices than the State average may be something of a revelation. It is significant that all the districts in North Bihar except Purnea have lower indices than the State average. The same is true of Chotanagpur, except Singhbhum. Ranchi has the lowest index (114.7).

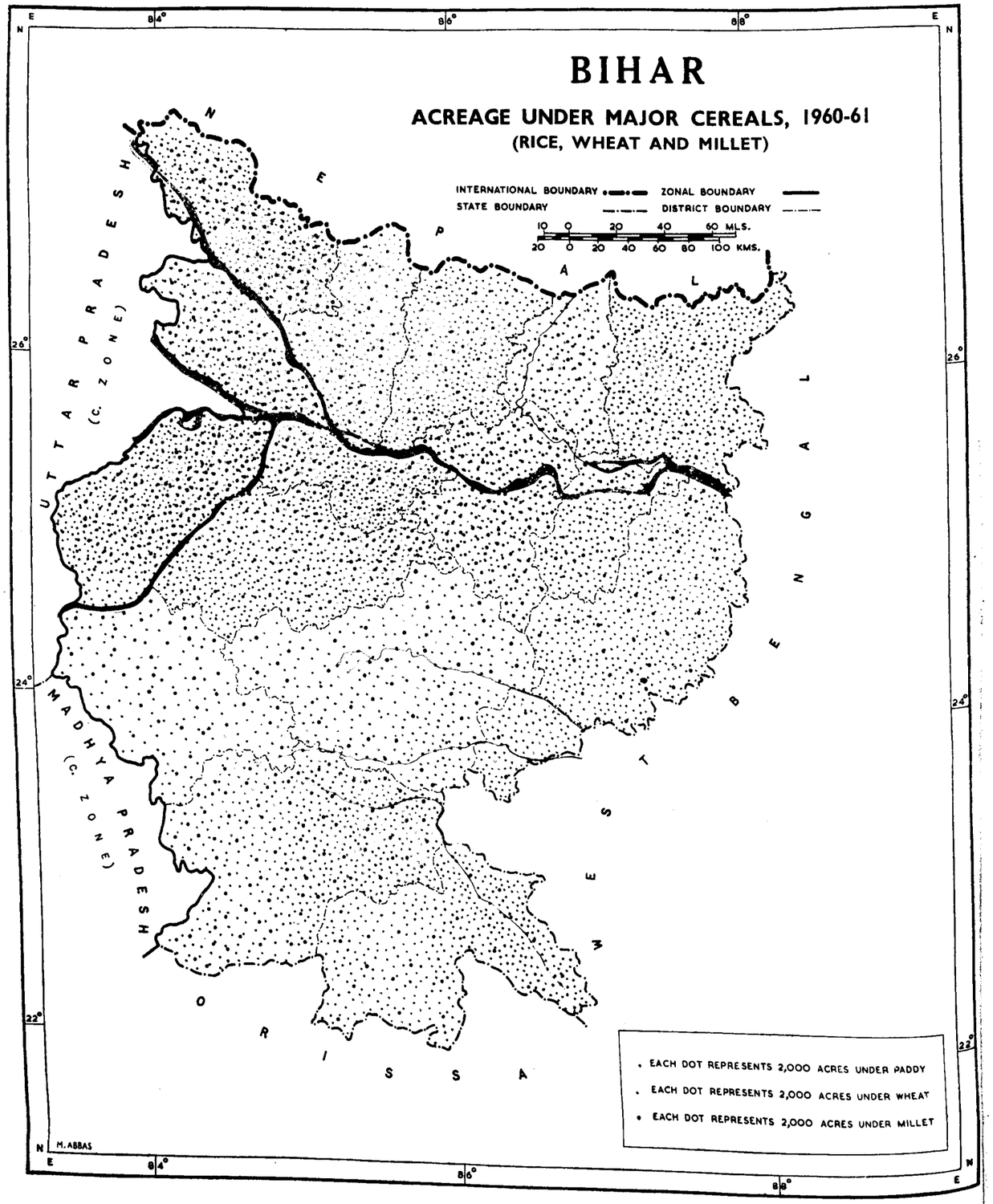
The map brings out distinct regional patterns by intensity indices. The five districts of Palamau, Hazaribagh, Monghyr, Bhagalpur and Saharsa form one compact block of very low indices (117—127). They are followed by another block of three districts of low indices (127—137), viz., Champaran, Muzaffarpur and Darbhanga. The intermediate group (137—147) consisting of Saran, Dhanbad and Singhbhum is rather scattered. So is the next higher group (147—157) which includes only Purnea and Gaya. In the highest group (above 157), Shahabad and Patna constitute a block but the district of Santal Parganas falls apart from it.

TABLE

INTENSITY OF CROPPING, 1960-61

Rank	State/District	Net area sown (1,000 acres)	Gross area sown (1,000 acres)	Intensity index
1	2	3	4	5
1	Shahabad ..	1,680	2,857	170.1
2	Patna ..	1,024	1,643	160.4
3	Santal Parganas ..	1,177	1,850	157.2
4	Gaya ..	1,707	2,609	152.8
5	Purnea ..	1,390	2,114	152.1
6	Singhbhum ..	725	1,050	144.8
	BIHAR	**19,848**	**27,447**	**138.3**
7	Dhanbad ..	202	279	138.1
8	Saran ..	1,190	1,639	137.7
9	Darbhanga ..	1,497	1,950	130.3
10	Champaran ..	1,479	1,918	129.7
11	Muzaffarpur ..	1,494	1,915	128.2
12	Bhagalpur ..	809	1,018	125.8
13	Hazaribagh ..	930	1,161	124.8
14	Monghyr ..	1,416	1,761	124.4
15	Palamau ..	743	913	122.9
16	Saharsa ..	725	855	117.9
17	Ranchi ..	1,660	1,904	114.7

SOURCE : Director of Statistics, Bihar.



ACREAGE UNDER MAJOR CEREALS, 1960-61 (RICE, WHEAT AND MILLET)

Purpose

This map shows districtwise the acreages under the major cereals in Bihar, namely, rice, wheat and millet.

Method

Dots in three different colours, each representing 2,000 acres of sown area, have been given in each district to represent the acreage under each type of crop.

Salient Features

Winter rice is by far the chief crop of the State. The acreage under it, 12.9 million acres, is more than five times the combined acreage under wheat and millet. Among the districts, Gaya, Shahabad, Santal Parganas, Ranchi and Purnea have the largest acreages under rice. Palamau and Dhanbad, on the other hand, have the lowest acreages.

Wheat is grown in only 1.6 million acres in the State. The sown area is above one lakh acres in Patna, Gaya, Shahabad, Saran, Champaran, Muzaffarpur and Monghyr districts. The acreage under wheat is highest in Shahabad (3.26 lakh acres), obviously due to facility of assured irrigation.

The acreage under millet is 8.65 lakh acres in the State. It is above a lakh acres only in Ranchi, Champaran and Monghyr districts.

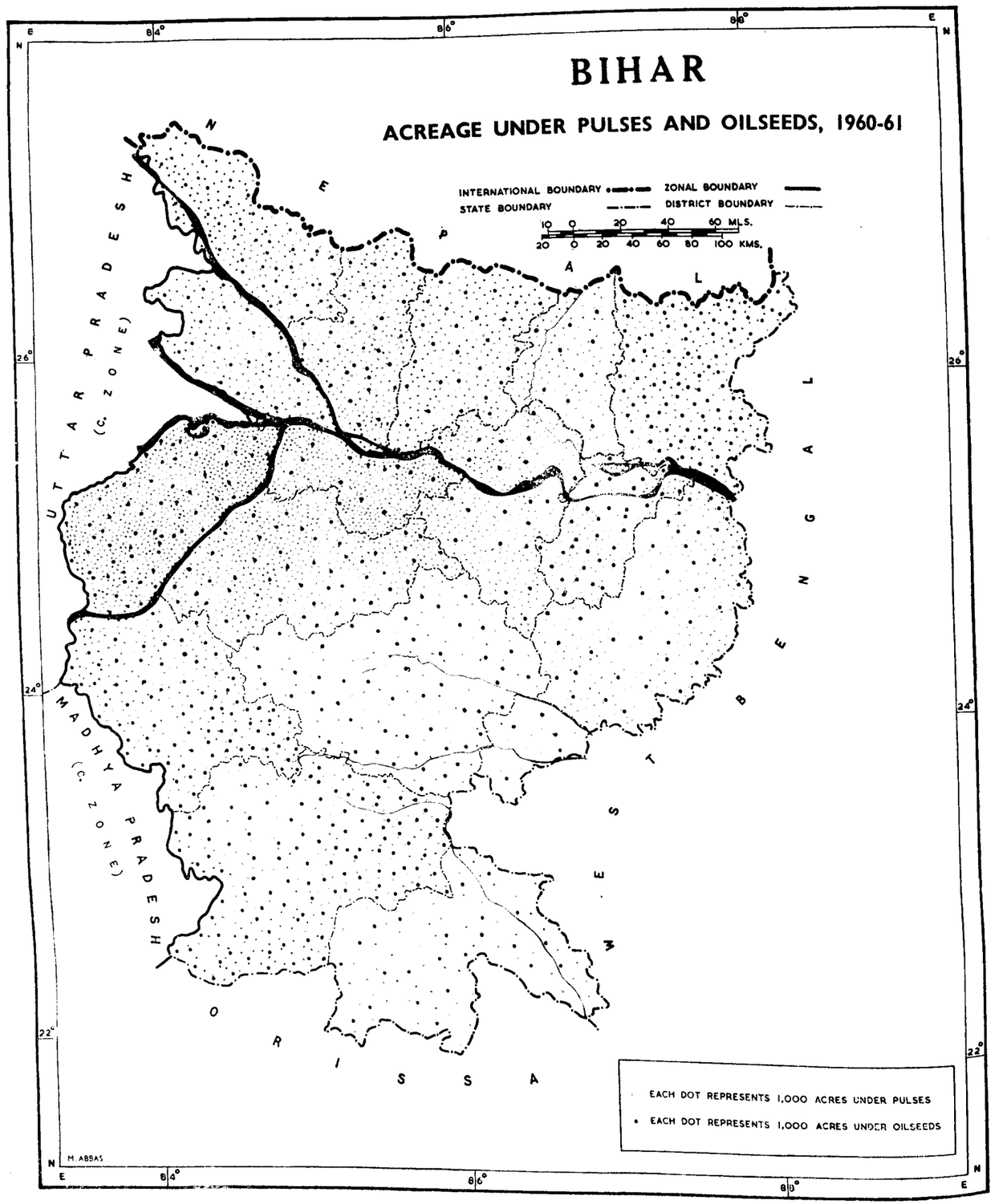
TABLE

ACREAGE UNDER MAJOR CEREALS, 1960-61
(IN 2,000 ACRES)

State/District	Rice	Wheat	Millet
BIHAR	**6,474**	**805**	**433**
Patna ..	325	54	8
Gaya ..	600	122	2
Shahabad ..	595	163	18
Saran ..	251	95	27
Champaran ..	486	59	55
Muzaffarpur ..	382	52	7
Darbhanga ..	495	47	5
Monghyr ..	260	100	54
Bhagalpur ..	197	25	7
Saharsa ..	139	21	18
Purnea ..	549	38	7
Santal Parganas ..	582	6	33
Palamau ..	134	13	42
Hazaribagh ..	349	6	40
Ranchi ..	578	2	86
Dhanbad ...	115	..	3
Singhbhum ..	436	2	21

SOURCE : Director of Statistics, Bihar ; Annual Season and Crop Report, 1960-61.

MAP NO. 48



MAP NO. 48

ACREAGE UNDER PULSES AND OILSEEDS, 1960-61

Purpose

This map shows districtwise the acreages under the major pulses and oilseeds.

Method

Dots in two different colours, each representing 1,000 acres of sown area, have been used to show the acreages under pulses and oilseeds in each district.

Salient Features

The total acreage under pulses in the State is 57.6 lakh acres. It exceeds 10 lakh acres in only one district, Shahabad. Gaya (8.97 lakh acres), Patna (6.56 lakh acres) and Monghyr (5.04 lakh acres) also have large areas under pulses. Pulses are not grown appreciably in Hazaribagh, Singhbhum and Dhanbad districts, the last two having less than one lakh acres under pulses.

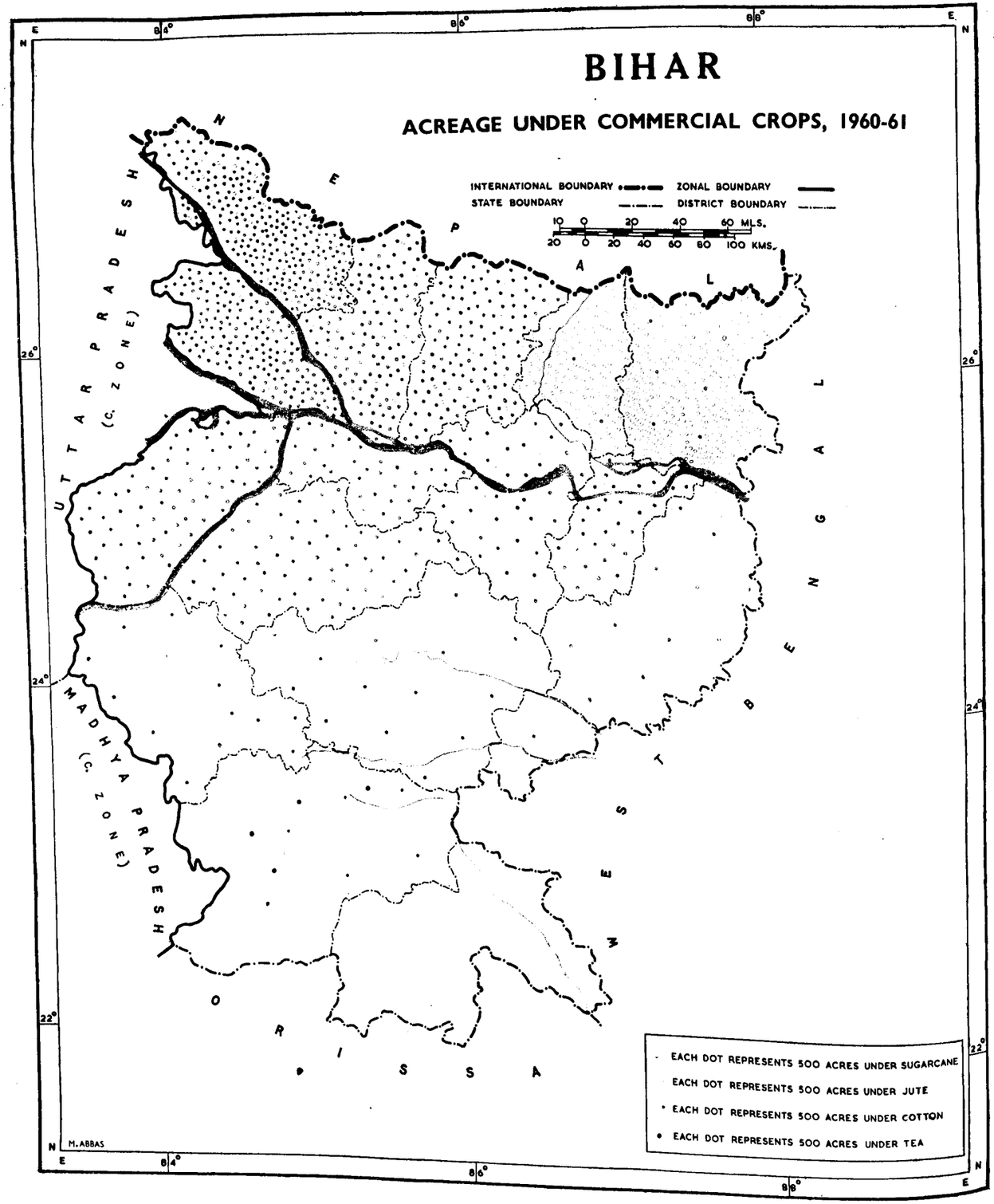
Oilseeds excluding castor cover 7.35 lakh acres in the State, the largest acreage being in Ranchi district (1.17 lakh acres). The production of oilseeds is negligible in Dhanbad district.

TABLE

ACREAGE UNDER PULSES AND OILSEEDS, 1960-61
(IN 1,000 ACRES)

State/District	Pulses	Oilseeds
BIHAR	**5,762**	735
Patna	656	14
Gaya	897	51
Shahabad	1,022	66
Saran	206	24
Champaran	243	47
Muzaffarpur	332	33
Darbhanga	238	28
Monghyr	504	21
Bhagalpur	262	32
Saharsa	120	9
Purnea	218	87
Santal Parganas ..	355	39
Palamau	273	89
Hazaribagh	110	52
Ranchi	245	117
Dhanbad	12	4
Singhbhum	69	42

SOURCE : Director of Statistics, Bihar ; Annual Season and Crop Report, 1960-61.



ACREAGE UNDER COMMERCIAL CROPS, 1960-61

Purpose

This map shows districtwise the acreages under the following commercial crops : (*i*) sugarcane, (*ii*) jute, (*iii*) cotton, and (*iv*) tea.

Method

The acreage under each of the four commercial crops has been shown separately by dots representing 500 acres each. Tea, cotton and sugarcane have been shown by solid dots and jute by hollow dots.

Salient Features

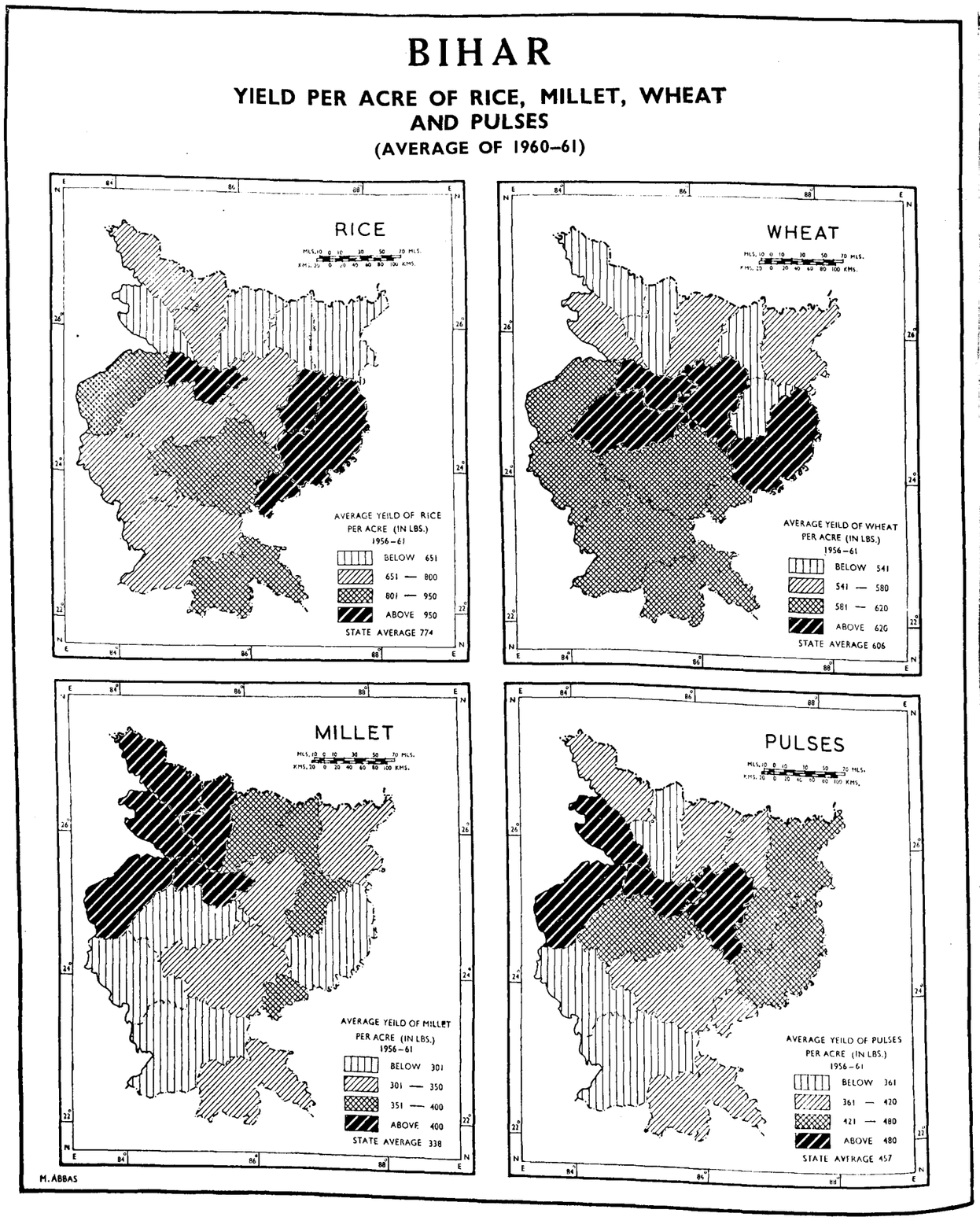
Tea is grown in 2,000 acres in the district of Ranchi only. (There are no coffee plantations in the State.) Cotton has been recently introduced and is grown mainly in Ranchi district. Other producers of cotton are Saran, Muzaffarpur and Palamau. Jute is an important commercial crop in the State, Purnea being the chief producer. Out of 3.62 lakh acres under jute, 2.47 lakhs are in Purnea and 0.70 lakh in Saharsa. Sugarcane is grown over 4.58 lakh acres in the State, chiefly in Champaran (1.17 lakh acres) and Saran (0.85 lakh acres). The production in Saharsa, Ranchi, Dhanbad and Singhbhum is negligible.

TABLE

ACREAGE UNDER COMMERCIAL CROPS, 1960-61
(IN 500 ACRES)

State/District	Sugar-cane	Jute	Cotton	Tea
1	2	3	4	5
BIHAR ..	917	725	10	4
Patna ..	33	..	..	..
Gaya ..	66	..	..	..
Shahabad ..	74	..	..	..
Saran ..	171	3	2	..
Champaran ..	235	37	..	..
Muzaffarpur ..	113	15	1	..
Darbhanga ..	115	19	..	..
Monghyr ..	33	4	..	..
Bhagalpur ..	30	2	..	..
Saharsa ..	2	140	..	..
Purnea ..	6	494	..	..
Santal Parganas	11	11	..	..
Palamau ..	13	..	1	..
Hazaribagh ..	14	..	..	..
Ranchi ..	..	..	6	4
Dhanbad ..	1	..	..	..
Singhbhum ..	..	..	..	..

SOURCE : Director of Statistics, Bihar ; Annual Season and Crop Report, 1960-61.



YIELD PER ACRE OF RICE, MILLET, WHEAT AND PULSES (AVERAGE OF 1960-61)

Purpose

Four maps have been prepared to show separately the average yield per acre of rice, millet, wheat and pulses in each district of Bihar.

Method

The average yield in lbs. per acre during 1960-61 for each district has been grouped into four ranges for each kind of crop as follows :

Rice	Millet	Wheat	Pulses
Below 651	Below 301	Below 541	Below 361
651—800	301—350	541—580	361—420
801—950	351—400	581—620	421—480
Above 950	Above 400	Above 620	Above 480

The State averages (in lbs. per acre) for each of these are : rice—774, millet—338, wheat—606, and pulses—457.

The districts have been shaded by different hatches ranging from high to low.

Salient Features

The yield of rice is substantially above the State average of 774 lbs. (or 352 kgs.) per acre in the districts of Patna, Bhagalpur, Santal Parganas and Dhanbad and somewhat higher also in Shahabad, Hazaribagh and Singhbhum. On the other hand, the production in Saran, Darbhanga, Saharsa and Purnea is much below the State average.

The average yield of millet is 338 lbs. (or 158 kgs.) for the State. Production is substantially above the State average in Saran, Champaran, Muzaffarpur, Shahabad and Patna, and somewhat higher in Darbhanga, Saharsa, Bhagalpur and Dhanbad. It is much below the State average in Gaya, Palamau, Ranchi and Santal Parganas.

The yield of wheat in Patna, Gaya, Shahabad, Monghyr and Santal Parganas is above the State average of 606 lbs. (or 275 kgs.) per acre, and substantially below it in Champaran, Muzaffarpur, Saharsa and Bhagalpur.

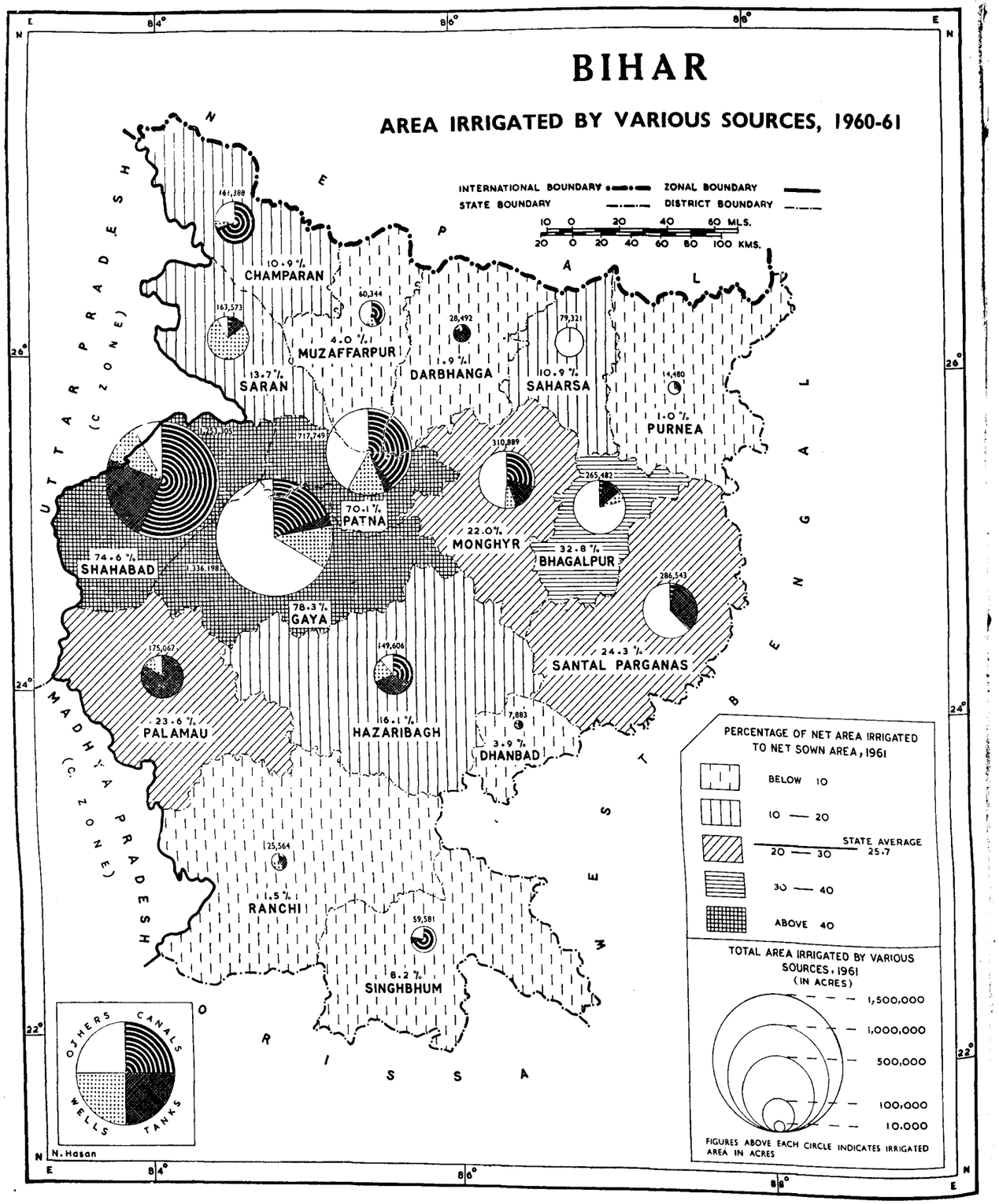
The yield of pulses is above the State average in Saran, Shahabad, Patna and Monghyr districts. It is substantially below the State average in Muzaffarpur, Palamau and Ranchi districts.

TABLE

YIELD PER ACRE OF RICE, MILLET, WHEAT AND PULSES, 1960-61

State/District	Yield per acre of (in lbs.)			
	Rice	Millet	Wheat	Pulses
1	2	3	4	5
BIHAR ..	**774**	**338**	**606**	**457**
Patna ..	1,028	652	711	591
Gaya ..	730	228	648	467
Shahabad ..	850	545	617	496
Saran ..	536	459	575	517
Champaran ..	756	417	432	388
Muzaffarpur ..	663	450	476	352
Darbhanga ..	640	388	579	396
Monghyr ..	712	316	788	495
Bhagalpur ..	1,109	351	519	443
Saharsa ..	324	360	367	387
Purnea ..	609	342	546	428
Santal Parganas ..	969	298	653	459
Palamau ..	794	252	583	360
Hazaribagh ..	830	312	583	400
Ranchi ..	697	285	583	251
Dhanbad ..	1,030	375	583	384
Singhbhum ..	869	347	583	399

SOURCE : Director of Statistics, Bihar; Annual Season and Crop Report, 1960-61.



AREA IRRIGATED BY VARIOUS SOURCES, 1960-61

Purpose

This map shows the districtwise percentages of net area irrigated to net area sown as also the sources of irrigation.

Method

The percentages of net area irrigated to net area sown have been grouped into the following five ranges :

(*i*) Below 10, (*iii*) 20—30,
(*ii*) 10—20, (*iv*) 30—40, and
(*v*) above 40.

Each district has been shaded by different hatches ranging from high to low.

Circles proportionate to the total irrigated area have been shown in each district. The circles have been divided into sectors proportionate to the percentage of irrigation provided by four main sources : (*i*) canals, (*ii*) tanks, (*iii*) wells and (*iv*) others.

Salient Features

Patna, Gaya and Shahabad comprise a distinct tract with more than 70 per cent of the net area sown under irrigation. In Bhagalpur it is 32.82 per cent. The three districts next in order, viz., Santal Parganas, Palamau and Monghyr have only 22 to 24 per cent of the sown area irrigated. It is less than 10 per cent in Muzaffarpur, Darbhanga, Purnea, Ranchi, Singhbhum and Dhanbad. Much of the area in the South Bihar Plains is irrigated by *ahars* and *pynes*. Such irrigation is dependent on normal rainfall and is ineffective in years of drought.

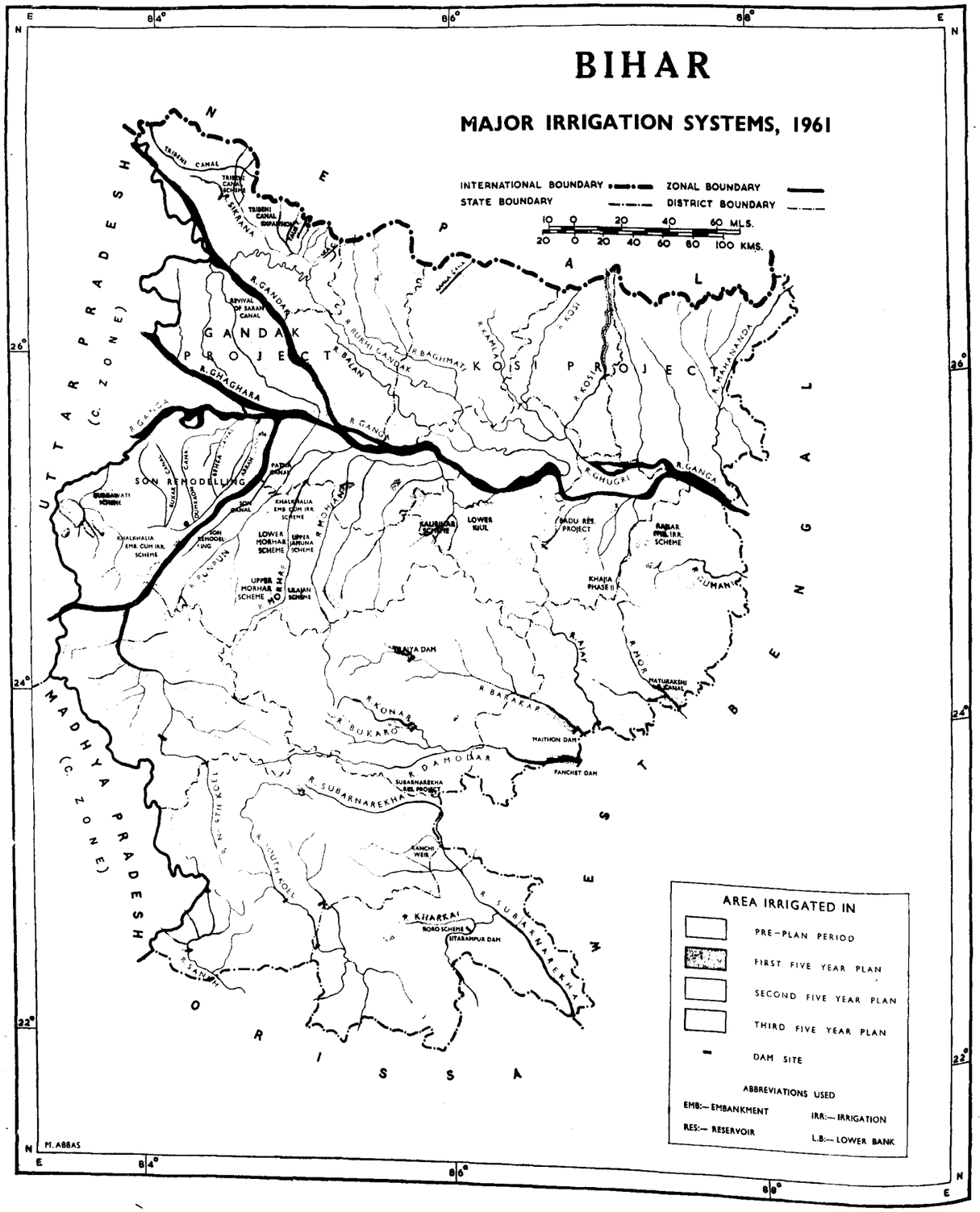
More than one half of the area under irrigation in Shahabad and Champaran districts are irrigated by canals. Tanks are the main source of irrigation in Palamau. Canals, wells and tanks provide the main sources of irrigation in Patna district. Other sources are important in Gaya.

TABLE

PERCENTAGE OF IRRIGATED AREA TO NET SOWN AREA, 1960-61

State/District	Total irrigated area (in acres)	Net sown area (in acres)	Percentage of irrigated area to net sown area
BIHAR ..	**5,095,465**	**19,848,000**	**25.67**
Patna ..	717,749	1,024,000	70.09
Gaya ..	1,336,198	1,707,000	78.28
Shahabad ..	1,253,305	1,680,000	74.60
Saran ..	163,573	1,190,000	13.74
Champaran ..	161,388	1,479,000	10.91
Muzaffarpur ..	60,344	1,494,000	4.04
Darbhanga ..	28,492	1,497,000	1.90
Monghyr ..	310,889	1,416,000	22.00
Bhagalpur ..	265,482	809,000	32.82
Saharsa ..	79,321	725,000	10.94
Purnea ..	14,480	1,390,000	1.04
Santal Parganas	286,543	1,177,000	24.34
Palamau ..	175,067	743,000	23.56
Hazaribagh ..	149,606	930,000	16.09
Ranchi ..	25,564	1,660,000	1.54
Dhanbad ..	7,883	202,000	3.90
Singhbhum ..	59,581	725,000	8.22

SOURCE : Director of Statistics, Bihar.



MAJOR IRRIGATION SYSTEMS, 1961

Purpose

This map shows the major irrigation systems in the State with their command areas. Schemes executed in the pre-plan, first Five Year Plan and second Five Year Plan periods, and those proposed in the third Five Year Plan have been shown separately in different colours.

Method

The map is based on the map of major and medium irrigation schemes of the State, furnished by the Irrigation Department of the State Government. The various irrigation schemes and their command areas have been shown in four different colours separately for the schemes started in pre-plan period and first, second and third Five Year Plan periods.

Salient Features

The Son Canal in Gaya and Shahabad districts and the Tribeni Canal in Champaran district were the two chief major irrigation systems before the first Five Year Plan.

In the first plan period, expansion of the Tribeni Canal in Champaran, revival of the Saran Canal in Saran, and setting up of the Kamla Canal in Darbhanga were the main schemes in North Bihar. Of the schemes executed in South Bihar during this period, mention may be made of the Durgawati scheme in Shahabad, the Morhar, Lilajan and Jamuna schemes in Gaya, the Kaurihar and Lower Kiul schemes in Monghyr and the Rajsar Embankment-*cum*-Irrigation and Mayurakshi Canal schemes in the Santal Parganas. The Tilaiya and Konar Dams in Hazaribagh and the Panchet Dam in Dhanbad were also executed during this period in Chotanagpur.

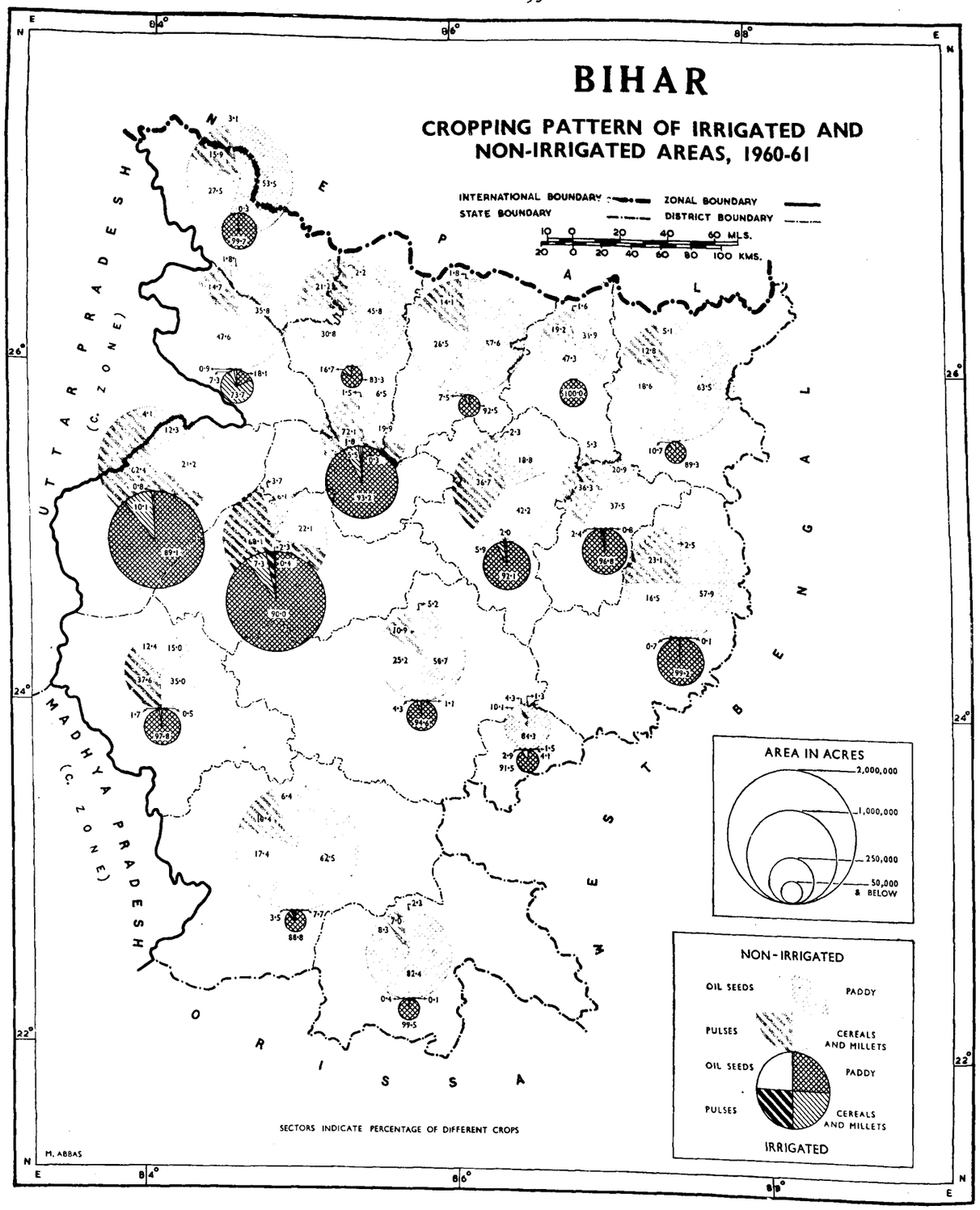
The largest irrigation scheme taken up during the second plan was the Kosi project which will benefit large areas in Darbhanga, Saharsa, North Bhagalpur and Purnea districts. The Khalkhalia embankment-*cum*-irrigation scheme in Shahabad and Gaya, the Badua project in Monghyr, the Subarnarekha project in Hazaribagh, the Kanchi Weir scheme in Ranchi, and the Roro scheme in Singhbhum were among the other important schemes taken up during this period.

Schemes taken up in the third plan included the Gandak Project which will benefit large parts of Saran, Champaran, Muzaffarpur and part of Darbhanga districts. Several other relatively small schemes have also been taken up. Among them are the following :

Scheme	District	Area to be irrigated in 1,000 acres
1. Goithwa	.. Patna	.. 15.00
2. Khudia	.. Dhanbad	.. 11.70
3. Arraj	.. Palamau	.. 10.35
4. Kokro	.. Ranchi	.. 8.62

The total area to be irrigated under the schemes scheduled for completion in the third Five Year Plan was 1.58 lakh acres.

SOURCE : Chief Engineer, Irrigation, Government of Bihar, Patna.



MAP NO. 53

CROPPING PATTERN OF IRRIGATED AND NON-IRRIGATED AREAS, 1960-61

Purpose

This map shows the cropping pattern separately for irrigated and non-irrigated areas in each district of the State in 1960-61.

Method

Circles proportionate to the areas have been drawn in each district. The black circles show irrigated areas and the red circles non-irrigated areas. Each circle is divided into sectors showing the percentage shares of main crops, viz., paddy, millet, pulses and oilseeds. Tea and cotton in the non-irrigated areas have negligible proportions.

Salient Features

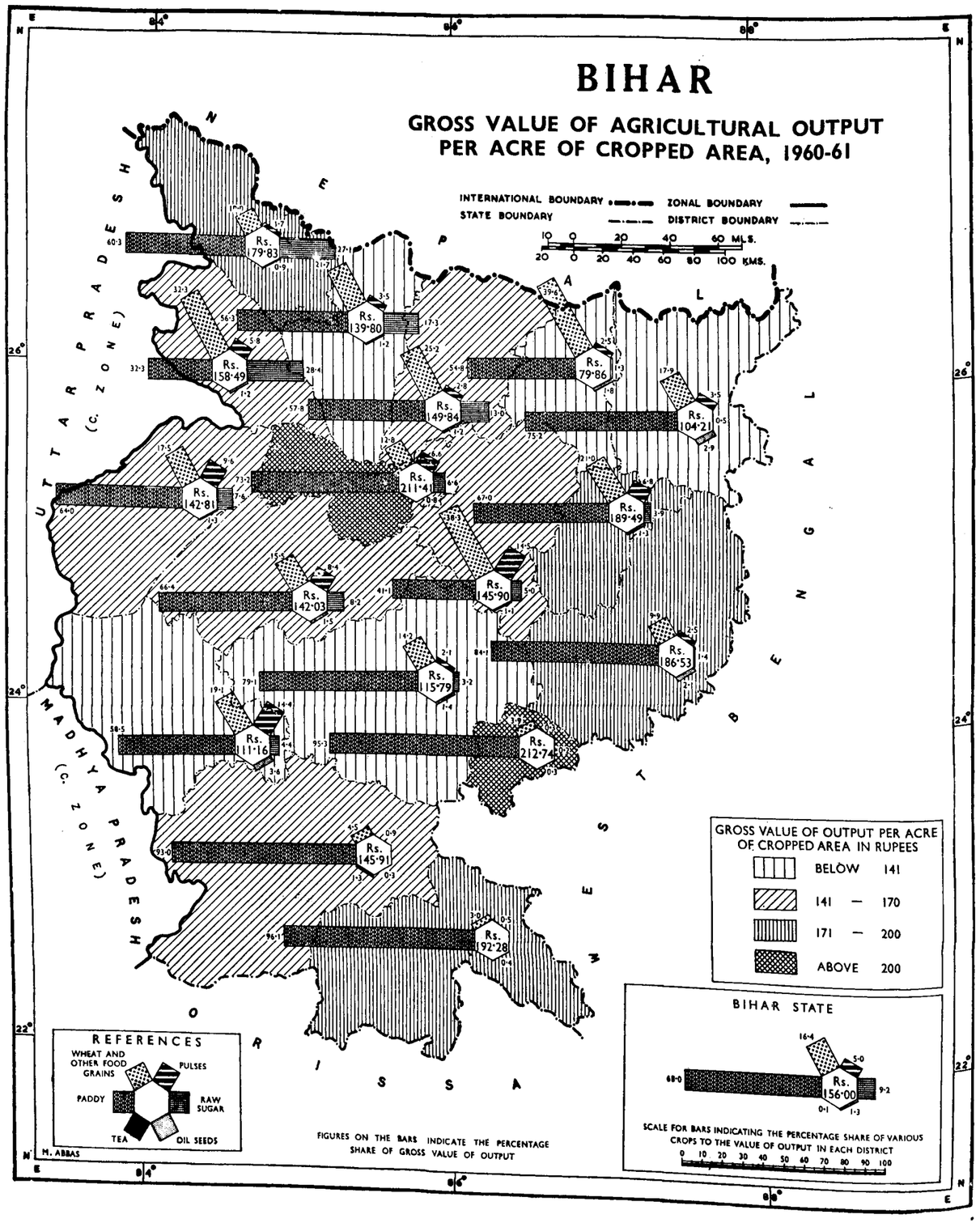
The irrigated areas are comparatively high in the districts of Patna, Gaya and Shahabad, and low in the North Bihar districts as well as the districts of Chotanagpur Plateau.

Paddy is the main crop in irrigated areas, the acreage under it being over 90 per cent in 12 out of 17 districts. The proportions are over 80 per cent in Shahabad, Muzaffarpur, Purnea and Ranchi but only 18.1 per cent in Saran district. Cereals and millets including *jowar*, *bajra* and maize are grown in 73.7 per cent of the irrigated area in Saran district.

Paddy is the chief crop in non-irrigated areas as well. The acreage under paddy exceeds 50 per cent of the non-irrigated area in Champaran, Darbhanga, Purnea and all districts of the Chotanagpur Plateau except Palamau. In all these districts, cereals, millets and pulses are the next important crops.

The statistics on which this map has been prepared are reproduced in Appendices III and IV at the end of the volume.

SOURCE : Director of Statistics, Bihar; Annual Season and Crop Report, 1960-61.



GROSS VALUE OF AGRICULTURAL OUTPUT PER ACRE OF CROPPED AREA, 1960-61

Purpose

This map shows the gross value of output per acre of cropped area for each district of the State. The regional variations in agricultural productivity have thus been portrayed in this map.

Method

Gross values of output per acre have been obtained for each district from the statistics on acreages under different types of crops, and production and value of each type of crop. The figures relating to gross values of output per acre have been given in polygons for each district. The cropping pattern is indicated by six bars proportionate to the percentage shares of gross value of each of the six kinds of crops. The types of crops shown are : (*i*) paddy, (*ii*) wheat and other foodgrains, (*iii*) pulses, (*iv*) raw sugar, (*v*) oilseeds, and (*vi*) tea.

The productivity values (in rupees per acre) for the districts have been grouped into four ranges, as under :

(*i*) Below 141, (*iii*) 171—200, and
(*ii*) 141—170, (*iv*) above 200.

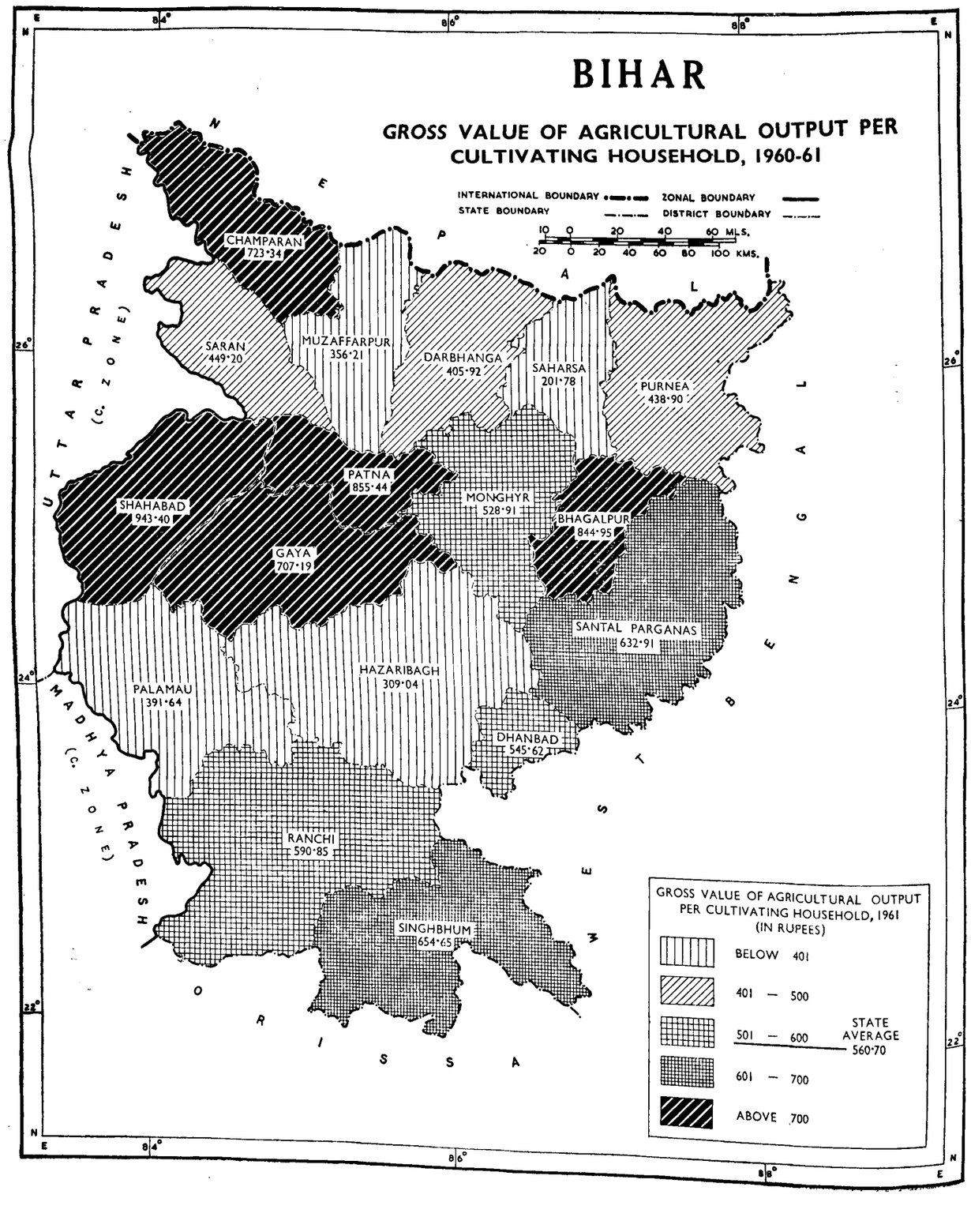
The districts have been shaded by four different grades of hatching ranging from high to low.

Salient Features

The gross value of output per acre of cropped area in the State, in 1961, was Rs. 156. Patna and Dhanbad had indices above Rs. 200. Bhagalpur, Santal Parganas, Singhbhum and Champaran had values above the State average. The districts of Muzaffarpur, Saharsa and Purnea in North Bihar fell in the range below Rs. 141, to which category also belonged Palamau and Hazaribagh in Chotanagpur.

Paddy was the chief crop accounting for over 90 per cent of the gross value of agricultural output in the districts of Ranchi, Dhanbad and Singhbhum and over 80 per cent in the district of Santal Parganas. Wheat and other foodgrains were important in Saharsa, Monghyr, Saran and Darbhanga, though in these districts also paddy continued to be the most important crop. Raw sugar was important in Saran, Champaran, Muzaffarpur and Darbhanga.

The table on the basis of which the map has been prepared is given in Appendix V at the end of the volume.



GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATING HOUSEHOLD, 1960-61

Purpose

This map shows the gross value of agricultural output per cultivating household for each district of the State in 1960-61.

Method

The gross value of agricultural output for each district has been calculated as in the case of Map no. 54. The number of cultivating households has been obtained from Table B-X of the Household Economic Tables.

The gross values (in rupees) of agricultural output per cultivating household have been grouped into five ranges, as under :

(*i*) Below 401, (*iii*) 501—600,
(*ii*) 401—500, (*iv*) 601—700, and
(*v*) above 700.

The districts have been shaded by five different grades of hatching ranging from high to low.

Salient Features

For the State as a whole, the gross value of agricultural output per cultivating household was Rs. 560.70 in 1960-61. The districts of Patna, Shahabad and Gaya along with Champaran and Bhagalpur had values above Rs. 700. The value was, however, highest for Shahabad at Rs. 943.40, followed by Patna and Bhagalpur. The Santal Parganas and Singhbhum had values between Rs. 600 and 700. While in Muzaffarpur, Palamau and Hazaribagh the values ranged between Rs. 300 and 400, the lowest value in the State was recorded in Saharsa district (Rs. 201.78).

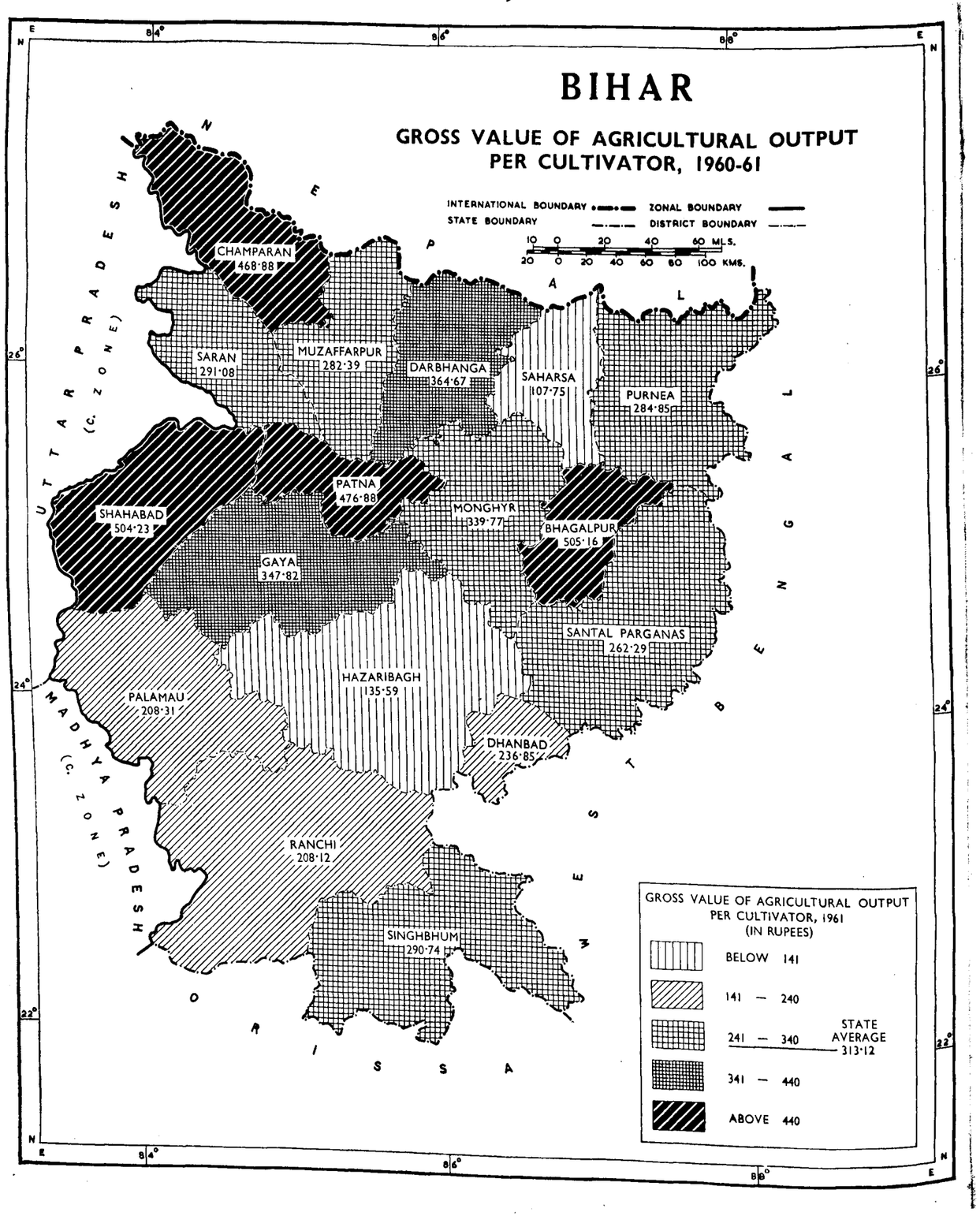
TABLE

GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATING HOUSEHOLD, 1960-61

State/District	Number of cultivating households*	Gross value of output in lakhs of rupees	Gross value per cultivating household in rupees
BIHAR ..	**5,786,725**	**32,446.22**	**560.70**
Patna ..	251,405	2,150.63	855.44
Gaya ..	380,360	2,689.87	707.19
Shahabad ..	309,300	2,917.95	943.40
Saran ..	506,040	2,273.15	449.20
Champaran ..	392,235	2,837.22	723.34
Muzaffarpur ..	549,215	1,956.38	356.21
Darbhanga ..	588,305	2,388.10	405.92
Monghyr ..	380,310	2,011.51	528.91
Bhagalpur ..	183,115	1,547.24	844.95
Saharsa ..	221,040	446.03	201.78
Purnea ..	366,535	1,608.73	438.90
Santal Parganas	428,280	2,710.65	632.91
Palamau ..	179,010	701.09	391.64
Hazaribagh ..	344,560	1,064.86	309.04
Ranchi ..	333,620	1,971.21	590.85
Dhanbad ..	98,815	539.16	545.62
Singhbhum ..	274,580	1,797.54	654.65

*Figures have been taken from Table B-X, Part III(i), Household Economic Tables, Bihar, 1961. The figures appearing in Table B-X are based upon 20 per cent sample. These have further been multiplied by 5.

SOURCE : (1) Director of Statistics, Bihar; Annual Season and Crop Report, 1960-61.
(2) Census of India, 1961, Vol. IV, Bihar, Part III (i), Table B-X.



MAP NO. 56

GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATOR, 1960-61

Purpose

This map shows the gross value (in rupees) of agricultural output per cultivator in 1960-61 for each district of the State.

Method

The gross value (in rupees) of agricultural output for each district has been computed as in Map no. 54. The number of cultivators has been obtained from the Primary Census Abstract. The gross values of agricultural output per cultivator for the different districts have been grouped into five ranges, as under :

(*i*) Below 141, (*iii*) 241—340,
(*ii*) 141—240, (*iv*) 341—440, and
(*v*) above 440.

The districts have been shaded by five different grades of hatching ranging from high to low.

Salient Features

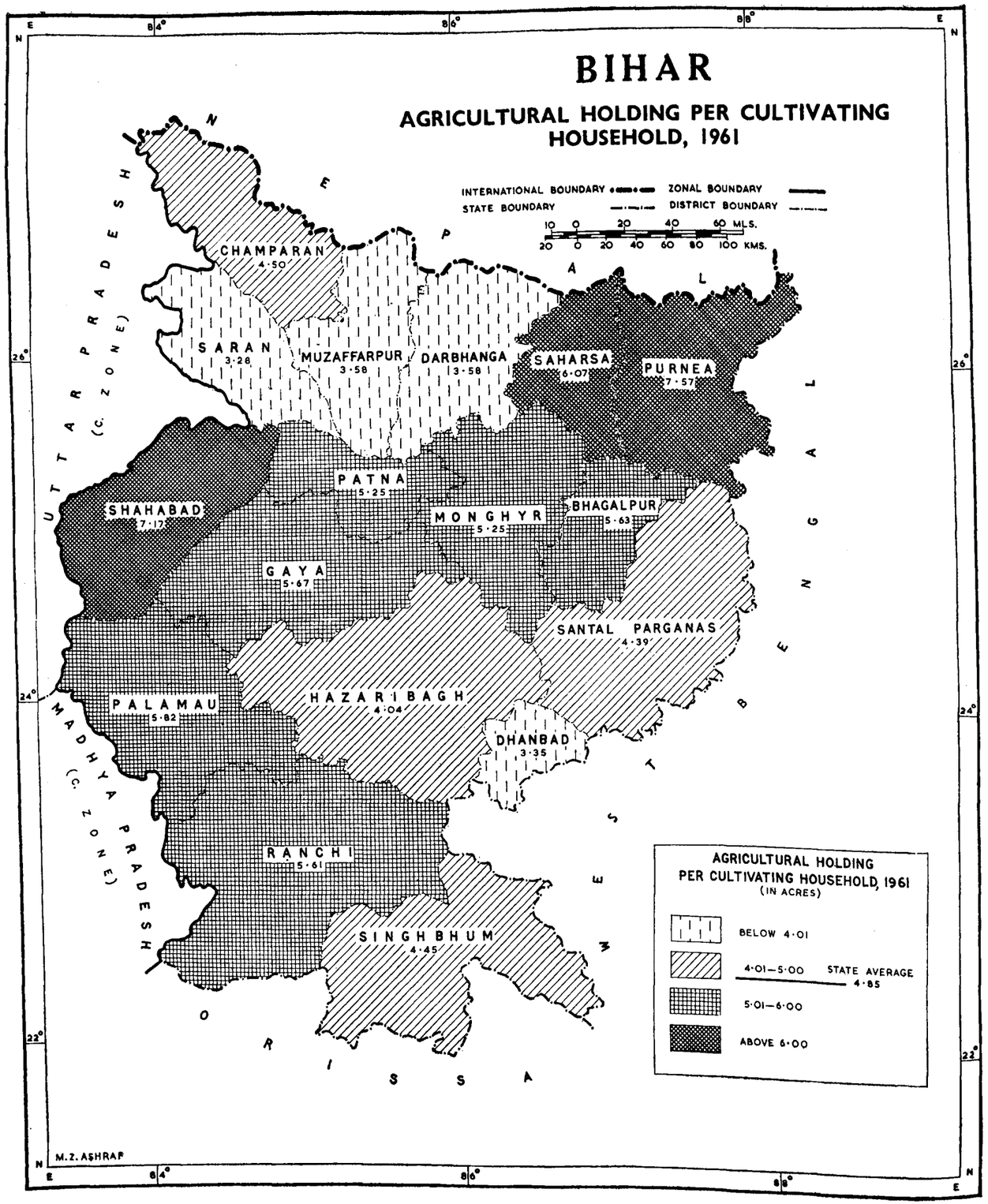
For the State as a whole, the gross value of agricultural output per cultivator was Rs. 313.12 in 1960-61. The proportions were comparatively high in districts of Darbhanga and Gaya, apparently because these districts have larger proportions of agricultural labourers. The values were above Rs. 500 in Shahabad and Bhagalpur, and between Rs. 400 and 500 in Patna and Champaran. The districts of Hazaribagh and Saharsa had values below Rs. 141 each.

TABLE

GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATOR, 1960-61

State/District	Number of cultivators	Gross value of output in lakhs of rupees	Gross value per cultivator in rupees
BIHAR ..	**10,361,971**	**32,446.22**	**313.12**
Patna ..	450,970	2,150.63	476.88
Gaya ..	773,339	2,689.87	347.82
Shahabad ..	578,686	2,917.95	504.23
Saran ..	780,911	2,273.15	291.08
Champaran ..	605,104	2,837.22	468.88
Muzaffarpur ..	692,778	1,956.38	282.39
Darbhanga ..	654,853	2,388.10	364.67
Monghyr ..	592,005	2,011.51	339.77
Bhagalpur ..	306,283	1,547.24	505.16
Saharsa ..	413,927	446.03	107.75
Purnea ..	564,759	1,608.73	284.85
Santal Parganas	10,334,439	2,710.65	262.29
Palamau ..	336,553	701.09	208.31
Hazaribagh ..	785,342	1,064.86	135.59
Ranchi ..	947,131	1,971.21	208.12
Dhanbad ..	227,634	539.16	236.85
Singhbhum ..	618,257	1,797.54	290.74

SOURCES : (1) Director of Statistics, Bihar ; Annual Season and Crop Report, 1960-61.
(2) Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



AGRICULTURAL HOLDING PER CULTIVATING HOUSEHOLD, 1961

Purpose

This map shows the size (in acres) of agricultural holding per cultivating household in each district of Bihar in 1961.

Method

Table B-XI of 1961 Census gives the statistics ralating to cultivating households classified by size of holding. From the mean size of holdings in each range, the sum of all holdings has been worked out. From this, the size of agricultural holding per cultivating household has been arrived at. The values (in acres) for the districts have been grouped into four ranges, as under :

(*i*) Below 4.01, (*iii*) 5.01—6.00, and
(*ii*) 4.01—5.00, (*iv*) above 6.00.

The districts have then been shaded by four different grades of hatching ranging from high to low.

Salient Features

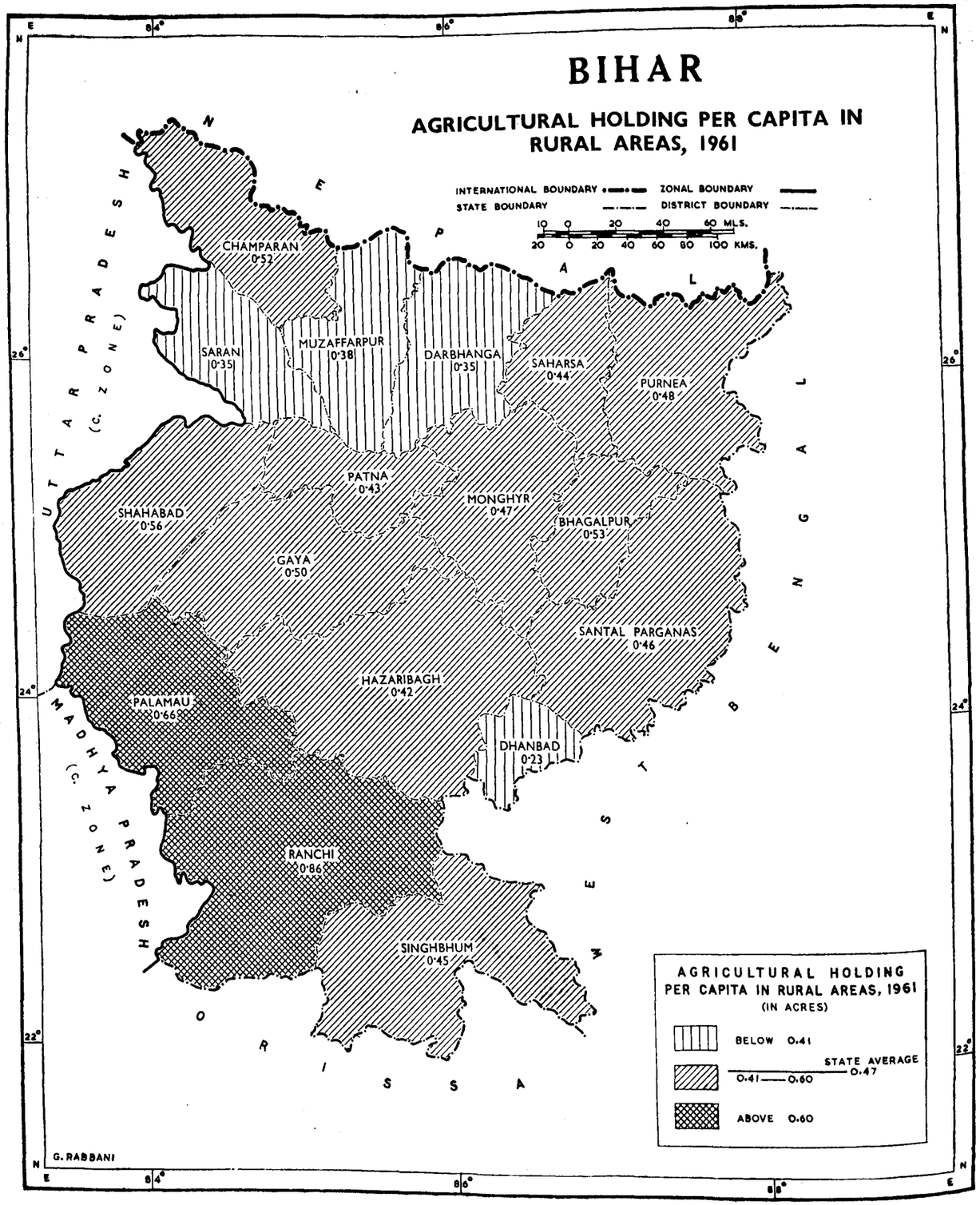
The size of agricultural holding per cultivating household was 4.85 acres for the State as a whole in 1961. In Purnea and Shahabad, the size exceeded 7 acres; in Saharsa, it was slightly over 6 acres. In as many as six districts, viz., Patna, Gaya, Monghyr, Bhagalpur, Palamau and Ranchi, the size varied between 5 and 6 acres. It was below 4 acres in Dhanbad, Darbhanga, Muzaffarpur and Saran.

TABLE

AGRICULTURAL HOLDING PER CULTIVATING HOUSEHOLD, 1961

State/District	Total acreage	Total cultivating households	Acreage per cultivating household
BIHAR ..	**5,615,809.0**	**1,157,345**	**4.85**
Patna ..	264,003.5	50,281	5.25
Gaya ..	431,215.7	76,072	5.67
Shahabad ..	443,592.2	61,860	7.17
Saran ..	332,018.0	101,208	3.28
Champaran ..	353,387.1	78,447	4.50
Muzaffarpur ..	393,681.3	109,843	3.58
Darbhanga ..	421,173.4	117,661	3.58
Monghyr ..	399,013.2	76,062	5.25
Bhagalpur ..	206,256.7	36,623	5.63
Saharsa ..	268,482.5	44,208	6.07
Purnea ..	554,713.6	73,307	7.57
Santal Parganas ..	376,295.9	85,656	4.39
Palamau ..	208,290.5	35,802	5.82
Hazaribagh ..	278,621.7	68,912	4.04
Ranchi ..	374,293.3	66,724	5.61
Dhanbad ..	66,219.4	19,763	3.35
Singhbhum ..	244,551.0	54,916	4.45

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part III(i), Table B-XI.



AGRICULTURAL HOLDING PER CAPITA IN RURAL AREAS, 1961

Purpose

This map shows the size (in acres) of agricultural holding per capita in rural areas of different districts in the State in 1961.

Method

The size (in acres) of agricultural holding per capita in rural areas of each district has been arrived at by dividing the net sown area by its rural population. The sizes have been grouped into the following three ranges :

(*i*) Below 0.41, (*ii*) 0.41—0.60, and (*iii*) above 0.60.

The districts have been shaded by three different grades of hatching ranging from high to low.

Salient Features

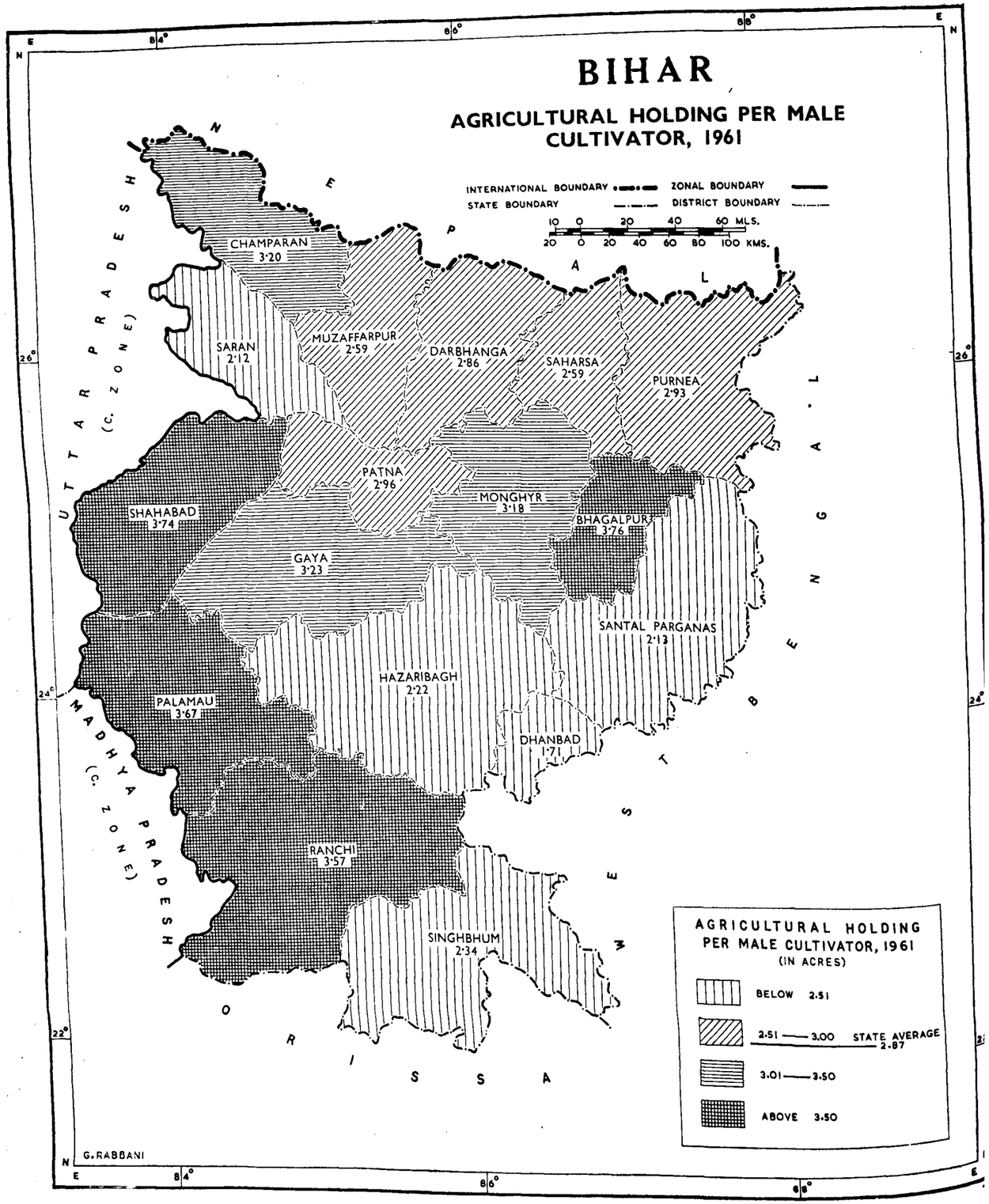
For the State as a whole, the size of agricultural holding per capita in its rural areas in 1961 was 0.47 acres. The value was highest, almost double the State average, in Ranchi district. It was comparatively high also in the districts of Palamau, Shahabad, Bhagalpur, Champaran, Gaya and Purnea. Dhanbad had the invidious distinction of having the lowest value which was less than half the average for the State. The values were also low in Saran, Muzaffarpur and Darbhanga. These are among the most densely populated districts in the State.

TABLE

AGRICULTURAL HOLDING PER CAPITA IN RURAL AREAS, 1961

Rank	State/ District	Rural population 1961	Net area sown excluding orchards (in acres)	Agricultural holding per capita (in acres)
1	2	3	4	5
1	Ranchi ..	1,936,087	1,660,000	0.86
2	Palamau ..	1,131,625	743,000	0.66
3	Shahabad ..	2,986,316	1,680,000	0.56
4	Bhagalpur ..	1,524,417	809,000	0.53
5	Champaran ..	2,860,566	1,479,000	0.52
6	Gaya ..	3,382,794	1,707,000	0.50
7	Purnea ..	2,903,531	1,390,000	0.48
	**BIHAR .. **	**42,541,690**	**19,848,000**	**0.47**
8	Monghyr ..	3,011,883	1,416,000	0.47
9	Santal Parganas	2,532,251	1,177,000	0.46
10	Singhbhum ..	1,609,260	725,000	0.45
11	Saharsa ..	1,656,139	725,000	0.44
12	Patna ..	2,355,850	1,024,000	0.43
13	Hazaribagh ..	2,195,227	930,000	0.42
14	Muzaffarpur ..	3,929,573	1,494,000	0.38
15	Saran ..	3,435,002	1,190,000	0.35
	Darbhanga ..	4,222,472	1,497,000	0.35
17	Dhanbad ..	868,697	1,202,000	0.23

SOURCE : (1) Director of Statistics, Bihar.
(2) Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-1.



AGRICULTURAL HOLDING PER MALE CULTIVATOR, 1961

Purpose

This map shows the size (in acres) of agricultural holding per male cultivator in each district of the State in 1961.

Method

The net area sown (excluding orchards) in each district has been divided by the number of male cultivators in it, as given in the Primary Census Abstract. The values relating to agricultural holding per male cultivator in different districts have been grouped into four ranges, as under :

(*i*) Below 2.51, (*iii*) 3.01—3.50, and
(*ii*) 2.51—3.00, (*iv*) above 3.50.

The districts have then been shaded by four different grades of hatching ranging from high to low.

Salient Features

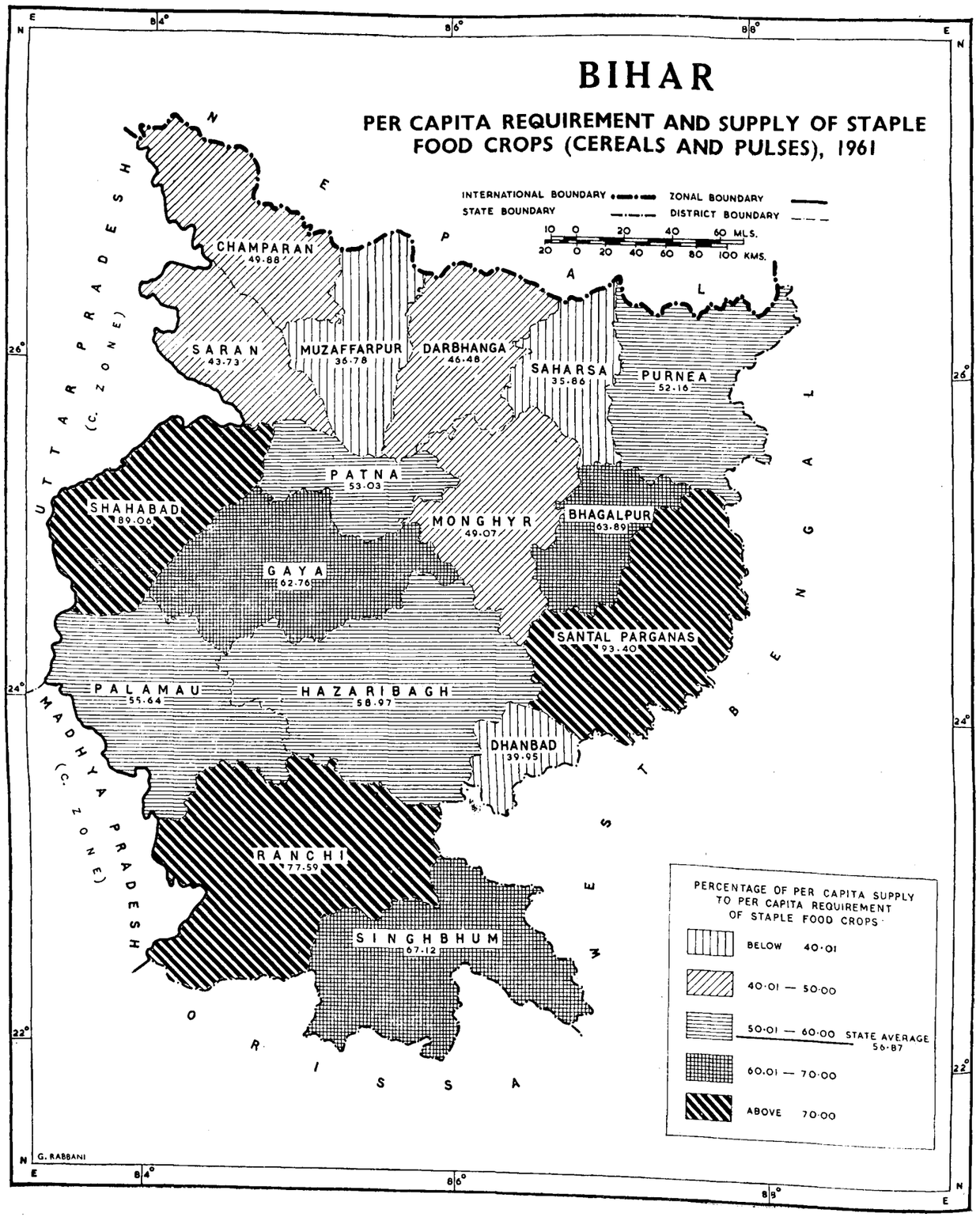
For the State as a whole, the size of agricultural holding per male cultivator is 2.87 acres only. The proportion is above 3.5 acres in a group of three contiguous districts, viz., Shahabad, Palamau and Ranchi. Bhagalpur, though isolated, also belongs to the same category. The proportion is above 3 acres in Champaran, Gaya and Monghyr districts. Muzaffarpur, Darbhanga, Saharsa and Purnea in North Bihar Plain along with Patna have averages varying between 2.5 and 3 acres. The districts with relatively small holdings per male cultivator are Santal Parganas, Dhanbad, Hazaribagh and Singhbhum in the Chotanagpur Plateau, and Saran in the North Bihar Plain.

TABLE

AGRICULTURAL HOLDING PER MALE CULTIVATOR, 1961

Rank	State/ District	Number of male cultivators	Net area sown excluding orchards (in acres)	Acr age per male cultivator
1	2	3	4	5
1	Bhagalpur ..	214,946	809,000	3.76
2	Shahabad ..	449,676	1,680,000	3.74
3	Palamau ..	202,588	743,000	3.67
4	Ranchi ..	464,396	1,660,000	3.57
5	Gaya ..	528,049	1,707,000	3.23
6	Champaran ..	462,806	1,479,000	3.20
7	Monghyr ..	445,097	1,416,000	3.18
8	Patna ..	346,122	1,024,000	2.96
9	Purnea ..	473,966	1,390,000	2.93
	**BIHAR ..	**6,926,057**	**19,848,000**	**2.87**
10	Darbhanga ..	522,811	1,497,000	2.86
11	Muzaffarpur..	576,394	1,494,000	2.59
	Saharsa ..	279,487	725,000	2.59
13	Singhbhum ..	309,568	725,000	2.34
14	Hazaribagh ..	418,995	930,000	2.22
15	Santal Parganas	551,652	1,177,000	2.13
16	Saran ..	561,179	1,190,000	2.12
17	Dhanbad	118,325	202,000	1.71

SOURCE : (1) Director of Statistics, Bihar.
(2) Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PER CAPITA REQUIREMENT AND SUPPLY OF STAPLE FOOD CROPS (CEREALS AND PULSES), 1961

Purpose

This map shows for each district the requirement and supply of staple food crops in the form of cereals and pulses.

Method

Calculations have been made in accordance with the recommendations of the Nutritive Advisory Committee*. The standard requirement of staple food crops for a male adult has been taken at 17 ounces consisting of 9 ounces of rice, 5 ounces of wheat/millet, and 3 ounces of pulses. The standard requirement per adult female has been taken as 90 per cent of the standard requirement for an adult male. An adult is a person aged 18 or more. For persons below 18, the standard requirements have been estimated in the following proportions of the standard requirement for an adult male, no distinction being made on account of sex :

(*i*)	Age group 13—17	..	0.8
(*ii*)	Age group 8—12	..	0.6
(*iii*)	Age group 3—7	..	0.4
(*iv*)	Age group 0—2	..	0.1

On the basis indicated above, the annual requirement of cereals and pulses has been worked out for the population of each district and then converted into calories on the basis of 348 calories per 100 grams of rice and 350 calories per 100 grams of wheat/millet and pulses.

Supplies have been worked out on the basis of average yearly production of cereals which yield the per capita yearly supply in terms of calories. Districtwise figures relating to yearly per capita net production of cereals and pulses in calories and the yearly per capita requirement as also the percentage ratio between these two sets of figures for each district have been furnished by the Map Officer, Office of the Registrar General, India. The percentages are grouped into five different ranges as follows :

(*i*) Below 40.01, (*iii*) 50.01—60.00,
(*ii*) 40.01—50.00, (*iv*) 60.01—70.00, and
(*v*) above 70.00.

The districts have been shaded by different grades of hatching ranging from high to low.

Salient Features

The ratio of per capita net production of cereals and pulses to per capita requirement for the State is 56.87 per cent. 7 out of 17 districts have percentages above the State average. In descending order of availability ratio, these districts are Santal Parganas, Shahabad, Ranchi, Singhbhum, Bhagalpur, Gaya and Hazaribagh. The lowest proportion has been recorded in Saharsa district (35.86 per cent).

TABLE

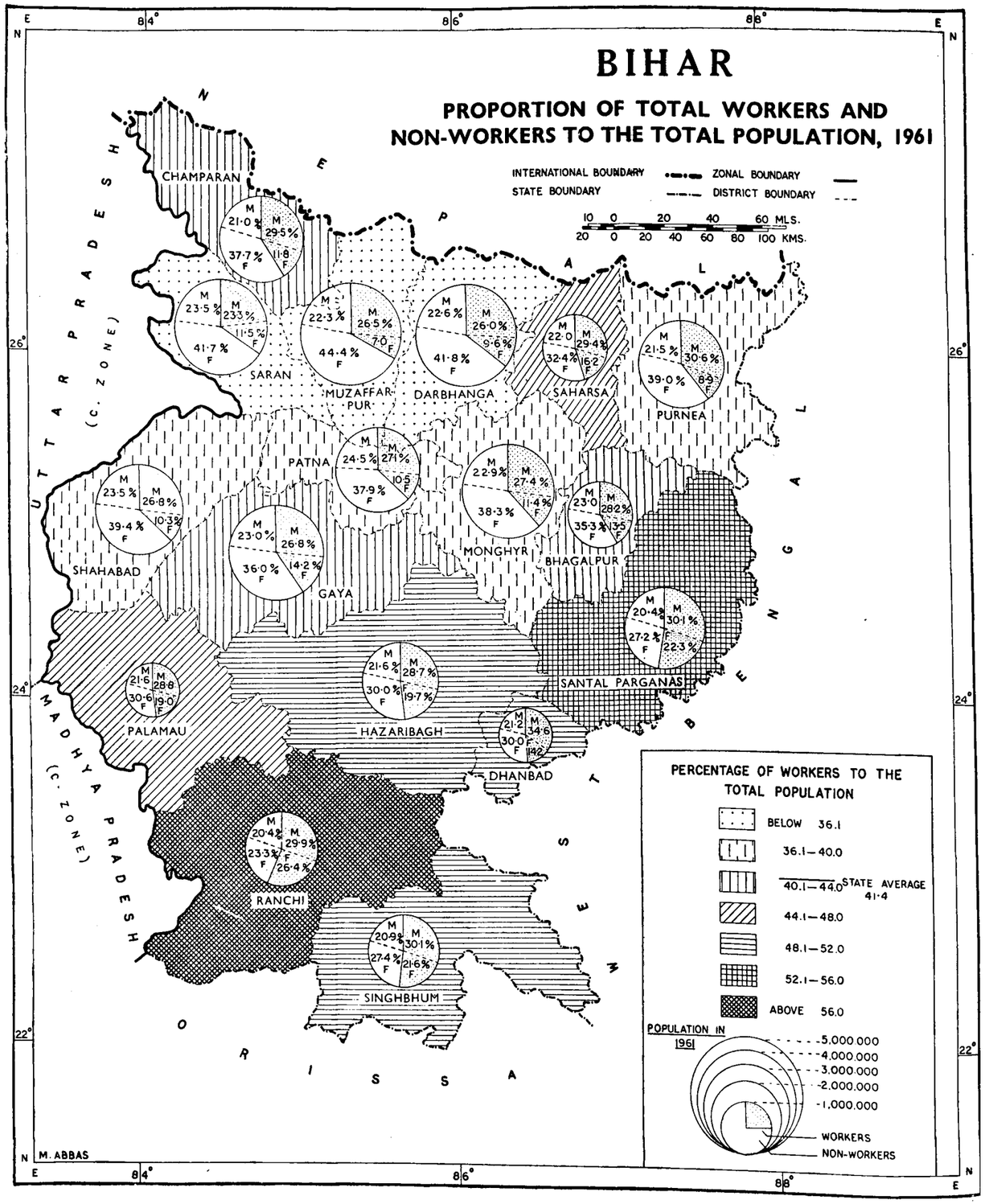
PER CAPITA REQUIREMENT AND SUPPLY OF STAPLE FOOD CROPS (CEREALS AND PULSES) 1961

Rank	State/District	Per capita production as per cent of per capita requirement
1	Santal Parganas	93.40
2	Shahabad	89.06
3	Ranchi	77.59
4	Singhbhum	67.12
5	Bhagalpur	63.89
6	Gaya	62.76
7	Hazaribagh	58.97
	BIHAR	**56.87**
8	Palamau	55.64
9	Patna	53.03
10	Purnea	52.16
11	Champaran	49.88
12	Monghyr	49.07
13	Darbhanga	46.48
14	Saran	43.73
15	Dhanbad	39.95
16	Muzaffarpur	36.78
17	Saharsa	35.86

*Aykroyd, W. R., Health Bulletin No. 23, page 16.

SOURCE : Office of the Registrar General, India.

MAP NO. 61



MAP NO. 61

PROPORTION OF TOTAL WORKERS AND NON-WORKERS TO THE TOTAL POPULATION, 1961

Purpose

This map shows the proportion of total workers and non-workers to the total population in different districts of Bihar in 1961.

Method

Circles have been drawn proportionate to the total population of each district. The shaded sector shows the percentage of workers, and the unshaded sector that of non-workers. Both the sectors have been sub-divided by broken lines indicating the percentage shares of males and females among workers and non-workers. The percentages of both sexes in the two categories have also been shown in the map.

The percentages of workers in the districts have been grouped into seven ranges, viz.,

(*i*) Below 36.1, (*iv*) 44.1—48.0,
(*ii*) 36.1—40.0, (*v*) 48.1—52.0,
(*iii*) 40.1—44.0, (*vi*) 52.1—56.0, and
(*vii*) above 56.0.

The districts have been shaded by seven different grades of hatching ranging from high to low.

Salient Features

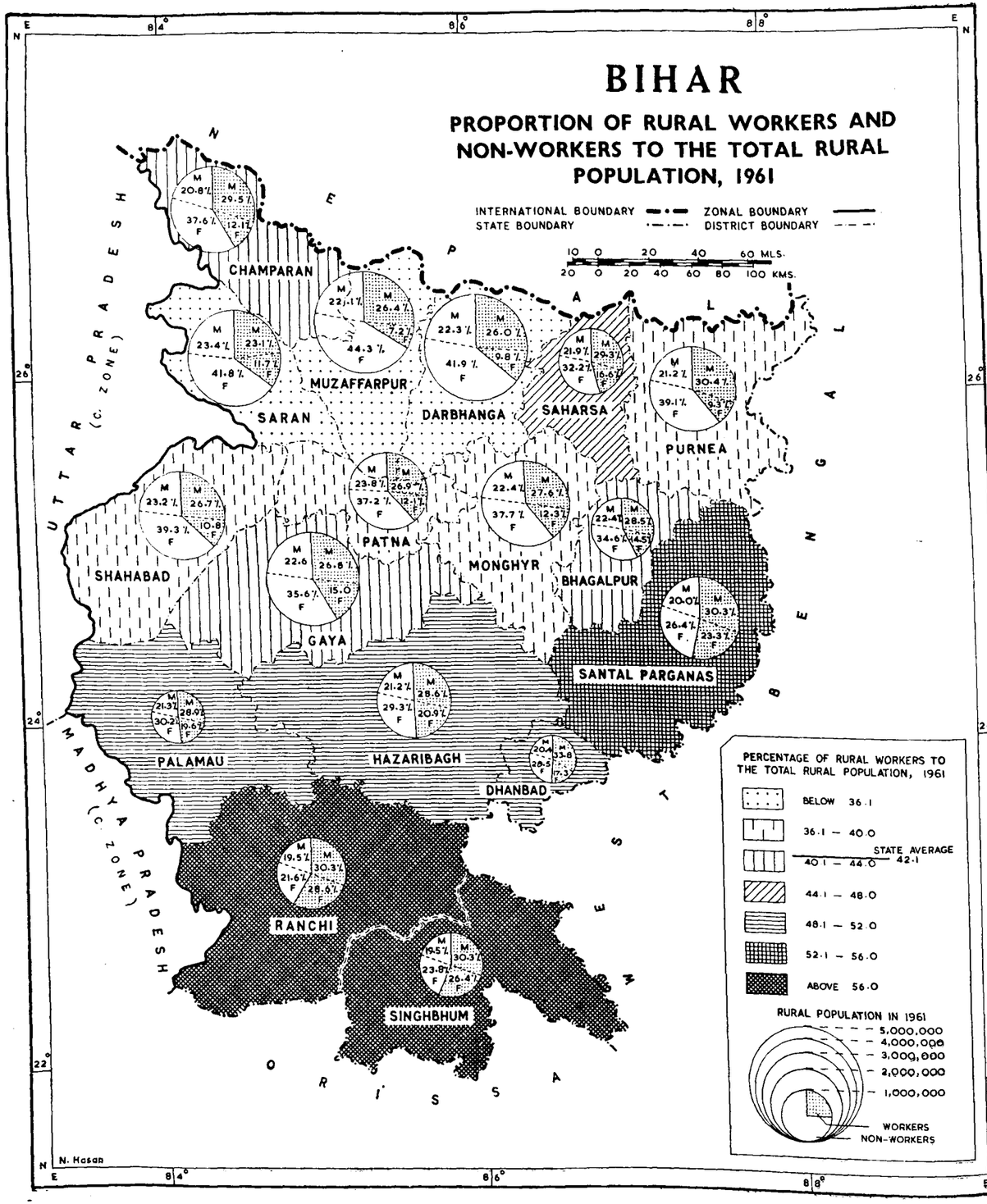
Out of the total population of 46,455,610 in the State, 19,234,565 or 41.4 per cent are workers and the remaining non-workers. Among workers, males comprise 27.9 per cent and females 13.5 per cent so that 2 out of every 3 workers are males. On the other hand, among non-workers, males comprise 22.3 per cent and females 36.3 per cent.

The proportions of total workers are higher than the State average in 8 districts. The first six places are taken by the districts of the Chotanagpur Plateau, followed by Saharsa and Bhagalpur. Ranchi has the highest proportion (56.3 per cent) followed by the Santal Parganas (52.4 per cent). The higher participation rates in the Chotanagpur Plateau are largely attributable to the greater proportions of workers among females. The six districts in the plateau, along with Saharsa, have recorded the highest proportions of female workers.

Muzaffarpur is at the other end of the scale, with total workers comprising only 33.5 per cent of the population. Significantly, the female participation rate (7.0 per cent) in this district is also the lowest in the State. In the districts of Saran and Darbhanga also, which lie on either side of Muzaffarpur, the rates are below 36 per cent. These three districts form a compact block of low participation rate region. The other distinct block of low rates (36.1—40.0 per cent) is comprised of Shahabad, Patna and Monghyr. Purnea also lies in this group but is intercepted by Saharsa having higher values.

In respect of male workers, Dhanbad ranks first (34.6 per cent), followed by Purnea (30.6 per cent). Saharsa too has a higher male participation rate than Palamau or Hazaribagh in the Chotanagpur Plateau.

The statistics on which this map has been prepared are given in Appendix VI at the end of the volume.



PROPORTION OF RURAL WORKERS AND NON-WORKERS TO THE TOTAL RURAL POPULATION, 1961

Purpose

This map shows the proportion of workers and non-workers to the rural population in different districts of Bihar in 1961.

Method

Circles have been drawn proportionate to the total rural population of each district. The shaded sector shows the percentage of workers in the rural population and the unshaded sector that of non-workers. Both these sectors are subdivided by broken lines indicating the percentage shares of males and females among workers and non-workers. The percentages of both sexes in the two categories are also shown in the map.

The percentages of rural workers in the districts have been grouped into seven categories, viz.,

(*i*) Below 36.1, (*iv*) 44.1—48.0,
(*ii*) 36.1—40.0, (*v*) 48.1—52.0,
(*iii*) 40.1—44.0, (*vi*) 52.1—56.0, and
(*vii*) above 56.0.

The districts have then been shaded by seven different grades of hatching ranging from high to low.

Salient Features

Out of the total rural population of 42,541,690 in the State, 17,934,321 or 42.1 per cent are workers and the remaining non-workers. The participation rate for the rural population is thus higher than that for the total population (41.4 per cent).

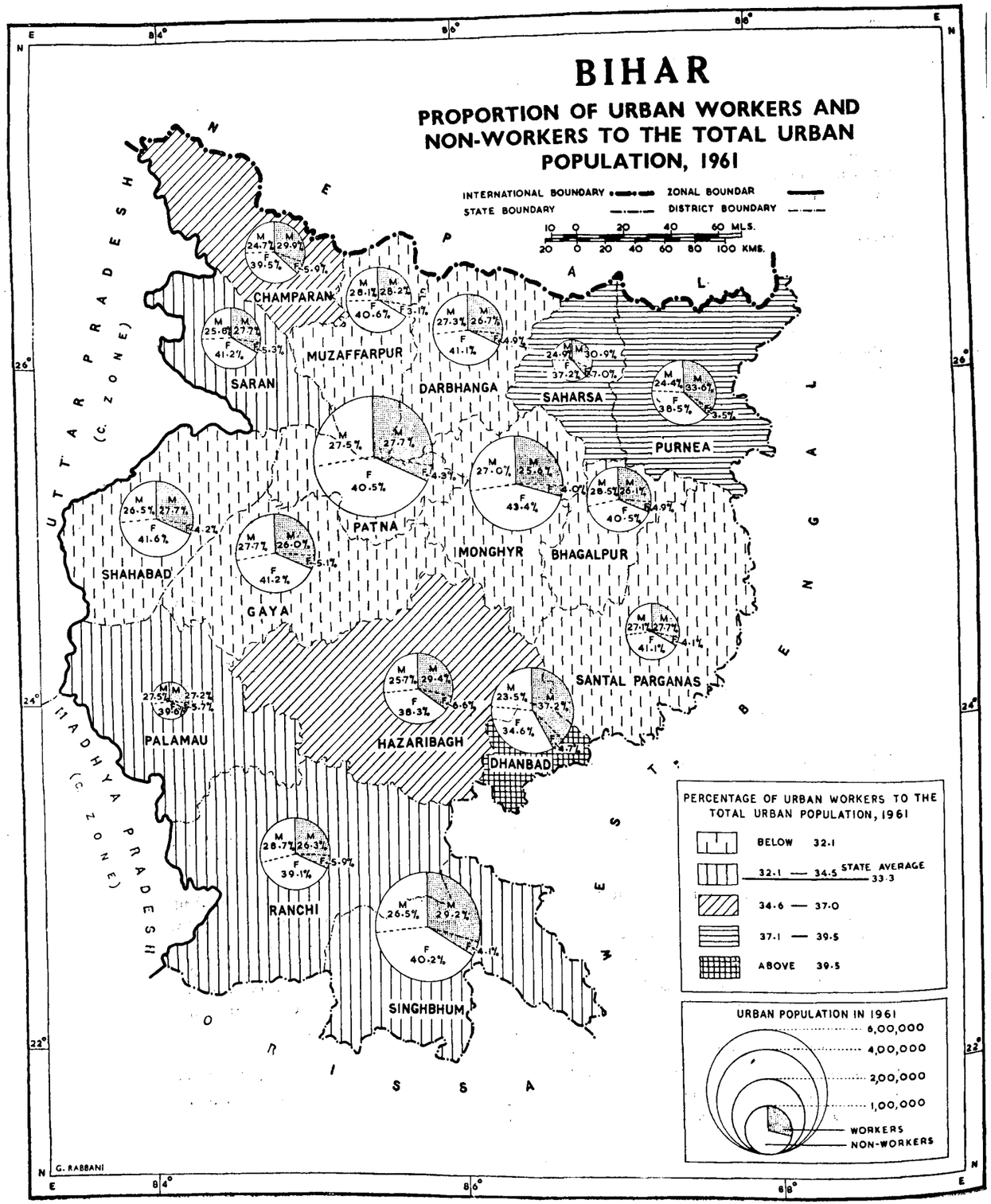
Among workers, males comprise 27.8 per cent and females 14.3 per cent of the total rural population. The corresponding proportions among non-workers are 21.9 and 36.0 per cent respectively. The distribution of workers by sex in rural areas is thus very similar to that in all areas.

As in the case of total workers, rural workers constitute a higher proportion than the State average in the six districts of the Chotanagpur Plateau as well as Saharsa and Bhagalpur. In fact, the relative rankings of these districts remain almost the same except that Singhbhum and Santal Parganas inter-change their places. Thus Ranchi has the highest participation rate (58.9 per cent), followed by Singhbhum (56.7 per cent) and Santal Parganas (53.6 per cent). Their distinction is mainly due to the higher participation rates among females. The six districts of the Chotanagpur Plateau, along with Saharsa, have also recorded the highest proportions of female workers.

Muzaffarpur is again at the other end of the scale with rural workers constituting 33.6 per cent. In fact, the five districts of Patna, Shahabad, Darbhanga, Saran and Muzaffarpur, which have lowest total participation rates (in that order), also have the lowest rural participation rates in the same order. While Saran, Muzaffarpur and Darbhanga form a compact block with rates below 36 per cent, Patna, Shahabad and Monghyr constitute another block with rates varying between 36.1 and 40.0 per cent. Purnea, though separated from Monghyr, also falls in the same range.

In respect of male workers, Dhanbad (33.8 per cent) leads, followed by Ranchi, Singhbhum and Santal Parganas with 30.3 per cent each. Saran (23.1 per cent) has the lowest proportion of male rural workers. It is significant that this district sends out a large number of male labourers.

The statistics on which this map has been prepared are given in Appendix VII at the end of the volume.



MAP NO. 63

PROPORTION OF URBAN WORKERS AND NON-WORKERS TO THE TOTAL URBAN POPULATION, 1961

Purpose

This map shows the proportion of workers and non-workers to the urban population of each district in Bihar in 1961.

Method

Circles have been drawn proportionate to the urban population of each district. The shaded sector shows the percentage of workers and the unshaded sector that of non-workers. Both the sectors are subdivided by broken lines indicating the percentage shares of males and females among workers and non-workers. The percentages of both sexes in the two categories are also shown in the map.

The percentages of urban workers in the districts have been grouped into five categories, viz.,

(*i*) Below 32.1,
(*ii*) 32.1—34.5,
(*iii*) 34.6—37.0,
(*iv*) 37.1—39.5, and
(*v*) above 39.5.

The districts have then been shaded by five different grades of hatching ranging from high to low.

Salient Features

Out of the total urban population of 3,913,920 in the State, 1,300,244 or 33.3 per cent are workers and the remaining non-workers. The participation rate for the urban population is thus much lower than that for the rural population (42.1 per cent).

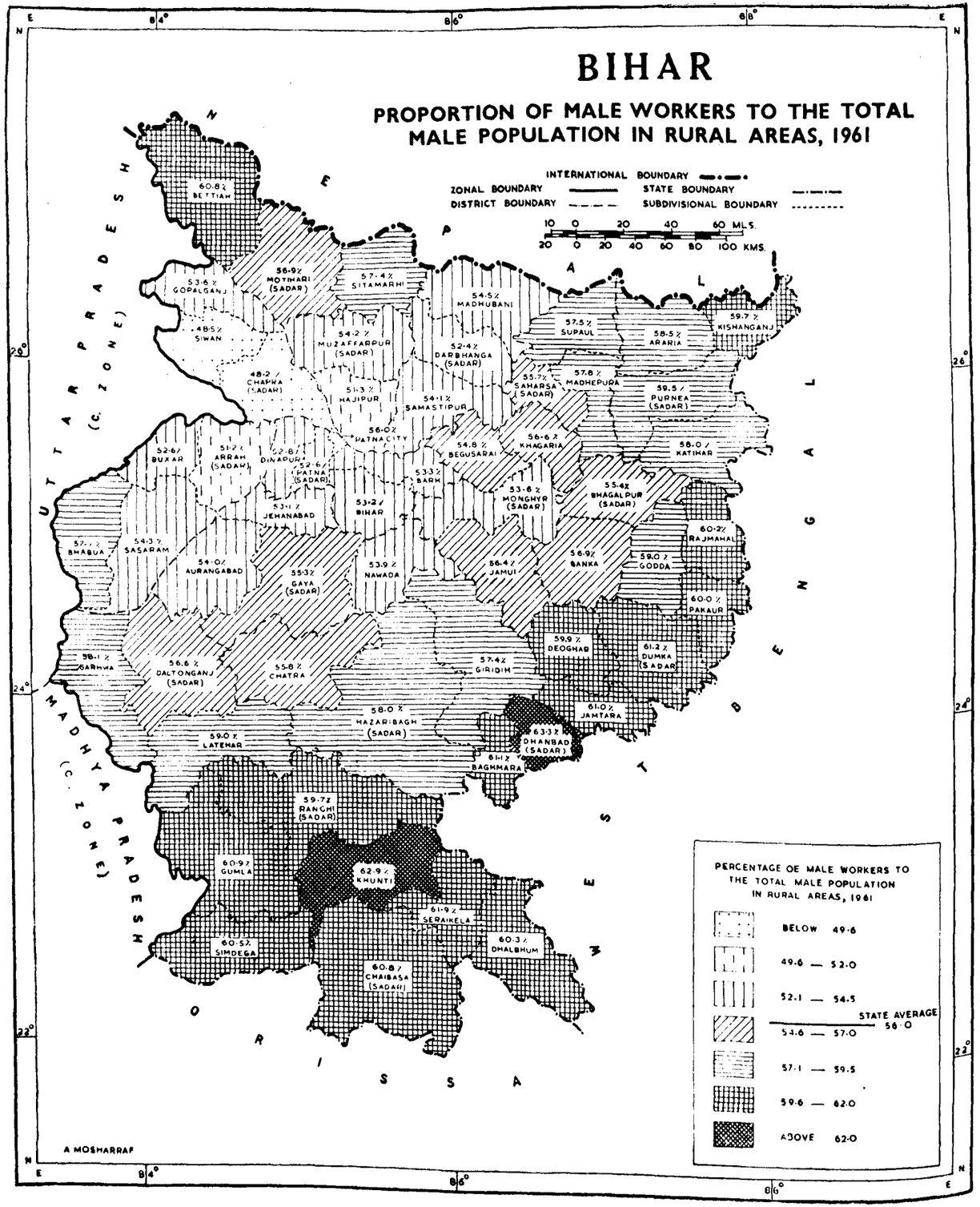
Among workers, males comprise 28.6 per cent and females 4.7 per cent of the total urban population. The distribution of urban workers by sex shows a much greater preponderance of males among them than in the rural population.

The districtwise rates of participation, which were largely similar for total and rural populations, are markedly different for urban areas.

Urban workers comprise a higher proportion than the State average in five districts only. These, in order of rank, are Dhanbad, Saharsa, Purnea, Hazaribagh and Champaran. Except Dhanbad, the overall urban content in these districts is low. The proportion of urban workers is the same as the State average in Singhbhum, and lower in Patna, the two districts other than Dhanbad which are relatively more urbanised. Monghyr has the lowest proportion of urban workers (29.6 per cent).

Out of the 11 districts in which participation rates are lower than the State average, Palamau and Ranchi (with Singhbhum) form a compact block with proportions varying from 32.1 to 34.5 per cent. Saran also belongs to the same range. The remaining 8 districts lie in the range 'below 32.1 per cent'.

The statistics on which this map has been prepared are given in Appendix VIII at the end of the volume.



PROPORTION OF MALE WORKERS TO THE TOTAL MALE POPULATION IN RURAL AREAS BY SUBDIVISIONS, 1961

Purpose

This map shows the percentages of male workers to total male population in the rural areas of each subdivision in the State in 1961.

Method

The percentages of rural male workers to total rural male population for each subdivision have been grouped into seven categories, viz.,

(*i*) Below 49.6, (*iv*) 54.6—57.0,

(*ii*) 49.6—52.0, (*v*) 57.1—59.5,

(*iii*) 52.1—54.5, (*vi*) 59.6—62.0, and

(*vii*) above 62.0.

The subdivisions have been shaded by seven different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

The proportion of rural male workers varies from 63.3 per cent in Dhanbad Sadar subdivision to 48.2 per cent in Chapra Sadar subdivision. The proportions are above the State average in 33 out of 58 subdivisions. It is remarkable that the subdivisions with proportions below the State average comprise a compact block consisting of Arrah Sadar, Buxar and Sasaram in Shahabad district; Chatra in Hazaribagh district; the whole of Gaya, Patna and Saran districts; Muzaffarpur Sadar and Hajipur in Muzaffarpur district; the whole of Darbhanga district; Begusarai and Monghyr Sadar in Monghyr district; Bhagalpur Sadar in Bhagalpur district; and Saharsa Sadar in Saharsa district.

Thus, the entire Chotanagpur Plateau except Chatra subdivision, as well as the contiguous subdivisions of Bhabua, Jamui and Banka together with the districts of Purnea and Champaran, and the subdivisions of Sitamarhi, Supaul, Madhepura and Khagaria have relatively high proportions of rural male workers.

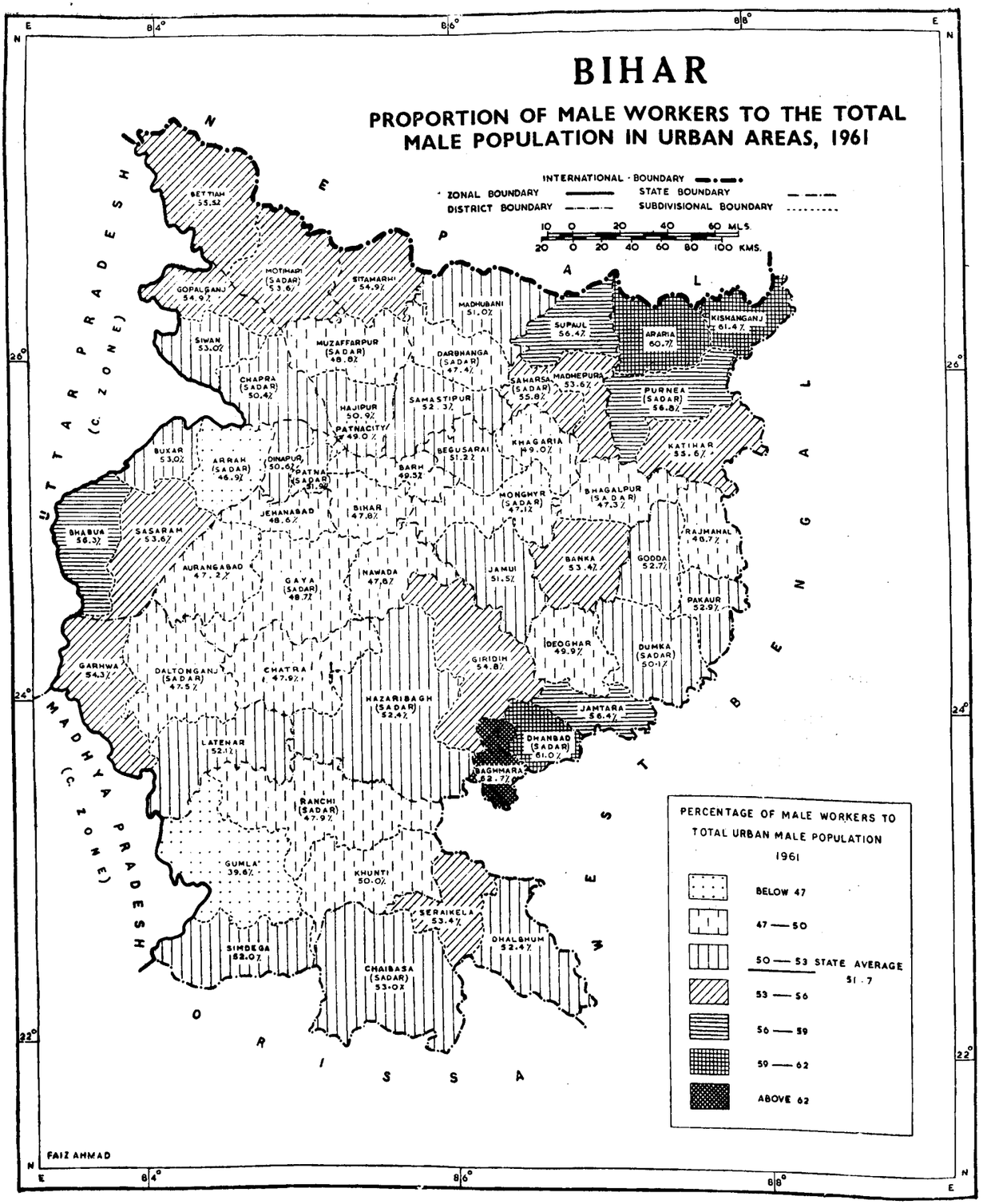
Dhanbad Sadar and Khunti are the only two subdivisions with percentages above 62. In the entire Singhbhum district and the remaining parts of Ranchi, Dhanbad and the Santal Parganas (except Godda), the values are 59.6—62.0 per cent. Kishanganj in the north-east and Bettiah in the north-west of the State fall in the same range.

TABLE

PERCENTAGE OF MALE WORKERS TO THE TOTAL MALE POPULATION IN RURAL AREAS, 1961

Rank	State/District	Percentage
1	Dhanbad	62.4
2	Singhbhum	60.9
3	Ranchi	60.8
4	Santal Parganas	60.2
5	Purnea	58.8
6	Champaran	58.6
7	Palamau	57.5
	Hazaribagh	57.5
9	Saharsa	57.2
10	Bhagalpur	56.0
	BIHAR	**56.0**
11	Monghyr	55.2
12	Muzaffarpur	54.5
13	Gaya	54.3
14	Darbhanga	53.8
15	Shahabad	53.5
16	Patna	53.1
17	Saran	49.7

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.



PROPORTION OF MALE WORKERS TO THE TOTAL MALE POPULATION IN URBAN AREAS BY SUBDIVISIONS, 1961

Purpose

This map shows the percentage of urban male workers to total male population in urban areas of each subdivision in the State in 1961.

Method

The percentages of male workers to total male population in urban areas of each subdivision have been grouped into seven categories, viz.,

(*i*) Below 47, (*iv*) 53—56,

(*ii*) 47—50, (*v*) 56—59,

(*iii*) 50—53, (*vi*) 59—62, and

(*vii*) above 62.

The subdivisions have been shaded by seven different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

The proportion of urban male workers varies from 62.7 per cent in Baghmara subdivision to 39.6 per cent in Gumla subdivision. The variation is almost of the same range as for the rural male workers. The proportions are above the State average in 31 out of 58 subdivisions. It is noteworthy that subdivisions with proportions lower than the State average are generally confined in the plains regions.

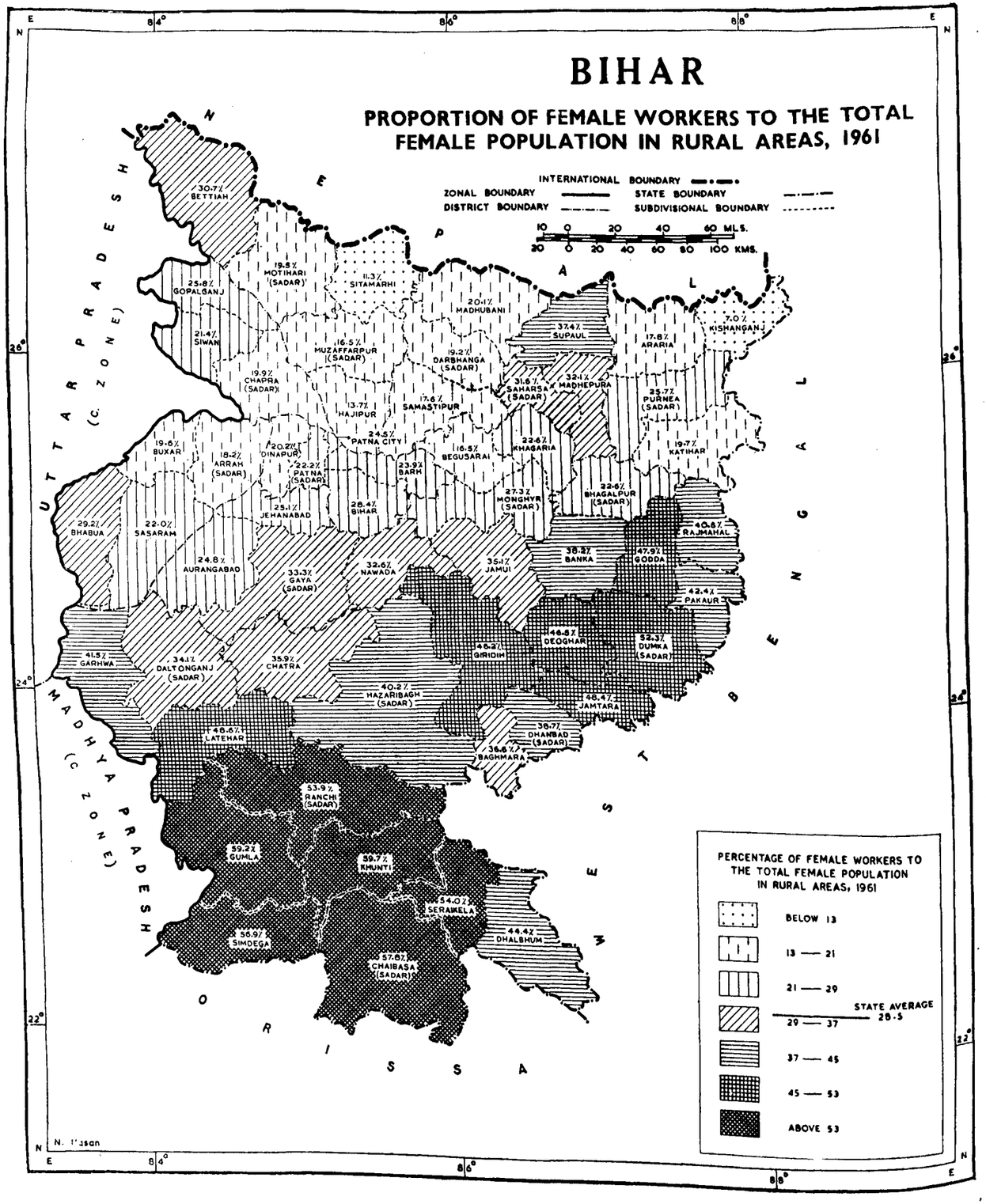
Baghmara is the only subdivision with percentage above 62. In Dhanbad Sadar, Araria and Kishanganj, the values are 59—62 per cent.

TABLE

PERCENTAGE OF MALE WORKERS TO THE TOTAL MALE POPULATION IN URBAN AREAS, 1961

Rank	State/District	Percentage
1	Dhanbad	61.3
2	Purnea	57.9
3	Saharsa	55.4
4	Champaran	54.7
5	Hazaribagh	53.3
6	Singhbhum	52.5
7	Saran	51.8
	BIHAR	**51.7**
8	Shahabad	51.1
9	Santal Parganas	50.6
10	Patna	50.1
	Muzaffarpur	50.1
12	Palamau	49.7
13	Darbhanga	49.4
14	Monghyr	48.7
15	Gaya	48.4
16	Ranchi	47.8
17	Bhagalpur	47.7

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.



PROPORTION OF FEMALE WORKERS TO THE TOTAL FEMALE POPULATION IN RURAL AREAS BY SUBDIVISIONS, 1961

Purpose

This map shows the percentages of female workers to total female population in rural areas of each subdivision in 1961.

Method

The percentages of rural female workers to the total female population in rural areas of each subdivision have been grouped into seven categories, viz.,

(*i*) Below 13, (*ii*) 13—21, (*iii*) 21—29, (*iv*) 29—37, (*v*) 37—45, (*vi*) 45—53, and (*vii*) above 53.

The subdivisions have been shaded by seven different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

The proportion of rural female workers varies from 59.7 per cent in Khunti subdivision to 7.0 per cent in Kishanganj subdivision. The range of variation is great in comparison to that of rural male workers.

The proportion is above the State average in the entire Chotanagpur Plateau and some of its contiguous subdivisions, e.g., Bhabua, Gaya Sadar, Nawada, Jamui and Banka, as also in the whole of Saharsa district and Bettiah subdivision in North Bihar.

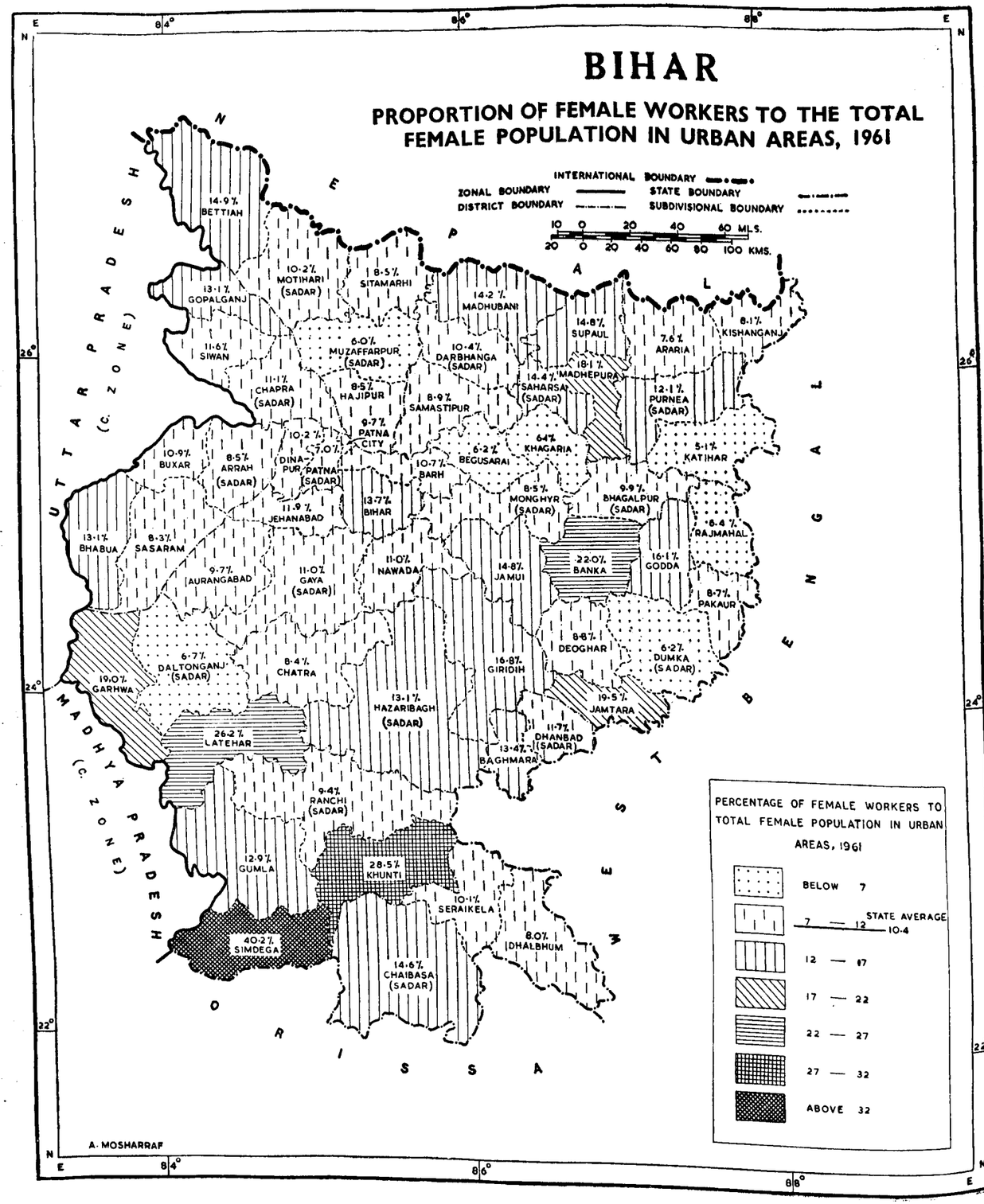
It is noteworthy that Khunti also recorded the highest proportion of rural male workers. Kishanganj, which had a high value in the case of male workers in rural areas, has the lowest proportion in respect of such females.

TABLE

PERCENTAGE OF FEMALE WORKERS TO THE TOTAL FEMALE POPULATION IN RURAL AREAS, 1961

Rank	State/District	Percentage
1	Ranchi	57.0
2	Singhbhum	52.6
3	Santal Parganas	47.0
4	Hazaribagh	41.7
5	Palamau	39.4
6	Dhanbad	37.8
7	Saharsa	34.0
8	Bhagalpur	29.6
9	Gaya	29.5
	BIHAR	**28.5**
10	Monghyr	24.7
11	Patna	24.5
12	Champaran	24.3
13	Saran	21.9
14	Shahabad	21.6
15	Purnea	19.2
16	Darbhanga	19.0
17	Muzaffarpur	14.9

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PROPORTION OF FEMALE WORKERS TO THE TOTAL FEMALE POPULATION IN URBAN AREAS BY SUBDIVISIONS, 1961

Purpose

This map shows the percentages of female workers to total female population in urban areas of each subdivision of the State in 1961.

Method

The percentages of urban female workers to the total female population in urban areas of each subdivision have been grouped into seven categories, viz.,

(*i*) Below 7,
(*ii*) 7—12,
(*iii*) 12—17,
(*iv*) 17—22,
(*v*) 22—27,
(*vi*) 27—32, and
(*vii*) above 32.

The subdivisions have then been shaded by different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

The proportion of urban female workers varies from 40.2 per cent in Simdega subdivision to 5.1 per cent in Katihar subdivision. The range is wider than in the case of urban male workers.

The proportions are above the State average in 30 out of 58 subdivisions. There is no discernible large tract with similar values, presumably because the characteristics of towns vary considerably.

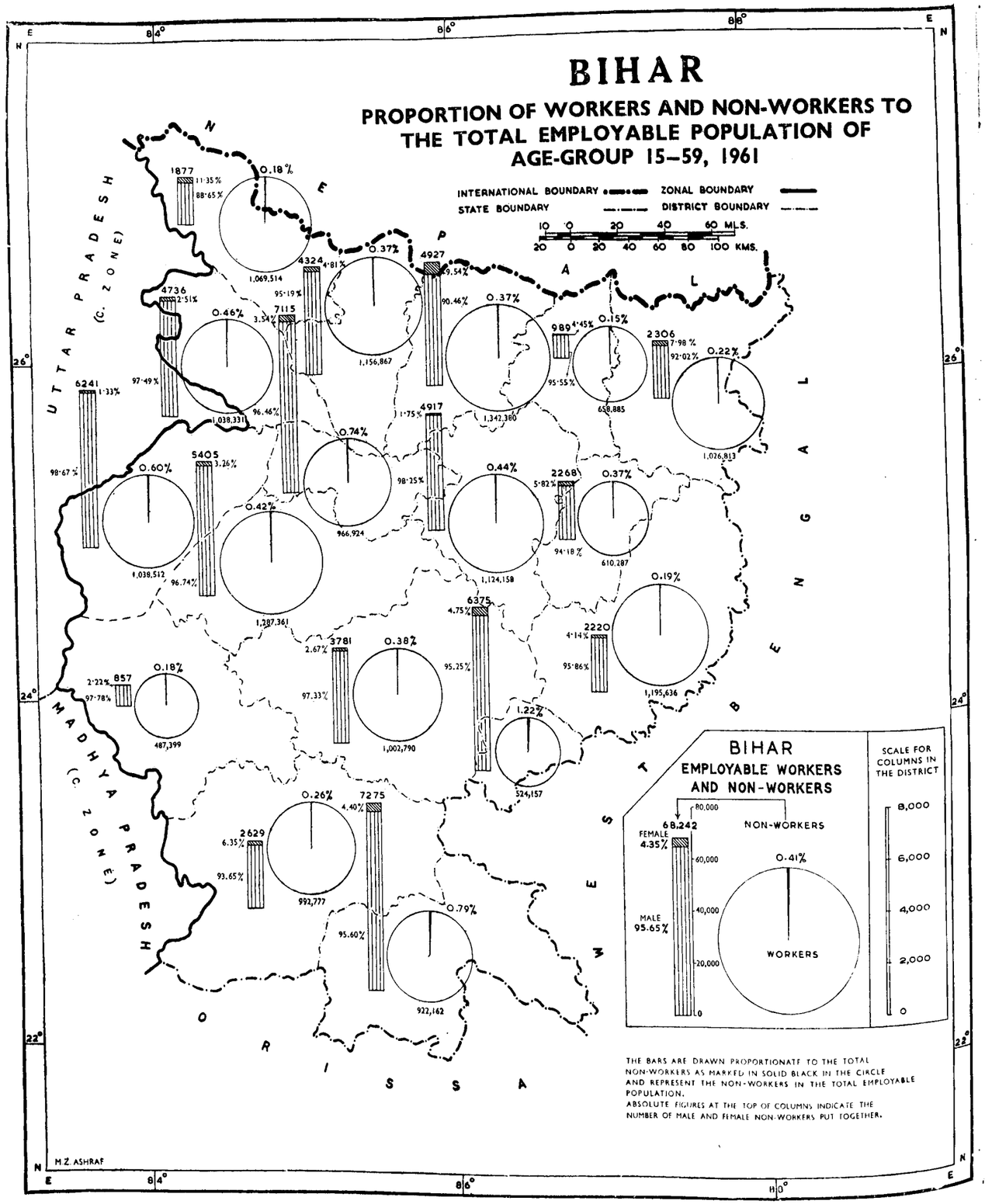
Generally, female participation is higher in the Chotanagpur Plateau and in towns which are largely agricultural in character.

TABLE

PERCENTAGE OF FEMALE WORKERS TO THE TOTAL FEMALE POPULATION IN URBAN AREAS, 1961

Rank	State/District	Percentage
1	Saharsa	15.8
2	Hazaribagh	14.6
3	Champaran	13.0
	Ranchi	13.0
5	Palamau	12.6
6	Dhanbad	11.9
7	Saran	11.5
8	Gaya	10.9
9	Darbhanga	10.7
	Bhagalpur	10.7
	BIHAR	**10.4**
11	Patna	9.7
12	Singhbhum	9.3
13	Shahabad	9.1
	Santal Parganas	9.1
15	Monghyr	8.5
16	Purnea	8.4
17	Muzaffarpur	7.1

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PROPORTION OF WORKERS AND NON-WORKERS TO THE TOTAL EMPLOYABLE POPULATION OF AGE GROUP 15—59, 1961

Purpose

This map shows the proportion of workers and employment-seeking non-workers to the total employable population in the age group 15—59, separately for each sex, in each district of the State in 1961.

Method

The employable population consists of the population in the age group 15—59 which was either working or seeking work. It excludes the non-working population engaged in (*i*) unpaid home duties, and those who were (*ii*) full time students, (*iii*) dependants, (*iv*) retired persons or rentiers, (*v*) beggars or vagrants, or (*vi*) inmates of penal, mental or charitable institutions.

Circles proportionate to the total employable population have been drawn for each district. Sectors indicating percentages of non-workers to the total employable population have been shaded. The percentages of non-workers have been shown above the circles, and the absolute figures of employable population below the circles.

Bars for each district, proportional to the number of non-workers (as shown in the circles), have been drawn to show the sexwise percentages of the non-working employable population. Their absolute figures and the percentages of males and females have also been shown in the map.

Salient Features

Out of a total employable population of 16,444,953 in the age group 15—59, as many as 16,376,711 or 99.59 per cent have been returned as workers and 68,242 or 0.41 per cent non-workers. The small proportion of persons seeking employment for the first time and those who were employed before but who were out of employment at the time of census actually reflects the conceptual broadness of workers in the 1961 Census. Thus, the category of workers included even persons engaged in purely seasonal work and also those engaged merely in supervisory capacity.

In spite of the small returns, regional trends are generally indicative. The industrial districts of Dhanbad and Singhbhum have the largest proportions of unemployed persons. The proportions are higher than the State average in Patna, Gaya, Shahabad, Saran and Monghyr. On the other hand, Saharsa has the smallest percentage.

In regard to the distribution of unemployed persons by sex, percentages for females are about the same as the State average in Dhanbad and Singhbhum. Champaran, Darbhanga and Purnea have relatively high proportions of females among the unemployed.

A table showing the relevant statistics appears on the next page.

TABLE

PERCENTAGE OF WORKERS AND NON-WORKERS TO THE TOTAL EMPLOYABLE POPULATION OF AGE GROUP 15—59, 1961

Rank	State/District	Percentage of workers to total employable population	Percentage of non-workers to total employable population	Percentage of male non-workers to total employable non-workers	Percentage of female non-workers to total employable non-workers
1	2	3	4	5	6
1	Saharsa	99·85	0.15	95.55	4.45
2	Champaran	99.82	0.18	88.65	11.35
	Palamau	99.82	0.18	97.78	2.22
4	Santal Parganas	99.81	0.19	95.86	4.14
5	Purnea	99.78	0.22	92.02	7.98
6	Ranchi	99.74	0.26	93.65	6.35
7	Muzaffarpur	99.63	0.37	95.19	4.81
	Darbhanga	99.63	0.37	90.46	9·54
	Bhagalpur	99.63	0.37	94.18	5.82
10	Hazaribagh	99.62	0.38	97.33	2.67
	BIHAR	**99.59**	**0.41**	**95.65**	**4.35**
11	Gaya	99.58	0.42	96.74	3.26
12	Monghyr	99.56	0.44	98·25	1.75
13	Saran	99.54	0.46	97.49	2.51
14	Shahabad	99.40	0.60	98.67	1.33
15	Patna	99.26	0.74	96.46	3.54
16	Singhbhum..	99.21	0.79	95.60	4.40
17	Dhanbad	98.78	1.22	95.25	4.75

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts II-B(i) and II-B(ii).

MAP NO. 69

INDUSTRIAL STRUCTURE OF MALE AND FEMALE POPULATION, 1961

Purpose

The map on the following page shows districtwise the distribution of working population of each sex into nine industrial categories and three broad sectors, viz., primary, secondary and tertiary.

Method

The percentages of workers in each industrial category to total population of each sex have been used to prepare the pyramidal diagram in each district. Nine horizontal bars, proportional to the percentage of workers in each industrial caregory, have been drawn for each sex. Males are represented by bars on the left, and females by those on the right. The nine industrial categories have been grouped into three sectors as under :

PRIMARY—

I .. Cultivator

II .. Agricultural labourer

III .. Mining, quarrying and other primary activities

SECONDARY—

IV .. Household industry

V .. Manufacturing other than household industry

VI .. Construction

TERTIARY—

VII .. Trade and Commerce

VIII .. Transport, Storage and Communications

IX .. Other services

The bars for each sector have been suitably hatched to conform to the above three sectors. For facility of reference, the percentage of workers of each sex in each industrial category has been indicated in the map.

Salient Features

Males comprise the bulk of the working population, there being only 485 female workers per 1,000 male workers in the State. Over three-fourths (77.5 per cent) of male workers are employed in the primary sector. The corresponding proportion for females is higher still (85.9 per cent).

36.01 per cent of the total male population in the State consists of cultivators and 13.38 per cent of agricultural labourers. 2.82 per cent is employed in mining, quarrying and other primary activities.

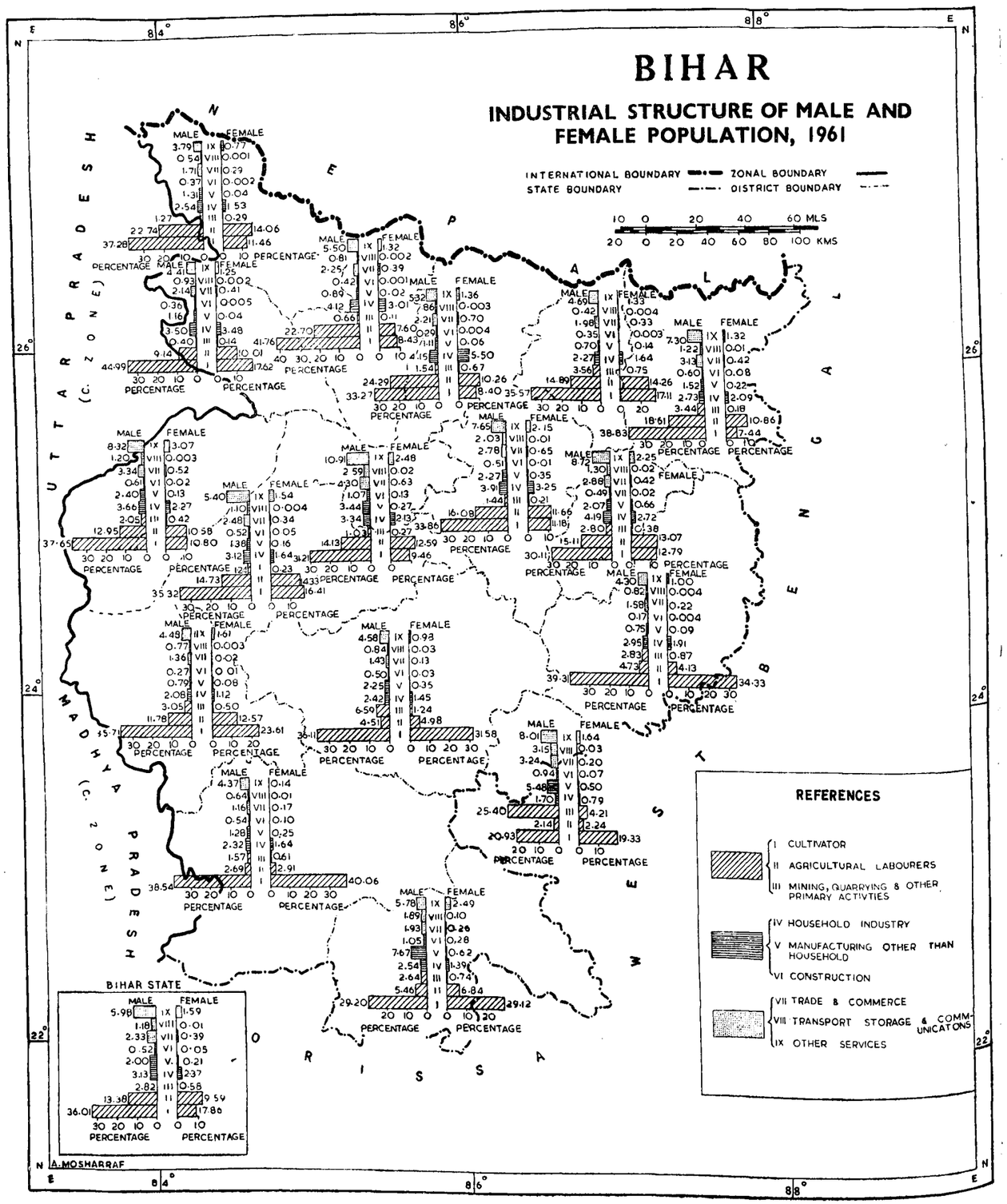
Among males, Muzaffarpur, Champaran and Purnea have the highest proportions in the primary sector, while Patna, Ranchi and Singhbhum have the lowest. Among females, however, employment in the primary sector is highest in Ranchi, Santal Parganas and Hazaribagh, and lowest in Darbhanga, Purnea and Muzaffarpur.

Employment of males in the secondary sector records its highest peaks in Singhbhum, Dhanbad and Patna. The lowest values are in Santal Parganas, Saharsa and Palamau. Female employment in secondary sector is conspicuously high in Darbhanga, Monghyr and Saran, and low in Champaran, Dhanbad and Palamau.

In the tertiary sector, male employment is significantly high in Patna, Dhanbad and Bhagalpur, while it is low in Palamau, Ranchi and Champaran. Among females working in the tertiary sector, the highest proportions are reached in Shahabad, Patna and Singhbhum, and the lowest in Hazaribagh, Champaran and Ranchi.

Relevant statistics are contained in the table that follows.

MAP NO. 69

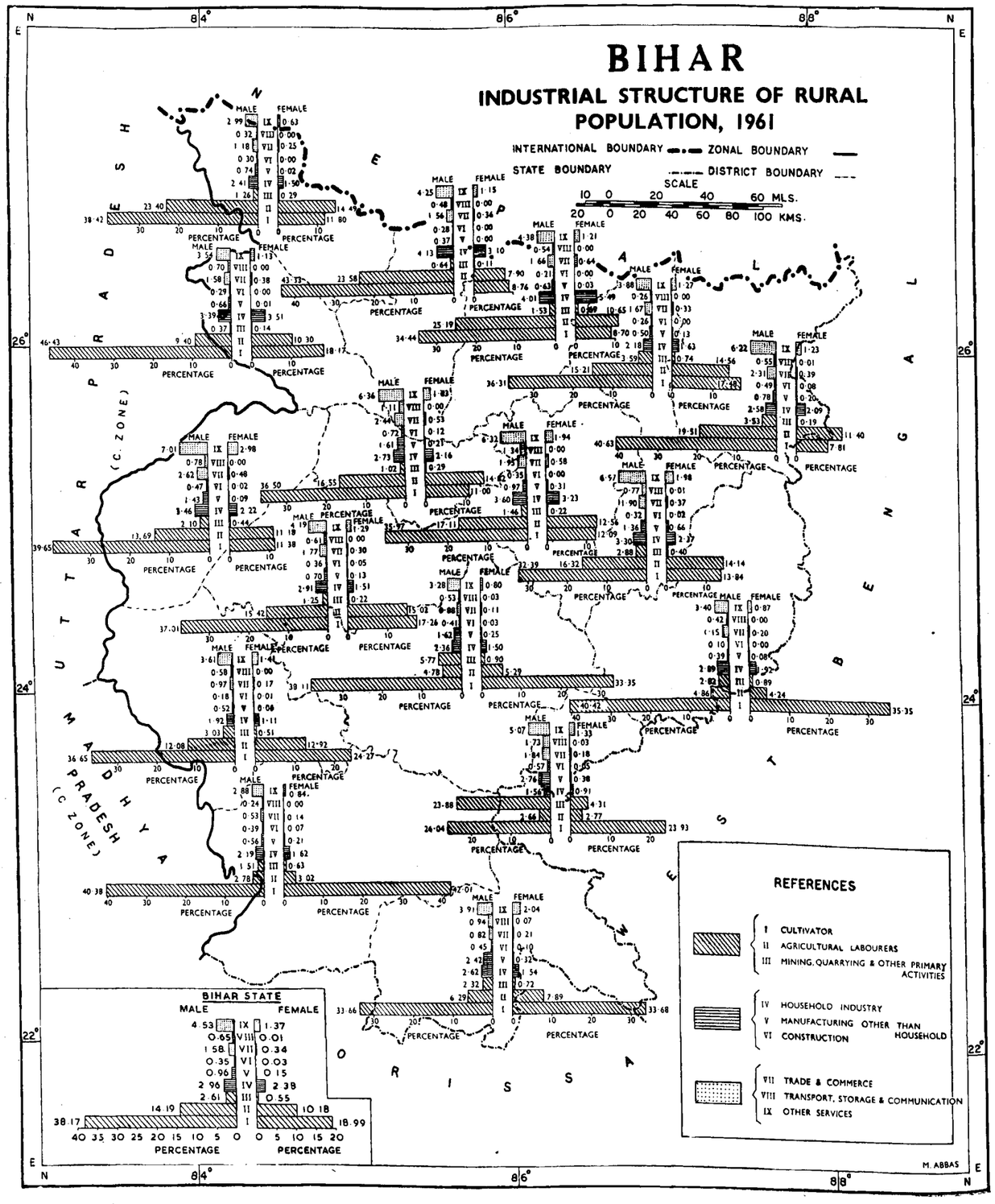


TABLE

PERCENTAGE OF WORKERS UNDER DIFFERENT SECTORS, 1961

State/District	Primary sector		Secondary sector		Tertiary sector	
	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7
BIHAR	**52.21**	**28.03**	**5.65**	**2.63**	**9.49**	**1.99**
Patna	46.37	22.32	7.85	2.53	17.80	3.13
Gaya	51.29	30.97	5.02	1.85	8.98	1.92
Shahabad	52.65	21.80	6.66	2.42	12.86	3.59
Saran	54.53	27.77	5.02	3.52	7.48	1.66
Champaran	61.29	25.81	4.22	1.57	6.04	1.06
Muzaffarpur	65.12	16.14	5.43	3.03	8.56	1.71
Darbhanga	59.10	19.33	5.55	5.56	8.39	2.06
Monghyr	51.38	23.05	6.69	3.61	12.46	2.81
Bhagalpur	48.03	26.24	6.75	3.40	12.90	2.69
Saharsa	54.02	32.12	3.32	1.78	7.09	1.66
Purnea	60.88	18.48	4.85	2.39	11.65	1.75
Santal Parganas	46.87	39.33	3.87	2.00	6.70	1.22
Palamau	50.54	36.68	3.14	1.21	6.61	1.81
Hazaribagh	47.21	37.80	5.17	1.83	6.85	1.14
Ranchi	42.80	43.58	4.14	1.99	6.17	0.32
Dhanbad	48.47	25.78	8.12	1.36	14.40	1.87
Singhbhum	37.30	36.70	11.26	12.29	9.60	2.85

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



INDUSTRIAL STRUCTURE OF RURAL POPULATION, 1961

Purpose

This map shows districtwise the distribution of rural workers of either sex into nine industrial categories and three broad sectors, viz., primary, secondary and tertiary.

Method

The percentages of workers in each industrial category to total population of each sex have been used to present the pyramidal diagram in each district. Nine horizontal bars, proportional to the percentage of workers in each industrial category, have been drawn for each sex. Males are represented by bars on the left, and females by those on the right. The nine industrial categories have been grouped into three sectors as under :

PRIMARY—

I .. Cultivator
II .. Agricultural labourer
III .. Mining, quarrying and other primary activities

SECONDARY—

IV .. Household industry
V .. Manufacturing other than household industry
VI .. Construction

TERTIARY—

VII .. Trade and Commerce
VIII .. Transport, Storage and Communications
IX .. Other services

The bars for each sector have been suitably hatched to conform to the above three sectors. For facility of reference, the percentage of workers of each sex in each industrial category has been indicated in the map.

Salient Features

As the level of urbanisation is very low in Bihar, the industrial structure of its rural population follows closely the pattern indicated by the total population. Males comprise the bulk of the rural working population, there being only 515 female workers per 1,000 male workers. Over 54.97 per cent of male workers are employed in the primary sector. The corresponding proportion for females is even higher.

In the State as a whole, 38.17 per cent of rural males are cultivators, 14.19 per cent agricultural labourers, 4.53 per cent engaged in 'other services', 2.96 per cent in household industry, 2.61 per cent in mining, quarrying, dairying, etc., and 1.58 per cent in trade and commerce. Other categories account for less than 1 per cent. The female proportions more or less follow the same pattern, only the values are much less.

The industrial structure of male population in rural areas indicates a much higher participation in the primary sector in North Bihar districts (e.g., Champaran, Muzaffarpur, Darbhanga and Purnea where the values range from 61 to 64 per cent) than in Chotanagpur districts (e.g., Santal Parganas, Hazaribagh, Dhanbad and Singhbhum—values below 50 per cent). On the other hand, if females are considered, the districts of Chotanagpur have somewhat higher proportions than the districts of North Bihar. This is a special feature of the higher participation of females in work in Chotanagpur Plateau.

If the overall dependency of the rural population as such on the primary sector is to be considered, the combined figures

of males and females will be more indicative. The industrial structure of the total rural population indicates that, of the 8 districts in which participation in the primary sector is higher than the State average, four districts, viz., Ranchi, Palamau, Santal Parganas and Hazaribagh lie in the Chotanagpur Plateau; three districts, viz., Champaran, Saharsa and Saran lie in the North Bihar Plain; and one district, viz., Gaya, lies in South Bihar Plain.

Participation in the secondary sector is comparatively high in the districts of Darbhanga, Bhagalpur and Monghyr. The first two districts are well known for their *khadi* and silk industries.

The tertiary sector employs comparatively small proportions of rural population in the Chotanagpur districts. The proportions are highest in Patna and Shahabad.

TABLE

PERCENTAGE OF WORKERS UNDER DIFFERENT SECTORS IN RURAL AREAS, 1961

State/District	Primary sector		Secondary sector		Tertiary sector	
	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7
BIHAR	**54.97**	**29.72**	**4.27**	**2.56**	**6.76**	**1.72**
Patna	54.07	26.11	5.06	2.49	9.91	30.96
Gaya	53.68	32.50	3.97	1.69	6.57	1.59
Shahabad	55.44	23.00	5.36	2.33	10.41	3.46
Saran	56.20	28.61	4.34	3.52	5.82	1.51
Champaran	63.08	26.58	3.45	1.52	4.49	0.88
Muzaffarpur	67.55	16.77	4.78	3.10	6.29	1.51
Darbhanga	61.16	20.04	4.85	5.52	6.58	1.85
Monghyr	54.54	24.87	4.92	3.54	9.61	2.52
Bhagalpur	51.59	28.38	4.98	3.05	9.64	2.36
Saharsa	55.11	32.78	2.94	1.76	5.81	1.60
Purnea	63.67	19.40	3.85	2.37	9.08	1.63
Santal Parganas	48.10	40.48	3.38	2.00	4.97	1.07
Palamau	51.76	37.70	2.62	1.18	5.16	1.58
Hazaribagh	48.66	39.54	4.39	1.78	4.69	0.94
Ranchi	44.67	45.66	3.14	1.90	3.65	0.98
Dhanbad	52.58	31.01	4.89	1.34	8.64	1.54
Singhbhum	42.27	42.29	5.49	1.96	5.67	2.32

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.

MAP NO. 71

INDUSTRIAL STRUCTURE OF URBAN POPULATION, 1961

Purpose

The map on the following page shows districtwise the distribution of urban workers of each sex into nine industrial categories and three broad sectors, viz., primary, secondary and tertiary.

Method

The percentages of workers of each sex to total working population have been used to present pyramidal diagrams in different districts. Nine horizontal bars, proportional to the percentages of workers in each industrial category, have been drawn for each sex. Males being represented by the bars on the left and females by those on the right. The nine industrial categories have been grouped into three sectors as follows :

PRIMARY—

I .. Cultivator

II .. Agricultural labourer

III .. Mining, quarrying and other primary activities

SECONDARY—

IV .. Household industry

V .. Manufacturing other than household industry

VI .. Construction

TERTIARY—

VII .. Trade and Commerce

VIII .. Transport, Storage and Communications

IX .. Other services

The bars for each sector have been suitably hatched. For facility of reference, the percentage of workers of each sex in each industrial category has also been indicated in the map.

Salient Features

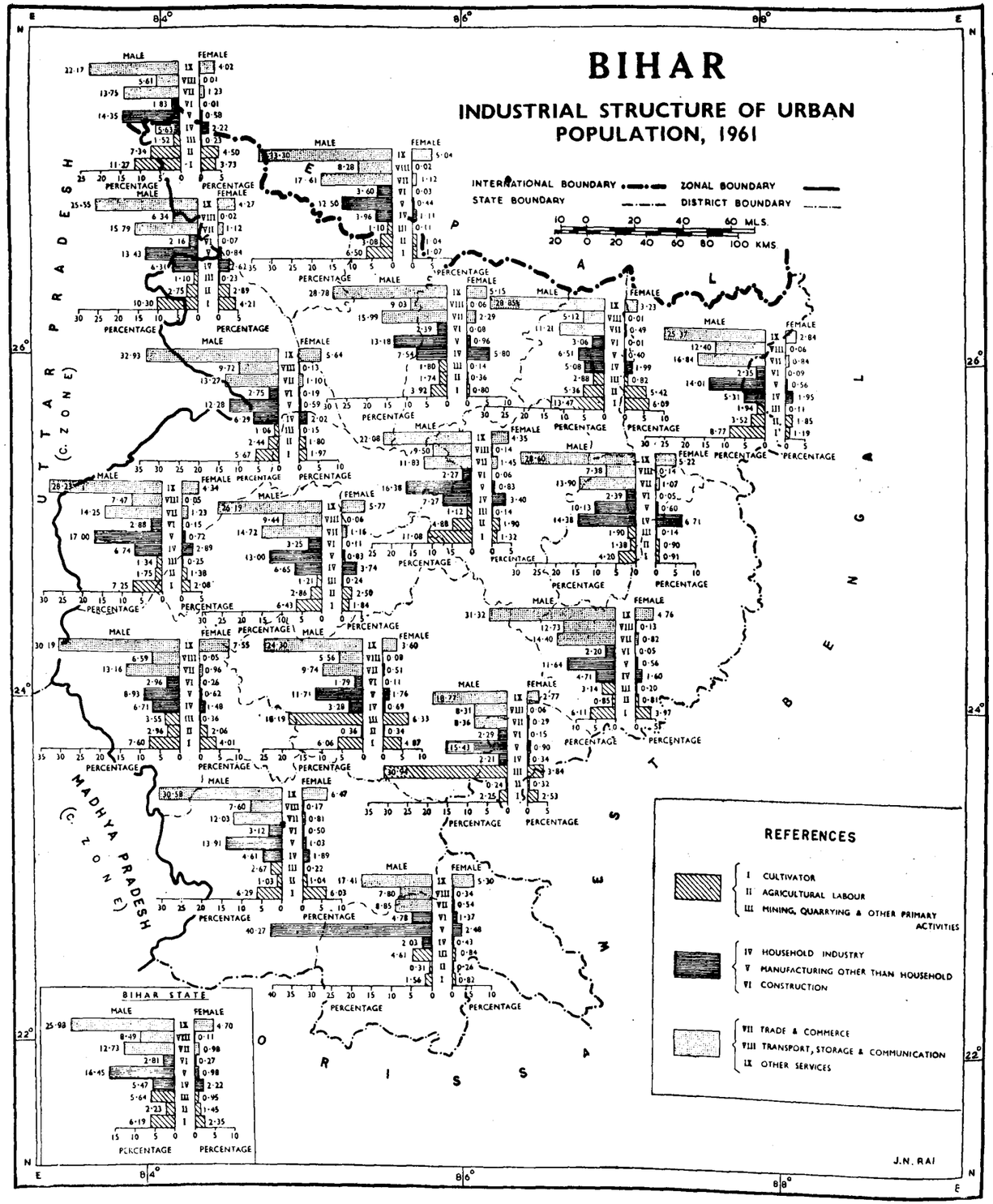
The industrial structure of urban population is quite different from that of rural population. Males comprise an even greater proportion of workers in the urban population than in the rural. There are only 163 female workers per 1,000 male workers in urban areas.

Out of the total working population, more than half among males are engaged in tertiary sector in the districts of Patna, Gaya, Muzaffarpur, Darbhanga, Purnea, Santal Parganas and Ranchi. The combined proportion of male and female workers in the tertiary sector to the total working population exceeds one half in the districts of Shahabad, Saran, Bhagalpur and Palamau.

There is appreciable concentration of workers in the primary sector in the districts of Dhanbad and Hazaribagh, mainly due to mining activities in these districts. In Saharsa over one-third of working population (21.71 per cent male and 12.33 per cent female) is engaged in the primary sector, mainly in agriculture and dairying.

More than half of the urban workers in Singhbhum are engaged in secondary sector. The city of Jamshedpur is well known for its various manufacturing industries. Employment in household industries plays a significant role in determining the proportions in some other districts with high proportions in the secondary sector.

MAP NO. 71

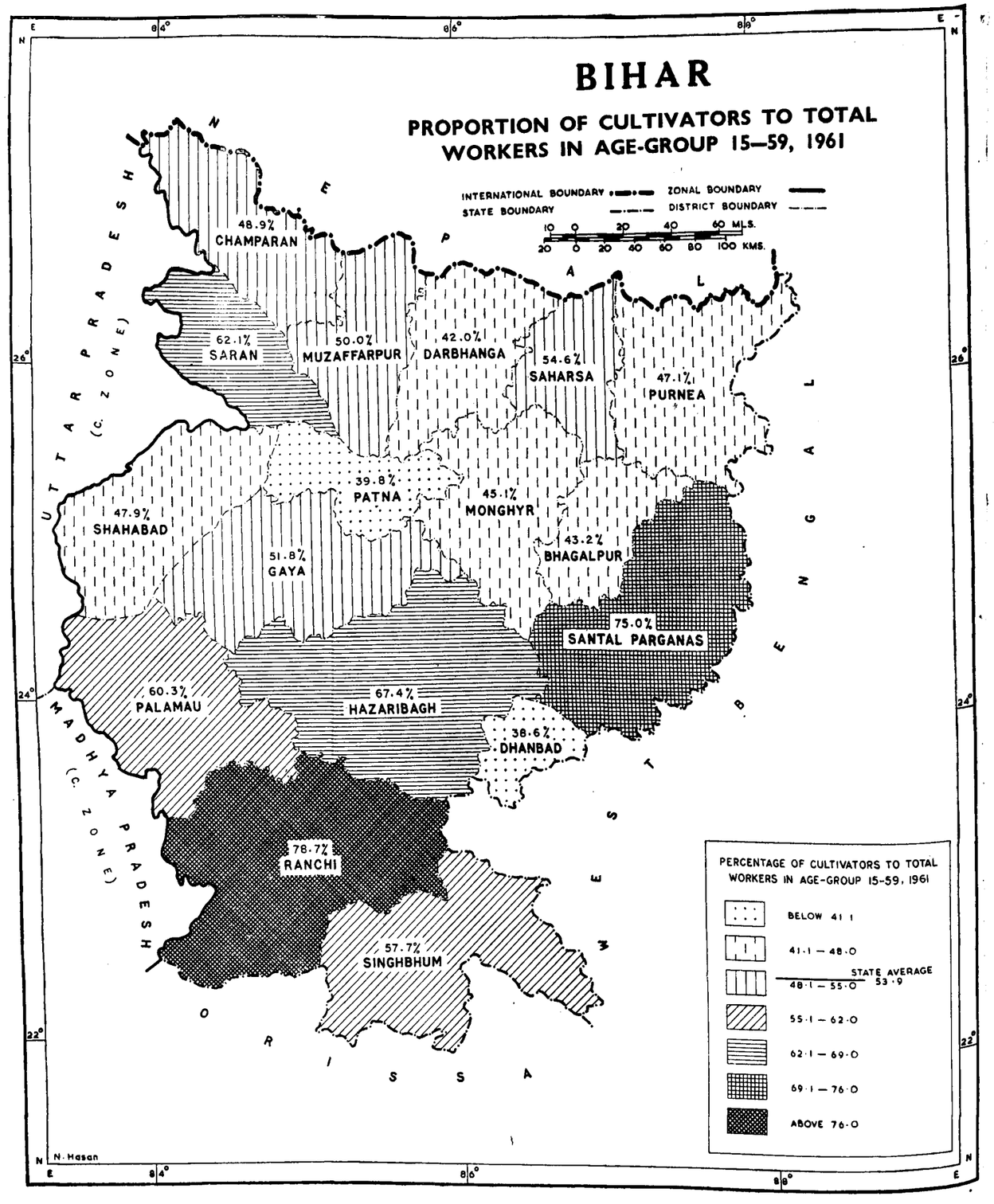


TABLE

PERCENTAGE OF WORKERS UNDER DIFFERENT SECTORS IN URBAN AREAS, 1961

State/District	Primary sector		Secondary sector		Tertiary sector	
	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7
BIHAR	**14.06**	**4.75**	**24.73**	**3.47**	**47.20**	**5.79**
Patna	9.17	3.92	21.32	2.80	55.92	6.87
Gaya	10.50	4.58	22.90	4.68	50.35	6.99
Shahabad	10.34	3.71	26.62	3.76	49.95	5.62
Saran	14.15	7.33	21.90	3.53	47.68	5.41
Champaran	20.13	8.46	21.81	2.81	41.53	5.26
Muzaffarpur	10.77	2.22	20.06	1.58	59.19	6.18
Darbhanga	7.45	1.30	23.11	6.84	53.80	7.50
Monghyr	17.08	3.36	25.92	4.29	43.41	5.94
Bhagalpur	7.48	1.95	26.90	7.36	49.88	6.43
Saharsa	21.71	12.33	14.65	2.40	45.18	3.73
Purnea	14.23	3.15	21.67	2.60	54.61	3.74
Santal Parganas	10.10	4.98	18.55	2.21	58.45	5.71
Palamau	14.11	6.43	18.60	2.36	49.94	8.56
Hazaribagh	25.33	11.54	16.78	2.56	39.60	4.19
Ranchi	9.99	7.29	21.64	3.42	50.21	7.45
Dhanbad	33.43	6.69	19.93	1.39	35.44	3.12
Singhbhum	6.48	1.92	47.08	4.28	34.06	6.18

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PROPORTION OF CULTIVATORS TO TOTAL WORKERS IN AGE GROUP 15—59, 1961

Purpose

The proportion of workers engaged in cultivation to the population of workers in the age group 15—59 is shown in this map separately for each district.

Method

The percentages for the districts have been grouped into seven categories, viz.,

(*i*) Below 41.1, (*iv*) 55.1—62.0,
(*ii*) 41.1—48.0, (*v*) 62.1—69.0,
(*iii*) 48.1—55.0, (*vi*) 69.1—76.0, and
(*vii*) above 76.0.

The districts have been shaded by seven different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 16,376,711 workers belonging to the age group 15—59 in the State, as many as 8,821,414 or more than half (53.9 per cent) are cultivators. This highlights the dominant role played by cultivation in the State's economy.

Since mining and other services account for the bulk of the workers in Dhanbad and Patna districts respectively, the percentages of cultivators in these districts are the lowest. However, the entire Chotanagpur Plateau (except Dhanbad) has noticeably high proportion of cultivators. No fewer than three out of every four workers in Ranchi and Santal Parganas in this age group are cultivators. Both the districts contain sizeable tribal populations and the special tenancy laws appear to have provided some safeguard to them from being uprooted from their lands.

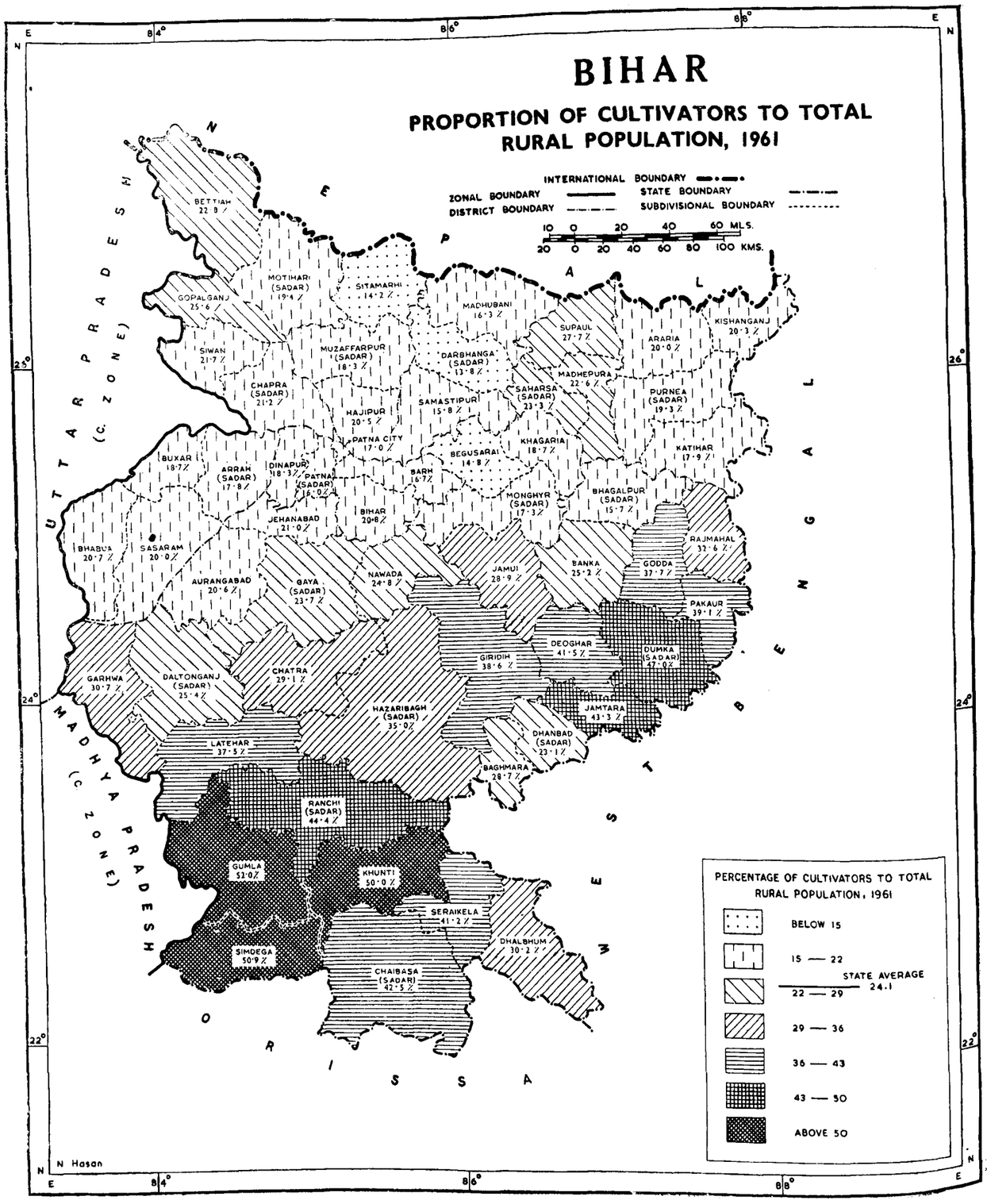
Saran and Saharsa are the only districts outside the Chotanagpur Plateau with proportions of cultivators higher than the State average. Apparently, the land holdings in Saran have more workers than are necessary or good, as is evidenced by the district sending out a large number of emigrants. The recent reclamation of vast areas of land in Saharsa perhaps explains its nominally higher proportion of cultivators.

TABLE

PERCENTAGE OF CULTIVATORS TO TOTAL WORKERS IN AGE GROUP 15—59, 1961

Rank	State/District	Percentage
1	Ranchi	78.7
2	Santal Parganas	75.0
3	Hazaribagh	67.4
4	Saran	62.1
5	Palamau	60.3
6	Singhbhum	57.7
7	Saharsa	54.6
	BIHAR	**53.9**
8	Gaya	51.8
9	Muzaffarpur	50.0
10	Champaran	48.9
11	Shahabad	47.9
12	Purnea	47.1
13	Monghyr	45.1
14	Bhagalpur	43.2
15	Darbhanga	42.0
16	Patna	39.8
17	Dhanbad	38.6

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B(i), Table B-I.



MAP NO. 73

PROPORTION OF CULTIVATORS TO TOTAL RURAL POPULATION BY SUBDIVISIONS, 1961

Purpose

The proportion of cultivators to total population in the rural areas of each subdivision in the State has been shown in this map.

Method

The subdivisional percentages have been grouped into seven categories, viz.,

(*i*) Below 15, (*iv*) 29—36,
(*ii*) 15—22, (*v*) 36—43,
(*iii*) 22—29, (*vi*) 43—50, and
(*vii*) above 50.

Each subdivision has been shaded by different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

24 per cent of the rural population in Bihar is comprised of cultivators. The proportions are above the State average in 25 subdivisions. These include all the subdivisions in Ranchi (4), Singhbhum (3), Hazaribagh (3), Santal Parganas (6), Palamau (3), and one each in Monghyr, Gaya, Bhagalpur, Saran, Saharsa and Dhanbad districts.

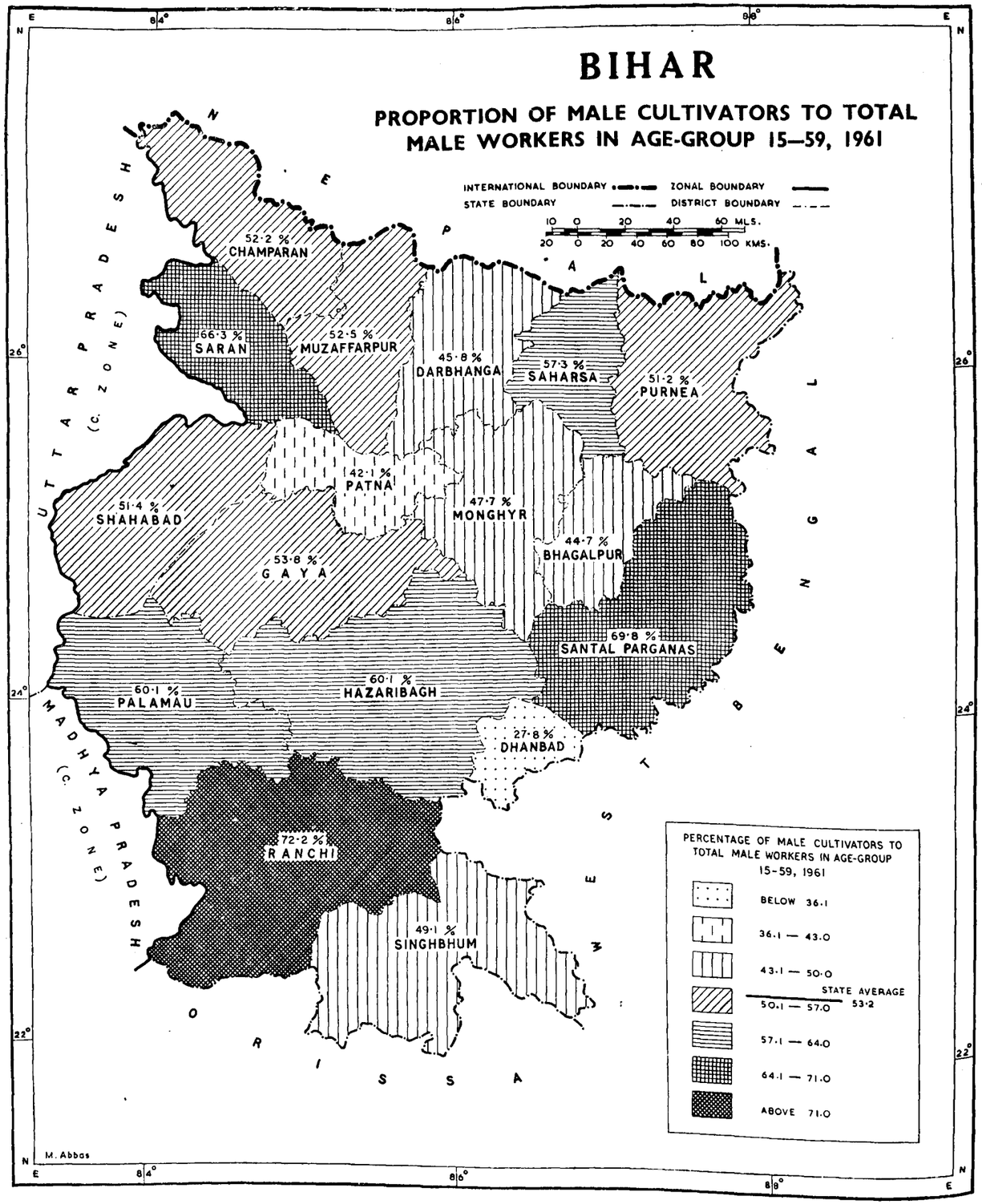
Thus, the districts of the Chotanagpur Plateau (except Dhanbad) have relatively higher proportions of cultivators in their rural population. On the other hand, the districts in the plains region have relatively lower proportions throughout. Only Gopalganj, Bettiah, Saharsa Sadar, Supaul and Madhepura subdivisions in the North Bihar Plain and Gaya Sadar, Nawada and Banka subdivisions in the South Bihar Plain fall in the same range as the State average.

TABLE

PROPORTION OF CULTIVATORS TO TOTAL RURAL POPULATION, 1961

State/District	Total rural cultivators	Total rural population	Percentage
BIHAR ..	**10,250,842**	**42,541,690**	**24.1**
Patna ..	436,454	2,355,850	18.5
Gaya ..	766,519	3,382,794	22.7
Shahabad ..	571,807	2,986,316	19.1
Saran ..	773,724	3,435,002	22.5
Champaran ..	597,286	2,860,566	20.9
Muzaffarpur ..	688,254	3,920,573	17.5
Darbhanga ..	652,010	4,222,472	15.4
Monghyr ..	578,237	3,011,883	19.2
Bhagalpur ..	303,331	1,524,417	19.9
Saharsa ..	408,930	1,656,139	24.7
Purnea ..	557,902	2,903,531	19.2
Santal Parganas	1,028,857	2,532,251	40.6
Palamau ..	334,408	1,131,625	29.6
Hazaribagh ..	777,439	2,195,227	35.4
Ranchi ..	939,106	1,936,087	48.5
Dhanbad ..	221,820	868,697	25.5
Singhbhum ..	614,758	1,609,260	38.2

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



MAP NO. 74

PROPORTION OF MALE CULTIVATORS TO TOTAL MALE WORKERS IN AGE GROUP 15—59, 1961

Purpose

This map illustrates the proportions of male cultivators to total male workers in the age group 15—59 in different districts of the State.

Method

The percentages for the districts have been grouped into seven categories, viz.,

(*i*) Below 36.1, (*iv*) 50.1—57.0,
(*ii*) 36.1—43.0, (*v*) 57.1—64.0,
(*iii*) 43.1—50.0, (*vi*) 64.1—71.0, and
(*vii*) above 71.0.

The districts have been shaded by seven different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 10,991,314 male workers belonging to the age group 15—59 in the State, as many as 5,848,348 or more than half (53.2 per cent) are cultivators. As in Map no. 72 showing similar features for the total population, the predominance of cultivation in the State's economy in regard to its male population is at once evident.

As in the case of total workers, Ranchi, Santal Parganas, Palamau and Hazaribagh in the Chotanagpur Plateau have higher proportions of male cultivators than the State average. Singhbhum and Dhanbad, because of their industrial bias, have noticeably lower proportions.

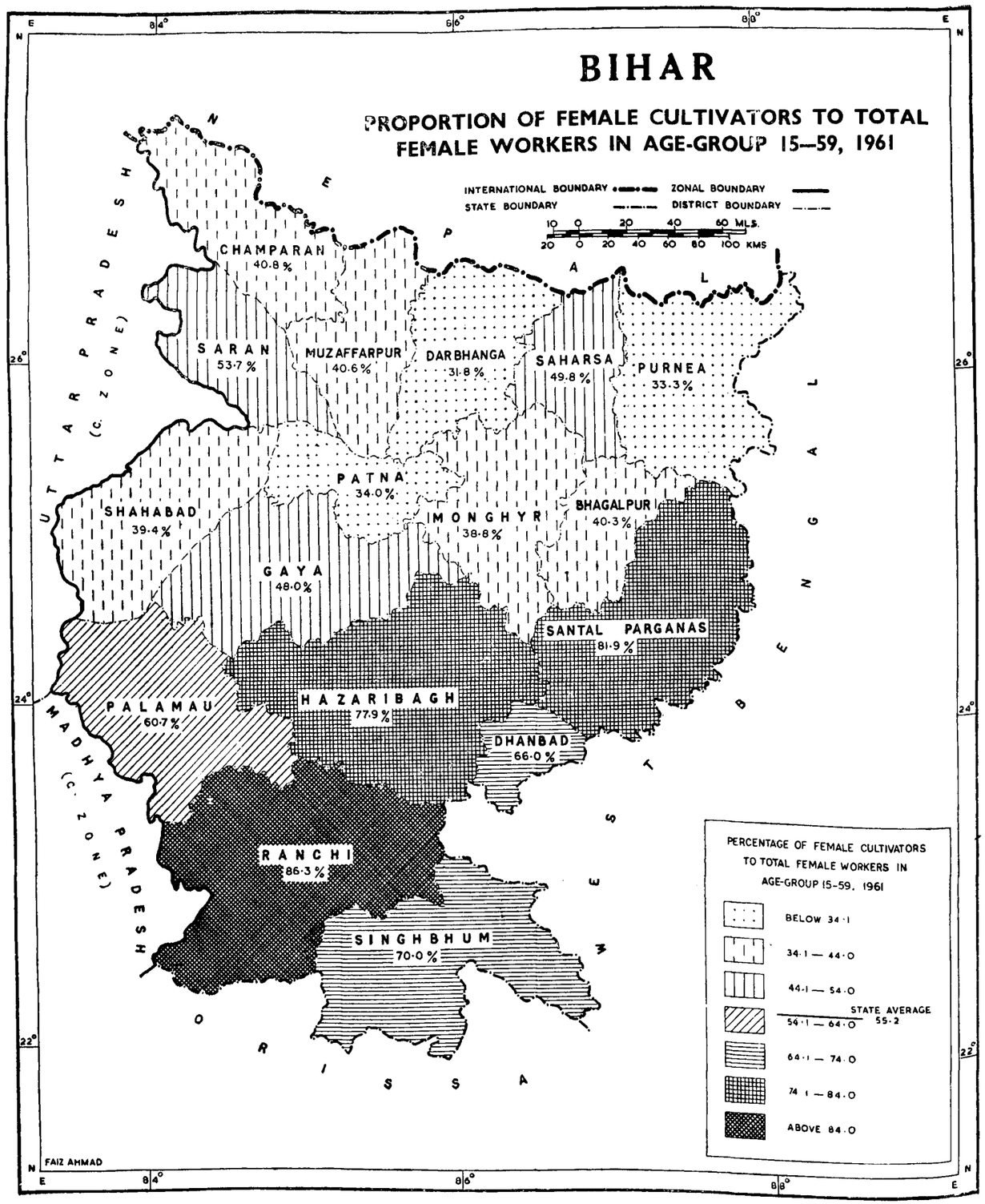
Although the plains regions apparently show comparatively smaller proportions of cultivators, their economy is by no means less dependent on agriculture. The difference is explained by the absence of agricultural labourers who constitute sizeable proportions of the working population in these districts.

TABLE

PROPORTION OF MALE CULTIVATORS TO TOTAL MALE WORKERS IN AGE GROUP 15—59, 1961

Rank	State/District	Percentage
1	Ranchi	72.2
2	Santal Parganas	69.8
3	Saran	66.3
4	Palamau	60.1
	Hazaribagh	60.1
6	Saharsa	57.3
7	Gaya	53.8
	BIHAR	**53.2**
8	Muzaffarpur	52.5
9	Champaran	52.2
10	Shahabad	51.4
11	Purnea	51.2
12	Singhbhum	49.1
13	Monghyr	47.7
14	Darbhanga	45.8
15	Bhagalpur	44.7
16	Patna	42.1
17	Dhanbad	27.8

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B(i), Table B-I.



MAP NO. 75

PROPORTION OF FEMALE CULTIVATORS TO TOTAL FEMALE WORKERS IN AGE GROUP 15—59, 1961

Purpose

This map shows the proportions of female cultivators to total female workers in the age group 15—59 in different districts of the State.

Method

The percentages for the districts have been grouped into seven categories, viz.,

(*i*) Below 34.1, (*iv*) 54.1—64.0,
(*ii*) 34.1—44.0, (*v*) 64.1—74.0,
(*iii*) 44.1—54.0, (*vi*) 74.1—84.0, and
(*vii*) above 84.0.

The districts have been shaded by seven different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 5,383,397 female workers in Bihar in the age group 15—59, as many as 2,973,066 or 55.2 per cent are cultivators.

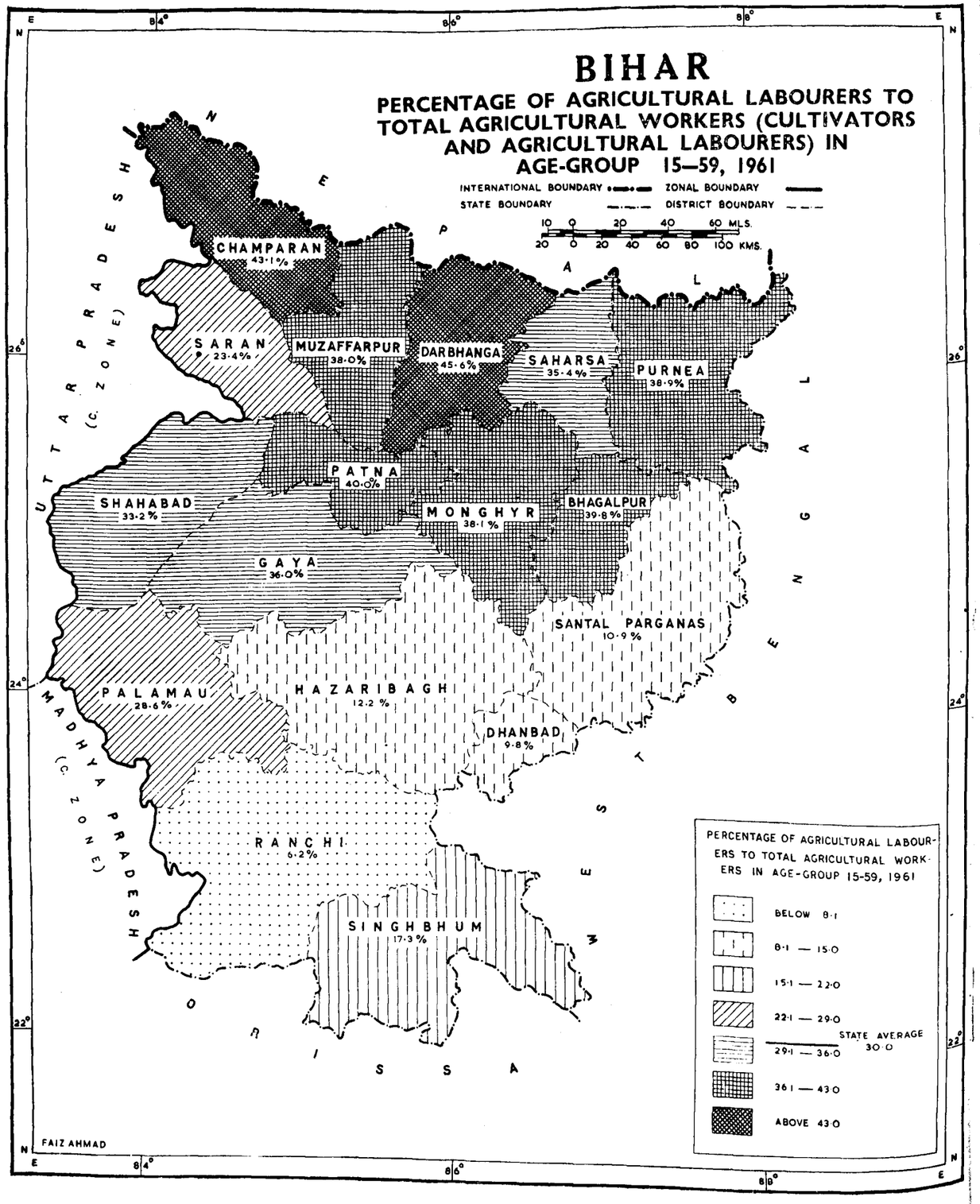
The proportions of cultivators among female workers are strikingly high in the districts of Chotanagpur Plateau. In the State as a whole, the range of variation among the districts is very wide. While the percentage is 86.3 in Ranchi, it drops down to 31.8 only in Darbhanga. It may be noted that the proportions are below 50 per cent in all the plains districts except Saran (53.7 per cent). These are largely explained by low participation rates among women in these districts.

TABLE

PROPORTION OF FEMALE CULTIVATORS TO TOTAL FEMALE WORKERS IN AGE GROUP 15—59, 1961

Rank	State/District	Percentage
1	Ranchi	86.3
2	Santal Parganas	81.9
3	Hazaribagh	77.9
4	Singhbhum	70.0
5	Dhanbad	66.0
6	Palamau	60.7
	BIHAR	**55.2**
7	Saran	53.7
8	Saharsa	49.8
9	Gaya	48.0
10	Champaran	40.8
11	Muzaffarpur	40.6
12	Bhagalpur	40.3
13	Shahabad	39.4
14	Monghyr	38.8
15	Patna	34.0
16	Purnea	33.3
17	Darbhanga	31.8

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B(i), Table B-I.



PERCENTAGE OF AGRICULTURAL LABOURERS TO TOTAL AGRICULTURAL WORKERS (CULTIVATORS AND AGRICULTURAL LABOURERS) IN AGE GROUP 15—59, 1961

Purpose

This map shows for each district the proportion of agricultural labourers to total agricultural workers (cultivators and agricultural labourers) in the age group 15—59.

Method

The districtwise percentages have been grouped into the following seven ranges :

(*i*) Below 8.1, (*iv*) 22.1—29.0,

(*ii*) 8.1—15.0, (*v*) 29.1—36.0,

(*iii*) 15.1—22.0, (*vi*) 36.1—43.0, and (*vii*) above 43.0.

The districts have been shaded by seven different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

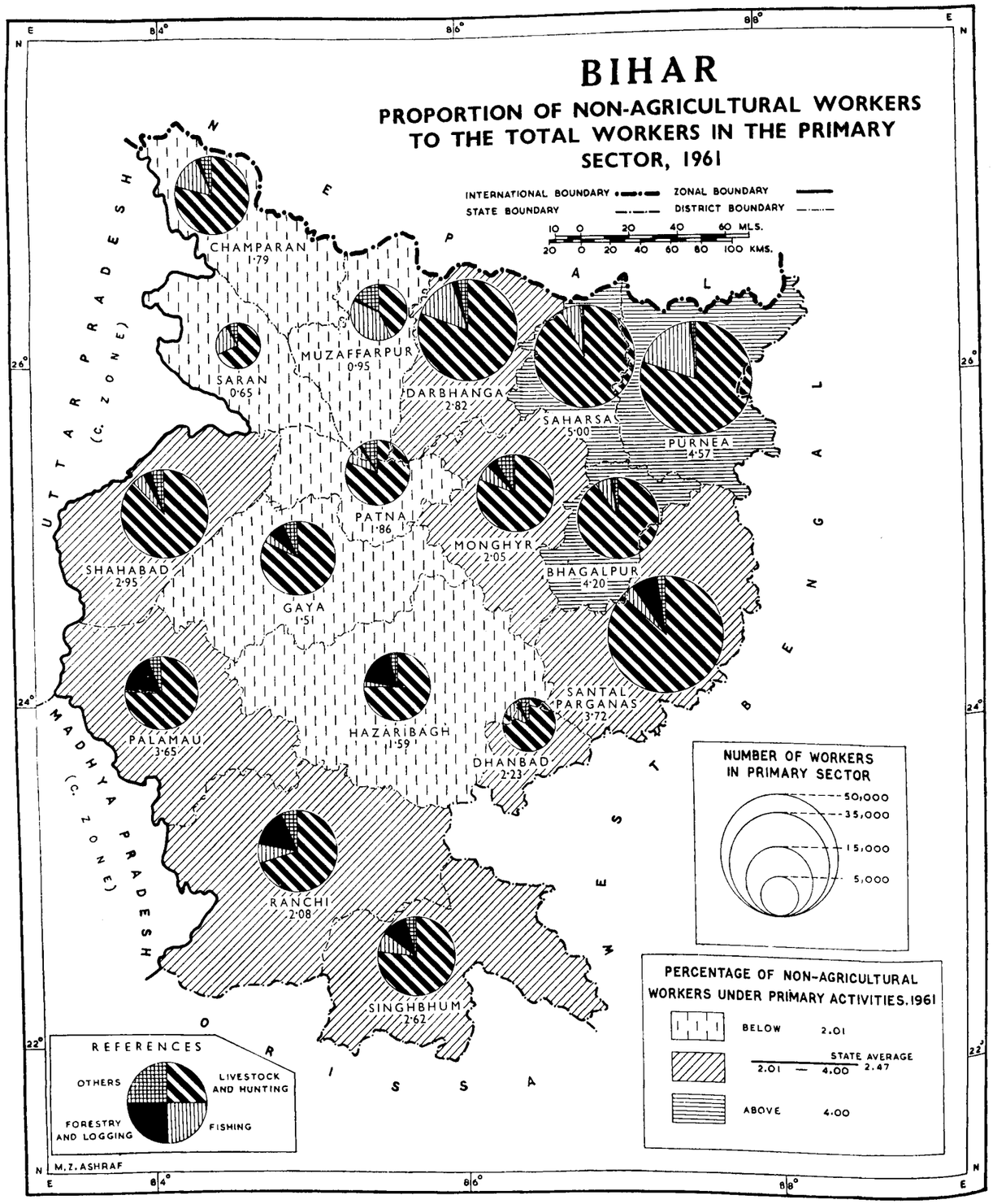
Agricultural labourers, who are essentially landless people engaged on land, comprise a large section of the agricultural working population in all districts in the plains region of the State. In Darbhanga, Champaran and Patna, no fewer than 4 out of every 10 agricultural workers are agricultural labourers. Even in other plains districts with the sole exception of Saran, the proportion of agricultural labourers is nowhere less than one-third. The districts in Chotanagpur Plateau appear to be much better off in this regard. That is so because most of the tribal people have some *raiyati* holding, big or small, and the special tenancy laws and social customs there have stood in the way of any large-scale alienation of their land.

TABLE

PERCENTAGE OF AGRICULTURAL LABOURERS TO TOTAL AGRICULTURAL WORKERS IN AGE GROUP 15—59, 1961

Rank	State/District	Percentage
1	Darbhanga	45.6
2	Champaran	43.1
3	Patna	40.0
4	Bhagalpur	39.8
5	Purnea	38.9
6	Monghyr	38.1
7	Muzaffarpur	38.0
8	Gaya	36.0
9	Saharsa	35.4
10	Shahabad	33.2
	BIHAR	**30.0**
11	Palamau	28.6
12	Saran	23.4
13	Singhbhum	17.3
14	Hazaribagh	12.2
15	Santal Parganas . ..	10.9
16	Dhanbad	9.8
17	Ranchi	6.2

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B(i), Table B-I.



PROPORTION OF NON-AGRICULTURAL WORKERS TO THE TOTAL WORKERS IN THE PRIMARY SECTOR, 1961

Purpose

This map depicts the proportion of non-agricultural workers to total workers in primary activities other than mining, in each district of Bihar.

Method

For the purpose of this map, workers in the primary sector are those in the following categories :

Category I—Cultivators.

Category II—Agricultural labourers.

Category III—(*i*) Livestock and hunting,
(*ii*) fishing,
(*iii*) forestry and logging, and
(*iv*) others.

Workers in mining have been excluded.

The percentages of workers in category III (excluding mining) to the total workers in categories I to III have been grouped into three ranges, viz.,

(*i*) Below 2.01, (*ii*) 2.01—4.00, and
(*iii*) above 4.00.

The districts have then been shaded by three different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

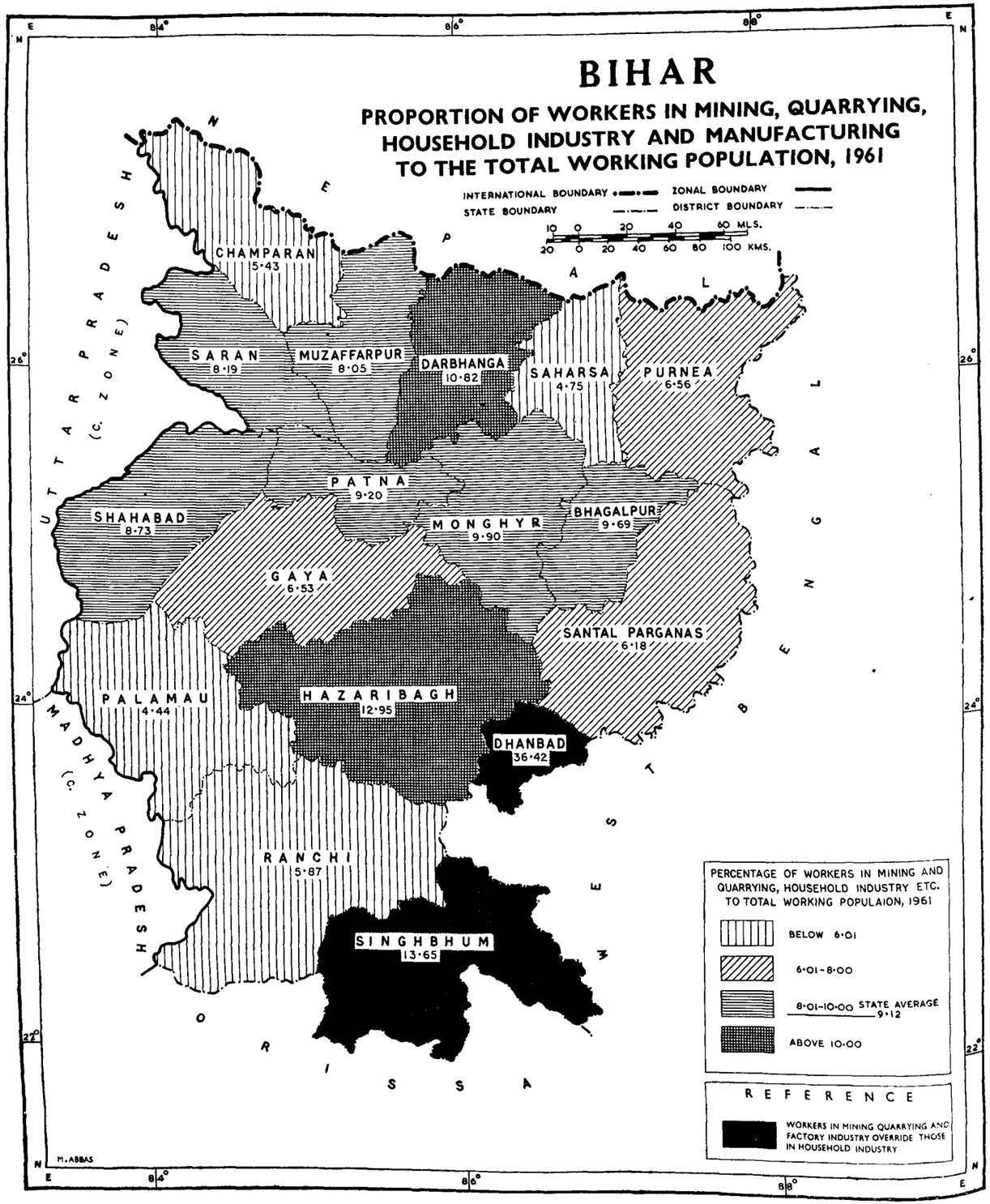
Circles proportionate to the total number of non-agricultural workers in the primary sector have also been drawn in each district. These have been divided into four sectors indicating the percentages of non-agricultural workers in each of the four kinds of activities in category III, as indicated above.

Salient Features

Agricultural workers comprise the main bulk (97.53 per cent) of workers in the primary sector throughout the State. The proportion of non-agricultural workers varies from the lowest of 0.65 per cent in Saran to the highest of 5.00 per cent in Saharsa. The proportion is below 2.01 per cent in a compact block of 6 districts, viz., Champaran, Saran, Muzaffarpur, Patna, Gaya and Hazaribagh. Another block consisting of the three contiguous districts of Saharsa, Purnea and Bhagalpur has proportions of over 4.00 per cent.

Livestock and hunting provide the mainstay of employment among non-agricultural workers. Their proportions in the districts range from 43.22 per cent in Muzaffarpur to 92.81 per cent in Saharsa. Employment in fishing is appreciable in Muzaffarpur (40.23 per cent), Saran (22.65 per cent) and Purnea (18.41 per cent). Forestry and logging account for significant proportions in Hazaribagh (18.16 per cent), Palamau (17.35 per cent) and Ranchi (15.24 per cent).

The statistics on which this map has been prepared are given in Appendix IX at the end of the volume.



MAP NO. 78

PROPORTION OF WORKERS IN MINING, QUARRYING, HOUSEHOLD INDUSTRY AND MANUFACTURING TO THE TOTAL WORKING POPULATION, 1961

Purpose

This map shows the proportion of workers in the secondary sector to the total working population in each district of Bihar.

Method

The proportions of workers in mining and quarrying (part of category III), household industry (category IV) and manufacturing other than household industry (category V) to the total working population have been grouped into four ranges, viz.,

(*i*) Below 6.01, (*iii*) 8.01—10.00, and
(*ii*) 6.01—8.00, (*iv*) above 10.00.

The districts have been shaded by four different hatches ranging from high to low. Districts in which the proportions of workers in mining, quarrying and factory industry exceed those in household industry have been shown in red.

Salient Features

Only 9.12 per cent of the working population of Bihar is engaged in the secondary sector, i.e., in mining and quarrying, household industry and manufacturing other than household industry. The proportions are above 10 per cent in Dhanbad, Singhbhum, Hazaribagh and Darbhanga. While Dhanbad and Singhbhum have relatively larger number of workers in mining, quarrying and factory industry, the position is just the reverse in Hazaribagh and Darbhanga. To some extent, mica splitting is done in Hazaribagh district on household industry basis. There are insignificant factory industries but no mining industries in Darbhanga. Household industries, chiefly spinning and weaving, are important in this district.

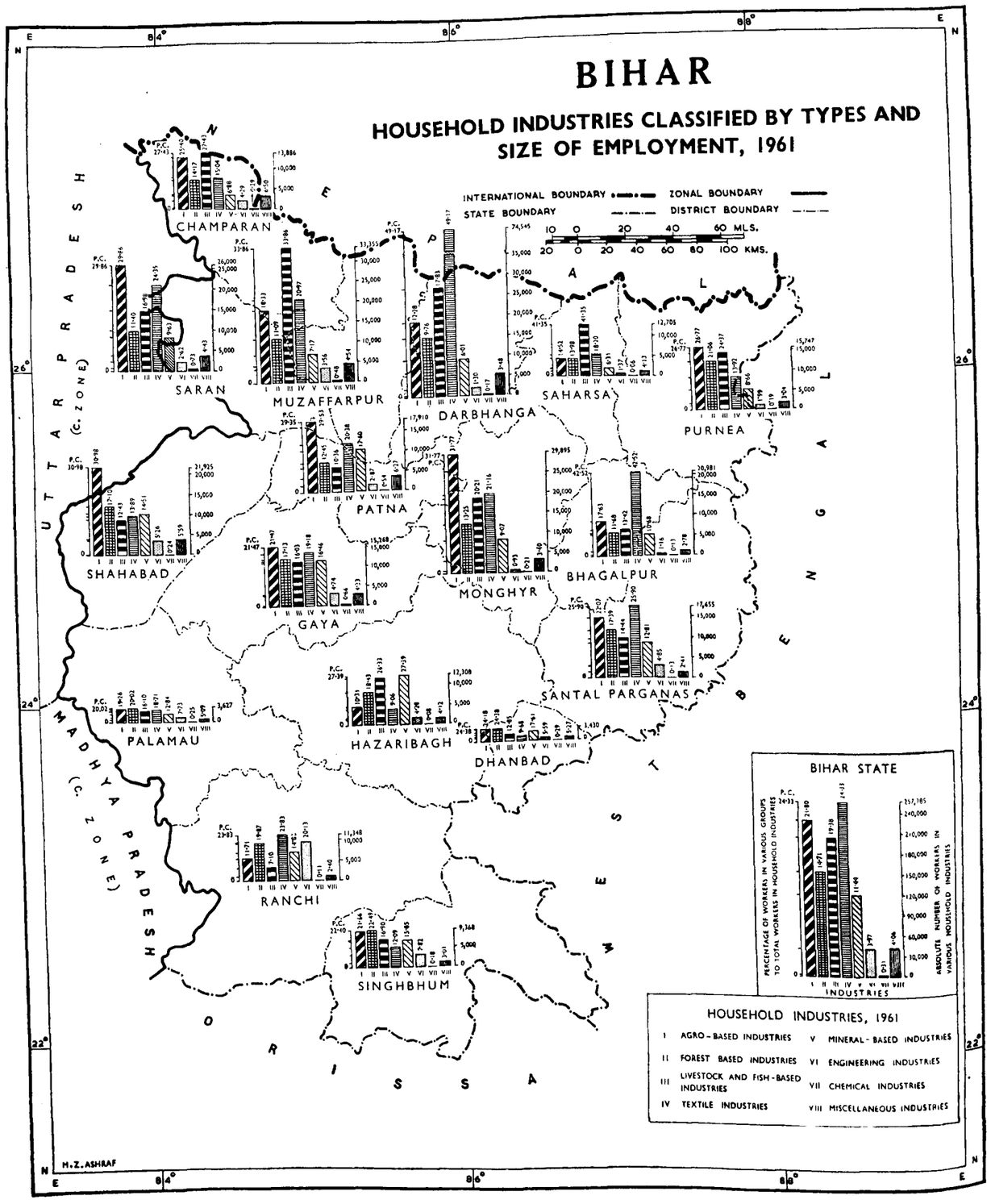
A compact block of six districts, lying in the same range as the State average, consists of Saran, Muzaffarpur, Shahabad, Patna, Monghyr and Bhagalpur. Employment in the secondary sector is lowest in Ranchi, Champaran, Saharsa and Palamau districts.

TABLE

PERCENTAGE OF WORKERS IN MINING, QUARRYING, HOUSEHOLD INDUSTRY AND MANUFACTURING TO THE TOTAL WORKING POPULATION, 1961

Rank	State/District	Percentage
1	Dhanbad	36.42
2	Singhbhum	13.65
3	Hazaribagh	12.95
4	Darbhanga .. .	10.82
5	Monghyr..	9.90
6	Bhagalpur	9.69
7	Patna	9.20
	BIHAR	**9.12**
8	Shahabad	8.73
9	Saran	8.19
10	Muzaffarpur	8.05
11	Purnea	6.56
12	Gaya	6.53
13	Santal Parganas	6.18
14	Ranchi	5.87
15	Champaran	5.43
16	Saharsa	4.75
17	Palamau	4.44

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts II-A and II-B (i).



HOUSEHOLD INDUSTRIES CLASSIFIED BY TYPES AND SIZE OF EMPLOYMENT, 1961

Purpose

This map shows for each district the pattern and size of employment in the following eight types of household industries :

(*i*) Agro-based industries,

(*ii*) Forest-based industries,

(*iii*) Livestock and fish-based industries,

(*iv*) Textile industries,

(*v*) Mineral-based industries,

(*vi*) Engineering industries,

(*vii*) Chemical industries, and

(*viii*) Miscellaneous industries.

Method

Eight bars proportionate to the employment strength have been drawn for each district. The bars have been shaded in different hatches for each type of industry. The percentages at the top of bars indicate the percentages of employment in each type of industry.

Salient Features

Agro-based industries account for the largest percentage of workers in household industries in 6 districts, viz., three in Patna division, along with Saran, Monghyr and Purnea. Their proportions vary between 21 and 32 per cent. In six other districts, agro-based industries occupy the second place in order of employment in household industries. They are relatively less important in Saharsa, Darbhanga, Ranchi and Hazaribagh.

Forest-based industries employ the largest proportions in Palamau, Dhanbad and Singhbhum (20—24 per cent), which have large areas under forests. The proportions in Ranchi and Hazaribagh (18 per cent) are high but other types of household industries provide employment to higher proportions of workers.

Proportions in livestock and fish-based industries are high in Saharsa (41 per cent), Muzaffarpur (34 per cent) and Champaran (27 per cent), all in the North Bihar Plain and having many rivers and tanks. Saharsa also has large pastures for cattle.

For the State as a whole, textile industries account for the largest share of workers in household industries. Among the districts, this holds good in respect of Darbhanga (49 per cent), Bhagalpur (43 per cent) and Santal Parganas (26 per cent). Darbhanga is well known for its *khadi* products while Bhagalpur is a centre of silk weaving.

Mineral-based industries are predominant in Hazaribagh (27 per cent) where mica splitting is also done on household industry basis.

Engineering industries account for the second largest proportion only in Ranchi district (20 per cent).

Chemical and miscellaneous industries do not occupy an important place among household industries in Bihar.

The table on the following page contains relevant statistics on the basis of which this map has been prepared.

TABLE

HOUSEHOLD INDUSTRIES CLASSIFIED BY TYPES AND SIZE OF EMPLOYMENT, 1961

State/District	Total population in household industry	Percentage of workers engaged in household industry in— I Agro-based industries	II Forest-based industries	III Livestock and fish-based industries	IV Textile industries	V Mineral-based industries	VI Engineering industries	VII Chemical industries	VIII Miscellaneous industries
1	2	3	4	5	6	7	8	9	10
BIHAR ..	**1,057,900**	**21.80**	**14.71**	**19.38**	**24.33**	**11.44**	**3.97**	**0.31**	**4.06**
Patna ..	60,655	29.53	12.45	10.36	20.38	17.60	2.87	0.54	6.27
Gaya ..	71,129	21.47	17.13	16.03	19.18	16.46	4.74	0.66	4.33
Shahabad ..	70,765	30.98	17.10	12.43	13.89	14.51	5.26	0.24	5.59
Saran ..	87,069	29.86	11.40	16.98	24.35	9.63	2.62	0.73	4.43
Champaran ..	50,629	25.40	14.17	27.43	15.04	6.88	4.29	0.29	6.30
Muzaffarpur ..	98,498	18.33	11.09	33.86	20.97	7.17	3.56	0.48	4.54
Darbhanga ..	151,616	12.28	9.76	17.83	49.17	6.01	1.30	0.17	3.48
Monghyr ..	94,097	31.77	13.25	20.21	21.16	9.07	0.93	0.21	3.40
Bhagalpur ..	49,346	17.63	11.68	13.42	242.52	10.68	1.16	0.13	2.78
Saharsa ..	30,722	14.52	13.98	41.35	18.20	6.31	1.37	0.06	4.13
Purnea ..	58,811	26.77	21.06	24.37	13.92	8.66	1.99	0.19	3.04
Santal Parganas ..	68,159	22.07	17.39	14.44	25.90	12.81	4.85	0.13	2.41
Palamau ..	18,120	19.26	20.02	16.10	18.71	12.84	7.73	0.25	3.09
Hazaribagh ..	44,938	10.31	18.43	26.33	9.06	27.39	4.28	0.08	4.12
Ranchi ..	47,619	11.71	19.87	7.10	23.83	14.85	20.13	0.11	2.40
Dhanbad ..	14,069	24.18	24.38	12.85	9.63	17.61	5.59	0.29	5.27
Singhbhum ..	41,658	21.66	22.49	16.90	12.09	15.85	7.82	0.18	3.01

NOTE : In Saharsa and Dhanbad, the total of all columns are not 100% because mining industry has been excluded from Household Industry.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B (i), Table B-IV Part C.

MAP NO. 80

FACTORY INDUSTRIES CLASSIFIED BY TYPES AND SIZE OF EMPLOYMENT, 1961

Purpose

The map on the following page shows districtwise the extent of employment in factory industries, separately for eight types of such industries.

Method

For the purpose of this map, employment in factory industry relates to persons engaged in category V (manufacturing other than household industry), and in category III (only plantation crops, Major Group 01). Factory industries have been classified into eight groups on the basis of the Major and Minor Groups of the Standard Industrial Classification, as under :

Type of Industry	Code number
I. Agro-based including plantation, foodstuff, beverage and tobacco industries.	01, 20 (excluding minor groups 204 and 206), 21 and 22.
II. Forest-based including manufacture of wood and paper products.	28 and 29
III. Livestock and fish-based including manufacture of leather, leather goods and production of dairy products.	31, 204 and 206
IV. Textile including cotton, jute, wool and silk products.	23 to 27
V. Mineral-based including non-metallic minerals, petroleum, coal, earthenware and basic metals.	34 to 36 (excluding minor group 369).
VI. Engineering including manufacture of machinery and electrical equipment.	369, 37 and 38
VII. Chemical including rubber, petroleum and coal products.	32 and 33
VIII. Miscellaneous industries ..	30 and 39

Eight bars proportionate to the number of workers engaged in each type of factory industry have been drawn in each district with a scale on the right. The percentage distribution of the eight types of industries is indicated on the left. Each bar has been suitably hatched to distinguish the various types of industry.

Salient Features

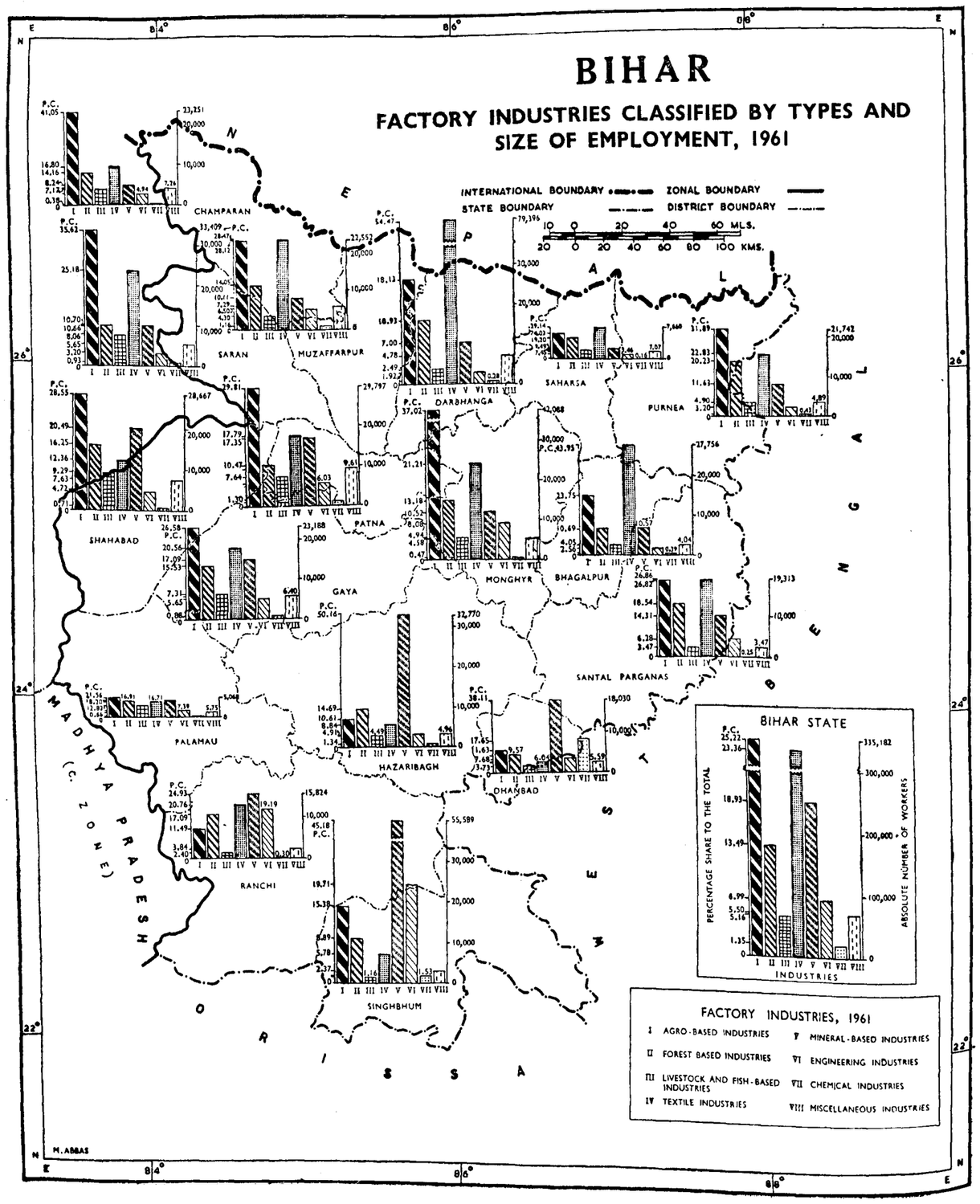
It is rather surprising that Darbhanga has the highest employment figure in factory industries (1.46 lakhs). Singhbhum, Monghyr and Shahabad also have employment exceeding 1 lakh. On the other hand, Dhanbad, Saharsa and Palamau have less than 50,000 each. While there are only few industries in Saharsa and Palamau, the low position of Dhanbad is due to the exclusion of mining industries from the present classification.

For the State as a whole, agro-based industries provide employment to the largest proportion of workers (25.22 per cent). Such industries account for the largest share of workers in factory industries in the districts of Monghyr, Shahabad, Patna, Saran, Gaya, Purnea, Champaran and Palamau. Agro-based industries provide the second largest proportion of workers in the districts of Darbhanga, Muzaffarpur, Santal Parganas, Bhagalpur and Saharsa. Thus, it is only in the four districts of Singhbhum, Hazaribagh, Ranchi and Dhanbad that agro-based industries do not occupy first or second position in regard to employment.

Forest-based industries are important in Hazaribagh (14.69 per cent) in which the proportion of such workers is second only to that in mineral-based industries. Since forest-based industries include manufacture of wood products, employment in such industries ranks third in 11 other districts, viz., Darbhanga, Monghyr, Shahabad, Saran, Muzaffarpur, Santal Parganas, Purnea, Bhagalpur, Champaran, Saharsa and Palamau.

Livestock and fish-based industries provide employment to only 5.16 per cent of workers in factory industries in the State,

MAP NO. 80



It is only in Palamau (12.82 per cent) that the proportion is significant.

Textile industries account for 23.36 per cent in the State. More than half of workers (54.47 per cent) in factory industries in Darbhanga district are employed in them. Such industries also provide largest employment in the districts of Muzaffarpur, Santal Parganas, Bhagalpur and Saharsa. Employment in textile industries exceeds 10 per cent in all districts except Hazaribagh, Dhanbad and Singhbhum.

Mineral-based industries account for the largest proportion of workers in Hazaribagh (50.16 per cent), Singhbhum (45.18 per cent), Dhanbad (38.11 per cent) and Ranchi (24.93 per cent). Workers in mineral-based industries have the second largest proportion in Palamau (18.20 per cent) and Shahabad (20.49 per cent).

Engineering industries provide employment to large proportions of workers in the districts of Singhbhum (19.71 per cent) and Ranchi (19.19 per cent).

Chemical industries cover 17.65 per cent of the workers in factory industries in Dhanbad district. The Sindri Fertiliser Factory and the Superphosphate Factory are apparently the main employers.

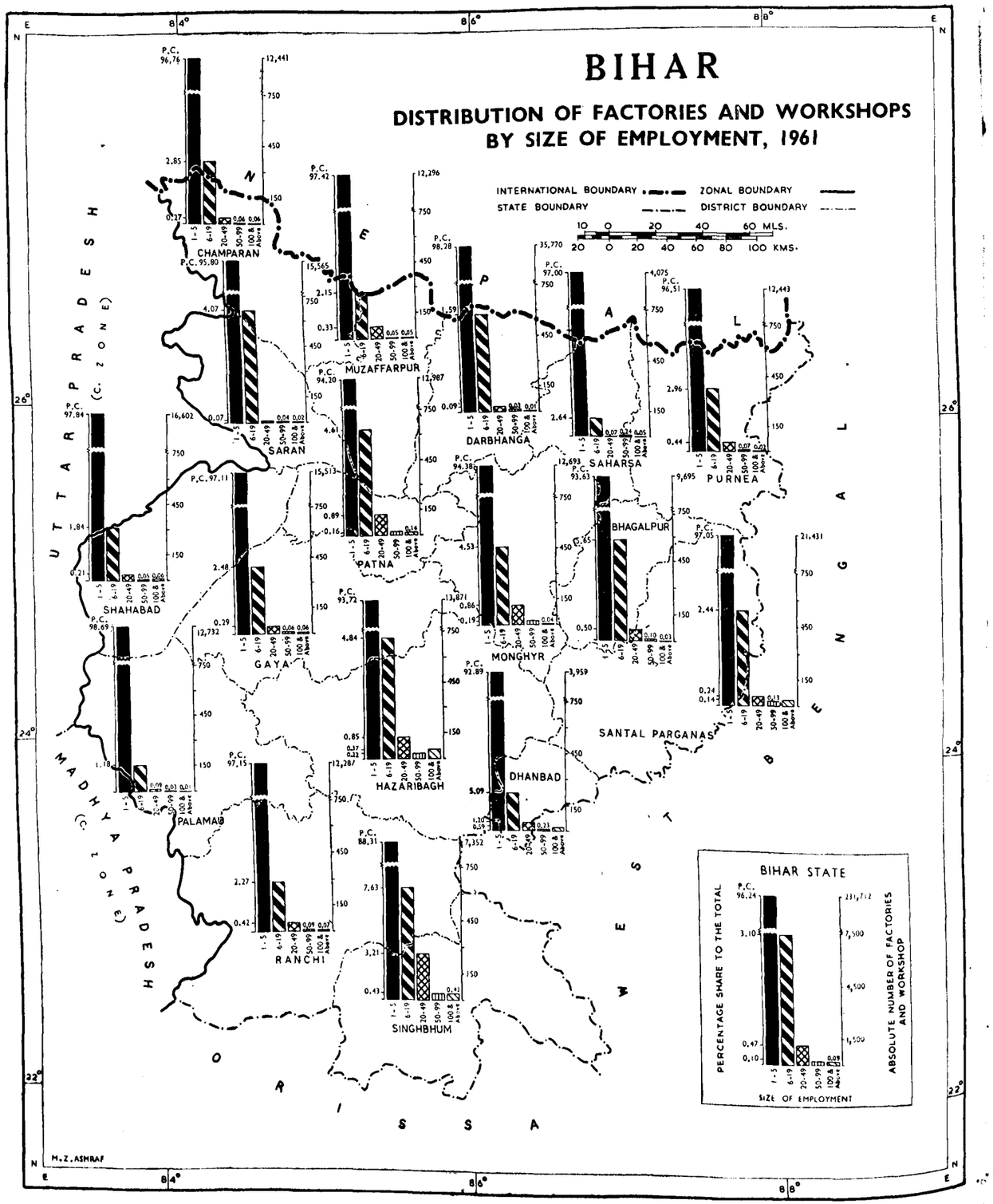
Miscellaneous industries account for only 5.5 per cent of workers in factory industries in the State. There is no district in which employment in such industries exceeds 10 per cent.

TABLE

FACTORY INDUSTRIES CLASSIFIED BY TYPES AND SIZE OF EMPLOYMENT, 1961

Rank	State/ District	Total of I to VIII	Percentage of workers engaged in factory industries in—							
			I	II	III	IV	V	VI	VII	VIII
1	2	3	4	5	6	7	8	9	10	11
	BIHAR	**1,328,933**	**25.22**	**13.49**	**5.16**	**23.36**	**18.93**	**6.99**	**1.35**	**5.50**
1	Darbhanga ..	145,774	18.13	10.93	2.49	54.47	7.00	1.92	0.28	4.78
2	Singhbhum	123,052	15.38	8.89	1.16	5.78	45.18	19.71	1 53	2.37
3	Monghyr ..	113,681	37.02	13.18	4.94	21.21	10.52	8.08	0.47	4.58
4	Shahabad ..	100,421	28.55	16.25	9.29	12.36	20.49	4.72	0.71	7.63
5	Patna ..	99,974	29.81	10.47	7.64	17.79	17.35	6.03	1.30	9.61
6	Saran ..	93,801	35.62	10.70	8.06	25.18	10.66	3.20	0.93	5.65
7	Gaya ..	87,230	26.58	15.53	7.31	20.56	17.09	5.65	0.88	6.40
8	Muzaffarpur	79,221	28.12	14.05	4.30	28.47	10.11	6.50	1.16	7.29
9	Santal Parganas	71,909	26.82	18.54	3.47	26.86	14.31	6.28	0.25	3.47
10	Purnea ..	68,173	31.89	20.23	4.90	22.83	11.63	3.20	0.43	4.89
11	Hazaribagh ..	65,332	10.61	14.69	4.49	8.84	50.16	4.91	1.34	4.96
12	Ranchi ..	63,475	11.49	17.09	2.40	20.76	24.93	19.19	0.30	3.84
13	Bhagalpur ..	63,154	23.75	10.69	4.05	43.95	10.57	2.56	0.39	4.04
14	Champaran ..	56,637	41.05	14.16	7.17	16.80	8.24	4.94	0.38	7.26
15	Dhanbad ..	47,307	11.63	9.57	3.73	6.04	38.11	7.68	17.65	5.59
16	Saharsa ..	26,286	24.03	19.20	7.45	29.14	9.49	3.46	0.16	7.07
17	Palamau ..	23,506	21.56	16.91	12.82	16.71	18.20	7.39	0.66	5.75

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B(i), Table B-IV Part C.



DISTRIBUTION OF FACTORIES AND WORKSHOPS BY SIZE OF EMPLOYMENT, 1961

Purpose

This map shows for each district the distribution of census houses used as factories and workshops classified by size of employment.

Method

Figures relating to the number of census houses used as factories and workshops have been obtained from Table E-III of the Report on Housing and Establishments* (compiled from the houselists prepared on the eve of 1961 Census). Factories and workshops have been classified into the following five categories according to the number of workers employed :

(*i*) 1—5, (*iii*) 20—49,
(*ii*) 6—19, (*iv*) 50—99, and
(*v*) 100 and above.

A workshop is defined as a place where "some kind of production, processing, repair or servicing goes on or where goods and articles are made and sold". A factory is a workshop registered under the Indian Factories Act.

Five bars have been drawn in each district proportional to the number of workers employed under each size class of employment, according to the scale given on the right of the bars. The scale on the left of the bars indicates the percentage share of persons employed in each size class of employment.

*Census of India, 1961, Bihar, Vol. IV, Part IV-B.

Salient Features

231,712 census houses were used as factories and workshops in the State in 1960. Darbhanga had the largest number of such factories and workshops(36,396), followed by Santal Parganas (22,083). Cotton spinning and weaving on handlooms and manufacture of *khadi* accounted for 72.8 per cent of the total factories and workshops in Darbhanga, and 38.4 per cent in Santal Parganas. Dhanbad, Singhbhum and Saharsa had less than 10,000 such factories and workshops, while the figures varied between 10,000 and 20,000 in the remaining districts.

The bulk of factories and workshops in the State have less than 6 workers each. They account for 96.24 per cent of total workers in such factories and workshops. Among the districts, the percentage is less than the State average in Bhagalpur, Monghyr, Patna, Saran, Singhbhum, Dhanbad and Hazaribagh. In these districts, the proportion of workers employed in factories having 6—19 persons each is correspondingly greater. It is significant that factories and workshops with 20—49 persons account for over 1 per cent of total workers only in Singhbhum (3.21 per cent) and Dhanbad (1.20 per cent). There were only 479 factories and workshops in the State with 50 or more workers in each. They provided employment to only 19 workers out of every 10,000.

A table containing the relevant statistics relating to this map appears on the next page.

TABLE

DISTRIBUTION OF FACTORIES AND WORKSHOPS BY SIZE OF EMPLOYMENT, 1961

State District	Size of Employment										Total
	1—5		6—19		20—49		50—99		100 and above		
	Persons	Per cent	Persons	Per cent	Persons	Per cent	Persons	Per cent	Persons	Per cent	
1	2	3	4	5	6	7	8	9	10	11	12
BIHAR ..	231,712	96.24	7,453	3.10	1,124	0.47	251	0.10	228	0.09	240,768
Patna ..	12,987	94.20	636	4.61	122	0.89	22	0.16	19	0.14	13,786
Gaya ..	15,513	97.11	397	2.48	46	0.29	10	0.06	9	0.06	15,975
Shahabad ..	16,602	97.84	312	1.84	35	0.21	9	0.05	11	0.06	16,969
Saran ..	15,565	95.80	661	4.07	12	0.07	6	0.04	3	0.02	16,247
Champaran ..	12,441	96.76	366	2.85	35	0.27	8	0.06	7	0.06	12,857
Muzaffarpur ..	12,296	97.42	271	2.15	42	0.33	6	0.05	6	0.05	12,621
Darbhanga ..	35,770	98.28	577	1.59	33	0.09	12	0.03	4	0.01	36,396
Monghyr ..	12,693	94.38	610	4.53	116	0.86	25	0.19	5	0.04	13,449
Bhagalpur ..	9,695	93.63	585	5.65	61	0.59	11	0.10	3	0.03	10,355
Saharsa ..	4,075	97.00	111	2.64	3	0.07	10	0.24	2	0.05	4,201
Purnea ..	12,443	96.51	381	2.96	57	0.44	9	0.07	3	0.02	12,893
Santal Parganas	21,431	97.05	538	2.44	54	0.24	28	0.13	32	0.14	22,083
Palamau ..	12,732	98.69	152	1.18	12	0.09	4	0.03	1	0.01	12,901
Hazaribagh ..	13,871	93.72	717	4.84	125	0.85	33	0.22	54	0.37	14,800
Ranchi ..	12,287	97.15	287	2.27	53	0.42	12	0.09	9	0.07	12,648
Dhanbad ..	3,959	92.89	217	5.09	51	1.20	10	0.23	25	0.59	4,262
Singhbhum ..	7,352	88.31	635	7.63	267	3.21	36	0.43	35	0.42	8,325

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part IV-B, Table E-III.

MAP NO. 82

DISTRIBUTION OF FOOD-PROCESSING INDUSTRIES, 1961

Purpose

The distribution of important food-processing industries in different districts of the State in 1961 by the size of employment and the location of factories is sought to be shown in separate maps on the following two pages.

Method

For the map showing the distribution by the size of employment figures relating to the number of registered factories in each of the following different kinds of food-processing industries have been taken into account :

(*i*) Sugar factories,
(*ii*) Rice and *dal* mills,
(*iii*) Flour mills,
(*iv*) Oil mills,
(*v*) Bakeries,
(*vi*) Dairies, and
(*vii*) Food preservation units.

Circles proportionate to the number of persons employed in each type of factory have been drawn in each district. The circles have been suitably hatched to indicate the seven types of food-processing industries. The number of factories of each type has been indicated within different circles in each district.

The locations of factories relating to—

(*i*) Rice and *dal* mills,
(*ii*) Flour mills,
(*iii*) Oil mills, and
(*iv*) Sugar factories

have been shown separately by means of dots in four different maps of small size.

Salient Features

Food-processing factories totalling 3,012 in the State in 1961 employed 37,016 persons in all.

Sugar factories, 53 in number, provided employment to 52.8 per cent of the workers in this sector. They were concentrated mostly in Tirhut division which had 25 of them. Patna and Shahabad had 1 each, employing nearly 1,000 persons in each case. The three factories in Gaya employed over 1,500 persons. Twenty-three sugar factories in Monghyr, Bhagalpur, Saharsa, Purnea and Santal Parganas were small units, employing only 767 persons in all.

Rice and *dal* mills as well as flour mills were comparatively more numerous, and distributed throughout the State. Though such factories accounted for 83.4 per cent of the total number, they provided employment to 36.8 per cent only of the workers in food-processing industries.

The district of Patna had the largest concentration of oil mills—more than 100 in all. Gaya and Shahabad had over 80 bakeries each, dairies and fruit-preserving units were comparatively few in number.

The relevant statistics on which these maps have been based are given in Appendix X at the end of the volume.

MAP NO. 82

BIHAR

DISTRIBUTION OF FOOD-PROCESSING INDUSTRIES, 1961

INTERNATIONAL BOUNDARY — ZONAL BOUNDARY
STATE BOUNDARY — DISTRICT BOUNDARY
10 0 20 40 60 MLS.
20 0 20 40 60 80 100 KMS.

CHAMPARAN
SARAN
MUZAFFARPUR
DARBHANGA
SAHARSA
PURNEA
SHAHABAD
PATNA
GAYA
MONGHYR
BHAGALPUR
SANTAL PARGANAS
PALAMAU
HAZARIBAGH
DHANBAD
RANCHI
SINGHBHUM
UTTAR PRADESH (C. ZONE)
MADHYA PRADESH (C. ZONE)
BIHAR
WEST BENGAL
ORISSA

SUGAR FACTORY
RICE AND DAL MILL
FLOUR MILL
OIL MILL
BAKERY FACTORY
DAIRY INDUSTRY
FRUIT PRESERVATION FACTORY

NUMBER OF PERSONS EMPLOYED
5,000
2,000
1,000
100
25 & BELOW
FIGURES INSIDE THE CIRCLES INDICATE THE NUMBER OF FACTORIES

M. ABBAS

BIHAR

DISTRIBUTION OF FOOD-PROCESSING INDUSTRIES, 1961

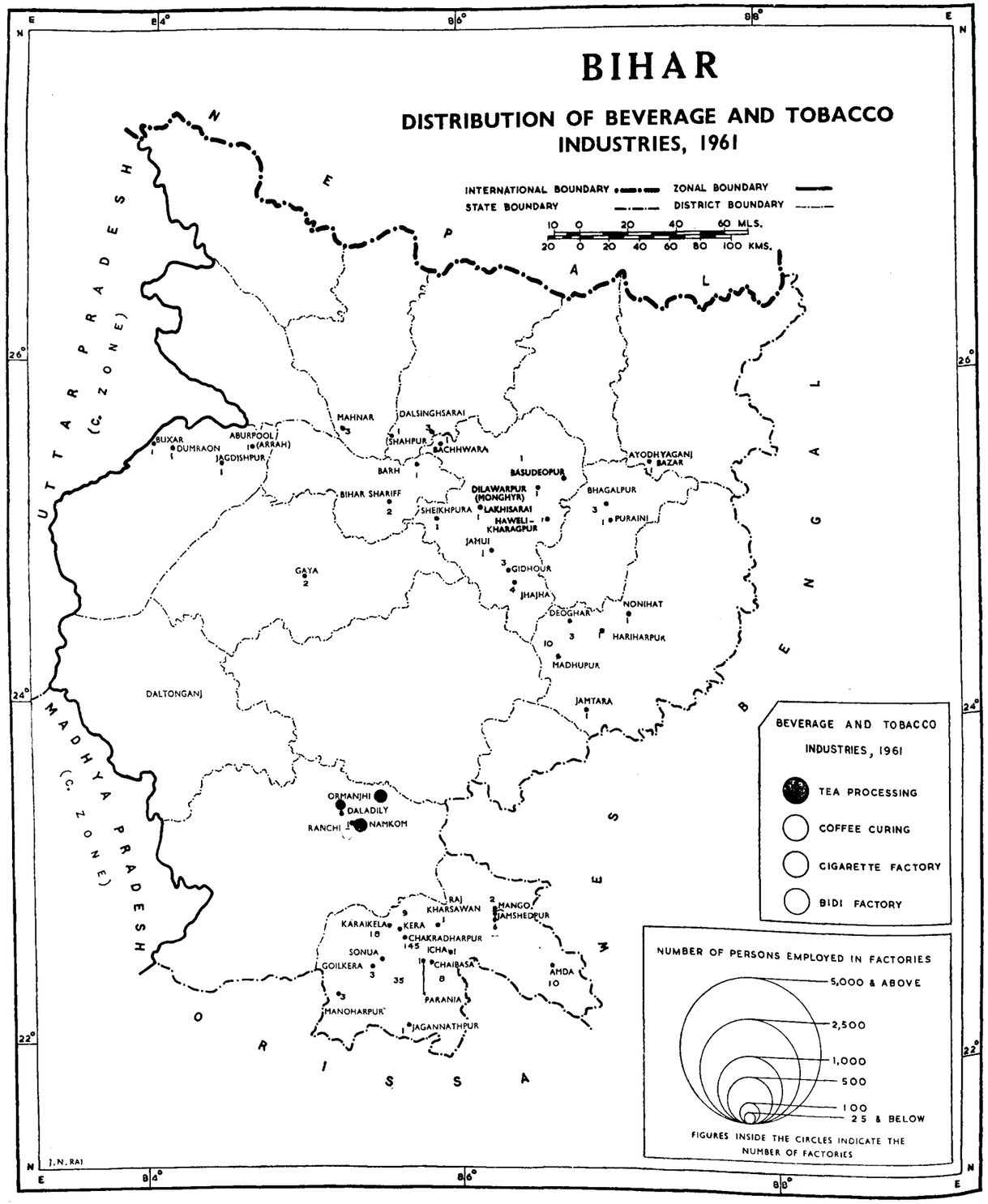
RICE AND DAL MILLS
RICE AND DAL MILLS
EACH DOT INDICATES ONE UNIT

OIL MILLS
OIL MILLS
EACH DOT INDICATES ONE UNIT

FLOUR MILLS
FLOUR MILLS
EACH DOT INDICATES ONE UNIT

SUGAR FACTORY
SUGAR FACTORY
EACH DOT INDICATES ONE UNIT

M. ABBAS



MAP NO. 83

DISTRIBUTION OF BEVERAGE AND TOBACCO INDUSTRIES, 1961

Purpose

This map shows the distribution of units relating to beverage (including tea-processing and coffee-curing) and tobacco (including cigarette and *bidi* manufacturing) industries in Bihar in 1961.

Method

Circles in different colours have been drawn for each type of industry. These circles are proportionate to the number of workers employed in each type of industry. The location and number of factories have been shown in the map. The data are based on the list of registered factories maintained by the Chief Inspector of Factories, Bihar.

Salient Features

Beverage industry in the State was confined only to Ranchi district which had 3 tea processing factories employing 93 persons in all, and one coffee-curing factory employing 3 persons.

The cigarette factory in Monghyr town, owned by the Imperial Tobacco Company, provided employment to 2,495 workers.

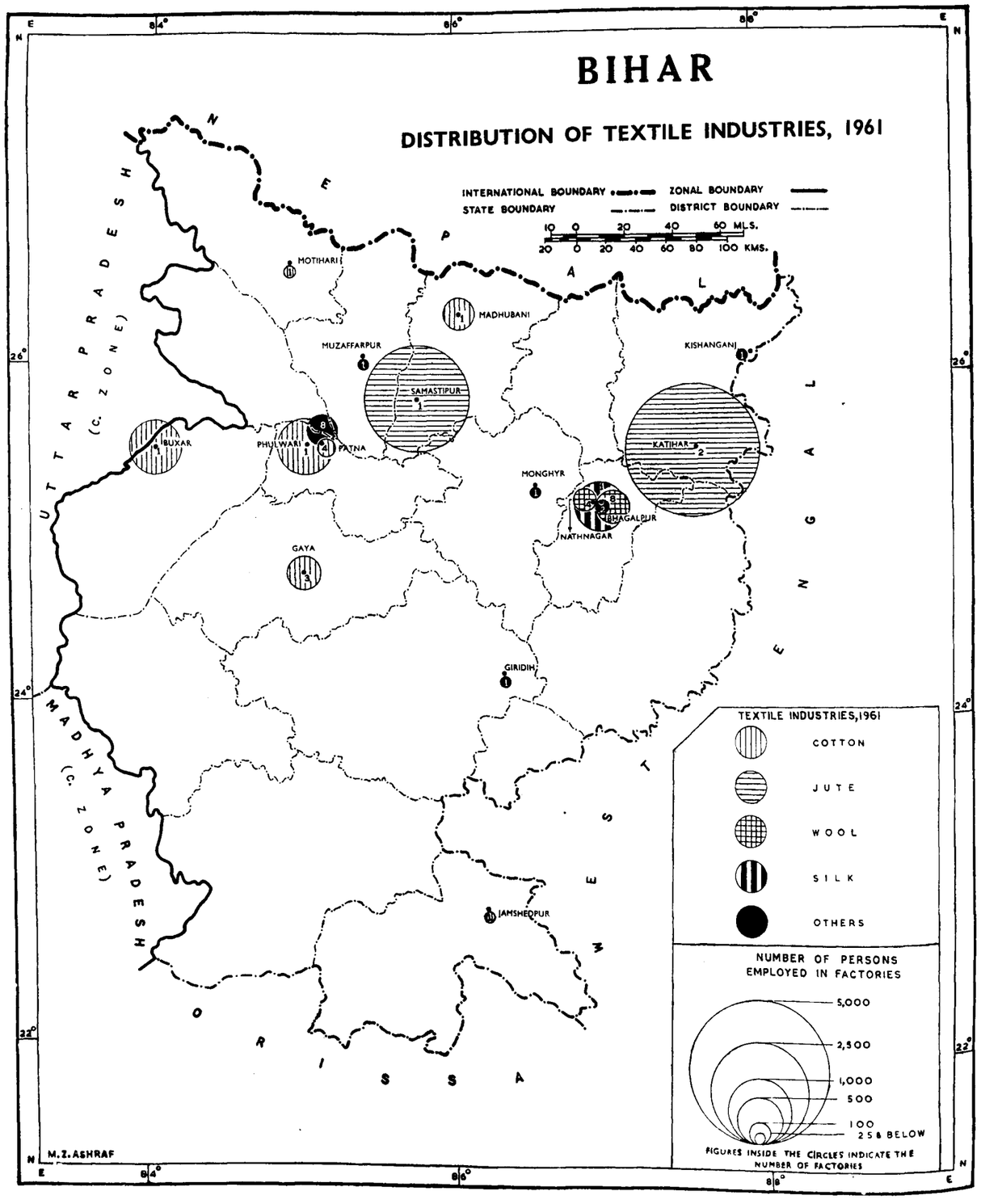
There were 297 registered *bidi* factories in the State employing 10,238 persons in all. Singhbhum district, supporting 243 *bidi* factories employing 7,945 persons, had the bulk of such units. The districts next in order were the Santal Parganas with 16 units and Monghyr with 13 units, providing employment to only about 640 persons in each case. There were no registered *bidi* factories in Saran, Champaran, Saharsa, Hazaribagh and Dhanbad districts.

TABLE

DISTRIBUTION OF BEVERAGE AND TOBACCO INDUSTRIES, 1961

State/District	Tea processing		Coffee curing		Cigarette factory		*Bidi* factory		Total	
	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment
1	2	3	4	5	6	7	8	9	10	11
BIHAR	**3**	**93**	**1**	**3**	**1**	**2,495**	**297**	**10,238**	**302**	**12,829**
Patna	..	..	..	..	..	..	3	349	3	349
Gaya	..	..	..	..	..	..	2	4	2	4
Shahabad	..	..	..	..	..	..	4	84	4	84
Saran	..	..	..	..	..	..	..	..	..	..
Champaran	..	..	..	..	..	..	..	..	..	..
Muzaffarpur	..	..	..	..	..	..	3	44	3	44
Darbhanga	..	..	..	..	..	..	4	43	4	43
Monghyr	..	..	..	..	1	2,495	13	634	14	3,129
Bhagalpur	..	..	..	..	..	..	4	346	4	346
Saharsa	..	..	..	..	..	..	..	..	..	..
Purnea	..	..	..	..	..	..	1	10	1	10
Santal Parganas ..	..	..	..	..	..	..	16	645	16	645
Palamau	..	..	..	..	..	..	3	105	3	105
Hazaribagh	..	..	..	..	..	..	..	..	..	..
Ranchi	3	93	1	3	..	..	1	29	5	125
Dhanbad	..	..	..	..	..	..	..	..	..	..
Singhbhum	..	..	..	..	..	..	243	7,945	243	7,945

SOURCE: Chief Inspector of Factories, Bihar.



DISTRIBUTION OF TEXTILE INDUSTRIES, 1961

Purpose

This map shows the districtwise distribution of textile industries manufacturing (*i*) cotton, (*ii*) jute, (*iii*) wool, (*iv*) silk, and (*v*) other goods in Bihar in the year 1961.

Method

Circles proportionate to the number of workers have been drawn for each type of textile industry. They have been suitably shaded by hatches to indicate the type of industry. The location and number of factories have also been shown in the map.

Salient Features

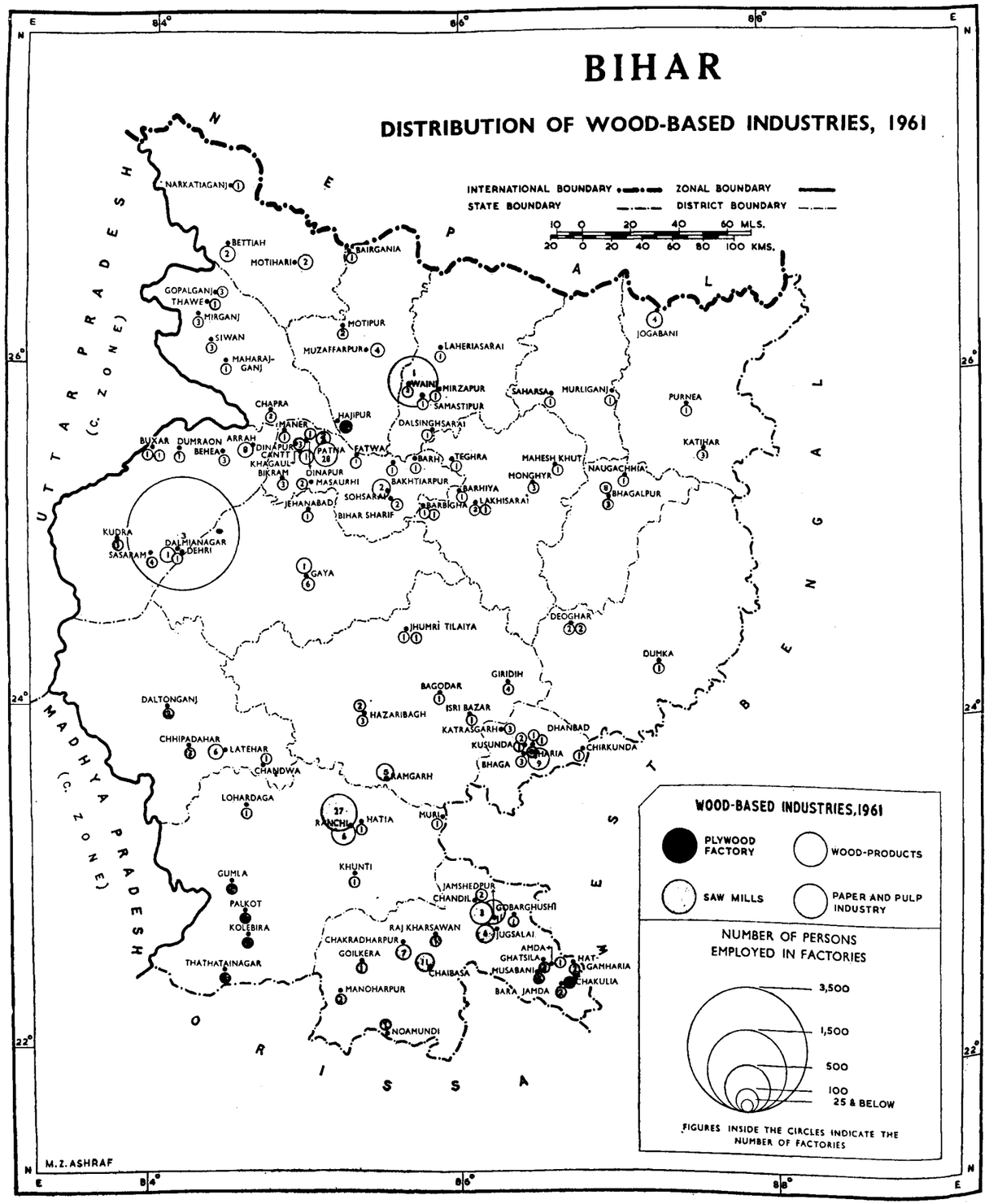
There were 42 registered factories manufacturing textile goods in the State. They provided employment to 10,850 persons in all. The two jute mills at Katihar in Purnea district and the one at Samastipur in Darbhanga district together employed 7,404 persons or 68.24 per cent of the total workers in textile industries.

The largest unit manufacturing cotton goods in Bihar was at Phulwari in Patna district. It employed 750 workers. The Buxar Central Jail factory in Shahabad came next with an employment figure of 695.

Bhagalpur was the only district in Bihar having silk factories, located mostly in Bhagalpur city. 12 such units employed 424 workers in all.

Factories manufacturing hosiery products, wearing apparel, coir products, umbrellas, etc., comprised the residuary group of textile industries. Bihar had 14 such factories in 1961, employing 309 persons in all. Patna district supported 8 such units employing 223 workers. It was by far the most advanced district in hosiery industry. Six more units of this kind were located at Muzaffarpur, Monghyr, Bhagalpur, Kishanganj (Purnea) and Giridih (Hazaribagh). The employment provided by them was, however, small.

The statistics on which this map has been prepared are given in Appendix XI at the end of the volume.



DISTRIBUTION OF WOOD-BASED INDUSTRIES, 1961

Purpose

This map shows the districtwise distribution of wood-based industries in Bihar in 1961. Such industries consist of (*i*) plywood factories, (*ii*) saw mills, (*iii*) factories manufacturing wood products, and (*iv*) paper and pulp factories.

Method

Circles in different colours, proportionate to the number of workers employed, have been drawn for each of the four types of wood-based industries. The location and number of factories have also been shown in the map.

Salient Features

In 1961 there were 302 wood-based registered factories in the State providing employment to 6,540 persons in all.

The three paper factories at Dalmianagar in Shahabad district were by far the largest and most conspicuous units in this category. They provided employment to 3,154 persons or 48.23 per cent of the total in wood-based industries. There were no paper factories in any other part of the State.

Saw mills numbering 262 in the State employed 2,094 workers in all. Singhbhum (52), Patna (45), and Ranchi (35) had relatively large number of such units providing employment to 300—500 persons in each case. Every district has a few saw mills.

Registered factories engaged in the manufacture of wood products numbered 35 in all employed 1,209 workers. Ranchi had the largest number of such units, i.e., six. There were no such units in Champaran, Saharsa, Purnea and Palamau districts, while the numbers in other districts varied from 1 to 4.

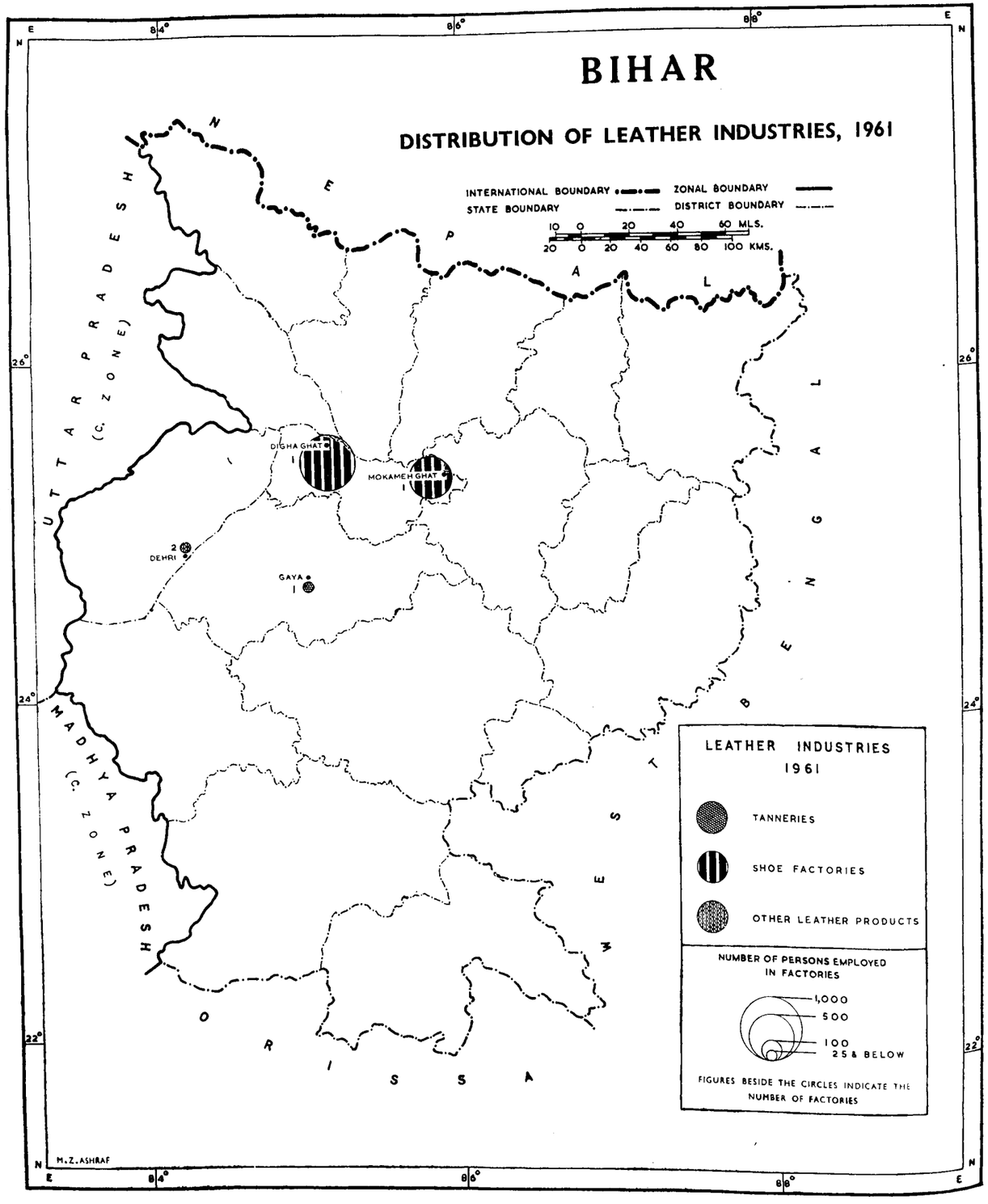
Only Muzaffarpur and Singhbhum had plywood factories, one in each, employing 83 persons in all.

TABLE

DISTRIBUTION OF WOOD-BASED INDUSTRIES, 1961

State/District	Plywood factories		Saw Mills		Factories manufacturing wood products		Paper and pulp factories		Total	
	Factories	Employment	Factories	Employment	Factories	Employment	Factories	Employment	Factories	Employment
1	2	3	4	5	6	7	8	9	10	11
BIHAR	**2**	**83**	**262**	**2,094**	**35**	**1,209**	**3**	**3,154**	**302**	**6,540**
Patna	..	..	45	306	3	61	..	..	48	367
Gaya	..	..	7	32	1	70	..	..	8	102
Shahabad	..	..	19	94	2	63	3	3,154	24	3,311
Saran	..	..	12	51	1	5	..	..	13	56
Champaran	..	..	5	112	..	..	..	..	5	112
Muzaffarpur	1	33	6	41	1	4	..	..	8	78
Darbhanga	..	..	5	25	2	604	..	..	7	629
Monghyr	..	..	11	30	2	12	..	..	13	42
Bhagalpur	..	..	9	43	3	30	..	..	12	73
Saharsa	..	..	2	7	..	..	..	..	2	7
Purnea	..	..	8	76	..	..	..	..	8	76
Santal Parganas ..	..	..	2	6	3	24	..	..	5	30
Palamau	..	..	12	83	..	..	..	..	12	83
Hazaribagh	..	..	14	126	4	63	..	..	18	189
Ranchi	..	..	35	409	6	143	..	..	41	552
Dhanbad	..	..	18	154	4	25	..	..	22	179
Singhbhum	1	50	52	499	3	105	..	..	56	654

SOURCE : Chief Inspector of Factories, Bihar.



DISTRIBUTION OF LEATHER INDUSTRIES, 1961

Purpose

This map shows the districtwise distribution of leather industries in the State, separately for (*i*) tanneries, (*ii*) shoe factories, and (*iii*) other leather products, for the year 1961.

Method

Circles have been drawn proportionate to the number of persons employed in each type of leather industry. These have been shaded separately for each type of industry. The location and number of factories are also indicated in the map.

Salient Features

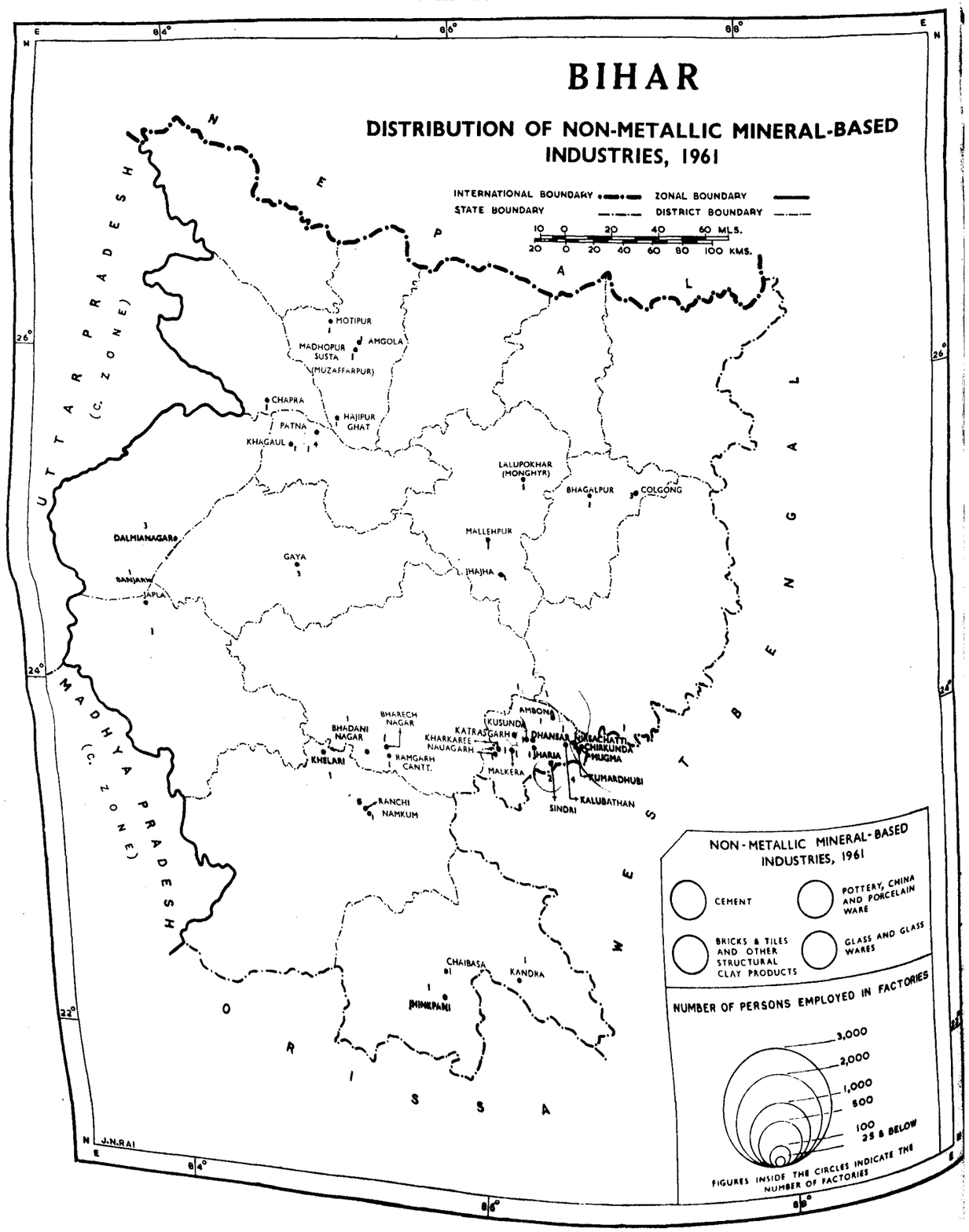
There were 5 registered leather factories in the State employing 1,211 persons in all. The two shoe factories (of Bata Co.) at Mokameh Ghat and Digha Ghat in Patna district formed the core of the leather industry in Bihar, and provided employment to as many as 1,201 workers. There was also a tannery at Gaya. Dehri (Shahabad) had 2 leather factories employing 9 persons in all.

TABLE

DISTRIBUTION OF LEATHER INDUSTRIES, 1961

District	Place	Number of factories	Total employment
(a) Tanneries ..	..	**1**	**1**
Gaya ..	Gaya ..	1	1
(b) Shoe factories	..	**2**	**1,201**
Patna ..	Digha Ghat ..	1	751
	Mokameh Ghat	1	450
(c) Other leather products	..	**2**	**9**
Shahabad ..	Dehri ..	2	9

SOURCE : Chief Inspector of Factories, Bihar.



DISTRIBUTION OF NON-METALLIC MINERAL-BASED INDUSTRIES, 1961

Purpose

This map shows the distribution of 4 types of non-metallic mineral-based industries, relating to manufacture of (*i*) cement, (*ii*) bricks and tiles and other structural clay works, (*iii*) pottery, china and porcelainware, and (*iv*) glass and glasswares, in Bihar State in the year 1961.

Method

Circles proportionate to the total number of workers employed in each type of factory have been drawn and shaded by different colours according to the type of industry. The location and number of factories have also been shown in the map.

Salient Features

In 1961, there were 58 registered factories for non-metallic mineral-based industries in the State, employing 16,418 persons.

The districts of Champaran, Darbhanga, Saharsa, Purnea and Santal Parganas had no such units.

Ten factories manufacturing cement employed 7,884 persons or 48.02 per cent of the total workers in non-metallic mineral-based industries. These factories were located at Banjari and Dalmianagar in Shahabad, Japla in Palamau, Khelari in Ranchi, Kumardhubi and Sindri in Dhanbad, and Jhinkpani in Singhbhum districts.

Factories manufacturing bricks, tiles and other structural clay products numbered 39 in the State and employed 5,622 persons.

There were 6 factories in Bihar engaged in manufacture of glass and glasswares. Two of them were located at Katrasgarh and Ambona in Dhanbad district, two at Bhadaninagar and Ramgarh Cantonment in Hazaribagh district, one at Kandra (near Jamshedpur) in Singhbhum district, and one in Patna district. The table below gives further details for each district :

TABLE

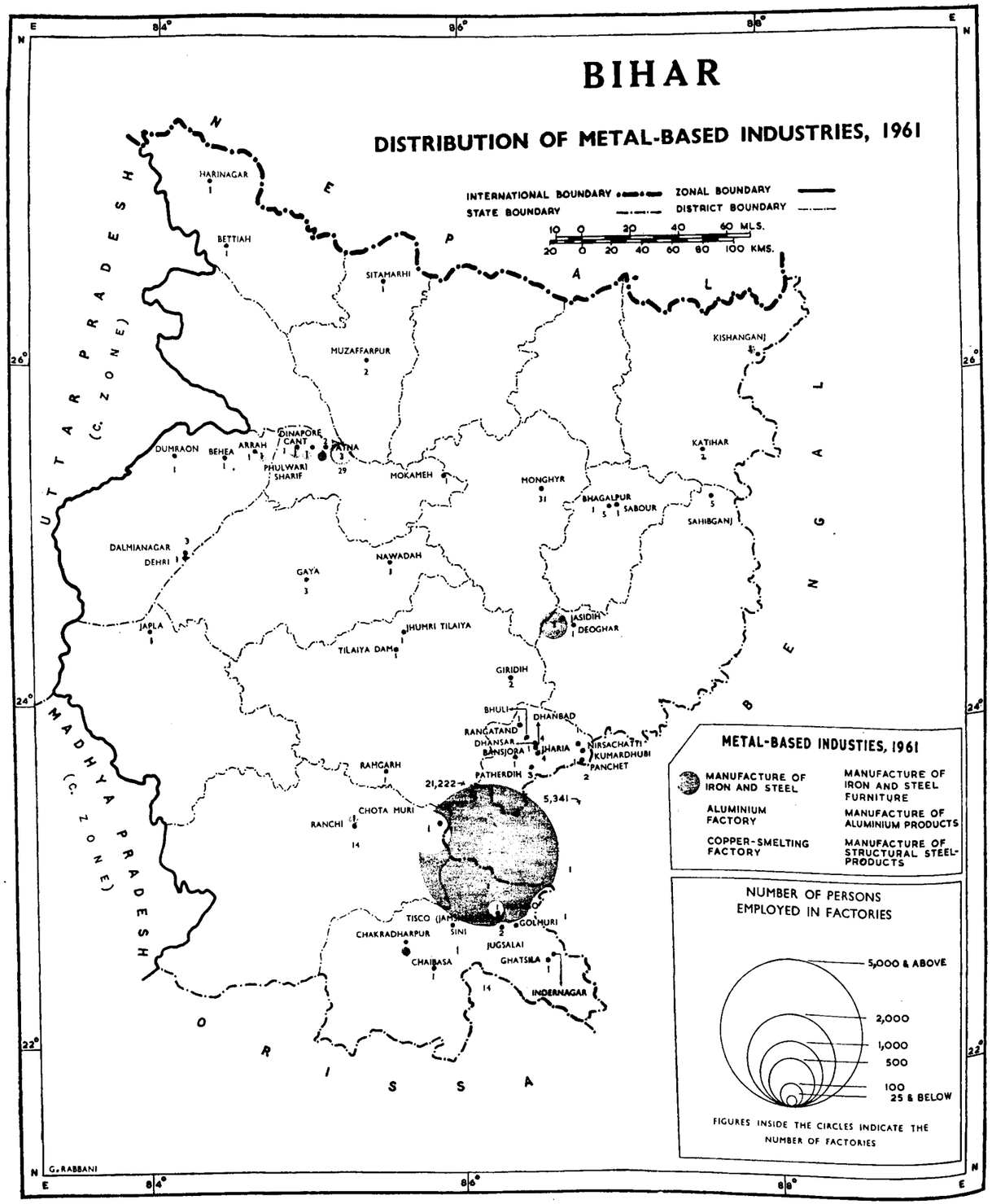
DISTRIBUTION OF NON-METALLIC MINERAL-BASED INDUSTRIES, 1961

State/District	Cement		Bricks and tiles*		Pottery†		Glass and glass-wares		Total	
	Factories	Employment	Factories	Employment	Factories	Employment	Factories	Employment	Factories	Employment
1	2	3	4	5	6	7	8	9	10	11
BIHAR	**10**	**7,884**	**39**	**5,622**	**3**	**247**	**6**	**2,665**	**58**	**16,418**
Patna	..	..	5	361	..	..	1	20	6	381
Gaya	..	..	3	153	.	..	..	..	3	153
Shahabad	4	1,424	..	..	..	..	..	..	4	1,424
Saran	..	..	1	3	..	..	..	..	1	3
Champaran	..	..	..	..	..	..	..	..	..	..
Muzaffarpur	..	..	4	116	..	..	..	..	4	116
Darbhanga	..	..	..	..	..	..	..	..	..	..
Monghyr	..	..	2	40	1	58	..	..	3	98
Bhagalpur	..	..	4	75	..	..	..	..	4	75
Saharsa	..	..	..	..	..	..	..	..	..	..
Purnea	..	..	..	..	..	..	..	..	..	..
Santal Parganas	..	..	..	..	..	..	..	..	..	..
Palamau	1	1,356	..	..	..	..	..	..	1	1,356
Hazaribagh	..	..	1	100	..	..	2	981	3	1,081
Ranchi	1	748	5	178	1	45	..	..	7	971
Dhanbad	3	3,405	14	4,596	..	..	2	1,100	19	9,101
Singhbhum	1	951	..	..	1	144	1	564	3	1,659

*Including other structural clay products.

†Including china and procelainware.

SOURCE : Chief Inspector of Factories, Bihar.



DISTRIBUTION OF METAL-BASED INDUSTRIES, 1961

Purpose

This map shows the distribution of the following six types of metal-based industires in Bihar in the year 1961:

(1) Manufacture of iron and steel including smelting, refining, rolling, and conversion into basic forms;

(2) Aluminium factories;

(3) Copper smelting factories;

(4) Manufacture of aluminium products;

(5) Manufacture of iron and steel furniture; and

(6) Manufacture of structural steel products such as joist, rail-sheet, plate, etc.

Method

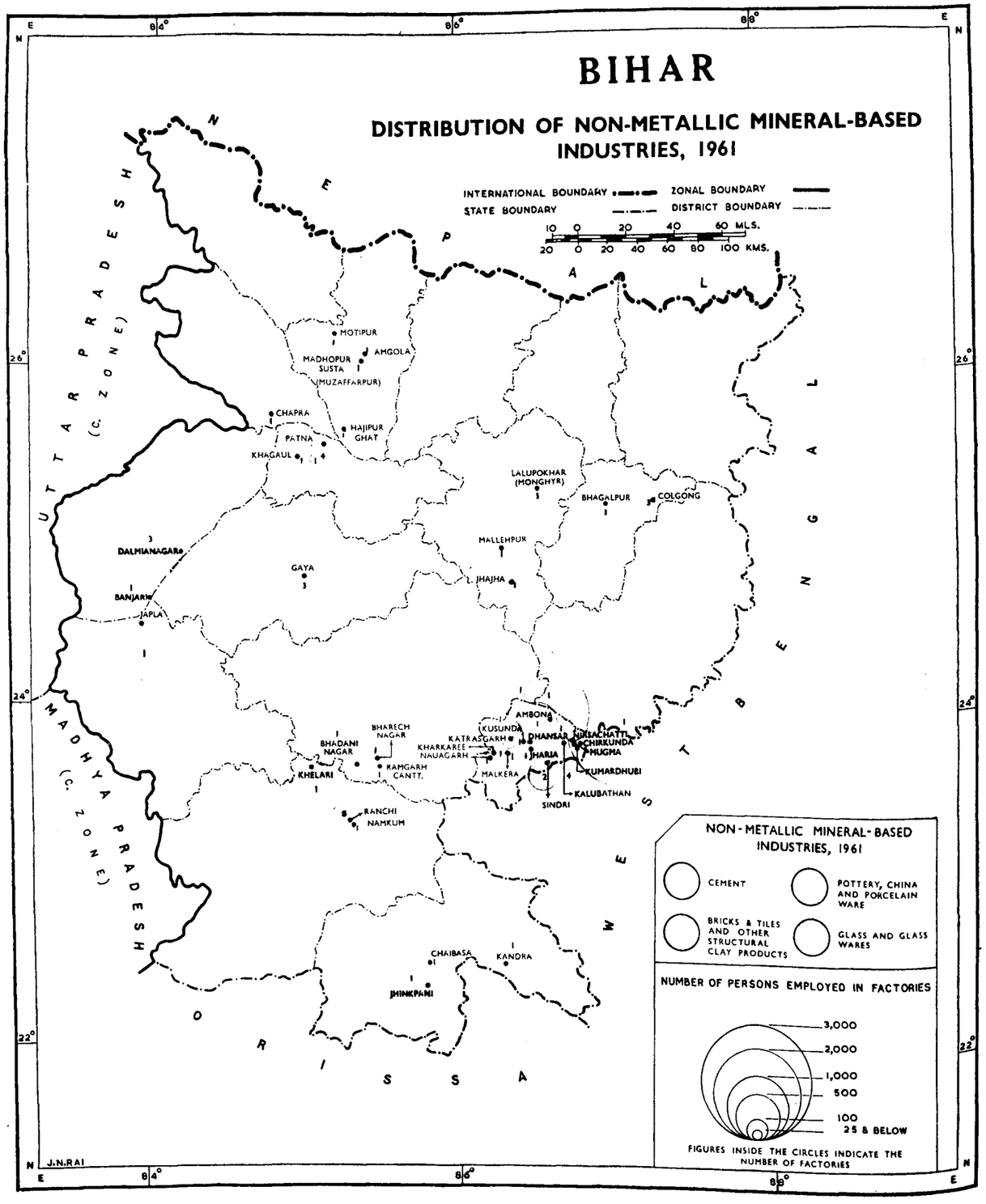
Circles proportionate to the number of workers employed have been drawn in different colours for each of the six types of metal-based industries. The locations and number of factories have also been shown in the map.

Salient Features

There were 170 registered factories engaged in metal-based industries in the State. They provided employment to 41,400 workers in all. The manufacturing of iron and steel absorbed the largest number of workers (21,464). Of the five steel plants in the country, the Tata Iron and Steel Co. at Jamshedpur is perhaps the oldest and employed 21,252 persons in 1961.

There was only one aluminium factory in the State at Muri in Ranchi district employing 427 persons. The only copper smelting factory in Bihar, and in India in 1961, was located at Maubhandar near Ghatsila in Singhbhum district. It employed 1,630 persons. The other unit at Nawada in Gaya district was engaged in small scale fabrication work. Manufacture of aluminium products at Patna and Bhagalpur employed 64 persons. Seven factories engaged in manufacture of iron and steel furniture employed nearabout 160 persons. The factories for manufacturing structural steel products accounted for the largest number of factories engaged in metal-based industries. Nearly 152 such factories employed 17,651 persons. All the districts except Saran, Darbhanga and Saharsa had some such units. The bulk of employment was, however, provided by 22 factories in Singhbhum (12,072) and 19 in Dhanbad (3,250).

The statistics on which this map has been prepared are given in Appendix XII at the end of the volume.



DISTRIBUTION OF NON-METALLIC MINERAL-BASED INDUSTRIES, 1961

Purpose

This map shows the distribution of 4 types of non-metallic mineral-based industries, relating to manufacture of (*i*) cement, (*ii*) bricks and tiles and other structural clay works, (*iii*) pottery, china and porcelainware, and (*iv*) glass and glasswares, in Bihar State in the year 1961.

Method

Circles proportionate to the total number of workers employed in each type of factory have been drawn and shaded by different colours according to the type of industry. The location and number of factories have also been shown in the map.

Salient Features

In 1961, there were 58 registered factories for non-metallic mineral-based industries in the State, employing 16,418 persons.

The districts of Champaran, Darbhanga, Saharsa, Purnea and Santal Parganas had no such units.

Ten factories manufacturing cement employed 7,884 persons or 48.02 per cent of the total workers in non-metallic mineral-based industries. These factories were located at Banjari and Dalmianagar in Shahabad, Japla in Palamau, Khelari in Ranchi, Kumardhubi and Sindri in Dhanbad, and Jhinkpani in Singhbhum districts.

Factories manufacturing bricks, tiles and other structural clay products numbered 39 in the State and employed 5,622 persons.

There were 6 factories in Bihar engaged in manufacture of glass and glasswares. Two of them were located at Katrasgarh and Ambona in Dhanbad district, two at Bhadaninagar and Ramgarh Cantonment in Hazaribagh district, one at Kandra (near Jamshedpur) in Singhbhum district, and one in Patna district. The table below gives further details for each district :

TABLE

DISTRIBUTION OF NON-METALLIC MINERAL-BASED INDUSTRIES, 1961

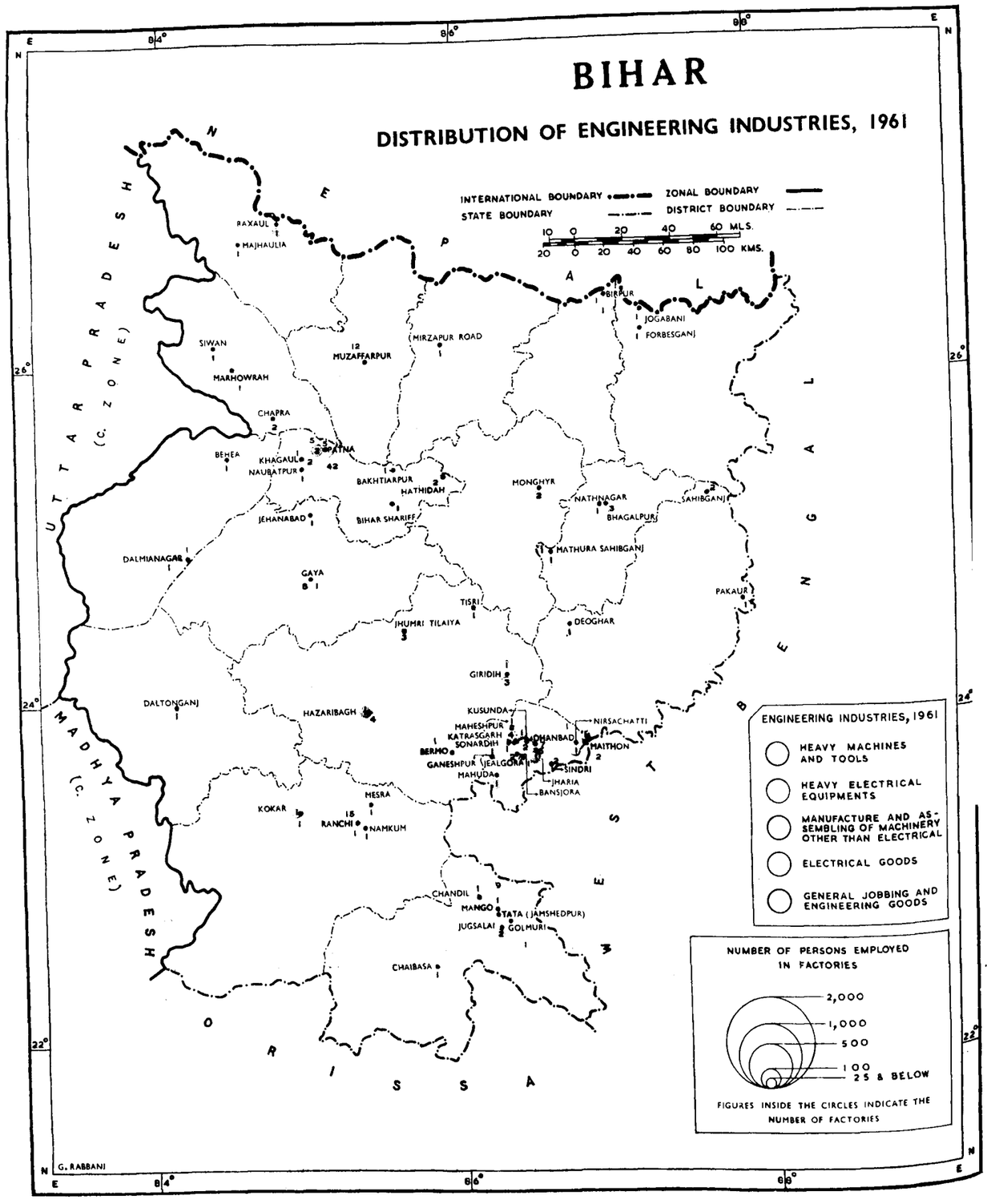
State/District	Cement		Bricks and tiles*		Pottery†		Glass and glass-wares		Total	
	Factories	Employment	Factories	Employment	Factories	Employment	Factories	Employment	Factories	Employment
1	2	3	4	5	6	7	8	9	10	11
BIHAR	**10**	**7,884**	**39**	**5,622**	**3**	**247**	**6**	**2,665**	**58**	**16,418**
Patna	..	..	5	361	..	..	1	20	6	381
Gaya	..	..	3	153	.	..	..	..	3	153
Shahabad	4	1,424	..	..	..	..	..	..	4	1,424
Saran	..	..	1	3	..	..	..	..	1	3
Champaran	..	..	..	..	..	..	..	..	..	..
Muzaffarpur	..	..	4	116	..	..	..	..	4	116
Darbhanga	..	..	..	..	..	..	..	..	..	..
Monghyr	..	..	2	40	1	58	..	..	3	98
Bhagalpur	..	..	4	75	..	..	..	..	4	75
Saharsa	..	..	..	..	..	..	..	..	..	..
Purnea	..	..	..	..	..	..	..	..	..	..
Santal Parganas ..	..	..	..	..	..	..	..	..	..	..
Palamau	1	1,356	..	..	..	..	..	..	1	1,356
Hazaribagh	..	..	1	100	..	..	2	981	3	1,081
Ranchi	1	748	5	178	1	45	..	..	7	971
Dhanbad	3	3,405	14	4,596	..	..	2	1,100	19	9,101
Singhbhum	1	951	..	..	1	144	1	564	3	1,659

*Including other structural clay products.

†Including china and procelainware.

SOURCE : Chief Inspector of Factories, Bihar.

MAP NO. 89



MAP NO. 89

DISTRIBUTION OF ENGINEERING INDUSTRIES, 1961

Purpose

This map shows the distribution and extent of employment in the following five types of engineering industries in the State in the year 1961 :

(*i*) Heavy machines and tools,
(*ii*) Heavy electrical equipments,
(*iii*) Manufacture and assembling of machinery other than electrical,
(*iv*) Electrical goods, and
(*v*) General jobbing and engineering goods.

Method

Circles proportionate to employment and coloured differently for each type of industry have been drawn in the districts concerned. The location and number of factories have also been shown in the map.

Salient Features

In 1961 there were 194 registered factories for engineering industries in the State. They provided employment to 9,606 persons in all. Industries engaged in general jobbing and engineering goods comprised the largest number and provided the highest employment under this head.

The table below gives detailed figures under each industry except the one relating to heavy electrical equipments (motors, generators, etc.) which had only 4 units employing 145 persons, the lowest number, in 1961. Their districtwise distribution was as follows :

District	*Factories*	*Employment*
Champaran	1	15
Ranchi	1	28
Dhanbad	2	102

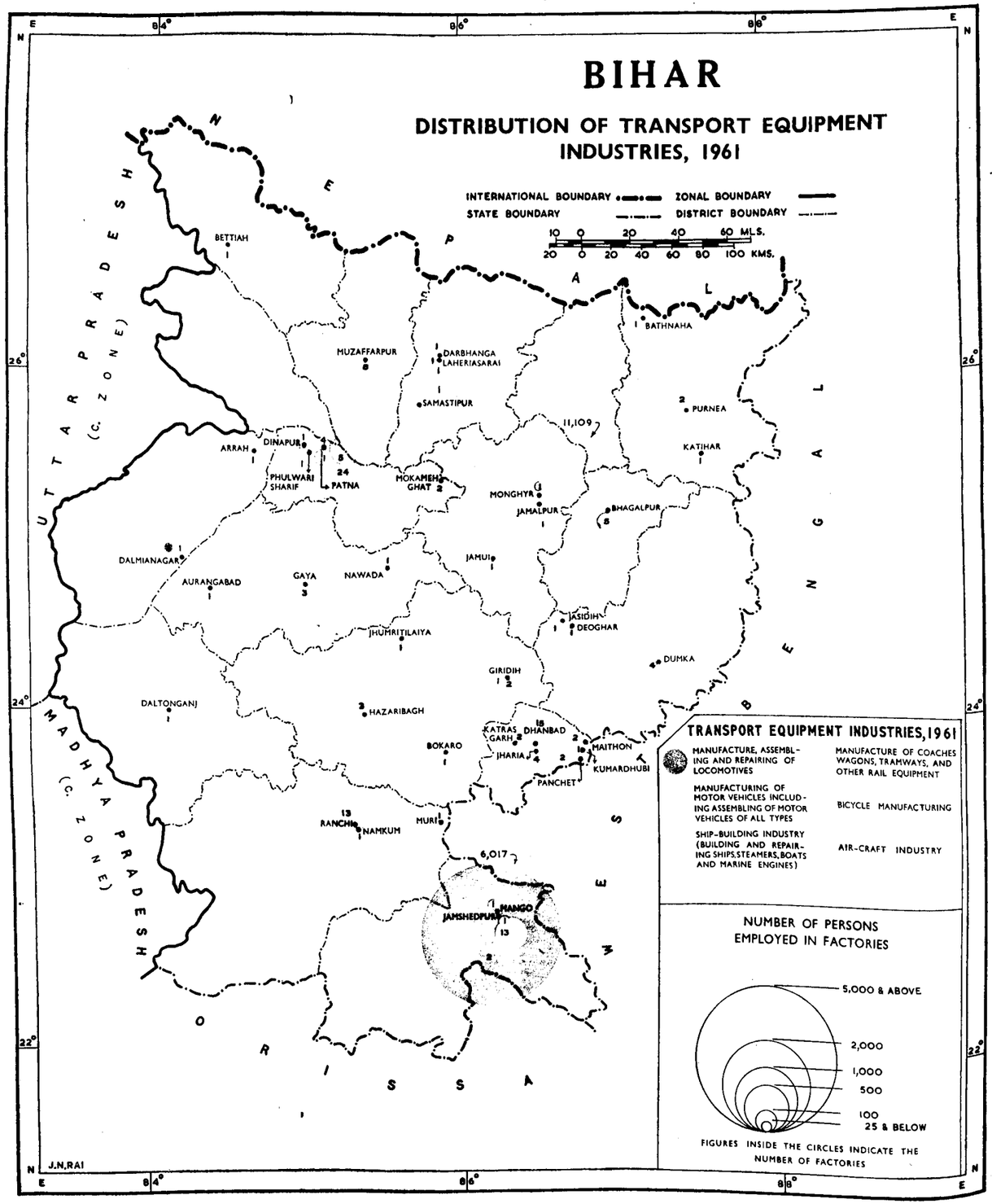
TABLE

DISTRIBUTION OF ENGINEERING INDUSTRIES, 1961

State/District	Heavy machines and tools		Manufacture and assembling of machinery other than electrical		Electrical goods (lamps, fans, etc.)		General jobbing and engineering goods		Total *	
	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment
1	2	3	4	5	6	7	8	9	10	11
BIHAR	**8**	**215**	**13**	**258**	**10**	**3,294**	**159**	**5,694**	**194**	**9,606**
Patna ..	2	30	7	128	5	320	48	843	62	1,321
Gaya ..	..	..	2	3	..	..	8	22	10	25
Shahabad	..	..	..	..	1	127	2	558	3	685
Saran ..	..	..	..	..	..	..	4	634	4	634
Champaran	..	..	..	..	..	..	1	8	2	23
Muzaffarpur	..	..	..	..	..	..	12	871	12	871
Darbhanga	..	..	..	..	..	..	1	7	1	7
Monghyr	..	..	..	..	..	..	2	11	2	11
Bhagalpur	1	25	1	3	..	..	4	26	6	54
Saharsa ..	1	95	..	..	..	..	1	40	2	135
Purnea ..	..	..	..	..	..	..	2	24	2	24
Santal Parganas	1	5	1	2	..	..	2	22	4	29
Palamau	..	..	..	..	..	..	1	3	1	3
Hazaribagh	1	33	..	..	1	392	12	600	14	1,025
Ranchi	..	..	1	120	1	9	17	243	20	400
Dhanbad	2	27	1	2	1	467	28	1,151	34	1,749
Singhbhum	..	..	..	..	1	1,979	14	631	15	2,610

*Includes the number of factories and employment of heavy electrical equipments (Motors, Generators, etc.) industries.

SOURCE : Chief Inspector of Factories, Bihar.



DISTRIBUTION OF TRANSPORT EQUIPMENT INDUSTRIES, 1961

Purpose

This map shows the distribution and extent of employment in the following six types of transport equipment industries in Bihar in the year 1961 :

(*i*) Manufacture, assembling and repairing of locomotives,

(*ii*) Manufacture of coaches, wagons, tramways and other rail equipments,

(*iii*) Manufacturing of motor vehicles of all types,

(*iv*) Bicycle manufacturing,

(*v*) Ship-building industry, and

(*vi*) Aircraft industry.

Method

Circles proportionate to the extent of employment in each type of industry have been drawn. They have been coloured separately for each type of industry. The location and number of factories have also been shown in the map.

Salient Features

In 1961, there were 144 registered factories for manufacturing transport equipments in the State. They provided employment to 21,766 persons in all. The districts of Saran and Saharsa had no such industrial units.

The largest employment was provided by the three factories engaged in the manufacturing of coaches, wagons, etc. Among them the railway workshop at Jamalpur in Monghyr district employed 11,109 persons.

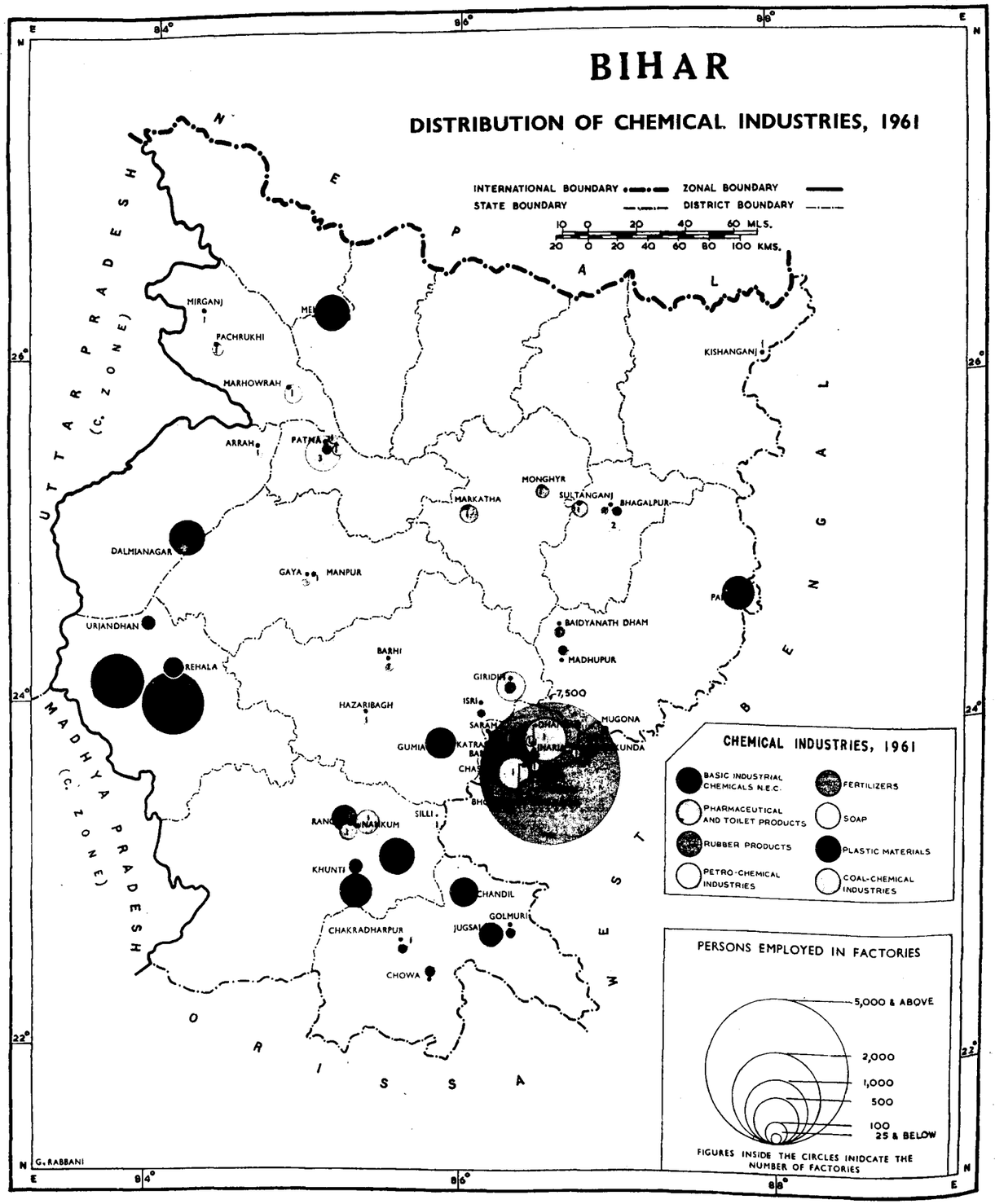
The manufacturing of locomotives was the second most important industry in this group from the point of employment. The two factories at Jamshedpur employed 6,017 persons in all.

Factories for the repair of motor vehicles were by far the most numerous in this group. They accounted for as many as 121 units out of 144 engaged in transport industries. The total employment in such units was, however, only 2,774 persons. The factories were dispersed all over the State except in Saran and Saharsa districts.

Bicycles were manufactured or assembled in 4 factories in Patna town and one at Phulwari Sharif in Patna district. Actual manufacturing was confined to the factory at Phulwari Sharif which employed 297 persons.

Ship-building industry in Bihar was apparently related to the maintenance and repair of steamers, and confined only to Patna and Mokameh Ghat in Patna district. There were seven such factories employing 674 persons. Similarly, the two factories under aircraft industry related to maintenance of aircrafts and were located at Patna and Jamshedpur. They employed 68 persons in all.

The statistics on which this map has been prepared are given in Appendix XIII at the end of the volume.



DISTRIBUTION OF CHEMICAL INDUSTRIES, 1961

Purpose

This map shows the distribution and extent of employment in Bihar in the following eight types of chemical industries in 1961 :

(*i*) Industrial chemicals,

(*ii*) Fertilizers,

(*iii*) Pharmaceutical products, perfumes, cosmetics and other toilet products,

(*iv*) Soaps,

(*v*) Synthetic rubber and rubber products,

(*vi*) Plastic products, synthetic resins, etc.,

(*vii*) Petro-chemical industries, and

(*viii*) Coal-chemical industries.

Method

Circles proportionate to the extent of employment in each type of industry have been drawn. They have been shown in different colours for each type of industry. The location and number of factories have also been shown in the map.

Salient Features

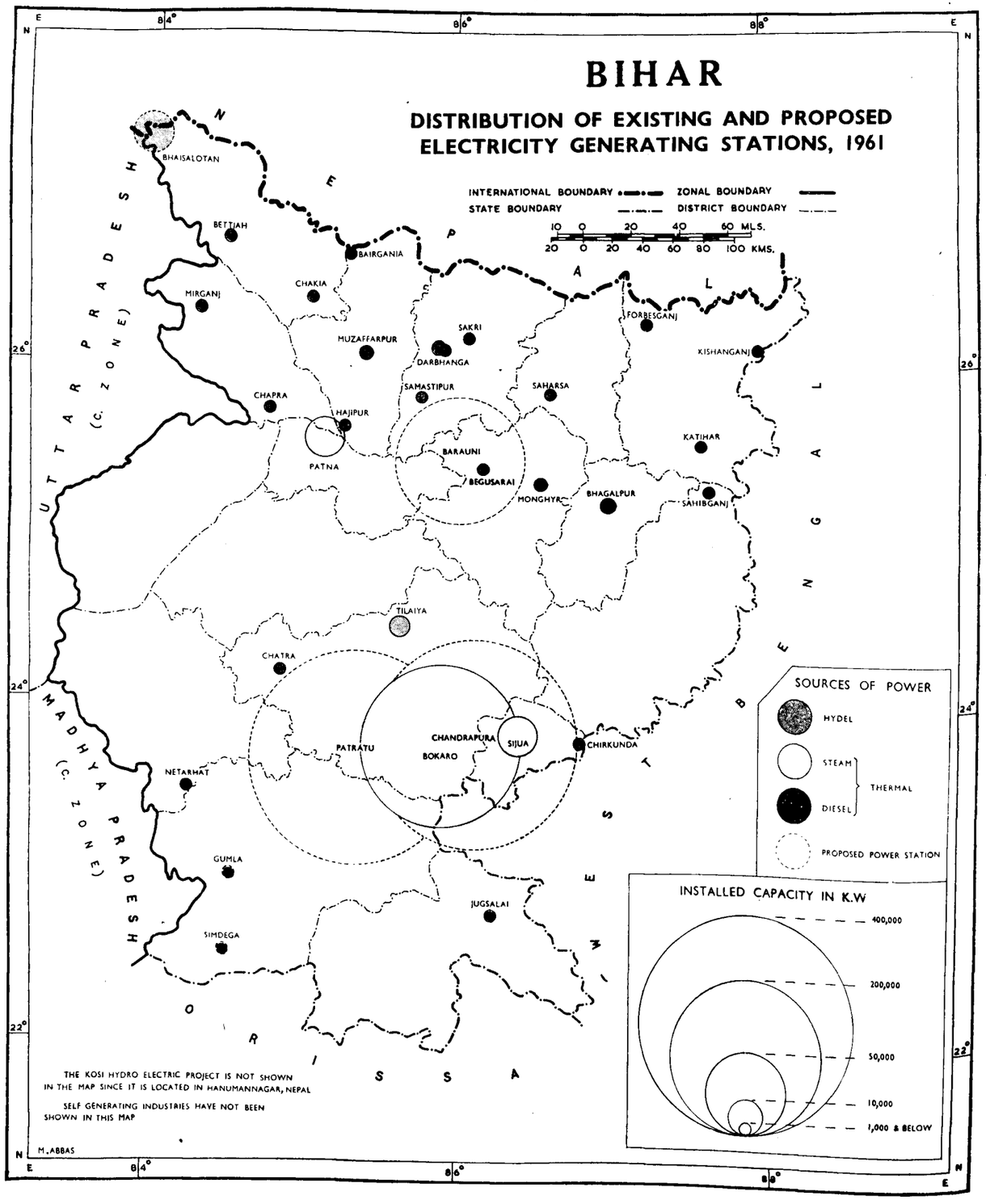
In 1961, there were 125 registered factories for chemical industries in the State. They provided employment to 14,489 workers in all.

The Sindri Fertiliser Factory alone employed 7,500 persons, or more than half of the total number of workers employed in chemical industries.

Manufacture of plastic products and synthetic resins covered 73 factories employing 3,427 workers. The largest number, 32 of such factories was located in Palamau district which is the chief producer of lac in Bihar. As many as 1,726 persons were employed in these industries. Ranchi with 22 factories came next and provided employment to 815 persons.

There were only 14 factories for the manufacture of industrial chemicals. Five of them were in Dhanbad, two each in Singhbhum and Shahabad, and one each in Champaran, Bhagalpur, Santal Parganas and Hazaribagh.

The statistics on which this map has been prepared are reproduced in Appendix XIV at the end of the volume.



DISTRIBUTION OF EXISTING AND PROPOSED ELECTRICITY GENERATING STATIONS, 1961

Purpose

This map shows the distribution of electricity generating stations in Bihar in 1961, including those which were then proposed to be set up. Power stations run by self-generating industries have not been shown in the map.

Method

Each electricity generating station has been represented by a circle proportionate to its installed capacity. The stations have been shown in different colours according to the source of their power, viz., hydel, steam or diesel. A proposed station has been indicated by a circle with broken circumference.

Salient Features

In the past, power generation in Bihar was mainly confined to a number of self-generating units in the mining and industrial areas. These are, however, not shown in the map. With the implementation of Five Year Plans, the pattern of power generation has undergone a revolutionary change.

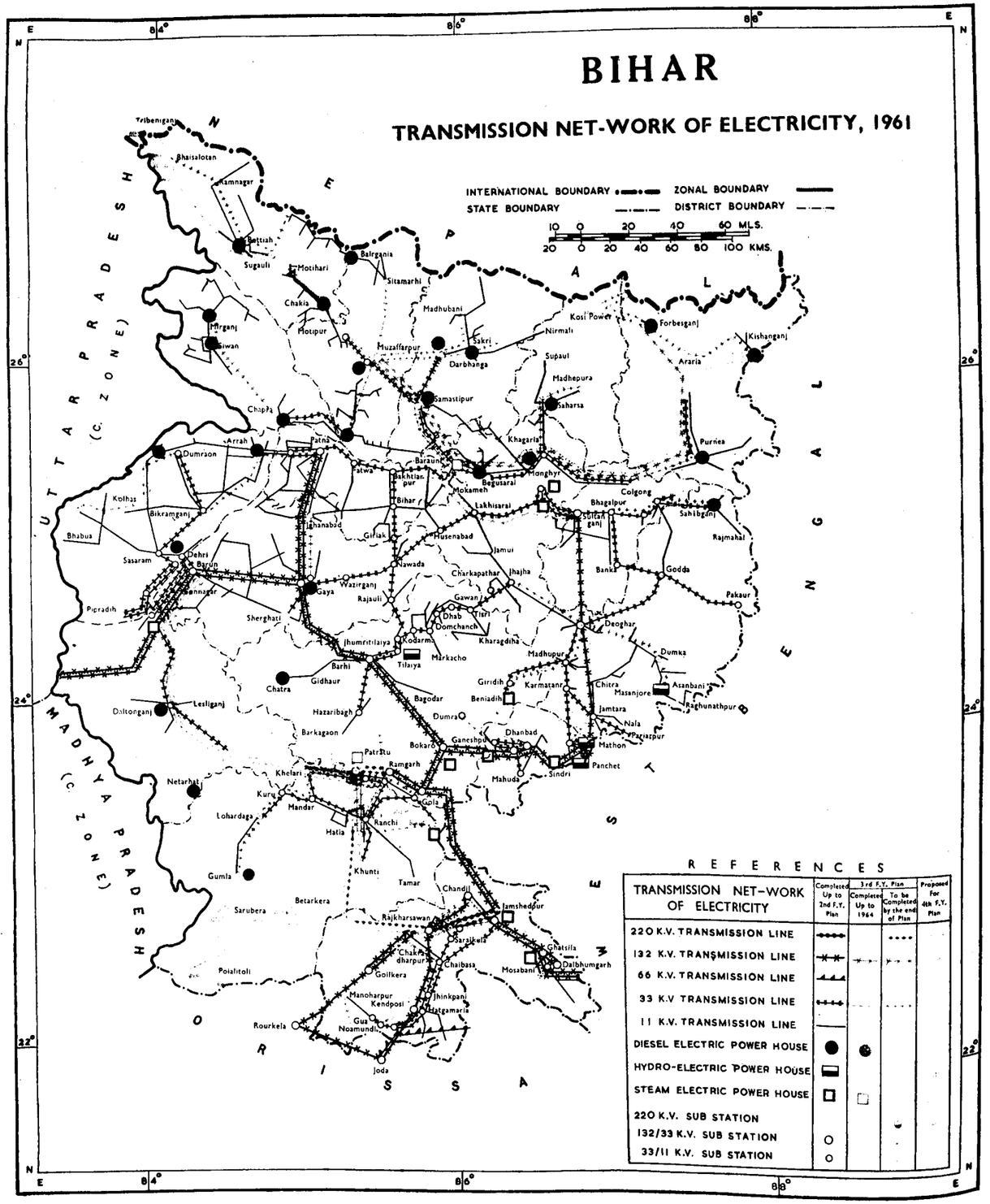
Of the electricity generating stations existing in 1961, those with high installed capacities, viz., Bokaro, Sijua and Patna, used steam as the source of their generation. Tilaiya was the only hydel station. Small generating stations catering to local needs operated mainly in the North Bihar Plain. Maithon, Panchet and Masanjore power houses, though started in the Second Plan, were not completed by 1961.

Among the generating stations, Patratu, Chandrapura and Barauni were the most important. They were all based on steam as the source of their power. The unit at Bhainsalotan was, however, intended as a hydel station. Diesel stations were proposed to be set up at Gumla and Simdega in Ranchi district.

The Kosi Hydel Project has not been shown in the map as its actual location is at Hanumannagar in Nepal.

The total installed generating capacity in the State rose from 244 MW in 1950 to 604 MW in 1960. It has further risen to 859 MW in 1965.

SOURCE : (1) Bihar State Electricity Board, Patna.
(2) Damodar Valley Corporation, Calcutta.



TRANSMISSION NET-WORK OF ELECTRICITY, 1961

Purpose

This map illustrates the main transmission lines existing in 1961 and those proposed to be set up in the Third and Fourth Plan periods.

Method

The transmission lines have been shown by five symbols separately for—

(*i*) 220 KV,
(*ii*) 132 KV,
(*iii*) 66 KV,
(*iv*) 33 KV, and
(*v*) 11 KV lines.

The source of power is also indicated by symbols separately for diesel-electric, hydro-electric and steam-electric power houses. Power houses and transmission lines completed by 1961 have been shown in black, those expected to be completed in the Third Five Year Plan in red, and those proposed to be set up in Fourth Five Year Plan in green.

Salient Features

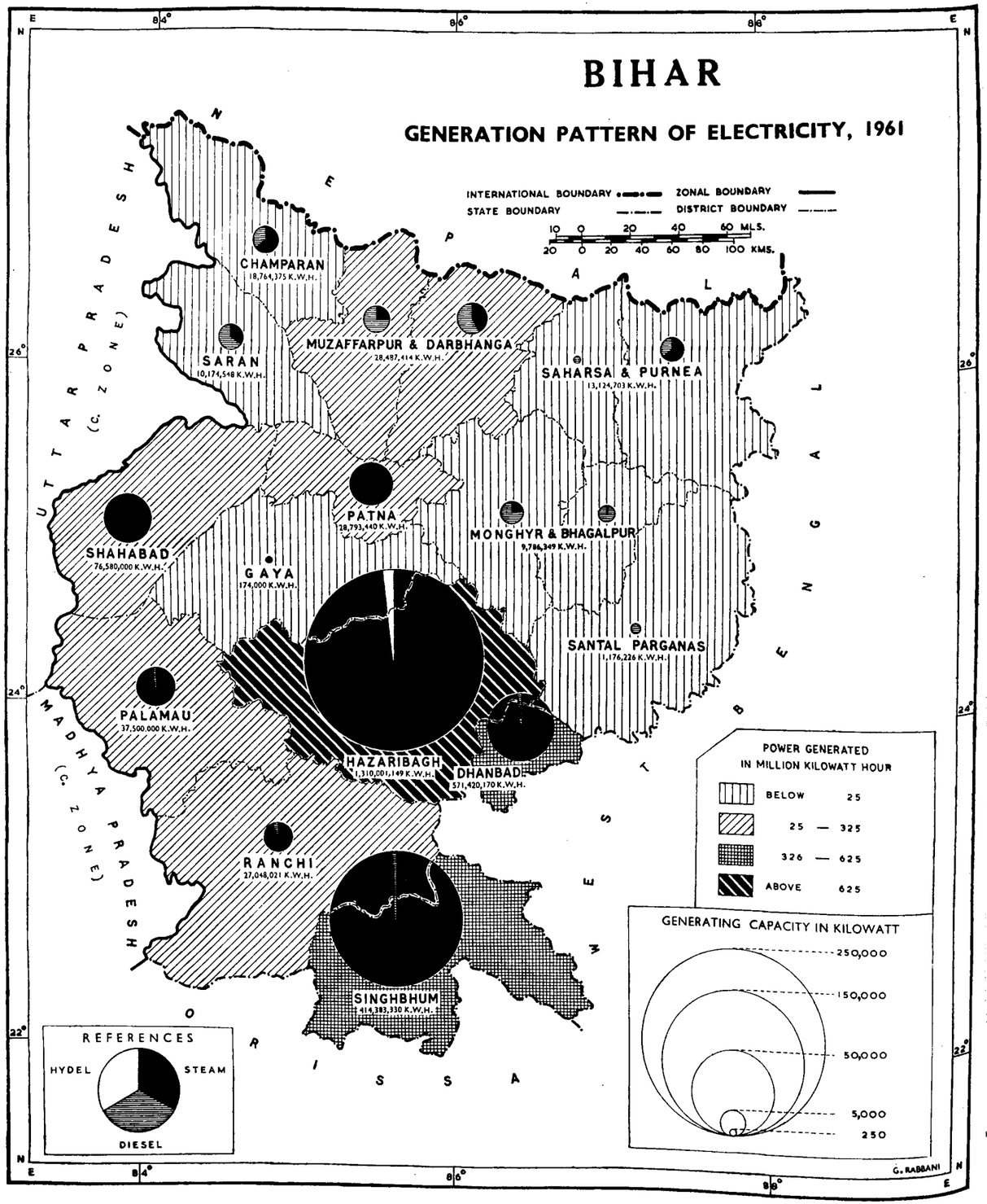
Among the major lines started in the First Five Year Plan was the 132 KV transmission line to connect Bokaro with Tilaiya, Gaya, Patna, Barun, Jamshedpur, and on to Calcutta *via* Ghatsila.

The targets in respect of transmission lines till the end of the Second Five Year Plan were 8,500 miles of high tension lines (up to 33 KV) and 3,800 miles of low tension lines (11 KV). Among the important lines taken up during this period were the 132 KV lines from Maithon to Sultanganj, from Chandil to Rourkela *via* Raj Kharsawan and Goilkera, and from Rihand Power House in U.P. to Sone Nagar.

Transmission systems were proposed in the Third Plan for the Barauni, Gandak and Kosi Power Stations. These included a double circuit 132 KV line from Barauni to Muzaffarpur and on to Sugauli. A double circuit 132 KV line was also proposed from Patratu to Ramgarh for linking the power station with the D.V.C. grid and extendable to Hatia for supply to the Heavy Engineering Corporation.

A perusal of the map would indicate that even after the end of the Third Plan, the transmission facilities were inadequate over most parts of the State, and particularly so in the North Bihar Plain. Considerable emphasis is proposed to be laid on the expansion of transmission and distribution lines in the Fourth Plan period.

SOURCE : Bihar State Electricity Board, Patna.



GENERATION PATTERN OF ELECTRICITY, 1961

Purpose

This map shows for each district in Bihar the generation of electricity and the generating capacity, classified by three modes of production, viz., hydel, diesel and steam.

Method

The districts have been grouped into the following four ranges according to the extent of power generated (in million kilowatt hours):

(*i*) Below 25, (*iii*) 326—625, and
(*ii*) 25—325, (*iv*) above 625.

The districts have been shaded by suitable hatches ranging from high to low.

Circles proportionate to generating capacity of power in kilowatts have been drawn in each district. The circles have been divided into sectors according to the share of generating capacity by (*i*) steam, (*ii*) diesel, and (*iii*) hydel. The sectors have been suitably shaded.

Combined figures have been shown for Muzaffarpur-*cum*-Darbhanga, Saharsa-*cum*-Purnea and Monghyr-*cum*-Bhagalpur, as districtwise figures were not available.

Salient Features

An analysis of figures relating to actual generation or generating capacity of electricity by districts is of limited significance as most areas are connected by the State Electricity grid and there is the prospect of even a national grid coming into being sooner rather than later. With such a wide network of transmission lines, power generated in one district can easily be utilised in another.

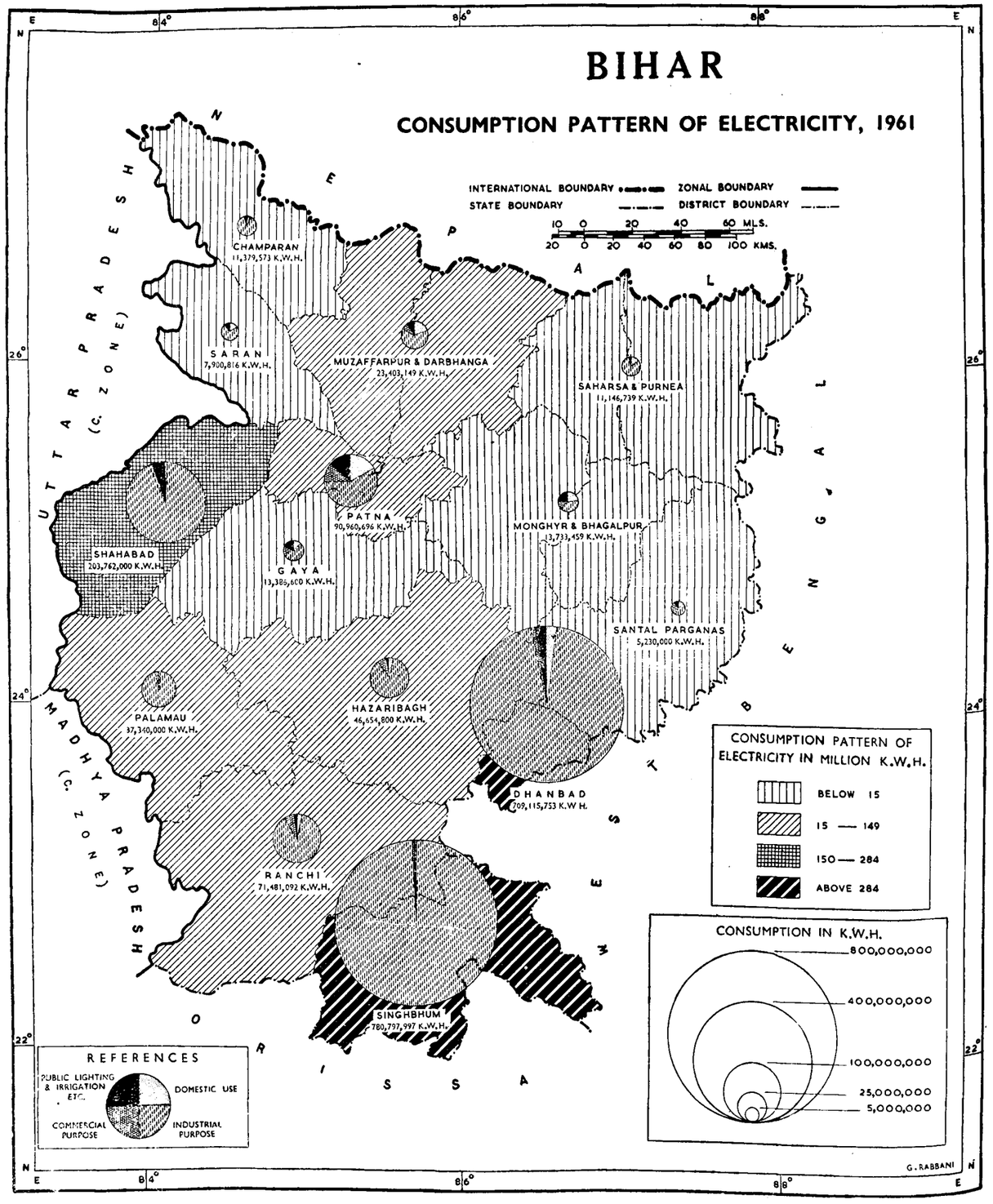
With the several generating units of the Damodar Valley Corporation in operation within the district, Hazaribagh is easily at the top of all districts in Bihar in regard to generating capacity as well as actual generation of electricity. Dhanbad and Singhbhum follow next. Nearly 95 per cent of the power generation in Bihar is through steam. The only hydel unit is that of the D. V. C. at Tilaiya in Hazaribagh district. No electricity is generated by gas.

TABLE

GENERATION PATTERN OF ELECTRICITY, 1961

Rank	State/District	Generating capacity (in kW)				Generation of energy in kWh, 1961
		Hydel	Diesel	Steam	Total	
1	2	3	4	5	6	7
	BIHAR	**4,000**	**21,281**	**464,179**	**489,460**	**2,547,413,725**
1	Hazaribagh	4,000	163	237,180	241,343	1,310,001,149
2	Dhanbad	..	450	33,000	33,450	571,420,170
3	Singhbhum	..	1,185	133,125	134,310	414,383,330
4	Shahabad	..	..	17,000	17,000	76,580,000
5	Palamau	..	140	12,500	12,640	37,500,000
6	Patna	..	..	13,545	13,545	28,793,440
7	Muzaffarpur	..	3,623	1,196	4,819	28,487,414
8	Darbhanga	..	3,998	2,920	6,918	
9	Ranchi	..	371	5,500	5,871	27,048,021
10	Champaran	..	1,722	3,100	4,822	18,764,375
11	Saharsa	..	290	..	290	13,124,703
12	Purnea	..	1,367	2,545	3,912	
13	Saran	..	2,761	1,483	4,244	10,174,548
14	Monghyr	..	2,480	760	3,240	9,786,349
15	Bhagalpur	..	2,115	75	2,190	
16	Santal Parganas ..	..	616	..	616	1,176,226
17	Gaya	..	..	250	250	174,000

SOURCE : (1) Bihar State Electricity Board, Patna.
(2) Damodar Valley Corporation, Calcutta.



CONSUMPTION PATTERN OF ELECTRICITY, 1961

Purpose

This map shows for each district in 1961 the consumption of electricity and the four broad uses to which such consumption is related.

Method

The consumption of electricity (in million kilowatt hours) has been grouped into four ranges, as under :

(*i*) Below 15, (*iii*) 150—284, and
(*ii*) 15—149, (*iv*) above 284.

The districts have been shaded by different hatches ranging from high to low.

Circles proportionate to the total consumption of electricity (in kWh) have been drawn in each district. They have also been divided into sectors according to the share of electricity consumed by the four broad types of use, viz., (*i*) domestic use, (*ii*) industrial use, (*iii*) commercial use, and (*iv*) use in public lighting, irrigation, waterworks, etc.

Combined figures have been shown for Muzaffarpur-*cum*-Darbhanga, Saharsa-*cum*-Purnea, and Monghyr-*cum*-Bhagalpur, because separate figures for these districts were not available.

Salient Features

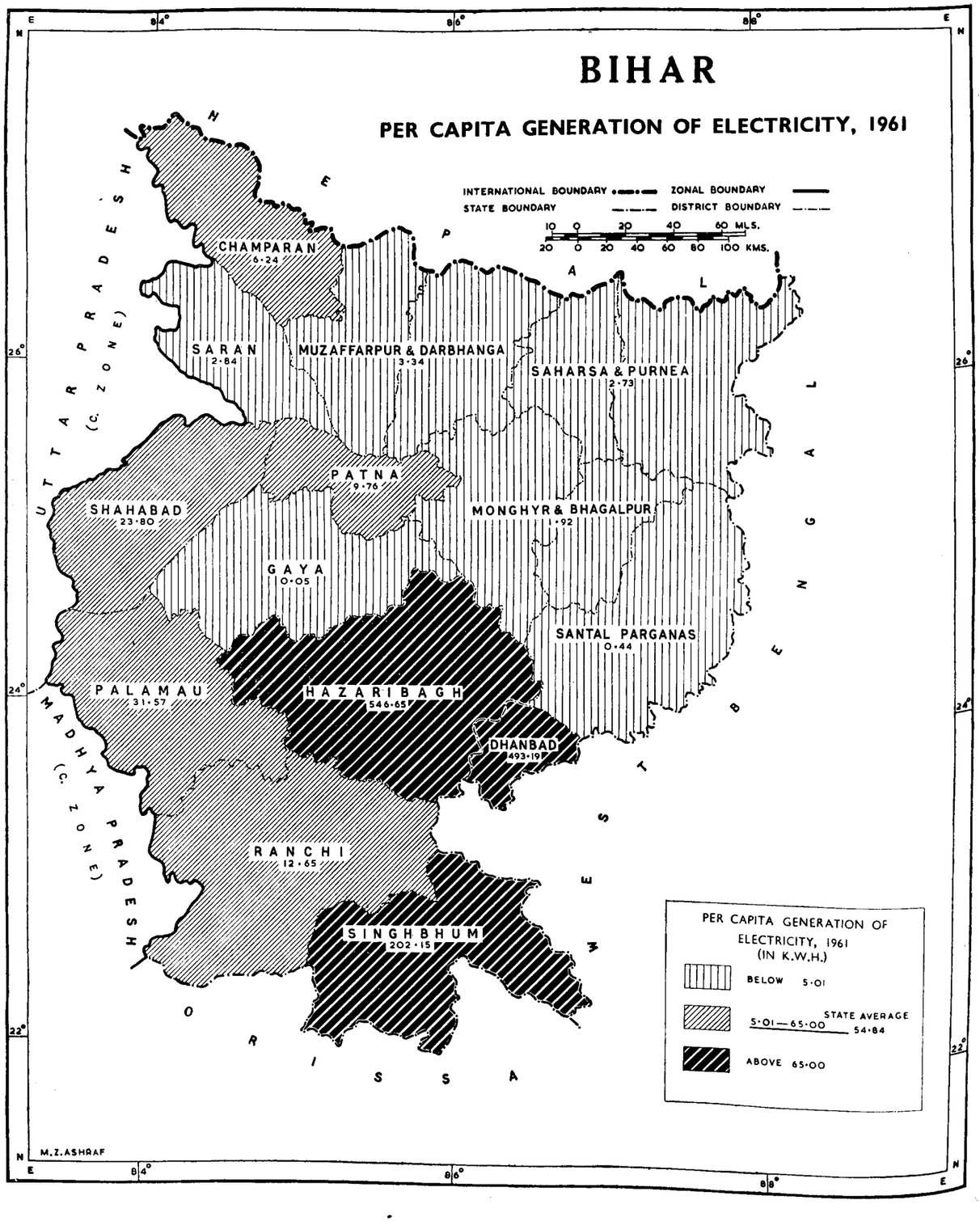
Though Hazaribagh is the largest producer of electricity in Bihar, consumption is greatest in Singhbhum, followed by Dhanbad. Nearly 95 per cent or more of it is consumed for industrial purposes. As many as eight districts in Bihar consumed less than 14 million kilowatt hours of electricity in 1961. They were also low in generation of electricity.

TABLE

CONSUMPTION PATTERN OF ELECTRICITY, 1961

Rank	State/District	Consumption of power in kWh, 1961	Percentage distribution of consumption of power in different uses			
			Domestic uses	Industrial purposes	Commercial purposes	Public lighting, irrigation, waterworks, etc.
1	2	3	4	5	6	7
	BIHAR	**2,026,292,674**	**2.77**	**92.83**	**1.85**	**2.55**
1	Singhbhum	780,797,997	0.30	99.19	0.45	0.06
2	Dhanbad	709,115,753	2.37	94.71	0.69	2.23
3	Shahabad	203,762,000	0.93	93.02	0.98	5.07
4	Patna	90,960,696	17.52	57.51	11.47	13.50
5	Ranchi	71,481,092	3.41	87.54	7.96	1.09
6	Hazaribagh .	46,654,800	4.29	86.35	7.00	2.36
7	Palamau	37,340,000	0.97	95.39	1.98	1.66
8	Muzaffarpur and Darbhanga ..	23,403,149	20.33	63.25	6.84	9.58
9	Monghyr and Bhagalpur	13,733,459	23.79	38.67	13.80	23.74
10	Gaya	13,386,600	13.07	57.80	11.95	17.18
11	Champaran	11,379,573	6.24	87.35	0.35	6.06
12	Saharsa and Purnea ..	11,146,739	15.43	80.71	0.72	3.14
13	Saran	7,900,816	17.21	71.14	0.89	10.76
14	Santal Parganas	5,230,000	15.87	41.87	32.51	9.75

SOURCE : (1) Bihar State Electricity Board, Patna.
(2) Damodar Valley Corporation, Calcutta.



PER CAPITA GENERATION OF ELECTRICITY, 1961

Purpose

This map shows the per capita generation of electricity in the districts of the State in 1961.

Method

The figures relating to per capita generation of electricity (in kWh) have been grouped into three ranges, as under :

(*i*) Below 5.01,
(*ii*) 5.01—65.00, and
(*iii*) above 65.00.

The districts have been shaded by different hatches ranging from high to low. The State average is 54.84 kWh and falls in the range 5.01—65.00.

Combined figures have been shown for Muzaffarpur-*cum*-Darbhanga, Saharsa-*cum*-Purnea and Monghyr-*cum*-Bhagalpur, as separate figures for these districts were not available.

Salient Features

As observed in the case of Map no. 94, figures relating to districtwise generation of electricity per capita are not very significant because the electricity generated in one district is often transmitted to, and consumed in, another.

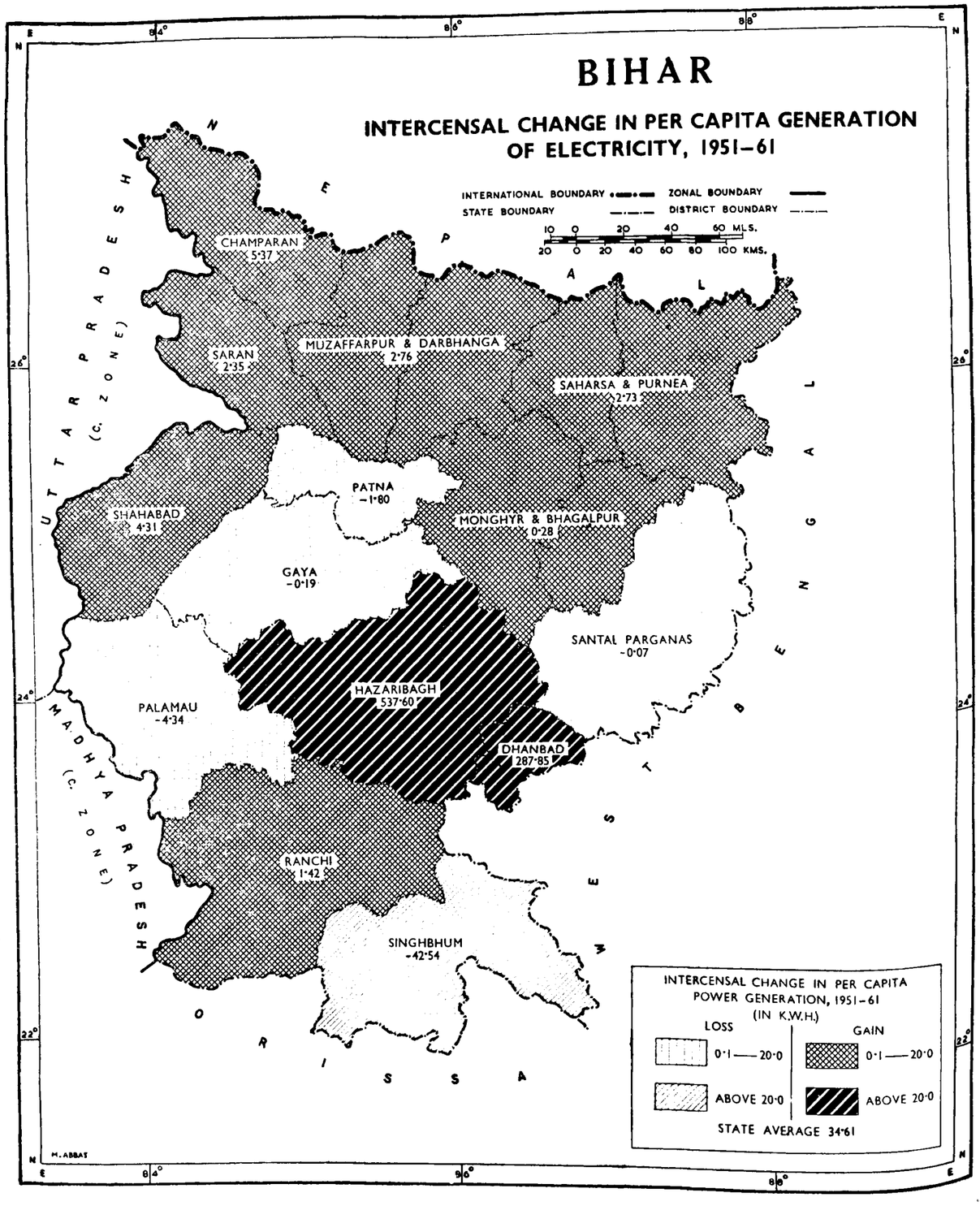
Variations in per capita generation of electricity are rather wide in different districts of the State. Thus, while the generation per capita is as high as 546.65 kWh in Hazaribagh, 493.19 kWh in Dhanbad and 202.15 kWh in Singhbhum, the district next in order is Palamau with only 31.57 kWh. Along with Champaran, the four other districts, viz., Patna, Shahabad, Palamau and Ranchi have the corresponding figures ranging from only 6 to 32 kWh. In the remaining 9 districts of the State, the per capita generation varies from a mere 0.05 kWh in Gaya to 3.34 kWh in Muzaffarpur-*cum*-Darbhanga.

TABLE

PER CAPITA GENERATION OF ELECTRICITY, 1961

Rank	State/District	Total generation of power (in kWh), 1961	Per capita generation of power (in kWh), 1961
1	Hazaribagh ..	1,310,001,149	546.65
2	Dhanbad ..	571,420,170	493.19
3	Singhbhum ..	414,383,330	202.15
	BIHAR ..	**2,547,413,725**	**54.84**
4	Palamau ..	37,500,000	31.57
5	Shahabad ..	76,580,000	23.80
6	Ranchi ..	27,048,021	12.65
7	Patna ..	28,793,440	9.76
8	Champaran ..	18,764,375	6.24
9	Muzaffarpur and Darbhanga	28,487,414	3.34
10	Saran ..	10,174,548	2.84
11	Saharsa and Purnea	13,124,703	2.73
12	Monghyr and Bhagalpur	9,786,349	1.92
13	Santal Parganas ..	1,176,226	0.44
14	Gaya ..	174,000	0.05

SOURCE : (1) Bihar State Electricity Board, Patna.
(2) Damodar Valley Corporation, Calcutta.



MAP NO. 97

INTERCENSAL CHANGE IN PER CAPITA GENERATION OF ELECTRICITY, 1951—61

Purpose

This map shows the changes in per capita generation of electricity in each district of the State during the decade, 1951—61.

Method

The variations in per capita generation of electricity have been grouped into two broad categories, viz., those showing loss, and those showing gain. They have been further classified into 2 ranges each, as under :

Loss	*Gain*
(*i*) 0.1—20.0	(*i*) 0.1—20.0
(*ii*) Above 20.0	(*ii*) Above 20.0

The districts have been suitably hatched, those recording loss being shown in red, and those recording gain in black.

Combined figures have been shown for Muzaffarpur-*cum*-Darbhanga, Saharsa-*cum*-Purnea and Monghyr-*cum*-Bhagalpur as separate figures for these districts were not available.

Salient Features

For the State as a whole, the per capita generation of electricity increased by 34.61 kWh between 1951 and 1961. The increase has been particularly noteworthy in the districts of Hazaribagh and Dhanbad where the generation per capita shot up by 537.60 and 287.85 kWh respectively. The gain in all the North Bihar districts ranged from 2.35 to 5.37 kWh. In the South Bihar Plain, while Shahabad and Monghyr-*cum*-Bhagalpur showed some gain, there was actually a marginal loss in the per capita generation of electricity in the districts of Patna and Gaya. This was apparently due to increase in the population of these districts without any significant increase in power generation. In the Chotanagpur Plateau, Ranchi (besides Hazaribagh and Dhanbad) also showed some gain but there was loss in the per capita generation of electricity in the districts of Santal Parganas, Palamau and Singhbhum. The loss was heaviest (42.54 kWh) in the district of Singhbhum. The total generation of electricity in this district actually went down in 1961 as compared to 1951. An additional reason apparently was the utilisation in Singhbhum district of cheaper electricity produced in other districts by the Damodar Valley Corporation.

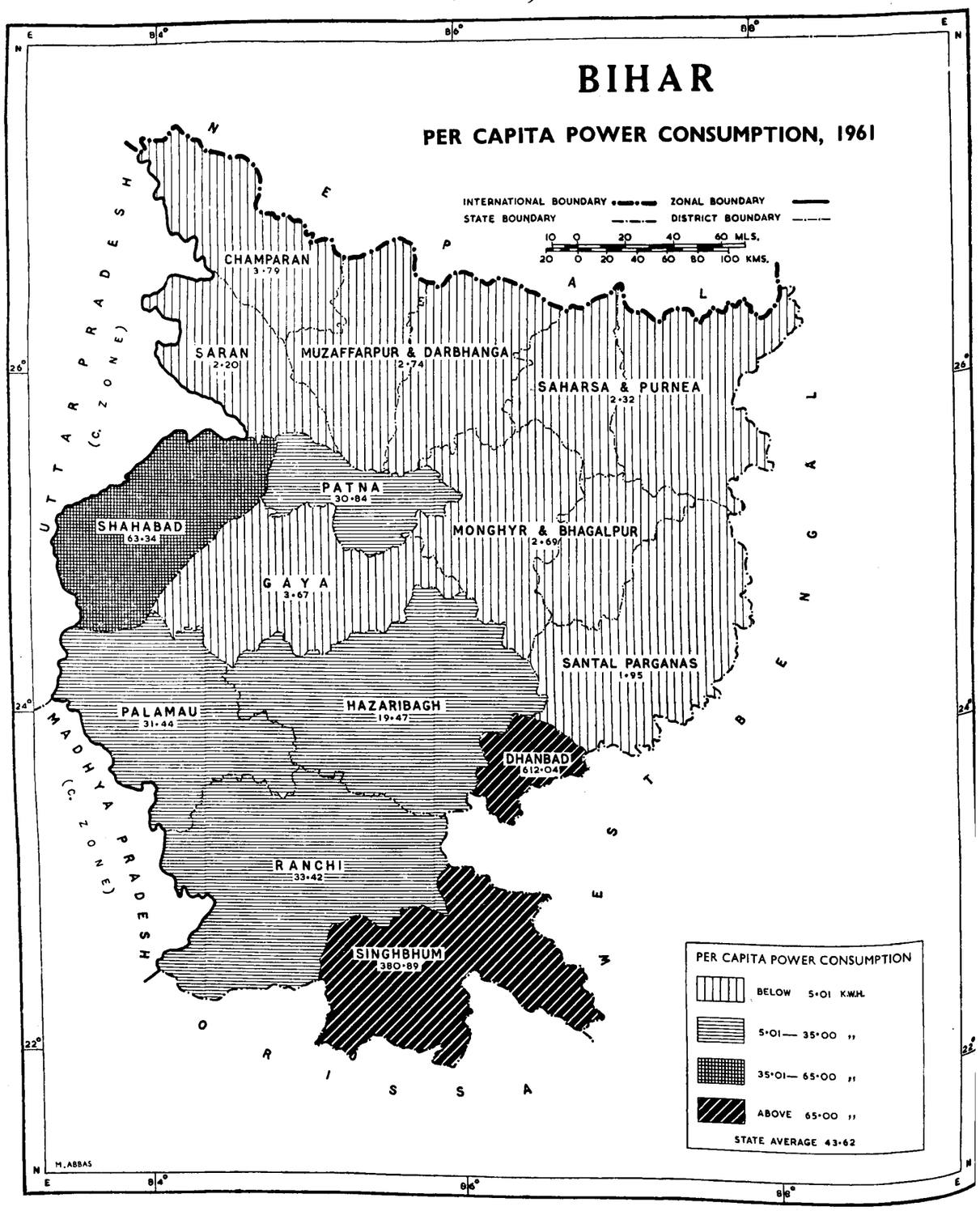
TABLE

INTERCENSAL CHANGE IN PER CAPITA POWER GENERATION, 1951—61

(All figures in kWh)

Rank	State/District	Per capita generation of power in 1951	Per capita generation of power in 1961	Variation in per capita generation in 1951—61
1	2	3	4	5
1	Hazaribagh ..	9.05	546.65	+537.60
2	Dhanbad ..	205.34	493.19	+287.85
	**BIHAR .. **	**20.23**	**54.84**	**+34.61**
3	Champaran ..	0.87	6.24	+5.37
4	Shahabad ..	19.49	23.80	+4.31
5	Muzaffarpur and Darbhanga	0.58	3.34	+2.76
6	Saharsa and Purnea ..	..	2.73	+2.73
7	Saran ..	0.49	2.84	+2.35
8	Ranchi ..	11.23	12.65	+1.42
9	Monghyr and Bhagalpur	1.64	1.92	+0.28
10	Santal Parganas	0.51	0.44	—0.07
11	Gaya ..	0.24	0.05	—0.19
12	Patna ..	11.56	9.76	—1.80
13	Palamau .	35.91	31.57	—4.34
14	Singhbhum .	244.69	202.15	—42.54

SOURCE : (1) Bihar State Electricity Board, Patna.
(2) Damodar Valley Corporation, Calcutta.



MAP NO. 98

PER CAPITA POWER CONSUMPTION, 1961

Purpose

This map shows for each district of Bihar the per capita consumption of electricity in 1961.

Method

The figures relating to per capita consumption (in kWh) have been grouped into four categories, as under :

(*i*) Below 5.01,
(*ii*) 5.01—35.00,
(*iii*) 35.01—65.00, and
(*iv*) above 65.00.

The districts have been shaded by different grades of hatching ranging from high to low.

Combined figures have been shown for Muzaffarpur-*cum*-Darbhanga, Saharsa-*cum*-Purnea and Monghyr-*cum*-Bhagalpur because separate figures were not available.

Salient Features

Dhanbad led in per capita power consumption. Notwithstanding a decrease in per capita power generation, consumption of power in Singhbhum was still the second highest in the State (380.89 kWh). Shahabad came next with 63.34 kWh. Patna, Palamau, Hazaribagh and Ranchi ranged between 19 and 34 kWh. In the remaining districts, the range was much less (between 1 and 4 kWh).

TABLE

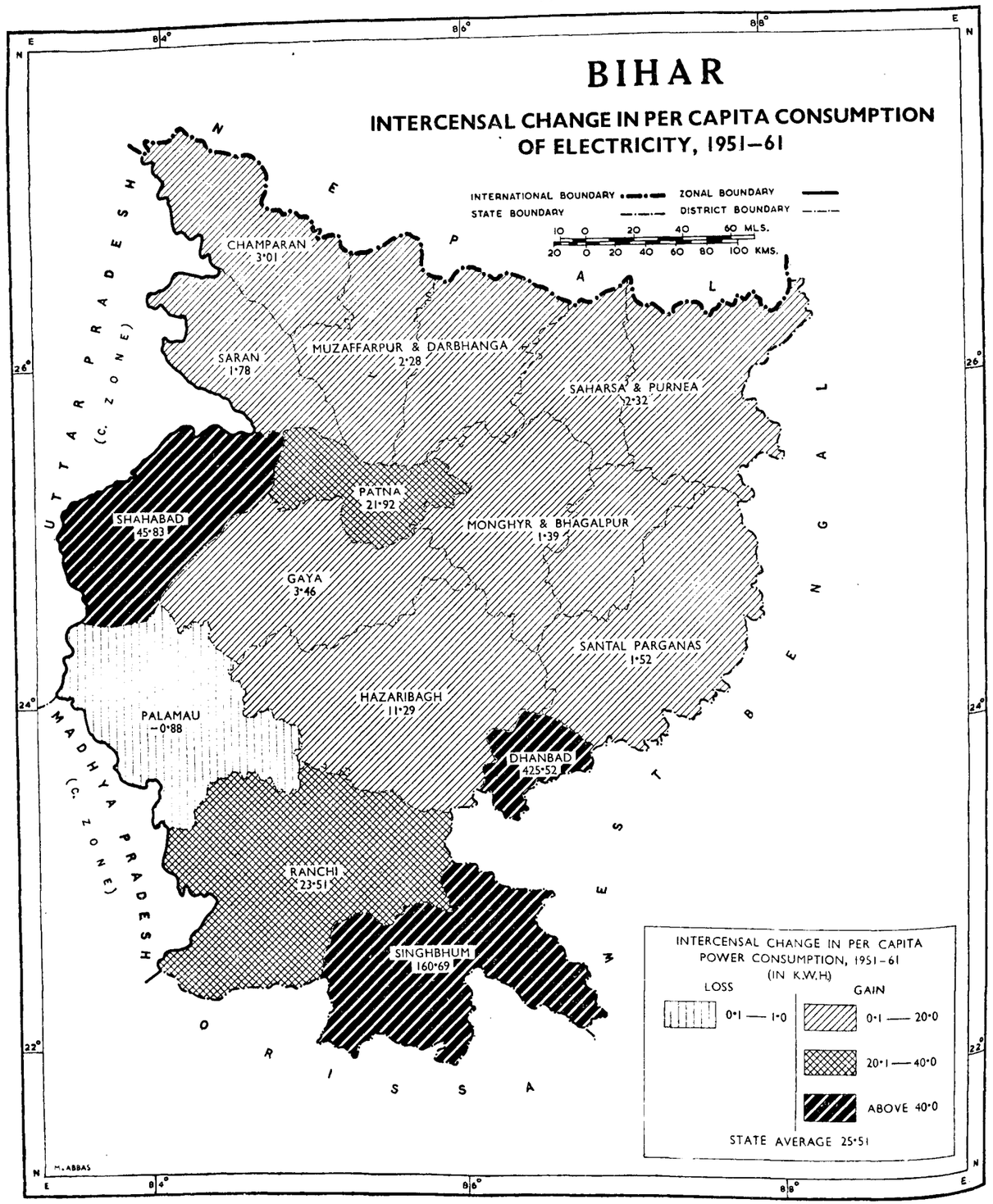
PER CAPITA POWER CONSUMPTION IN BIHAR, 1961

(Figures in kWh)

Rank	State/District	Consumption of power in kWh	Per capita consumption
1	Dhanbad ..	709,115,753	612.04
2	Singhbhum ..	780,797,997	380.89
3	Shahabad ..	203,762,000	63.34
	BIHAR ..	**2,026,292,674**	**43.62**
4	Ranchi ..	71,481,092	33.42
5	Palamau ..	37,340,000	31.44
6	Patna ..	90,960,696	30.84
7	Hazaribagh ..	46,654,800	19.47
8	Champaran ..	11,379,573	3.79
9	Gaya ..	13,386,600	3.67
10	Muzaffarpur and Darbhanga	23,403,149	2.74
11	Monghyr and Bhagalpur	13,733,459	2.69
12	Saharsa and Purnea	11,146,739	2.32
13	Saran ..	7,900,816	2.20
14	Santal Parganas ..	5,230,000	1.95

SOURCE : (1) Bihar State Electricity Board, Patna.
(2) Damodar Valley Corporation, Calcutta.

MAP NO. 99



MAP NO. 99

INTERCENSAL CHANGE IN PER CAPITA CONSUMPTION OF ELECTRICITY, 1951—61

Purpose

This map shows the changes in per capita consumption of electricity in each district of the State during 1951—61.

Method

The variations in per capita consumption of electricity (in kWh) have been grouped into four categories, one indicating loss and the others indicating gain, as under :

Loss	*Gain*
(*i*) 0.1—1.0	(*i*) 0.1—20.0
	(*ii*) 20.1—40.0
	(*iii*) Above 40.0

The State average is 25.51 kWh and falls in the range 20.1—40.0.

The districts have been shaded by different hatches ranging from high to low. Palamau, the only district showing loss in per capita consumption, has been shaded in red.

Combined figures have been used for Muzaffarpur-*cum*-Darbhanga, Saharsa-*cum*-Purnea and Monghyr-*cum*-Bhagalpur as districtwise figures were not available.

Salient Features

For the State as a whole, the per capita consumption of electricity increased by 25.51 kWh between 1951 and 1961.

While the gain in per capita consumption was above 40 kWh in Dhanbad, Singhbhum and Shahabad, it was 23.51 kWh in Ranchi and 21.92 kWh in Patna. In the remaining districts, the gain varied from 1 to 12 kWh.

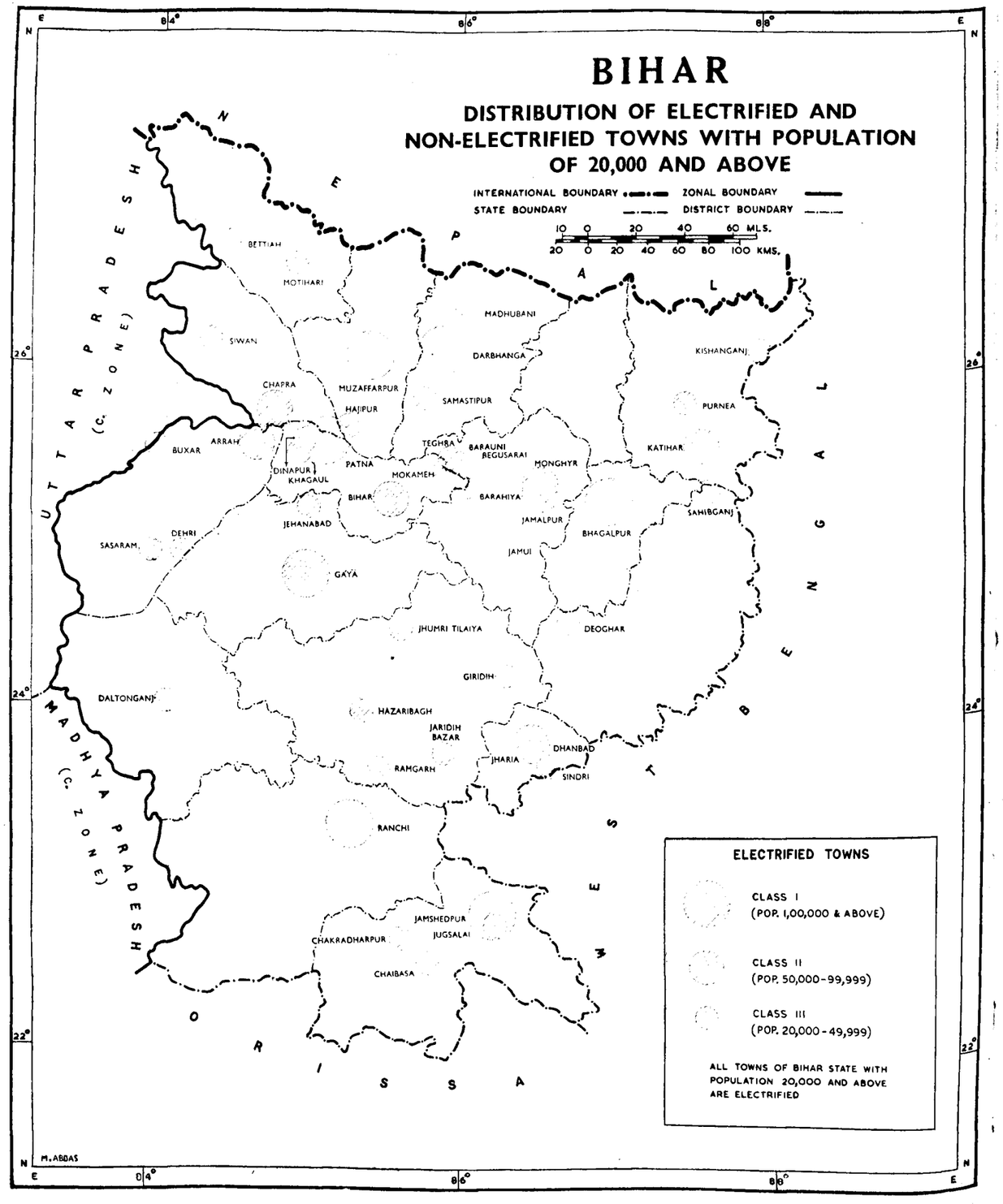
TABLE

INTERCENSAL CHANGE IN PER CAPITA POWER CONSUMPTION, 1951—61

(All figures in kWh)

Rank	State/District	Per capita consumption of power in 1951	Per capita consumption of power in 1961	Variation in per capita of power consumption in 1951—61
1	2	3	4	5
1	Dhanbad ..	186.52	612.04	+425.52
2	Singhbhum ..	220.20	380.89	+160.69
3	Shahabad ..	17.51	63.34	+45.83
	BIHAR ..	**18.11**	**43.62**	**+25.51**
4	Ranchi ..	9.91	33.42	+23.51
5	Patna ..	8.92	30.84	+21.92
6	Hazaribagh ..	8.18	19.47	+11.29
7	Gaya ..	0.21	3.67	+3.46
8	Champaran ..	0.78	3.79	+3.01
9	Saharsa and Purnea	Nil	2.32	+2.32
10	Muzaffarpur and Darbhanga	0.46	2.74	+2.28
11	Saran ..	0.43	1.95	+1.78
12	Santal Parganas	0.43	1.95	+1.52
13	Monghyr and Bhagalpur ..	1.30	2.69	+1.39
14	Palamau ..	32.32	31.44	—0.88

SOURCE : (1) Bihar State Electricity Board, Patna.
(2) Damodar Valley Corporation, Calcutta.



DISTRIBUTION OF ELECTRIFIED AND NON-ELECTRIFIED TOWNS WITH POPULATION OF 20,000 AND ABOVE, 1961

Purpose

This map shows the position of electrified and non-electrified towns with population of 20,000 and above, in Bihar State in 1961.

Method

47 towns, each with population of 20,000 or more, i.e., towns of classes I, II and III, have been shown in the map by circles of different sizes proportional to their classes. Electrified towns have been shown in red.

Salient Features

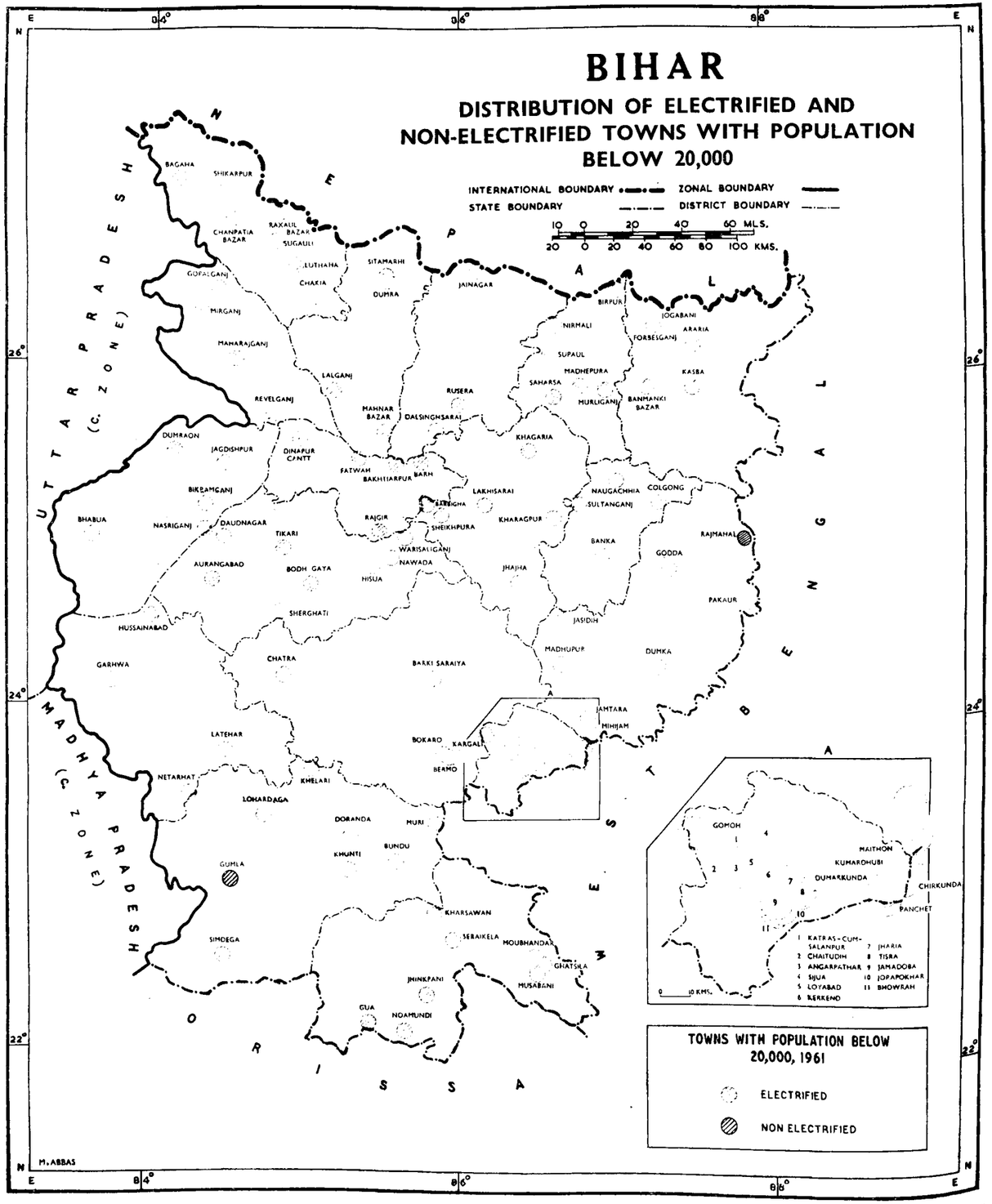
It is worthy of note that all towns of classes I, II and III in Bihar State were electrified in 1961.

TABLE

NUMBER OF ELECTRIFIED AND NON-ELECTRIFIED TOWNS WITH POPULATION OF 20,000 AND ABOVE, 1961

State/District	Number of electrified towns			
	Class I	Class II	Class III	Total
1	2	3	4	5
BIHAR	7	7	33	47
Patna	1	1	3	5
Gaya	1	..	1	2
Shahabad	..	1	3	4
Saran	..	1	1	2
Champaran	..	..	2	2
Muzaffarpur	1	..	1	2
Darbhanga	1	..	2	3
Monghyr	..	2	5	7
Bhagalpur	1	..	..	1
Saharsa	..	..	..	..
Purnea	..	1	2	3
Santal Parganas	..	..	2	2
Palamau	..	..	1	1
Hazaribagh	..	..	5	5
Ranchi	1	..	..	1
Dhanbad	..	1	2	3
Singhbhum	1	..	3	4

SOURCE : Bihar State Electricity Board, Patna.



DISTRIBUTION OF ELECTRIFIED AND NON-ELECTRIFIED TOWNS WITH POPULATION BELOW 20,000, 1961

Purpose

This map shows the position of electrified and non-electrified towns with population below 20,000 in Bihar State in 1961.

Method

106 towns with population below 20,000 each, i.e., all towns of classes IV, V and VI, have been shown in the map by circles of uniform size. Electrified towns have been indicated in red and those not electrified in black.

Salient Features

Gumla in Ranchi district (population 10,710) and Rajmahal in Santal Parganas district (population 6,801) were the only non-electrified towns in the State in 1961.

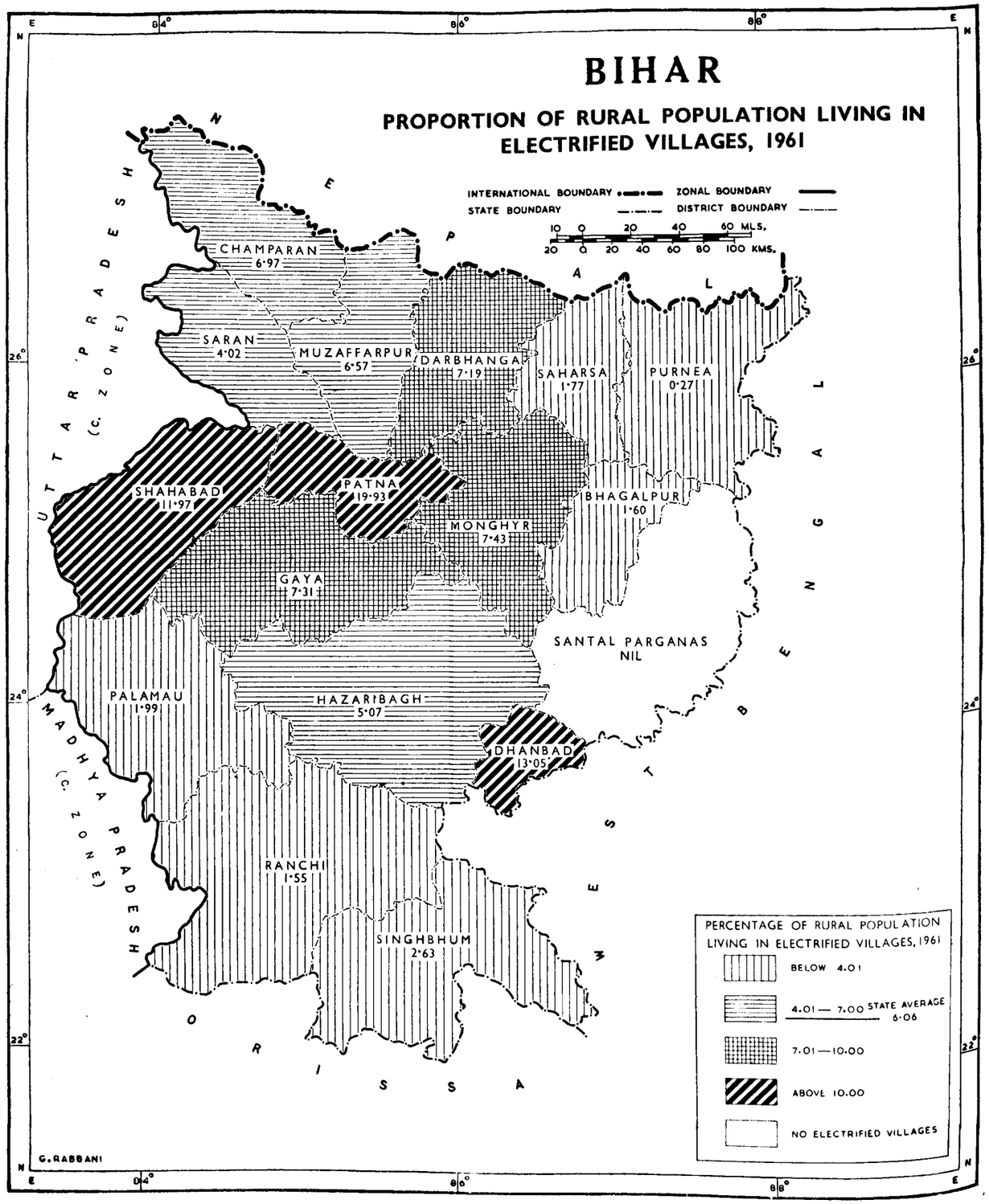
TABLE

NUMBER OF ELECTRIFIED AND NON-ELECTRIFIED TOWNS WITH POPULATION BELOW 20,000, 1961

State/District	Number of electrified towns				Number of non-electrified towns
	Class IV	Class V	Class VI	Total	
1	2	3	4	5	6
BIHAR	**51**	**45**	**8**	**104**	**2**
Patna	3	1	1	5	..
Gaya	5	3	..	8	..
Shahabad	2	3	..	5	..
Saran	3	1	..	4	..
Champaran	4	2	1	7	..
Muzaffarpur	3	..	1	4	..
Darbhanga	2	1	..	3	..
Monghyr	5	1	..	6	..
Bhagalpur	2	2	..	4	..
Saharsa	3	3	..	6	..
Purnea	3	2	..	5	..
Santal Parganas	3	3	1	7	1*
Palamau	1	2	1	4	..
Hazaribagh	2	3	..	5	..
Ranchi	3	3	1	7	1†
Dhanbad	6	9	1	16	..
Singhbhum	1	6	1	8	..

*Town falls in the category of Class V.
†Town falls in the category of Class IV.

SOURCE : Bihar State Electricity Board, Patna.



PROPORTION OF RURAL POPULATION LIVING IN ELCTRIFIED VILLAGES, 1961

Purpose

This map shows the districtwise proportion of rural population living in electrified villages in 1961.

Method

The percentages of rural population living in electrified villages have been grouped into four ranges, viz.,

(*i*) Below 4.01,

(*ii*) 4.01—7.00,

(*iii*) 7.01—10.00 and

(*iv*) above 10.00.

The districts have been shaded by different grades of hatching ranging from high to low.

Salient Features

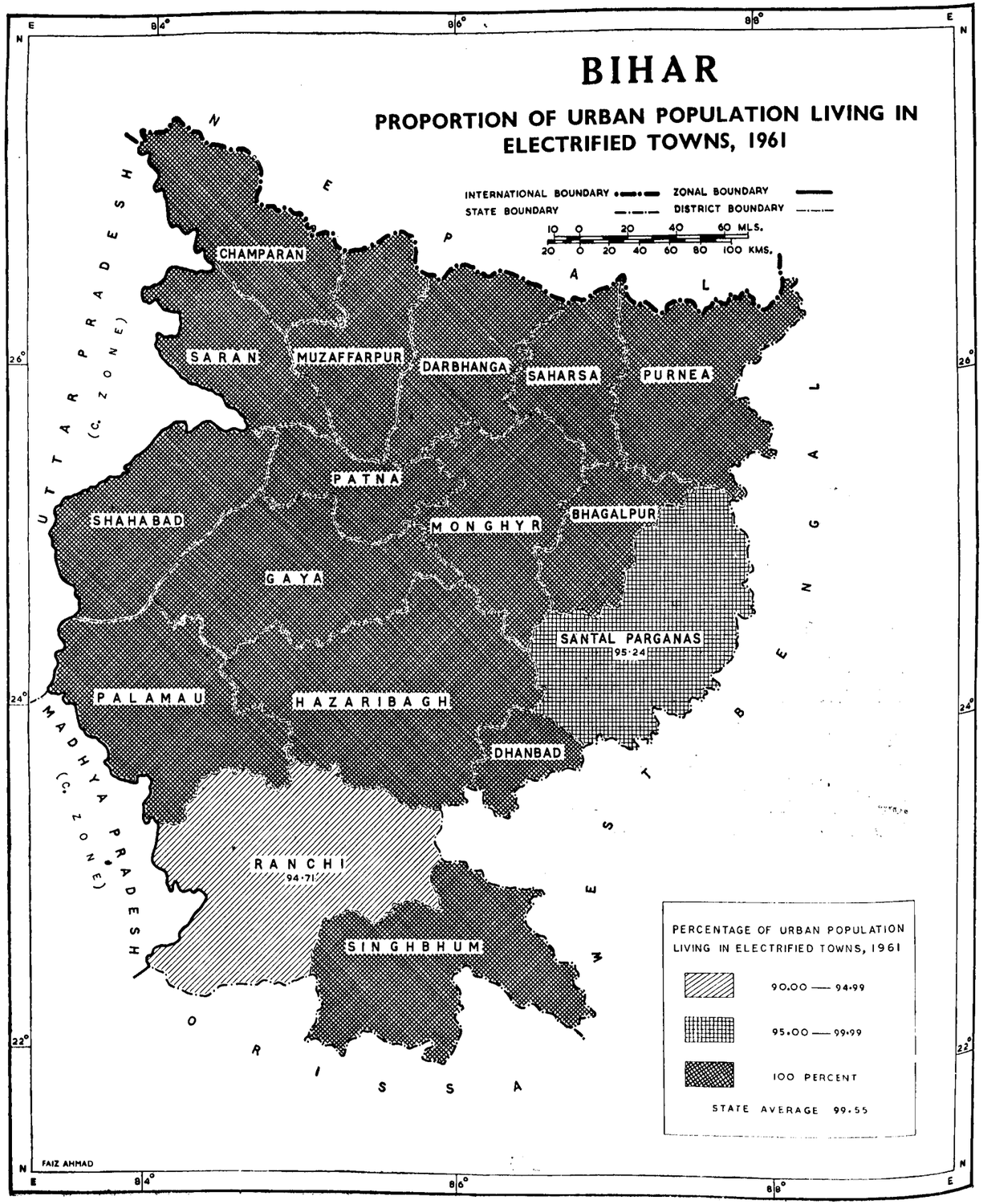
For the State as a whole, only 6.06 per cent of the rural population lived in electrified villages in 1961. The proportions were noticeably high in Patna, Dhanbad and Shahabad districts, and above the State average in Gaya, Monghyr and Darbhanga districts. The corresponding proportions in the North Bihar districts except Darbhanga were understandably low and varied from 0.27 per cent in Purnea to 6.97 per cent in Champaran. There were no electrified villages in the Santal Parganas.

TABLE

PROPORTION OF RURAL POPULATION LIVING IN ELECTRIFIED VILLAGES, 1961

Rank	State/District	Percentage of rural population living in electrified villages, 1961
1	Patna	19.93
2	Dhanbad	13.05
3	Shahabad	11.97
4	Monghyr	7.43
5	Gaya	7.31
6	Darbhanga	7.19
7	Champaran	6.97
8	Muzaffarpur	6.57
	BIHAR	**6.06**
9	Hazaribagh	5.07
10	Saran	4.02
11	Singhbhum	2.63
12	Palamau .. .	1.99
13	Saharsa	1.77
14	Bhagalpur	1.60
15	Ranchi	1.55
16	Purnea	0.27
17	Santal Parganas ..	Nil

SOURCE : Bihar State Electricity Board, Patna.



PROPORTION OF URBAN POPULATION LIVING IN ELECTRIFIED TOWNS, 1961

Purpose

This map shows the proportion of urban population living in electrified towns in each district of the State in 1961.

Method

Percentages of urban population living in electrified towns in each district have been grouped into three categories, viz.,

(*i*) 90.00—94.99,

(*ii*) 95.00—99.99, and

(*iii*) 100.

The districts have been shaded by different grades of hatching ranging from high to low.

Salient Features

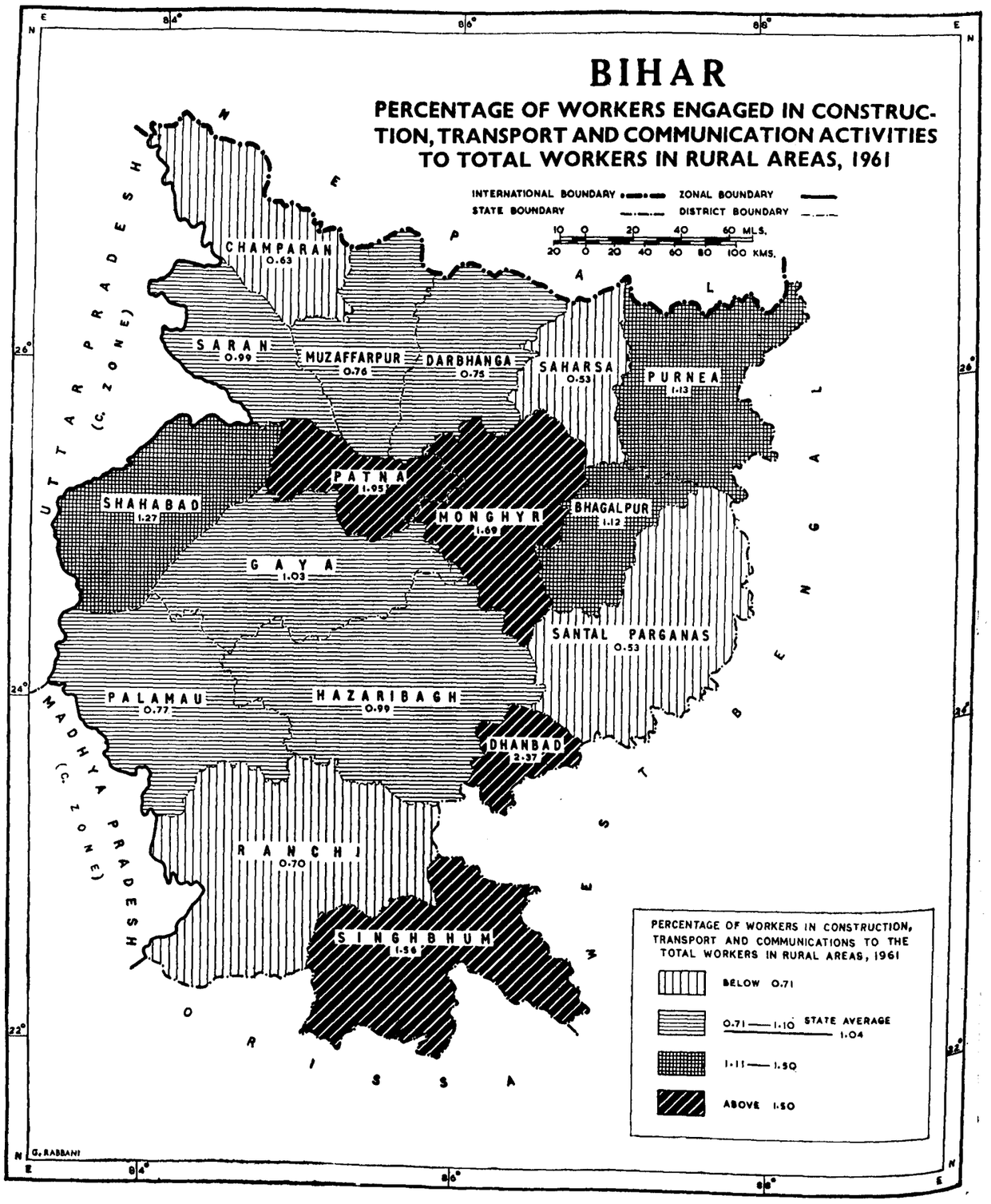
Since all towns except Gumla and Rajmahal in the State were electrified in 1961, the proportion of urban population living in electrified towns is 100 per cent in all the districts except Ranchi and the Santal Parganas. In the latter two districts, the percentages are 95.24 and 94.71 respectively.

TABLE

PROPORTION OF URBAN POPULATION LIVING IN ELECTRIFIED TOWNS, 1961

Rank	State/District	Percentage of urban population living in electrified towns	Number of towns		Total number of towns
			Electrified	Non-electrified	
1	2	3	4	5	6
1	Patna	100.00	10	..	10
	Gaya	100.00	10	..	10
	Shahabad	100.00	9	..	9
	Saran	100.00	6	..	6
	Champaran	100.00	9	..	9
	Muzaffarpur	100.00	6	..	6
	Darbhanga	100.00	6	..	6
	Monghyr	100.00	13	..	13
	Bhagalpur	100.00	5	..	5
	Saharsa	100.00	6	..	6
	Purnea	100.00	8	..	8
	Palamau	100.00	5	..	5
	Hazaribagh	100.00	10	..	10
	Dhanbad	100.00	19	..	19
	Singhbhum	100.00	12	..	12
	BIHAR	**99.55**	**151**	**2**	**153**
16	Santal Parganas	95.24	9	1	10
17	Ranchi	94.71	8	1	9

SOURCE : Bihar State Electricity Board, Patna.



PERCENTAGE OF WORKERS ENGAGED IN CONSTRUCTION, TRANSPORT AND COMMUNICATIONS ACTIVITIES TO TOTAL WORKERS IN RURAL AREAS, 1961

Purpose

This map shows the percentage of workers engaged in construction, transport and communications activities to total workers in rural areas of each district of the State in 1961.

Method

Percentages of workers in Industrial Categories VI and VIII (of the 1961 Census) to total workers in rural areas of each district have been grouped into four categories, as under :

(*i*) Below 0.71,
(*ii*) 0.71—1.10,
(*iii*) 1.11—1.50, and
(*iv*) above 1.50.

The districts have been shaded by four different grades of hatching ranging from high to low. For facility of reference, the percentages have also been indicated in the map.

Salient Features

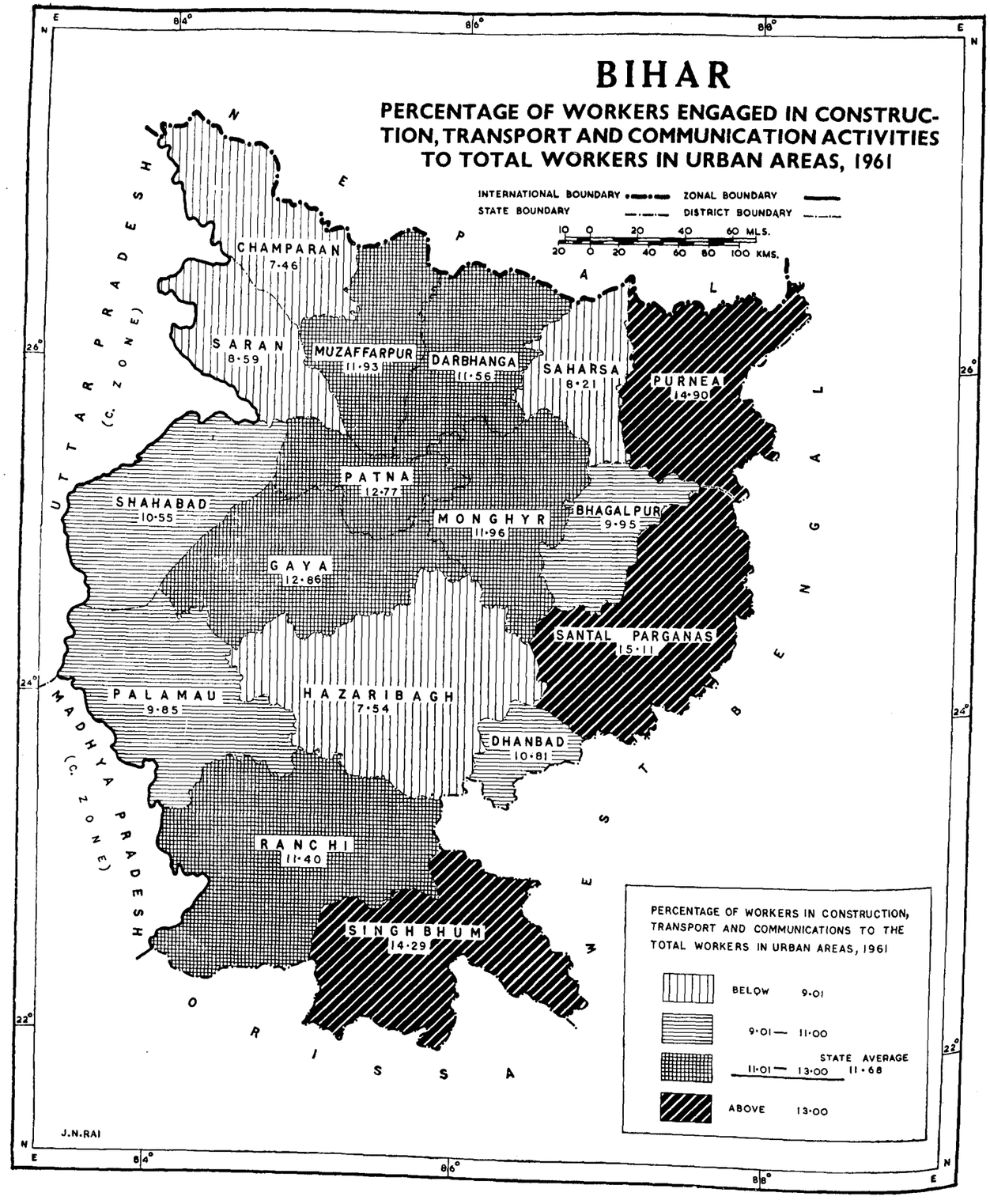
For the State as a whole, only 1.04 per cent of the total workers in rural areas are engaged in construction, transport and communications activities. Dhanbad, Singhbhum, Patna and Monghyr districts have comparatively high proportions. Shahabad, Bhagalpur and Purnea districts are also above the State average. As many as 9 districts have proportions below 1 per cent. Among them, the district of Santal Parganas comes last of all.

TABLE

PERCENTAGE OF WORKERS ENGAGED IN CONSTRUCTION, TRANSPORT AND COMMUNICATIONS TO TOTAL WORKERS IN RURAL AREAS OF BIHAR STATE, 1961

Rank	State/District	Workers in construction, transport and communications	Percentage
1	Dhanbad	10,531	2.37
2	Patna	17,963	1.95
3	Monghyr	20,393	1.69
4	Singhbhum	14,225	1.56
5	Shahabad	14,180	1.27
6	Purnea	13,041	1.13
7	Bhagalpur	7,328	1.12
	BIHAR ..	**186,979**	**1.04**
8	Gaya	14,502	1.03
9	Saran	11,891	0.99
	Hazaribagh ..	10,809	0.99
11	Palamau	4,205	0.77
12	Muzaffarpur ..	10,016	0.76
13	Darbhanga ..	11,279	0.75
14	Ranchi	7,962	0.70
15	Champaran ..	7,442	0.63
16	Saharsa	4,017	0.53
	Santal Parganas ..	7,195	0.53

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PERCENTAGE OF WORKERS ENGAGED IN CONSTRUCTION, TRANSPORT AND COMMUNICATIONS ACTIVITIES TO TOTAL WORKERS IN URBAN AREAS, 1961

Purpose

This map shows the percentage of workers engaged in construction, transport and communications activities to total workers in urban areas of each district of the State in 1961.

Method

Percentages of workers in Industrial Categories VI and VIII (of the 1961 Census) total number of workers in urban areas of each district have been grouped into four categories, as under :

(*i*) Below 9.01,
(*ii*) 9.01—11.00,
(*iii*) 11.01—13.00, and
(*iv*) above 13.00.

The districts have been shaded by four grades of hatching ranging from high to low. For facility of reference, the percentages have also been indicated in the map.

Salient Features

Employment in construction, transport and communications activities is understandably higher in urban areas of the State. 11.68 per cent of urban workers are thus employed as against 1.04 per cent only of rural workers. In fact even Champaran which has the lowest proportion (7.46 per cent) of such employment among urban workers, is much ahead of Dhanbad district which has the highest proportion of such employment among rural workers.

Among individual districts, the proportions are appreciably high in the districts of Santal Parganas, Purnea and Singhbhum. The first two districts have relatively small urban components comprising only 5.34 and 6.01 per cent respectively of their populations. Singhbhum, of course, has the second highest proportion of urban population in the State and 14.29 per cent of its urban workers belong to this category.

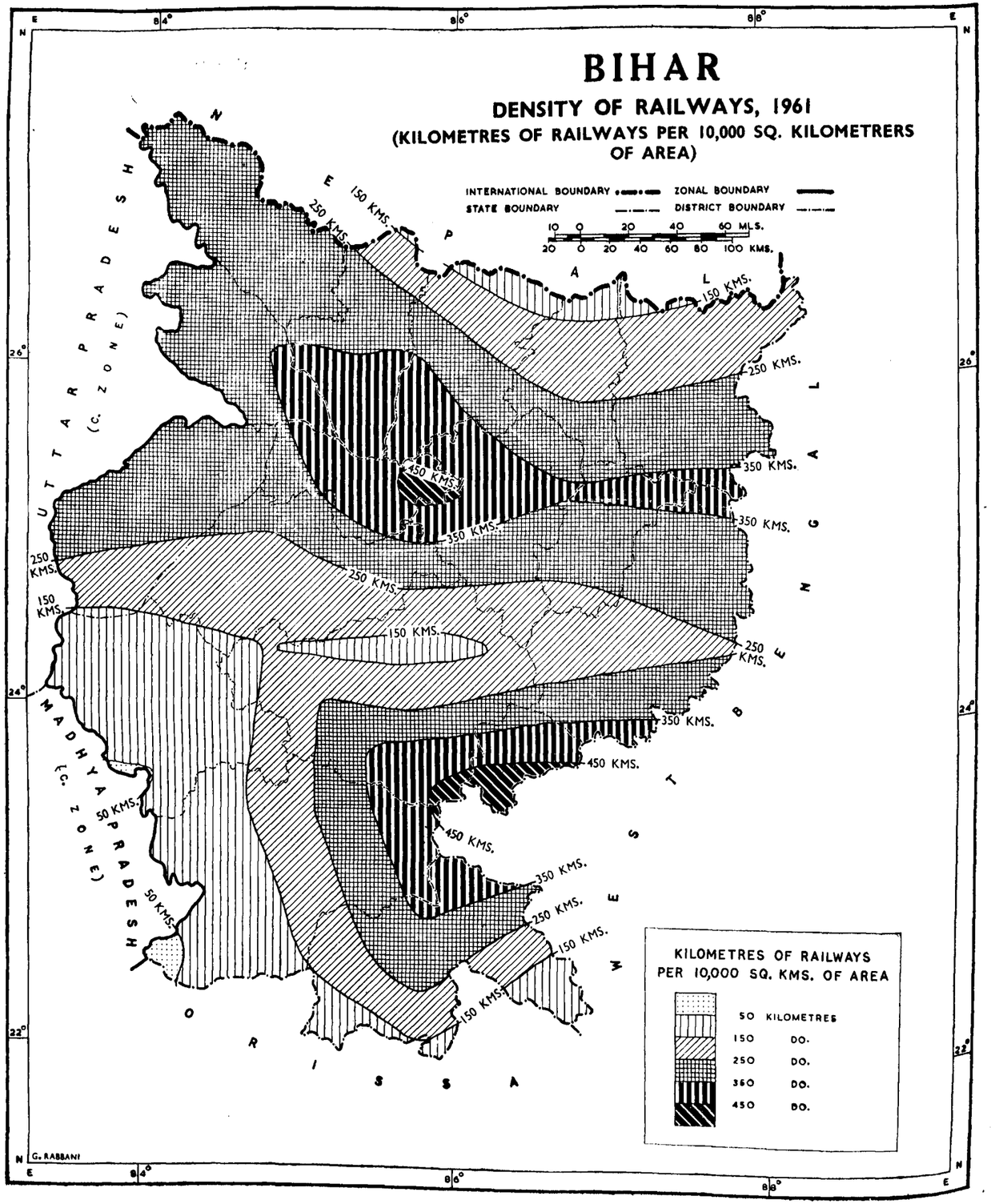
In the range 11.01—13.00 per cent, there is a compact block of five districts covering Muzaffarpur, Darbhanga, Patna, Gaya and Monghyr. Ranchi, though not a part of the block, also falls in the same range. Dhanbad, which has the highest proportion among rural workers, has relatively low employment in this category in urban areas. The districts in the lowest range (7.46—8.59) are Saran, Champaran, Saharsa and Hazaribagh.

TABLE

PERCENTAGE OF WORKERS ENGAGED IN CONSTRUCTION, TRANSPORT AND COMMUNICATIONS TO TOTAL WORKERS IN URBAN AREAS, 1961

Rank	State/District	Workers in construction, transport and communications	Percentage
1	Santal Parganas ..	6,869	15.11
2	Purnea	10,262	14.90
3	Singhbhum	21,019	14.29
4	Gaya	10,599	12.86
5	Patna	24,273	12.77
6	Monghyr	13,282	11.96
7	Muzaffarpur ..	7,051	11.93
	BIHAR ..	**151,906**	**11.68**
8	Darbhanga ..	6,965	11.56
9	Ranchi	7,422	11.40
10	Dhanbad	13,132	10.81
11	Shahabad	7,783	10.55
12	Bhagalpur	5,744	9.95
13	Palamau	1,819	9.85
14	Saran	4,255	8.59
15	Saharsa	2,097	8.21
16	Hazaribagh ..	5,449	7.54
17	Champaran ..	3,885	7.46

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.



MAP NO. 106

DENSITY OF RAILWAYS, 1961
(KILOMETRES OF RAILWAYS PER 10,000 SQ. KILOMETRES OF AREA)

Purpose

This map shows the density of railways per 10,000 sq. kilometres of area in the State in 1961.

Method

The number of kilometres of railways per 10,000 sq. kms. of area has been calculated by placing grids of squares of 10,000 sq. kms. each on the railway map of the State and plotting the values in each square according to the length of railways in it. Isopleths have been drawn for values of 50, 150, 250, 350 and 450. The space between isopleths has been shaded by different hatches ranging from high to low.

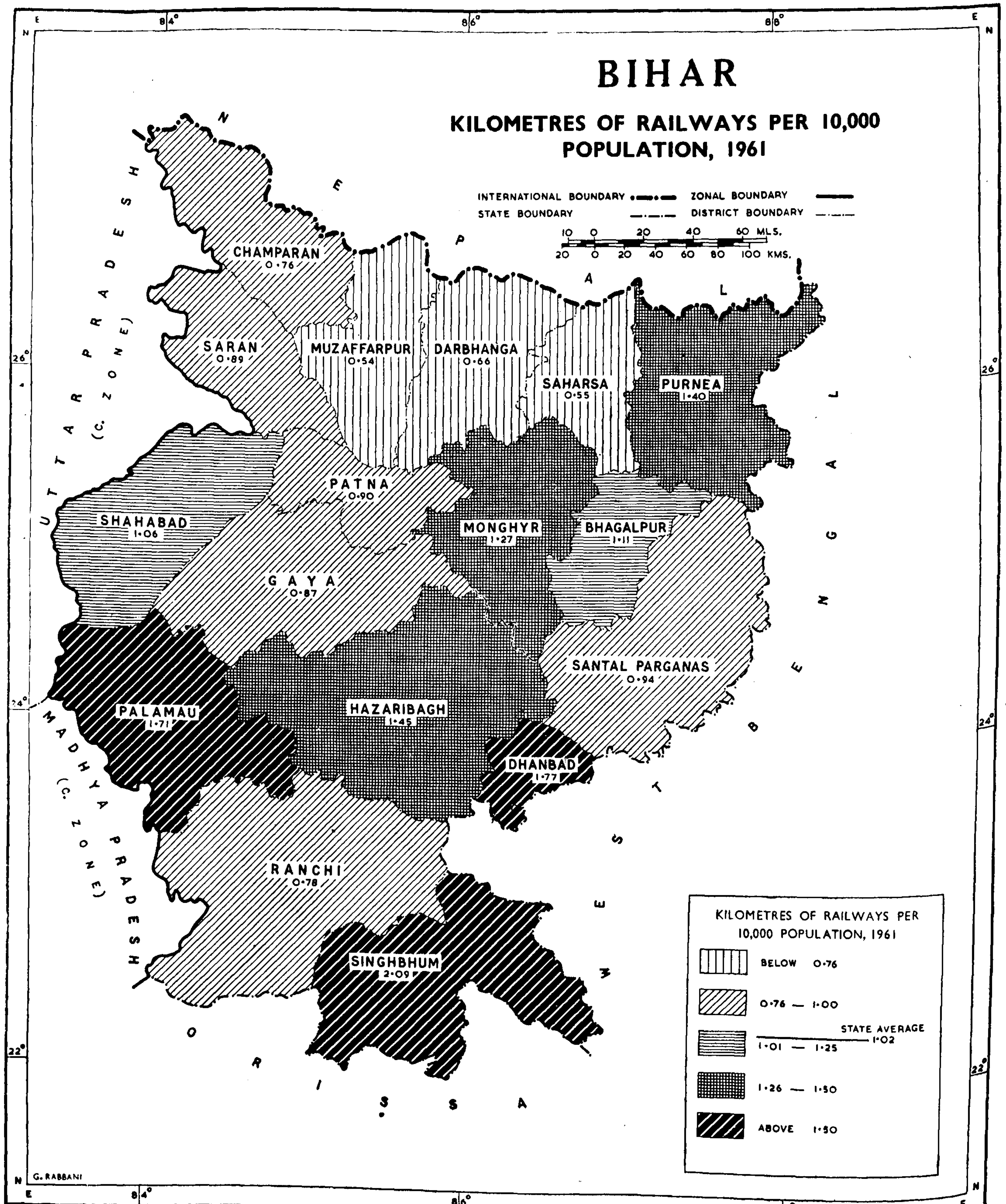
Salient Features

The density of railways is highest in two areas of the State, viz., (*i*) the north-eastern part of Patna district, and (*ii*) the south-eastern part of Hazaribagh district together with the southern part of Dhanbad district. In the former area, the impact of the main line of the Eastern Railway as well as the Bakhtiarpur-Rajgir Branch line and the Mokameh-Barauni link is too obvious. In the latter case, apart from the main line of the South Eastern Railway, there are several small branch lines for facilitating the movement of coal in which this area abounds.

The density of railways in the Gangetic Plain is over 350 kms. per 10,000 sq. kms. of the area. The main line of the Eastern Railway traverses the area south of the Ganges, while the North Eastern Railway does so in the area north of it. The south-eastern portion of Hazaribagh, the eastern portion of Ranchi, and the northern portion of Singhbhum also have railway densities in the same range.

The density of railways is below 150 kms. in the northern parts of the State adjoining Nepal, in the Chotanagpur Plateau, in practically the whole of Palamau district, and in the western portion of Ranchi district.

SOURCE : Railway Maps.



KILOMETRES OF RAILWAYS PER 10,000 POPULATION, 1961

Purpose

This map shows the density of railways per 10,000 of population in each district of the State in 1961.

Method

The number of kilometres of railways per 10,000 of population has been calculated for each district and grouped into five categories, as under :

(*i*) Below 0.76,
(*ii*) 0.76—1.00,
(*iii*) 1.01—1.25,
(*iv*) 1.26—1.50, and
(*v*) above 1.50.

The districts have then been shaded in five grades of hatching ranging from high to low. For facility of reference, densities have been indicated in the map.

Salient Features

Generally speaking, the districts with relatively low density of population are more prominent in this map. Against 1.02 kms. of railways per 10,000 of population in the State as a whole in 1961, the district of Singhbhum, with a ratio of 2.09, has more than double the State average. It is followed by Dhanbad (1.77) and Palamau (1.71). In Palamau, the most sparsely populated district in the State, the density of railways in terms of area is very small but in terms of population, it is the third highest in the State.

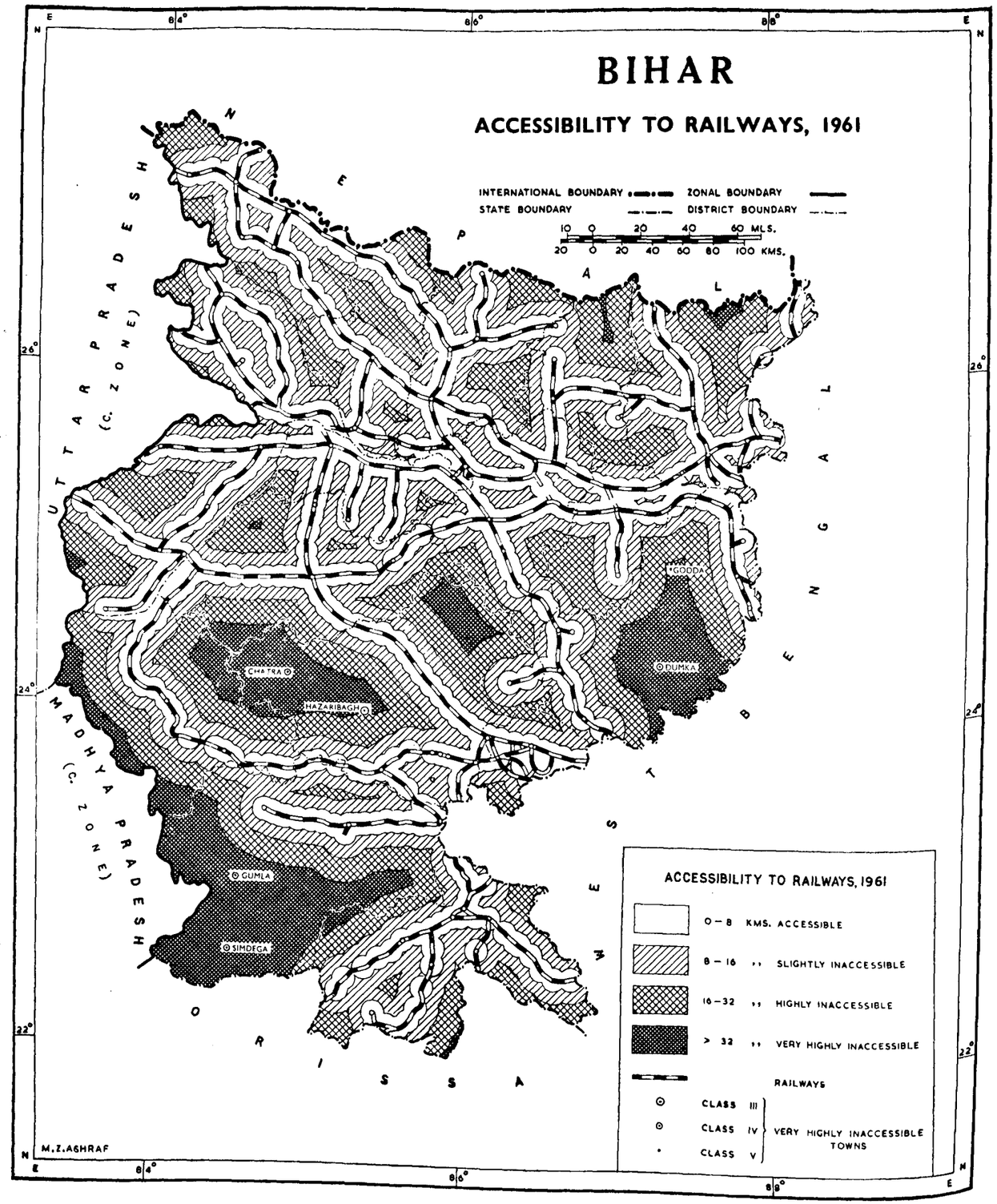
The low values in the North and South Bihar Plains arise mainly due to the high density of population in these areas. In Ranchi and Santal Parganas, however, the low railway densities coupled with the relatively low densities of population highlight their pronounced backwardness in rail communications.

TABLE

KILOMETRES OF RAILWAYS PER 10,000 POPULATION, 1961

Rank	State/District	Length of railways in kms.	Kilometres of railways per 10,000 population
1	Singhbhum	429	2.09
2	Dhanbad	205	1.77
3	Palamau	203	1.71
4	Hazaribagh ..	347	1.45
5	Purnea	431	1.40
6	Monghyr	431	1.27
7	Bhagalpur	190	1.11
8	Shahabad	341	1.06
	BIHAR	**4,733**	**1.02**
9	Santal Parganas ..	251	0.94
10	Patna	266	0.90
11	Saran	318	0.89
12	Gaya	319	0.87
13	Ranchi	167	0.78
14	Champaran ..	227	0.76
15	Darbhanga ..	292	0.66
16	Saharsa	94	0.55
17	Muzaffarpur ..	222	0.54

SOURCE : (1) Railway Maps.
(2) Railway Bradshaw.



ACCESSIBILITY TO RAILWAYS, 1961

Purpose

This map shows the accessibility of different regions of the State to railways, in terms of distances at intervals of 8 kilometres.

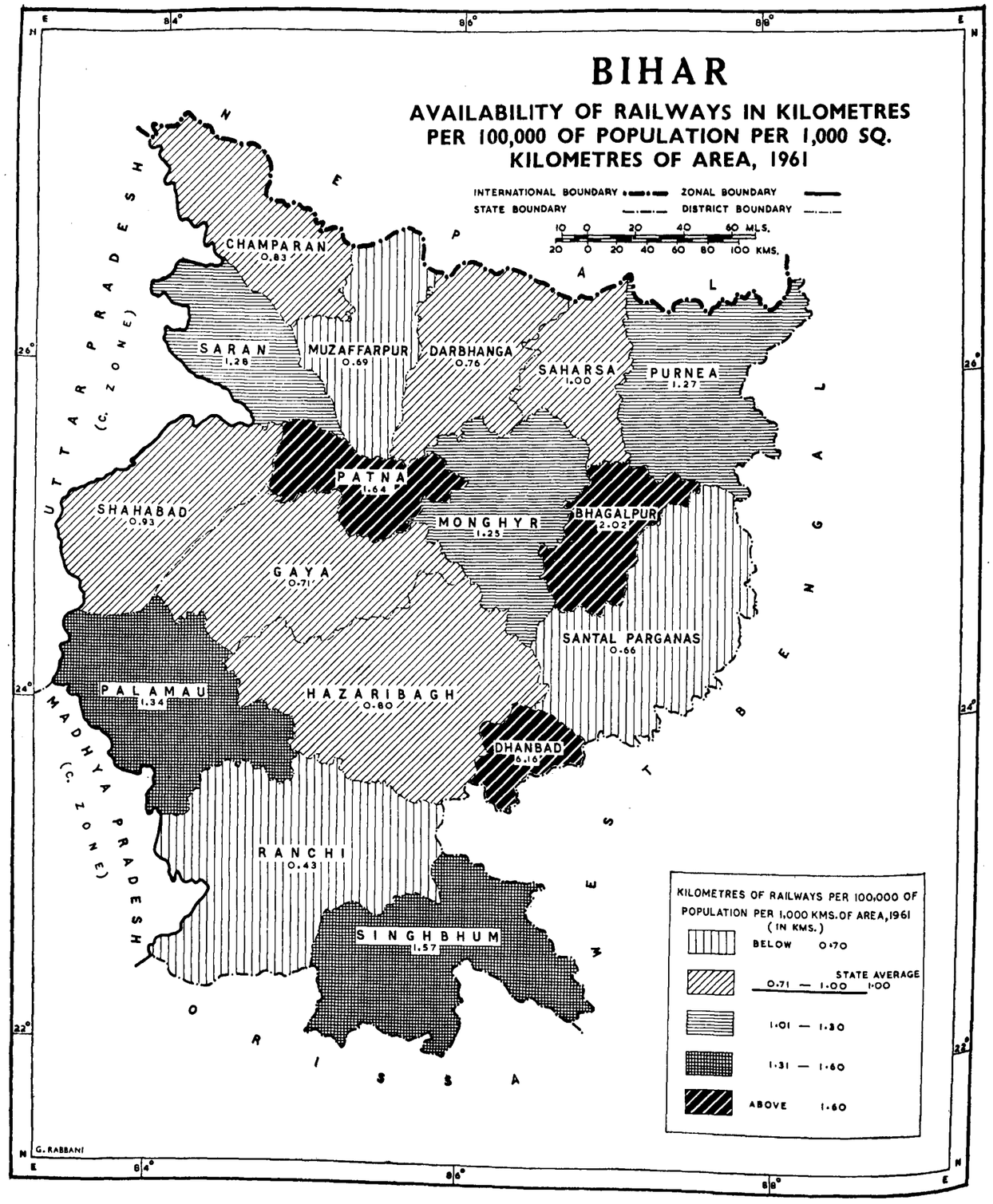
Method

The railways in the State have first been drawn on the map and the railway stations marked on it. With the railway stations as centres, arcs have been drawn with radii of 8, 16 and 32 kilometres. The arcs for each of the three radii have then been joined together giving three successive curved lines running more or less parallel to the railways. Areas within 8 kilometres of railway stations have been termed as *accessible*, those from 8 to 16 kilometres away as *slightly inaccessible*, those from 16 to 32 kilometres away as *highly inaccessible*, and those more than 32 kilometres away as *very highly inaccessible*. While the areas up to 8 kilometres away from railway stations have been left blank, those from 8 to 16, 16 to 32 and over 32 kilometres away have been shaded in three different grades of hatches ranging from high to low. Towns falling in very highly inaccessible regions have been shown in the map with separate symbols for each of the classes III to V, there being no towns of other classes in such regions.

Salient Features

The Chotanagpur Plateau clearly stands out in regard to zones which may be termed as highly inaccessible. Dumka and Hazaribagh are the only district towns lying in such zones. Chatra, Gumla and Simdega belong to the same category among subdivisional towns. Among other highly inaccessible zones are the south-western portion of Palamau, the plateau region near Adhaura in south-western Shahabad, and small portions in the northern parts of Saharsa and Purnea districts.

SOURCE : Railway Maps.



MAP NO. 109

AVAILABILITY OF RAILWAYS IN KILOMETERS PER 100,000 OF POPULATION PER 1,000 SQ. KILOMETRES OF AREA, 1961

Purpose

This map shows the availability of railways in kilometres per 100,000 of population per 1,000 sq. kilometres of area in Bihar State in 1961.

Method

The index for relating the two elements of area and population to availability of railways in kilometres is worked out as follows :

$$\frac{\text{Kms. of railways}}{\text{Area in sq. km.} \times \text{Population}} \times 1{,}000 \times 100{,}000$$

The values for the districts have been grouped into five categories, as under :

(*i*) Below 0.70, (*iii*) 1.01—1.30,
(*ii*) 0.71—1.00, (*iv*) 1.31—1.60, and
(*v*) above 1.60.

The districts have been shaded by five different grades of hatching ranging from high to low. For facility of reference, the values have also been shown in the map.

Salient Features

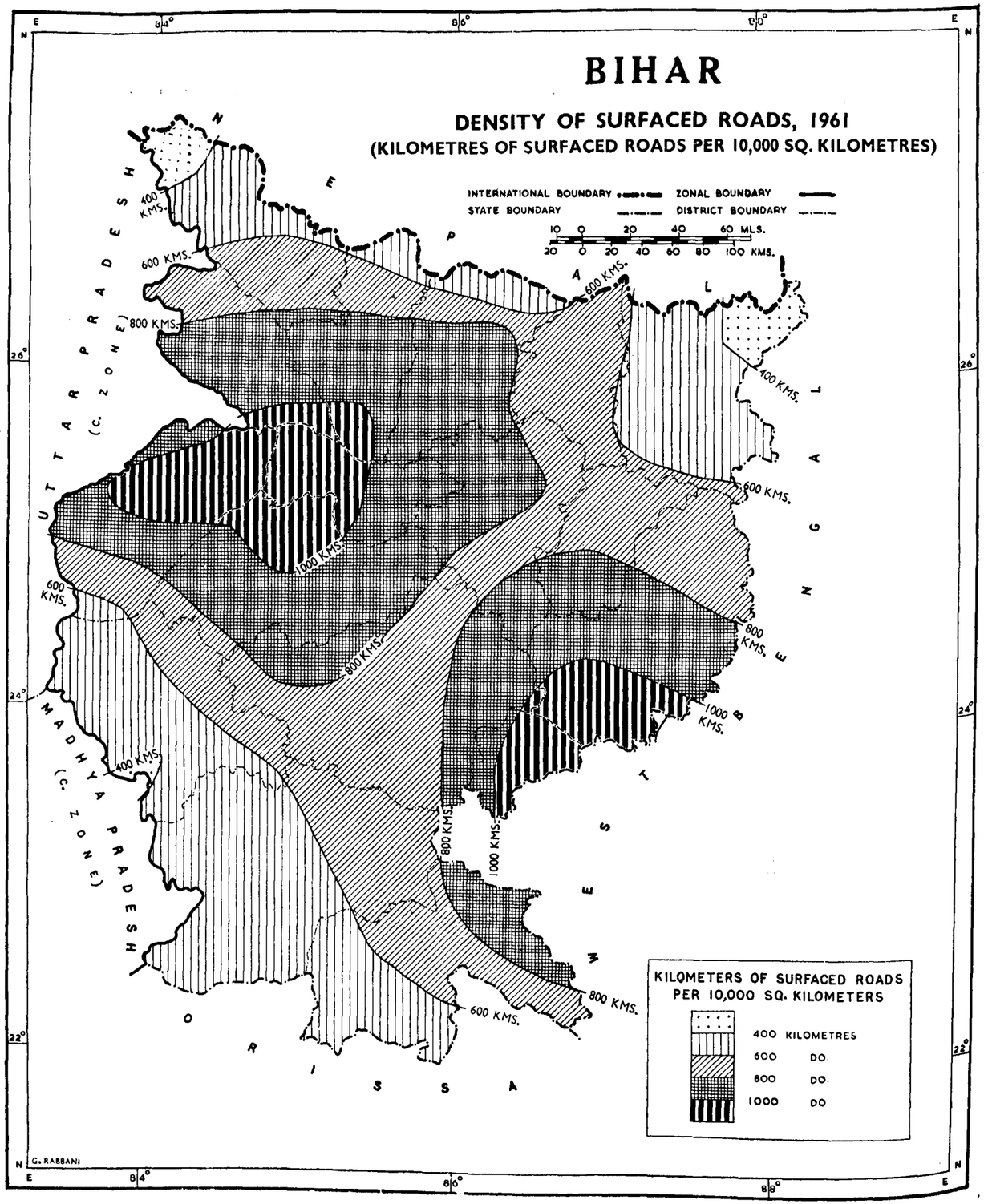
This map presents a clearer picture of the availability of railways in Bihar as it correlates the function to both area and population. Dhanbad, a small district with high density of population, stands out above all others. It has 6.16 kms. of railways as against the State average of 1.00. Bhagalpur too has a proportion which is more than double the State average. Patna, with 1.64 kms., follows next. Singhbhum, Palamau, Purnea, Monghyr and Saran are other districts with higher concentration of railways than the average for State. The indices are lowest in Muzaffarpur, Santal Parganas and Ranchi.

TABLE

AVAILABILITY OF RAILWAYS IN KILOMETRES PER 100,000 OF POPULATION PER 1,000 SQ. KMS. OF AREA, 1961

Rank	State/District	Length of railways in kms.	Railways in kms. per 100,000 of population per 1,000 sq. kms. of area
1	Dhanbad ..	205	6.16
2	Bhagalpur ..	190	2.02
3	Patna ..	266	1.64
4	Singhbhum ..	429	1.57
5	Palamau ..	203	1.34
6	Saran ..	318	1.28
7	Purnea ..	431	1.27
8	Monghyr ..	431	1.25
	BIHAR ..	4,733	1.00
9	Saharsa ..	94	1.00
10	Shahabad ..	341	0.93
11	Champaran ..	227	0.83
12	Hazaribagh ..	347	0.80
13	Darbhanga ..	292	0.76
14	Gaya ..	319	0.71
15	Muzaffarpur ..	222	0.69
16	Santal Parganas ..	251	0.66
17	Ranchi ..	167	0.43

SOURCE : (1) Railway Maps.
(2) Railway Bradshaw.



DENSITY OF SURFACED ROADS, 1961
(KILOMETRES OF SURFACED ROADS PER 10,000 SQ. KILOMETRES OF AREA)

Purpose

This map shows the density of surfaced roads per 10,000 sq. kms. of area in the State in 1961.

Method

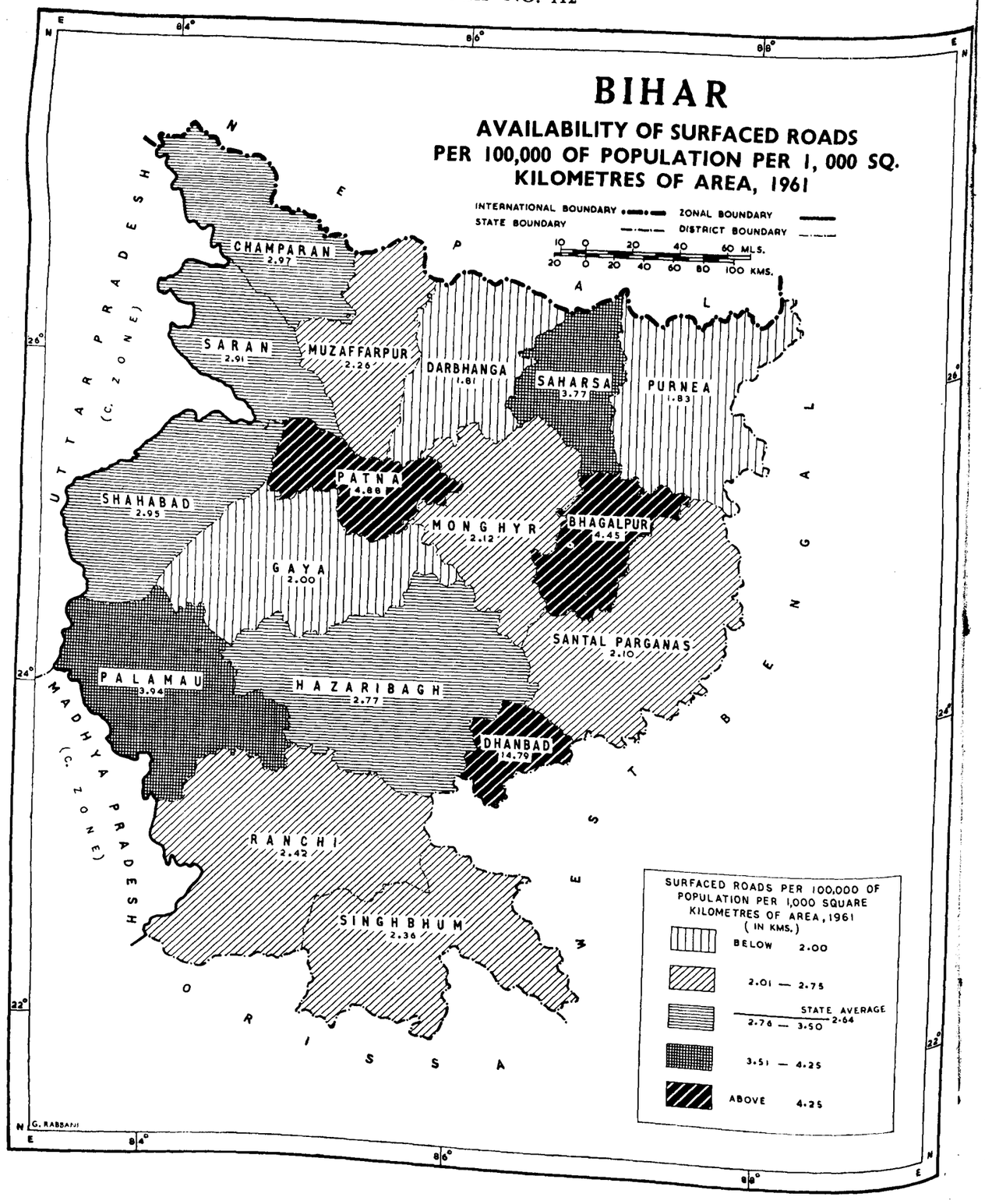
Grids of squares 10,000 sq. kms. each were drawn on the road map of the State and values of the length of roads in each square were plotted. Isopleths were then drawn for values of 400, 600, 800 and 1,000 kms. per 10,000 sq. kms. of the area. The intervening space between isopleths were shaded by five grades of hatching ranging from high to low.

Salient Features

The density of surfaced roads in terms of area is over 1,000 kms. in two compact zones, one comprising the western portion of Patna, northern portion of Gaya, north-eastern portion of Shahabad, and southern portions of Saran and Muzaffarpur districts, and the other comprising the southern portion of the Santal Parganas and eastern portion of Dhanbad districts.

A good portion of Palamau and Ranchi districts together with the western portion of Singhbhum district constitutes a compact zone of surfaced road density below 600 kms. The north-western part of Champaran and north-eastern part of Purnea districts are isolated zones with densities below 400 kms. Almost the whole of the remaining portion of Purnea district has road density of only 400 to 600 kms.

SOURCE : Road Map of India, Second Edition.



AVAILABILITY OF SURFACED ROADS PER 100,000 OF POPULATION PER 1,000 SQ. KILOMETRES OF AREA, 1961

Purpose

This map shows the availability of surfaced roads per 100,000 of population per 1,000 sq. kms. of area in each district of the State in 1961.

Method

The index for relating the two elements of area and population to availability of surfaced roads in kms. is as follows :

$$\frac{\text{Kms. of surfaced roads}}{\text{Area in sq. kms.} \times \text{Population}} \times 1{,}000 \times 100{,}000$$

The values for the districts have been grouped into five categories, as under :

(*i*) Below 2.00, (*iii*) 2.76—3.50,
(*ii*) 2.01—2.75, (*iv*) 3.51—4.25, and
(*v*) above 4.25.

The districts have then been shaded by five different grades of hatching ranging from high to low. For facility of reference, the values have also been shown in the map.

Salient Features

This map presents a clearer picture of the availability of surfaced roads in relation to both population and area.

The district of Dhanbad again stands high above the remaining districts of the State, with an average of 14.79 kms. as against the State average of 2.64 kms. only.

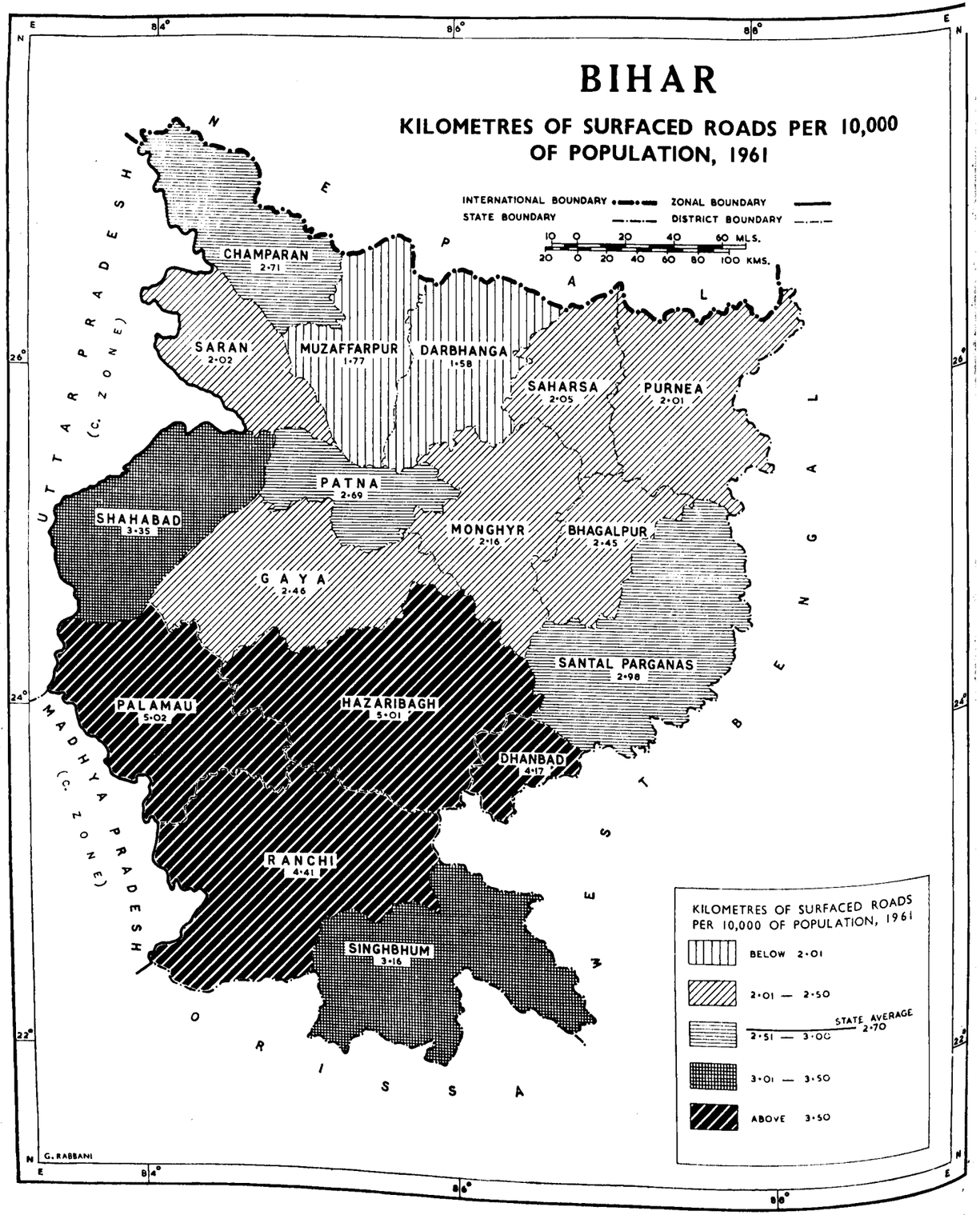
The districts of Patna and Bhagalpur also have high values as compared to the State average, but they are nowhere near Dhanbad's figure. The values are above the State average in Saharsa district as also in a group of five districts extending from Champaran in the north-west to Hazaribagh in the Chotanagpur Plateau. In the remaining districts—and more particularly in Gaya, Darbhanga and Purnea—the values are lower than the State average.

TABLE

AVAILABILITY OF SURFACED ROADS PER 100,000 OF POPULATION PER 1,000 SQ. KMS. OF AREA, 1961

Rank	State/District		Kms. of surfaced roads per 100,000 of population per 1,000 sq. kms. of area, 1961
1	Dhanbad	..	14.79
2	Patna	..	4.88
3	Bhagalpur	..	4.45
4	Palamau	..	3.94
5	Saharsa	..	3.77
6	Champaran	..	2.97
7	Shahabad	..	2.95
8	Saran	..	2.91
9	Hazaribagh	..	2.77
	BIHAR	..	**2.64**
10	Ranchi	..	2.42
11	Singhbhum	..	2.36
12	Muzaffarpur	..	2.26
13	Monghyr	..	2.12
14	Santal Parganas	..	2.10
15	Gaya	..	2.00
16	Purnea	..	1.83
17	Darbhanga	..	1.81

SOURCE : (1) Public Works Department, Government of Bihar.
(2) Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-I.



KILOMETRES OF SURFACED ROADS PER 10,000 OF POPULATION, 1961

Purpose

This map shows the length of surfaced roads per 10,000 of population in each district of the State in 1961.

Method

The values relating to kilometres of surfaced roads per 10,000 of population for each district have been grouped into five categories, as under :

(*i*) Below 2.01, (*iii*) 2.51—3.00,
(*ii*) 2.01—2.50, (*iv*) 3.01—3.50, and
(*v*) above 3.50.

The districts have been shaded by five different grades of hatching ranging from high to low. For facility of reference, the values have also been shown in the map.

Salient Features

The Chotanagpur Plateau, with its low density of population, has relatively high density of surfaced roads in terms of population. While the values are above the State average in each of the six districts in the plateau, those in Palamau, Hazaribagh, Ranchi and Dhanbad exceed 4 kms. per 10,000 of population in them.

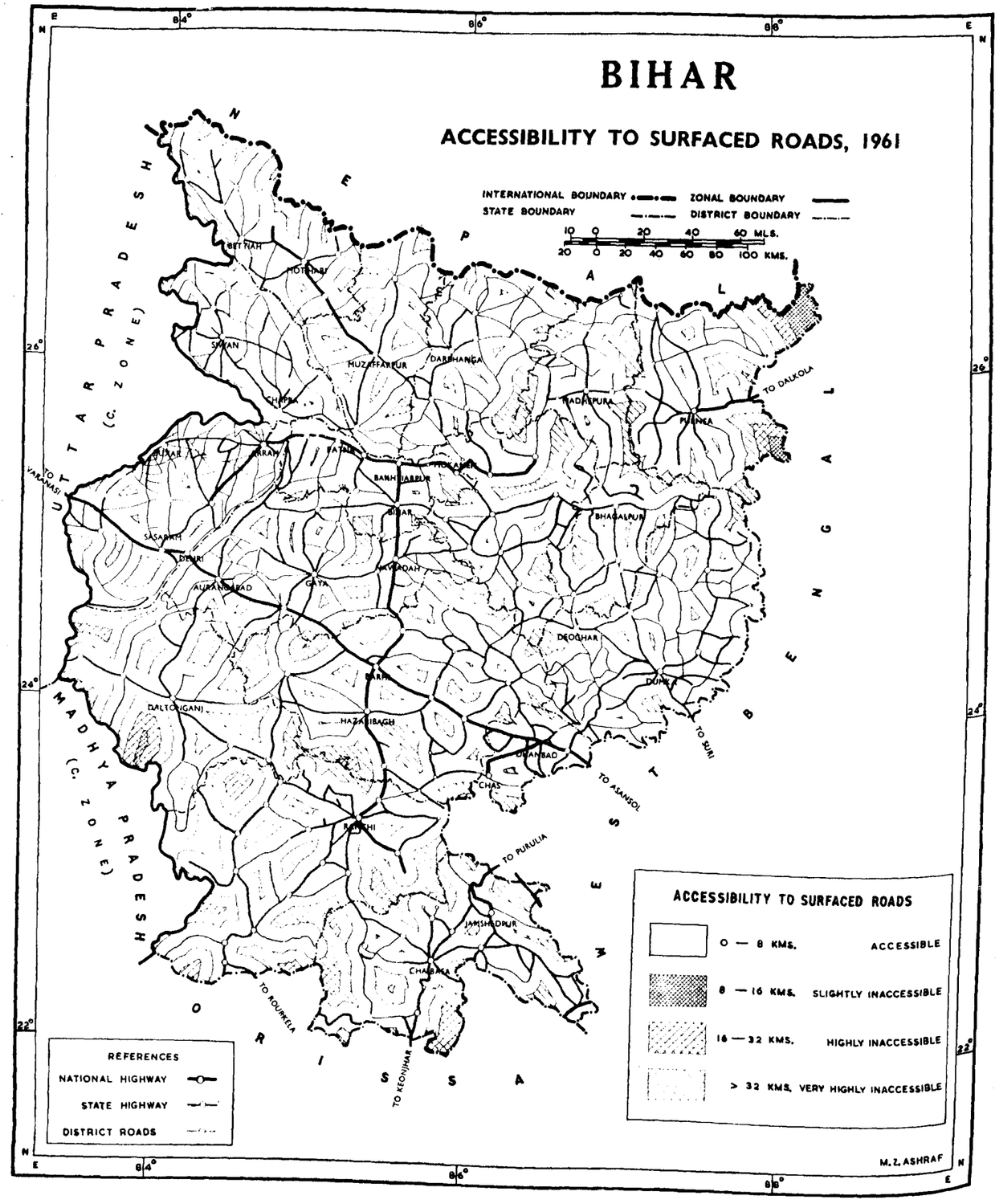
Shahabad (3.35) is the only district in the plains region with a value substantially higher than the State average (2.70). The values for Patna and Champaran districts are, however, very close to the State average. In other districts, the values are much less.

TABLE

KILOMETRES OF SURFACED ROADS PER 10,000 OF POPULATION, 1961

Rank	State/District	Kilometres of surfaced roads	Kilometres of surfaced roads per 10,000 of population
1	Palamau	.. 596	5.02
2	Hazaribagh	.. 1,201	5.01
3	Ranchi	.. 942	4.41
4	Dhanbad	.. 483	4.17
5	Shahabad	.. 1,079	3.35
6	Singhbhum	.. 647	3.16
7	Santal Parganas	.. 797	2.98
8	Champaran	.. 816	2.71
	BIHAR	.. **12,527**	**2.70**
9	Patna	.. 794	2.69
10	Gaya	.. 898	2.46
11	Bhagalpur	.. 419	2.45
12	Monghyr	.. 732	2.16
13	Saharsa	.. 354	2.05
14	Saran	.. 725	2.02
15	Purnea	.. 620	2.01
16	Muzaffarpur	.. 728	1.77
17	Darbhanga	.. 696	1.58

SOURCE : Public Works Department, Government of Bihar.



ACCESSIBILITY TO SURFACED ROADS, 1961

Purpose

This map shows the accessibility of different parts of the State to surfaced roads in 1961.

Method

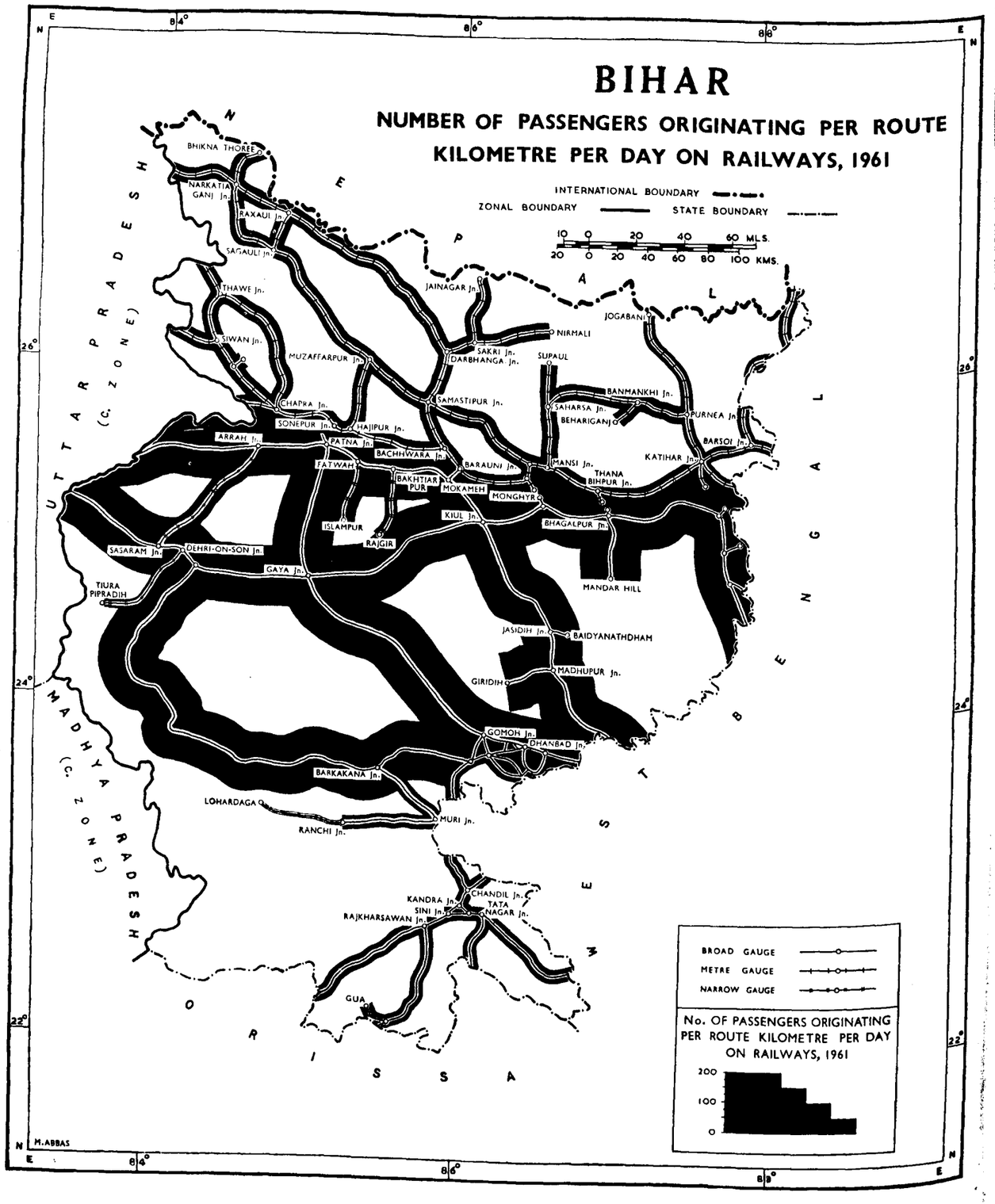
Surfaced roads in the State are comprised of national highways, state highways and district roads, which have all been shown in the map. Areas have then been demarcated and hatched separately according to their distances from the roads. Areas lying within 0—8 kms. of any such road have been treated as accessible and left blank in the map. Those lying beyond 8 kms. have been shown by three legends according to the following degrees of inaccessibility :

8—16 kms.—Slightly inaccessible
16—32 kms.—Highly inaccessible
Beyond 32 kms.—Very highly inaccessible.

Salient Features

The districts of Saran and Shahabad seem to be served well in regard to accessibility to surfaced roads. By and large, the position is not too bad in the plains region. Very highly inaccessible areas are found in the eastern portions of Purnea district, and in Palamau district. Highly inaccessible areas show prominently in the districts of Palamau, Hazaribagh, Ranchi and Singhbhum.

SOURCE : Road Map of India, Second Edition.



NUMBER OF PASSENGERS ORIGINATING PER ROUTE KILOMETRE PER DAY ON RAILWAYS, 1961

Purpose

This map shows the extent of use of the railways by passengers on different railway lines in the State.

Method

For the purpose of this map, data in respect of railways within the State have been obtained for the entire railway zones concerned. Separate figures for the State portions only were not available. The number of passengers originating per route km. per day has been obtained by dividing the total number of passengers in the year 1960-61 by the product of 365 days and the total route mileage (in kms.). Parallel lines have then been drawn on both sides of the railways proportionate to the number of passengers originating per route km. per day. These have then been shaded in black.

Salient Features

The map shows that passenger traffic is heavy on the Eastern Railway but not so heavy on the North Eastern and the South Eastern Railways.

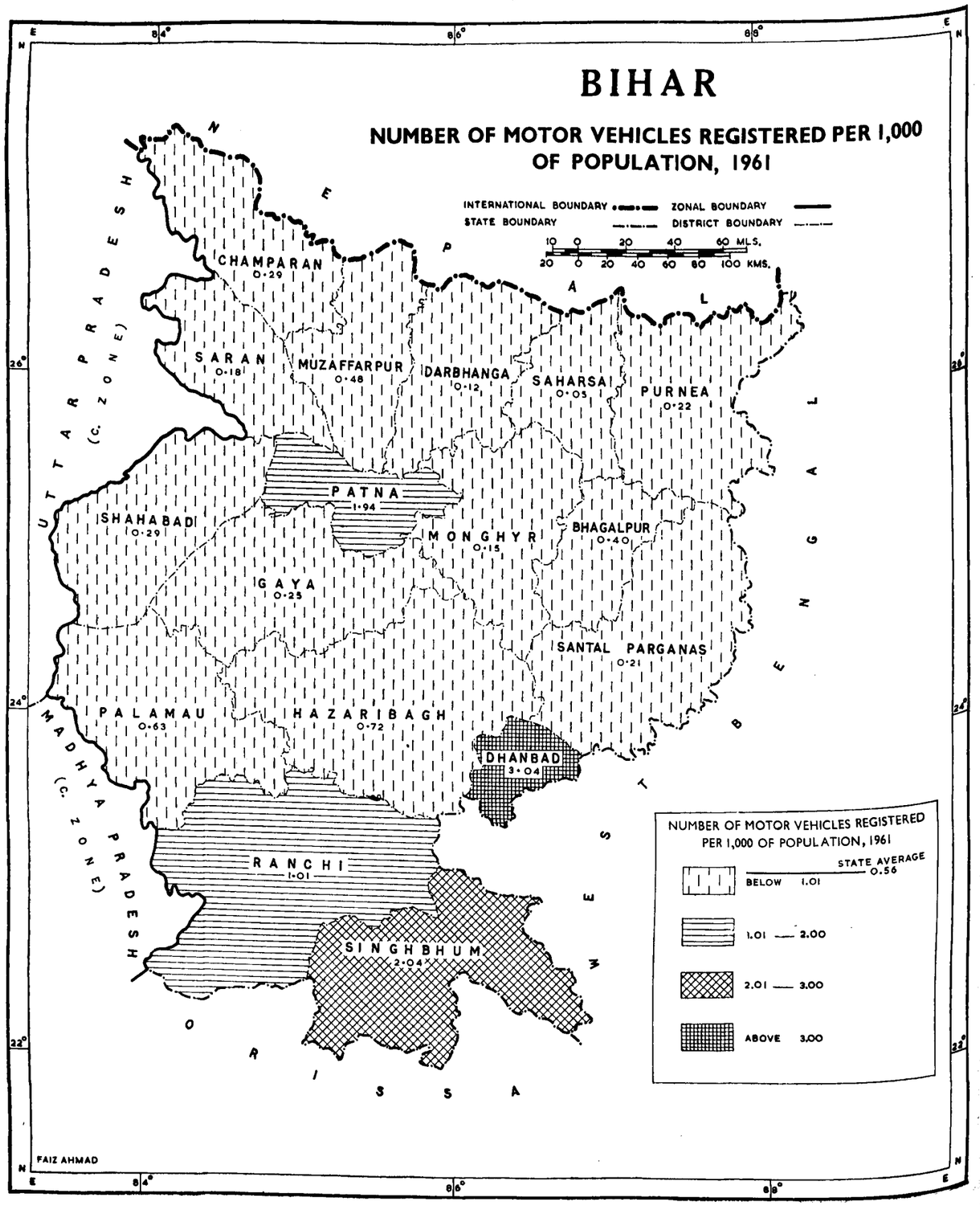
TABLE

NUMBER OF PASSENGERS ON VARIOUS RAILWAY LINES IN THE STATE

Railway	Gauge	Passengers originating per year	Route in kilometers	Total no. of days	No. of passengers per route km. per day
1	2	3	4	5	6
South Eastern Railway ..	Broad	72,180,000	4,376.97	365	45.18
	Narrow	6,400,000	1,381.68	365	12.69
Eastern Railway ..	Broad	273,567,000	3,847.04	365	194.82
	Narrow*	521,000	27.58	365	51.75
North East Frontier Railway ..	Metre	38,570,800	2,727.43	365	38.75
	Narrow*	102,700	83.64	365	3.36
North Eastern Railway ..	Metre	95,715,100	4,920.93	365	53.29
Arrah-Sasaram Light Railway ..	Narrow	2,269,175	96.96	365	64.12
Fatwah-Islampur Light Railway ..	Narrow	1,256,767	43.12	365	79.85
Bihar-Bakhtiarpur Light Railway ..	Narrow	780,700	53.11	365	40.27
Dehri-Rohtas Light Railway ..	Narrow	535,274	66.34	365	22.11

*Does not fall in Bihar.

SOURCE : Statistical Officers, S. E. Rly., E. Rly., N. E. F. Rly., N. E. Rly., and Railway Bradshaw.



NUMBER OF MOTOR VEHICLES REGISTERED PER 1,000 OF POPULATION, 1961

Purpose

This map shows the number of registered motor vehicles per 1,000 persons in each district of the State in 1961.

Method

Values for the districts have been grouped into four categories, as under :

(*i*) Below 1.01, (*iii*) 2.01—3.00, and

(*ii*) 1.01—2.00, (*iv*) above 3.00.

The districts have been shaded by four different grades of hatching ranging from high to low. For facility of reference, the values have also been noted on the map.

Salient Features

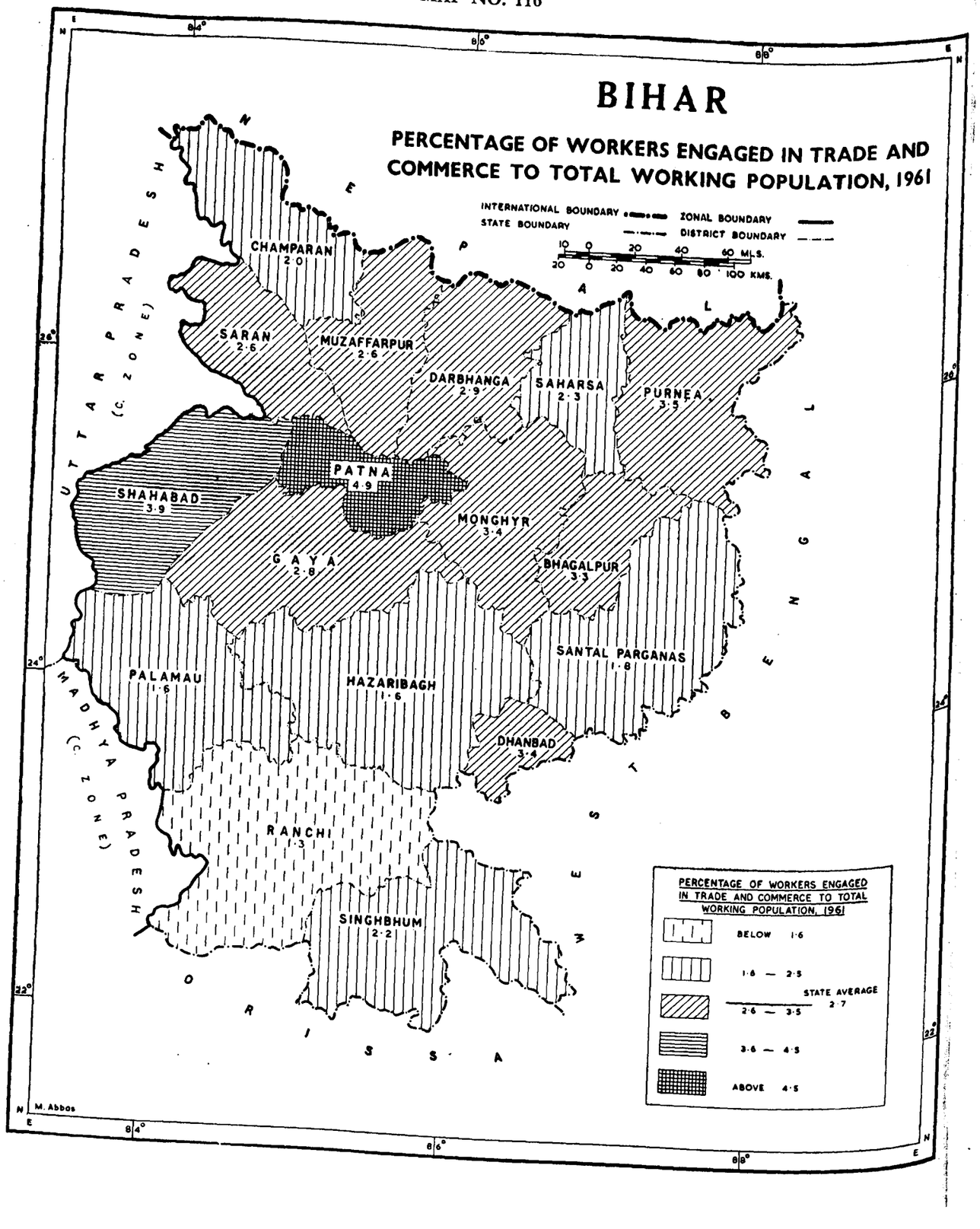
As against the State average of 0.56 registered motor vehicles per 1,000 persons the values are nearly six times (3.04) in Dhanbad and almost four times in Singhbhum (2.04) and Patna (1.94). Ranchi is the only other district in the State with more than 1 registered vehicle per 1,000 population. In the remaining districts, the values are below 1 per *mille*.

TABLE

NUMBER OF MOTOR VEHICLES REGISTERED PER 1,000 OF POPULATION, 1961

Rank	State/District	Total no. of vehicles	Number of registered vehicles per 1,000 population
1	Dhanbad ..	3,521	3.04
2	Singhbhum ..	4,191	2.04
3	Patna ..	5,739	1.94
4	Ranchi ..	2,159	1.01
5	Hazaribagh ..	1,722	0.72
6	Palamau ..	745	0.63
	BIHAR ..	**26,136**	**0.56**
7	Muzaffarpur ..	1,984	0.48
8	Bhagalpur ..	680	0.40
9	Champaran ..	864	0.29
	Shahabad ..	950	0.29
11	Gaya ..	931	0.25
12	Purnea ..	686	0.22
13	Santal Parganas ..	559	0.21
14	Saran ..	663	0.18
15	Monghyr ..	523	0.15
16	Darbhanaga ..	543	0.12
17	Saharsa ..	79	0.05

SOURCE : State Transport Commissioner, Bihar.



PERCENTAGE OF WORKERS ENGAGED IN TRADE AND COMMERCE TO TOTAL WORKING POPULATION, 1961

Purpose

This map shows the percentage of workers engaged in trade and commerce to total working population in different districts of the State.

Method

The districtwise percentages have been grouped into five ranges, viz.,

(*i*) Below 1.6, (*iii*) 2.6—3.5,
(*ii*) 1.6—2.5, (*iv*) 3.6—4.5, and
(*v*) above 4.5.

The districts have been shaded by five different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 19,234,565 workers in the State, 522,949 workers or 2.7 per cent are engaged in trade and commerce.

With the State capital located in it, Patna district has understandably recorded the highest proportion of workers in trade and commerce. It is followed by Shahabad (3.9 per cent) and Purnea (3.5 per cent). Retail trading in agricultural produce and different kinds of cloth account for the bulk of persons employed in trade and commerce.

The percentages are lowest in Ranchi (1.3 per cent), Palamau and Hazaribagh (1.6 per cent each). In these districts (as also in the Santal Parganas), a good deal of commercial transactions take place in periodical markets spread all over the district. Middlemen are largely redundant in such markets. Sellers and buyers are generally the village folks themselves.

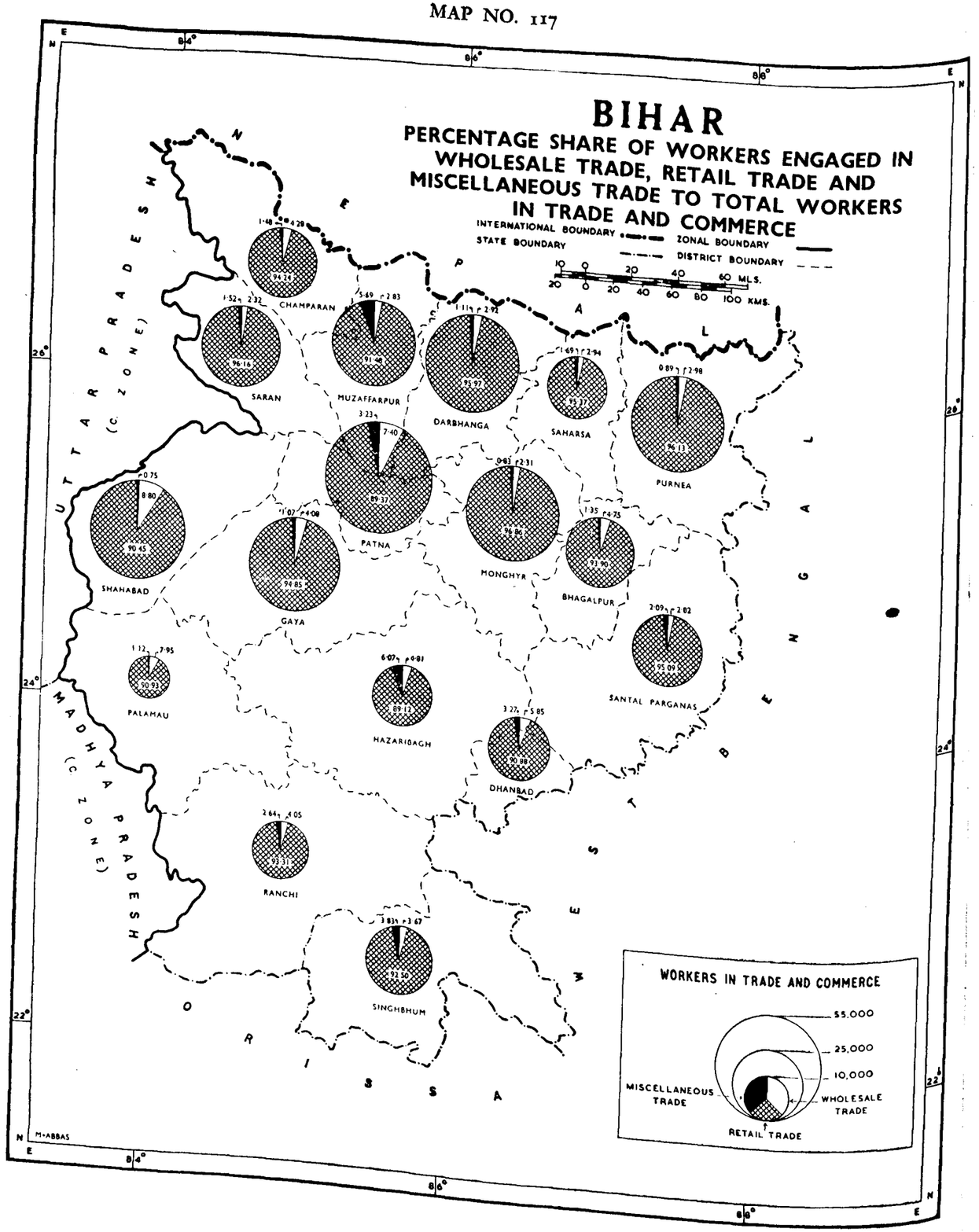
In the North Bihar districts, the proportions are generally low.

TABLE

PERCENTAGE OF WORKERS ENGAGED IN TRADE AND COMMERCE TO TOTAL WORKING POPULATION, 1961

Rank	State/District	Percentage
1	Patna ..	4.9
2	Shahabad ..	3.9
3	Purnea ..	3.5
4	Monghyr ..	3.4
	Dhanbad ..	3.4
6	Bhagalpur ..	3.3
7	Darbhanga ..	2.9
8	Gaya ..	2.8
	BIHAR ..	2.7
9	Saran ..	2.6
	Muzaffarpur ..	2.6
11	Saharsa ..	2.3
12	Singhbhum ..	2.2
13	Champaran ..	2.0
14	Santal Parganas ..	1.8
15	Palamau ..	1.6
	Hazaribagh ..	1.6
17	Ranchi ..	1.3

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PERCENTAGE SHARE OF WORKERS ENGAGED IN WHOLESALE TRADE, RETAIL TRADE AND MISCELLANEOUS TRADE TO TOTAL WORKERS IN TRADE AND COMMERCE, 1961

Purpose

– This map portrays, for each district, the classification of workers engaged in trade and commerce by their employment in *(i)* wholesale trade *(ii)* retail trade, and *(iii)* miscellaneous trades.

Method

Circles proportional to total workers in trade and commerce have been drawn in each district. The percentage shares of workers engaged in the three types of trade have been shown by sectors within the circles. The percentage share of each type has been indicated within or just outside the respective sectors.

Salient Features

Out of 522,949 persons engaged in trade and commerce, 22,907 persons or 4.38 per cent are engaged in wholesale trade, 488,979 persons or 93.50 per cent in retail trade, and 11,063 persons or 2.12 per cent in miscellaneous trades.

The proportions engaged in wholesale trade are comparatively high in Shahabad, Patna and Palamau. Wholesale trade in cereals and pulses employs about 2,000 persons each in Shahabad and Patna while such trade in forest produce is important in Palamau. Purnea has over 400 persons employed in wholesale trade in yarns and fabrics.

Retail trade in cereals and pulses, and yarns and fabrics account for the bulk of retail traders in all districts. The proportions are generally above 90 per cent.

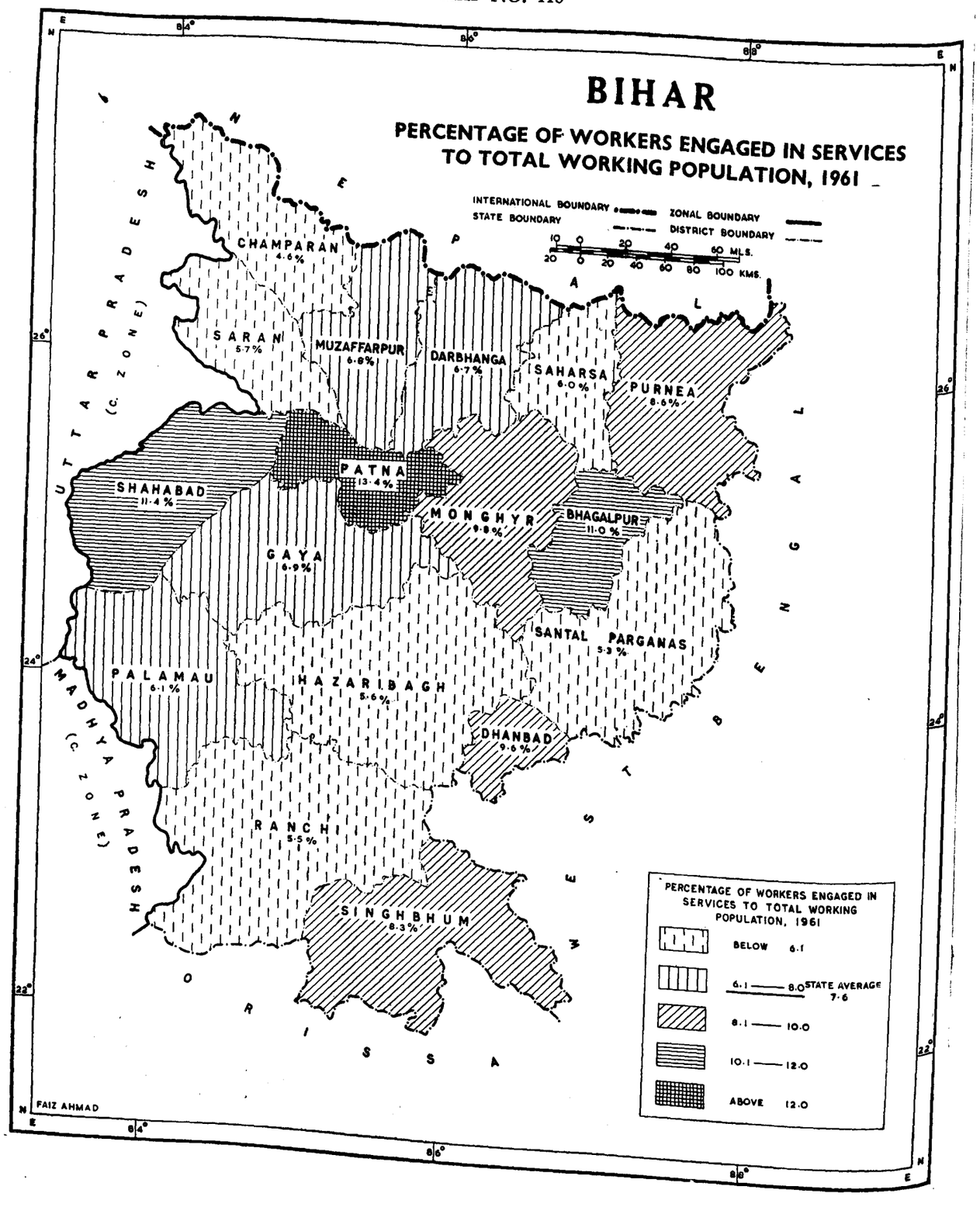
Miscellaneous trades include import and export, real estate, insurance, banking and money lending. Hazaribagh, with its large business in mica export, has the highest proportion in this category.

TABLE

PERCENTAGE SHARE OF WORKERS ENGAGED IN WHOLESALE TRADE, RETAIL TRADE AND MISCELLANEOUS TRADES TO TOTAL WORKERS IN TRADE AND COMMERCE, 1961

State/District	Total workers in trade and commerce	Percentage of workers in wholesale trade	Percentage of workers in retail trade	Percentage of workers in miscellaneous trade
1	2	3	4	5
BIHAR ..	**522,949**	**4.38**	**93.50**	**2.12**
Patna ..	54,600	7.40	89.37	3.23
Gaya ..	42,216	4.08	94.85	1.07
Shahabad ..	46,131	8.80	90.45	0.75
Saran ..	31,910	2.32	96.16	1.52
Champaran ..	24,794	4.28	94.24	1.48
Muzaffarpur ..	36,517	2.83	91.48	5.69
Darbhanga ..	45,792	2.92	95.97	1.11
Monghyr ..	45,122	2.31	96.86	0.83
Bhagalpur ..	23,555	4.75	93.90	1.35
Saharsa ..	18,163	2.94	95.37	1.69
Purnea ..	43,298	2.98	96.13	0.89
Santal Parganas ..	25,191	2.82	95.09	2.09
Palamau ..	8,838	7.95	90.93	1.12
Hazaribagh ..	18,123	4.81	89.12	6.07
Ranchi ..	16,012	4.05	93.31	2.64
Dhanbad ..	19,477	5.85	90.88	3.27
Singhbhum ..	23,210	3.67	92.50	3.83

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B(i), Table B-IV, Part C.



MAP NO. 118

PERCENTAGE OF WORKERS ENGAGED IN SERVICES TO TOTAL WORKING POPULATION, 1961

Purpose

This map shows the proportion of workers in other services (category IX) to the total working population in each district in 1961.

Method

The district percentages have been grouped into five categories, viz.,

(*i*) Below 6.1, (*iii*) 8.1—10.0,
(*ii*) 6.1—8.0, (*iv*) 10.1—12.0, and
(*v*) above 12.0.

The districts have been shaded into five different grades of hatching ranging from high to low. The percentage values of individual districts have been shown in the map to facilitate reading.

Salient Features

Out of 19,234,565 workers in the State, 1,456,306 workers or 7.6 per cent are engaged in various services such as educational and scientific, medical and health, personal, and miscellaneous.

The district of Patna stands above all others in regard to its high proportion of workers in services. This is evidently due to its considerable urban growth unaccompanied by any significant industrial development. It has been helped in such a situation by several factors such as the existence of the State's capital within the district, the pre-eminence of Patna as an old centre of historical and commercial importance born out of its convenient location for river-borne traffic, and such other factors. The percentages are relatively high also in the four districts of South Bihar Plain, extending from Shahabad to Bhagalpur.

The proportion of workers engaged in services is low throughout the North Bihar Plain (except Purnea) and in the Chotanagpur Plateau (except Dhanbad and Singhbhum). Industrial development in the latter two districts has apparently resulted in generating substantial employment in services also.

The following compact blocks are easily discernible :

(*i*) Saran and Champaran in the range below 6.1 ;
(*ii*) Muzaffarpur and Darbhanga in the range 6.1—8.0 ;
(*iii*) Gaya and Palamau in the same range of 6.1—8.0 ; and
(*iv*) Santal Parganas, Hazaribagh and Ranchi in the range below 6.1.

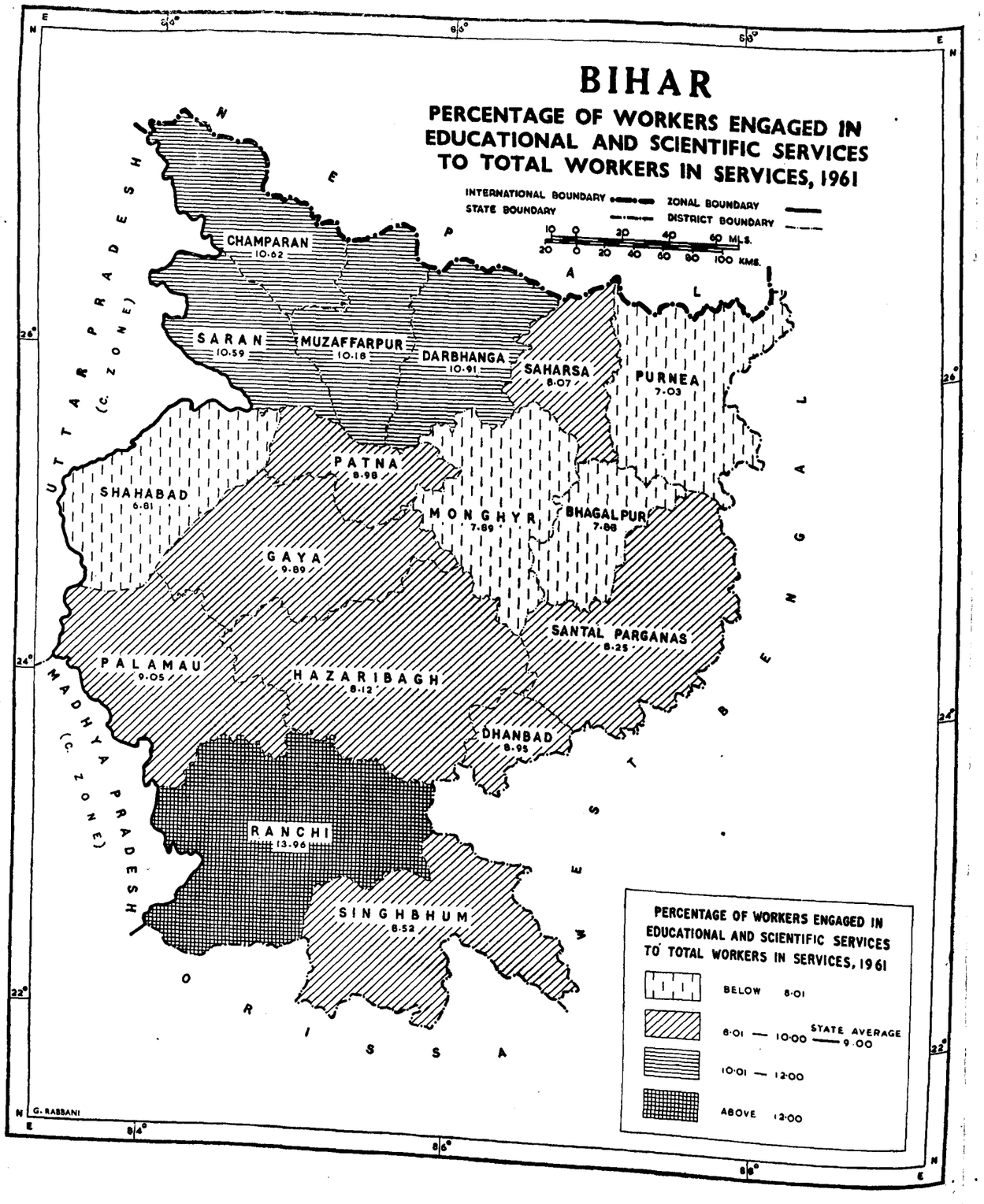
They conform to the regional patterns except in the case of (*iii*) above, where the two districts belong to two different natural divisions.

TABLE

PERCENTAGE OF WORKERS IN SERVICES TO TOTAL WORKING POPULATION, 1961

Rank	State/District		Percentage
1	Patna	..	13.4
2	Shahabad	..	11.4
3	Bhagalpur	..	11.0
4	Monghyr	..	9.8
5	Dhanbad	..	9.6
6	Purnea	..	8.6
7	Singhbhum	..	8.3
	BIHAR	..	**7.6**
8	Gaya	..	6.9
9	Muzaffarpur	..	6.8
10	Darbhanga	..	6.7
11	Palamau	..	6.1
12	Saharsa	..	6.0
13	Saran	..	5.7
14	Hazaribagh	..	5.6
15	Ranchi	..	5.5
16	Santal Parganas	..	5.3
17	Champaran	..	4.6

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PERCENTAGE OF WORKERS ENGAGED IN EDUCATIONAL AND SCIENTIFIC SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Purpose

This map is intended to show the proportion in 1961 of workers engaged in educational and scientific services to total workers in services.

Method

The proportion is expressed in terms of percentage for every district. The percentages have been grouped into four categories, viz.,

(*i*) Below 8.01, (*ii*) 8.01—10.00, (*iii*) 10.01—12.00, and (*iv*) above 12.00.

The districts have been shaded by four different grades of hatching ranging from high to low. The percentage values of individual districts have been noted on the map to facilitate reading.

Salient Features

A mere 9.00 per cent of the total workers in services are engaged in educational and scientific services in Bihar State. The highest percentage has been recorded by Ranchi district (13.96) and the lowest by Shahabad district (6.81). In absolute numbers, however, Patna leads with 13,329 persons engaged in educational and scientific services, followed by Darbhanga (11,450). Palamau and Saharsa are at the other end with figures of 3,126 and 2,810 respectively.

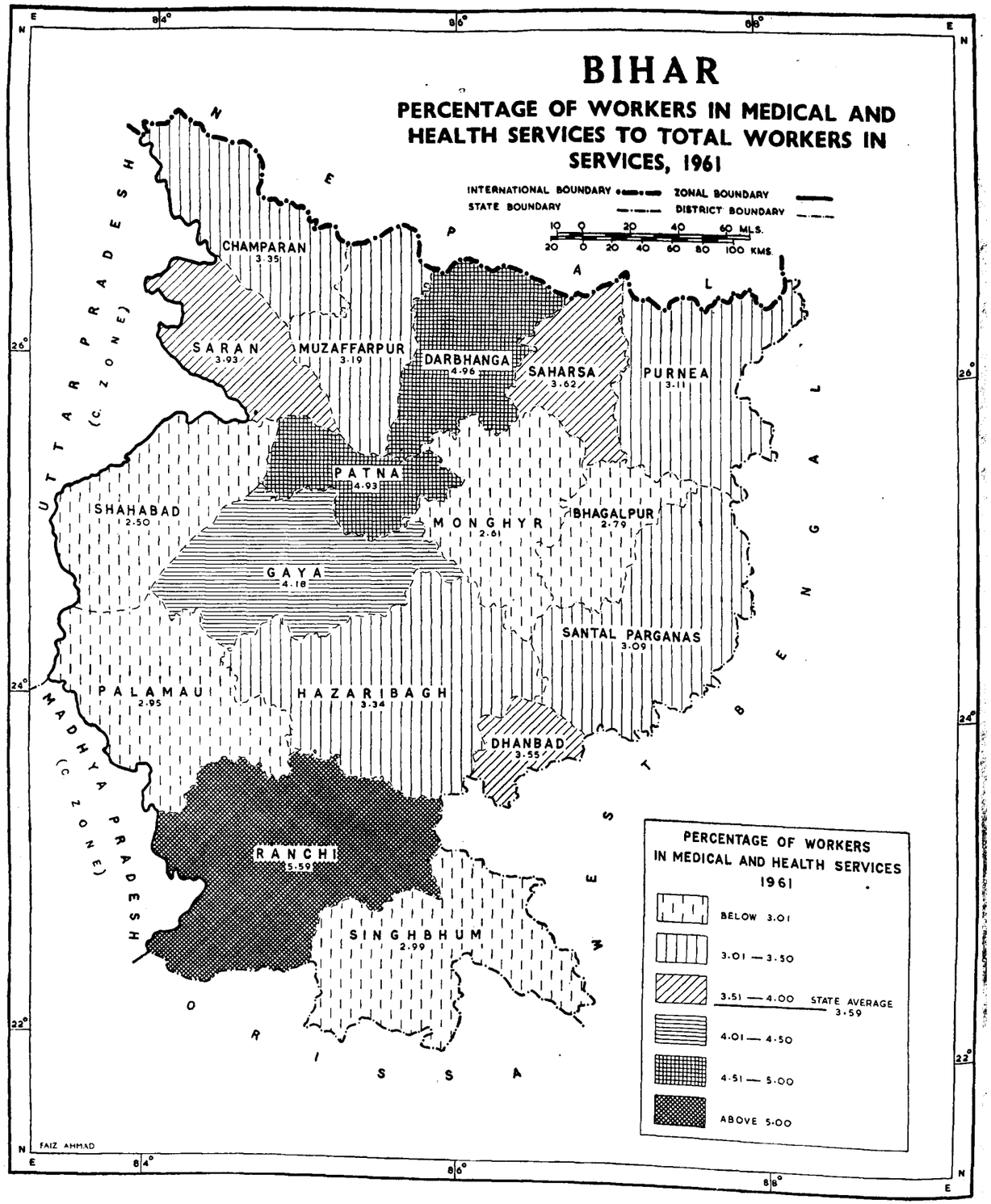
In the map, three compact blocks are easily discernible. The whole of Tirhut division comprises one block with district percentages above the State average (9.00 per cent). The whole of Chotanagpur Plateau *minus* Ranchi district but including Patna and Gaya districts forms another compact block with values within a range of ± 1 per cent of the State average. The third block of low percentages is constituted by Monghyr, Bhagalpur and Purnea districts. The districts of Saharsa and Shahabad are, however, geographically separated from the respective groups to which they belong statistically.

TABLE

PERCENTAGE OF WORKERS IN EDUCATIONAL AND SCIENTIFIC SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Rank	State/District		Percentage
1	Ranchi	..	13.96
2	Darbhanga	..	10.91
3	Champaran	..	10.62
4	Saran	..	10.59
5	Muzaffarpur	..	10.18
6	Gaya	..	9.89
7	Palamau	..	9.05
	BIHAR	..	9.00
8	Patna	..	8.98
9	Dhanbad	..	8.95
10	Singhbhum	..	8.52
11	Santal Parganas	..	8.25
12	Hazaribagh	..	8.12
13	Saharsa	..	8.07
14	Monghyr	..	7.89
15	Bhagalpur	..	7.88
16	Purnea	..	7.03
17	Shahabad	..	6.81

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B (i), Table B-IV Part C.



PERCENTAGE OF WORKERS IN MEDICAL AND HEALTH SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Purpose

This map brings out the proportions of workers engaged in medical and health services to total workers in services during 1961.

Method

The districtwise proportions, expressed in terms of percentages, have been grouped into six different categories, viz.,

(*i*) Below 3.01, (*ii*) 3.01—3.50, (*iii*) 3.51—4.00, (*iv*) 4.01—4.50, (*v*) 4.51—5.00, and (*vi*) above 5.00.

The districts have then been shaded by six different grades of hatching ranging from high to low. For facility of reading, the individual values have been indicated on the map within the respective districts.

Salient Features

Out of a total of 1,456,306 workers in various services in Bihar, 52,215 workers comprising 3.59 per cent are engaged in medical and health services.

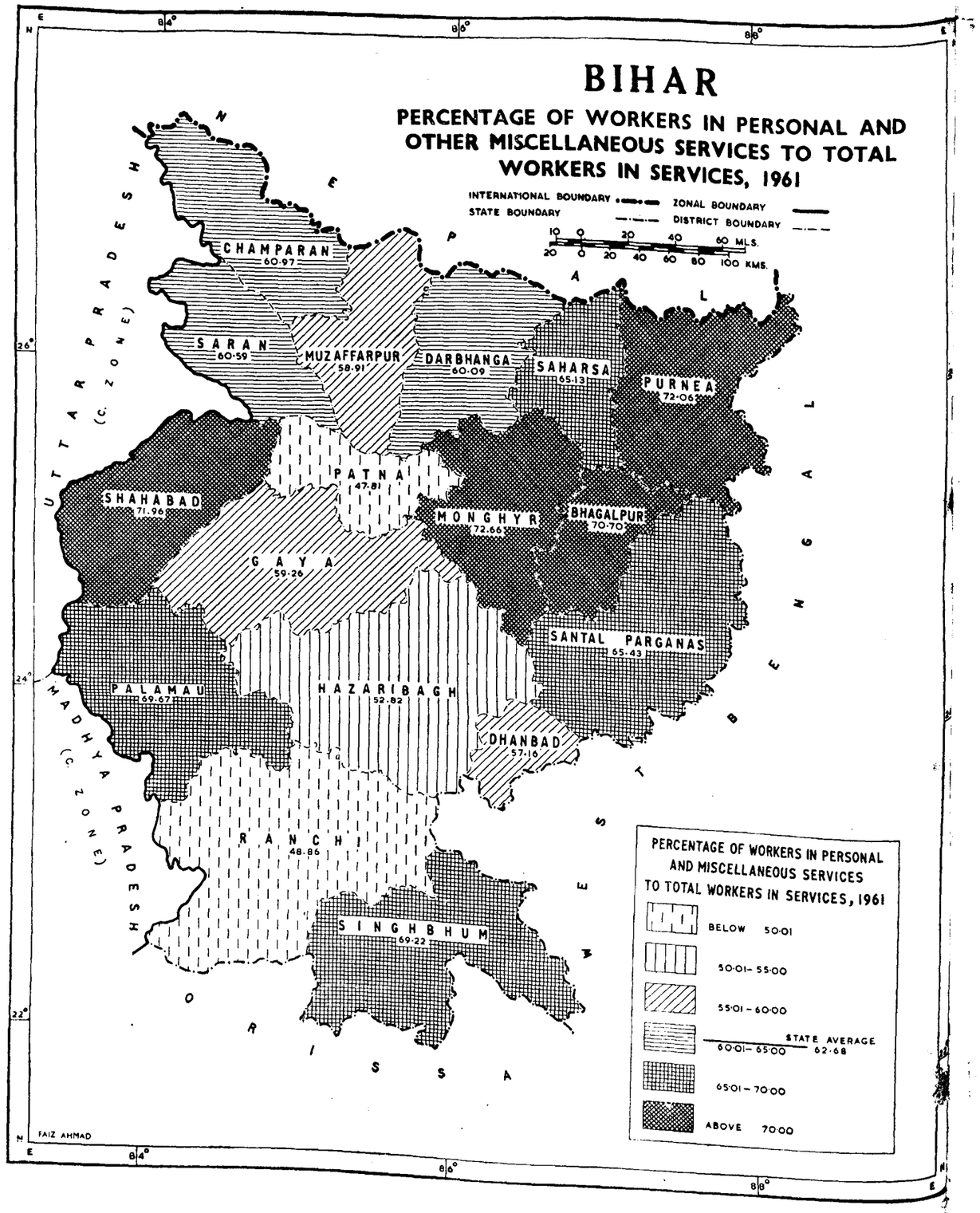
As in the case of educational and scientific services, Ranchi and Darbhanga occupy the top positions and Shahabad the bottom position in the proportion of workers engaged in medical and health services. In terms of absolute numbers, however, Patna takes the lead with 7,318 such workers, followed by Darbhanga (5,202) and Gaya (4,335), while Palamau (1,018) and Saharsa (1,714) are again at the tail end. The high percentages in Ranchi, Darbhanga and Patna are evidently attributable to the Medical Colleges and Hospitals located at the headquarters of these districts.

TABLE

PERCENTAGE OF WORKERS IN MEDICAL AND HEALTH SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Rank	State/District	Percentage
1	Ranchi ..	5.59
2	Darbhanga ..	4.96
3	Patna ..	4.93
4	Gaya ..	4.18
5	Saran ..	3.93
6	Saharsa ..	3.62
	BIHAR ..	**3.59**
7	Dhanbad ..	3.55
8	Champaran ..	3.35
9	Hazaribagh ..	3.34
10	Muzaffarpur ..	3.19
11	Purnea ..	3.11
12	Santal Parganas ..	3.09
13	Singhbhum ..	2.99
14	Palamau ..	2.95
15	Bhagalpur ..	2.79
16	Monghyr ..	2.61
17	Shahabad ..	2.50

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B (i), Table B-IV Part C.



MAP NO. 121

PERCENTAGE OF WORKERS IN PERSONAL AND OTHER MISCELLANEOUS SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Purpose

This map shows the percentage of workers engaged in personal and miscellaneous services to total workers in services during 1961.

Method

The districtwise percentages have been grouped into the following six categories :

(*i*) Below 50.01, (*iv*) 60.01—65.00,
(*ii*) 50.01—55.00, (*v*) 65.01—70.00, and
(*iii*) 55.01—60.00, (*vi*) above 70.00.

The districts have then been shaded by six different grades of hatching ranging from high to low. For facility of reading, the individual values have been indicated on the map within the respective districts.

Salient Features

Workers in personal and other miscellaneous services comprise the main bulk of workers in services. In Bihar State, according to the Census of 1961, they account for 62.68 per cent of total workers in services.

The highest proportion of such workers has been recorded in Monghyr district, followed by Purnea, Shahabad and Bhagalpur, all having more than 70 per cent. In the next range (between 65.01 and 70.00 per cent) which too has high values, fall Palamau, Singhbhum, Santal Parganas and Saharsa. They have no geographical contiguity and the one common factor among them is their relative backwardness, notwithstanding the fact that Singhbhum has Jamshedpur to boast of. The third group consists of Champaran, Saran and Darbhanga which, but for Muzaffarpur, would have comprised one block. Their percentages, though somewhat lower than the State average, are nearest to it. Gaya, Muzaffarpur and Dhanbad come in the fourth group. Hazaribagh is the sole representative of the fifth group having rather low percentage. Ranchi and Patna which have the lowest percentages belong to the last group.

TABLE

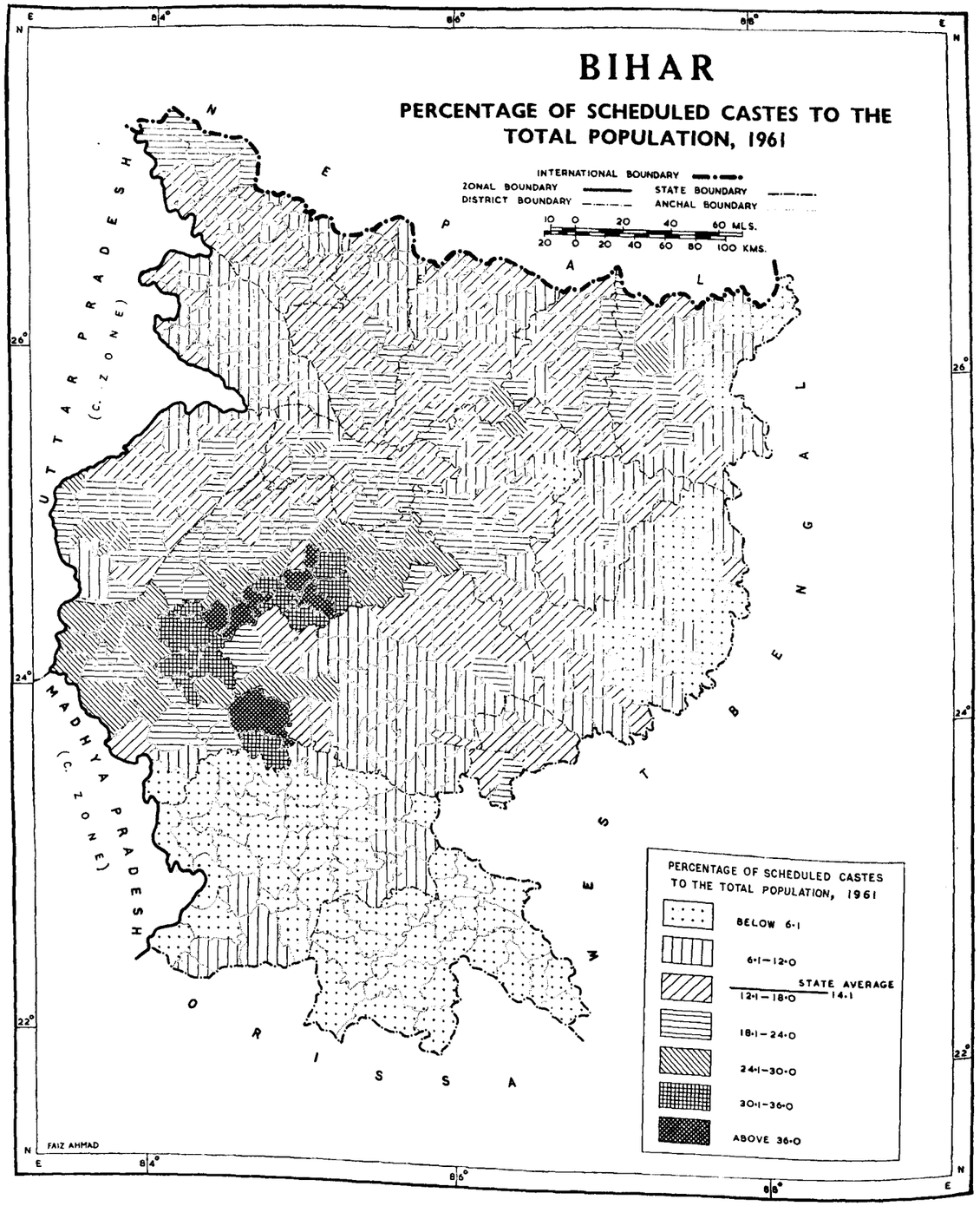
PERCENTAGE OF WORKERS IN PERSONAL AND MISCELLANEOUS SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Rank	State/District	Percentage
1	Monghyr	72.66
2	Purnea	72.06
3	Shahabad	71.96
4	Bhagalpur	70.70
5	Palamau	69.67
6	Singhbhum	69.22
7	Santal Parganas	65.43
8	Saharsa	65.13
	BIHAR	**62.68**
9	Champaran	60.97
10	Saran	60.59
11	Darbhanga	60.09
12	Gaya	59.26
13	Muzaffarpur	58.91
14	Dhanbad	57.16
15	Hazaribagh	52.82
16	Ranchi	48.86
17	Patna	47.81

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B(*i*), Table B-IV Part C.

5. SOCIO-CULTURAL ASPECTS

MAP NO. 122



PERCENTAGE OF SCHEDULED CASTES TO THE TOTAL POPULATION, 1961

Purpose

This map shows the proportions of scheduled caste population to the total population of each anchal in the State.

Method

The percentages have been grouped into seven, ranges viz.,

(*i*) Below 6.1, (*iv*) 18.1—24.0,
(*ii*) 6.1—12.0, (*v*) 24.1—30.0,
(*iii*) 12.1—18.0, (*vi*) 30.1—36.0, and
(*vii*) above 36.0.

The anchals have been shaded by seven different grades of hatching ranging from high to low.

Salient Features

There are 23 scheduled castes in the State notified under the Constitution of India (Scheduled Castes and Scheduled Tribes) Order, 1950 as amended in 1956. They comprise 14.07 per cent of the State's population, as against 14.71 per cent for the country as a whole.

Although the scheduled castes in Bihar are found in all parts of the State, their proportion is below 10 per cent in the southern and eastern parts of the Chotanagpur Plateau comprising Santal Parganas, Ranchi and Singhbhum districts. Their proportions are, however, above 20 per cent in the contiguous distticts of Palamau and Gaya.

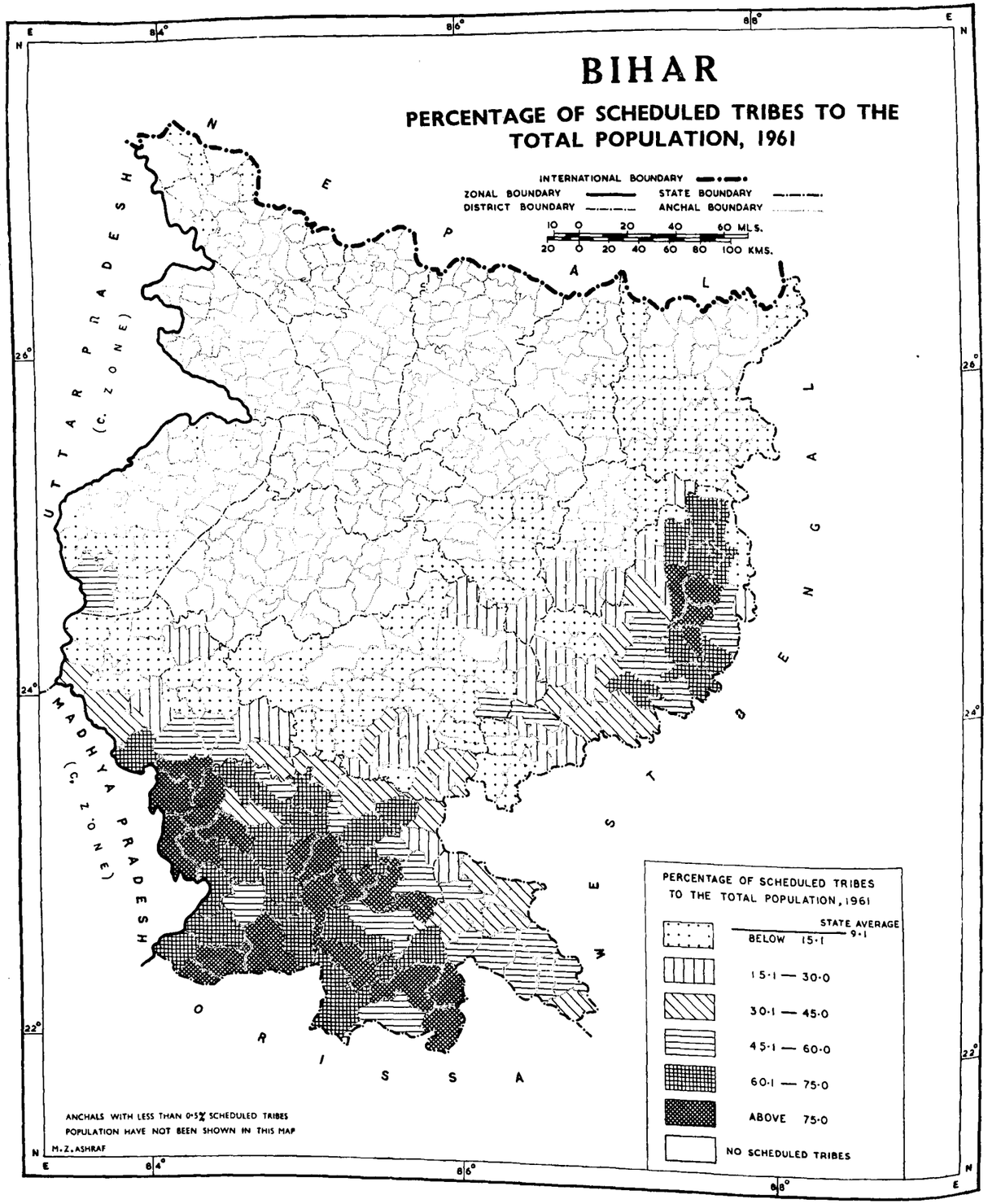
In 50 out of 575 anchals in the State, the proportion of scheduled castes exceeds 24.1 per cent of the total population. 41 of these anchals lie in Palamau and Gaya which are the only districts with anchals having more than 30 per cent of their population comprised of scheduled castes.

TABLE

PERCENTAGE OF SCHEDULED CASTES TO THE TOTAL POPULATION, 1961

Rank	State/ District	Percentage of scheduled castes	Total anchals	Number of anchals in range						
				Below 6.1	6.1—12.0	12.1—18.0	18.1—24.0	24.1—30.0	30.1—36.0	Above 36.0
1	2	3	4	5	6	7	8	9	10	11
1	Palamau ..	25.93	25	1	1	1	6	9	6	1
2	Gaya ..	24.54	46	..	..	7	14	13	6	6
3	Saharsa ..	17.18	21	..	2	13	6	..	..	..
4	Patna ..	16.09	28	..	1	13	13	1	..	..
5	Shahabad ..	16.01	41	..	6	20	12	3	..	..
6	Monghyr ..	15.80	39	..	8	15	15	1	..	..
7	Dhanbad ..	15.58	10	..	2	5	2	1	..	..
8	Muzaffarpur ..	14.89	40	..	9	24	7	..	..	..
9	Darbhanga ..	14.67	44	..	12	24	7	1	..	..
10	Champaran ..	14.56	36	..	9	22	5	..	..	..
	BIHAR ..	**14.07**	**575**	**78**	**156**	**194**	**97**	**31**	**12**	**7**
11	Hazaribagh ..	12.37	42	..	23	15	3	1	..	..
12	Purnea ..	12.24	38	7	13	11	6	1	..	..
13	Bhagalpur ..	11.58	21	..	10	10	1	..	..	..
14	Saran ..	10.33	40	..	33	7	..	..	..	..
15	Santal Parganas	7.56	41	17	17	7	..	..	..	..
16	Ranchi ..	4.55	38	23	10	..	..	..	..	..
17	Singhbhum ..	2.92	25	25	..	..	..	..	..	..

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.



PERCENTAGE OF SCHEDULED TRIBES TO THE TOTAL POPULATION, 1961

Purpose

The proportion of scheduled tribe population to the total population of each anchal is shown in this map.

Method

The percentages have been grouped into six ranges, viz.,

(*i*) below 15.1, (*iv*) 45.1—60.0,
(*ii*) 15.1—30.0, (*v*) 60.1—75.0, and
(*iii*) 30.1—45.0, (*vi*) above 75.0.

The anchals have been shaded by six different grades of hatching ranging from high to low. Anchals containing less than 0.5 per cent of scheduled tribes or none at all have not been shaded.

Salient Features

There are 30 scheduled tribes in the State notified under the Constitution (Scheduled Castes and Scheduled Tribes) Order, 1950 as amended in 1956. They comprise 9.05 per cent of the State's population, as against 6.81 per cent for the country as a whole.

The scheduled tribes in Bihar are mainly concentrated in the six districts of the Chotanagpur Plateau. These contain 93.7 per cent of their total population. More than two-fifths (61.61 per cent) of Ranchi's population and almost half (47.31 per cent) of Singhbhum's is tribal. The proportions are lower in the Santal Parganas (38.24 per cent) and Palamau (19.24 per cent), and only about 11 per cent in Hazaribagh and Dhanbad.

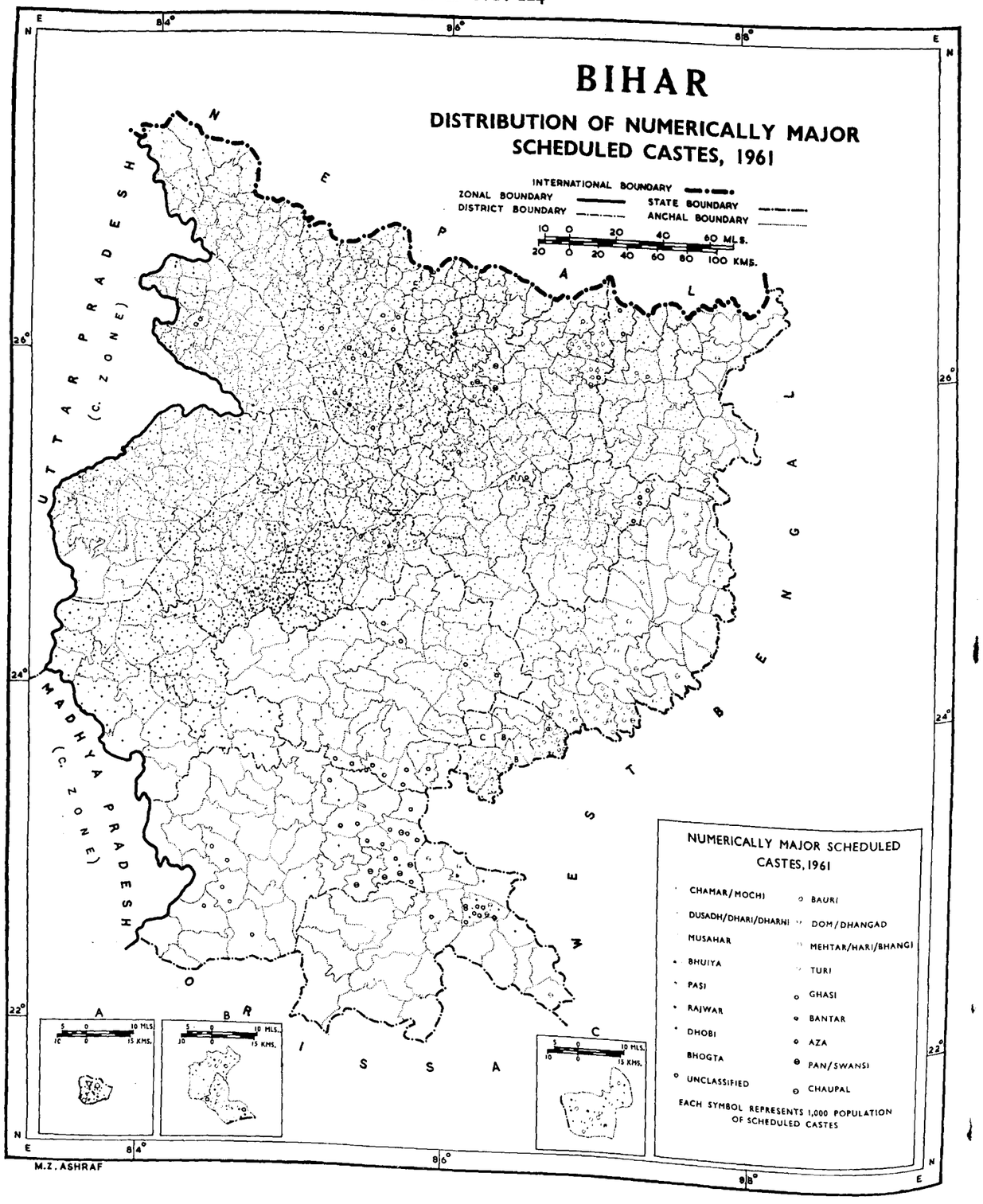
Out of 575 anchals in Bihar, as many as 335 contain none or negligible number of scheduled tribes. Out of these, only 6 are in the Chotanagpur Plateau, viz., Hariharganj in Palamau district and Jainagar, Chauparan, Hunterganj, Satgawan and Itkhori in Hazaribagh district. All these anchals lie on the northern border of the Chotanagpur Plateau adjoining the South Bihar Plain. All anchals of the remaining four districts in Chotanagpur contain scheduled tribes.

The proportion of scheduled tribes exceeds 15 per cent in all anchals of Ranchi and Singhbhum districts, and 75 per cent in 23 anchals of Ranchi, Singhbhum, Santal Parganas and Palamau districts.

Among the districts outside the Chotanagpur Plateau containing substantial population of scheduled tribes, mention may be made of Purnea (3.91 per cent) and Bhagalpur (3.77 per cent). The scheduled tribes are found in as many as 26 out of 38 anchals of Purnea district and 11 out of 21 anchals in Bhagalpur district. While in the latter the scheduled tribes are found in areas contiguous to the Santal Parganas, those in Purnea district are made up of families of immigrants who came into the district at the beginning of the present century.

No anchal of Patna, Saran, Muzaffarpur and Darbhanga districts has scheduled tribe population exceeding 0.5 per cent.

The statistics on which the map has been prepared are given in Appendix XV at the end of the volume.



DISTRIBUTION OF NUMERICALLY MAJOR SCHEDULED CASTES, 1961

Purpose

This map shows the distribution of 16 scheduled castes of the State in anchals in which their population exceeds 999 each.

Method

The major scheduled castes in the State have been assigned suitable symbols (in different colours) in the map. A reference may be made to the legends given on the map. The distribution of each caste in an anchal has been shown by the symbols representing 1,000 persons each. Full symbol has been given for fractions of over 500, while those below 500 have been ignored. Those scheduled castes which do not have population of over 1,000 in any anchal have not been shown in the map.

Salient Features

This map shows the distribution of 16 out of 23 scheduled castes in the State and also a residuary group comprised of scheduled castes whose names were not specifically returned (unclassified or *Aza**) in the Census of 1961. The 16 scheduled castes shown in the map include 15 which are numerically the strongest and one more, Chaupal, whose numerical strength is lower than that of Nat which is not shown in the map because its population does not exceed 999 in any anchal.

The Chamars, Dusadhs and Musahars comprise more than 70 per cent of the total population of scheduled castes in the State. They are found largely in the North and South Bihar Plains, their total population (4.20 million) in this region being higher than that of all the scheduled tribes (4.07 million). Each district in the North and South Bihar Plains contains more than 10 per cent of the total population of one or two of these three scheduled castes. The Chamars are numerous in the west, the Dusadhs in the middle and the Musahars in the east.

The Pans are largely confined to Ranchi and Singhbhum districts ; the Ghasis to Palamau, Hazaribagh, Singhbhum and Ranchi districts ; and the Bauris to Santal Parganas, Dhanbad and Hazaribagh districts.

The Chaupals are mainly found in North Bihar, particularly in Darbhanga, Saharsa, Purnea and Monghyr. The Bantars are numerous in Muzaffarpur, Darbhanga, Saharsa and Purnea.

'Unclassified' or *Aza* scheduled castes were returned mostly from Dhanbad, Gaya and Muzaffarpur districts.

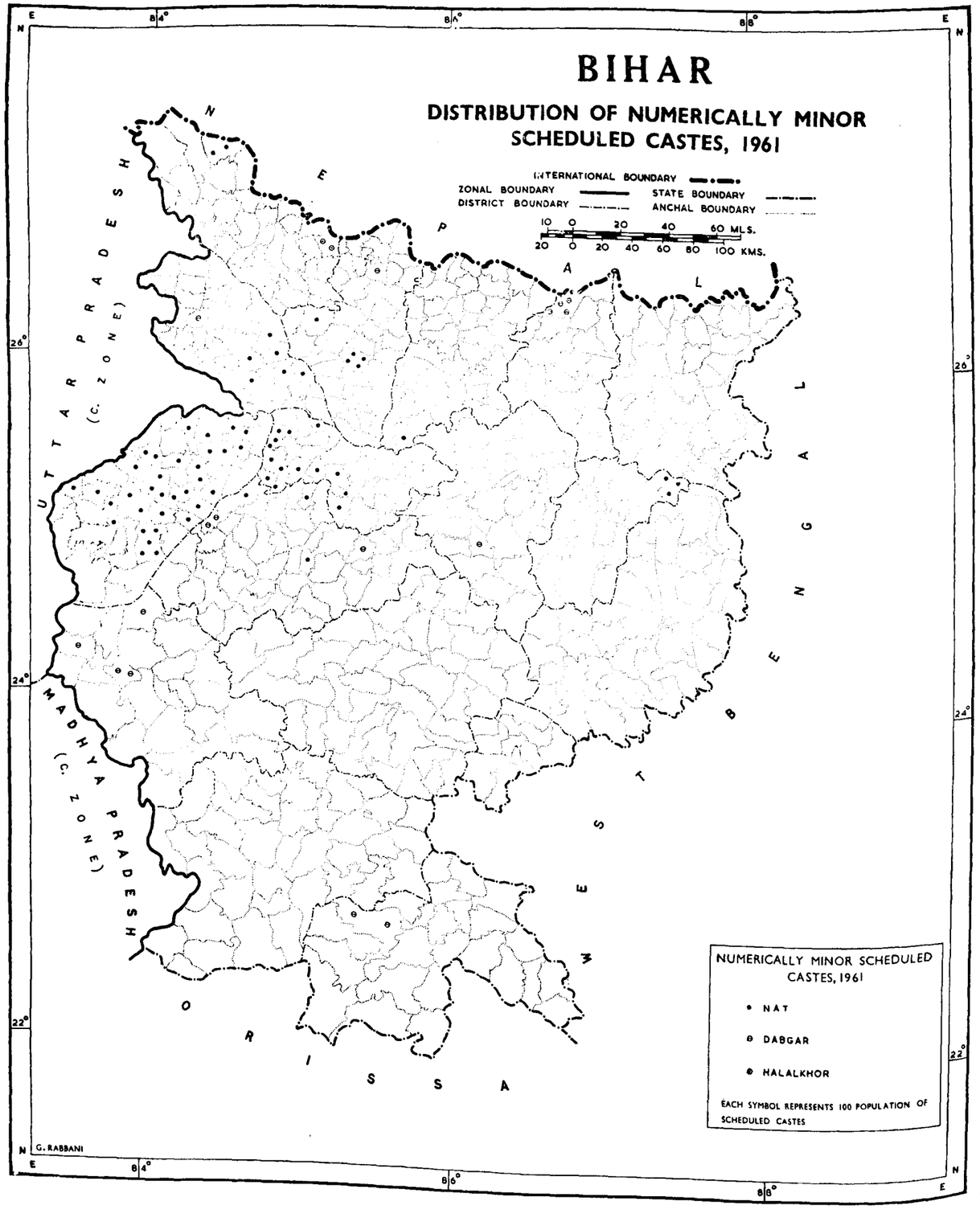
TABLE

DISTRIBUTION OF NUMERICALLY MAJOR SCHEDULED CASTES OF BIHAR, 1961

Rank	Scheduled caste	Population
1	Chamar or Mochi ..	1,895,179
2	Dusadh ..	1,724,553
3	Musahar ..	1,007,340
4	Bhuiya ..	360,495
5	Dhobi ..	332,245
6	Pasi ..	260,087
7	Dom or Dhangad ..	158,638
8	Rajwar ..	155,174
9	Unclassified ..	121,973
10	Turi ..	90,436
11	Hari, Mehtar or Bhangi	90,162
12	Bhogta ..	87,733
13	Bauri ..	76,057
14	Ghasi ..	55,034
15	Bantar ..	45,048
16	Pan ..	14,767
17	Chaupal ..	10,214

*Stands for अ. जा. or abbreviation for अनुसूचित जाति (Scheduled Caste)

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part V-A and other census data.



DISTRIBUTION OF NUMERICALLY MINOR SCHEDULED CASTES, 1961

Purpose

This map shows the distribution of 3 numerically minor scheduled castes in the State. A minor caste is one whose numerical strength ranges from 100 to 999 in any anchal.

Method

The numerically minor scheduled castes in Bihar are Nat, Dabgar and Halalkhor. They have been shown in the map by separate symbols, each representing 100 persons.

Salient Features

The total population of the scheduled castes shown in the map is : Nat—12,154, Dabgar—3,104, and Halalkhor—2,947. These three castes collectively constitute only 2.8 per *mille* of the total population of scheduled castes in Bihar. More than one-third of the Nats are found in Shahabad district. Patna, Gaya and Saran contain over 10 per cent each of the Nat population. These four contiguous districts together account for nearly four-fifths of the Nat population in Bihar.

The Dabgars are largely confined to the districts of Gaya and Palamau which together contain almost half of their total population in the State.

The Halalkhors number between 100 and 999 in one anchal of Champaran district only.

TABLE

DISTRIBUTION OF NUMERICALLY MINOR SCHEDULED CASTES, 1961

(Anchals having population between 100—999)

Patna district—
Nat—Patna Rural 128, Masaurhi 103, Dhanarua 113, Bihta 410, Bikram 183, Paliganj 196, Hilsa 123, Ekangarsarai 103 and Islampur 110.

Gaya district—
Nat—Manpur 143, Kako 139 and Arwal 140.
Dabgar—Hisua 102 and Daudnagar 200.

Shahabad district—
Nat—Arrah 155, Udwantnagar 101, Behea 122, Jagdishpur 169, Piro 243, Tarari 137, Rajpur 105, Itarhi 152, Nawanagar 122, Barhampur 139, Bikramganj 200, Karkat 130, Dinara 297, Kargahar 151, Nokha 113, Sasaram 522, Nasriganj 146, Mohania 147, Durgawati 125 and Kudra 174.

Saran district—
Nat—Jalalpur 105, Benipur 108, Parsa 120, Marhaura 148, Mashrakh 124 and Saraiya 136.
Dabgar—Siwan 127.

Champaran district—
Nat—Gaunaha 176.
Halalkhor—Dakha 152.

Muzaffarpur district—
Nat—Baruraj 139 and Kurhani 431.
Dabgar—Dumra 101.

Darbhanga district—
Nat—Mohiuddinagar 121.

Monghyr district—
Dabgar—Jamui 105.

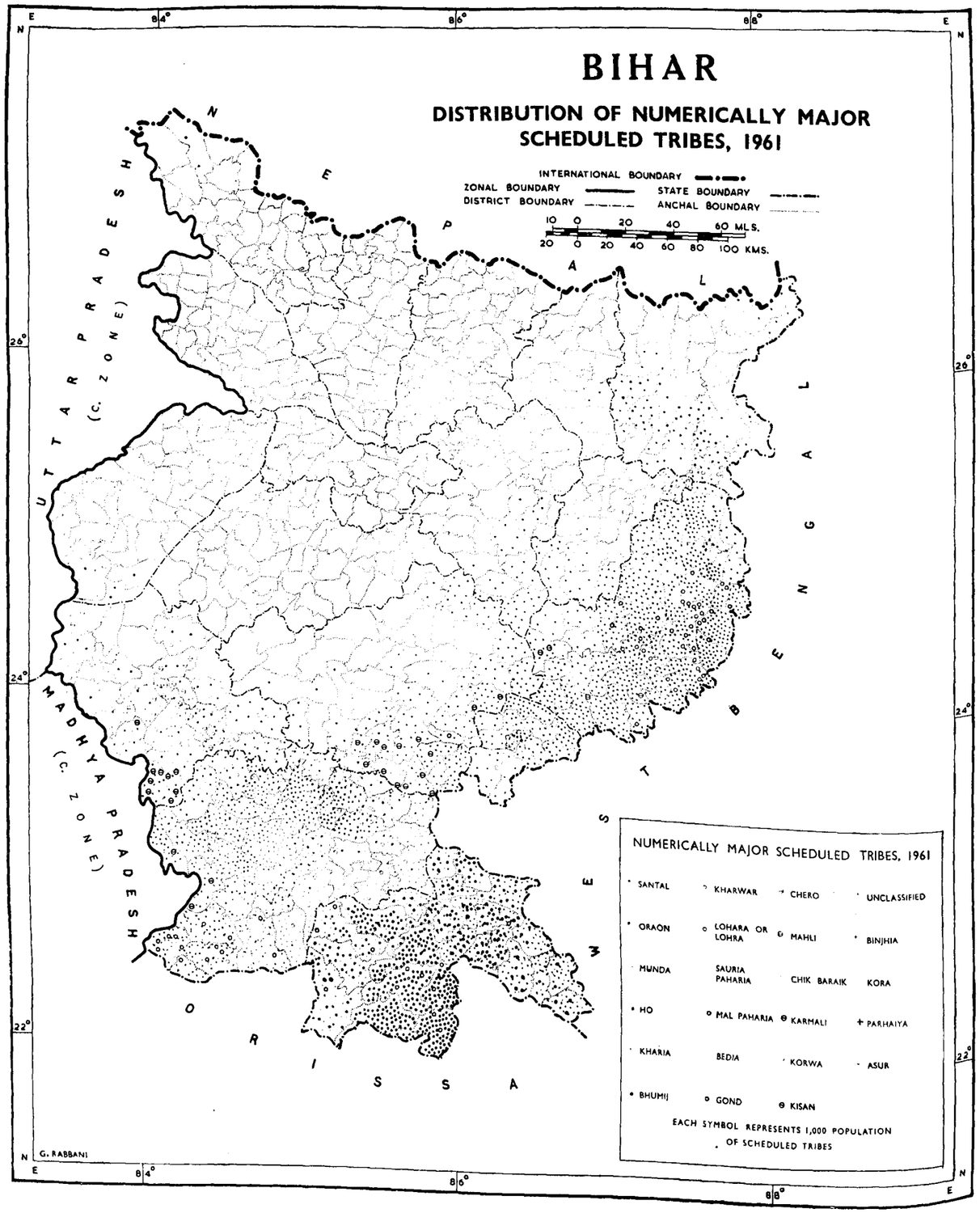
Bhagalpur district—
Nat—Pirpainti 251.

Saharsa district—
Dabgar—Nirmali 369.

Palamau district—
Dabgar—Hussainabad 124, Garhwa 166 and Untari 116.

Singhbhum district—
Dabgar—Chakradharpur 201.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part V-A and other census data.



DISTRIBUTION OF NUMERICALLY MAJOR SCHEDULED TRIBES, 1961

Purpose

This map shows the distribution of 22 major scheduled tribes of the State in anchals in which their population exceeds 999.

Method

The major scheduled tribes in the State have been assigned suitable symbols in different colours, as shown in the legend on the map. The distribution of each tribe in different anchals is shown by symbols representing 1,000 persons each. Full symbol has been given for fractions of over 500 while those below 500 have been ignored. The scheduled tribes which do not have population of over 999 in any anchal have not been shown in this map.

Salient Features

Out of 30 scheduled tribes in the State, 22 are represented on this map. This excludes a group of 'unclassified' scheduled tribes comprising those whose specific names were not recorded in the Census of 1961. These 22 tribes, along with the 'unclassified' scheduled tribes, together constitute 96.41 per cent of the total tribal population of the State.

That the tribes are confined largely to the six districts of the Chotanagpur Plateau and the adjoining areas of Monghyr and Bhagalpur districts is at once apparent from the map. Purnea also has a sizeable population of scheduled tribes.

The Santals, the Oraons, the Mundas and the Hos are the most numerous among the tribes in Bihar. Together they constitute almost four-fifths of the total tribal population of the State.

More than one half of the Santals are found in the Santal Parganas, and about a quarter in Hazaribagh and Singhbhum put together. Their numbers are significant also in Dhanbad, Purnea, Monghyr and Bhagalpur but negligible in Palamau and Ranchi districts.

Over three-fourths of the Oraons are confined to Ranchi district. Palamau also has significant numbers. The Oraons are the only tribe to be found in a few anchals of the Champaran district.

Like the Oraons, almost three-fourths of the Mundas are found in Ranchi district. The bulk of their remaining population lives in the adjoining district of Singhbhum.

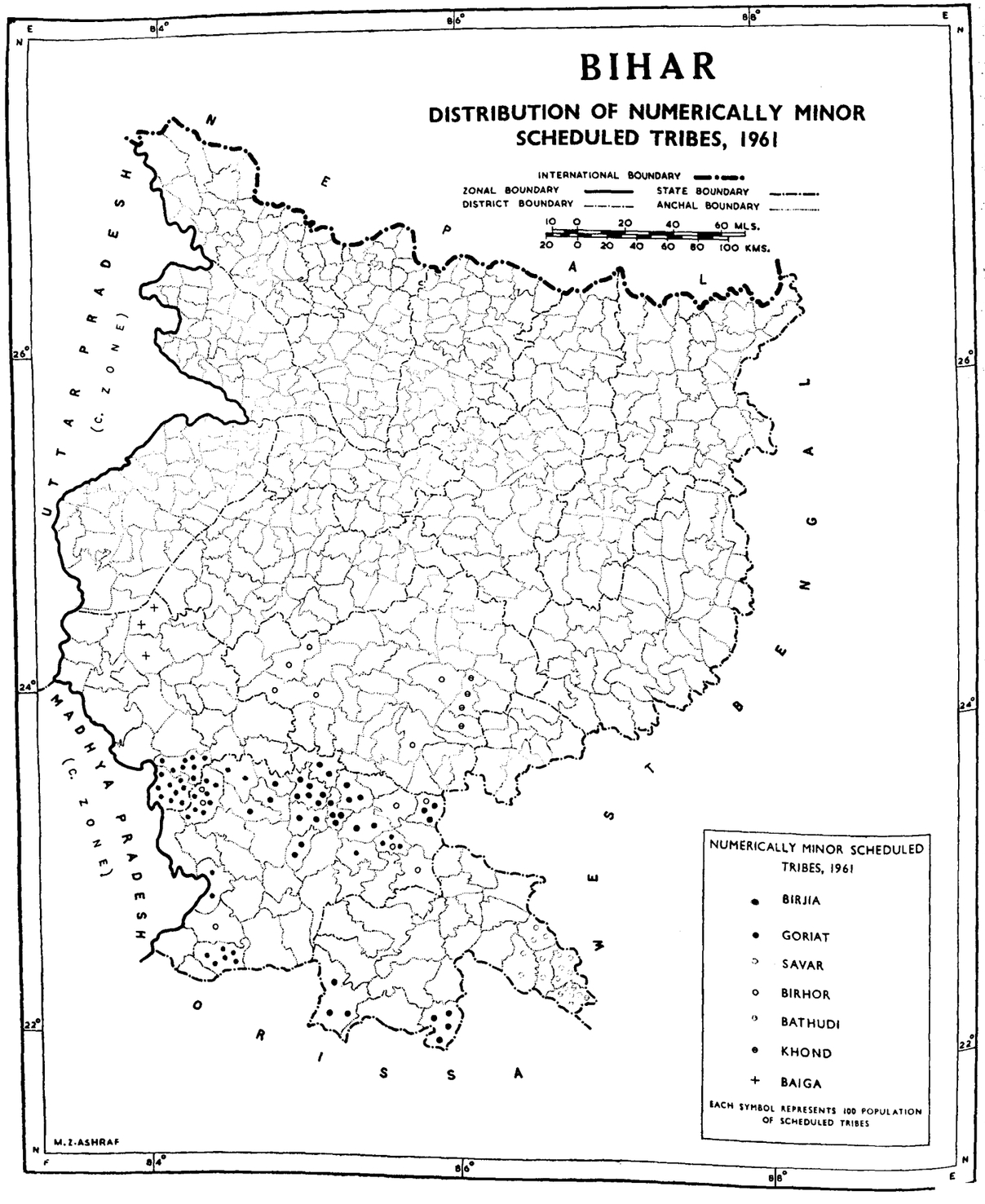
The Hos are virtually confined to Singhbhum district only. Similarly, the Kharwars are found mainly in Palamau, the Kharias in Ranchi, and the Bhumij in Singhbhum. The Sauria Paharias and the Mal Paharias are almost exclusively found in the Santal Parganas. Palamau district is also the stronghold of the Cheros, Parhaiyas, Kisans and Korwas.

TABLE

DISTRIBUTION OF NUMERICALLY MAJOR SCHEDULED TRIBES OF BIHAR, 1961

Rank	Scheduled tribe		Population
1	Santal	..	1,541,345
2	Oraon	..	735,025
3	Munda	..	628,931
4	Ho	..	454,746
5	Kharwar	..	109,357
6	Kharia	..	108,983
7	Bhumij	..	101,057
8	Lohara or Lohra	..	92,609
9	Mahli	..	67,979
10	Sauria Paharia	..	55,606
11	Mal Paharia	..	45,423
12	Bedia	..	38,241
13	Gond	..	33,521
14	Chero	..	30,845
15	Chik Baraik	..	30,770
16	Karmali	..	26,509
17	Korwa	..	21,162
18	Kora	..	13,824
19	Parhaiya	..	12,268
20	Kisan	..	12,011
21	Binjhia	..	6,725
22	Asur	..	5,819

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part V-A and other census data.



DISTRIBUTION OF NUMERICALLY MINOR SCHEDULED TRIBES, 1961

Purpose

This map shows the distribution of 7 scheduled tribes in the State whose numbers vary between 100 and 999 in any anchal of the State.

Method

The tribes have been denoted by different symbols as indicated in the legends on the map. The symbols have been plotted in the anchals in which the tribes concerned are found, each symbol representing 100 persons.

Salient Features

Each of the seven tribes depicted in this map has population below 5,000 in the State as a whole. While the populations of Gorait, Birjia, Birhor and Savar are between 1,000 and 5,000, those of Baiga, Khond and Bathudi are below 1,000 each. The seven tribes taken together account for only 3.59 per cent of the total tribal population of the State. With the inclusion of 22 tribes in the previous map and 7 in this one, the only tribe that has not been shown in either is the Banjara, whose total population was 42 only in 1961.

The Birjias are confined to the districts of Ranchi and Palamau where they live mostly in the *Pat* areas in and around the Netarhat plateau. Over two-thirds of the Goraits are found in the district of Ranchi. The Savars are virtually confined to the south-eastern portions of Singhbhum district. The Birhors are found mainly in Hazaribagh and Ranchi districts. The total population of the scheduled tribes in Bihar shown in the map is : Gorait 4,793 ; Birjia 4,029 ; Birhor 2,438; Savar 1,561 ; Baiga 951 ; Khond 814 and Bathudi 456.

TABLE

DISTRIBUTION OF NUMERICALLY MINOR SCHEDULED TRIBES, 1961
(Anchals having population between 100—999)

Palamau district—
Baiga—Bishrampur 128 and Hussainabad 181.

Birjia—Mahuadanr 913 and Garu 759.

Hazaribagh district—
Birhor—Bagodar 110, Gumia 134, Chatra 215 and Simaria 168.

Khond—Dumri 250 and Nawadih 135.

Ranchi district—
Gorait—Lohardaga 146, Gamharia 141, Kuru 142, Burmu 190, Mandar 623, Bero 173, Lapung 240, Ratu 400, Kanke 320, Khijri 157 and Silli 289.

Birjia—Kisko 228, Khunti 132, Bundu 288, Bishunpur 785, Raidih 172 and Thethai-Tangar 644.

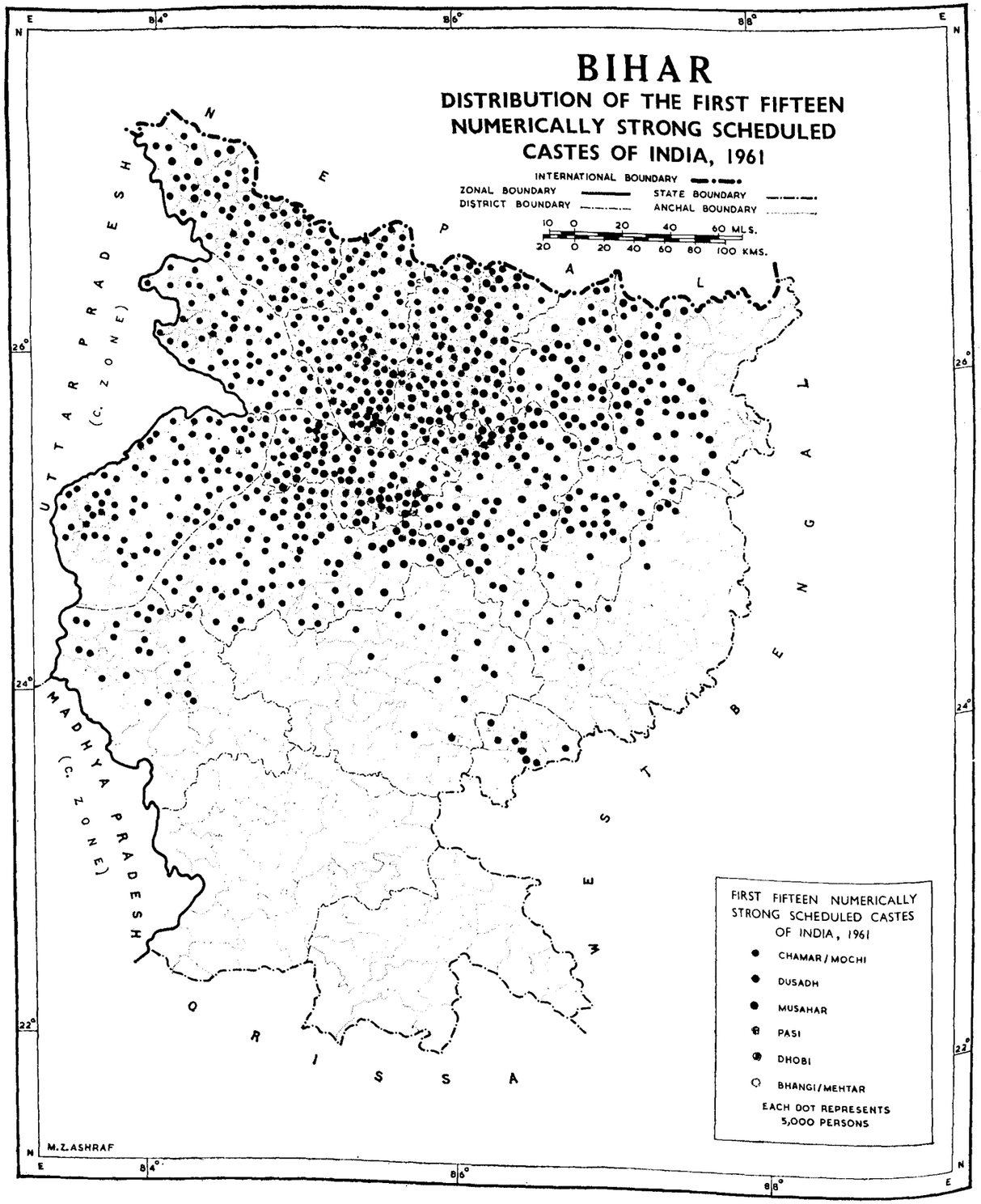
Birhor—Silli 116, Angar 134, Bundu 107, Tamar I 104, Bishunpur 167 and Simdega 112.

Singhbhum district—
Gorait—Majhgoan 449 and Manoharpur 264.

Savar—Ghatsila 306, Dhalbhumgarh 236, Musabani 198, Chakulia 470 and Baharagora 307.

Bathudi—Baharagora 449.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part V-A and other census data.



DISTRIBUTION OF THE FIRST FIFTEEN NUMERICALLY STRONG SCHEDULED CASTES OF INDIA, 1961

Purpose

This map shows the distribution of 6 scheduled castes of the State which are among the fifteen numerically strong scheduled castes of India, according to the 1961 Census.

Method

The six scheduled castes have been shown by symbols of different colours as indicated in the legend on the map. Each symbol represents 5,000 persons. The symbols have been placed in anchals containing over 5,000 members of each of the castes concerned.

Salient Features

Of the six scheduled castes shown in the map, viz., Chamar, Dusadh, Musahar, Pasi, Dhobi and Mehtar, the first three have the largest populations in Bihar. The Bhuiyas are more numerous than the Dhobis or the Pasis. Similarly, the Doms, the Rajwars and the Turis number more than the Haris. Even so, the Bhuiyas, the Doms, the Rajwars and the Turis have not been shown in the map because they are not among the 15 numerically strong scheduled castes of India.

The Chamars, the Dusadhs and the Musahars together constitute over 70 per cent of the scheduled caste population in Bihar. They are concentrated mainly in the North Bihar and South Bihar Plains. The Chamars are numerous in the west, the Dusadhs in the middle and the Musahars in the east.

More than one half of the Pasis in Bihar are found in the districts of Patna and Gaya. The Dhobis are more uniformly distributed throughout the State, though only few anchals contain more than 5,000 of them.

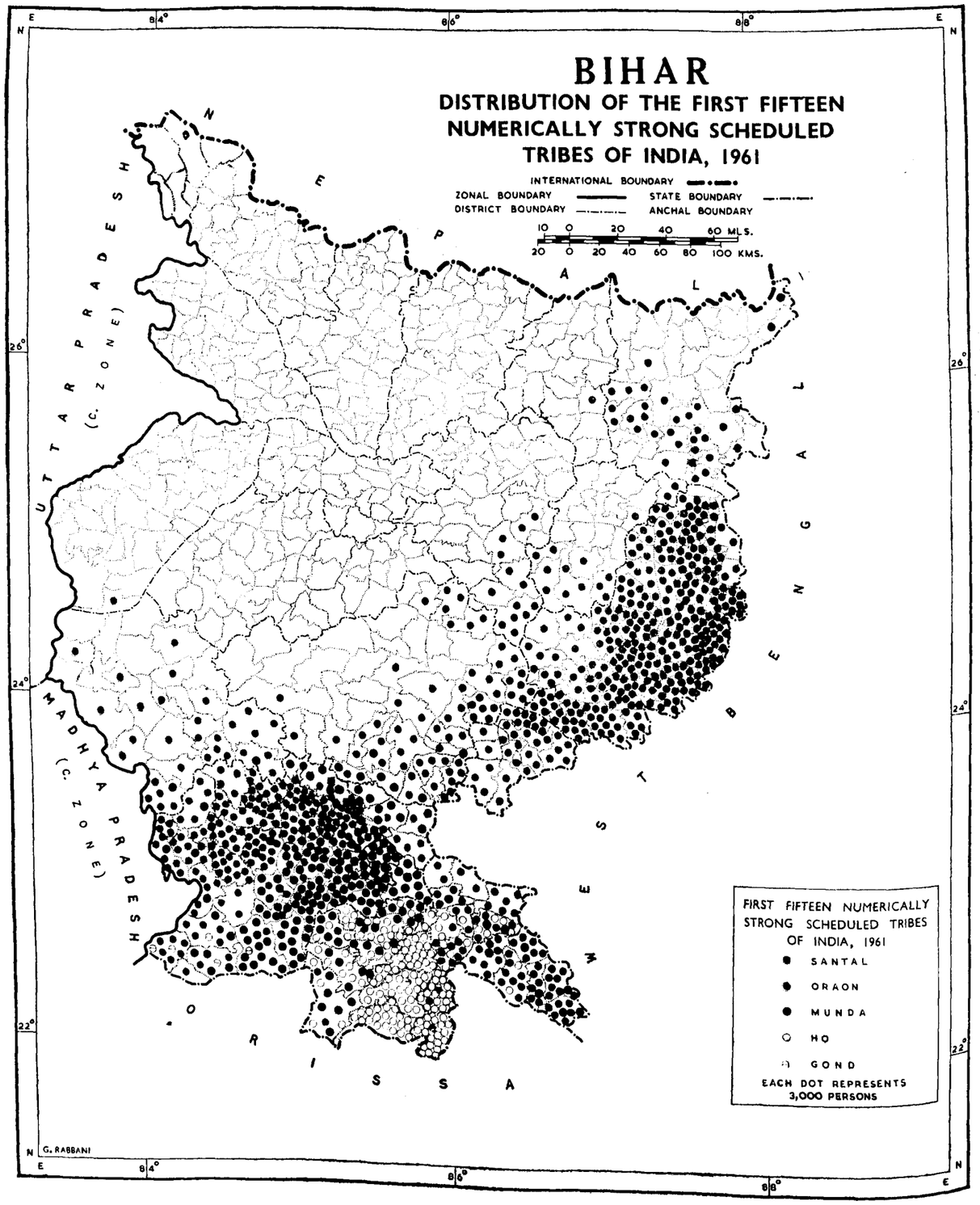
The Haris are found largely in Purnea.

TABLE

DISTRIBUTION OF THE FIRST FIFTEEN NUMERICALLY STRONG SCHEDULED CASTES OF INDIA IN BIHAR, 1961

Rank	Scheduled caste	Population
1	Chamar or Mochi ..	1,895,179
2	Dusadh ..	1,724,553
3	Musahar ..	1,007,340
4	Dhobi ..	332,245
5	Pasi ..	260,087
6	Hari, Mehtar or Bhangi	90,162

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part V-A and other census data.



DISTRIBUTION OF THE FIRST FIFTEEN NUMERICALLY STRONG SCHEDULED TRIBES OF INDIA, 1961

Purpose

This map shows the distribution of 5 scheduled tribes of Bihar which are among the fifteen numerically strong scheduled tribes of India, according to the census of 1961.

Method

The five scheduled tribes have been shown by symbols of different colours as indicated in the legend on the map. Each symbol represents 3,000 persons. The symbols have been placed in anchals containing at least 3,000 numbers of each of the tribes.

Salient Features

Of the 5 scheduled tribes shown in the map, viz., Santal, Oraon, Munda, Ho and Gond, the first four are numerically the strongest in Bihar. Together they constitute nearly four-fifths of the total tribal population in the State. Eight other tribes, though more numerous in the State than the Gonds, have not been shown in the map as they are not among the 15 numerically strong tribes of India.

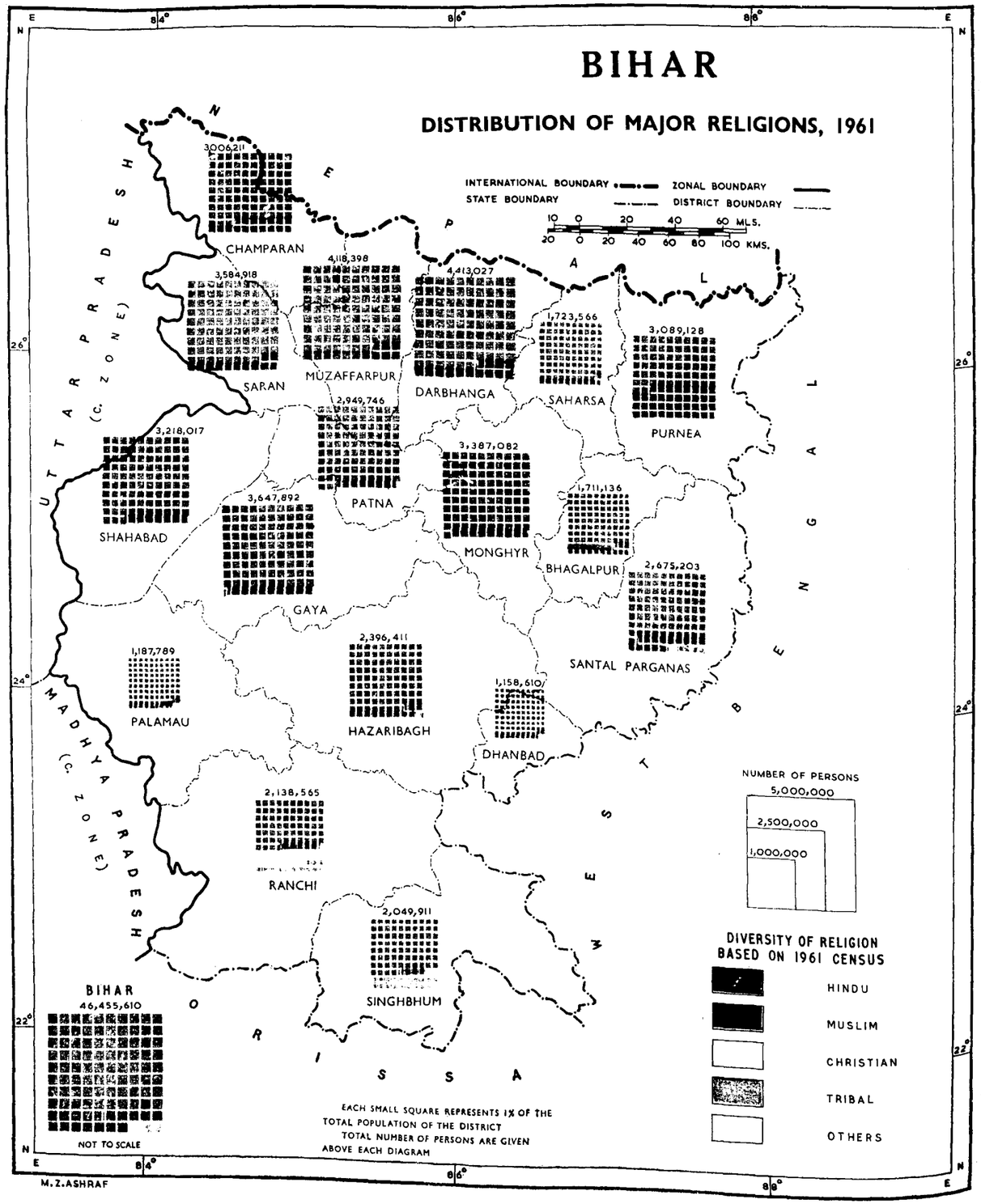
The Santals are found mainly in the Santal Parganas and Singhbhum, the Oraons in Ranchi and Palamau, and the Mundas in Ranchi and Singhbhum. The Hos are virtually confined to Singhbhum, and the Gonds to the southern portions of Ranchi and Singhbhum districts.

TABLE

DISTRIBUTION OF THE FIRST FIFTEEN NUMERICALLY STRONG SCHEDULED TRIBES OF INDIA IN BIHAR, 1961

Rank	Scheduled tribe		Population
1	Santal	..	1,541,345
2	Oraon	..	735,025
3	Munda	..	628,931
4	Ho	..	454,746
5	Gond	..	33,521

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part V-A and other census data.



DISTRIBUTION OF MAJOR RELIGIONS, 1961

Purpose

This map shows the distribution of major religions in each district of the State in 1961.

Method

Squares have been drawn proportionate to the total population of each district. Each square has been divided into 100 small squares, each representing 1 per cent of the total population of the district. The percentages of population returning the following religions have been shown in different colours :

(*i*) Hindu, (*ii*) Muslim, (*iii*) Christian, (*iv*) Tribal, and (*v*) Others.

Salient Features

The Hindus comprise the main bulk of the State's population (84.70 per cent). Their proportion exceeds 90 per cent in the districts of Patna, Gaya, Shahabad and Monghyr.

The Muslims constitute 12.45 per cent of the State's population. Their proportion is highest in Purnea (37.68 per cent), and above the State average in Champaran (16.59 per cent), Darbhanga (13.72 per cent) and Santal Parganas (13.77 per cent).

The Christians form only 1.08 per cent of the State's population. Ranchi, with 17.71 per cent, contains the largest proportion of Christians. The Santal Parganas, Palamau and Singhbhum contain 1 to 2 per cent each.

Tribal religions account for 1.62 per cent of the State's population. Their proportions are highest in Singhbhum (18.70 per cent) and Ranchi (12.52 per cent). The district of Santal Parganas has 3.66 per cent.

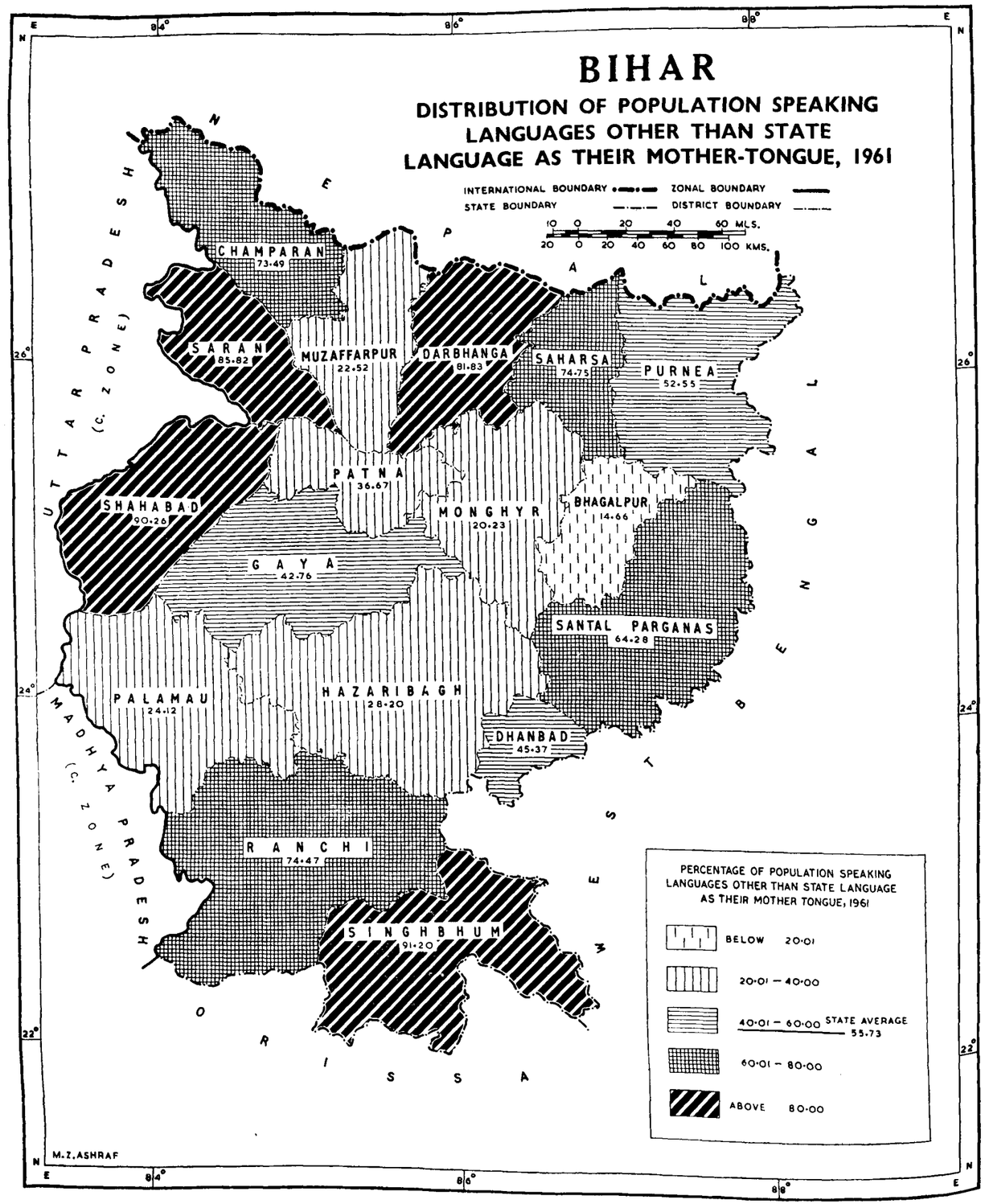
The category of 'Others' includes the Buddhists, the Jains, the Sikhs and others. It is significant only in Singhbhum where it contributes 1.02 per cent of the total population.

TABLE

DISTRIBUTION OF MAJOR RELIGIONS, 1961

State/District		Percentage of				
		Hindus	Muslims	Christians	Tribals	Others
1		2	3	4	5	6
BIHAR	..	**84.70**	**12.45**	**1.08**	**1.62**	**0.15**
Patna	..	92.46	7.22	0.12	..	0.20
Gaya	..	90.49	9.41	0.02	..	0.08
Shahabad	..	92.95	6.88	0.07	..	0.10
Saran	..	88.06	11.92	..	..	0.02
Champaran	..	83.28	16.59	0.12	..	0.01
Muzaffarpur	..	87.18	12.77	0.02	..	0.03
Darbhanga	..	86.25	13.72	0.01	..	0.02
Monghyr	..	91.00	8.81	0.09	0.05	0.05
Bhagalpur	..	87.45	12.40	0.07	0.01	0.07
Saharsa	..	88.98	10.88	0.08	..	0.06
Purnea	..	62.12	37.68	0.03	0.02	0.15
Santal Parganas	..	81.38	13.77	1.14	3.66	0.05
Palamau	..	88.55	9.69	1.67	..	0.09
Hazaribagh	..	87.50	11.80	0.33	0.07	0.30
Ranchi	..	63.73	5.74	17.71	12.52	0.30
Dhanbad	..	88.27	10.58	0.38	0.02	0.75
Singhbhum	..	74.46	3.75	2.07	18.70	1.02

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C, Table C-VII.



DISTRIBUTION OF POPULATION SPEAKING LANGUAGES OTHER THAN STATE LANGUAGE AS THEIR MOTHER-TONGUE, 1961

Purpose

Hindi is the State language of Bihar. This map shows, for each district, the proportion of persons who have returned for their mother-tongue a language or dialect other than Hindi.

Method

The districtwise percentages of population returning for their mother-tongue a language or dialect other than Hindi have been grouped into five ranges, viz.,

(*i*) Below 20.01, (*iii*) 40.01—60.00,
(*ii*) 20.01—40.00, (*iv*) 60.01—80.00, and
(*v*) above 80.00.

The districts have been shaded by different grades of hatching ranging from high to low.

Salient Features

Out of 46,455,610 persons in the State, 25,887,855 persons or 55.73 per cent of the total have returned mother-tongues other than Hindi. Among the major languages (other than Hindi) returned as mother-tongue are Bihari (comprising, in the main, Bhojpuri, Magahi and Maithili) and the tribal languages of Oraon, Mundari and Santali. The districts with high proportions of persons with non-Hindi mother-tongues can be conveniently grouped into two categories, viz., (*i*) those in which speakers of Bihari predominate, and (*ii*) those in which speakers of tribal languages predominate.

Out of the four districts in which non-Hindi speakers account for over 80 per cent of the population, speakers of tribal languages predominate in Singhbhum only. Bhojpuri is the chief dialect of Shahabad and Saran, and Maithili of Darbhanga.

Out of another lot of four districts with proportions of non-Hindi speakers varying between 60 and 80 per cent, speakers of tribal languages constitute the majority in Ranchi and Santal Parganas, while speakers of Bhojpuri do so in Champaran, and those of Maithili in Saharsa.

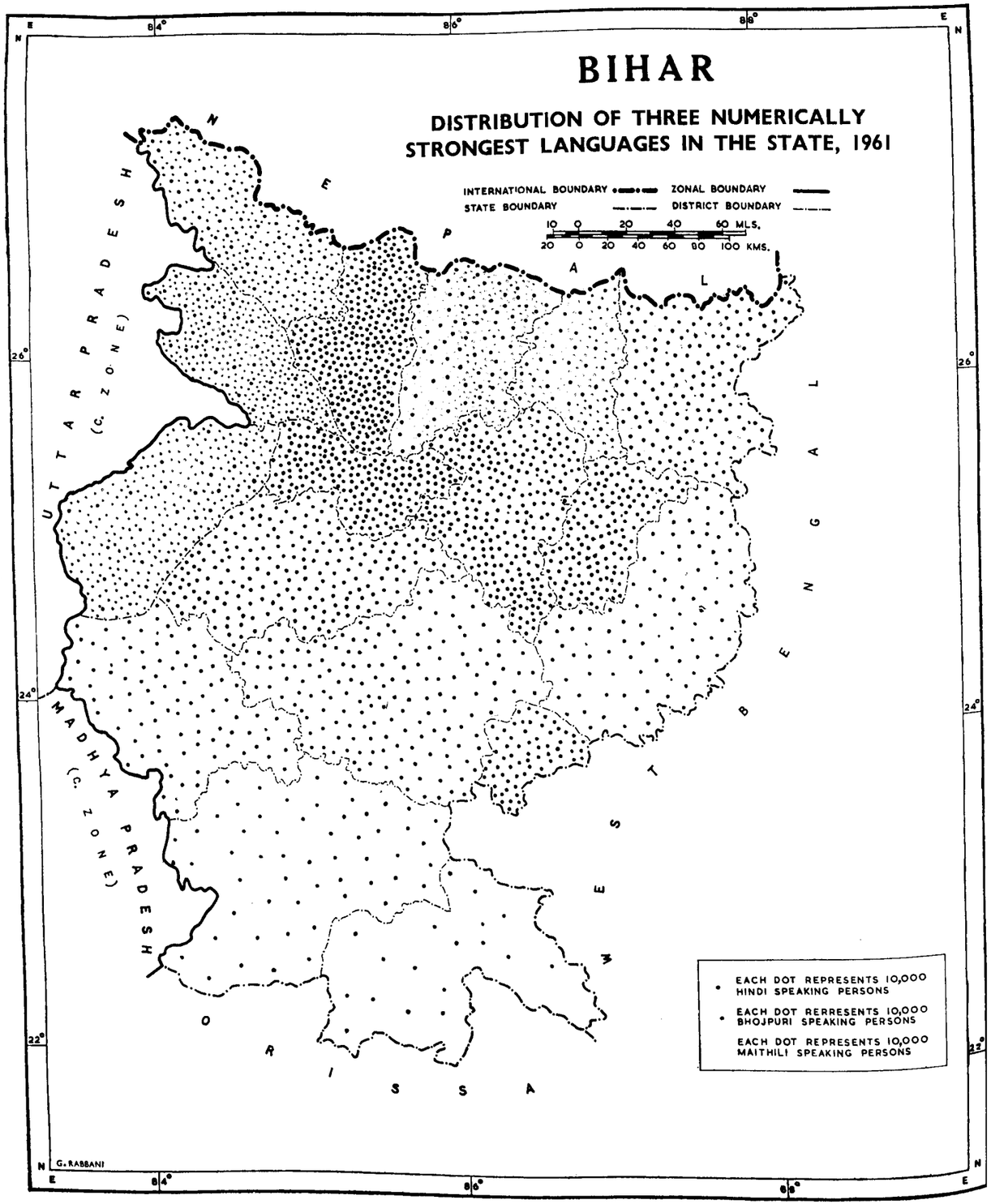
Non-Hindi speakers form smaller proportions than the State average in the remaining 9 districts. Among them, the proportion of Hindi speakers exceeds 75 per cent in Palamau, Muzaffarpur, Monghyr and Bhagalpur districts.

TABLE

PERCENTAGE OF POPULATION SPEAKING LANGUAGES OTHER THAN STATE LANGUAGE AS MOTHER-TONGUE, 1961

Rank	State/District	Percentage
1	Singhbhum ..	91.20
2	Shahabad ..	90.26
3	Saran ..	85.82
4	Darbhanga ..	81.83
5	Saharsa .	74.75
6	Ranchi ..	74.47
7	Champaran ..	73.49
8	Santal Parganas ..	64.29
	BIHAR ..	**55.73**
9	Purnea ..	52.55
10	Dhanbad ..	45.37
11	Gaya ..	42.76
12	Patna ..	36.67
13	Hazaribagh ..	28.20
14	Palamau ..	24.12
15	Muzaffarpur ..	22.52
16	Monghyr ..	20.23
17	Bhagalpur ..	14.66

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C. Table C-V.



DISTRIBUTION OF THREE NUMERICALLY STRONGEST LANGUAGES IN THE STATE, 1961

Purpose

This map shows the districtwise distribution of speakers of the three major mother-tongues in Bihar, viz., Hindi, Bhojpuri and Maithili. These have been returned by the largest number of persons in the State.

Method

The distribution of the three mother-tongues has been shown by different coloured dots, each dot representing 10,000 speakers of the mother-tongue concerned.

Salient Features

The total speakers of Hindi and the two Bihari dialects, Bhojpuri and Maithili, account for 72.1 per cent of the total population of the State. Over half the population of Purnea, Dhanbad, Gaya, Patna and Hazaribagh speak Hindi. The corresponding proportion is over three-fourths in Palamau, Muzaffarpur, Monghyr and Bhagalpur. Bhojpuri is the chief dialect of Shahabad (85.49 per cent), Saran (79.34 per cent) and Champaran (61.83 per cent). Maithili occupies similar position in Darbhanga (69.85 per cent) and Saharsa (65.93 per cent).

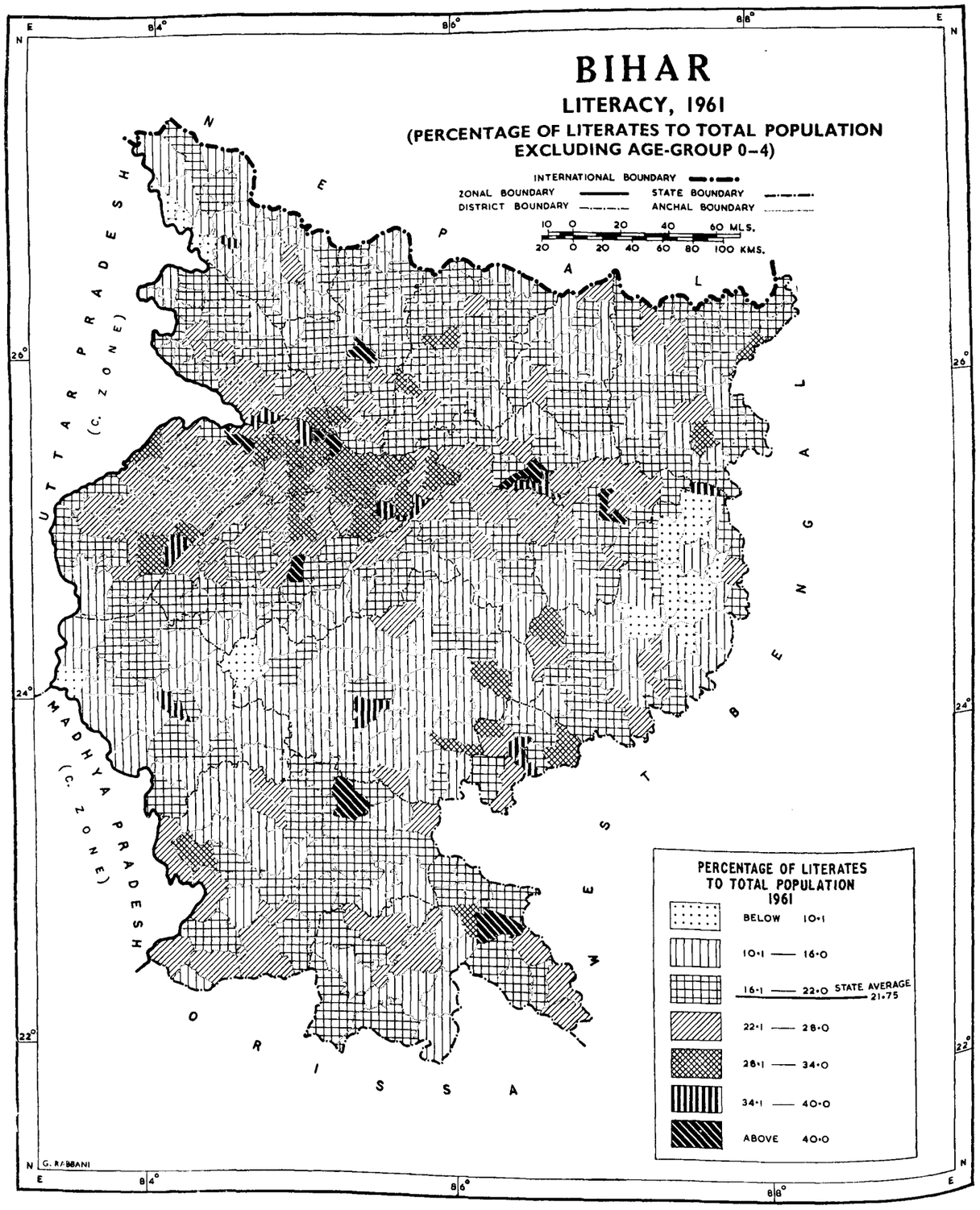
In Singhbhum, Ranchi and Santal Parganas, the majority of the population speak tribal languages.

TABLE

DISTRIBUTION OF THREE STRONGEST LANGUAGES IN BIHAR, 1961

State/District	Persons returning mother-tongue as		
	Hindi ('000)	Bhojpuri ('000)	Maithili ('000)
BIHAR ..	20,568	7,843	4,983
Patna ..	1,868	56	8
Gaya ..	2,088	5	1
Shahabad ..	314	2,751	1
Saran ..	508	2,844	3
Champaran ..	797	1,860	13
Muzaffarpur ..	3,191	188	355
Darbhanga ..	802	4	3,082
Monghyr ..	2,702	3	50
Bhagalpur ..	1,460	12	3
Saharsa ..	435	5	1,136
Purnea ..	1,466	17	315
Santal Parganas ..	956	27	4
Palamau ..	901	51	..
Hazaribagh ..	1,721	3	1
Ranchi ..	546	2	1
Dhanbad ..	633	6	2
Singhbhum ..	180	9	6

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-C, Table C-V.



LITERACY, 1961
(PERCENTAGE OF LITERATES TO TOTAL POPULATION EXCLUDING AGE GROUP 0—4)

Purpose

This map shows the proportions of literate persons to the total population aged 5 or more in each anchal of the State in 1961. The test of literacy is the ability to read and write a simple letter in any language.

Method

The percentages of literates have been grouped into seven ranges, as under :

(*i*) Below 10.1, (*ii*) 10.1—16.0, (*iii*) 16.1—22.0, (*iv*) 22.1—28.0, (*v*) 28.1—34.0, (*vi*) 34.1—40.0, and (*vii*) above 40.0.

The anchals have been shaded by seven different grades of hatching ranging from high to low.

Salient Features

Out of 39,297,575 persons aged 5 or more in the State, 8,547,845 persons or 21.75 per cent are literate. The corresponding rate of literacy was 13.45 per cent in 1951. Though there has been substantial increase in literacy rate in the last decade, the rate in Bihar is still among the lowest in India, and considerably lower than the all-India average of 28.29* per cent.

Five districts in the South Bihar Plain, viz., Patna, Gaya, Shahabad, Monghyr and Bhagalpur, along with three districts in Chotanagpur, viz., Ranchi, Dhanbad and Singhbhum, have literacy rates above the State average. No anchal in these districts has literacy rate of less than 10 per cent. Even in the range 10.1—16.0 per cent, there are only 36 anchals in these eight districts as against 112 in the remaining nine. On the other hand, 7 out of 8 anchals with literacy rates exceeding 40 per cent and 7 out of 12 in the range 34.1—40.0 per cent lie in these two blocks.

The anchals with highest literacy rates invariably contain cities or towns. Those around the cities of Patna, Gaya, Muzaffarpur, Bhagalpur, Ranchi and Jamshedpur, and the towns of Arrah and Monghyr, comprise the eight anchals with literacy rates above 40 per cent. The Patna Rural anchal with a literacy of 55.66 per cent, has the highest rate in the State.

The 13 anchals with literacy rates below 10 per cent are largely concentrated in hilly and forested areas. The district of Santal Parganas has a contiguous belt of 8 such anchals, viz., Litipara, Amrapara, Sundar Pahari, Borio, Gopi Kandar, Pathna, Boarijor and Ramgarh. There is a pocket of 3 such anchals in western Champaran, consisting of Bairia, Thakrahan and Madhubani. Dhurki in Palamau and Pratap Pur in Hazaribagh complete the list of such anchals.

*Excluding NEFA and Goa, Daman and Diu.

TABLE

LITERACY, 1961

Rank	State/District	Percentage	Total anchals	Number of anchals in range						
				Below 10.1	10.1—16.0	16.1—22.0	22.1—28.0	28.1—34.0	34.1—40.0	Above 40.0
1	2	3	4	5	6	7	8	9	10	11
1	Patna	33.75	28	..	..	..	9	16	2	1
2	Dhanbad	29.43	10	..	1	3	2	2	2	..
3	Singhbhum.. ..	26.86	25	..	6	10	7	1	..	1
4	Shahabad	25.62	41	..	1	10	24	4	1	1
5	Bhagalpur	23.95	21	..	2	10	8	..	..	1
6	Gaya	22.74	46	..	8	18	17	2	..	1
7	Ranchi	22.66	38	..	11	16	9	1	..	1
8	Monghyr	22.43	39	..	7	15	14	..	2	1
	BIHAR ..	**21.75**	**575**	**13**	**148**	**235**	**123**	**26**	**12**	**8**
9	Saran	21.52	40	..	4	21	13	1	1	..
10	Muzaffarpur ..	20.15	40	..	9	22	7	1	..	1
11	Darbhanga	19.76	44	..	5	35	1	3	..	..
12	Purnea	19.51	38	..	8	25	3	2	..	..
13	Santal Parganas ..	17.31	41	8	14	13	4	1	1	..
14	Hazaribagh.. ..	17.29	42	1	31	5	2	2	1	..
15	Saharsa	16.69	21	..	4	15	2	..	..	..
16	Palamau	16.41	25	1	14	9	..	..	1	..
17	Champaran	15.46	36	3	23	8	1	..	1	

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A and other census data.

MAP NO. 134

MALE LITERACY, 1961
(PERCENTAGE OF MALE LITERATES TO TOTAL MALE POPULATION EXCLUDING AGE GROUP 0—4)

Purpose

The map on the following page shows the proportions of literate males to total males aged 5 or more in each anchal of the State in 1961. The test of literacy is the ability to read and write a simple letter in any language.

Method

The percentages of literate males have been grouped into seven ranges, as under :

(*i*) Below 20.1, (*ii*) 20.1—27.0, (*iii*) 27.1—34.0, (*iv*) 34.1—41.0, (*v*) 41.1—48.0, (*vi*) 48.1—55.0, and (*vii*) above 55.0.

The anchals have been shaded by seven different grades of hatching ranging from high to low.

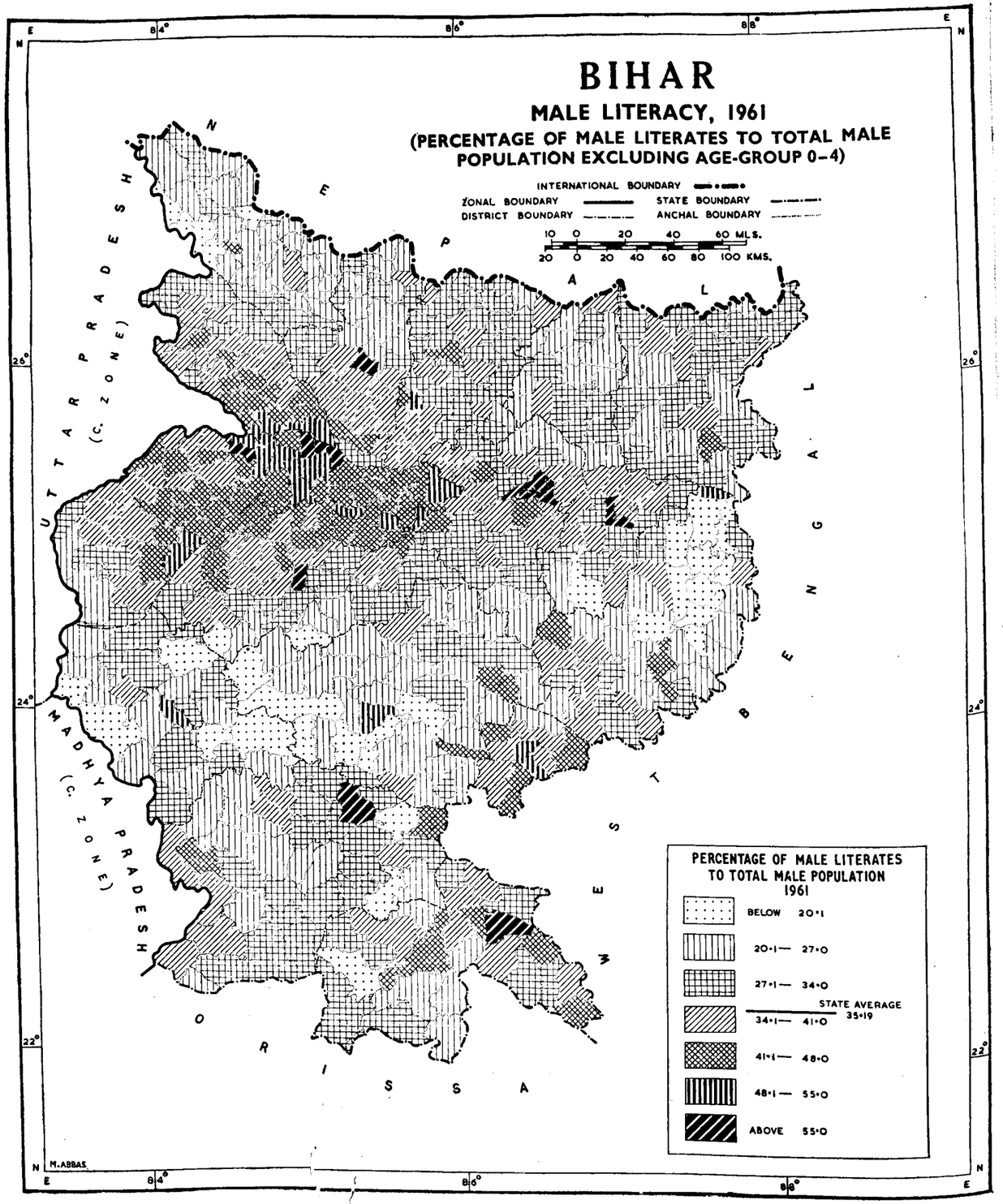
Salient Features

Out of 19,750,570 males aged 5 or more in the State, 6,950,967 males or 35.19 per cent are literate. The corresponding rate among females is only 8.17 per cent.

As in the case of total literacy, male literacy is higher than the State average in the five districts of Patna, Gaya, Shahabad, Monghyr and Bhagalpur in the South Bihar Plain, and two districts of Singhbhum and Dhanbad in the Chotanagpur Plateau. Though Ranchi has higher-than-average literacy in regard to total population, Saran displaces it in regard to male population. In the 8 districts with higher-than-average male literacy, there are only 4 anchals with literacy rates below 20 per cent as against 28 in the remaining 9 districts. On the other hand, 8 out of 10 anchals with male literacy above 55 per cent are located in this tract.

As in the case of total literacy, anchals containing towns have recorded the highest rates in regard to male population also. Thus, the anchals containing the cities/towns of Patna, Gaya, Muzaffarpur, Monghyr Bhagalpur, Ranchi, Jamshedpur, Arrah, Dinapur and Jamalpur have literacy rates exceeding 55 per cent. Among the anchals with male literacy below 20 per cent, 11 out of 13 anchals which were in the lowest range in the case of total literacy also figure similarly in regard to male literacy. However, 19 additional anchals find place in the lowest range of male literacy (below 20 per cent). They are Barachatti and Dumaria in Gaya district ; Jogapatti and Sikta in Champaran district; Katoria in Bhagalpur district ; Barhait and Taljhari in Santal Parganas district; Ranka, Chhatapur, Balumath and Manika in Palamau district; Barkagaon, Simaria, Tandwa, Nagri (Churchu) and Bishungarh in Hazaribagh district; Tamar and Angara in Ranchi district; and Goilkera in Singhbhum district.

MAP NO. 134

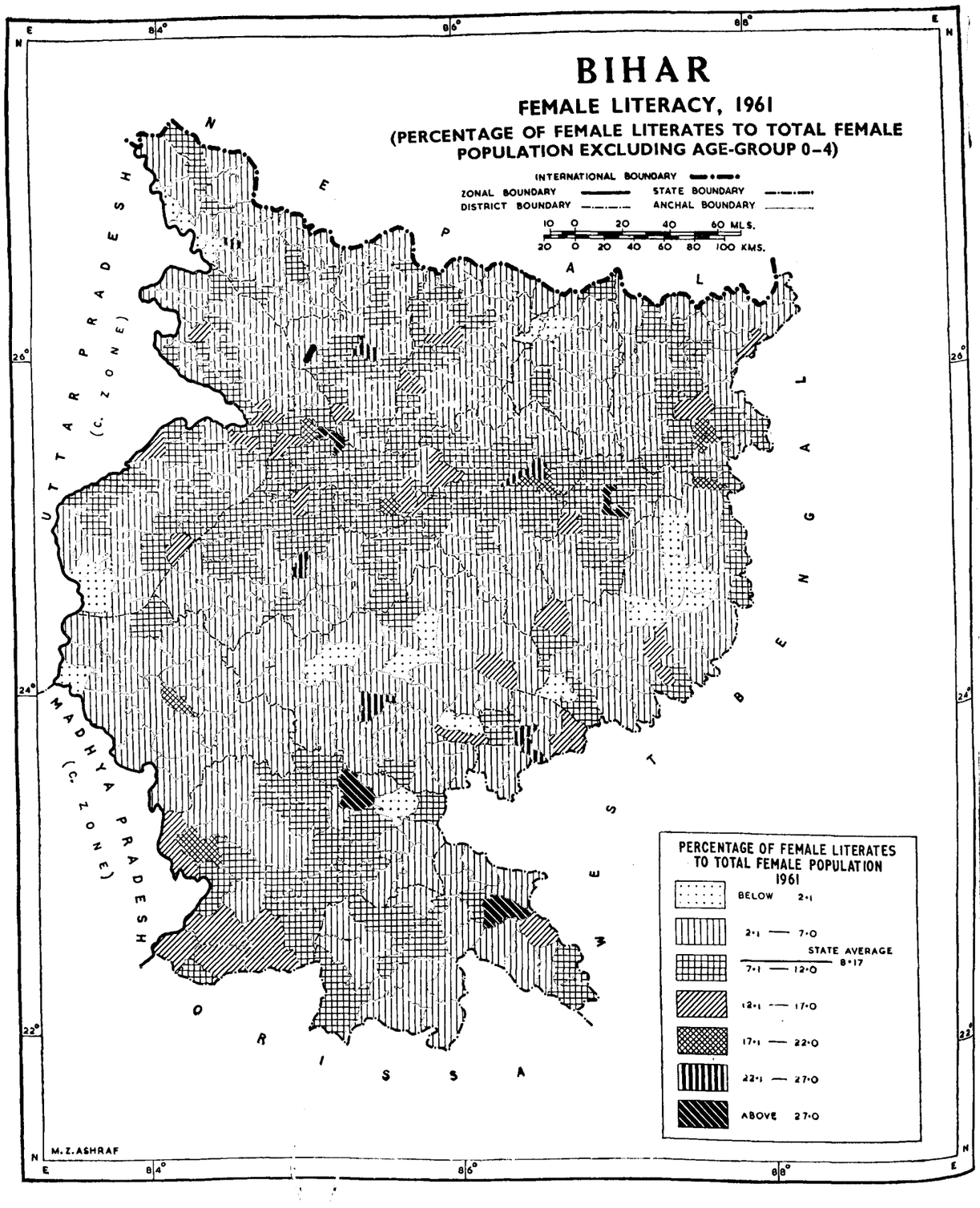


TABLE

MALE LITERACY, 1961

Rank	State/District	Percentage	Total anchals	Number of anchals in range						
				Below 20.1	20.1—27.0	27.1—34.0	34.1—41.0	41.1—48.0	48.1—55.0	Above 55.0
1	2	3	4	5	6	7	8	9	10	11
1	Patna	50.92	28	..	..	..	..	18	8	2
2	Dhanbad	42.41	41	..	2	5	14	15	4	1
3	Shahabad	42.13	10	..	1	..	4	3	2	..
4	Singhbhum	40.79	25	1	5	7	6	5	..	1
5	Saran	38.73	40	..	..	9	18	10	3	..
6	Gaya	37.36	46	2	4	12	17	10	..	1
7	Bhagalpur	36.56	21	1	1	8	10	..	..	1
8	Monghyr	35.96	39	..	6	14	14	2	1	2
	BIHAR ..	35.20	575	32	135	167	134	75	22	10
9	Ranchi	34.38	38	2	10	16	7	2	..	1
10	Darbhanga	33.60	40	..	3	26	12	2	1	..
11	Muzaffarpur ..	33.34	40	..	13	10	13	3	..	1
12	Purnea	30.45	38	..	12	21	4	1	..	..
13	Hazaribagh	28.96	42	6	23	8	2	2	1	..
14	Santal Parganas ..	28.37	41	10	12	8	9	1	1	..
15	Saharsa	27.64	21	..	12	7	2	..	..	..
16	Palamau	27.54	25	5	9	9	1	..	1	..
17	Champaran	25.20	36	5	22	7	1	1	..	..

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A and other census data.



FEMALE LITERACY, 1961
(PERCENTAGE OF FEMALE LITERATES TO TOTAL FEMALE POPULATION EXCLUDING AGE GROUP 0—4)

Purpose

This map shows the proportions of female literates to total females aged 5 and above in each anchal of the State in 1961. The test of literacy is the ability to read and write a simple letter in any language.

Method

The percentages of literate females have been grouped into seven categories, as under :

(*i*) Below 2.1, (*ii*) 2.1—7.0, (*iii*) 7.1—12.0, (*iv*) 12.1—17.0, (*v*) 17.1—22.0, (*vi*) 22.1—27.0, and (*vii*) above 27.0.

The anchals have been shaded by seven different grades of hatching ranging from high to low.

Salient Features

Out of 19,547,005 females aged 5 or more in the State, 1,596,878 females or 8.17 per cent are literate. The literacy rate for females is much lower than that for males (35.19 per cent).

The same set of eight districts which were higher than average in regard to literacy rates for total population have also higher than average literacy rates for female population. They are comprised of 5 districts in the South Bihar Plain along with Dhanbad, Singhbhum and Ranchi in the Chotanagpur. Patna has the highest female literacy in the State. Dhanbad, Singhbhum and Ranchi follow in the same order.

There are only 4 anchals in the State with literacy rates higher than 27 per cent among their females. They are the anchals containing the cities of Patna, Bhagalpur, Ranchi and Jamshedpur.

In as many as 18 anchals of the State, female literacy is below 2 per cent. Angara in Ranchi district and Adhaura in Shahabad district are the two anchals in this category even though they lie in districts with higher than average female literacy. Other anchals with female literacy below 2 per cent are Madhubani, Thakrahan and Bairia in Champaran; Kishanpur and Marauna in Saharsa; Sundar Pahari, Litipara, Ramgarh, Boarijore, Narainpur and Amrapara in Santal Parganas; Dhurki in Palamau and Markacho, Barakatha, Nawadih and Itkhori in Hazaribagh.

TABLE

FEMALE LITERACY, 1961

Rank	State/District	Percentage	Total anchals	Number of anchals in range						
				Below 2.1	2.1—7.0	7.1—12.0	12.1—17.0	17.1—22.0	22.1—27.0	Above 27.0
1	2	3	4	5	6	7	8	9	10	11
1	Patna	15.29	28	..	1	21	3	2	..	1
2	Dhanbad	12.65	10	..	5	2	1	..	2	..
3	Singhbhum	12.18	25	..	16	7	1	..	..	1
4	Ranchi	10.67	38	1	13	17	5	1	..	1
5	Bhagalpur	10.61	21	..	7	12	1	..	..	1
6	Monghyr	8.76	39	..	15	21	1	1	1	..
7	Shahabad	8.66	41	1	18	19	2	1	..	..
8	Gaya	8.26	46	..	22	22	1	..	1	..
	BIHAR ..	**8.17**	**575**	**18**	**325**	**186**	**27**	**8**	**7**	**4**
9	Muzaffarpur ..	7.63	40	..	24	14	1	..	1	..
10	Purnea	7.29	38	..	25	10	2	1	..	..
11	Darbhanga ..	6.81	44	..	27	14	3	..	..	..
12	Saran	6.70	40	..	27	11	2	..	..	..
13	Santal Parganas ..	5.93	41	6	26	6	2	1	..	..
14	Champaran ..	5.41	36	3	27	5	..	..	1	..
15	Hazaribagh	5.40	42	4	33	2	2	..	1	..
16	Palamau	5.00	25	1	22	1	..	1	..	..
17	Saharsa	4.94	21	2	17	2	..	..	..	..

SOURCE : Census of India, 1961, Vol IV, Bihar, Part II-A and other census data.

MAP NO. 136

MALE LITERACY IN RURAL AREAS, 1961
(PERCENTAGE OF MALE LITERATES TO TOTAL MALE POPULATION EXCLUDING AGE GROUP 0—4 IN RURAL AREAS)

Purpose

The map on the following page shows the proportions of male literates to the rural male population aged 5 and above in each anchal of the State in 1961.

Method

The percentages of rural male literates aged 5 and above have been worked out for each anchal and grouped into 7 categories, as under:

(*i*) Below 14.1,
(*ii*) 14.1—21.0,
(*iii*) 21.1—28.0,
(*iv*) 28.1—35.0,
(*v*) 35.1—42.0,
(*vi*) 42.1—49.0, and
(*vii*) above 49.0.

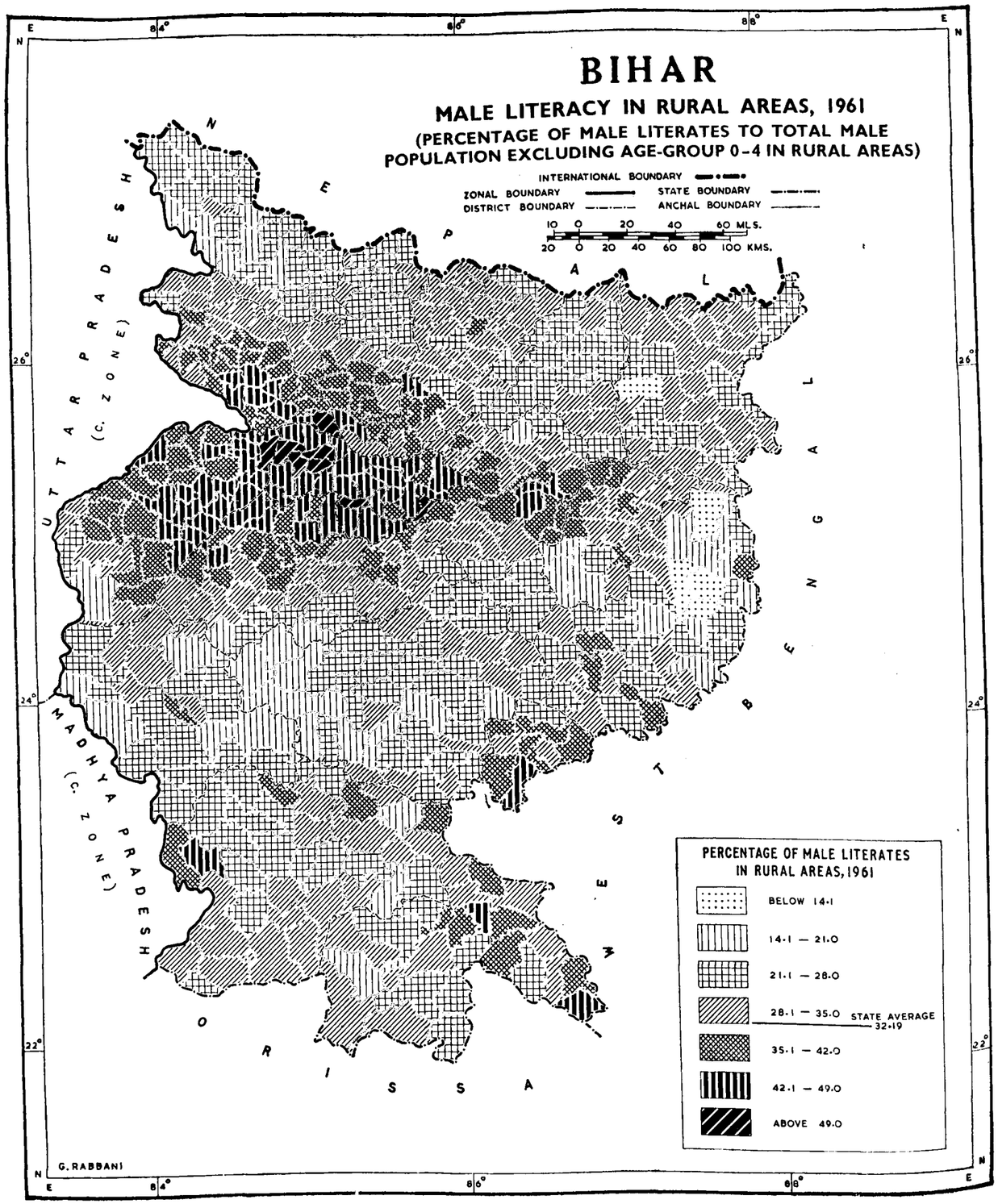
The anchals have been shaded by seven different grades of hatching ranging from high to low.

Salient Features

Out of 17,864,369 males aged 5 and above in rural areas of the State, 5,750,692 males or 32.19 per cent are literate. The rural literacy is highest in a compact block of three districts, viz., Patna, Shahabad, and Saran and a high zone of literacy is at once discernible in the anchals of these districts. Out of 70 anchals having rural male literacy above 42 per cent, as many as 53 are located in these three districts. Of the remaining anchals with high rural male literacy, 6 are situated in Gaya; 3 in Monghyr; 2 each in Darbhanga, Muzaffarpur and Singhbhum; and 1 each in Dhanbad and Ranchi.

Out of 5 anchals with male literacy rate below 14 per cent in rural areas, Litipara, Amrapara, Sundar Pahari and Borio lie in Santal Parganas. It is rather surprising that Banmankhi in Purnea district also belongs to this category.

MAP NO. 136

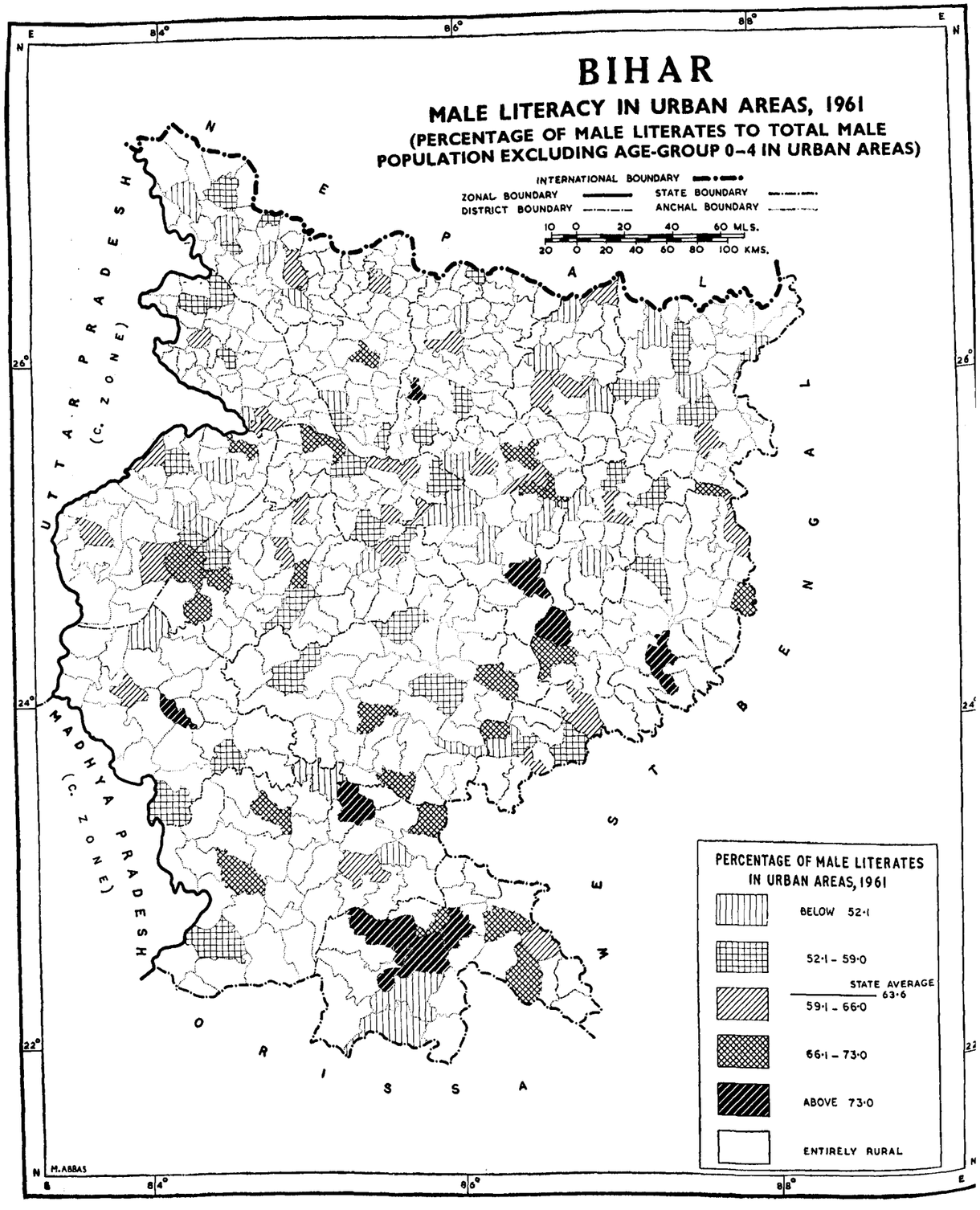


TABLE

MALE LITERACY IN RURAL AREAS, 1961

Rank	State/District	Percentage	Total anchals	Number of anchals in range						
				Below 14.1	14.1—21.0	21.1—28.0	28.1—35.0	35.1—42.0	42.1—49.0	Above 49.0
1	2	3	4	5	6	7	8	9	10	11
1	Patna	46.0	28	..	..	..	..	2	21	5
2	Shahabad	40.7	41	..	1	1	5	16	17	1
3	Saran	37.5	40	..	..	3	10	19	7	1
4	Dhanbad	36.1	10	..	..	1	2	5	1	..
5	Gaya	35.1	46	..	2	16	17	15	6	..
6	Bhagalpur	33.1	21	..	2	1	12	6	..	..
7	Monghyr	32.8	39	..	1	7	17	11	2	1
	BIHAR ..	**32.2**	**575**	**5**	**40**	**164**	**190**	**107**	**61**	**9**
8	Darbhanga	32.1	44	..	..	7	29	6	2	..
9	Muzaffarpur ..	31.5	40	..	..	14	13	11	2	..
	Singhbhum	31.5	25	..	1	7	9	6	2	..
11	Ranchi	29.7	38	..	2	14	17	4	1	..
12	Purnea	28.5	38	1	..	15	22	..	..	..
13	Saharsa	26.5	21	..	..	16	5	..	..	..
14	Santal Parganas ..	25.8	41	4	9	13	11	4	..	..
15	Hazaribagh ..	25.6	42	..	9	22	11	..	..	..
16	Palamau	25.5	25	..	5	13	6	1	..	..
17	Champaran ..	23.6	36	..	8	24	4	..	..	..

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A and other census data.



MALE LITERACY IN URBAN AREAS, 1961
(PERCENTAGE OF MALE LITERATES TO TOTAL MALE POPULATION EXCLUDING AGE GROUP 0—4 IN URBAN AREAS)

Purpose

This map shows the proportions of male literate to the urban male population aged 5 or more in each anchal of the State in 1961.

Method

The percentages of literates have been grouped into five ranges, as under :

(*i*) Below 52.1, (*iii*) 59.1—66.0,
(*ii*) 52.1—59.0, (*iv*) 66.1—73.0, and
(*v*) above 73.0.

The anchals have been shaded by five different grades of hatching ranging from high to low. Anchals which do not contain any urban population have not been shaded at all.

Salient Features

Out of 1,886,201 males living in urban areas of the State and aged 5 or more, 1,200,275 males or 63.6 per cent are literate. The male literacy rate in urban areas is thus almost twice that in rural areas of the State.

Urban male literacy is higher than the State average in four districts of the Chotanagpur Plateau, viz., Ranchi, Singhbhum, Santal Parganas and Palamau, as also in Patna and Muzaffarpur.

The literacy rate among urban males exceeds 73 per cent in 9 anchals of the State. The towns involved are Chaibasa, Seraikela and Chakradharpur in Singhbhum district, Ranchi and Doranda in Ranchi district, Daltonganj in Palamau district, and Dumka and Deoghar in Santal Parganas district. No anchal in Patna or Muzaffarpur has urban male literacy exceeding 73 per cent. However, literacy is over 73 per cent in Jhajha town in Monghyr district and Samastipur town in Darbhanga district.

The literacy rate among males in the cities of Patna as well as Jamshedpur is only 71.60 per cent which is lower than the rates in 9 towns mentioned above as also in Gumla in Ranchi district.

The districts of Champaran, Saharsa and Purnea are at the bottom in regard to literacy rates among urban males.

TABLE

MALE LITERACY IN URBAN AREAS, 1961

Rank	State/District	Percentage	Total anchals	Number of anchals in range					
				Below 52.1	52.1—59.0	59.1—66.0	66.1—73.0	Above 73.0	Entirely rural
1	2	3	4	5	6	7	8	9	10
1	Ranchi	73.3	8	2	1	1	3	1	30
2	Singhbhum..	70.4	9	2	..	1	3	3	16
3	Santal Parganas	69.2	8	..	1	2	3	2	33
4	Patna	68.5	8	..	3	3	2	..	20
5	Palamau	64.7	5	1	2	1	..	1	20
6	Muzaffarpur	64.2	5	1	2	1	1	..	35
	BIHAR	**63.6**	**125**	**33**	**33**	**28**	**22**	**9**	**450**
7	Gaya	63.4	10	2	3	3	2	..	36
8	Shahabad	62.3	9	2	2	3	2	..	32
9	Darbhanga..	61.7	6	1	3	1	..	1	38
	Bhagalpur	61.7	5	2	2	1	..	..	16
11	Saran	61.2	6	1	3	2	..	..	34
12	Hazaribagh	60.8	7	1	3	..	3	..	35
13	Monghyr	59.9	13	7	..	3	2	1	26
14	Dhanbad	57.9	5	1	2	1	1	..	5
15	Purnea	56.4	7	3	3	1	..	..	31
16	Saharsa	53.4	6	3	..	3	..	..	15
17	Champaran	53.3	8	4	3	1	..	..	26

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A and other census data.

MAP NO. 138

FEMALE LITERACY IN RURAL AREAS, 1961
(PERCENTAGE OF FEMALE LITERATES TO TOTAL FEMALE POPULATION EXCLUDING AGE GROUP 0—4 IN RURAL AREAS)

Purpose

The map on the following page shows the proportions of female literates to the rural female population aged 5 or more in each anchal of the State in 1961.

Method

Percentages of rural female literates aged 5 or more have been worked out for each anchal and grouped into seven categories, as under :

(*i*) Below 2.1, (*ii*) 2.1—4.0, (*iii*) 4.1—6.0, (*iv*) 6.1—8.0, (*v*) 8.1—10.0, (*vi*) 10.1—12.0, and (*vii*) above 12.0.

The anchals have been shaded by seven different grades of hatching ranging from high to low.

Salient Features

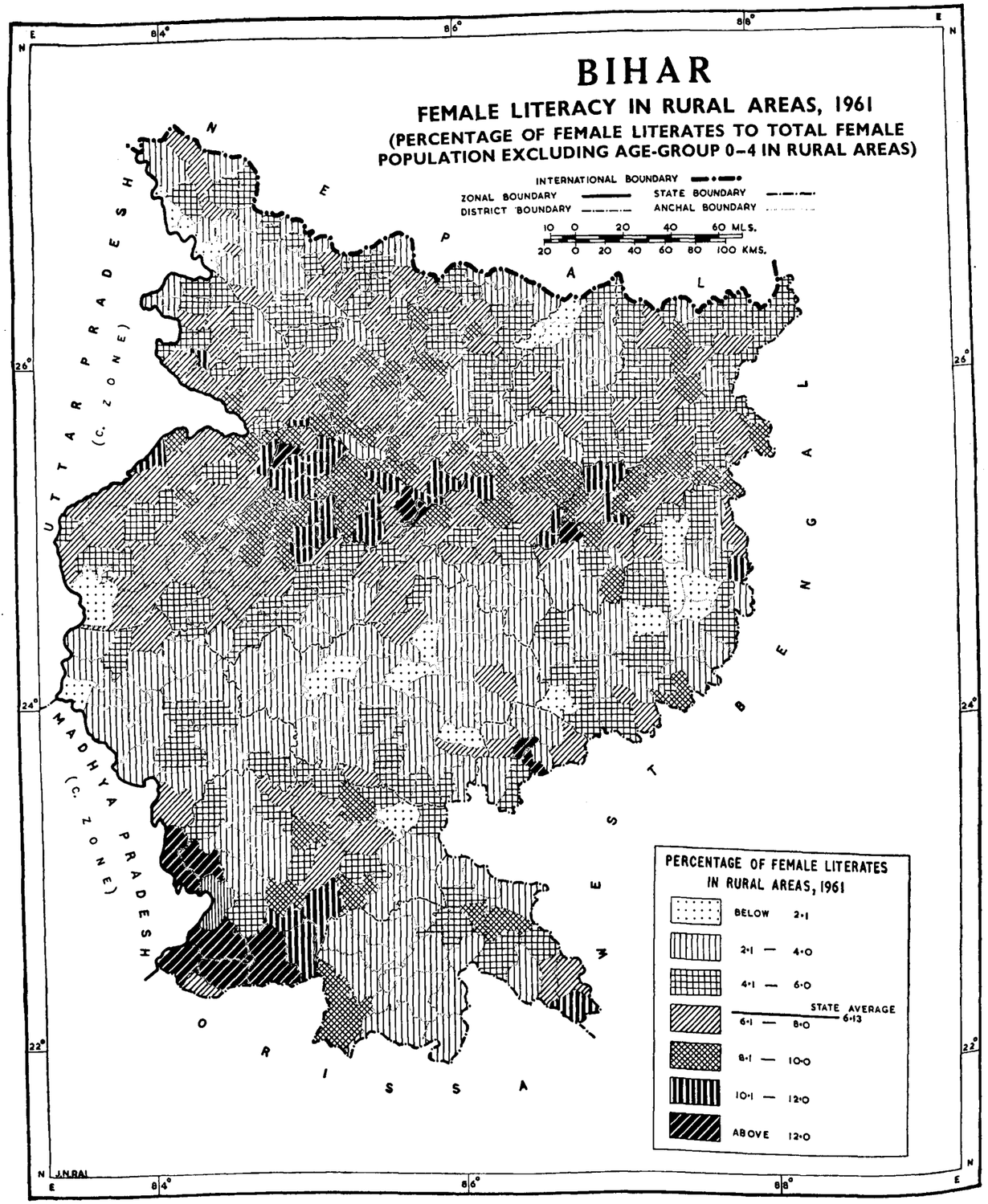
Out of 18,066,546 rural females aged 5 or more, 1,106,816 females or 6·13 per cent are literate. Thus, the literacy rate among rural females is less than one-fifth of the corresponding rate among males.

The five districts of Patna, Gaya, Shahabad, Monghyr, and Bhagalpur in the South Bihar Plain alongwith Ranchi, Dhanbad and Muzaffarpur have higher rural female literacy rates than the State average.

A distinctive feature of literacy rates among rural females is their high concentration in the southern and western parts of Ranchi, evidently the outcome of welfare activities by Christian Missions which seems to have gone a long way in spreading literacy among tribal females. Chainpur, Dumri, Simdega, Kolebira, Thethai-Tangar and Kurdeg anchals in Ranchi district have female literacy rates exceeding 12 per cent in each case, while the rate is above 8 per cent in 8 other anchals of the district. Patna district comes next with 2 anchals having over 12 per cent literacy among rural females. The anchals are Bihta and Asthawan. Among other anchals in the highest range of female literacy are Barbigha in Monghyr district, Sambhuganj in Bhagalpur district, Jharia-*cum*-Jorapokhar-*cum*-Sindri and Dhanbad-*cum*-Kenduadih-*cum*-Jagta in Dhanbad district, and Pusa in Darbhanga district.

There are as many as 20 anchals with female literacy below 2 per cent. 6 anchals of the Santal Parganas, viz., Sundar Pahari, Litipara, Ramgarh, Boarijore, Narainpur and Amrapara, belong to this category. They are all in the Rajmahal hills. Hazaribagh has four such anchals, viz., Markacho, Barakatha, Nawaqih and Itkhori. Champaran and Saharsa in the North Bihar Plain have 6 such anchals, viz., Madhubani, Thakrahan and Bairia in the former, and Kishanpur, Marauna and Nirmali in the latter. There is one such anchal in each of the districts of Shahabad (Adhaura), Palamau (Dhurki), Ranchi (Angara), and Singhbhum (Chakradharpur).

MAP NO. 138

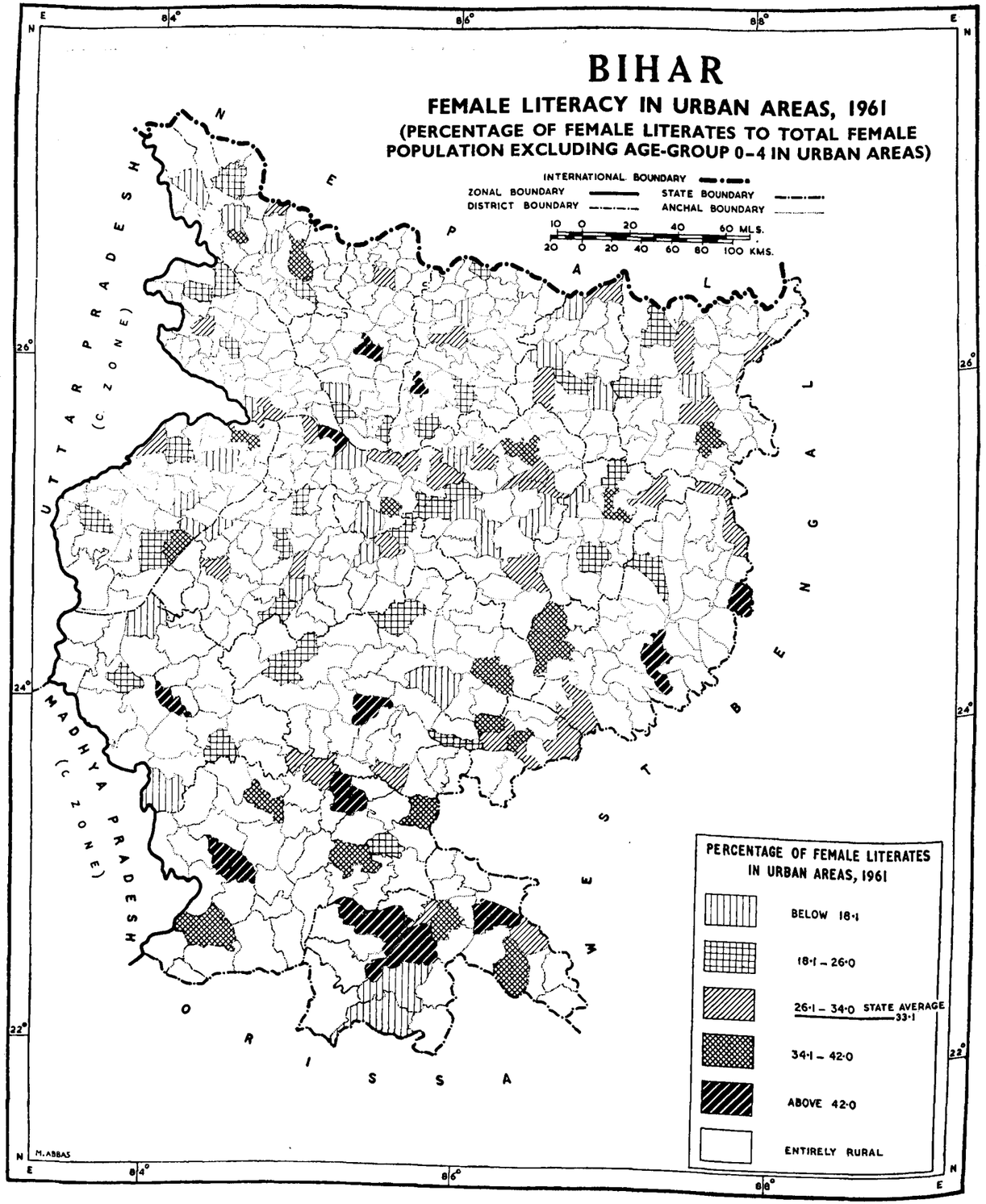


TABLE

FEMALE LITERACY IN RURAL AREAS, 1961

Rank	State/District	Percentage	Total anchals	Number of anchals in range: Below 2.1	2.1—4.0	4.1—6.0	6.1—8.0	8.1—10.0	10.1—12.0	Above 12.0
1	2	3	4	5	6	7	8	9	10	11
1	Patna ..	9.9	28	..	..	..	5	10	11	2
2	Bhagalpur ..	8.2	21	..	2	1	8	5	4	1
3	Shahabad ..	7.3	41	1	..	6	27	6	1	..
4	Ranchi ..	7.2	38	1	9	8	6	4	4	6
5	Monghyr ..	6.9	39	..	7	6	13	10	2	1
6	Gaya ..	6.8	46	..	6	13	17	6	4	..
7	Muzaffarpur ..	6.6	40	..	4	10	18	8	..	..
	Dhanbad ..	6.6	10	..	5	1	2	..	..	2
	BIHAR ..	**6.1**	575	20	142	150	154	67	29	13
9	Saran ..	6.0	50	..	5	13	18	2	2	..
	Darbhanga ..	6.0	44	..	8	16	14	5	..	1
	Purnea ..	6.0	38	..	3	21	8	6	..	..
12	Singhbhum ..	4.6	25	1	13	5	2	3	1	..
13	Champaran ..	4.4	36	3	15	11	7	..	..	..
	Saharsa ..	4.4	21	3	6	10	2	..	..	..
15	Santal Parganas ..	4.3	41	6	15	15	3	1	1	..
16	Palamau ..	3.8	25	1	15	8	1	..	..	..
17	Hazaribagh ..	3.4	42	4	29	6	3	..	..	..

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A and other census data.



Purpose

This map shows the proportions of female literates to the urban female population aged 5 or more in each anchal of the State in 1961.

Method

Percentages of urban female literates aged 5 or more have been worked out for each anchal and grouped into five categories, as under :

(*i*) Below 18.1, (*iii*) 26.1—34.0,
(*ii*) 18.1—26.0, (*iv*) 34.1—42.0, and
(*v*) above 42.0.

The anchals have been shaded by different grades of hatching ranging from high to low. The anchals containing no urban population have not been shaded at all.

Salient Features

Out of 1,480,459 urban females aged 5 or more in the State, 490,062 females or 33.1 per cent are literates. The order of female literacy in urban areas is thus almost the same as male literacy in rural areas (32.19 per cent) and about five times the female literacy rate in rural areas.

Urban female literacy is higher than the State average in four districts of the Chotanagpur Plateau, viz., Ranchi, Singhbhum, Santal Parganas and Dhanbad, as also Patna and Muzaffarpur.

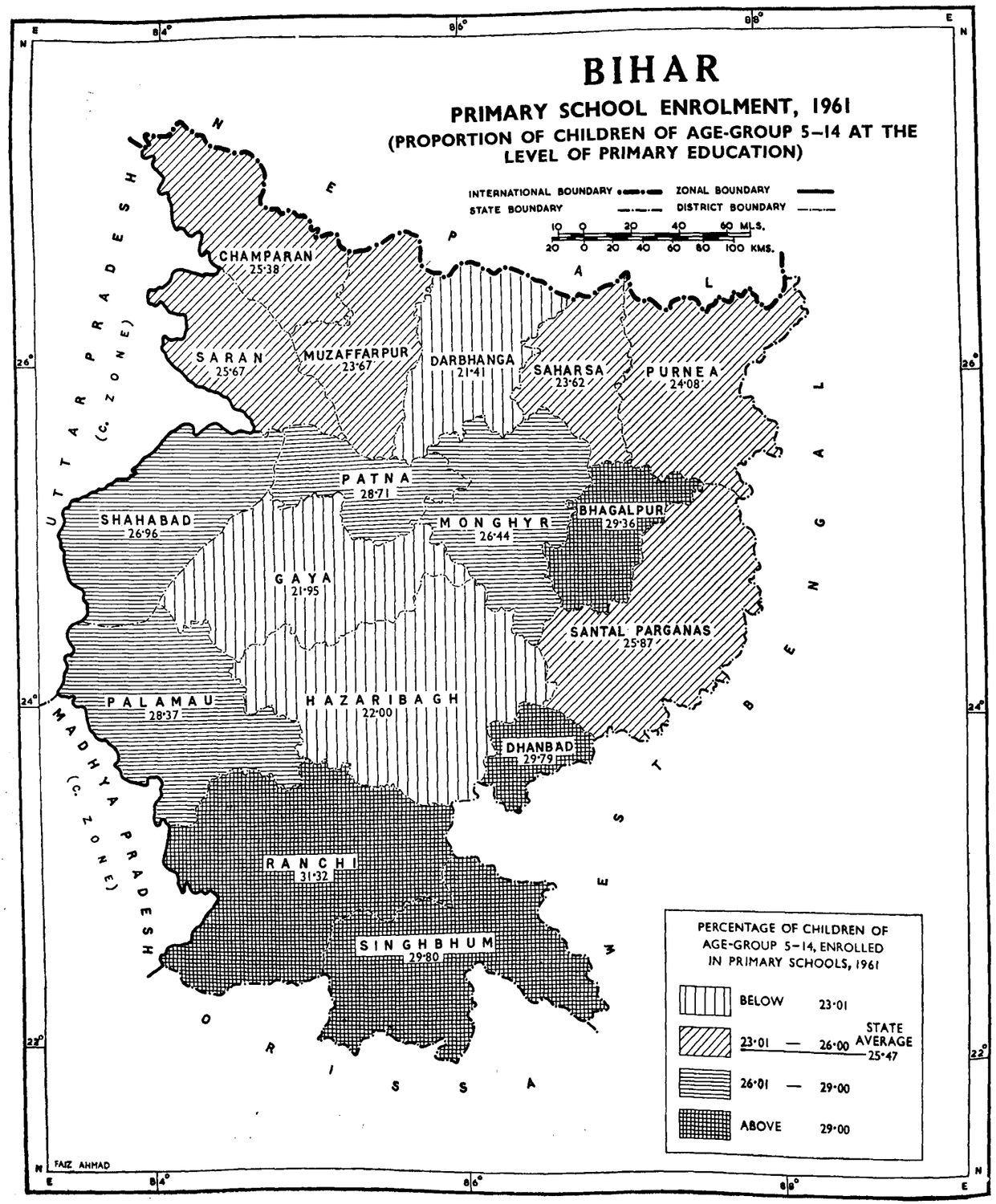
Female literacy rate in urban areas is above 42 per cent in 12 anchals. The towns involved are Chaibasa, Chakradharpur, Jamshedpur, Ranchi, Gumla, Dumka, Pakaur, Patna, Muzaffarpur, Samastipur, Daltonganj and Hazaribagh. Thus, 9 of the 12 anchals with urban female literacy over 42 per cent lie in the Chotanagpur Plateau. Female literacy is below 18 per cent in 29 anchals of the State of which 5 lie in Monghyr district and 3 each in Gaya, Shahabad, Champaran and Saharsa districts. Even Palamau, Singhbhum and Patna have 2 anchals each in this range.

TABLE

FEMALE LITERACY IN URBAN AREAS, 1961

Rank	State/District	Percentage	Total anchals	Number of anchals in range					
				Below 18.1	18.1—26.0	26.1—34.0	34.1—42.0	Above 42.0	Entirely rural
1	2	3	4	5	6	7	8	9	10
1	Ranchi	47.5	8	..	1	1	4	2	30
2	Singhbhum..	44.0	9	2	..	2	2	3	16
3	Patna	38.6	8	2	..	4	1	1	20
4	Santal Parganas	37.0	8	..	1	3	2	2	33
5	Dhanbad	34.3	5	..	..	3	2	..	5
6	Muzaffarpur	33.2	5	1	2	1	..	1	35
	BIHAR	**33.1**	**125**	**29**	**32**	**33**	**19**	**12**	**450**
7	Bhagalpur	32.0	5	1	2	1	1	..	16
8	Palamau	30.3	5	2	2	..	..	1	20
9	Hazaribagh	29.8	7	1	3	1	1	1	35
10	Purnea	29.5	7	1	2	3	1	..	31
11	Gaya	28.4	10	3	4	3	..	..	16
12	Shahabad	28.3	9	3	3	1	2	..	32
13	Darbhanga	26.5	6	1	3	1	..	1	38
14	Champaran	26.2	8	3	2	1	2	..	26
15	Saran	25.1	6	1	3	2	..	..	34
16	Monghyr	24.8	13	5	3	4	1	..	26
17	Saharsa	20.2	6	3	1	2	..	..	15

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A and other census data.



PRIMARY SCHOOL ENROLMENT, 1961
(PROPORTION OF CHILDREN OF AGE GROUP 5—14 AT THE LEVEL OF PRIMARY EDUCATION)

Purpose

This map shows the proportion of children in the age group 5—14 reading in classes I to V to their total population, in each district of the State in 1961.

Method

Percentages have been worked out for each district and grouped into four categories, as under :

(*i*) Below 23.01, (*iii*) 26.01—29.00, and
(*ii*) 23.01—26.00, (*iv*) above 29.00.

The districts have been shaded by four different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 12,495,293 children in age group 5—14 in the State, 3,182,175 children or 25.47 per cent were enrolled in primary classes (I to V) in 1961.

Enrolment of children at the level of primary education is high in the districts of Ranchi, Singhbhum and Dhanbad in the Chotanagpur Plateau. Incidentally, these districts also have high literacy rates. On the other hand, enrolment in primary classes is lower than the State average (25.47) in each district of the North Bihar Plain except Saran. Even in the latter, the proportion is only nominally above the State average.

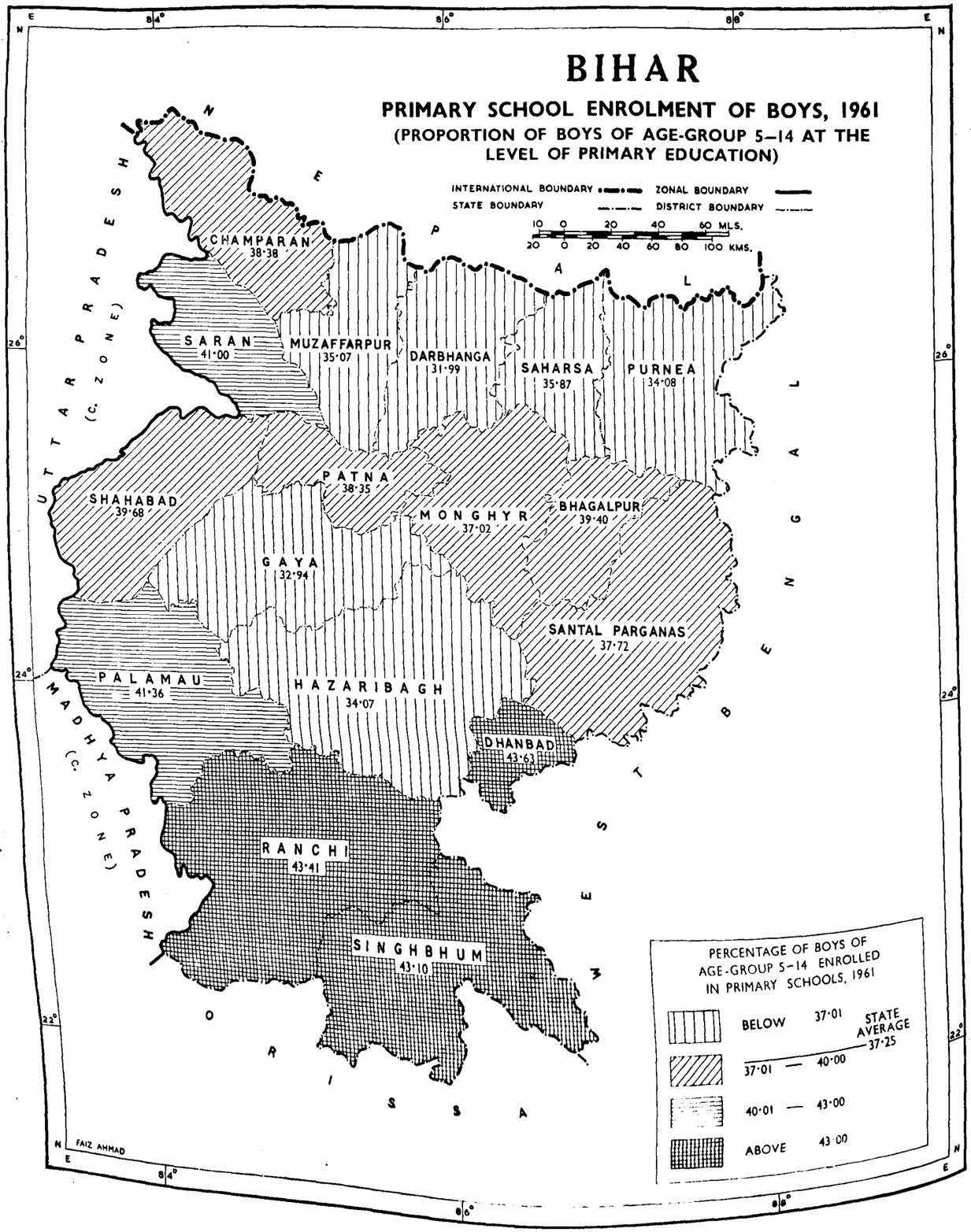
It is interesting to observe that primary school enrolment is above the State average in a contiguous group of 4 districts, viz., Palamau, Shahabad, Patna and Monghyr. On the other hand, the districts of Hazaribagh, Gaya and Darbhanga form the rear in this regard.

TABLE

PROPORTION OF CHILDREN OF AGE GROUP 5—14 AT THE LEVEL OF PRIMARY EDUCATION, 1961

Rank	State/District		Percentage
1	Ranchi	..	31.32
2	Singhbhum	..	29.80
3	Dhanbad	..	29.79
4	Bhagalpur	..	29.36
5	Patna	..	28.71
6	Palamau	..	28.37
7	Shahabad	..	26.96
8	Monghyr	..	26.44
9	Santal Parganas	..	25.87
10	Saran	..	25.67
	BIHAR	..	25.47
11	Champaran	..	25.38
12	Purnea	..	24.08
13	Muzaffarpur	..	23.67
14	Saharsa	..	23.62
15	Hazaribagh	..	22.00
16	Gaya	..	21.95
17	Darbhanga	..	21.41

SOURCE : Director of Public Instruction, Bihar.



PRIMARY SCHOOL ENROLMENT OF BOYS, 1961 (PROPORTION OF BOYS OF AGE GROUP 5—14 AT THE LEVEL OF PRIMARY EDUCATION)

Purpose

This map shows the proportion of boys in the age group 5—14 reading in classes I to V to their total population, in each district of the State in 1961.

Method

Percentages of boys enrolled in primary schools have been calculated for each district and grouped into four categories, as under :

(*i*) Below 37.01, (*iii*) 40.01—43.00 and
(*ii*) 37.01—40.00, (*iv*) above 43.00.

The districts have been shaded by four different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 6,561,967 boys in the age group 5—14, 2,444,402 boys or 37.25 per cent were enrolled in primary classes (I to V) in 1961. This proportion is substantially higher than the overall proportion of 25.47 per cent for boys and girls, and almost three times the proportion for girls only.

Primary school enrolment for boys is higher than the State average in 10 districts. This was also the case in regard to overall enrolment for boys and girls. However, Monghyr which has higher than average total primary school enrolment has lower than average figures in respect of boys. On the other hand, Champaran which has lower than State average for total enrolment, is above the State average in respect of boys.

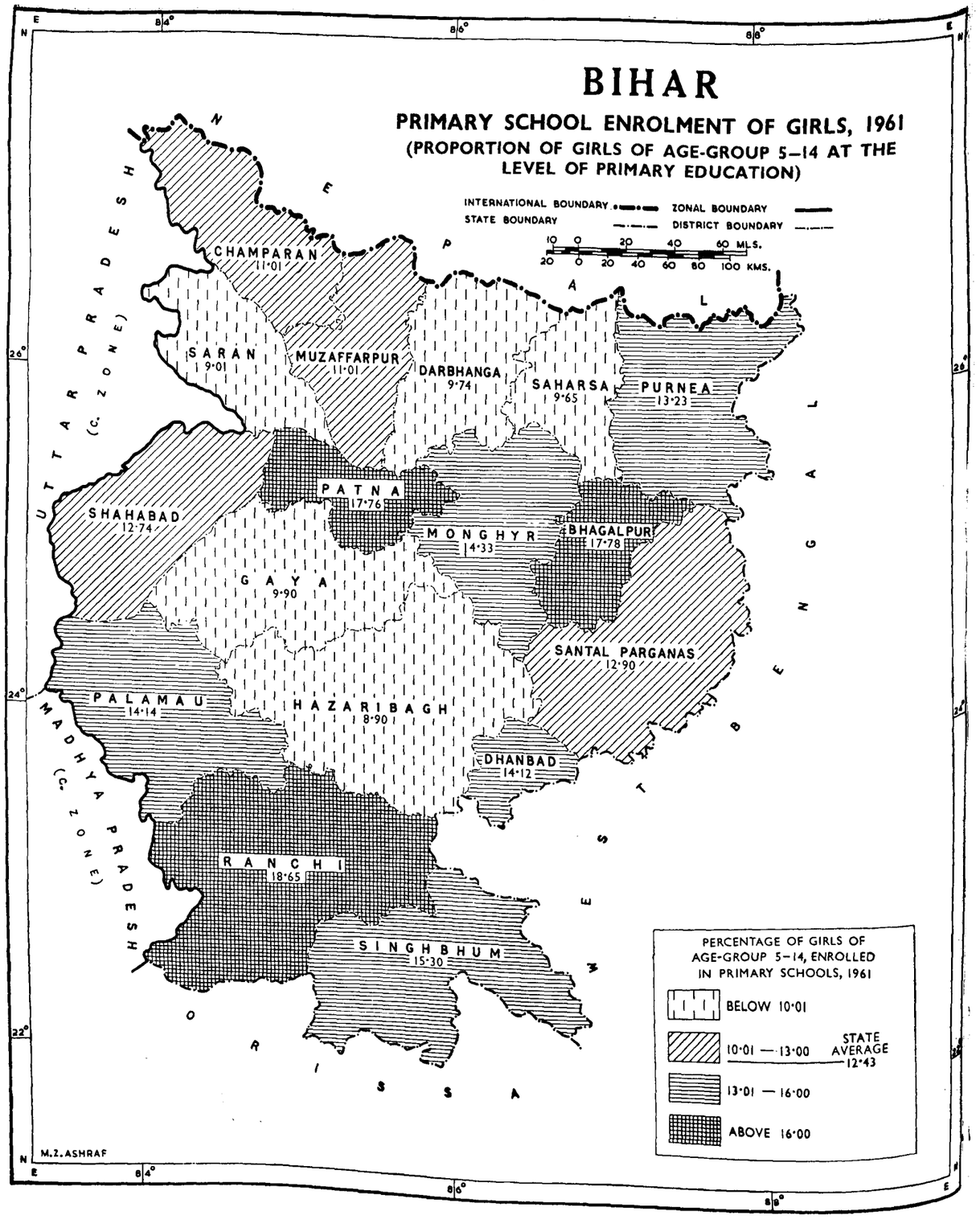
Ranchi, Singhbhum and Dhanbad continue to occupy the first three positions in respect of primary school enrolment among boys. These are the only districts in the range above 43 per cent. Saran and Palamau districts are two isolated districts in the range 40.01—43.00 per cent. Four districts of the South Bihar Plain, viz., Shahabad, Patna, Monghyr, and Bhagalpur along with Santal Parganas form compact block with primary school enrolment of boys ranging from 37 to 40 per cent, the proportion being only nominally below the State average in Monghyr district.

TABLE

PROPORTION OF BOYS OF AGE GROUP 5—14 AT THE LEVEL OF PRIMARY EDUCATION, 1961

Rank	State/District		Percentage
1	Dhanbad	..	43.63
2	Ranchi	..	43.41
3	Singhbhum	..	43.10
4	Palamau	..	41.36
5	Saran	..	41.00
6	Shahabad	..	39.68
7	Bhagalpur	..	39.40
8	Champaran	..	38.38
9	Patna	..	38.35
10	Santal Parganas	..	37.72
	BIHAR	..	**37.25**
11	Monghyr	..	37.02
12	Saharsa	..	35.87
13	Muzaffarpur	..	35.07
14	Purnea	..	34.08
15	Hazaribagh	..	34.07
16	Gaya	..	32.94
17	Darbhanga	..	31.99

SOURCE : Director of Public Instruction, Bihar.



PRIMARY SCHOOL ENROLMENT OF GIRLS, 1961 (PROPORTION OF GIRLS OF AGE GROUP 5—14 AT THE LEVEL OF PRIMARY EDUCATION)

Purpose

This map shows the proportion of girls in the age group 5—14 reading in classes I to V, to their total population, in each district of the State in 1961.

Method

Percentages of girls enrolled in primary classes have been calculated for each district and grouped into four categories, as under:

(*i*) Below 10.01, (*iii*) 13.01—16.00, and
(*ii*) 10.01—13.00, (*iv*) above 16.00.

The districts have been shaded by four different grades of hatching ranging from high to low. For facility of reference, percentages have also been shown in the map.

Salient Features

Out of 5,933,326 girls in the age group 5—14, 737,773 girls or 12.43 per cent were enrolled in primary schools in Bihar during 1961.

As many as 10 districts have primary school enrolment of girls above the State average. The districts with lower than State average are mostly confined to the North Bihar Plain, only Gaya in South Bihar and Hazaribagh in the Chotanagpur Plateau fall in this category.

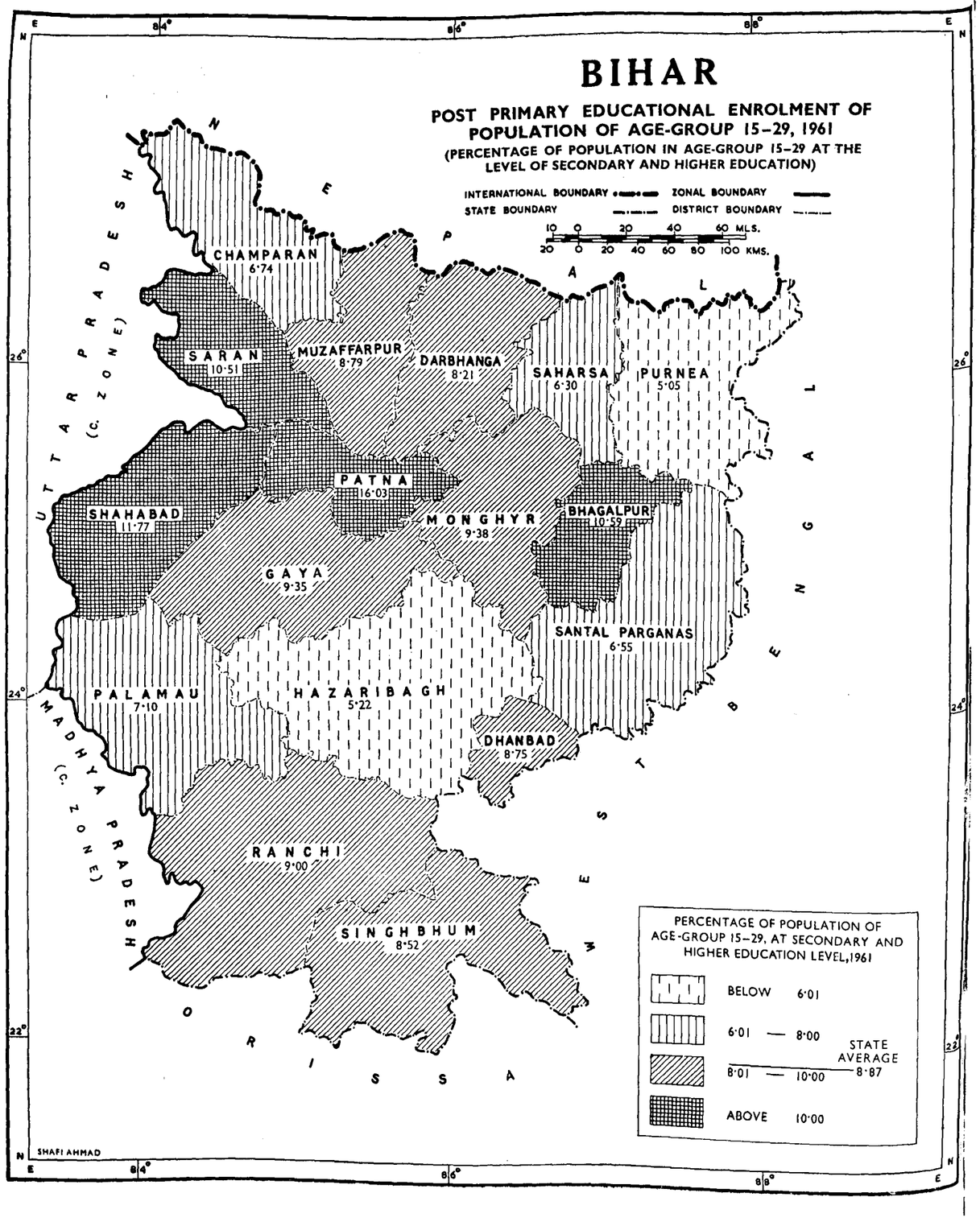
Ranchi, Bhagalpur and Patna are three isolated districts with primary school enrolment of girls exceeding 16 per cent in each case. Even in the lower range (13.01—16.00 per cent), the five districts of Singhbhum, Dhanbad, Palamau, Monghyr and Purnea are scattered.

TABLE

PROPORTION OF GIRLS OF AGE GROUP 5—14 AT THE LEVEL OF PRIMARY EDUCATION, 1961

Rank	State/District	Percentage
1	Ranchi ..	18.65
2	Bhagalpur ..	17.78
3	Patna ..	17.76
4	Singhbhum ..	15.30
5	Monghyr ..	14.33
6	Palamau ..	14.14
7	Dhanbad ..	14.12
8	Purnea ..	13.23
9	Santal Parganas ..	12.90
10	Shahabad ..	12.74
	BIHAR ..	**12.43**
11	Champaran ..	11.01
	Muzaffarpur ..	11.01
13	Gaya ..	9.90
14	Darbhanga ..	9.74
15	Saharsa ..	9.65
16	Saran ..	9.01
17	Hazaribagh ..	8.90

SOURCE : Director of Public Instruction, Bihar.



POST-PRIMARY EDUCATIONAL ENROLMENT OF POPULATION OF AGE GROUP 15—29, 1961

Purpose

This map shows the proportion of persons in the age group 15—29 reading at the level of secondary and higher education to their total population, in each district of the State in 1961.

Method

Enrolment statistics for classes VI to XII of Secondary and Higher Secondary schools have been obtained from the Directorate of Public Instruction, Bihar. Similar figures for enrolment in Vocational and Technical schools, Teachers' Training institutions, pre-University and University classes, etc., have been compiled from the districtwise educational statistics published by the National Council of Educational Research and Training, New Delhi. The percentages of post-primary educational enrolment have then been calculated from the said information for each district and grouped into four ranges, as under :

(*i*) Below 6.01, (*iii*) 8.01—10.00, and
(*ii*) 6.01—8.00, (*iv*) above 10.00.

The districts have been shaded by four different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 11,112,300 persons in age group 15—29, 985,334 persons or 8.87 per cent were enrolled in institutions imparting secondary and higher education in the State during, 1961.

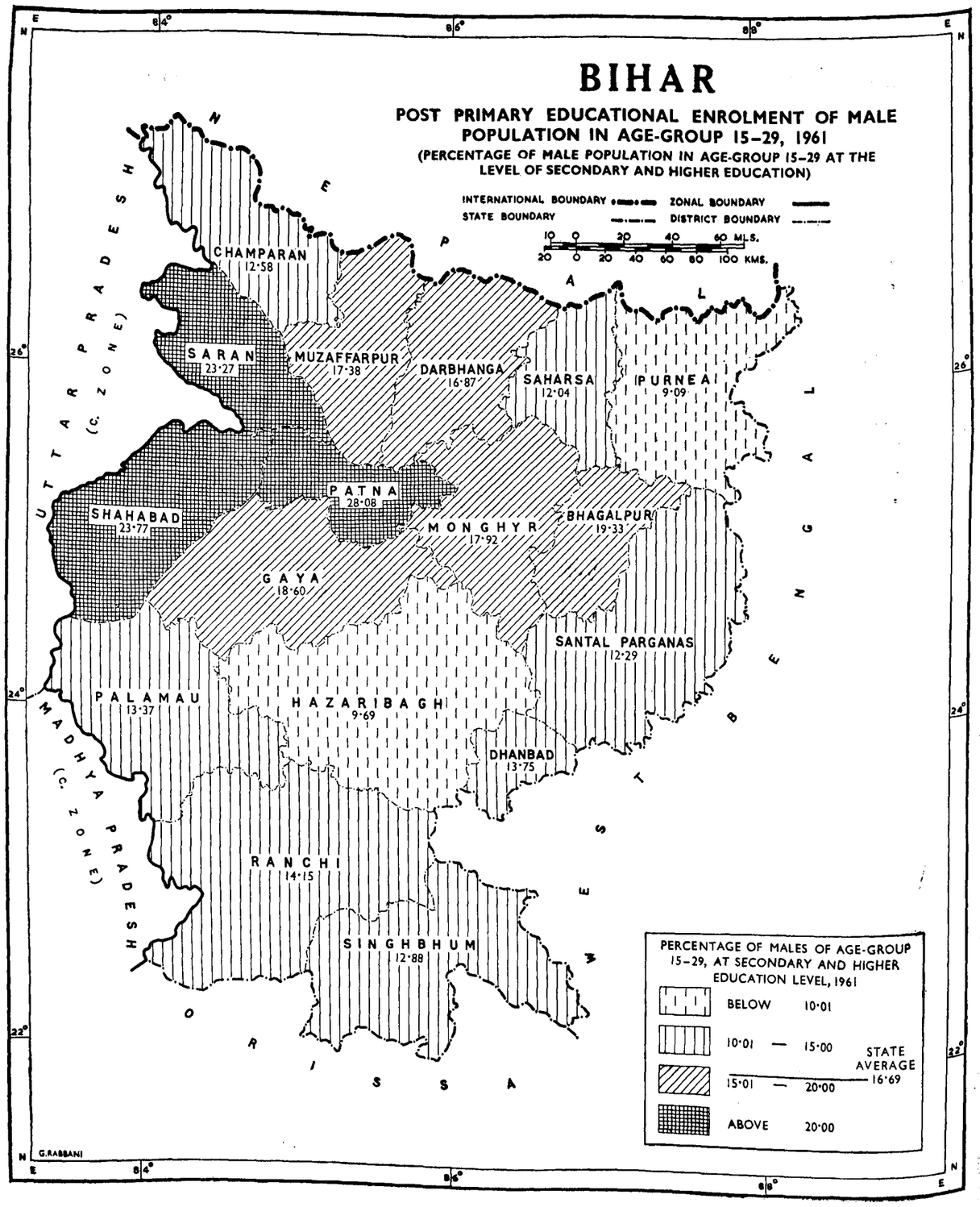
With 16.03 per cent enrolment, Patna district has the highest proportion of population in the age group 15—29 at the level of secondary and higher education. The adjoining district of Shahabad is the only other district in the range above 11 per cent. Significantly, the districts contiguous to Patna and Shahabad, viz., Saran, Gaya, Monghyr and Bhagalpur, have post-primary educational enrolment between 9 and 11 per cent only. In addition to the above six districts only Ranchi has post-primary educational enrolment above the State average (8.87 per cent). In Palamau, Singhbhum and Dhanbad in the Chotanagpur Plateau and Muzaffarpur and Darbhanga in the North Bihar Plain the percentage of enrolment is between 7 and 9 per cent. Post-primary educational enrolment is only 5 to 7 per cent in Champaran and a group of four districts comprising Saharsa, Purnea, Santal Parganas and Hazaribagh.

TABLE

POST-PRIMARY EDUCATIONAL ENROLMENT OF POPULATION OF AGE GROUP 15—29, 1961

Rank	State/District		Percentage
1	Patna	..	16.03
2	Shahabad	..	11.77
3	Bhagalpur	..	10.59
4	Saran	..	10.51
5	Monghyr	..	9.38
6	Gaya	..	9.35
7	Ranchi	..	9.00
	BIHAR	..	**8.87**
8	Muzaffarpur	..	8.79
9	Dhanbad	..	8.75
10	Singhbhum	..	8.52
11	Darbhanga	..	8.21
12	Palamau	..	7.10
13	Champaran	..	6.74
14	Santal Parganas	..	6.55
15	Saharsa	..	6.30
16	Hazaribagh	..	5.22
17	Purnea	..	5.05

SOURCE : (1) Director of Public Instruction, Bihar.
(2) N. C. E. R. & T., New Delhi; Educational Statistics, Districtwise 1960-61



POST-PRIMARY EDUCATIONAL ENROLMENT OF MALE POPULATION IN AGE GROUP 15—29, 1961

Purpose

This map shows the proportion of males in the age group 15—29 reading at the level of secondary and higher education to their total population, in each district of the State in 1961.

Method

Enrolment statistics for classes VI to XII of Secondary and Higher Secondary schools have been obtained from the Directorate of Public Instruction, Bihar. Similar figures of enrolment in Vocational and Technical schools, Teachers' Training institutions, pre-University and University classes, etc., have been compiled from the districtwise educational statistics published by the National Council of Educational Research and Training, New Delhi. The percentages of post-primary educational enrolment have then been calculated from the said information for each district and grouped into four ranges, as under:

(*i*) Below 10.01, (*iii*) 15.01—20.00, and
(*ii*) 10.01—15.00, (*iv*) above 20.00.

The districts have been shaded by four different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

Out of 5,384,143 males in the age group 15—29, 898,427 or 16.69 per cent are enrolled in institutions imparting secondary and higher training. The percentage is highest in Patna (28.08) and also above 20 per cent in Shahabad and Saran districts which are contiguous to Patna. It varies between 15 and 20 per cent in Muzaffarpur, Darbhanga and 3 districts of South Bihar, viz., Gaya, Monghyr, and Bhagalpur. Thus, all the districts of the South Bihar Plain have post-primary educational enrolment over 15 per cent, this being true also of Saran and Muzaffarpur in North Bihar.

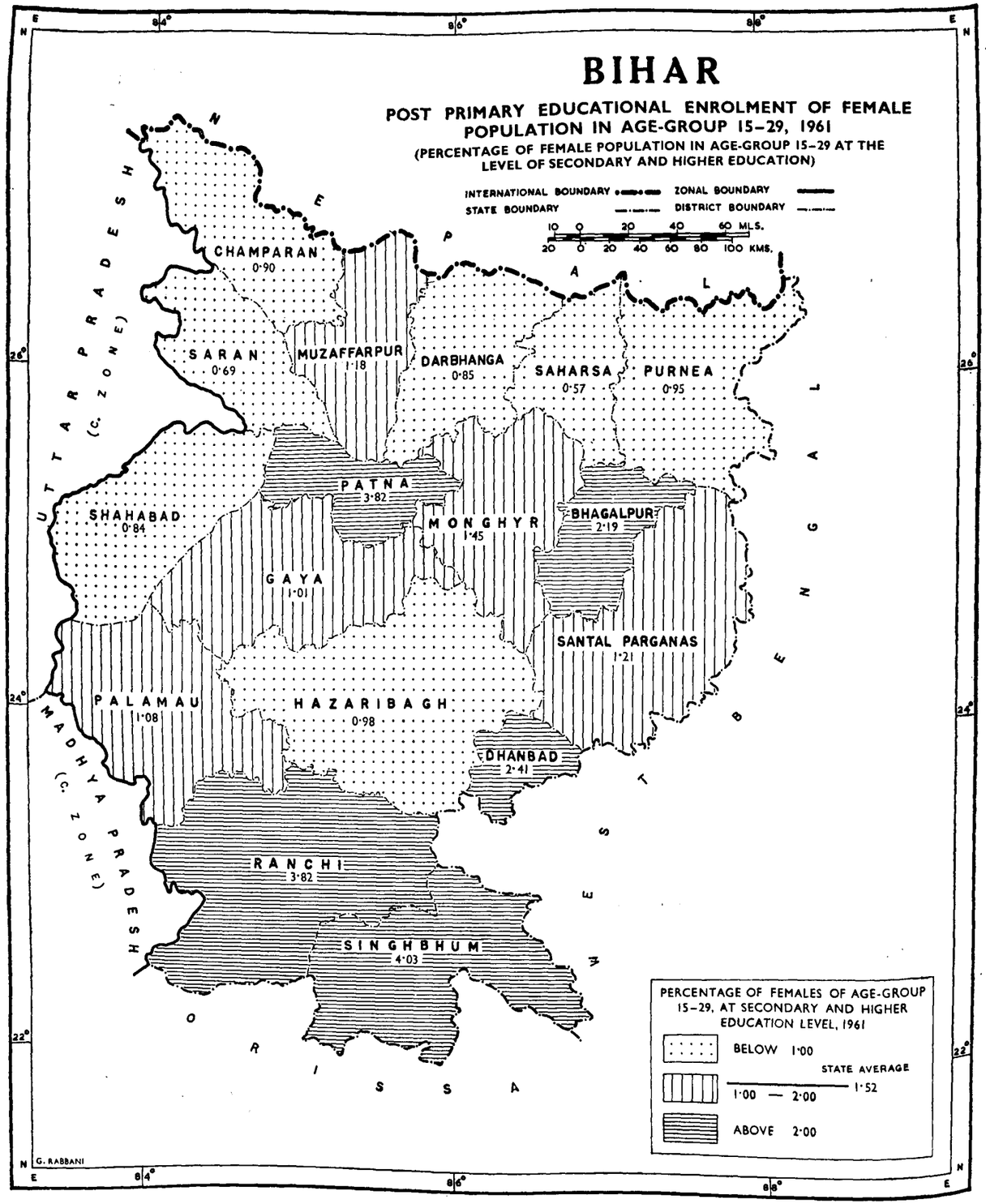
Except Purnea and Hazaribagh in which post-primary enrolment is below 10 per cent, the proportion ranges from 10 to 15 per cent in the remaining districts which include 5 in the Chotanagpur Plateau and 2 in the North Bihar Plain.

TABLE

POST-PRIMARY EDUCATIONAL ENROLMENT OF MALE POPULATION OF AGE GROUP 15—29, 1961

Rank	State/District		Percentage
1	Patna	..	28.08
2	Shahabad	..	23.77
3	Saran	..	23.27
4	Bhagalpur	..	19.33
5	Gaya	..	18.60
6	Monghyr	..	17.92
7	Muzaffarpur	..	17.38
8	Darbhanga	..	16.87
	BIHAR	..	16.69
9	Ranchi	..	14.15
10	Dhanbad	..	13.75
11	Palamau	..	13.37
12	Singhbhum	..	12.88
13	Champaran	..	12.58
14	Santal Parganas	..	12.29
15	Saharsa	..	12.04
16	Hazaribagh	..	9.69
17	Purnea	..	9.09

SOURCE : (1) Director of Public Instruction, Bihar.
(2) N. C. E. R. & T., New Delhi; Educational Statistics, Districtwise, 1960-61.



POST-PRIMARY EDUCATIONAL ENROLMENT OF FEMALE POPULATION IN AGE GROUP 15—29, 1961

Purpose

This map shows the proportion of females in the age group 15—29, reading at the level of secondary and higher education to their total population in each district of the State, 1961.

Method

Enrolment statistics for classes VI to XII of Secondary and Higher Secondary schools have been obtained from the Directorate of Public Instruction, Bihar. Similar figures for enrolment in Vocational and Technical schools, Teachers' Training institutions, pre-University and University classes, etc., have been compiled from the districtwise educational statistics published by the National Council of Educational Research and Training, New Delhi. The percentages of post-primary educational enrolment have then been calculated from the said information for each district and grouped into three ranges, as under:

(*i*) Below 1.00,
(*ii*) 1.00—2.00, and
(*iii*) above 2.00.

The districts have been shaded by three different grades of hatching ranging from high to low. For facility of reference, the percentages have also been shown in the map.

Salient Features

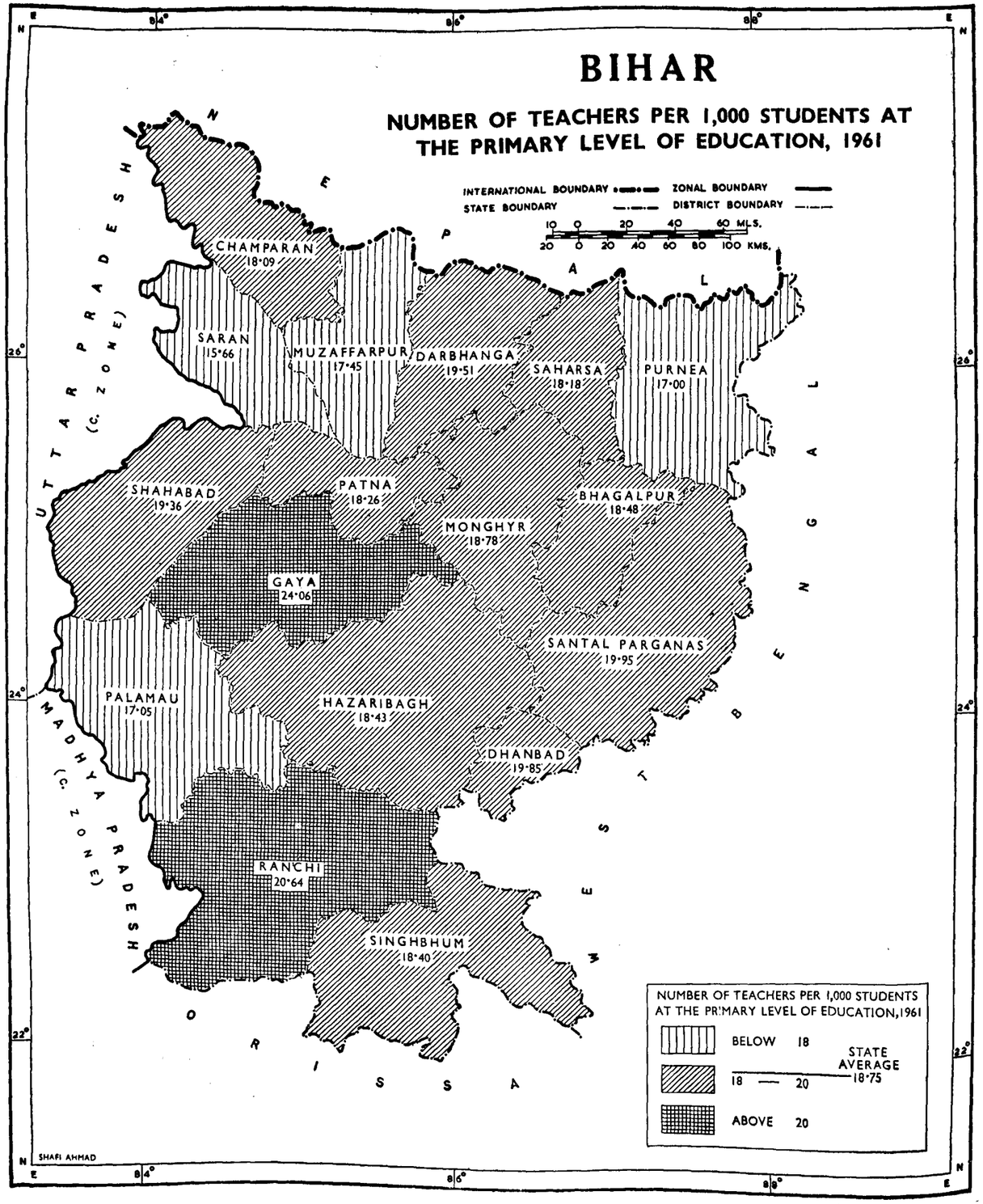
Out of 5,728,157 females in the age group 15—29 only 86,907 or 1.52 per cent are enrolled in institutions imparting training in secondary and higher education. The proportion is above the State average (1.52 per cent) in Singhbhum, Ranchi and Dhanbad districts in the Chotanagpur Plateau as also in Patna and Bhagalpur in the South Bihar Plain. Gaya, Monghyr, Muzaffarpur, Palamau and Santal Parganas have post-primary educational enrolment of females between 1 and 2 per cent. It is below 1 per cent in the remaining districts which include 5 in the North Bihar Plain (except Muzaffarpur), Shahabad in the South Bihar Plain and Hazaribagh in the Chotanagpur Plateau.

TABLE

POST-PRIMARY EDUCATIONAL ENROLMENT OF FEMALE POPULATION OF AGE GROUP 15—29, 1961

Rank	State/District		Percentage
1	Singhbhum	..	4.03
2	Patna	..	3.82
	Ranchi	..	3.82
4	Dhanbad	..	2.41
5	Bhagalpur	..	2.19
	BIHAR	..	**1.52**
6	Monghyr	..	1.45
7	Santal Parganas	..	1.21
8	Muzaffarpur	..	1.18
9	Palamau	..	1.08
10	Gaya	..	1.01
11	Hazaribagh	..	0.98
12	Purnea	..	0.95
13	Champaran	..	0.90
14	Darbhanga	..	0.85
15	Shahabad	..	0.84
16	Saran	..	0.69
17	Saharsa	..	0.57

SOURCE : (1) Director of Public Instruction, Bihar.
(2) N. C. E. R. & T., New Delhi, Educational Statistics, Districtwise, 1960-61.



NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE PRIMARY LEVEL OF EDUCATION, 1961

Purpose

This map shows the proportion of teachers per 1,000 students at the primary level of education in each district of the State in 1961.

Method

The districtwise proportions of teachers per 1,000 students reading in classes I to V have been grouped into three categories, viz.,

(*i*) Below 18,
(*ii*) 18—20, and
(*iii*) above 20.

The districts have been shaded by three different grades of hatching ranging from high to low.

Salient Features

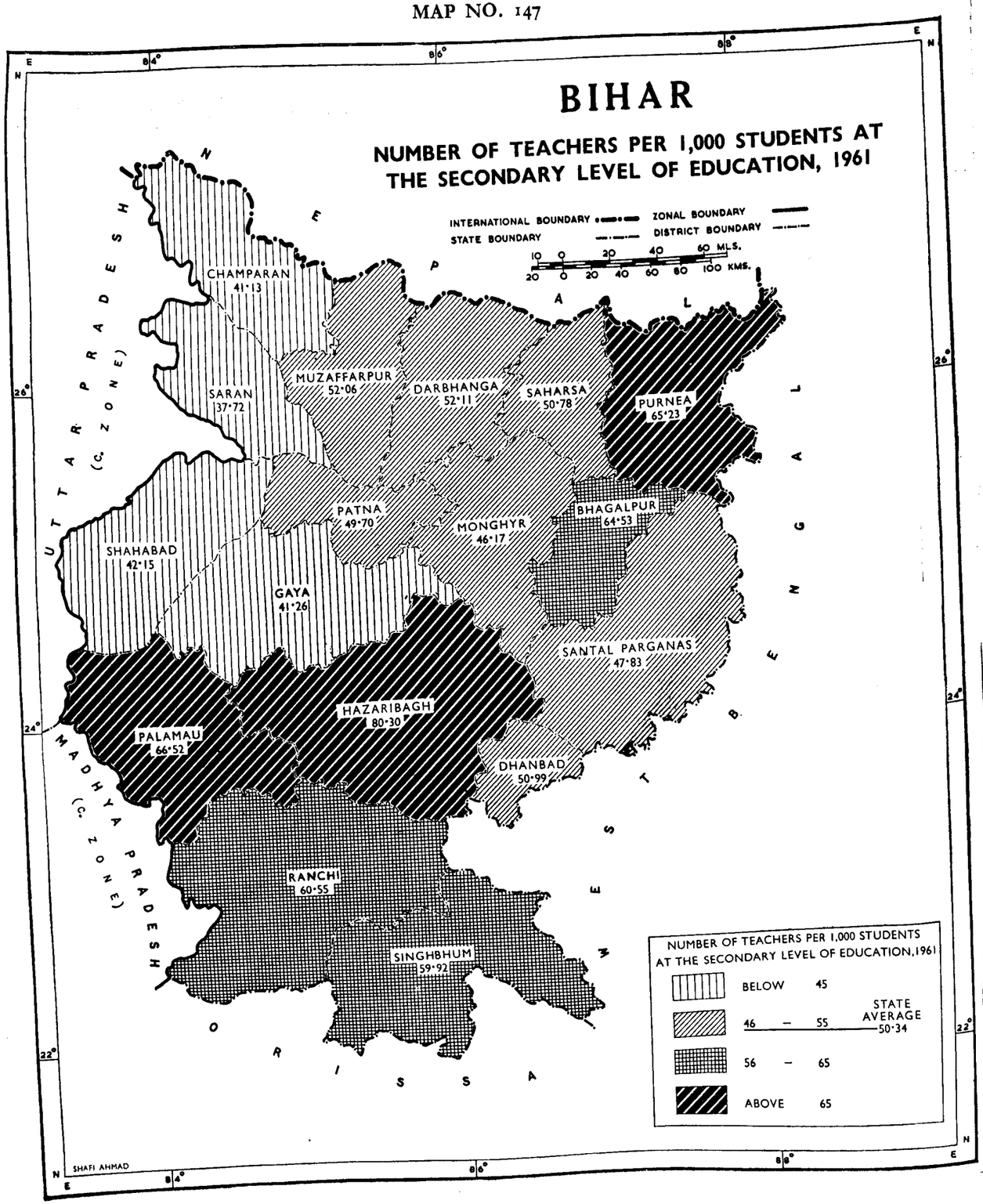
For the State as a whole, there were 18.75 teachers per 1,000 students, or 1 teacher for every 53 students, at the primary level of education. The proportions were, however, significantly higher in the districts of Gaya and Ranchi, and only nominally so in those of Santal Parganas, Dhanbad, Darbhanga, Shahabad and Monghyr. On the other hand, the proportions were below 18 in Muzaffarpur, Palamau, Purnea and Saran districts.

TABLE

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE PRIMARY LEVEL OF EDUCATION
1961

Rank	State/District		Number of teachers
1	Gaya	..	24.06
2	Ranchi	..	20.64
3	Santal Parganas	..	19.95
4	Dhanbad	..	19.85
5	Darbhanga	..	19.51
6	Shahabad	..	19.36
7	Monghyr	..	18.78
	BIHAR	..	**18.75**
8	Bhagalpur	..	18.48
9	Hazaribagh	..	18.43
10	Singhbhum	..	18.40
11	Patna	..	18.26
12	Saharsa	..	18.18
13	Champaran	..	18.09
14	Muzaffarpur	..	17.45
15	Palamau	..	17.05
16	Purnea	..	17.00
17	Saran	..	15.66

SOURCE : Director of Public Instruction, Bihar, Table ES-VI-A.



NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE SECONDARY LEVEL OF EDUCATION, 1961

Purpose

This map depicts the pro ortions of teachers per 1,000 students at the secondary level of education in each district of the State in 1961.

Method

The districtwise proportions of teachers per 1,000 students reading in classes VI to XI or XII have been grouped into four categories, viz.,

(*i*) Below 45, (*iii*) 56—65, and
(*ii*) 45—55, (*iv*) above 65.

The districts have been shaded by four different grades of hatching ranging from high to low.

Salient Features

For the State as a whole, there were 50.34 teachers per 1,000 students at the secondary level of education in Bihar in 1961. In other words, the ratio was 1 teacher for every 20 students (approximately).

The teacher-student ratio at the secondary level varied from 80.30 in Hazaribagh to almost half this figure in Champaran (41.13).

All the districts of Chotanagpur division had ratios above the State average. The ratio exceeded 60 in Hazaribagh, Palamau and Ranchi in Chotanagpur, as also in Purnea and Bhagalpur. On the other hand, the ratios were lowest in Champaran and Saran.

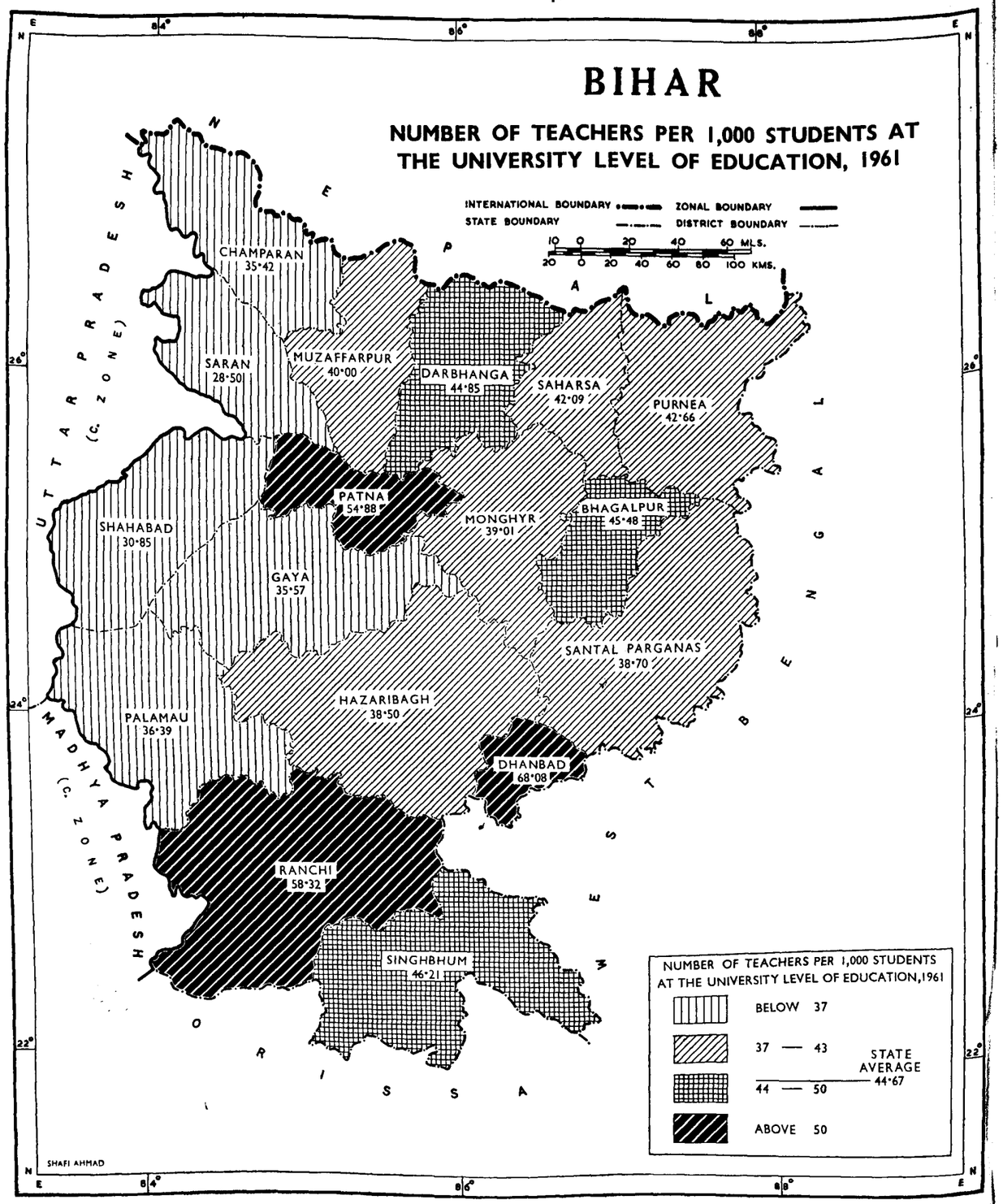
TABLE

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE SECONDARY LEVEL OF EDUCATION 1961

Rank	State/District	Number of teachers
1	Hazaribagh ..	80.30
2	Palamau ..	66.52
3	Purnea ..	65.23
4	Bhagalpur ..	64.53
5	Ranchi ..	60.55
6	Singhbhum ..	59.92
7	Darbhanga ..	52.11
8	Muzaffarpur ..	52.06
9	Dhanbad ..	50.99
10	Saharsa ..	50.78
	BIHAR ..	**50.34**
11	Patna ..	49.70
12	Santal Parganas ..	47.83
13	Monghyr ..	46.17
14	Shahabad ..	42.15
15	Gaya ..	41.26
16	Champaran ..	41.13
17	Saran ..	37.72

SOURCE : (1) Director of Public Instruction, Bihar, Table ES-VI-A.

(2) N. C. E. R. & T. New Delhi, Educational Statistics, Districtwise, 1960-61.



MAP NO. 148

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE UNIVERSITY LEVEL OF EDUCATION, 1961

Purpose

This map indicates the proportions of teachers per 1,000 students at the University level of education in each district of the State in 1961.

Method

The districtwise proportions of teachers per 1,000 students studying at any level in the Universities of the State have been grouped into four categories, viz.,

(*i*) Below 37, (*iii*) 44—50, and
(*ii*) 37—43, (*iv*) above 50.

The districts have been shaded by four different grades of hatching ranging from high to low.

Salient Features

The overall proportion of teachers per 1,000 students at the University level in 1961 was 44.67 for the State. In other words, there was 1 teacher for every 22 students (approximately).

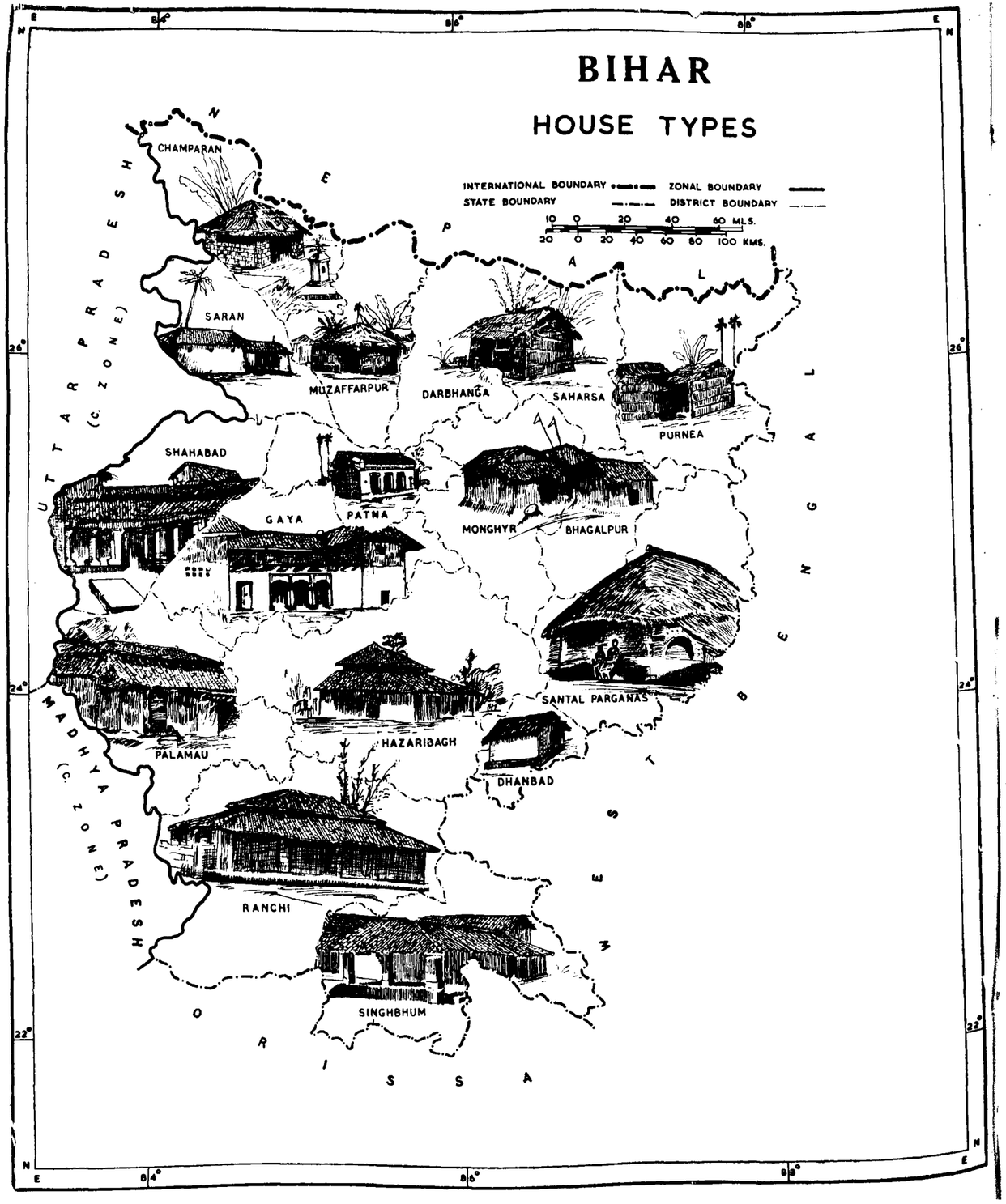
The district of Dhanbad had the highest proportion, followed by Ranchi and Patna. The latter two being the headquarters of two Universities in Bihar, the figures are easily explained. Of the three other districts containing headquarters of Universities, viz., Bhagalpur, Muzaffarpur and Gaya, the teacher-student proportion was above the State average only in Bhagalpur. The proportions were lowest in Shahabad and Saran.

TABLE

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE UNIVERSITY LEVEL OF EDUCATION
1961

Rank	State/District	Number of teachers
1	Dhanbad	68.08
2	Ranchi	58.32
3	Patna	54.88
4	Singhbhum	46.21
5	Bhagalpur	45.48
6	Darbhanga	44.85
	BIHAR	**44.67**
7	Purnea	42.66
8	Saharsa	42.09
9	Muzaffarpur	40.00
10	Monghyr	39.01
11	Santal Parganas	38.70
12	Hazaribagh	38.50
13	Palamau	36.39
14	Gaya	35.57
15	Champaran	35.42
16	Shahabad	30.85
17	Saran	28.50

SOURCE : N. C. E. R. & T., New Delhi, Educational Statistics, Districtwise, 1960-61.



MAP NO. 149

HOUSE TYPES

Purpose

This map depicts the predominant types of residential houses in each district of the State, 1961.

Method

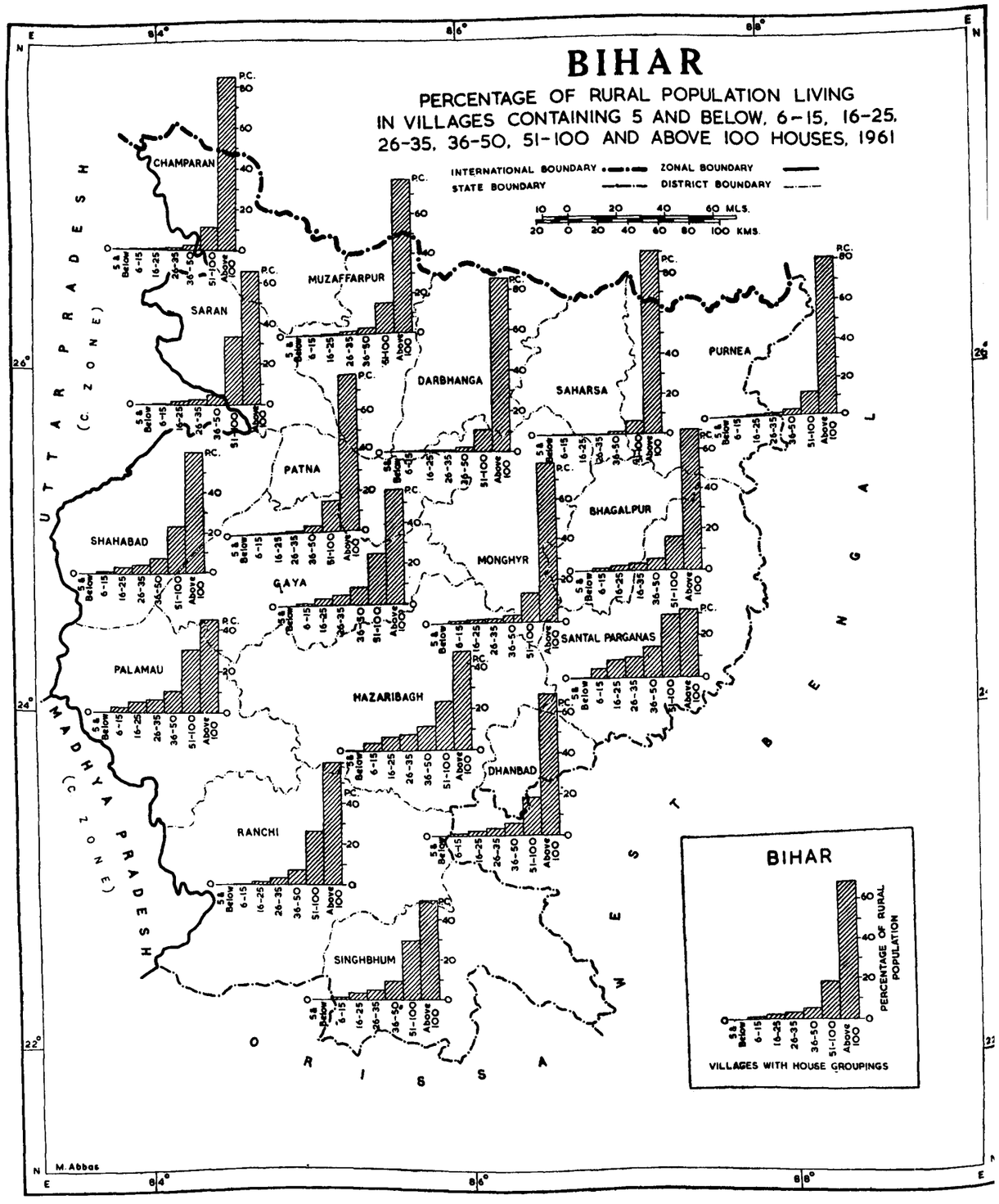
Following the houselisting operations, photographs of typical houses were taken in the different districts of the State. Some photographs were also taken in connection with the socio-economic survey of villages. Representative types of houses showing predominant materials used in their construction and types of designs have been selected for each district and drawn on the map. The original map was got prepared by the Map Officer, Office of the Registrar General, India. It was subsequently redrawn with certain changes in order to give a more realistic idea of the housing pattern.

Salient Features

Local availability of building material is the chief determinant of house types in the State. Mud is the most common wall material. In Patna division, however, 15 per cent of the households live in brick-walled houses as shown in the map. Walls made of grass, reeds and bamboos account for one-third of the houses in Tirhut division and 38 per cent in Bhagalpur division. In addition to ready availability of raw materials, light structures made of *khar* (a kind of grass) are preferred in the districts of Muzaffarpur, Darbhanga, Saharsa and Purnea which are liable to ravages of floods.

Grass or straw roofs are provided in two-thirds of the houses in Bhagalpur division and over one half of the houses in Tirhut division. Tiles are more common elsewhere.

For a more detailed analysis of data relating to house types, a reference may be made to the Report and Tables on Housing and Establishments in Bihar, Census of India, 1961, Bihar, Vol. IV, Parts IV-A and IV-B.



MAP NO. 150

PERCENTAGE OF RURAL POPULATION LIVING IN VILLAGES CONTAINING 5 AND BELOW, 6—15, 16—25, 26—35, 36—50, 51—100 AND ABOVE 100 HOUSES, 1961

Purpose

This map shows the districtwise distribution of rural population living in villages classified by the number of houses in them, as disclosed by the 1961 Census.

Method

Districtwise percentages of rural population living in villages in the seven ranges of number of houses to the total rural population have been worked out. Bar graphs have been drawn in each district proportionate to the percentages in each of the seven ranges.

Salient Features

68.32 per cent or the main bulk of rural population in Bihar lives in villages containing more than 100 houses each. The percentages are even higher in nine districts, viz., Patna, Champaran, Muzaffarpur, Darbhanga, Monghyr, Bhagalpur, Saharsa, Purnea and Dhanbad. The corresponding proportions in Gaya, Shahabad, Saran and Ranchi are above 50 per cent. It is only in the districts of Santal Parganas, Palamau, Hazaribagh and Singhbhum that the proportions of rural population living in villages containing more than 100 houses each are below 50 per cent.

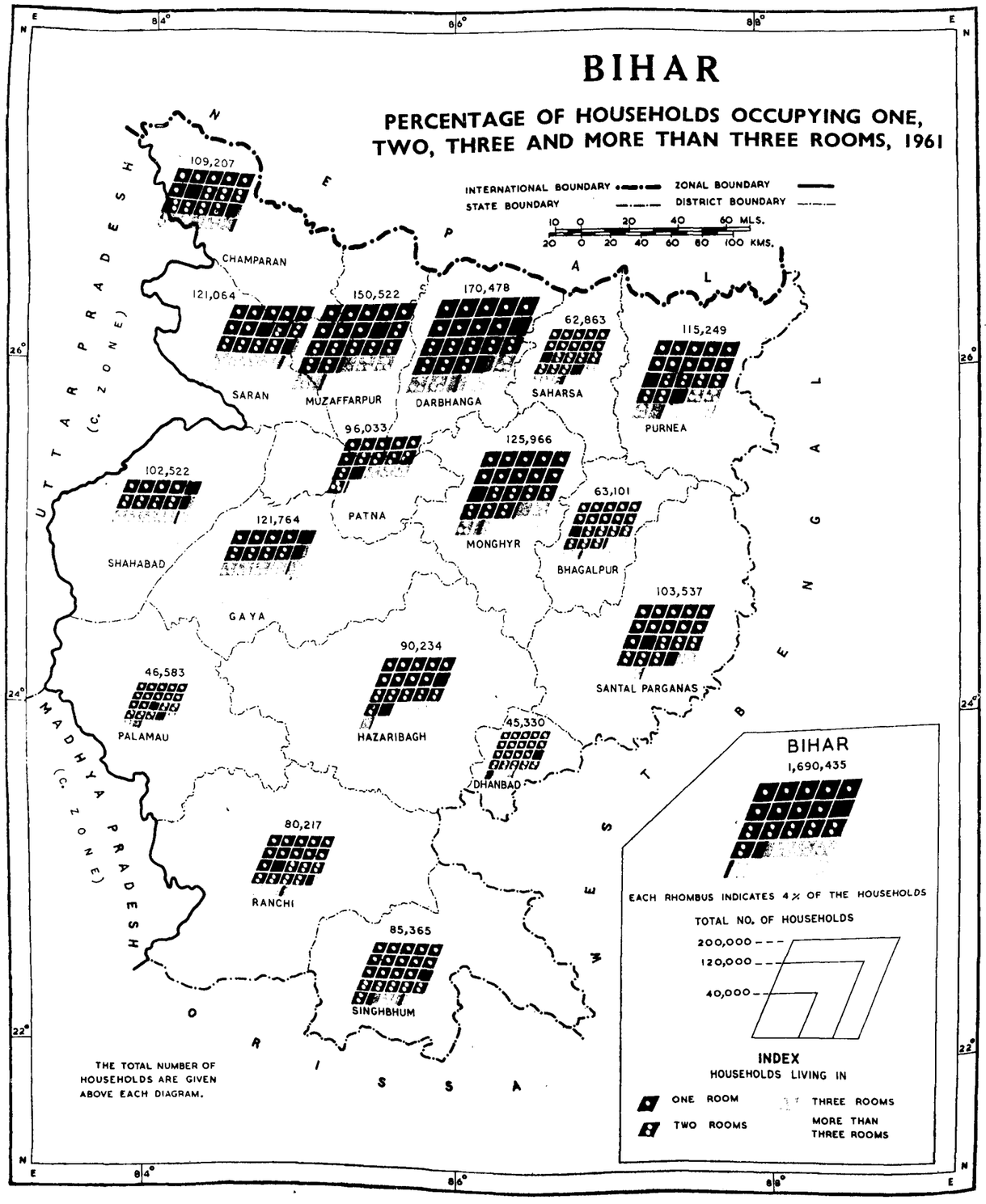
The proportions of rural population living in villages with less than 100 houses each are relatively higher in the Chotanagpur Plateau, scattered settlements being characteristic of the low density tribal areas.

TABLE

PERCENTAGE OF RURAL POPULATION LIVING IN VILLAGES CONTAINING DIFFERENT RANGES OF HOUSES, 1961

State/District	Percentage of rural population living in villages containing houses numbering						
	5 and below	6—15	16—25	26—35	36—50	51—100	101 and above
1	2	3	4	5	6	7	8
BIHAR ..	0.15	1.24	2.51	3.28	5.77	18.73	68.32
Patna ..	0.02	0.32	0.94	1.61	3.68	15.89	77.54
Gaya ..	0.13	1.46	3.48	5.06	8.41	24.87	56.59
Shahabad ..	0.16	1.59	3.25	4.64	7.17	23.27	59.92
Saran ..	0.09	0.73	1.95	2.60	5.50	23.48	65.58
Champaran ..	0.02	0.20	0.57	0.96	2.28	11.12	84.85
Muzaffarpur ..	0.08	0.50	0.99	1.92	3.55	15.58	77.38
Darbhanga ..	0.05	0.32	0.71	0.97	2.14	10.37	85.44
Monghyr ..	0.18	1.03	1.71	1.74	3.32	13.56	78.46
Bhagalpur ..	0.25	1.53	2.61	3.31	5.36	16.05	70.89
Saharsa ..	0.02	0.20	0.48	0.55	1.60	6.67	90.48
Purnea ..	0.08	0.63	1.36	1.70	3.17	12.09	80.97
Santal Parganas ..	0.35	4.80	8.60	9.67	14.73	29.70	31.95
Palamau ..	0.30	2.35	5.22	6.09	10.65	30.49	44.90
Hazaribagh ..	0.50	3.90	6.39	7.48	11.04	23.60	47.09
Ranchi ..	0.40	0.58	1.91	3.30	7.42	26.61	60.14
Dhanbad ..	0.12	1.25	2.39	3.28	5.92	18.46	68.58
Singhbhum ..	0.17	1.66	3.89	5.32	9.62	29.70	49.64

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts, IV-A and IV-B.



PERCENTAGE OF HOUSEHOLDS OCCUPYING ONE, TWO, THREE AND MORE THAN THREE ROOMS, 1961

Purpose

This map shows the percentage distribution of households living in census houses with 1 room, 2 rooms, 3 rooms, and more than 3 rooms, in each district of the State. The relevant data were obtained at the time of houselisting operations for the 1961 Census in September-October, 1960.

Method

The square root of the number of households in each district has first been worked out. A horizontal line proportional to the square root has then been drawn in each district and a rhombus drawn on that line. Each rhombus is divided into twentyfive small pockets, each representing 4 per cent of the households. The pockets are shaded in different colours according to the percentages of households under different numbers of rooms. White dots have been placed inside each small pocket to indicate the number of rooms. Thus, one dot stands for one room, two dots for two rooms, three dots for three rooms, and four dots for more than three rooms.

Salient Features

36.33 per cent or over one-third of the households in Bihar live in census houses having only 1 room each. The percentage varies from 57.90 in Singhbhum to 16.82 in Shahabad. One room tenements are more common in the Chotanagpur Plateau and less so in Patna division.

29.36 per cent of households in Bihar live in census houses having 2 rooms each. The percentages are lower in Singhbhum, Dhanbad, Palamau and Santal Parganas in the Chotanagpur Plateau, and in Patna, Gaya and Shahabad in the South Bihar Plain. While the lower proportions in the first four districts arise out of the predominance of single-room tenements, large proportions of households living in houses having more than 3 rooms seem to be responsible for such features in the districts of Patna division.

There is a wide variation in the district-wise proportions of households occupying more than three rooms. The lowest is 5.52 per cent in Singhbhum; and the highest, 43.72 per cent, in Gaya.

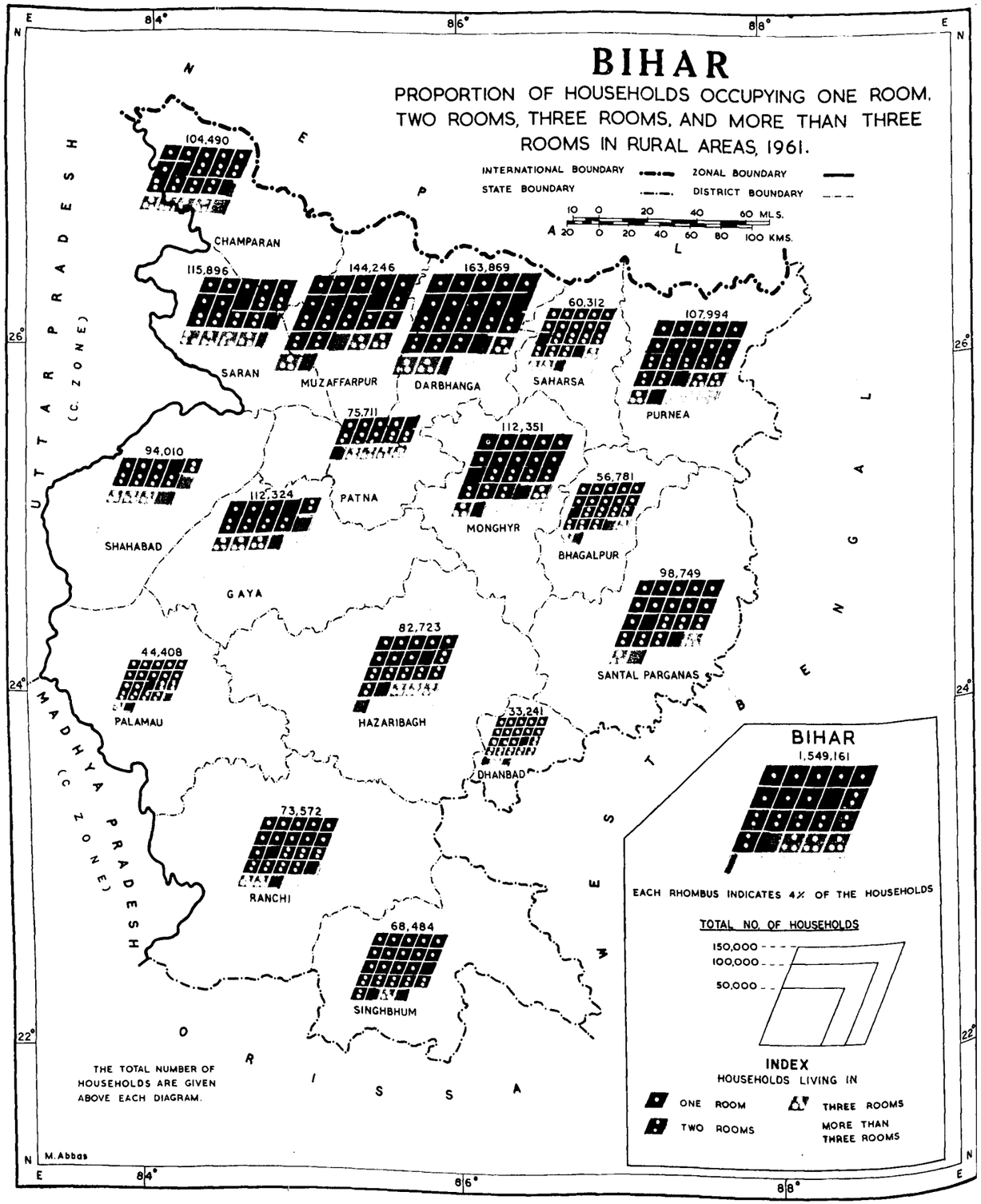
For a more detailed analysis of data on this subject, a reference may be made to the Report and Tables on Housing and Establishments.

TABLE

PERCENTAGE DISTRIBUTION OF CENSUS HOUSEHOLDS ACCORDING TO NUMBER OF ROOMS OCCUPIED, 1961

Rank	State/District	One room	Two rooms	Three rooms	More than three rooms
1	2	3	4	5	6
1	Singhbhum	57.90	27.50	8.93	5.52
2	Dhanbad	56.14	26.05	9.34	7.75
3	Palamau	50.05	25.76	11.26	12.84
4	Santal Parganas	47.05	27.68	12.89	12.10
5	Ranchi	44.61	33.29	12.13	9.79
6	Saharsa	43.23	32.09	15.20	9.34
7	Monghyr	42.75	29.92	13.05	14.12
8	Bhagalpur	42.08	30.39	13.85	13.44
9	Purnea	40.80	30.67	15.64	12.75
10	Darbhanga	39.23	35.06	15.09	10.48
11	Hazaribagh	36.58	31.01	15.70	16.62
	BIHAR	**36.33**	**29.36**	**15.48**	**18.66**
12	Muzaffarpur	33.27	35.65	17.39	13.54
13	Saran	28.95	29.70	18.68	22.52
14	Champaran	27.71	31.00	20.68	20.45
15	Patna	23.62	23.93	17.07	35.24
16	Gaya	17.55	20.59	18.03	43.72
17	Shahabad	16.82	21.39	18.69	42.95

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts IV-A and IV-B.



PROPORTION OF HOUSEHOLDS OCCUPYING ONE ROOM, TWO ROOMS, THREE ROOMS, AND MORE THAN THREE ROOMS, IN RURAL AREAS, 1961

Purpose

This map shows the percentage distribution of households living in census houses with 1 room, 2 rooms, 3 rooms, and more than 3 rooms in the rural areas of each district of the State. The data were obtained at the time of houselisting operations for the 1961 Census in September-October, 1960.

Method

The square root of the number of households in each district has first been worked out. A horizontal line proportional to the square root has then been drawn in each district and a rhombus drawn on that line. Each rhombus is divided into twentyfive small pockets, each representing 4 per cent of the households. The pockets are shaded in different colours according to percentages of households under different numbers of rooms. White dots have been placed inside each small pocket to indicate the number of rooms. Thus one dot stands for one room, two dots for two rooms, three dots for three rooms and four dots for more than three rooms.

Salient Features

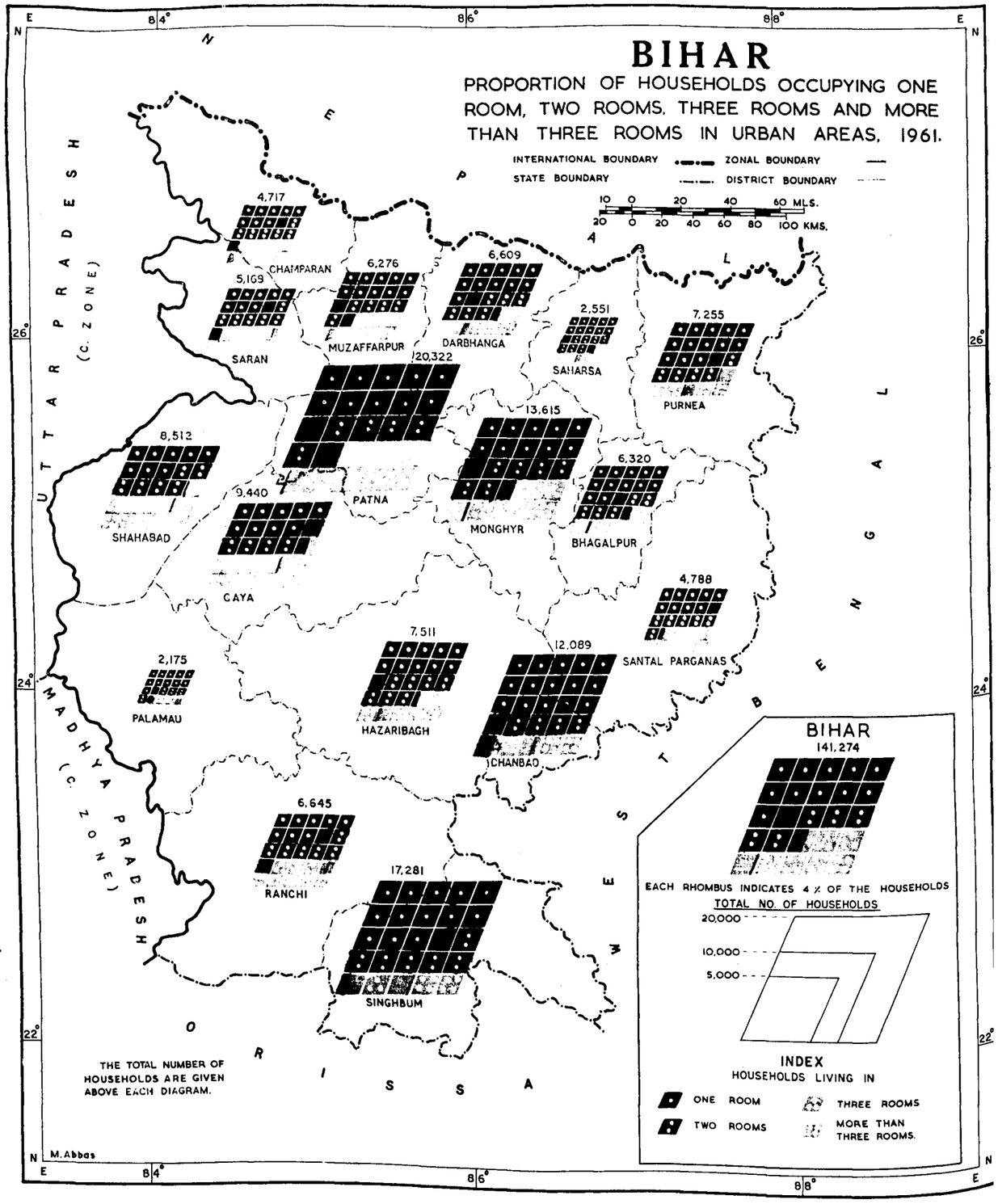
Housing conditions in rural areas of the State are largely similar to those in all areas. This is natural because the urban content of Bihar's population is very low (8.41 per cent). The relative ranking of districts in terms of proportion of households occupying 1 room is the same for rural as well as all areas.

In rural areas of the State, as many as 65.2 per cent of the households live in small dwellings with 2 rooms or less, and another 24.1 per cent in medium dwellings having 3-4 rooms. Large dwellings with 5 rooms or more are limited to a mere 10.5 per cent of the households.

Single or double room households are more common (above 70 per cent) in Darbhanga district, the whole of Bhagalpur division and Chotanagpur division except Hazaribagh district (67 per cent). Even in Muzaffarpur district the percentage is nearly 70. The incidence of such households is highest in Singhbhum district (86.4 per cent), followed by Dhanbad (81.9 per cent) and Ranchi (79.2 per cent). In Patna division, the percentages are comparatively much less, the lowest being in Gaya district (36.4 per cent). Shahabad district has an almost equally low percentage (36.5 per cent). Consequently, the districts of Patna division come on top in the distribution of medium or large dwellings.

Thus, the great majority of households (65.2 per cent) live in dwellings with 1 or 2 rooms. Households with more rooms are relatively more common in Patna division—Gaya and Shahabad having an incidence of over 63 per cent. Bhagalpur and Chotanagpur divisions (except Hazaribagh to some extent) are regions of households with small number of rooms. In Tirhut division also, the balance is tilted more towards households having small number of rooms ; but in Saran and Champaran districts, the effect is not so pronounced as the incidence of households with more than 2 rooms is quite considerable. Muzaffarpur and Darbhanga districts fall in line with the pattern in Bhagalpur or Chotanagpur division.

The statistics on which the map has been prepared are given in Appendix XVI at the end of the volume.



PROPORTION OF HOUSEHOLDS OCCUPYING ONE ROOM, TWO ROOMS, THREE ROOMS AND MORE THAN THREE ROOMS IN URBAN AREAS, 1961

Purpose

This map shows the percentage distribution of households living in census houses with 1 room, 2 rooms, 3 rooms, and more than 3 rooms, in the urban areas of each district of the State. The data were obtained at the time of houselisting operations for the 1961 Census in September-October, 1960.

Method

The square root of the number of households in each district has first been worked out. A horizontal line proportional to the square root has then been drawn in each district and a rhombus drawn on that line. Each rhombus is divided into twentyfive small pockets, each representing 4 per cent of the households. The pockets are shaded in different colours according to percentages of households under different numbers of rooms. White dots have been placed inside each small pocket to indicate the number of rooms. Thus, one dot stands for one room, two dots for two rooms, three dots for three rooms and four dots for more than three rooms.

Salient Features

The extent of overcrowding in urban areas, as indicated by proportions of households living in one room tenements, is highest in the industrial districts of Dhanbad and Singhbhum.

Dhanbad has the maximum percentage (82.9) of households living in small dwellings with 1 or 2 rooms. Singhbhum is a close second with 81.5 per cent. The lowest percentage is that of Shahabad (56.6 per cent) followed by Gaya district (58.6 per cent). All other districts have percentages above 60. In fact, Monghyr, Darbhanga, Bhagalpur, Saharsa, Purnea and Hazaribagh districts have percentages exceeding 70 in each case.

Shahabad and Gaya have highest proportions of urban households living in houses with more than 3 rooms.

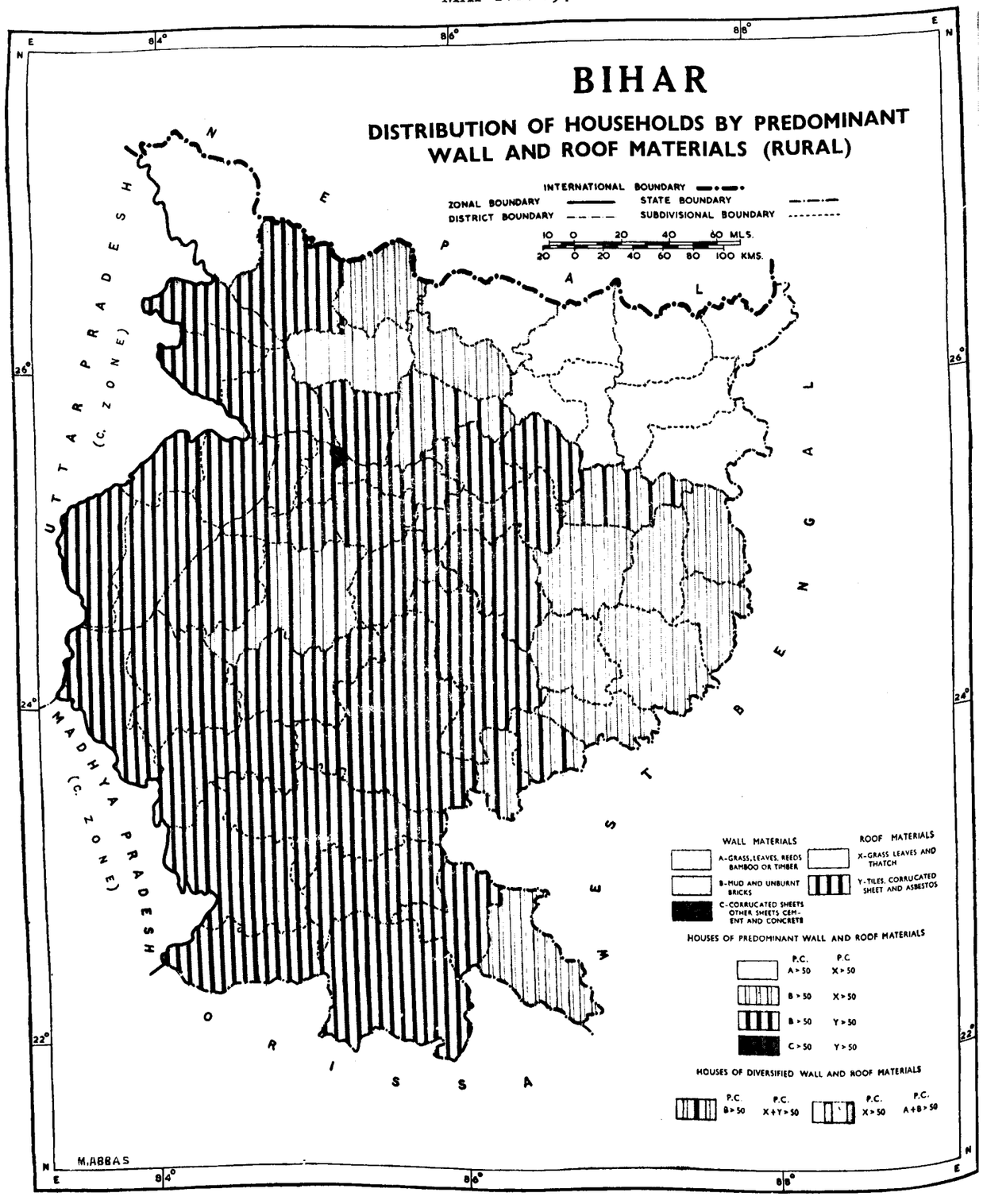
For a more detailed analysis of data on this subject, a reference may be made to the Report and Tables on Housing and Establishments.

TABLE

PERCENTAGE DISTRIBUTION OF CENSUS HOUSEHOLDS ACCORDING TO NUMBER OF ROOMS OCCUPIED IN URBAN AREAS, 1961

Rank	State/District	One room	Two rooms	Three rooms	More than three rooms
1	2	3	4	5	6
1	Dhanbad	62.54	20.42	7.68	8.09
2	Singhbhum	53.98	27.48	9.85	8.31
3	Purnea	52.68	23.67	11.66	11.51
4	Bhagalpur	49.34	24.78	10.06	14.87
5	Darbhanga	45.50	28.58	11.88	13.56
	BIHAR	**44.11**	**26.37**	**12.72**	**16.38**
6	Palamau	44.09	12.25	12.69	20.65
7	Hazaribagh	43.74	29.50	11.85	14.70
8	Patna	41.29	25.92	13.67	18.90
9	Saharsa	40.96	34.22	13.25	11.33
10	Muzaffarpur	40.70	26.91	13.85	17.78
11	Monghyr	40.49	30.06	13.10	16.04
12	Santal Parganas	38.07	27.47	14.45	19.86
13	Gaya	36.48	22.08	14.94	26.39
14	Saran	35.14	27.75	15.07	21.50
15	Ranchi	34.82	28.88	14.13	22.03
16	Champaran	34.74	29.09	17.49	18.49
17	Shahabad	31.64	24.99	17.48	25.72

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts IV-A and IV-B.



DISTRIBUTION OF HOUSEHOLDS BY PREDOMINANT WALL AND ROOF MATERIALS (RURAL)

Purpose

This map illustrates the predominant wall and roof materials used in construction of houses in the rural areas of each subdivision in Bihar. The relevant data were obtained at the time of houselisting operations for the 1961 Census in September-October, 1960.

Method

Wall and roof materials have been grouped into the following categories :

Wall materials	*Roof materials*
A—Grass, leaves, reeds, bamboo or timber.	X—Grass, leaves and thatch.
B—Mud and unburnt bricks.	Y—Tiles, corrugated sheets and asbestos.
C—Corrugated sheets, other sheets, cement and concrete.	

The percentage shares of each type of wall material (A, B, C) and roof material (X, Y) have been worked out. Values of over 50 per cent indicate the predominant wall/roof material. If no single category is predominant, the categories, which together constitute over 50 per cent, have been taken into account.

Colour screens show the type of wall material and coloured vertical lines show the type of roof material, as indicated in the legend on the map.

Salient Features

It is at once evident that mud and unburnt bricks constitute the most predominant wall material in the State. In fact mud walls are mostly in vogue (66.3 per cent) all over, the proportion of unburnt bricks (0.7 per cent) being almost negligible. Mud walls are found in dwellings of more than 50 per cent of the households in 47 out of 58 subdivisions. Of the 11 subdivisions in which mud is not the predominant material of wall, grass, leaves, reeds and bamboos are mainly used in Bettiah subdivision in Champaran district and a contiguous area comprising eight subdivisions in the north-east, viz., Madhubani, three in Saharsa district and four in Purnea district. Patna City and Muzaffarpur Sadar subdivisions have only 45 and 45.5 per cent dwellings with mud walls respectively.

Tiled roofs are the most common type of roofing in the State (52.2 per cent). They predominate in 34 out of 58 subdivisions. Roofs of grass, leaves and thatch have the upper hand in the whole of Saharsa, Purnea and Santal Parganas (containing 13 subdivisions) as also in Bettiah, Muzaffarpur Sadar, Sitamarhi, Darbhanga Sadar, Madhubani, Banka and Dhalbhum subdivisions. No single roof material is predominant in Gaya Sadar, Samastipur, Bhagalpur Sadar and the two subdivisions of Dhanbad district.

Thus, mud walls in conjunction with tiled roofs constitute the predominant type of wall and roof in the rural areas of the State. In North Bihar, however, Bettiah subdivision in Champaran district and a contiguous tract comprising Madhubani subdivision in Darbhanga district and the districts of Saharsa and Purnea together constitute an area in which grass, reeds, bamboo or timber are the predominant wall material used in conjuction with roofs made of grass, leaves and thatch. Walls of mud in conjuction with roofs of grass, leaves and thatch are predominant in the district of Santal Parganas, Banka subdivision in Bhagalpur, Dhalbhum subdivision in Singhbhum, Sitamarhi subdivision in Muzaffarpur and Darbhanga Sadar subdivision.

Patna City subdivision is the lone representative of the combination in which corrugated and other sheets, cement or concrete walls are predominant in conjunction with tiles, corrugated sheets or asbestos as roof material. The subdivisions of Samastipur in Darbhanga, Bhagalpur Sadar, Gaya Sadar and the entire district of Dhanbad comprise the category having houses of diversified wall and roof materials.

In all these subdivisions, while mud constitutes the predominant wall material, both grass, leaves or thatch and tiles, corrugated sheets or asbestos are used as roof material. Muzaffarpur Sadar is the only subdivision in which while grass, leaves or thatch constitute predominant roof materials, both grass, leaves, reeds, bamboo or timber and mud constitute the chief materials used in wall construction.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts IV-A and IV-B.

MAP NO. 155

DISTRIBUTION OF HOUSEHOLDS BY PREDOMINANT WALL AND ROOF MATERIALS (URBAN)

Purpose

The map on the following page illustrates the predominant wall and roof materials used in construction of houses in the urban areas of each subdivision in Bihar. The relevant data were obtained at the time of houselisting operations for the 1961 Census in September-October, 1960.

Method

Wall and roof materials have been grouped into the following categories :

Wall materials	*Roof materials*
A—Grass, leaves, reeds, bamboo or timber.	X—Grass, leaves and thatch.
B—Mud and unburnt bricks.	Y—Tiles, corrugated sheet and asbestos.
C—Corrugated sheets, other sheets, cement and concrete.	Z—Bricks, lime, concrete and stone.

The percentage shares of each type of wall material (A, B, C) and roof material (X, Y, Z) have been worked out. Values of over 50 per cent indicate the predominant wall/roof material. If no single category is predominant, the two categories which together constitute over 50 per cent, have been taken into account.

Colour screens show the type of wall material and coloured vertical lines show the type of roof material, as indicated in the legend in the map.

Salient Features

Walls of cement, concrete or corrugated sheets are predominant in the urban areas of 30 out of 58 subdivisions. Mud walls are most common even in the urban areas of 17 subdivisions comprising Nawada, Aurangabad, Bhabua, Jamui, Banka, Godda, Jamtara, Pakaur; the three subdivisions of Palamau; Hazaribagh Sadar, Chatra, Khunti, Gumla, Simdega and Seraikela. Grass, leaves and bamboo walls continue to predominate in urban areas of 6 subdivisions, viz., Madhubani, Supaul, Madhepura, Purnea Sadar, Araria and Kishanganj.

No single category of walls is predominant in 5 subdivisions. A and B are predominant in Rajmahal, A and C in Bettiah and Katihar, and B and C in Hajipur and Saharsa Sadar.

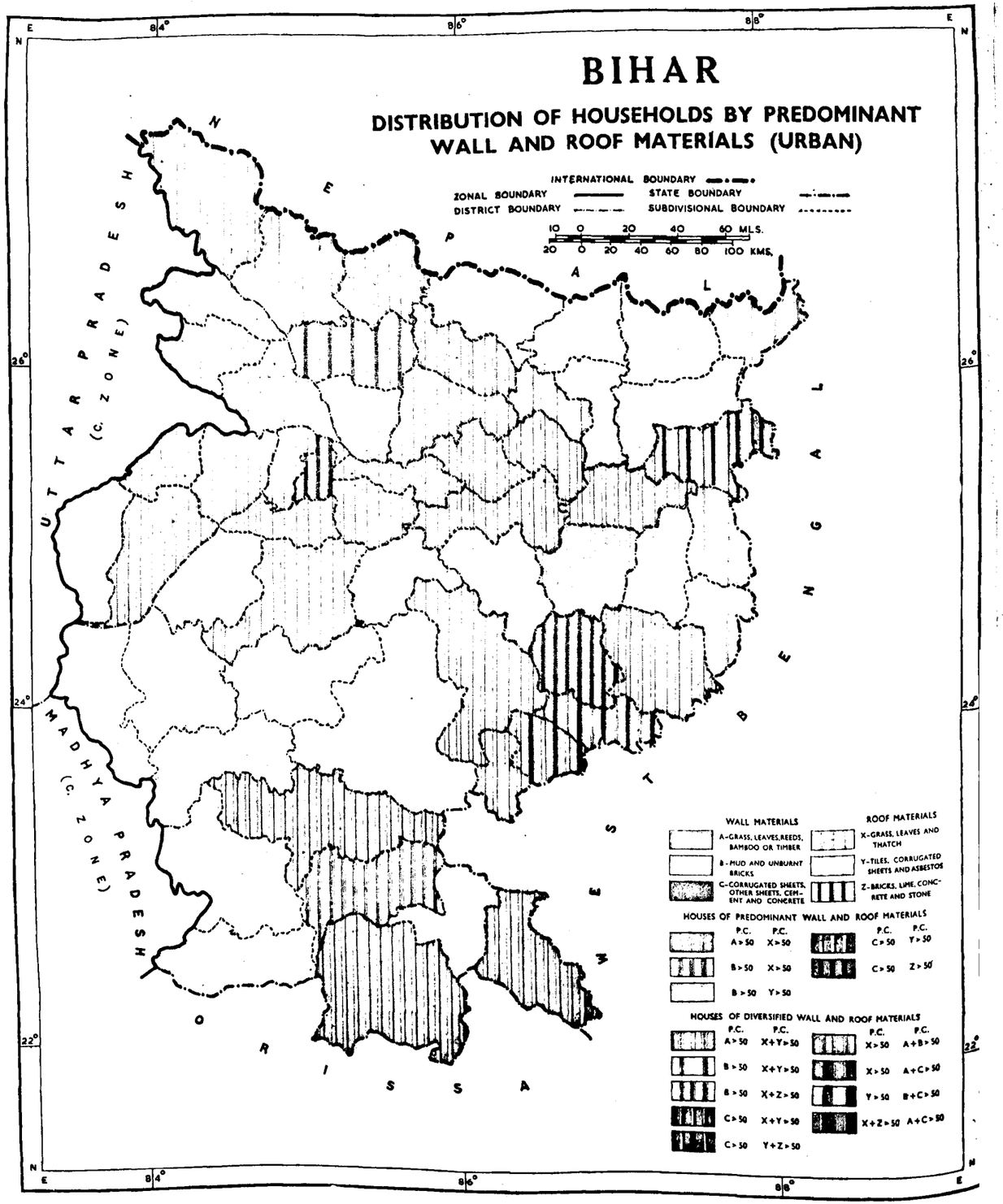
Tiled roofs continue to predominate in urban areas of 38 out of 58 subdivisions. Grass, leaves and thatch are most common in 9 subdivisions, viz., Bettiah, Madhubani, Banka, Supaul, Madhepura, Purnea Sadar, Araria, Rajmahal, Khunti. Only Patna Sadar and Deoghar subdivisions have brick and lime roofs predominant in urban areas.

45 out of 58 subdivisions in the State have houses in urban areas made of wall and roof materials belonging to one or the other predominant types. In 13 others, the position is not so, and wall and roof materials are more diversified.

Wall materials consisting of corrugated and other sheets, cement and concrete in conjunction with roofs of tiles, corrugated sheets and asbestos are predominant in 23 subdivisions comprising a compact block running through Saran, Shahabad (except Bhabua), Jehanabad, Gaya Sadar, Patna (except Patna Sadar), Bhagalpur Sadar, Monghyr (except Jamui) and Samastipur. The subdivisions of Dumka, Giridih, Baghmara, Ranchi Sadar, Chaibasa and Dhalbhum in the Chotanagpur Plateau fall in the same group.

13 subdivisions including 9 in the Chotanagpur Plateau and 4 in the South Bihar Plain have houses predominantly

MAP NO. 155



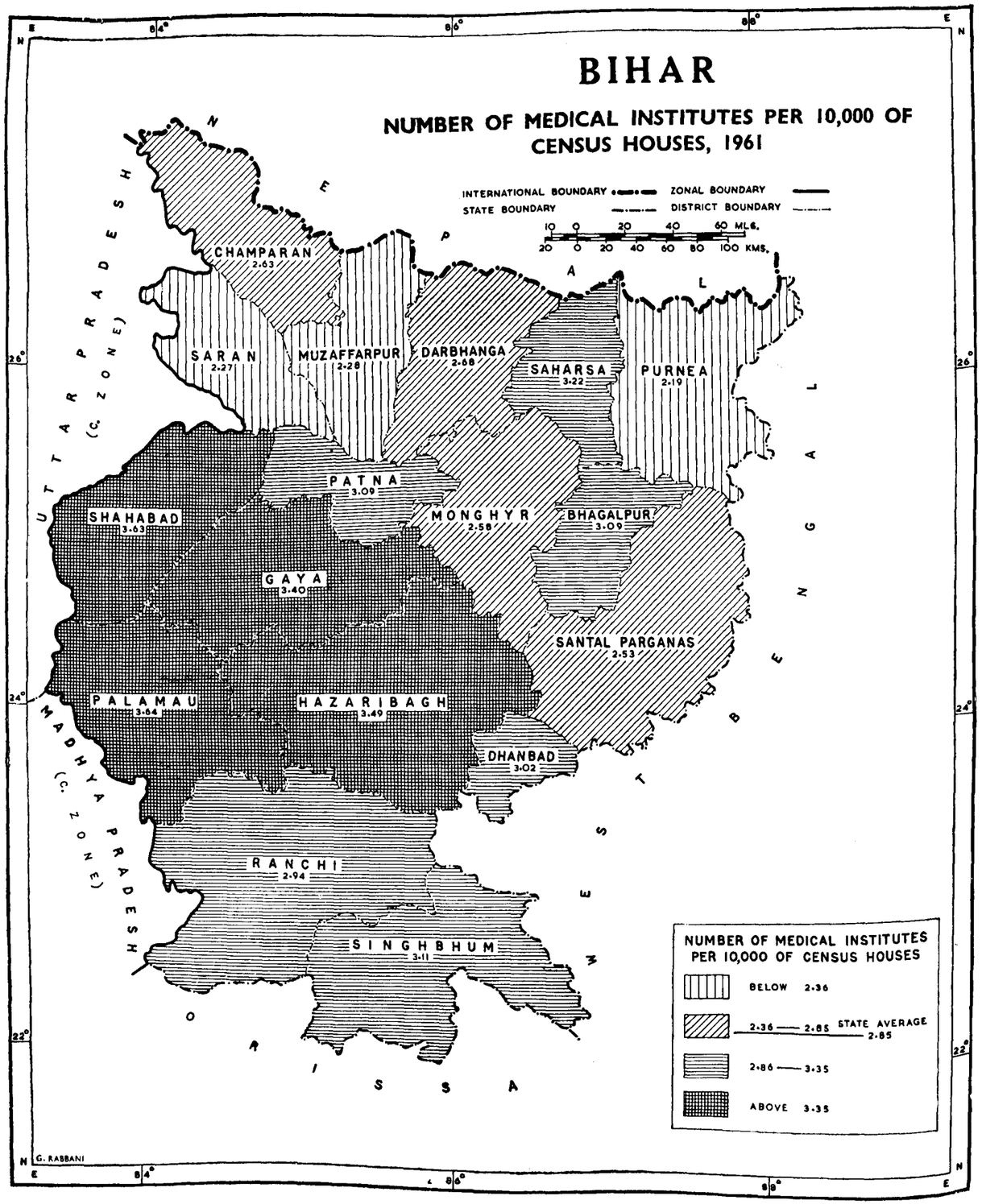
made of mud or unburnt brick walls and tiled roofs. The predominant type in Araria, Purnea Sadar, Supaul, Madhepura and Madhubani subdivisions is wall of grass, leaves, reeds, bamboo, etc., and roof of grass, leaves and thatch.

Patna Sadar and Deoghar are characterised by houses with walls predominantly made of cement or concrete and roofs of bricks, lime, concrete or stone.

In Banka and Khunti, mud walls with grass, leaves or thatch roofs are predominant.

In the remaining 13 subdivisions either wall or roof materials are diversified. Wall materials are diversified in Rajmahal, Bettiah, Saharsa, Hajipur and Katihar. Roof materials are diversified in Kishanganj, Pakaur, Jamtara, Darbhanga, Sitamarhi, Motihari, Muzaffarpur Sadar and Dhanbad Sadar.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts IV-A and IV-B.



MAP NO. 156

NUMBER OF MEDICAL INSTITUTES PER 10,000 OF CENSUS HOUSES, 1961

Purpose

This map shows the distribution of medical institutions per 10,000 occupied residential houses in each district of the State in 1961.

Method

For the purpose of this map, the term 'medical institution' includes hospitals, dispensaries, primary health centres, maternity and child welfare centres, and tuberculosis clinics. The total number of such institutions has been compiled for each district, and its ratio per 10,000 occupied residential houses calculated and grouped into the following four ranges :

(*i*) Below 2.36, (*iii*) 2.86—3.35, and
(*ii*) 2.36—2.85, (*iv*) above 3.35.

The districts have been shaded by different grades of hatches ranging from high to low.

Salient Features

With a total of 1,965 medical institutions and 6,885,541 occupied residential houses, Bihar has an average of 2.85 medical institutions per 10,000 occupied residential houses.

The ratio of medical institutions is lower than the State average in 7 out of 17 districts.

A compact block of four districts having relatively higher proportion of medical institutions is comprised of the districts of Shahabad, Gaya, Hazaribagh and Palamau. The last named district with 3.64 medical institutions per 10,000 occupied residential houses, has the highest value among the districts of the State. Another block with somewhat lower values is made up of Ranchi, Singhbhum and Dhanbad. Saharsa and Bhagalpur also fall in the same range.

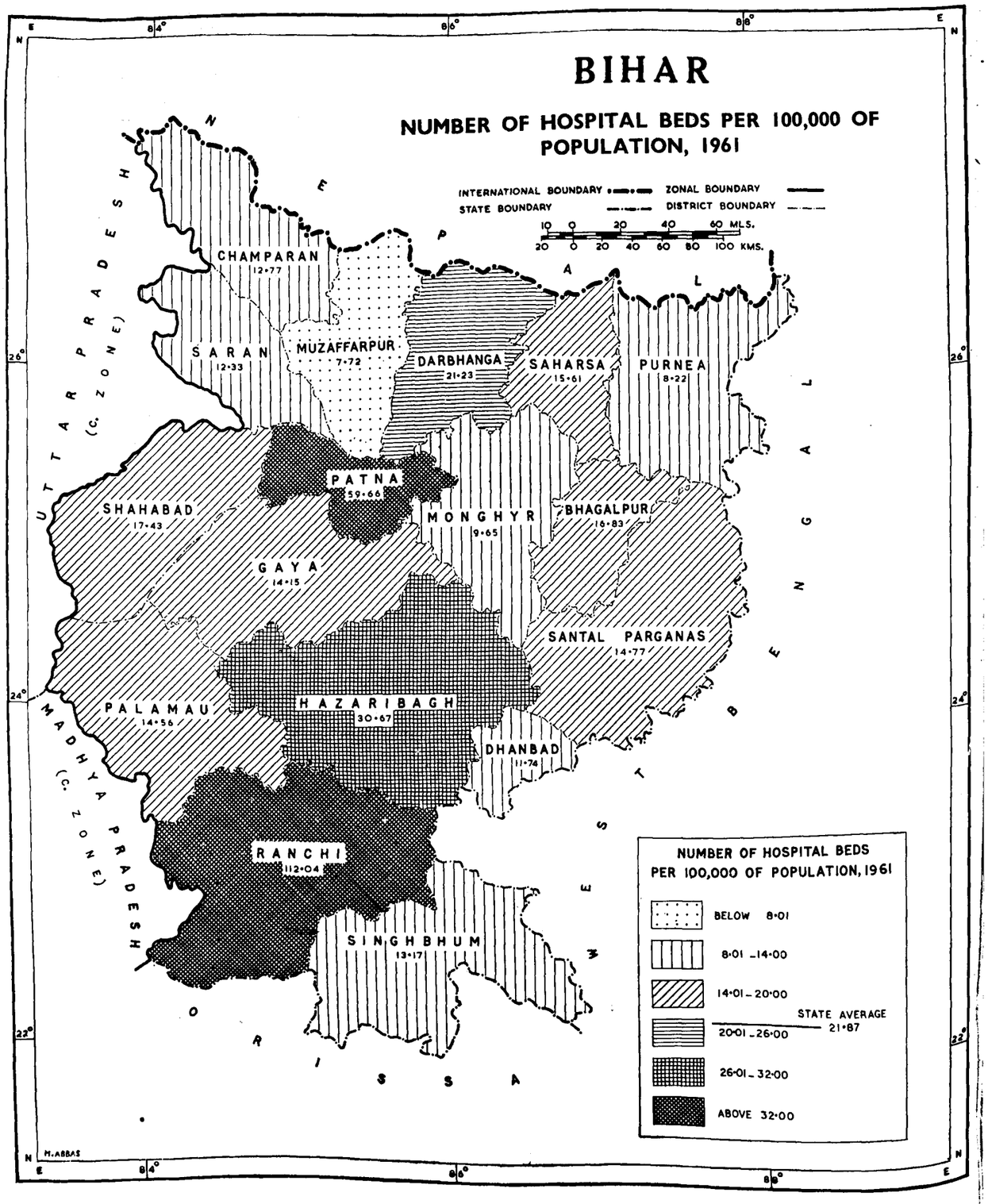
The extent of facilities provided by medical institutions is relatively small in the densely populated districts of the North Bihar Plain. In this region, only Saharsa has a proportion above the State average.

TABLE

NUMBER OF MEDICAL INSTITUTIONS PER 10,000 OCCUPIED RESIDENTIAL HOUSES, 1961

Rank	State/District		Number
1	Palamau	..	3.64
2	Shahabad	..	3.63
3	Hazaribagh	..	3.49
4	Gaya	..	3.40
5	Saharsa	..	3.22
6	Singhbhum	..	3.11
7	Patna	..	3.09
	Bhagalpur	..	3.09
9	Dhanbad	..	3.02
10	Ranchi	..	2.94
	BIHAR	..	**2.85**
11	Darbhanga	..	2.68
12	Champaran	..	2.63
13	Monghyr	..	2.58
14	Santal Parganas	..	2.53
15	Muzaffarpur	..	2.28
16	Saran	..	2.27
17	Purnea	..	2.19

SOURCE : (1) Director of Health Services, Bihar.
(2) Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.



NUMBER OF HOSPITAL BEDS PER 100,000 OF POPULATION, 1961

Purpose

This map shows for each district the number of hospital beds for every lakh of population in 1961.

Method

The figures relating to total number of hospital beds in each district were used to calculate the proportion per 100,000 persons. These values have been grouped into six ranges, viz.,

(*i*) Below 8.01, (*iv*) 20.01—26.00,
(*ii*) 8.01—14.00, (*v*) 26.01—32.00, and
(*iii*) 14.01—20.00, (*vi*) above 32.00.

The districts have then been shaded by different grades of hatches ranging from high to low.

Salient Features

With a total of 1,016 hospital beds in the State and a population of 46.46 millions there are 21.87 hospital beds per lakh of population.

Three districts have higher proportions than the State average. These are Ranchi (112.04), Patna (59.66) and Hazaribagh (30.67). The unique position of Ranchi arises out of its low population density coupled with the location of a medical college, sanatoria for tuberculosis and hospitals run by Christian missionaries. Patna owes its high proportion to the large Medical College Hospital in the State capital which actually caters to the needs of the entire State. The lowest values are those in the districts of Muzaffarpur and Purnea in North Bihar and Monghyr in South Bihar.

Gaya, Shahabad and Palamau districts comprise a compact block with values in the range 14.01—20.00. Another block in the same range is formed by the districts of Saharsa, Bhagalpur and the Santal Parganas. Saran and Champaran in the north-west have values in the range 8.01—14.00.

TABLE

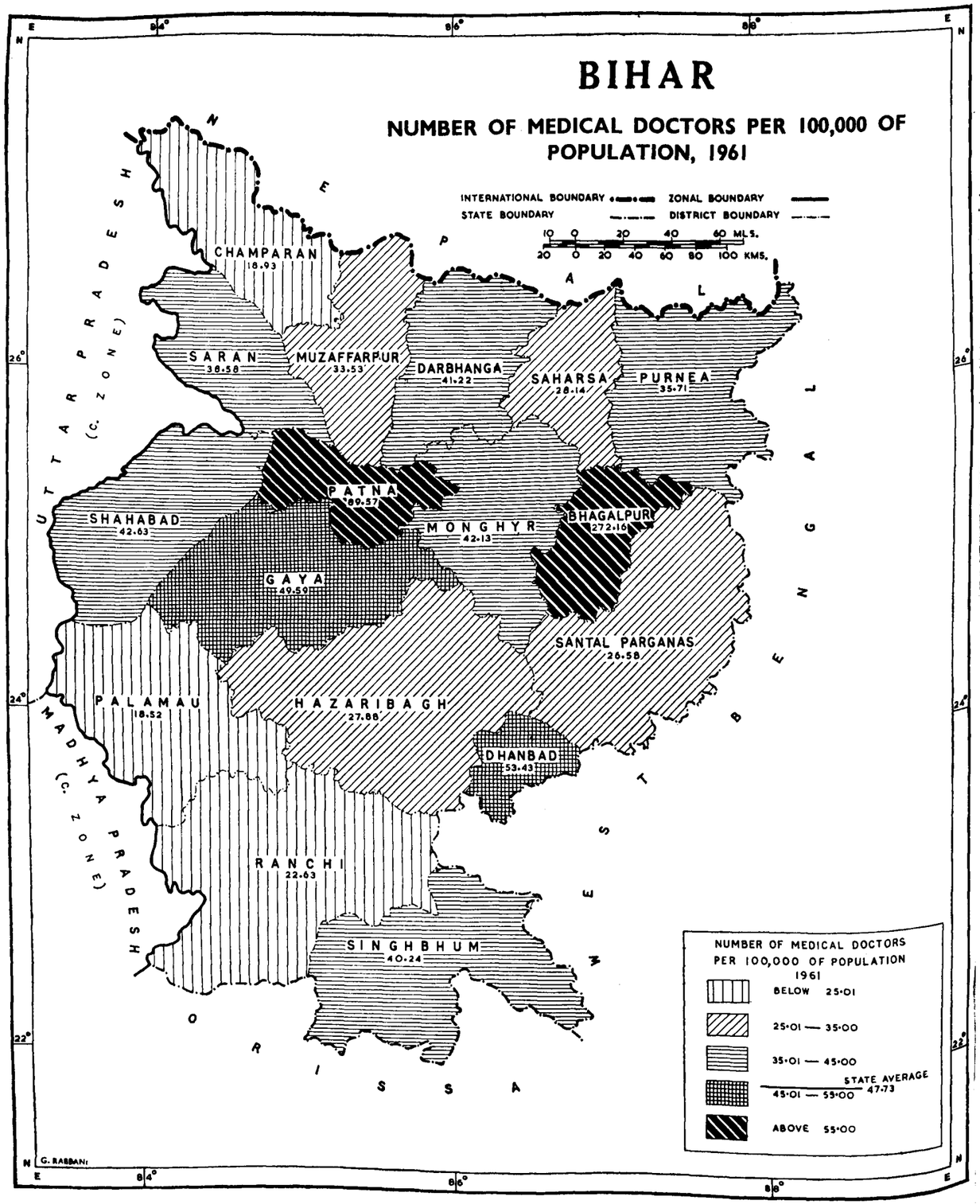
NUMBER OF HOSPITAL BEDS PER 100,000 OF POPULATION, 1961

Rank	State/District		Number
1	Ranchi	..	112.04
2	Patna	..	59.66
3	Hazaribagh	..	30.67
	BIHAR	..	21.87
4	Darbhanga	..	21.23
5	Shahabad	..	17.43
6	Bhagalpur	..	16.83
7	Saharsa	..	15.61
8	Santal Parganas	..	14.77
9	Palamau	..	14.56
10	Gaya	..	14.15
11	Singhbhum	..	13.17
12	Champaran	..	12.77
13	Saran	..	12.33
14	Dhanbad	..	11.74
15	Monghyr	..	9.65
16	Purnea	..	8.22
17	Muzaffarpur	..	7.72

SOURCE : (1) Director of Health Services, Bihar.

(2) Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.

MAP NO. 158



MAP NO. 158

NUMBER OF MEDICAL DOCTORS PER 100,000 OF POPULATION, 1961

Purpose

This map shows the number of doctors per lakh of population in each district of the State in 1961.

Method

The appellation, 'doctor', includes all persons returning their occupation as physician, surgeon or dentist in the 1961 Census and classified under Occupational Group 03 of the National Classification of Occupations. It embraces allopaths as well as physicians of other schools. Their proportions per lakh of population in each district have been grouped into five ranges, viz.,

(*i*) Below 25.01, (*iii*) 35.01—45.00,
(*ii*) 25.01—35.00, (*iv*) 45.01—55.00, and
(*v*) above 55.00.

The districts have been shaded by different grades of hatches ranging from high to low.

Salient Features

With a population of 46.46 millions in 1961, the State had a total of 22,174 physicians or an average of 47.73 per lakh of population.

Four districts have more doctors than the State average. In Bhagalpur (272.16), the number is almost six times that of the State average. Patna (89.57) which comes next in rank, has a little less than twice as many doctors per lakh persons as compared to the State average. The ratio of doctors varies between 30 and 50 in 8 districts. In four districts of the Chotanagpur Plateau (except Dhanbad and Singhbhum which have high proportions of urban population) and the districts of Saharsa and Champaran, the ratio is below 30 per lakh.

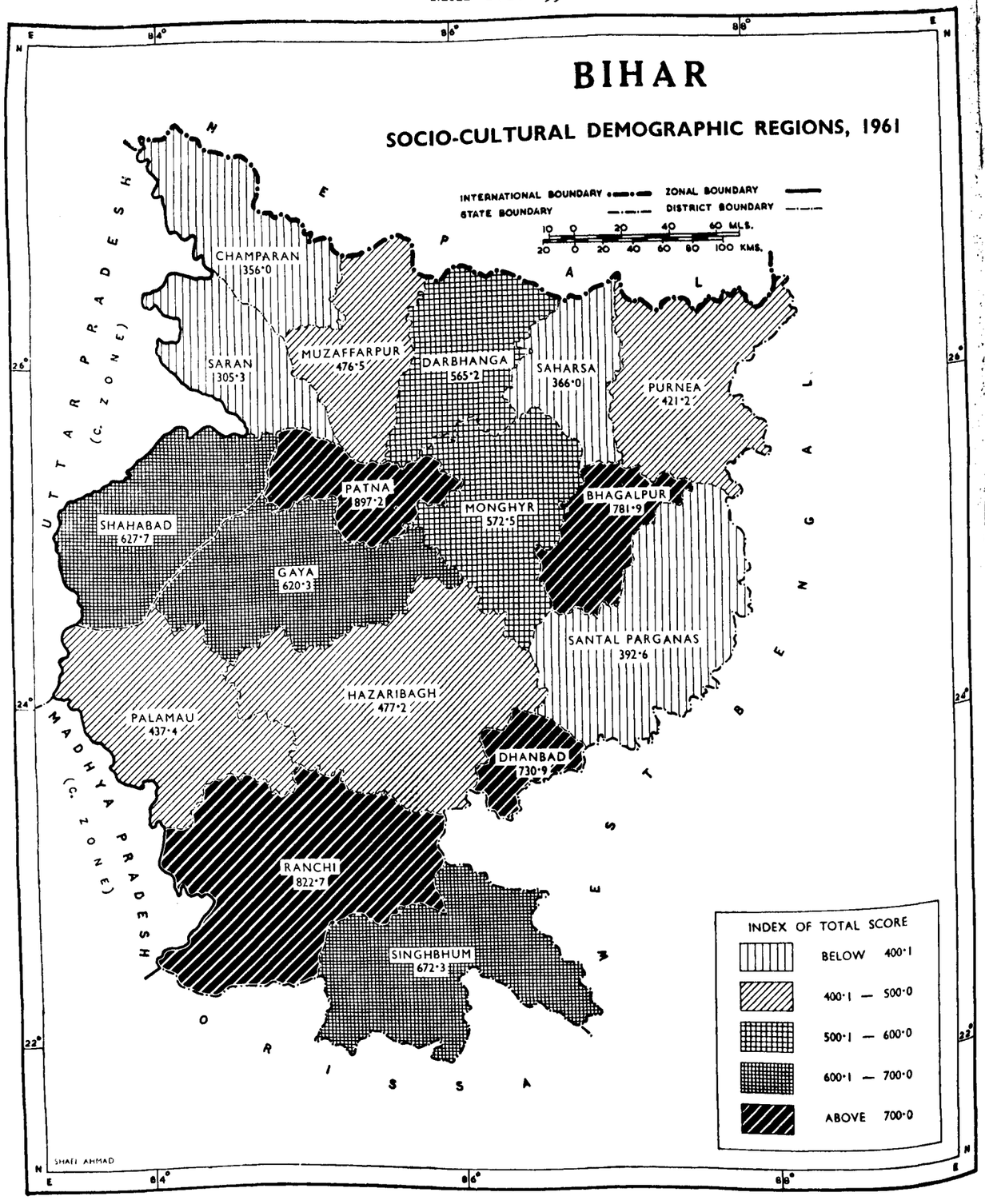
TABLE

NUMBER OF MEDICAL DOCTORS PER 100,000 OF POPULATION, 1961

Rank	State/District	Number
1	Bhagalpur ..	272.16
2	Patna ..	89.57
3	Dhanbad ..	53.43
4	Gaya ..	49.59
	BIHAR ..	**47.73**
5	Shahabad ..	42.63
6	Monghyr ..	42.13
7	Darbhanga ..	41.22
8	Singhbhum ..	40.24
9	Saran ..	38.58
10	Purnea ..	35.71
11	Muzaffarpur ..	33.53
12	Saharsa ..	28.14
13	Hazaribagh ..	27.88
14	Santal Parganas ..	26.58
15	Ranchi ..	22.63
16	Champaran ..	18.93
17	Palamau ..	18.52

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B (ii), Table B-V.

6. DEMOGRAPHIC REGIONS



SOCIO-CULTURAL DEMOGRAPHIC REGIONS, 1961

Purpose

This map shows the relative extent of socio-cultural development in various districts of the State in 1961.

Method

Twelve selected indicators have been used to determine the synthetic index indicating the level of socio-cultural development. The indicators are :

A. Urbanisation—

(*i*) Percentage of urban population.

B. Castes and Tribes—

(*ii*) Percentage of Scheduled Castes and Scheduled Tribes.

C. Literacy—

(*iii*) Percentage of literate population aged 5 or more.

(*iv*) Percentage of female literates aged 5 or more.

D. Education—

(*v*) Primary school enrolment of girls.

(*vi*) Post-primary educational enrolment of population in age group 15—29.

(*vii*) Number of teachers per 10,000 students at the primary level of education.

(*viii*) Number of teachers per 10,000 students at the secondary level of education.

(*ix*) Percentage of workers engaged in educational and scientific services to total workers in services.

(*x*) Number of medical institutions per 1,000 census houses.

(*xi*) Number of hospital beds per 100,000 persons.

(*xii*) Number of medical doctors per 100,000 persons.

Assuming 50 to be the score for State average under each indicator, the overall State average for 12 indicators comes to 600. The synthetic index of socio-cultural development has been worked out for each district from the assumed scores for the State average. A smooth curve graph has been drawn for each indicator with figures for the districts having maximum and minimum values, and the State average. Scores for other districts have been obtained from this graph.

The districtwise indices have been grouped into 5 categories, as under :

(*i*) Below 400.1, (*iii*) 500.1—600.0,

(*ii*) 400.1—500.0, (*iv*) 600.1—700.0, and

(*v*) above 700.0.

The districts have then been shaded into five different grades of hatching ranging from high to low.

Salient Features

Only 7 out of 17 districts have synthetic indices higher than the State average. Patna has the highest index (897.2) which is almost three times the index for the lowest placed district of Saran (305.3).

Of the seven districts with relatively higher socio-cultural development, four lie in the South Bihar Plain and three in the Chotanagpur Plateau. It is pertinent to note that Patna, Gaya and Shahabad form a compact block to which Bhagalpur also belongs, though separated by Monghyr (which too has an index of 572.5). Similarly, Ranchi, Dhanbad and Singhbhum

constitute another block of three virtually contiguous districts having comparatively high socio-cultural development.

The districts in the North Bihar Plain have relatively low ranking in the scale of socio-cultural development.

TABLE

SOCIO-CULTURAL DEMOGRAPHIC REGIONS, 1961

Rank	State/District	Synthetic index of socio-cultural development	Rank	State/District	Synthetic index of socio-cultural development
1	Patna ..	897.2	9	Darbhanga ..	565.2
2	Ranchi ..	822.7	10	Hazaribagh ..	477.2
3	Bhagalpur ..	781.9	11	Muzaffarpur ..	476.5
4	Dhanbad ..	730.9	12	Palamau ..	437.4
5	Singhbhum ..	672.3	13	Purnea ..	421.2
6	Shahabad ..	627.7	14	Santal Parganas ..	392.6
7	Gaya ..	620.3	15	Saharsa ..	366.0
	Assumed State Average ..	**600.0**	16	Champaran ..	356.0
8	Monghyr ..	572.5	17	Saran ..	305.3

SOURCE : (1) Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-IV, P. C. A. Part II-B(i), Table B-IV Part C Part II-B(ii), Table B-V

(2) Director of Public Instruction, Bihar

(3) N. C. E. R. & T., New Delhi, Education Statistics, Districtwise, 1960-61

(4) Director of Health Services, Bihar

(5) Railway Bradshaw

(6) Public Works Department, Government of Bihar, Patna.

MAP NO. 160

ECONOMIC DEMOGRAPHIC REGIONS, 1961

Purpose

The map on the following page indicates the comparative economic development in different districts of the State in 1961.

Method

Twelve selected indicators have been used to determine the synthetic index indicating the level of economic development. The indicators are :

A. Urbanisation—

(*i*) Percentage of urban population.

(*ii*) Percentage of population living in cities and towns with population above 50,000.

B. Agricultural development—

(*iii*) Gross value of agricultural output per cultivating household.

(*iv*) *Per capita* supply of staple food crops.

C. Industrial development—

(*v*) Proportion of industrial workers in mining and quarrying, household industries, and manufacturing to total industrial workers.

(*vi*) Proportion of workers engaged in factory industries to total industrial workers.

D. Power development—

(*vii*) *Per capita* consumption of electricity.

(*viii*) Proportion of rural population living in electrified villages.

E. Employment position—

(*ix*) Proportion of workers to the total employable population of age group 15—59.

F. Housing position—

(*x*) Percentage of households occupying three rooms or more to total households.

G. Transport development—

(*xi*) Density of railways.

(*xii*) Density of roads.

Assuming 50 to be the score for the State average under each indicator, the overall State average for 12 indicators comes to 600. The synthetic index of economic development has been worked out for each district from the assumed scores for the State average. A smooth curve graph has been drawn for each indicator with figures for the districts having maximum and minimum values and the State average. Scores for other districts have been obtained from this graph. The districtwise indices have been grouped into five categories, as under :

(*i*) Below 400.1, (*iii*) 500.1—600.0,

(*ii*) 400.1—500.0, (*iv*) 600.1—700.0, and

(*v*) above 700.0.

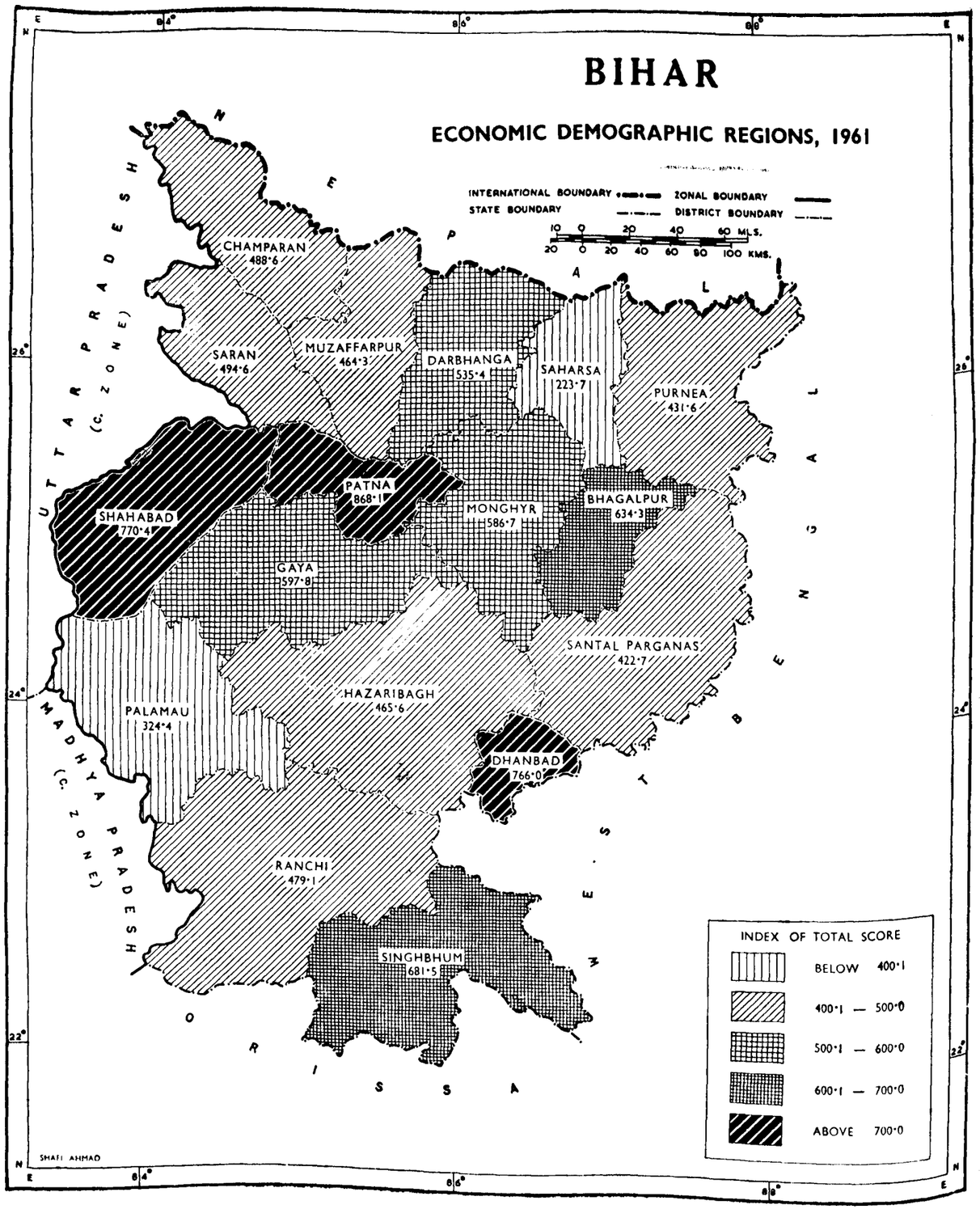
The districts have been shaded into five different grades of hatching ranging from high to low.

Salient Features

Only 5 out of 17 districts have synthetic indices of economic development higher than the State average. These include three in the South Bihar Plain and two in the Chotanagpur Plateau. The districts in the North Bihar Plain are comparatively more backward in economic development. Except Darbhanga (535.4), the indices in this region are below 500.

The district of Patna has the highest index (868.1) which is almost four times

MAP NO. 160



the index for the lowest placed district of Saharsa (223.7). Shahabad comes next. The mining and industrial districts of Dhanbad and Singhbhum follow thereafter. Bhagalpur completes the tally of districts with indices above the State average.

TABLE

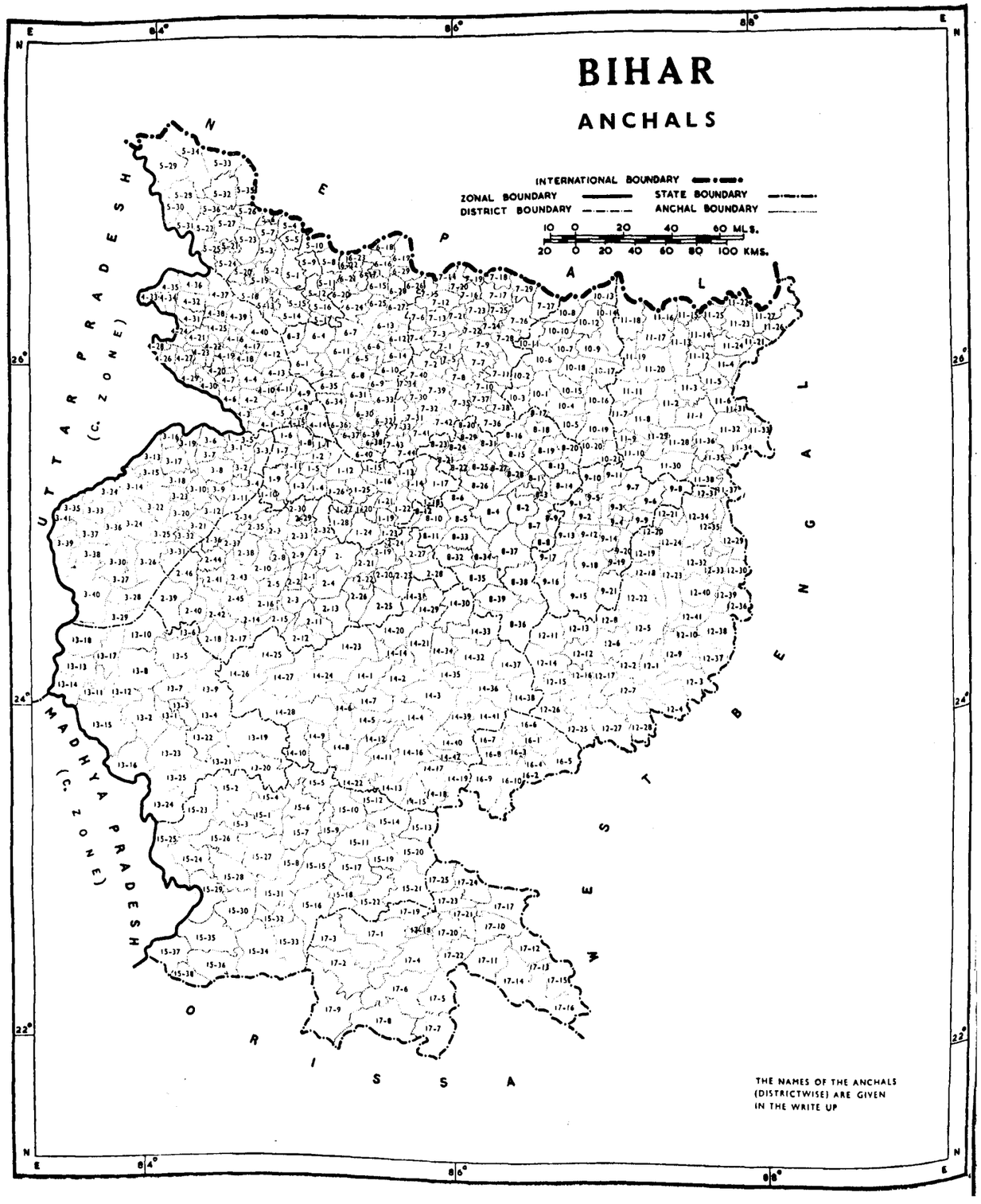
ECONOMIC DEMOGRAPHIC REGIONS, 1961

Rank	State/District	Synthetic index of economic development	Rank	State/District	Synthetic index of economic development
1	Patna ..	868.1	9	Saran ..	494.6
2	Shahabad ..	770.4	10	Champaran ..	488.6
3	Dhanbad ..	766.0	11	Ranchi ..	479.1
4	Singhbhum ..	681.5	12	Hazaribagh ..	465.6
5	Bhagalpur ..	634.3	13	Muzaffarpur ..	464.3
	Assumed State Average ..	**600.0**	14	Purnea ..	431.6
6	Gaya ..	597.8	15	Santal Parganas ..	422.7
7	Monghyr ..	586.7	16	Palamau ..	324.4
8	Darbhanga ..	535.4	17	Saharsa ..	223.7

SOURCE : (1) Census of India, 1961, Vol. IV, Bihar, Part II-A, Table A-IV
Part II-B(i), Table B-IV Part C
Part II-B (ii), Table B-IX
Part III(i), Table B-X
Part IV-B, Table E-V

(2) Director of Statistics, Bihar
(3) Bihar State Electricity Board, Patna
(4) Railway Bradshaw
(5) Public Works Department, Government of Bihar, Patna.

ANNEXURE I



ANNEXURE I

DISTRICTWISE LIST OF ANCHALS IN BIHAR STATE, 1961

1 PATNA DISTRICT

1 Patna Rural (*a*)
1 Patna Rural (*b*)
2 Phulwari
3 Masaurhi
4 Dhanarua
5 Punpun
6 Maner
7 Bihta
8 Dinapur-*cum*-Khagaul
9 Bikram
10 Paliganj
11 Naubatpur
12 Fatwah
13 Barh
14 Pandarakh
15 Bakhtiarpur
16 Harnaut
17 Mokameh
18 Sarmera
19 Bihar
20 Noorsarai
21 Rahui
22 Asthawan
23 Giriak
24 Rajgir
25 Chandi
26 Hilsa
27 Ekangar Sarai
28 Islampur

2 GAYA DISTRICT

1 Manpur
2 Gaya Town Anchal
3 Bodh Gaya
4 Wazirganj
5 Paraiya
6 Atri
7 Khizir Sarai
8 Tikari
9 Belaganj
10 Konch
11 Mohanpur
12 Barachatti
13 Fatehpur
14 Amas
15 Sherghati
16 Gurua
17 Imamganj
18 Dumaria
19 Nawada
20 Akbarpur
21 Hisua
22 Narhat
23 Gobindpur
24 Warisaliganj
25 Rajauli
26 Sirdala
27 Pakri Barawan
28 Kawakole
29 Kako
30 Jehanabad
31 Kurtha
32 Ghosi
33 Makhdumpur
34 Arwal
35 Karpi
36 Daudnagar
37 Haspura
38 Goh
39 Nabinagar
40 Kutumba
41 Aurangabad
42 Deo
43 Rafiganj
44 Obra
45 Madanpur
46 Barun

3 SHAHABAD DISTRICT

1 Arrah
2 Udwantnagar
3 Koilwar
4 Sandesh
5 Barhara
6 Shahpur
7 Behea
8 Jagdishpur
9 Charpokhri
10 Piro
11 Sahar
12 Tarari
13 Buxar
14 Rajpur
15 Itarhi
16 Simri
17 Dumraon
18 Nawanagar
19 Barhampur
20 Bikramganj
21 Karakat
22 Dinara
23 Dawath
24 Kargahar
25 Nokha
26 Sasaram
27 Sheosagar
28 Rohtas
29 Nawhatta
30 Chenari
31 Dehri
32 Nasriganj
33 Mohania
34 Ramgarh
35 Durgawati
36 Kudra
37 Bhabua
38 Bhagwanpur
39 Chainpur
40 Adhaura
41 Chand

4 SARAN DISTRICT

1 Chapra
2 Jalalpur
3 Revelganj
4 Baniapur
5 Garkha
6 Manjhi
7 Ekma
8 Dariapur
9 Parsa
10 Marhaura
11 Amnaur
12 Mashrakh
13 Taraiya
14 Sonepur
15 Dighwara
16 Goriakothi
17 Basantpur
18 Bhagwanpurhat
19 Maharajganj
20 Daraundha
21 Siwan
22 Pachrukhi
23 Hussainganj
24 Mairwa
25 Barharia
26 Darauli
27 Andar
28 Guthani
29 Raghunathpur
30 Siswan
31 Hathua
32 Uchkagaon
33 Bijaipur
34 Bhorey
35 Katia

36 Kuchaikot
37 Gopalganj
38 Manjha
39 Barauli
40 Baikunthpur

5 CHAMPARAN DISTRICT

1 Motihari
2 Turkaulia
3 Sugauli
4 Adapur
5 Narkatia
6 Raxaul
7 Ramgarhwa
8 Dhaka
9 Chiraiya
10 Ghorasahan
11 Patahi
12 Pakridayal
13 Kesaria
14 Kalyanpur
15 Pipra
16 Madhuban
17 Mehsi
18 Gobindganj
19 Harsidhi
20 Paharpur
21 Bettiah
22 Jogapatti
23 Majhaulia
24 Nautan
25 Bairia
26 Sikta
27 Chanpatia
28 Bagaha
29 Sidhaw
30 Madhubani
31 Thakrahan
32 Narkatiaganj
33 Gaunaha
34 Ramnagar
35 Mainatanr
36 Lauriya

6 MUZAFFARPUR DISTRICT

1 Paru I (Deoria)
2 Paru II (Saraiya)
3 Sahebganj
4 Baruraj
5 Musahri
6 Bochaha
7 Minapur
8 Kurhani
9 Sakra
10 Dholi
11 Kanti
12 Katra
13 Aurai
14 Gaighatti
15 Dumra
16 Bathnaha
17 Riga
18 Sonbarsa
19 Parihar
20 Sheohar
21 Piprarhi
22 Bairgania
23 Majorganj
24 Belsand
25 Runisaidpur
26 Pupri
27 Nanpur
28 Bajpatti
29 Sursand
30 Mahua
31 Goraul
32 Jandaha
33 Patepur
34 Lalganj
35 Vaishali
36 Hajipur
37 Bidupur
38 Mahnar
39 Sahdai Bujurg (Desari)
40 Raghopur

7 DARBHANGA DISTRICT

1 Darbhanga
2 Hayaghat
3 Keotiranway
4 Singhwara
5 Bahadurpur
6 Jale
7 Benipur
8 Baheri
9 Manigachhi
10 Biraul
11 Ghanshyampur
12 Benipatti
13 Bisfi
14 Harlakhi
15 Madhwapur
16 Khajauli
17 Babu Barhi
18 Ladania
19 Jainagar
20 Basopatti
21 Madhubani
22 Pandaul
23 Rajnagar
24 Jhanjharpur
25 Andhratharhi
26 Phulparas
27 Laukahi
28 Madhepur
29 Laukaha
30 Samastipur
31 Sarairanjan
32 Ujiarpur
33 Tajpur Morwa
34 Pusa
35 Rusera
36 Hasanpur
37 Singhia
38 Kusheshwar Asthan
39 Warisnagar
40 Kalyanpur
41 Dalsinghsarai
42 Bibhutpur
43 Patori
44 Mohiuddinagar

8 MONGHYR DISTRICT

1 Monghyr
2 Dharhara
3 Jamalpur
4 Surajgarha
5 Lakhisarai
6 Barahiya
7 Kharagpur
8 Sangrampur
9 Tarapur
10 Sheikhpura
11 Ariari
12 Barbigha
13 Gogri
14 Parbatta
15 Khagaria
16 Alauli
17 Simri Bakhtiarpur
18 Koparia
19 Chautham
20 Beldaur
21 Teghra
22 Barauni
23 Bachhwara
24 Bhagwanpur
25 Begusarai I
26 Begusarai II
27 Balia
28 Sahebpur Kamal
29 Cheria Bariarpur
30 Khudabandpur

31 Bakhri
32 Sikandra
33 Halsi
34 Jamui
35 Khaira
36 Chakai
37 Lakshmipur
38 Jhajha
39 Sono

9 BHAGALPUR DISTRICT

1 Sultanganj
2 Shahkund
3 Sabour
4 Jagdishpur
5 Nathnagar
6 Colgong
7 Gopalpur
8 Pirpainti
9 Sonhaula
10 Bihpur
11 Naugachhia
12 Amarpur
13 Shambhuganj
14 Rajaun
15 Katoria
16 Chanan
17 Belhar
18 Banka
19 Barahat
20 Dhuraiya
21 Bausi

10 SAHARSA DISTRICT

1 Kahara
2 Nauhatta
3 Mahisi
4 Sour Bazar
5 Sonbarsa
6 Supaul
7 Pipra
8 Nirmali
9 Tribeniganj
10 Kishanpur
11 Marauna
12 Raghopur
13 Basantpur
14 Chhatapur
15 Madhepura
16 Murliganj
17 Kumarkhand
18 Singheswar
19 Kishanganj
20 Alamnagar
21 Chausa

11 PURNEA DISTRICT

1 Purnea East
2 Krityanandnagar
3 Kasba
4 Amour North
5 Amour South
6 Baisi
7 Barhara
8 Dhamdaha
9 Bhawanipur
10 Rupauli
11 Banmankhi
12 Jokihat
13 Araria
14 Palasi
15 Sikti
16 Kursakatta
17 Forbesganj
18 Narpatganj
19 Bhargama
20 Raniganj
21 Kishanganj
22 Dighalbank
23 Bahadurganj
24 Kochadhamin
25 Terhagachh
26 Pothia
27 Thakurganj
28 Korha
29 Falka
30 Barari
31 Balrampur
32 Kadwa
33 Barsoi
34 Azamnagar
35 Pranpur
36 Katihar
37 Amdabad
38 Manihari

12 SANTAL PARGANAS DISTRICT

1 Dumka
2 Jama
3 Shikaripara
4 Ranishwar
5 Ramgarh
6 Jarmundi
7 Masalia
8 Saraiyahat
9 Kathikund
10 Gopikandar
11 Deoghar
12 Sarwan
13 Mohanpur
14 Madhupur
15 Karon
16 Sarath
17 Palojori
18 Godda
19 Pathargama
20 Mahagama
21 Meherma
22 Poreyahat
23 Sundar Pahari
24 Boarijor
25 Jamtara
26 Narayanpur
27 Nala
28 Kundahit
29 Rajmahal
30 Barharwa
31 Sahibganj
32 Barhait
33 Pathna
34 Borio
35 Taljhari
36 Pakaur
37 Pakuria
38 Maheshpur
39 Hiranpur
40 Litipara
41 Amrapara

13 PALAMAU DISTRICT

1 Daltonganj
2 Chainpur
3 Lesliegani
4 Panki
5 Chhatarpur
6 Hariharganj
7 Patan
8 Bishrampur
9 Manatu
10 Hussainabad
11 Meral
12 Garhwa
13 Untari
14 Dhurki
15 Ranka
16 Bhandaria
17 Majhiaon
18 Bhawanathpur
19 Balumath
20 Chandwa
21 Latehar
22 Manika
23 Barwadih
24 Mahuadanr
25 Garu

14 HAZARIBAGH DISTRICT

1 Barhi
2 Barakatha
3 Bagodar
4 Bishungarh
5 Hazaribagh
6 Katkamsandi
7 Ichak
8 Barkagaon
9 Keredari
10 Tandwa
11 Mandu
12 Nagri (Churchu)
13 Ramgarh
14 Jainagar
15 Gola
16 Gumia
17 Peterbar
18 Kasmar
19 Jaridih
20 Kodarma
21 Markacho
22 Patratu
23 Chauparan
24 Itkhori
25 Hunterganj
26 Pratap Pur
27 Chatra
28 Simaria
29 Gawan
30 Tisri
31 Satgawan
32 Jamua
33 Deori
34 Dhanwar
35 Birni
36 Giridih
37 Bengabad
38 Gande
39 Dumri
40 Nawadih
41 Pirtanr
42 Bermo

15 RANCHI DISTRICT

1 Lohardaga
2 Kisko
3 Gamharia
4 Kuru
5 Burmu
6 Mandar
7 Bero
8 Lapung
9 Ratu
10 Kanke
11 Khijri
12 Ormanjhi
13 Silli
14 Angra
15 Karra
16 Torpa
17 Khunti
18 Murhu
19 Bundu
20 Sonahatu
21 Tamar (I)
22 Tamar (II) (Erki)
23 Bishunpur
24 Chainpur
25 Dumri
26 Ghagra
27 Sisai
28 Gumla
29 Raidih
30 Palkot
31 Basia
32 Konbir
33 Bano
34 Kolchira
35 Simdega
36 Thethai-Tangar
37 Kurdeg
38 Bolba

16 DHANBAD DISTRICT

1 Gobindpur
2 Jharia-*cum*-Jorapokhar-*cum*-Sindri
3 Dhanbad-*cum*-Kenduadih-*cum*-Jagta
4 Baliapur
5 Nirsa-*cum*-Chirkunda
6 Tundi
7 Topchanchi
8 Baghmara-*cum*-Katras
9 Chas
10 Chandankiyari

17 SINGHBHUM DISTRICT

1 Chakradharpur
2 Goilkera
3 Sonua
4 Chaibasa
5 Manjhari
6 Jhinkpani
7 Majhgaon
8 Jagannathpur
9 Manoharpur
10 Golmuri-*cum*-Jugsalai
11 Potka
12 Ghatsila
13 Dhalbhumgarh
14 Musabani
15 Chakulia
16 Baharagora
17 Patamda
18 Kharsawan
19 Kuchai
20 Seraikela
21 Adityapur
22 Gobindpur (Rajnagar)
23 Chandil
24 Nimdih
25 Ichagarh

ANNEXURE II

SOIL ASSOCIATION

(The Map of Soils Association and the explanatory note below have been received from the Director of Agricultural Research, Bihar.)

Soils

The soils of Bihar have been grouped into 23 broad soil associations on the basis of important chemical, physical and morphological characteristics and geographical distribution. Seven such soil associations were described in North Bihar, six in the South Bihar Plains and ten in the Plateau region as detailed below :

(A) North Bihar—

1. Sub-Himalayan hill and forest soils.
2. Recent alluvium : *Terai* soils.
3. Recent alluvium : Non-calcareous, non-saline.
4. Young alluvium : Non-calcareous, non-saline.
5. Young alluvium : Calcareous.
6. Young alluvium : Calcareous, saline and saline-alkali.
7. Recent alluvium : Calcareous.

(B) South Bihar (Plains)—

1. Recent alluvium : Yellowish to reddish yellow, non-calcareous, non-saline.
2. Tal land soils : Light grey to dark grey, medium to heavy textured soils.
3. Old alluvium : Grey to greyish yellow, heavy textured soils with crackings.
4. Old alluvium : Reddish yellow to yellowish grey catenary soils.
5. Old alluvium : Yellowish red to yellow soils of foot hills.
6. Old alluvium : Saline and saline-alkali soils.

(C) South Bihar (Plateau)—

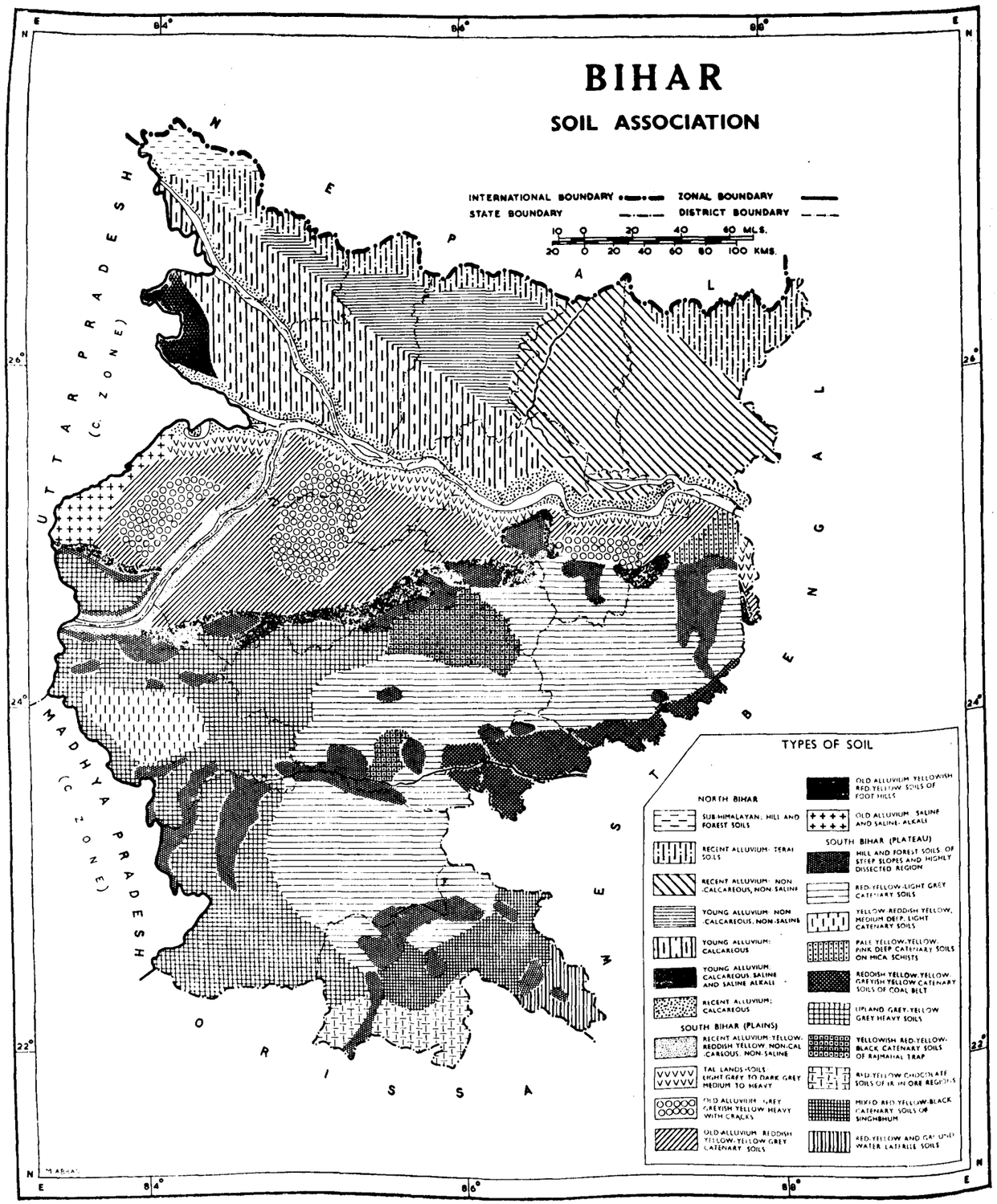
1. Hill and forest soils of steep slopes and highly dissected region.
2. Red to yellow and light grey catenary soils.
3. Yellow to reddish yellow, medium deep, light textured catenary soils.
4. Pale yellow to yellow and pinkish deep catenary soils on highly micaceous schists.
5. Reddish yellow to yellow and greyish yellow, deep catenary soils of coal belt.
6. Upland grey to yellowish grey heavy soils on sedimentary and allied rocks.
7. Yellowish to red-yellow and black catenary soils on Rajmahal trap rocks.
8. Red to yellow and chocolate soils of iron-ore region.
9. Mixed red to yellow and black catenary soils of Singhbhum.
10. Red to yellow ground water laterite soils.

A brief description of important characteristics, land use patterns, suitability to crops, etc., of these soil associations is given below :

(A) Soil Associations of North Bihar—

1. *Sub-Himalayan hill and forest soils*—This soil association is found in the nothern extremity of Champaran district in areas occupied by Someshwar hills and adjoining forests. The soils are shallow to medium deep over bed rocks and pebbles, brown to brownish yellow or grey in colour, sandy to loamy sand in texture, neutral in reaction and very rich in organic matter. Vegetation : Sal forests and forest of tall grasses.
2. *Recent alluvium : Terai soils*—This soil association is found as a thin

ANNEXURE II



strip along the border of Nepal in the northern portion of Champaran, Muzaffarpur and Darbhanga districts and north eastern portion of Purnea district. The soils along the channels of various rivers coming from the north are light textured, well drained recent alluvium and those away from their influence are *Terai* soils, which are heavy textured and imperfectly drained exhibiting neutral to moderately acidic reaction. The soils are generally of medium fertility and grow average crops of paddy, jute and sugarcane.

3. *Recent alluvium* : *Non-calcareous, non-saline*—This soil association covers the whole of Saharsa district, major part of Purnea district and the north-eastern part of Monghyr district. Portions of Darbhanga lying along the Kosi embankment and alongside the rivers coming from the north also come under this. The soil is of low to medium fertility. Paddy and jute are important crops. Maize, wheat, barley and *khesari* are also grown.

4. *Young alluvium* : *Non-calcareous, non-saline*—This association occupies a thin strip in northern Champaran and Muzaffarpur and about two-thirds of Darbhanga district north of the river Burhi-Gandak and away from its influence. Paddy, *paira*, sugarcane, sweet-potato and *marua* are the major crops grown in these soils. The soils are medium to heavy textured, whitish, pale yellow to olive grey in colour and neutral to moderately acidic in reaction. The fertility status of the soils is generally low to medium.

5. *Young alluvium* : *Calcareous*—This soil association occupies major portions of eastern Saran and nearly the entire area of Champaran, Muzaffarpur, Darbhanga and north-western portion of Mongyr district located south of the rivers Gandak and Burhi Gandak. The major crops are maize, paddy, *paira*, wheat, sugarcane, chillies and tobacco. The soils are, white to olive grey in colour with dark grey soils in *Chaurs* or *Tals*, showing slightly to moderately alkaline reaction (PH 7.4 to 8.6) and are of moderate to high in fertility status.

6. *Young alluvium* : *Calcareous, saline and saline-alkali*—The western half of Saran is covered by this soil association, where calcareous saline and saline-alkali soils are intermingled. Crop growth suffers due to high salt content and sodium ions. Reclamation by flooding and gypsum application will render soils fertile and productive.

7. *Recent alluvium* : *Calcareous*—The soils of this association are located along the two banks of the rivers Ganga, Gandak and Burhi-Gandak throughout their course of Bihar. Maize, sugarcane, *arhar*, wheat and other *rabi* crops are grown successfully. The soils are generally light textured whitish to light grey in colour and slightly to moderately alkaline in reaction with medium to high fertility status.

(B) Soil Associations of South Bihar (Plains)—

1. *Recent alluvium* : *Yellowish to reddish yellow, non-calcareous, non-saline*—The soils under this association found extensively along the banks of the rivers Sone, Phalgoo, Koel, Channan and other rivers flowing through south Bihar are generally light in texture and neutral to slightly acidic in reaction having medium to low fertility level. *Arhar*, maize, wheat, millets, vegetables, etc., are the principal crops of this association.

2. *Tal land soils* : *Light grey to dark grey, medium to heavy textured*

soils—This soil association occurs in the back water regions of the Ganga throughout its course. The soils are light grey to dark grey, medium heavy to heavy in texture showing neutral to slightly alkaline reaction (PH 7.0 to 8.0) and very fertile. Bumper *rabi* crops like wheat, gram, peas, *khesari*, etc., are grown. Appropriate drainage measures will render the soils suitable for *kharif* cultivation.

3. *Old alluvium* : *Grey to greyish yellow, heavy soils with cracks*—This soil association exists in Shahabad, Patna, Gaya, Monghyr, Bhagalpur districts and in portions of Santal Parganas. The crops grown are paddy, *paira*, wheat and sugarcane in irrigated areas. The grey coloured neutral to slightly alkaline soils are medium heavy to heavy textured with wide and deep polygonal cracks. The soil possesses medium fertility status.

4. *Old alluvium* : *Reddish yellow to yellowish grey catenary soils*—This soil association is found in the old alluvium of Shahabad, Patna, Gaya, Monghyr, Bhagalpur and Santal Parganas. The soils of uplands and medium uplands are reddish yellow to yellow, light to medium textured, exhibiting slight to moderately acidic reaction with low to moderate fertility. The low land soils are heavier in texture and are neutral to slightly alkaline in reaction with high fertility. Paddy, maize, wheat, gram, *arhar* and sugarcane grow well wherever facilities for irrigation exist.

5. *Old alluvium* : *Yellowish red to yellow soils of foot hills*—The soil association is found in a thin strip of the hills separating the plains of South Bihar and Chotanagpur Plateau, where maize *arhar*, *kulthi*, paddy and gram in bunded fields constitute the major crops. The soils are generally deep, light textured, acidic and poor in fertility.

6. *Old alluvium* : *Saline and saline-alkali soils*—This soil association occurs in the western portion of Bhabua and Sasaram subdivisions of Shahabad district. Small patches of saline and saline-alkali soils intermixed with normal soils are frequently met with. Paddy is the predominant crop during *kharif*. Wheat, gram and linseed are grown in *rabi* season.

(C) South Bihar (Plateau)—

1. *Hill and forest soils of steep slopes and highly dissected region*—This association occurs in the southern boundary of Shahabad, Gaya, Patna, Monghyr and Bhagalpur from where the plateau region begins. The soils are very shallow, gravelly and stony and deserve to be put under forest to check further deterioration due to erosion.

2. *Red to yellow and light grey catenary soils*—This association is located in the districts of Santal Parganas, South Bhagalpur, South Monghyr, Hazaribagh (Central), Dhanbad and parts of Ranchi and Singhbhum, comprising acidic uplands and the lowlands of light to medium textured soils, moderately fertile, particularly in lowlands. Major crops : *kodo, til, surguja, kulthi, gondli* and paddy.

3. *Yellow to reddish yellow, medium deep, light textured catenary soils*—This association covers the western portion of Hazaribagh, Ranchi and Singhbhum and portions of Palamau and Adhaura hills of Shahabad. The cropping pattern and the fertility status of the soils are the same as in the case of red to yellow catenary soils described above.

4. *Pale yellow to yellow and pinkish deep catenary soils on highly micaceous schists*—This association occurs in north eastern part of Hazaribagh district in the mica belt around Koderma and in the southern part around Mandu and Barkagaon. The soils are light textured, acidic to neutral and full of mica particles but deficient in nitrogen and phosphate. The cropping pattern is the same as in item (2) described above.

5. *Reddish yellow to yellow and greyish yellow, deep catenary soils of coal belts of Hazaribagh and Dhanbad, adjoining areas of Santal Parganas*—The lowland soils are slightly alkaline with cropping pattern and fertility level same as in catenary soil association no. (2) under South Bihar (Plateau).

6. *Upland grey to yellowish grey, heavy soils on sedimentary and allied rocks*—Soils under this association occurring in Palamau district have developed on shells, silts, stones or on low grade metamorphic rocks. These are medium to heavy in texture, neutral to alkaline and have good fertility status. Major crops : paddy, gram, *til*, *kodo*, *kalai*, etc.

7. *Yellowish to red-yellow and black catenary soils on Rajmahal trap rocks*—Olive grey and black soils have developed from basalts and the yellowish red soils on granitic rocks. The black soils are heavy textured neutral and very fertile which develop cracks on drying. Principal crops : paddy, gram and other *paira* crops.

8. *Red to yellow and dark reddish brown (chocolate) soils of iron-ore region*—Found in the southern part of Singhbhum. The soils are generally unproductive and support poor crops of paddy, *kulthi, surguja,* etc.

9. *Mixed red to yellow and black catenary soils of central Singhbhum*—The red and yellow soils are found in the upland soils whereas the black and dark grey soils occupy lowland position. The fertility status varies from low in the uplands to medium or high in the lowland soils having neutral to slightly alkaline reaction. Major crops, upland : millets, *arhar* and maize ; lowlands : paddy.

10. *Red to yellow ground water laterite soils*—Occurs in the south eastern portion of Singhbhum around Chakulia and bordering district of Midnapur in West Bengal. The soils are lateritic and are in a very poor state of fertility. Lowlying lands are, however, better and support average crop of paddy. Other crops are maize, *arhar* and millets, grown according to varying physiographic positions.

APPENDICES

APPENDIX I (MAP NO. 28)

SEX AND AGE STRUCTURE, 1961

State/District		Infants (0—4)	Boys and girls (5—14)	Young-men and women (15—34)	Middle-aged men and women (35—59)	Old men and women (60+)
1		2	3	4	5	6
BIHAR ..	**M**	**7.64**	**14.13**	**15.02**	**10.78**	**2.59**
	F	**7.76**	**12.77**	**15.84**	**10.42**	**3.05**
Patna ..	M	7.51	14.02	15.97	10.90	3.22
	F	7.36	12.34	15.68	9.72	3.28
Gaya ..	M	7.80	13.71	14.75	10.33	3.16
	F	7.91	12.50	16.21	10.22	3.41
Shahabad	M	7.52	13.95	14.81	10.77	3.19
	F	7.50	12.48	16.18	10.16	3.44
Saran ..	M	7.57	14.79	12.19	9.32	2.93
	F	7.64	13.61	16.31	11.80	3.84
Champaran	M	7.30	13.88	15.61	11.40	3.37
	F	7.58	12.55	15.62	10.83	2.86
Muzaffarpur	M	7.36	14.41	13.53	10.76	2.78
	F	7.43	12.98	15.42	11.62	3.71
Darbhanga	M	7.56	14.49	13.64	10.46	2.41
	F	7.63	13.12	16.02	11.34	3.33
Monghyr..	M	7.79	14.25	14.38	10.95	2.95
	F	7.61	12.44	14.40	10.85	3.43
Bhagalpur	M	7.67	14.27	15.36	10.95	3.00
	F	7.54	12.39	15.62	10.09	3.11
Saharsa ..	M	8.00	15.20	14.95	10.98	2.30
	F	8.06	13.33	14.85	9.59	2.74
Purnea ..	M	8.43	14.05	15.74	11.45	2.36
	F	8.92	12.94	15.02	8.85	2.24
Santal Parganas	M	7.67	13.97	16.04	10.78	2.05
	F	7.87	12.78	16.60	9.90	2.34
Palamau ..	M	8.52	13.87	15.06	10.76	2.19
	F	8.77	12.62	15.44	10.13	2.61
Hazaribagh	M	7.98	14.16	15.84	10.28	1.96
	F	8.31	13.05	16.32	9.82	2.30
Ranchi ..	M	7.62	13.80	15.62	11.08	2.21
	F	7.92	13.16	15.49	10.52	2.58
Dhanbad..	M	6.52	12.54	21.80	13.16	1.79
	F	6.87	11.07	16.19	8.21	1.85
Singhbhum	M	7.21	13.54	17.44	11.10	1.73
	F	7.41	12.41	16.71	10.00	2.44

SOURCE : Census of India, 1961, Bihar, Vol. IV, Part II-C, Social and Cultural Tables.

APPENDIX II (MAP NO. 45)

LAND UTILISATION, 1960-61
(PERCENTAGE OF AGRICULTURAL AND NON-AGRICULTURAL AREAS, 1960-61)

State/District	Total agricultural area (in acres)	Percentage to total agricultural area			Total non-agricultural area (in acres)	Percentage to total non-agricultural area			
		Fallow land	Net area sown	Cultivable waste		Permanent pasture and grazing ground	Forest	Land put to settlement and communications	Uncultiviable waste
1	2	3	4	5	6	7	8	9	10
BIHAR ..	**27,470,963**	**19.63**	**72.25**	**8.12**	**15,352,131**	**2.57**	**60.50**	**22.34**	**13.59**
Patna ..	1,119,074	6.89	91.51	1.60	242,846	0.04	4.70	83.89	11.37
Gaya ..	1,965,685	9.05	86.85	4.10	1,071,755	2.58	51.19	24.90	21.33
Shahabad ..	1,855,382	6.75	90.54	2.71	955,498	0.40	65.13	26.95	7.52
Saran ..	1,485,211	15.51	80.10	4.39	227,429	4.56	0.20	81.00	14.24
Champaran ..	1,778,901	9.21	83.16	7.63	484,779	7.28	35.20	40.47	17.05
Muzaffarpur ..	1,692,333	8.78	88.30	2.92	240,467	4.10	..	85.49	10.41
Darbhanga ..	1,786,517	12.73	83.77	3.50	363,243	6.40	..	82.26	11.34
Monghyr ..	1,836,796	14.67	77.08	8.25	679,684	1.93	31.62	35.62	30.83
Bhagalpur ..	993,578	13.32	81.41	5.27	390,037	4.71	40.56	35.36	19.37
Saharsa ..	1,055,844	20.27	68.68	11.05	269,021	4.63	0.79	51.86	42.72
Purnea ..	2,026,496	29.15	68.59	2.26	607,744	19.42	5.98	54.64	19.96
Santal Parganas	2,189,902	27.93	53.74	18.33	1,323,058	9.05	62.94	15.42	12.59
Palamau ..	1,319,455	33.00	56.33	10.67	1,825,505	1.12	86.17	4.48	8.23
Hazaribagh ..	1,824,213	30.95	50.99	18.06	2,646,827	2.65	81.66	6.33	9.36
Ranchi ..	2,795,569	32.19	59.36	8.45	1,707,788	1.38	74.73	10.63	13.21
Dhanbad ..	409,920	28.21	49.29	22.50	300,199	1.97	36.41	33.55	28.07
Singhbhum ..	1,336,087	30.57	54.29	15.14	2,016,251	1.75	77.86	11.38	9.01

SOURCE : Director of Statistics, Bihar.

APPENDIX III (MAP NO. 53)

CROPPING PATTERN OF IRRIGATED AND NON-IRRIGATED AREAS, 1960-61

(Irrigated area in acres)

State/District	Total	Paddy	*Cereals and millets	†Pulses	‡Oilseeds	Cotton	Tea
1	2	3	4	5	6	7	8
BIHAR	**4,625,693 (100.00)**	**4,170,627 (90.1)**	**382,664 (8.3)**	**64,958 (1.4)**	**7,444 (0.2)**	..	..
Patna	635,206 (100.00)	591,785 (93.2)	35,139 (5.5)	6,347 (1.0)	1,935 (0.3)	..	..
Gaya	1,247,110 (100.00)	1,122,815 (90.0)	91,132 (7.3)	28,949 (2.3)	4,214 (0.4)	..	..
Shahabad	1,113,635 (100.00)	992,557 (89.1)	112,390 (10.1)	8,688 (0.8)	..	..	..
Saran	132,862 (100.00)	23,999 (18.1)	97,946 (73.7)	9,685 (7.3)	1,232 (0.9)	..	..
Champaran	157,430 (100.00)	156,883 (99.7)	547 (0.3)	..	..	..	..
Muzaffarpur	54,088 (100.00)	45,041 (83.3)	9,047 (16.7)	..	..	..	..
Darbhanga	23,219 (100.00)	21,474 (92.5)	1,745 (7.5)	..	..	..	..
Monghyr	287,765 (100.00)	265,136 (92.1)	16,856 (5.9)	5,773 (2.0)	..	..	..
Bhagalpur	253,122 (100.00)	245,118 (96.8)	5,977 (2.4)	2,027 (0.8)	..	..	..
Saharsa	78,772 (100.00)	78,772 (100.0)	..	..	..	..	..
Purnea	13,149 (100.00)	11,740 (89.3)	1,409 (10.7)	..	..	..	..
Santal Parganas	276,840 (100.00)	274,675 (99.2)	1,951 (0.7)	214 (0.1)	..	..	..
Palamau	163,246 (100.00)	159,662 (97.8)	2,808 (1.7)	776 (0.5)	..	..	..
Hazaribagh	115,857 (100.00)	109,594 (94.6)	4,943 (4.3)	1,320 (1.1)	..	..	..
Ranchi	12,547 (100.00)	11,146 (88.8)	437 (3.5)	964 (7.7)	..	..	..
Dhanbad	4,135 (100.00)	3,786 (91.5)	118 (2.9)	168 (4.1)	63 (1.5)	..	..
Singhbhum	56,710 (100.00)	56,444 (99.5)	219 (0.4)	47 (0.1)	..	..	..

* Includes *jowar*, *bajra*, maize, etc., and other cereals and minor millets (*Kharif* and *Rabi*).
† Gram, *tur* and other pulses (*Kharif* and *Rabi*).
‡ Rape and mustard, linseed and other oilseeds.

NOTE : Figures in the brackets denote percentage.

SOURCE : Director of Statistics, Bihar; Annual Season and Crop Report, 1960-61.

APPENDIX IV (MAP NO. 53)

CROPPING PATTERN OF IRRIGATED AND NON-IRRIGATED AREAS, 1960-61

(Non-irrigated area in acres)

State/District	Total	Paddy	*Cereals and millets	†Pulses	‡Oilseeds	Cotton	Tea
1	2	3	4	5	6	7	8
BIHAR ..	**20,663,470 (100.0)**	**8,776,907 (42.5)**	**5,429,971 (26.3)**	**5,697,486 (27.6)**	**752,170 (3.6)**	**4,936 (0.0)**	**2,000 (0.0)**
Patna	900,557 (100.0)	58,209 (6.5)	179,330 (19.9)	649,518 (72.1)	13,470 (1.5)	30 (0.0)	..
Gaya	1,274,841 (100.0)	77,372 (6.1)	282,394 (22.1)	868,094 (68.1)	46,980 (3.7)	1 (0.0)	..
Shahabad ..	1,624,013 (100.0)	199,344 (12.3)	345,124 (21.2)	1,013,023 (62.4)	66,521 (4.1)	1 (0.0)	..
Saran	1,334,105 (100.0)	477,682 (35.8)	635,072 (47.6)	196,535 (14.7)	23,862 (1.8)	954 (0.1)	..
Champaran ..	1,523,866 (100.0)	814,796 (53.5)	418,259 (27.5)	242,906 (15.9)	47,797 (3.1)	108 (0.0)	..
Muzaffarpur ..	1,567,811 (100.0)	717,904 (45.8)	483,347 (30.8)	332,418 (21.2)	33,939 (2.2)	203 (0.0)	..
Darbhanga ..	1,681,774 (100.0)	969,453 (57.6)	444,937 (26.5)	237,888 (14.1)	29,468 (1.8)	28 (0.0)	..
Monghyr	1,358,236 (100.0)	255,601 (18.8)	573,450 (42.2)	497,992 (36.7)	31,186 (2.3)	7 (0.0)	..
Bhagalpur	716,775 (100.0)	149,645 (20.9)	269,164 (37.5)	260,265 (36.3)	37,700 (5.3)	1 (0.0)	..
Saharsa	624,674 (100.0)	199,290 (31.9)	295,431 (47.3)	120,006 (19.2)	9,872 (1.6)	75 (0.0)	..
Purnea	1,709,168 (100.0)	1,086,084 (63.5)	317,078 (18.6)	218,383 (12.8)	87,573 (5.1)	50 (0.0)	..
Santal Parganas ..	1,536,495 (100.0)	889,985 (57.9)	253,151 (16.5)	354,651 (23.1)	38,692 (2.5)	16 (0.0)	..
Palamau	724,134 (100.0)	108,561 (15.0)	253,358 (35.0)	272,249 (37.6)	89,753 (12.4)	213 (0.0)	..
Hazaribagh	1,001,534 (100.0)	588,389 (58.7)	252,145 (25.2)	108,595 (10.9)	52,398 (5.2)	7 (0.0)	..
Ranchi	1,829,652 (100.0)	1,144,576 (62.5)	318,274 (17.4)	244,685 (13.4)	116,896 (6.4)	3,221 (0.2)	2,000 (0.1)
Dhanbad	267,311 (100.0)	225,292 (84.3)	27,020 (10.1)	11,489 (4.3)	3,501 (1.3)	9 (0.0)	..
Singhbhum	988,524 (100.0)	814,724 (82.4)	82,437 (8.3)	68,789 (7.0)	22,562 (2.3)	12 (0.0)	..

* Wheat, barley, *jowar*, *bajra*, etc., and other cereals and millets (*Kharif* and *Rabi*).
† Gram, *tur* and other pulses (*Kharif* and *Rabi*).
‡ Castor, *til*, rape and mustard, linseed and other oilseeds.

NOTE : Figures in brackets denote percentage.

SOURCE : Director of Statistics, Bihar; Annual Season and Crop Report, 1960-61.

APPENDIX V (MAP NO. 54)

GROSS VALUE OF AGRICULTURAL OUTPUT PER ACRE OF CROPPED AREAS, 1961

State/District	Value of output per acre in Rs.	Percentage value of output of crops					
		Paddy	*Wheat and other foodgrains	Pulses	Raw sugar	Oil-seeds	Tea
1	2	3	4	5	6	7	8
BIHAR	**156.00**	**68.0**	**16.4**	**5.0**	**9.2**	**1.3**	**0.1**
Patna	211.41	73.2	12.8	6.6	6.6	0.8	..
Gaya	142.03	66.4	15.5	8.4	8.2	1.5	..
Shahabad	142.81	64.0	17.5	9.6	7.6	1.3	..
Saran	158.49	32.3	32.3	5.8	28.4	1.2	..
Champaran	179.83	60.3	10.0	1.7	27.1	0.9	..
Muzaffarpur	139.80	56.3	21.7	3.5	17.3	1.2	..
Darbhanga	149.84	57.8	25.2	2.8	13.0	1.2	..
Monghyr	145.90	41.1	38.3	14.5	5.0	1.1	..
Bhagalpur	189.49	67.0	21.0	6.8	3.9	1.3	..
Saharsa	79.86	54.8	39.6	2.5	1.3	1.8	..
Purnea	104.21	75.2	17.9	3.5	0.5	2.9	..
Santal Parganas	186.53	84.1	9.9	2.5	1.4	2.1	..
Palamau	111.16	58.5	19.1	14.4	4.4	3.6	..
Hazaribagh	115.79	79.1	14.2	2.1	3.2	1.4	..
Ranchi	145.91	93.0	4.5	0.9	N	0.3	1.3
Dhanbad	212.74	95.3	3.9	0.3	0.2	0.3	..
Singhbhum	192.28	96.1	3.0	0.5	N	0.4	..

*Includes wheat, barley, *jowar*, *bajra*, maize and *marua*.

N—denotes negligible figures.

SOURCE : Director of Statistics, Bihar; Annual Season and Crop Report, 1960-61.

APPENDIX VI (MAP NO. 61)

PERCENTAGE OF TOTAL WORKERS AND NON-WORKERS TO THE TOTAL POPULATION, 1961

Rank	State/District	Total population	Workers			Non-workers		
			Males as percentage to total population	Females as percentage to total population	Percentage of workers to total population	Males as percentage to total population	Females as percentage to total population	Percentage of non-workers to total population
1	2	3	4	5	6	7	8	9
1	Ranchi ..	2,138,565	29.9	26.4	56.3	20.4	23.3	43.7
2	Santal Parganas ..	2,675,203	30.1	22.3	52.4	20.4	27.2	47.6
3	Singhbhum ..	2,049,911	30.1	21.6	51.7	20.9	27.4	48.3
4	Dhanbad ..	1,158,610	34.6	14.2	48.8	21.2	30.0	51.2
5	Hazaribagh ..	2,396,411	28.7	19.7	48.4	21.6	30.0	51.6
6	Palamau ..	1,187,789	28.8	19.0	47.8	21.6	30.6	52.2
7	Saharsa ..	1,723,566	29.4	16.2	45.6	22.0	32.4	54.4
8	Bhagalpur ..	1,711,136	28.2	13.5	41.7	23.0	35.3	58.3
	BIHAR ..	**46,455,610**	**27.9**	**13.5**	**41.4**	**22.3**	**36.3**	**58.6**
9	Champaran ..	3,006,211	29.5	11.8	41.3	21.0	37.7	58.7
10	Gaya ..	3,647,892	26.8	14.2	41.0	23.0	36.0	59.0
11	Purnea ..	3,089,128	30.6	8.9	39.5	21.5	39.0	60.5
12	Monghyr ..	3,387,082	27.4	11.4	38.8	22.9	38.3	61.2
13	Patna ..	2,949,746	27.1	10.5	37.6	24.5	37.9	62.4
14	Shahabad ..	3,218,017	26.8	10.3	37.1	23.5	39.4	62.9
15	Darbhanga ..	4,413,027	26.0	9.6	35.6	22.6	41.8	64.4
16	Saran ..	3,584,918	23.3	11.5	34.8	23.5	41.7	65.2
17	Muzaffarpur ..	4,118,398	26.5	7.0	33.5	22.3	44.2	66.5

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P.C.A.

APPENDIX VII (MAP NO. 62)

PERCENTAGE OF RURAL WORKERS AND NON-WORKERS TO THE TOTAL RURAL POPULATION, 1961

Rank	State/District	Total rural population	Workers			Non-workers		
			Males as percentage to total rural population	Females as percentage to total rural population	Total as percentage to total rural population	Males as percentage to total rural population	Females as percentage to total rural population	Total as percentage to total rural population
1	2	3	4	5	6	7	8	9
1	Ranchi ..	1,936,087	30.3	38.6	58.9	19.5	21.6	41.1
2	Singhbhum ..	1,609,260	30.3	26.4	56.7	19.5	23.8	43.3
3	Santal Parganas ..	2,532,251	30.3	23.3	53.6	20.0	26.4	46.4
4	Dhanbad ..	868,697	33.8	17.3	51.1	20.4	28.5	48.9
5	Hazaribagh ..	2,195,227	28.6	20.9	49.5	21.2	29.3	50.5
6	Palamau ..	1,131,625	28.9	19.6	48.5	21.3	30.2	51.5
7	Saharsa ..	1,656,139	29.3	16.6	45.9	21.9	32.2	54.1
8	Bhagalpur ..	1,524,417	28.5	14.5	43.0	22.4	34.6	57.0
	BIHAR ..	**42,541,690**	**27.8**	**14.3**	**42.1**	**21.9**	**36.0**	**57.9**
9	Gaya ..	3,382,794	26.8	15.0	41.8	22.6	35.6	58.2
10	Champaran ..	2,860,566	29.5	12.1	41.6	20.8	37.6	58.4
11	Monghyr ..	3,011,883	27.6	12.3	39.9	22.4	37.7	60.1
12	Purnea ..	2,903,531	30.4	9.3	39.7	21.2	39.1	60.3
13	Patna ..	2,355,850	26.9	12.1	39.0	23.8	37.2	61.0
14	Shahabad ..	2,986,316	26.7	10.8	37.5	23.2	39.3	62.5
15	Darbhanga ..	4,222,472	26.0	9.8	35.8	22.3	41.9	64.2
16	Saran ..	3,435,002	23.1	11.7	34.8	23.4	41.8	65.2
17	Muzaffarpur ..	3,929,573	26.4	7.2	33.6	22.1	44.3	66.4

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A. P. C. A.

APPENDIX VIII (MAP NO. 63)

PERCENTAGE OF URBAN WORKERS AND NON-WORKERS TO THE TOTAL URBAN POPULATION, 1961

Rank	State/District	Total urban population	Workers			Non-workers		
			Males as percentage to total urban population	Females as percentage to total urban population	Total as percentage to total urban population	Males as percentage to total urban population	Females as percentage to total urban population	Total as percentage to total urban population
1	2	3	4	5	6	7	8	9
1	Dhanbad ..	289,913	37.2	4.7	41.9	23.5	34.6	58.1
2	Saharsa ..	67,427	30.9	7.0	37.9	24.9	37.2	62.1
3	Purnea ..	185,597	33.6	3.5	37.1	24.4	38.5	62.9
4	Hazaribagh ..	201,184	29.4	6.6	36.0	25.7	38.3	64.0
5	Champaran ..	145,645	29.9	5.9	35.8	24.7	39.5	64.2
	BIHAR	**3,913,920**	**28.6**	**4.7**	**33.3**	**26.6**	**40.1**	**66.7**
6	Singhbhum ..	440,651	29.2	4.1	33.3	26.5	40.2	66.7
7	Saran ..	149,916	27.7	5.3	33.0	25.8	41.2	67.0
8	Palamau ..	56,164	27.2	5.7	32.9	27.5	39.6	67.1
9	Ranchi ..	202,478	26.3	5.9	32.2	28.7	39.1	67.8
10	Patna ..	593,896	27.7	4.3	32.0	27.5	40.5	68.0
11	Shahabad ..	231,701	27.7	4.2	31.9	26.5	41.6	68.1
12	Santal Parganas	142,952	27.7	4.1	31.8	27.1	41.1	68.2
13	Darbhanga ..	190,555	26.7	4.9	31.6	27.3	41.1	68.4
14	Muzaffarpur ..	188,825	28.2	3.1	31.3	28.1	40.6	68.7
15	Gaya ..	265,098	26.0	5.1	31.1	27.7	41.2	68.9
16	Bhagalpur ..	186,719	26.1	4.9	31.0	28.5	40.5	69.0
17	Monghyr ..	375,199	25.6	4.0	29.6	27.0	43.4	70.4

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P. C. A.

APPENDIX IX (MAP NO. 77)

PROPORTION OF NON-AGRICULTURAL WORKERS TO THE TOTAL WORKERS IN THE PRIMARY SECTOR, 1961

State/District	Workers in Livestock, Fishing, Forestry, etc., excluding Mining and Quarrying	Percentage of workers in Livestock and Hunting, Fishing, Forestry and Logging and Others (excluding Mining)	Percentage to total non-agricultural workers (column 2) of workers in—			
			Livestock and Hunting	Fishing	Forestry and Logging	Others
1	2	3	4	5	6	7
BIHAR	**381,047**	**2.47**	**80.33**	**10.01**	**5.46**	**4.20**
Patna	14,175	1.86	81.16	9.72	1.23	7.89
Gaya	18,529	1.51	82.94	3.83	7.09	6.14
Shahabad	26,205	2.95	87.83	4.60	2.90	4.67
Saran	6,646	0.65	69.24	22.65	1.13	6.98
Champaran	19,322	1.79	78.68	14.66	1.57	5.09
Muzaffarpur	10,609	0.95	43.22	40.23	1.06	15.49
Darbhanga	34,737	2.82	80.92	14.20	1.98	2.90
Monghyr	20,071	2.05	64.75	16.54	10.54	8.17
Bhagalpur	22,267	4.20	91.22	6.14	0.62	2.02
Saharsa	33,837	5.00	92.81	5.89	0.20	1.10
Purnea	44,237	4.57	80.19	18.41	0.27	1.13
Santal Parganas	45,033	3.72	86.75	3.70	7.48	2.07
Palamau	18,042	3.65	76.36	0.67	17.35	5.62
Hazaribagh	15,730	1.59	75.41	2.72	18.16	3.71
Ranchi	21,678	2.08	70.47	7.81	15.24	6.48
Dhanbad	9,344	2.23	81.55	9.92	1.90	6.63
Singhbhum	20,585	2.62	77.29	8.01	10.25	4.45

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B (i), Table B-IV Part C.

APPENDIX X (MAP NO. 82)

FOOD PROCESSING INDUSTRIES, 1961

State/District	Rice and *dal* mills		Oil mills*		Sugar factory		Bakery factory		Dairy industry		Fruit preservation factory		Flour mill		Total	
	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
BIHAR ..	**887**	**9,022**	**428**	**3,086**	**53**	**19,567**	**14**	**483**	**7**	**214**	**2**	**31**	**1,621**	**4,613**	**3,012**	**37,016**
Patna	69	463	121	626	1	1,000	8	288	5	154	Nil	..	193	676	397	3,207
Gaya	95	549	86	360	3	1,514	Nil	..	Nil	..	Nil	..	230	536	414	2,958
Shahabad	128	1,026	95	314	1	1,113	Nil	..	Nil	..	Nil	..	183	454	407	2,907
Saran	4	11	6	27	7	4,985	1	125	Nil	..	1	20	59	134	78	5,302
Champaran	106	1,213	9	43	9	4,760	Nil	..	Nil	..	Nil	..	35	159	159	6,175
Muzaffarpur ..	55	829	8	97	4	2,164	1	2	Nil	..	Nil	..	112	210	180	3,302
Darbhanga	35	776	14	188	5	3,264	Nil	..	1	50	Nil	..	103	237	158	4,515
Monghyr	57	234	17	96	1	45	Nil	..	Nil	..	Nil	..	135	337	210	712
Bhagalpur	68	400	15	297	15	534	1	18	Nil	..	Nil	..	71	237	170	1,486
Saharsa	20	434	3	28	2	97	Nil	..	Nil	..	Nil	..	40	172	65	731
Purnea	67	2,016	24	111	4	71	1	20	Nil	..	Nil	..	40	384	136	2,602
Santal Parganas ..	81	429	16	244	1	20	1	10	Nil	..	Nil	..	81	213	174	916
Palamau	5	162	4	64	Nil	..	Nil	..	Nil	..	Nil	..	18	51	27	277
Hazaribagh	35	85	4	408	Nil	..	Nil	..	Nil	..	1	11	60	146	100	650
Ranchi	3	15	3	26	Nil	..	1	20	Nil	..	Nil	..	83	224	90	285
Dhanbad	14	34	2	74	Nil	..	Nil	..	Nil	..	Nil	..	128	294	144	402
Singhbhum	45	346	7	83	Nil	..	Nil	..	1	10	Nil	..	50	150	103	589

*Includes hydrogenated oil also.

SOURCE : Chief Inspector of Factories, Bihar.

APPENDIX IX (MAP NO. 77)

PROPORTION OF NON-AGRICULTURAL WORKERS TO THE TOTAL WORKERS IN THE PRIMARY SECTOR, 1961

State/District	Workers in Livestock, Fishing, Forestry, etc., excluding Mining and Quarrying	Percentage of workers in Livestock and Hunting, Fishing, Forestry and Logging and Others (excluding Mining)	Percentage to total non-agricultural workers (column 2) of workers in—			
			Livestock and Hunting	Fishing	Forestry and Logging	Others
1	2	3	4	5	6	7
BIHAR	**381,047**	**2.47**	**80.33**	**10.01**	**5.46**	**4.20**
Patna	14,175	1.86	81.16	9.72	1.23	7.89
Gaya	18,529	1.51	82.94	3.83	7.09	6.14
Shahabad	26,205	2.95	87.83	4.60	2.90	4.67
Saran	6,646	0.65	69.24	22.65	1.13	6.98
Champaran	19,322	1.79	78.68	14.66	1.57	5.09
Muzaffarpur	10,609	0.95	43.22	40.23	1.06	15.49
Darbhanga	34,737	2.82	80.92	14.20	1.98	2.90
Monghyr	20,071	2.05	64.75	16.54	10.54	8.17
Bhagalpur	22,267	4.20	91.22	6.14	0.62	2.02
Saharsa	33,837	5.00	92.81	5.89	0.20	1.10
Purnea	44,237	4.57	80.19	18.41	0.27	1.13
Santal Parganas	45,033	3.72	86.75	3.70	7.48	2.07
Palamau	18,042	3.65	76.36	0.67	17.35	5.62
Hazaribagh	15,730	1.59	75.41	2.72	18.16	3.71
Ranchi	21,678	2.08	70.47	7.81	15.24	6.48
Dhanbad	9,344	2.23	81.55	9.92	1.90	6.63
Singhbhum	20,585	2.62	77.29	8.01	10.25	4.45

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-B (i), Table B-IV Part C.

APPENDIX X (MAP NO. 82)

FOOD PROCESSING INDUSTRIES, 1961

State/District	Rice and *dal* mills		Oil mills*		Sugar factory		Bakery factory		Dairy industry		Fruit preservation factory		Flour mill		Total	
	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment	No. of factories	Employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
BIHAR ..	**887**	**9,022**	**428**	**3,086**	**53**	**19,567**	**14**	**483**	**7**	**214**	**2**	**31**	**1,621**	**4,613**	**3,012**	**37,016**
Patna	69	463	121	626	1	1,000	8	288	5	154	Nil	..	193	676	397	3,207
Gaya	95	549	86	360	3	1,514	Nil	..	Nil	..	Nil	..	230	536	414	2,958
Shahabad	128	1,026	95	314	1	1,113	Nil	..	Nil	..	Nil	..	183	454	407	2,907
Saran	4	11	6	27	7	4,985	1	125	Nil	..	1	20	59	134	78	5,302
Champaran	106	1,213	9	43	9	4,760	Nil	..	Nil	..	Nil	..	35	159	159	6,175
Muzaffarpur ..	55	829	8	97	4	2,164	1	2	Nil	..	Nil	..	112	210	180	3,302
Darbhanga	35	776	14	188	5	3,264	Nil	..	1	50	Nil	..	103	237	158	4,515
Monghyr	57	234	17	96	1	45	Nil	..	Nil	..	Nil	..	135	337	210	712
Bhagalpur	68	400	15	297	15	534	1	18	Nil	..	Nil	..	71	237	170	1,486
Saharsa	20	434	3	28	2	97	Nil	..	Nil	..	Nil	..	40	172	65	731
Purnea	67	2,016	24	111	4	71	1	20	Nil	..	Nil	..	40	384	136	2,602
Santal Parganas ..	81	429	16	244	1	20	1	10	Nil	..	Nil	..	81	213	174	916
Palamau	5	162	4	64	Nil	..	Nil	..	Nil	..	Nil	..	18	51	27	277
Hazaribagh	35	85	4	408	Nil	..	Nil	..	Nil	..	1	11	60	146	100	650
Ranchi	3	15	3	26	Nil	..	1	20	Nil	..	Nil	..	83	224	90	285
Dhanbad	14	34	2	74	Nil	..	Nil	..	Nil	..	Nil	..	128	294	144	402
Singhbhum	45	346	7	83	Nil	..	Nil	..	1	10	Nil	..	50	150	103	589

*Includes hydrogenated oil also.

SOURCE : Chief Inspector of Factories, Bihar.

APPENDIX XI (MAP NO. 84)

DISTRIBUTION OF TEXTILE INDUSTRIES, 1961

State/District	Cotton		Jute		Wool		Silk		Others (hosiery products, wearing apparel, etc.)		Total	
	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment
1	2	3	4	5	6	7	8	9	10	11	12	13
BIHAR ..	**12**	**2,093**	**3**	**7,404**	**1**	**620**	**12**	**424**	**14**	**309**	**42**	**10,850**
Patna ..	5	824	..	..	..	..	..	..	8	223	13	1,047
Gaya ..	3	285	..	..	..		..	..	..	..	3	285
Shahabad ..	1	695	..	..	..	..	..	..	..	..	1	695
Saran ..	..	..	..	..	..	..	..	..	..	..	..	..
Champaran ..	1	32	..	..	..	..	..	..	..	..	1	32
Muzaffarpur	..	..	..	..	..	..	..	..	1	9	1	9
Darbhanga ..	1	242	1	2,796	..	..	..	..	..	..	2	3,038
Monghyr ..	..	..	..	..	..	..	..	..	1	13	1	13
Bhagalpur ..	..	..	..	..	1	620	12	424	2	48	15	1,092
Saharsa ..	..	..	..	..	..	..	..	..	..	..	..	..
Purnea ..	..	..	2	4,608	..	..	..	..	1	9	5	4,617
Santal Parganas	..	..	..	..	..	..	..	..	..	..	..	..
Palamau ..	..	..	..	..	..	..	..	..	..	..	..	..
Hazaribagh ..	..	..	..	..	..	..	..	..	1	7	1	7
Ranchi ..	..	..	..	..	..	..	..	..	..	..	..	..
Dhanbad ..	..	..	..	..	.	..	..	..	..	..	..	..
Singhbhum ..	15	1	..	..	.	..	..	..	..	..	1	15

SOURCE : Chief Inspector of Factories, Bihar.

APPENDIX XII (MAP NO. 87)

DISTRIBUTION OF METAL-BASED INDUSTRIES, 1961

State/District	Manufacture of iron and steel including smelting, refining, rolling, conversion into basic form		Aluminium factory		Copper smelting factory		Manufacture of structural steel products such as joist, railsheet, plate, etc.		Manufacture of aluminium products		Manufacture of iron and steel furniture		Total	
	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BIHAR ..	**5**	**21,464**	**1**	**427**	**2**	**1,634**	**152**	**17,651**	**3**	**64**	**7**	**160**	**170**	**41,400**
Patna ..	1	10	..	..	..	..	31	980	2	55	5	148	39	1,193
Gaya ..	..	..	..	..	1	4	3	63	..	..	..	..	4	67
Shahabad ..	..	..	..	..	..	..	7	363	..	..	1	5	8	368
Saran ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Champaran ..	..	..	..	..	..	..	2	50	..	..	..	..	2	50
Muzaffarpur ..	..	..	..	..	..	..	3	73	..	..	..	..	3	73
Darbhanga ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monghyr ..	..	..	..	..	..	..	31	187	..	..	..	..	31	187
Bhagalpur ..	..	..	..	..	..	..	6	53	1	9	..	..	7	62
Saharsa ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purnea ..	1	2	..	..	..	..	2	23	..	..	..	..	3	25
Santal Parganas ..	1	200	..	..	..	..	6	187	..	..	..	..	7	387
Palamau ..	..	..	..	..	..	..	1	20	..	..	..	..	1	20
Hazaribagh ..	..	..	..	..	..	..	5	107	..	..	..	..	5	107
Ranchi ..	..	..	1	427	..	..	14	223	..	..	1	7	16	657
Dhanbad ..	..	..	..	..	..	..	19	3,250	..	..	..	..	19	3,250
Singhbhum ..	2	21,252	..	..	1	1,630	22	12,072	..	..	..	..	25	34,954

SOURCE : Chief Inspector of Factories, Bihar.

APPENDIX XIII (MAP NO. 90)

DISTRIBUTION OF TRANSPORT EQUIPMENT INDUSTRIES, 1961

State/District	Manufacture, assembling and repairing of locomotives		Manufacture of coaches, wagons, tramways and other rail equipments		Manufacturing of motor vehicles including assembling of motor vehicles of all types		Bicycle manufacturing		Ship-building Industry		Aircraft Industry		Total	
	Number of factories	Total employment.	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment	Number of factories	Total employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BIHAR	**3**	**6,035**	**3**	**11,844**	**121**	**2,774**	**8**	**371**	**7**	**674**	**2**	**68**	**144**	**21,766**
Patna ..	..	..	..	..	25	845	5	355	7	674	1	56	53	1,930
Gaya ..	..	..	..	..	5	115	..	..	..	..	..	..	5	115
Shahabad	1	18	1	35	1	2	..	..	..	..	..	..	3	55
Saran	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Champaran	..	..	..	..	1	5	..	..	..	..	..	..	1	5
Muzaffarpur	..	..	..	..	8	41	..	..	..	..	..	..	8	41
Darbhanga	..	..	1	700	2	20	1	3	..	..	..	..	4	723
Monghyr	..	..	1	11,109	2	40	..	..	..	..	..	..	3	11,149
Bhagalpur	..	..	..	..	5	81	..	..	..	..	..	..	5	81
Saharsa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purnea ..	..	..	..	..	3	52	1	12	..	..	..	..	4	64
Santal Parganas	..	..	..	..	6	103	..	..	..	..	..	..	6	103
Palamau	..	..	..	..	1	9	..	..	..	..	..	..	1	9
Hazaribagh	..	..	..	..	7	120	1	1	..	..	..	..	8	121
Ranchi ..	..	..	..	..	15	361	..	..	..	..	..	..	15	361
Dhanbad	..	..	..	..	26	711	..	..	..	..	..	..	26	711
Singhbhum	2	6,017	..	..	14	269	..	..	..	..	1	12	17	6,298

SOURCE : Chief Inspector of Factories, Bihar.

APPENDIX XIV (MAP NO. 91)

DISTRIBUTION OF CHEMICAL INDUSTRIES, 1961

State/District	Industrial chemicals such as acid, alkalies & their salts not elsewhere classified		Fertilizers		Medicine and pharmaceutical products		Soaps, perfumes, cosmetics & other toilets products		Plastic products, synthetic resins, etc.		Synthetic, rubber and rubber products		Petro-chemical industries (methanol foremeldehydestyrene, etc.)		Coal-chemical industries (coaltar, carbon black, etc.)		Total	
	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment	No. of factories	Total employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
BIHAR	**14**	**1,461**	**1**	**7,500**	**11**	**787**	**7**	**125**	**73**	**3,427**	**10**	**60**	**3**	**203**	**6**	**926**	**125**	**14,489**
Patna ..	1	19	..	..	3	310	..	..	..	..	1	3	1	30	..	..	6	362
Gaya ..	..	..	..	..	..	..	..	..	..	..	3	3	1	44	..	..	4	47
Shahabad ..	2	299	..	..	..	..	1	19	..	..	1	35	..	..	..	..	4	353
Saran ..	..	..	..	..	2	104	..	..	..	..	..	..	1	129	..	..	3	233
Champaran ..	1	6	..	..	..	..	..	..	7	314	..	..	..	..	..	..	8	320
Muzaffarpur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Darbhanga ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monghyr ..	..	..	..	..	2	103	..	..	..	..	..	..	..	..	..	..	2	103
Bhagalpur ..	1	24	..	..	1	50	2	59	..	..	1	8	..	..	..	..	5	141
Saharsa ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purnea ..	..	..	..	..	..	..	1	6	..	..	..	..	..	..	..	..	1	6
Santal Parganas	1	15	..	..	1	20	..	..	4	285	..	..	..	..	..	..	6	320
Palamau ..	..	..	..	..	..	..	..	..	32	1,726	..	..	..	..	..	..	32	1,726
Hazaribagh ..	1	240	..	..	..	..	1	3	..	..	3	4	..	..	1	193	6	440
Ranchi ..	..	..	..	..	2	200	1	8	22	815	1	7	..	..	..	..	26	1,030
Dhanbad ..	5	716	1	7,500	..	..	..	..	3	72	..	..	..	..	5	733	14	9,021
Singhbhum ..	2	142	..	..	..	..	1	30	5	215	..	..	..	..	..	..	8	387

SOURCE : Chief Inspector of Factories, Bihar.

APPENDIX XV (MAP NO. 123)

PERCENTAGE OF SCHEDULED TRIBES TO THE TOTAL POPULATION, 1961

Rank	State/District	Percentage of scheduled tribes	Total anchals	Number of anchals in range						No. of anchals with no scheduled tribes
				Below 15.1 per cent	15.1—30.0 per cent	30.1—45.0 per cent	45.1—60.0 per cent	60.1—75.0 per cent	Above 75.0 per cent	
1	2	3	4	5	6	7	8	9	10	11
1	Ranchi ..	61.61	38	..	1	5	5	15	12	..
2	Singhbhum ..	47.31	25	..	1	7	9	3	5	..
3	Santal Parganas	38.24	41	8	7	7	6	9	4	..
4	Palamau ..	19.24	25	12	3	3	3	1	2	1
5	Hazaribagh ..	11.30	42	24	8	4	1	..	..	5*
6	Dhanbad ..	11.08	10	6	3	..	1	..	..	..
	BIHAR ..	**9.05**	**575**	**109**	**28**	**26**	**26**	**28**	**23**	**335**
7	Purnea ..	3.91	38	26	..	..	..	..	..	12
8	Bhagalpur ..	3.77	21	7	4	..	..	..	..	10
9	Monghyr ..	1.38	39	8	1	..	..	..	..	30
10	Shahabad ..	0.69	41	8	..	..	1	..	..	32
11	Saharsa ..	0.44	21	5	..	..	..	..	..	16
12	Champaran ..	0.10	36	3	..	..	..	..	..	33
13	Patna ..	0.05	28	1	..	..	..	..	..	27
14	Gaya ..	0.02	46	1	..	..	..	..	..	45
15	Saran ..	*	40	..	..	..	..	..	..	40
16	Muzaffarpur ..	*	40	..	..	..	..	..	..	40
17	Darbhanga ..	*	44	..	..	..	..	..	..	44

*Less than 0.005 per cent.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P C A.

APPENDIX XVI (MAP NO. 152)

PERCENTAGE DISTRIBUTION OF CENSUS HOUSEHOLDS ACCORDING TO NUMBER OF ROOMS OCCUPIED IN RURAL AREAS, 1961

Rank	State/District	One room	Two rooms	Three rooms	More than three rooms
1	2	3	4	5	6
1	Singhbhum	58.88	27.51	8.70	4.81
2	Dhanbad	54.81	28.11	9.94	7.63
3	Palamau	50.44	25.93	11.19	12.46
4	Santal Parganas	47.48	27.69	12.81	11.73
5	Hazaribagh	44.50	24.04	11.95	8.69
6	Monghyr	44.50	23.04	11.28	9.46
7	Saharsa	44.50	23.04	11.28	11.89
8	Muzaffarpur	44.50	23.04	11.28	11.89
9	Bhagalpur	44.50	23.04	11.28	11.89
10	Purnea	44.50	23.04	11.28	11.89

Rank	State/District	One room	Two rooms	Three rooms	More than three rooms
1	2	3	4	5	6
10	Darbhanga	38.98	35.32	15.22	10.36
11	Hazaribagh	35.93	31.14	16.05	16.80
	BIHAR	**35.62**	**29.63**	**15.73**	**18.87**
12	Muzaffarpur	32.94	36.03	17.55	13.36
13	Saran	28.67	29.79	18.84	22.56
14	Champaran	27.39	31.09	20.82	20.54
15	Patna	18.87	23.40	17.98	39.63
16	Gaya	15.96	20.46	18.29	45.18
17	Shahabad	15.48	21.06	18.80	44.51

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts IV-A and IV-B.

APPENDIX XVII

SUBDIVISIONWISE STATISTICS

State/District/ Sub division	Map No. 15 Percentage change in population 1901—21	Map No. 16 Percentage change in population 1921—51	Map No. 17 Percentage change in population 1901—61	Map No. 18 Percentage change in population 1951—61	Map No. 64 Percentage of male workers to total male population in rural areas	Map No. 65 Percentage of male workers to total male population in urban areas	Map No. 66 Percentage of female workers to total female population in rural areas	Map No. 67 Percentage of female workers to total female population in urban areas	Map No. 73 Percentage of cultivators to total rural population 1961
1	2	3	4	5	6	7	8	9	10
BIHAR ..	**2.98**	**37.89**	**70.08**	**19.77**	**56.0**	**51.7**	**28.5**	**10.4**	**24.1**
Patna ..	**2.92**	**60.33**	**81.61**	**16.67**	**53.1**	**50.1**	**24.5**	**9.7**	**18.5**
Patna City ..	20.01	43.54	33.70	16.45	56.0	49.0	24.5	9.7	17.0
Patna Sadar ..	4.44	121.36	178.49	20.46	52.6	51.9	22.2	7.0	16.0
Dinapur ..	3.27	62.21	93.12	15.28	52.8	50.6	20.2	10.2	18.3
Barh ..	1.98	49.93	67.43	13.93	53.3	49.5	23.9	10.7	16.7
Bihar ..	5.21	46.48	62.76	17.23	53.2	47.8	28.4	13.7	20.8
Gaya	**4.42**	**42.62**	**76.92**	**18.80**	**54.3**	**48.4**	**29.5**	**10.9**	**22.7**
Sadar ..	5.68	48.69	85.74	18.20	55.3	48.7	33.3	11.0	23.7
Nawada ..	1.85	37.08	62.58	20.84	53.9	47.8	32.6	11.0	24.8
Jehanabad ..	6.69	41.37	76.77	17.21	53.1	48.6	25.1	11.9	21.0
Aurangabad ..	6.61	39.00	76.91	19.38	54.0	47.2	24.8	9.7	20.6
Shahabad ..	**7.43**	**48.19**	**64.19**	**19.70**	**53.5**	**51.1**	**21.6**	**9.1**	**19.1**
Sadar ..	10.32	41.60	47.98	16.53	51.2	46.9	18.2	8.5	17.8
Buxar ..	15.49	52.43	52.62	18.49	52.6	53.0	19.6	10.9	18.7
Sasaram ..	0.14	53.33	88.76	23.28	54.3	53.6	22.0	8.3	20.0
Bhabua ..	2.75	47.70	73.55	20.81	57.1	56.3	29.2	13.1	20.7
Saran ..	**2.87**	**34.82**	**48.79**	**13.62**	**49.8**	**51.8**	**21.9**	**11.5**	**22.5**
Sadar ..	4.57	37.45	51.10	15.20	48.2	50.4	19.9	11.1	21.2
Siwan ..	5.12	38.69	48.10	12.54	48.5	53.0	21.4	11.6	21.7
Gopalganj ..	2.60	26.52	46.20	12.62	53.6	54.9	25.8	13.1	25.6
Champaran ..	**8.40**	**29.60**	**67.90**	**19.51**	**58.6**	**54.7**	**24.3**	**13.0**	**20.9**
Sadar ..	7.98	28.51	61.55	16.42	56.9	53.6	19.5	10.2	19.4
Bettiah ..	8.98	31.10	76.71	23.68	60.8	55.5	30.7	14.9	22.8
Muzaffarpur ..	**0.04**	**27.80**	**49.43**	**16.98**	**54.5**	**50.1**	**13.9**	**7.1**	**17.5**
Sadar ..	0.41	31.53	52.03	16.06	54.2	48.8	16.5	6.0	18.3
Sitamarhi ..	6.62	14.18	40.58	15.48	57.4	54.9	11.3	8.5	14.2
Hajipur ..	8.66	43.67	57.77	20.22	51.3	50.9	13.7	8.5	20.5
Darbhanga ..	**0.03**	**29.38**	**51.51**	**17.07**	**53.8**	**49.4**	**19.0**	**10.7**	**15.4**
Sadar ..	1.45	34.43	57.65	15.59	52.4	47.4	19.2	10.4	13.8
Madhubani ..	6.58	16.74	46.30	17.58	54.5	51.0	20.1	14.2	16.3
Samastipur ..	8.04	40.69	52.35	17.75	54.1	52.3	17.6	8.9	15.8
Monghyr ..	**1.94**	**40.35**	**63.61**	**18.88**	**55.2**	**48.7**	**20.6**	**8.5**	**19.2**
Sadar ..	1.08	41.92	66.84	16.30	53.6	47.1	27.3	8.5	17.3
Khagaria ..	3.48	41.69	78.75	20.54	56.6	49.0	22.6	6.1	18.7
Begusarai ..	8.85	35.46	48.43	20.20	54.8	51.2	16.5	6.2	14.8
Jamui ..	0.15	43.81	70.05	19.62	56.4	51.5	35.1	14.8	28.9
Bhagalpur ..	**5.11**	**67.84**	**67.97**	**19.74**	**56.1**	**47.7**	**29.6**	**10.7**	**19.9**
Sadar ..	1.91	46.55	74.68	21.52	55.4	47.3	22.6	9.9	15.7
Banka ..	9.44	49.72	58.90	17.19	57.0	53.4	38.2	22.0	25.2

APPENDIX XV (MAP NO. 123)

PERCENTAGE OF SCHEDULED TRIBES TO THE TOTAL POPULATION, 1961

Rank	State/District	Percentage of scheduled tribes	Total anchals	Number of anchals in range						No. of anchals with no scheduled tribes
				Below 15.1 per cent	15.1—30.0 per cent	30.1—45.0 per cent	45.1—60.0 per cent	60.1—75.0 per cent	Above 75.0 per cent	
1	2	3	4	5	6	7	8	9	10	11
1	Ranchi ..	61.61	38	..	1	5	5	15	12	..
2	Singhbhum ..	47.31	25	..	1	7	9	3	5	..
3	Santal Parganas	38.24	41	8	7	7	6	9	4	..
4	Palamau ..	19.24	25	12	3	3	3	1	2	1
5	Hazaribagh ..	11.30	42	24	8	4	1	..	..	5*
6	Dhanbad ..	11.08	10	6	3	..	1	..	..	..
	BIHAR	**9.05**	**575**	**109**	**28**	**26**	**26**	**28**	**23**	**335**
7	Purnea ..	3.91	38	26	..	..	..	..	..	12
8	Bhagalpur ..	3.77	21	7	4	..	..	..	..	10
9	Monghyr ..	1.38	39	8	1	..	..	..	..	30
10	Shahabad ..	0.69	41	8	..	..	1	..	..	32
11	Saharsa ..	0.44	21	5	..	..	..	..	..	16
12	Champaran ..	0.10	36	3	..	..	..	..	..	33
13	Patna ..	0.05	28	1	..	..	..	..	..	27
14	Gaya ..	0.02	46	1	..	..	..	..	..	45
15	Saran ..	*	40	..	..	..	..	..	..	40
16	Muzaffarpur ..	*	40	..	..	..	..	..	..	40
17	Darbhanga ..	*	44	..	..	..	..	..	..	44

*Less than 0.005 per cent.

SOURCE : Census of India, 1961, Vol. IV, Bihar, Part II-A, P C A.

APPENDIX XVI (MAP NO. 152)

PERCENTAGE DISTRIBUTION OF CENSUS HOUSEHOLDS ACCORDING TO NUMBER OF ROOMS OCCUPIED IN RURAL AREAS, 1961

Rank	State/District	One room	Two rooms	Three rooms	More than three rooms	Rank	State/District	One room	Two rooms	Three rooms	More than three rooms
1	2	3	4	5	6	1	2	3	4	5	6
1	Singhbhum	58.88	27.51	8.70	4.81	10	Darbhanga	38.98	35.32	15.22	10.36
2	Dhanbad	53.81	28.11	9.94	7.63	11	Hazaribagh	35.93	31.14	16.05	16.80
3	Palamau	50.34	25.93	11.19	12.46		**BIHAR**	**35.62**	**29.63**	**15.73**	**18.87**
4	Santal Parganas	47.48	27.69	12.81	11.73	12	Muzaffarpur	32.94	36 03	17.55	13.36
5	Ranchi	45.50	33.68	11.95	8.69	13	Saran	28.67	29.79	18.84	22.56
6	Saharsa	43.32	32.00	15.28	9.26	14	Champaran	27.39	31.09	20.82	20.54
7	Monghyr	43.02	29.91	13.04	13.89	15	Patna	18.87	23.40	17.98	39.63
8	Bhagalpur	41.28	31.02	14.26	13.28	16	Gaya	15.96	20.46	18.29	45.18
9	Purnea	40.00	31.15	15.91	12.83	17	Shahabad	15.48	21.06	18.80	44.51

SOURCE : Census of India, 1961, Vol. IV, Bihar, Parts IV-A and IV-B.

APPENDIX XVII

SUBDIVISIONWISE STATISTICS

State/District/ Sub livision	Map No. 15 Percentage change in population 1901—21	Map No. 16 Percentage change in population 1921—51	Map No. 17 Percentage change in population 1901—61	Map No. 18 Percentage change in population 1951—61	Map No. 64 Percentage of male workers to total male population in rural areas	Map No. 65 Percentage of male workers to total male population in urban areas	Map No. 66 Percentage of female workers to total female population in rural areas	Map No. 67 Percentage of female workers to total female population in urban areas	Map No. 73 Percentage of cultivators to total rural population 1961
1	2	3	4	5	6	7	8	9	10
BIHAR ..	**2.98**	**37.89**	**70.08**	**19.77**	**56.0**	**51.7**	**28.5**	**10.4**	**24.1**
Patna ..	**2.92**	**60.33**	**81.61**	**16.67**	**53.1**	**50.1**	**24.5**	**9.7**	**18.5**
Patna City ..	20.01	43.54	33.70	16.45	56.0	49.0	24.5	9.7	17.0
Patna Sadar ..	4.44	121.36	178.49	20.46	52.6	51.9	22.2	7.0	16.0
Dinapur ..	3.27	62.21	93.12	15.28	52.8	50.6	20.2	10.2	18.3
Barh ..	1.98	49.93	67.43	13.93	53.3	49.5	23.9	10.7	16.7
Bihar ..	5.21	46.48	62.76	17.23	53.2	47.8	28.4	13.7	20.8
Gaya	**4.42**	**42.62**	**76.92**	**18.80**	**54.3**	**48.4**	**29.5**	**10.9**	**22.7**
Sadar ..	5.68	48.69	85.74	18.20	55.3	48.7	33.3	11.0	23.7
Nawada ..	1.85	37.08	62.58	20.84	53.9	47.8	32.6	11.0	24.8
Jehanabad ..	6.69	41.37	76.77	17.21	53.1	48.6	25.1	11.9	21.0
Aurangabad ..	6.61	39.00	76.91	19.38	54.0	47.2	24.8	9.7	20.6
Shahabad ..	**7.43**	**48.19**	**64.19**	**19.70**	**53.5**	**51.1**	**21.6**	**9.1**	**19.1**
Sadar ..	10.32	41.60	47.98	16.53	51.2	46.9	18.2	8.5	17.8
Buxar ..	15.49	52.43	52.62	18.49	52.6	53.0	19.6	10.9	18.7
Sasaram ..	0.14	53.33	88.76	23.28	54.3	53.6	22.0	8.3	20.0
Bhabua ..	2.75	47.70	73.55	20.81	57.1	56.3	29.2	13.1	20.7
Saran ..	**2.87**	**34.82**	**48.79**	**13.62**	**49.8**	**51.8**	**21.9**	**11.5**	**22.5**
Sadar ..	4.57	37.45	51.10	15.20	48.2	50.4	19.9	11.1	21.2
Siwan ..	5.12	38.69	48.10	12.54	48.5	53.0	21.4	11.6	21.7
Gopalganj ..	2.60	26.52	46.20	12.62	53.6	54.9	25.8	13.1	25.6
Champaran ..	**8.40**	**29.60**	**67.90**	**19.51**	**58.6**	**54.7**	**24.3**	**13.0**	**20.9**
Sadar ..	7.98	28.51	61.55	16.42	56.9	53.6	19.5	10.2	19.4
Bettiah ..	8.98	31.10	76.71	23.68	60.8	55.5	30.7	14.9	22.8
Muzaffarpur ..	**0.04**	**27.80**	**49.43**	**16.98**	**54.5**	**50.1**	**13.9**	**7.1**	**17.5**
Sadar ..	0.41	31.53	52.03	16.06	54.2	48.8	16.5	6.0	18.3
Sitamarhi ..	6.62	14.18	40.58	15.48	57.4	54.9	11.3	8.5	14.2
Hajipur ..	8.66	43.67	57.77	20.22	51.3	50.9	13.7	8.5	20.5
Darbhanga ..	**0.03**	**29.38**	**51.51**	**17.07**	**53.8**	**49.4**	**19.0**	**10.7**	**15.4**
Sadar ..	1.45	34.43	57.65	15.59	52.4	47.4	19.2	10.4	13.8
Madhubani ..	6.58	16.74	46.30	17.58	54.5	51.0	20.1	14.2	16.3
Samastipur ..	8.04	40.69	52.35	17.75	54.1	52.3	17.6	8.9	15.8
Monghyr ..	**1.94**	**40.35**	**63.61**	**18.88**	**55.2**	**48.7**	**20.6**	**8.5**	**19.2**
Sadar ..	1.08	41.92	66.84	16.30	53.6	47.1	27.3	8.5	17.3
Khagaria ..	3.48	41.69	78.75	20.54	56.6	49.0	22.6	6.1	18.7
Begusarai ..	8.85	35.46	48.43	20.20	54.8	51.2	16.5	6.2	14.8
Jamui ..	0.15	43.81	70.05	19.62	56.4	51.5	35.1	14.8	28.9
Bhagalpur ..	**5.11**	**67.84**	**67.97**	**19.74**	**56.1**	**47.7**	**29.6**	**10.7**	**19.9**
Sadar ..	1.91	46.55	74.68	21.52	55.4	47.3	22.6	9.9	15.7
Banka ..	9.44	49.72	58.90	17.19	57.0	53.4	38.2	22.0	25.2

APPENDIX XVII—*concld.*

State/District/Subdivision	Map No. 15 Percentage change in population 1901—21	Map No. 16 Percentage change in population 1921—51	Map No. 17 Percentage change in population 1901—61	Map No. 18 Percentage change in population 1951—61	Map No. 64 Percentage of male workers to total male population in rural areas	Map No. 65 Percentage of male workers to total male population in urban areas	Map No. 66 Percentage of female workers to total female population in rural areas	Map No. 67 Percentage of female workers to total female population in urban areas	Map No. 73 Percentage of cultivators to total rural population 1961
1	2	3	4	5	6	7	8	9	10
Saharsa ..	**0.29**	**22.59**	**61.05**	**31.75**	**57.2**	**55.4**	**34.0**	**15.8**	**24.7**
Sadar ..	6.44	46.39	64.56	20.15	55.7	55.8	31.6	14.4	23.3
Supaul ..	4.37	11.67	29.84	53.71	57.5	56.4	37.4	14.8	27.7
Madhepura ..	11.66	55.10	110.35	21.46	57.8	53.6	32.1	18.1	22.6
Purnea ..	**14.75**	**24.97**	**96.47**	**37.02**	**58.8**	**57.9**	**19.2**	**8.4**	**19.2**
Sadar ..	22.75	33.11	123.69	36.90	59.5	56.8	25.7	12.1	19.3
Araria ..	9.35	17.90	86.96	45.01	58.5	60.7	17.8	7.6	20.0
Kishanganj ..	2.45	11.01	24.35	36.41	59.7	61.4	7.0	8.1	20.3
Katihar ..	24.15	52.81	148.97	31.23	58.0	55.6	19.7	5.1	17.9
Santal Parganas	**0.60**	**29.46**	**48.25**	**15.21**	**60.2**	**50.6**	**46.9**	**9.1**	**40.6**
Dumka ..	5.09	35.95	46.48	13.52	61.3	50.1	52.3	6.2	47.0
Deoghar ..	25.51	45.42	23.67	14.16	59.9	49.9	46.5	8.8	41.5
Godda ..	14.35	31.73	67.00	10.87	59.0	52.7	47.9	16.1	37.7
Jamtara ..	9.31	39.53	70.77	11.96	61.0	56.4	48.4	15.5	43.3
Rajmahal ..	11.95	13.97	52.49	19.52	60.2	48.7	40.6	6.4	32.6
Pakaur ..	7.17	8.47	45.41	25.08	60.0	52.9	42.4	8.7	39.1
Palamau ..	**18.27**	**34.41**	**91.55**	**20.49**	**57.5**	**49.7**	**39.4**	**12.6**	**29.6**
Sadar ..	20.59	35.93	95.39	19.20	56.6	47.5	34.1	6.7	25.4
Garhwa ..	20.49	30.55	91.91	22.00	58.1	54.3	41.5	19.0	30.7
Latehar ..	10.00	36.60	82.50	21.45	59.0	52.1	48.6	26.2	37.5
Hazaribagh ..	**8.40**	**51.71**	**103.44**	**23.70**	**57.5**	**53.3**	**40.2**	**14.6**	**35.4**
Sadar ..	9.37	65.03	125.43	24.90	58.0	52.4	40.2	13.1	35.0
Chatra ..	0.77	20.11	45.76	22.30	55.8	47.9	35.9	8.4	29.1
Giridih ..	11.99	49.65	105.42	22.57	57.4	54.8	46.2	16.8	38.6
Ranchi ..	**12.38**	**39.47**	**18.60**	**15.86**	**60.9**	**47.8**	**56.9**	**13.0**	**48.5**
Sadar ..	8.55	50.38	97.11	20.75	59.7	47.9	53.9	9.4	44.4
Khunti ..	5.65	29.58	51.15	10.41	62.9	50.0	59.7	28.5	50.0
Gumla ..	14.49	30.90	72.25	14.93	60.9	39.6	59.2	12.9	52.0
Simdega ..	33.15	41.48	111.03	12.02	60.5	52.0	56.9	40.2	50.9
Dhanbad ..	**49.58**	**60.03**	**206.20**	**27.91**	**62.4**	**61.3**	**37.8**	**11.9**	**25.5**
Sadar ..	60.09	68.39	250.09	29.87	63.3	61.0	38.7	11.7	23.1
Baghmara ..	36.18	47.51	150.23	24.56	61.1	62.7	36.6	13.4	28.7
Singhbhum ..	**18.09**	**58.30**	**125.35**	**20.54**	**60.9**	**52.5**	**52.6**	**9.3**	**38.2**
Chaibasa ..	12.63	50.65	94.53	14.64	60.8	53.0	57.8	14.6	42.5
Dhalbhum ..	37.59	84.71	226.78	28.58	60.3	52.4	44.4	8.0	30.2
Seraikela ..	5.87	34.46	65.53	16.29	61.9	53.4	54.0	10.1	41.2

APPENDIX XVIII

ANCHALWISE STATISTICS

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
	Patna	**535**	**949**	**937**	**971**	**33.75**	**50.92**	**15.29**	**45.96**	**9.91**
1	Patna Rural (*a*) * ..	667	826	864	864	55.66	68.40	38.85	48.86	11.35
	Patna Rural (*b*) ..									
2	Phulwari ..	577	966	965	965	32.35	52.36	11.49	52.36	11.49
3	Masaurhi ..	416	989	989	989	30.05	48.13	11.69	48.13	11.69
4	Dhanarua ..	428	976	964	964	26.24	43.57	8.31	43.57	8.31
5	Punpun ..	425	999	996	996	30.93	50.22	11.66	50.22	11.66
6	Maner ..	481	989	1,019	1,019	26.38	43.55	9.55	43.55	9.55
7	Bihta ..	507	981	955	955	31.72	49.56	12.86	49.56	12.86
8	Dinapur-*cum*-Khagaul ..	983	903	893	948	39.49	56.24	20.48	42.66	6.83
9	Bikram ..	455	987	996	996	27.80	45.55	10.05	45.55	10.05
10	Paliganj ..	422	990	1,016	1,016	26.76	44.19	9.64	44.19	9.64
11	Naubatpur ..	500	967	985	985	31.22	50.21	12.00	50.21	12.00
12	Fatwah ..	494	972	970	982	28.64	46.29	10.43	45.37	9.76
13	Barh	576	956	939	957	30.56	47.95	11.90	45.05	8.75
14	Pandarakh ..	324	993	972	972	24.55	41.66	6.86	41.66	6.86
15	Bakhtiarpur ..	426	977	933	939	29.36	46.06	11.36	44.62	9.99
16	Harnaut	383	990	964	964	28.98	46.41	10.88	46.41	10.88
17	Mokameh ..	341	963	941	957	32.42	48.48	15.26	44.45	10.26
18	Sarmera	297	997	1,014	1,014	26.83	43.26	10.71	43.26	10.71
19	Bihar	876	969	948	965	37.70	53.13	21.29	40.83	7.42
20	Noorsarai ..	509	969	958	958	29.52	47.66	10.64	47.66	10.64
21	Rahui	514	959	944	944	26.89	45.20	7.29	45.20	7.29
22	Asthawan ..	496	1,002	1,017	1,017	28.29	44.87	12.18	44.87	12.18
23	Giriak	446	943	980	980	24.93	42.08	7.36	42.08	7.36
24	Rajgir	339	964	965	972	28.83	45.58	11.36	44.76	11.03
25	Chandi	455	970	971	971	28.94	47.63	9.61	47.63	9.61
26	Hilsa	490	961	946	946	28.21	46.34	8.95	46.34	8.95
27	Ekangar Sarai ..	479	958	955	955	30.71	50.71	9.65	50.71	9.65
28	Islampur	370	956	976	976	25.44	42.22	8.19	42.22	8.19

*Patna Rural (*a*) and Patna Rural (*b*) anchals have been treated as one anchal.

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No.133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
Gaya	.. ..	**297**	**1,000**	**1,010**	**1,023**	**22.74**	**37.36**	**8.26**	**35.08**	**6.82**
1	Manpur	323	998	977	977	19.93	33.73	5.60	33.73	5.60
2	Gaya Town Anchal ..	340	988	948	948	43.47	58.48	25.61	33.32	5.71
3	Bodh Gaya ..	269	964	975	1,006	19.12	31.90	5.86	28.94	5.57
4	Wazirganj	283	1,030	1,042	1,042	18.37	32.41	4.87	32.41	4.87
5	Paraiya	272	1,001	986	986	22.19	37.28	6.78	37.28	6.78
6	Atri	250	1,005	1,002	1,002	17.36	29.09	5.60	29.09	5.60
7	Khizir Sarai ..	338	989	980	980	22.99	38.16	7.55	38.16	7.55
8	Tikari	380	996	1,020	1,027	26.14	43.12	9.59	41.25	8.32
9	Belaganj	378	991	1,012	1,012	25.24	39.81	10.86	39.81	10.86
10	Konch	368	991	1,018	1,018	21.62	36.84	6.72	36.84	6.72
11	Mohanpur ..	190	1,080	1,081	1,081	11.77	21.23	3.11	21.23	3.11
12	Barachatti ..	154	1,056	1,044	1,044	11.06	19.11	3.40	19.11	3.40
13	Fatehpur	220	1,065	1,061	1,061	12.98	23.47	3.18	23.47	3.18
14	Amas	224	1,040	1,051	1,051	14.22	24.59	4.40	24.59	4.40
15	Sherghati	280	1,044	1,021	1,029	17.83	28.50	7.42	24.50	4.83
16	Gurua	290	1,035	1,051	1,051	16.35	29.18	4.19	29.18	4.19
17	Imamganj	220	981	1,008	1,008	13.52	22.51	4.51	22.51	4.51
18	Dumaria	116	1,021	1,029	1,029	11.35	19.27	3.58	19.27	3.58
19	Nawada	445	1,023	1,004	1,031	23.67	38.57	8.78	33.23	5.54
20	Akbarpur	221	1,068	1,066	1,066	20.96	35.95	7.05	35.95	7.05
21	Hisua	422	1,015	1,040	1,038	23.28	38.69	8.56	36.77	7.29
22	Narhat	436	1,082	1,119	1,119	21.53	37.60	7.42	37.60	7.42
23	Gobindpur ..	289	1,104	1,118	1,118	18.25	31.86	6.33	31.86	6.33
24	Warisaliganj ..	445	978	983	1,004	25.21	41.21	8.93	38.63	7.29
25	Rajauli	139	1,039	1,061	1,061	19.55	32.85	7.08	32.85	7.08
26	Sirdala	240	1,046	1,095	1,095	15.53	28.39	3.95	28.39	3.95
27	Pakri Barawan ..	296	1,022	1,047	1,047	19.94	33.08	7.50	33.08	7.50
28	Kawakole	181	1,060	1,075	1,075	15.41	27.75	3.95	27.75	5.95
29	Kako	468	951	1,014	1,014	26.00	40.48	11.78	40.48	11.78
30	Jehanabad	500	963	965	992	30.95	47.87	13.39	43.17	9.26

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No.138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
31	Kurtha	446	973	1,008	1,008	23.28	38.50	8.19	38.50	8.19
32	Ghosi	420	979	988	988	27.88	45.02	10.51	45.02	10.51
33	Makhdumpur ..	402	995	1,033	1,033	29.53	47.38	11.86	47.38	11.86
34	Arwal	467	1,008	1,016	1,016	27.63	46.53	9.06	46.53	9.06
35	Karpi	375	972	998	998	25.44	42.81	8.15	42.81	8.15
36	Daudnagar ..	354	995	994	1,001	25.36	42.21	8.40	40.14	7.17
37	Haspura	413	951	1,005	1,005	20.88	34.69	7.15	34.69	7.15
38	Goh	256	981	1,014	1,014	24.54	40.89	8.45	40.89	8.45
39	Nabinagar	186	963	964	964	17.31	29.77	4.30	29.77	4.30
40	Kutumba	292	999	1,003	1,003	19.90	34.59	5.25	34.59	5.25
41	Aurangabad ..	258	951	971	1,012	27.64	43.43	11.32	37.16	7.51
42	Deo	220	1,023	1,020	1,020	20.15	34.17	6.51	34.17	6.51
43	Rafiganj	259	1,025	1,038	1,038	20.89	34.92	7.50	34.92	7.50
44	Obra	291	995	1,008	1,008	25.12	42.80	7.57	42.80	7.57
45	Madanpur ..	209	1,041	1,021	1,021	19.91	33.30	6.83	33.30	6.83
46	Barun	201	976	978	978	22.22	37.96	6.03	37.96	6.03
Shahabad	.. ..	**283**	**979**	**990**	**1,003**	**25.62**	**42.41**	**8.66**	**40.69**	**7.26**
1	Arrah	844	962	949	1,077	40.23	58.07	21.45	47.71	8.66
2	Udwantnagar ..	357	1,072	1,041	1,041	25.74	44.98	7.51	44.98	7.51
3	Koilwar	422	1,021	1,053	1,053	31.05	51.78	11.63	51.78	11.63
4	Sandesh	354	1,016	1,047	1,047	24.47	43.74	6.28	43.74	6.28
5	Barhara	494	1,081	1,119	1,119	27.58	48.70	9.17	48.70	9.17
6	Shahpur	599	1,039	1,055	1,055	21.59	38.04	6.18	38.04	6.18
7	Behea	416	1,031	1,048	1,048	24.80	42.65	7.91	42.65	7.91
8	Jagdishpur ..	376	995	1,016	1,018	23.04	40.17	6.28	39.61	5.78
9	Charpokhri ..	379	987	1,009	1,009	25.50	44.76	6.45	44.76	6.45
10	Piro	472	990	1,028	1,028	26.45	46.14	7.30	46.14	7.30
11	Sahar	368	982	1,023	1,023	24,37	42.74	6.47	42.74	6.47
12	Tarari	385	987	1,033	1,033	26.97	47.04	7.60	47.04	7.60
13	Buxar	502	949	941	962	31.39	47.89	13.73	43.43	10.01
14	Rajpur	280	973	971	971	22.97	37.59	7.82	37.59	7.82

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
15	Itarhi	265	947	971	971	22.04	36.63	6.89	36.63	6.89
16	Simri	533	1,014	1,058	1,058	22.90	38.72	8.08	38.72	8.08
17	Dumraon	441	1,000	988	1,007	26.37	42.82	9.72	39.61	7.34
18	Nawanagar ..	361	960	1,002	1,002	22.82	38.84	6.77	38.84	6.77
19	Barhampur	489	1,033	1,036	1,036	23.69	40.31	7.73	40.31	7.73
20	Bikramganj	407	981	996	1,008	26.29	45.27	7.20	45.08	7.01
21	Karakat	438	993	1,022	1,022	27.35	47.26	7.84	47.26	7.84
22	Dinara	256	976	988	988	24.36	42.49	5.91	42.49	5.91
23	Dawath	435	966	1,009	1,009	25.74	43.33	8.23	43.33	8.23
24	Kargahar	209	940	962	962	22.31	37.93	5.99	37.93	5.99
25	Nokha	380	977	994	994	25.96	44.15	7.51	44.15	7.51
26	Sasaram	301	949	942	946	28.82	44.61	11.98	37.90	6.42
27	Sheosagar	178	949	974	974	21.88	37.01	6.32	37.01	6.32
28	Rohtas	101	948	891	891	23.83	38.80	6.70	38.80	6.70
29	Nawhatta	88	924	870	870	20.53	32.30	6.48	32.30	6.48
30	Chenari	171	952	973	973	19.86	33.63	5.59	33.63	5.59
31	Dehri	522	857	833	915	35.06	51.26	15.05	42.59	7.11
32	Nasriganj	401	1,028	1,029	1,034	28.42	48.11	9.30	47.25	8.38
33	Mohania	247	973	972	972	23.24	38.50	7.59	38.50	7.59
34	Ramgarh	245	960	995	995	21.40	35.64	7.01	35.64	7.01
35	Durgawati	282	942	982	982	20.64	33.88	7.15	33.88	7.15
36	Kudra	233	968	961	961	22.73	37.94	6.99	37.94	6.99
37	Bhabua	280	979	977	994	24.28	39.04	9.07	36.35	7.49
38	Bhagwanpur ..	138	958	972	972	18.89	31.50	5.89	31.50	5.89
39	Chainpur	135	964	985	985	16.73	26.78	6.46	26.78	6.46
40	Adhaura	18	937	947	947	11.00	20.58	0.64	20.58	0.64
41	Chand	221	942	953	953	20.25	33.73	5.98	33.73	5.98
Saran	.. ..	**516**	**1,102**	**1,137**	**1,150**	**21.52**	**38.73**	**6.70**	**37.56**	**6.00**
1	Chapra	709	992	964	1,087	34.58	52.87	15.32	40.40	5.84
2	Jalalpur	594	1,201	1,210	1,210	23.73	44.75	6.60	44.75	6.60
3	Revelganj	403	1,188	1,141	1,177	24.19	43.44	7.78	41.68	7.31

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
4	Baniapur	612	1,196	1,236	1,236	22.20	43.37	6.58	42.37	6.58
5	Garkha	520	1,179	1,153	1,153	23.21	43.13	6.50	43.13	6.50
6	Manjhi	486	1,205	1,226	1,226	24.87	45.90	8.20	45.90	8.20
7	Ekma	600	1,229	1,244	1,244	25.14	47.76	7.68	47.76	7.68
8	Dariapur	437	1,110	1,145	1,145	22.48	41.03	6.64	41.03	6.64
9	Parsa	487	1,094	1,154	1,154	22.23	41.14	6.34	41.14	6.34
10	Marhaura	641	1,048	1,135	1,135	21.71	40.08	5.89	40.08	5.89
11	Amnaur	580	1,112	1,175	1,175	22.49	42.25	6.19	42.25	6.19
12	Mashrakh	462	1,138	1,201	1,201	18.10	35.59	4.04	35.59	4.40
13	Taraiya	520	1,185	1,159	1,159	20.01	37.84	4.92	37.84	4.92
14	Sonepur	536	1,056	1,027	1,027	29.10	49.48	9.43	49.48	9.43
15	Dighwara	570	1,135	1,155	1,155	27.91	48.58	10.61	48.58	10.61
16	Goriakothi	615	1,091	1,197	1,197	20.12	37.21	6.35	37.21	6.35
17	Basantpur	521	1,110	1,219	1,219	18.53	36.04	4.72	36.04	4.72
18	Bhagwanpurhat ..	541	1,288	1,261	1,261	19.30	38.14	4.87	38.14	4.87
19	Maharajganj ..	655	1,182	1,148	1,185	24.09	43.25	7.74	40.41	6.21
20	Daraundha	537	1,112	1,181	1,181	19.77	37.99	4.78	37.99	4.78
21	Siwan	760	1,043	1,051	1,136	27.70	43.90	12.46	34.91	5.16
22	Pachrukhi	576	1,107	1,116	1,116	21.55	38.97	6.29	38.97	6.29
23	Hussainganj ..	652	1,114	1,173	1,173	23.38	39.24	10.15	39.24	10.15
24	Mairwa	514	1,064	1,107	1,107	18.83	34.74	4.72	34.74	4.72
25	Barharia	592	1,165	1,171	1,171	19.37	33.99	7.17	33.99	7.17
26	Darauli	408	1,090	1,134	1,134	21.36	37.34	7.64	37.34	7.64
27	Andar	463	1,101	1,162	1,162	20.23	36.58	6.58	36.58	6.58
28	Guthani	529	1,103	1,111	1,111	19.78	35.69	5.84	35.69	5.84
29	Raghunathpur ..	449	1,094	1,135	1,135	18.70	33.32	6.14	33.32	6.14
30	Siswan	333	1,140	1,164	1,164	21.81	39.14	7.41	39.14	7.41
31	Hathua	552	1,032	1,119	1,119	20.30	36.36	6.19	36.32	6.19
32	Uchkagaon ..	510	1,053	1,095	1,123	20.09	35.54	6.32	32.82	5.07
33	Bijaipur	397	1,047	1,098	1,098	14.97	27.63	3.68	27.63	3.68
34	Bhorey	441	1,035	1,072	1,072	15.00	27.96	3.05	27.96	3.05

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
35	Katia	397	1,016	1,103	1,103	15.17	28.17	3.42	28.17	3.42
36	Kuchaikot ..	452	1,042	1,097	1,097	18.25	32.86	4.90	32.86	4.90
37	Gopalganj	445	993	996	1,032	20.35	32.89	7.47	28.02	4.63
38	Manjha	494	1,038	1,116	1,116	19,46	34.48	6.28	34.48	6.28
39	Barauli	507	1,019	1,116	1,116	17.39	32.13	4.57	32.13	4.57
40	Baikunthpur ..	402	1,087	1,150	1,150	14.94	28.78	3.19	28.78	3.19
Champaran	..	**329**	**985**	**978**	**986**	**15.46**	**25.20**	**5.41**	**23.60**	**4.43**
1	Motihari	433	891	905	991	24.64	36.08	11.75	21.81	3.15
2	Turkaulia	398	1,013	976	976	12.54	20.91	3.96	20.91	3.96
3	Sugauli	462	940	959	979	15.61	25.77	4.91	23.61	3.80
4	Adapur	431	938	954	954	13.68	22.84	3.93	22.84	3.93
5	Narkatia	430	988	978	978	14.49	24.38	4.34	24.38	4.34
6	Raxaul	482	914	918	943	18.40	28.46	7.21	22.92	4.07
7	Ramgarhwa ..	405	969	966	966	15.72	25.23	5.75	25.23	5.79
8	Dhaka	559	1,111	1,082	1,082	16.22	26.79	6.53	26.79	6.53
9	Chiraiya	421	1,051	1,047	1,047	13.98	23.67	4.76	23.67	4.76
10	Ghorasahan ..	458	1,027	1,009	1,009	13.72	24.15	3.44	24.15	3.44
11	Patahi	497	1,047	1,050	1,050	16.12	25.74	7.03	25.74	7.03
12	Pakridayal	423	1,061	1,044	1,044	15.55	25.26	6.26	25.26	6.26
13	Kesaria	380	1,024	1,082	1,082	16.17	29.03	5.43	29.03	5.43
14	Kalyanpur	405	1,063	1,058	1,058	15.98	27.83	4.87	27.83	4.87
15	Pipra	406	1,015	1,025	1,030	15.44	25.73	5.24	23.87	4.19
16	Madhuban	436	1,037	1,052	1,052	11.84	21.35	2.86	21.35	2.86
17	Mehsi	459	1,075	1,059	1,059	16.64	28.65	5.42	28.65	5.42
18	Gobindganj ..	352	988	1,016	1.016	19.33	31.26	7.49	31.26	7.49
19	Harsidhi	369	999	983	983	13.16	22.38	3.70	22.38	3.70
20	Paharpur	404	973	965	965	13.06	22.18	3.51	22.18	3.51
21	Bettiah	1,004	947	919	965	36.34	47.04	24.46	25.07	7.04
22	Jogapatti	369	939	932	932	11.34	18.93	2.82	18.93	2.82
23	Majhaulia	385	969	949	949	12.33	20.73	3.35	20.73	3.35
24	Nautan	386	950	942	942	11.22	20.07	3.49	20.07	3.49

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
25	Bairia	317	1,007	936	936	8.93	15.30	1.99	15.30	1.99
26	Sikta	361	978	964	964	11.63	19.92	2.84	19.92	2.84
27	Chanpatia	400	929	946	949	15.51	25.33	4.90	23.09	3.86
28	Bagaha	328	942	961	969	15.45	24.04	6.37	21.72	5.14
29	Sidhaw	148	987	891	891	14.70	24.56	3.40	24.56	3.40
30	Madhubani ..	230	934	948	948	9.97	18.12	1.16	18.12	1.16
31	Thakrahan	217	990	963	963	9.47	16.92	1.58	16.92	1.58
32	Narkatiaganj ..	355	954	948	976	16.80	26.93	5.96	23.93	4.55
33	Gaunaha	201	999	957	957	14.31	24.3	3.79	24.23	3.79
34	Ramnagar	223	950	925	925	18.11	27.90	7.20	27.90	7.20
35	Mainatanr	248	1,054	983	983	13.79	23.14	4.29	23.14	4.29
36	Lauriya	418	944	954	954	18.70	29.32	7.40	29.32	7.46
Muzaffarpur	..	**526**	**1,034**	**1,047**	**1,062**	**20.15**	**33.34**	**7.63**	**31.54**	**6.59**
1	Paru I (Deoria) ..	419	1,026	1,116	1,116	18.16	31.80	6.18	31.80	6.18
2	Paru II (Saraiya) ..	447	1,072	1,135	1,135	21.43	37.75	7.36	37.75	7.36
3	Sahebganj ..	446	1,038	1,104	1,104	15.77	28.11	4.78	28.11	4.78
4	Baruraj	434	1,037	1,106	1,106	16.83	29.90	5.26	29.90	5.26
5	Musahri	960	867	827	1,009	42.07	55.38	25.53	34.78	9.28
6	Bochaha	486	1,002	1,011	1,011	14.23	22.58	6.00	22.58	6.00
7	Minapur	446	1,045	1,023	1,023	13.34	23.18	3.68	23.18	3.68
8	Kurhani	543	1,056	1,092	1,092	20.69	35.76	7.09	35.76	7.09
9	Sakra	593	1,009	1,120	1,120	23.70	40.59	8.70	40.59	8.70
10	Dholi	481	1,007	1,056	1,056	20.86	34.59	8.05	34.59	8.05
11	Kanti	500	1,053	1,097	1,097	20.55	34.74	7.84	34.74	7.84
12	Katra	442	1,068	1,091	1,091	16.27	26.66	6.85	26.66	6.85
13	Aurai	545	1,000	1,053	1,053	16.30	25.35	7.55	25.35	7.55
14	Gaighatti	462	1,021	1,054	1,054	17.48	29.30	6.36	29.30	6.36
15	Dumra	614	991	978	1,028	19.75	31.13	8.08	23.58	4.29
16	Bathnaha	461	1,022	997	997	13.35	22.54	4.14	22.54	4.14
17	Riga	542	998	1,024	1,024	15.30	25.60	5.25	25.60	5.25
18	Sonbarsa	490	1,032	999	999	14.45	25.47	3.41	25.47	3.41

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
19	Parihar	537	1,029	1,026	1,026	14.85	26.40	3.65	26.40	3.65
20	Sheohar	537	993	1,019	1,019	17.74	28.55	6.97	28.55	6.97
21	Piprarhi	511	1,017	1,014	1,014	16.25	25.71	6.95	25.71	6.95
22	Bairgania	638	1,022	1,022	1,022	19.37	31.70	5.33	31.70	5.33
23	Majorganj	481	980	1,002	1,002	16.64	27.60	5.75	27.60	5.75
24	Belsand	527	1,031	1,044	1,044	13.77	22.57	5.38	22.57	5.38
25	Runisaidpur ..	502	1,027	1,031	1,031	16.35	25.04	7.92	25.04	7.92
26	Pupri	507	1,068	1,051	1,051	18.41	30.97	6.69	30.97	6.69
27	Nanpur	534	1,134	1,113	1,113	15.06	25.38	5.91	35.38	5.91
28	Bajpatti	555	1,075	1,073	1,073	16.42	27.46	6.19	27.46	6.19
29	Sursand	507	1,040	1,062	1,062	20.29	34.26	7.18	34.26	7.18
30	Mahua	633	1,068	1,088	1,088	22.87	40.70	6.78	40.70	6.78
31	Goraul	600	1,067	1,082	1,082	21.24	37.75	6.24	37.75	6.24
32	Jandaha	649	1,053	1,046	1,046	21.73	37.41	6.99	37.41	6.99
33	Patepur	453	1,116	1,097	1,097	19.84	34.91	6.33	34.91	6.33
34	Lalganj	617	1,078	1,062	1,071	24.31	40.09	9.54	38.97	8.88
35	Vaishali	466	1,095	1,141	1,141	23.05	39.49	8.98	39.49	8.98
36	Hajipur	751	996	1,034	1,085	29.55	47.37	12.31	44.22	9.07
37	Bidupur	738	1,051	1,067	1,067	26.40	44.61	9.58	44.61	9.58
38	Mahnar	645	1,093	1,080	1,084	24.68	40.90	9.88	38.33	7.98
39	Sahdai Buzurg (Desari)..	551	1,133	1,099	1,099	23.97	41.85	8.09	41.85	8.09
40	Raghopur ..	314	978	956	956	16.84	29.72	3.27	29.72	3.27
Darbhanga	...	**507**	**1,044**	**1,059**	**1,070**	**19.76**	**33.60**	**6.81**	**32.14**	**6.01**
1	Darbhanga ..	930	995	973	1,107	32.03	47.42	16.18	26.17	5.31
2	Hayaghat	505	1,082	1,084	1,084	21.79	34.96	9.86	34.96	9.86
3	Keotiranway ..	613	1,083	1,183	1,183	16.90	30.54	5.80	30.54	5.80
4	Singhwara ..	579	1,108	1,232	1,232	18.04	31.08	7.72	31.08	7.72
5	Bahadurpur ..	510	1,056	1,081	1,081	19.20	31.93	7.49	31.93	7.49
6	Jale	521	1,099	1,159	1,159	19.61	32.07	9.11	32.07	9.11
7	Benipur	517	1,061	1,104	1,104	16.64	30.00	4.75	30.00	4.75
8	Baheri	468	1,053	1,144	1,144	16.06	29.99	3.51	29.99	3.51

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
9	Manigachhi ..	594	1,078	1,107	1,107	17.02	29.31	6.05	29.31	6.05
10	Biraul	486	1,073	1,079	1,079	16.14	28.84	4.45	28.84	4.45
11	Ghanshyampur ..	359	1,095	1,060	1,060	15.61	27.61	4.15	27.61	4.15
12	Benipatti	506	1,077	1,100	1,100	20.37	34.28	7.84	34.28	7.84
13	Bisfi	606	1,158	1,143	1,143	17.01	30.87	5.26	30.87	5.26
14	Harlakhi	457	1,076	1,091	1,091	17.34	31.11	4.94	31.11	4.94
15	Madhwapur ..	463	1,047	1,063	1,063	20.03	34.90	6.32	34.90	6.32
16	Khajauli	531	1,073	1,047	1,047	18.67	32.09	5.94	32.09	5.94
17	Babu Barhi ..	418	1,090	1,058	1,058	17.09	31.58	3.57	31.58	3.57
18	Ladania	325	1,072	1,046	1,046	14.60	27.40	2.50	27.40	2.50
19	Jainagar	563	1,023	994	1,013	18.35	31.96	4.64	28.46	2.77
20	Basopatti	487	1,060	1,063	1,063	17.23	30.16	5.12	30.16	5.12
21	Madhubani ..	702	1,025	1,011	1,054	21.94	35.42	8.70	29.57	6.03
22	Pandaul	653	1,051	1,049	1,049	21.74	35.65	8.51	35.65	8.51
23	Rajnagar	560	1,059	1,036	1,036	19.62	33.02	6.75	33.02	6.75
24	Jhanjharpur ..	500	1,102	1,106	1,106	19.49	32.71	7.76	32.71	7.76
25	Andhratharhi ..	429	1,052	1,082	1,082	17.50	31.95	4.29	31.95	4.29
26	Phulparas	391	1,048	1,061	1,061	18.34	33.24	4.36	33.24	4.36
27	Laukahi	284	1,061	1,013	1,013	18.52	34.89	2.41	34.89	2.41
28	Madhepur	377	1,017	1,034	1,034	18.37	32.32	4.91	32.32	4.91
29	Laukaha	341	1,060	1,021	1,021	13.76	24.53	3.30	24.53	3.30
30	Samastipur	835	958	941	1,028	33.38	50.56	15.06	42.40	8.26
31	Sarairanjan	585	1,012	1,067	1,067	21.96	37.58	7.59	37.58	7.59
32	Ujiarpur	593	1,033	1,058	1,058	22.16	38.52	6.94	38.52	6.94
33	Tajpur Morwa ..	526	1,056	1,073	1,073	21.56	37.18	7.28	37.18	7.28
34	Pusa	727	1,062	1,065	1,065	29.34	47.00	12.92	47.00	12.92
35	Rusera	563	988	1,019	1,028	18.34	31.98	4.99	29.46	3.48
36	Hasanpur	485	923	985	985	15.31	26.17	4.22	26.17	4.22
37	Singhia	460	1,021	1,037	1,037	16.22	27.75	5.11	27.75	5.11
38	Kusheshwar Asthan ..	385	1,004	1,021	1,021	12.66	21.68	3.81	21.68	3.81
39	Warisnagar	502	981	1,018	1,018	19.60	32.70	6.76	32.70	6.76
40	Kalyanpur	526	988	1,057	1,057	19.82	33.12	7.25	33.12	7.25

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
41	Dalsinghsarai	662	1,044	1,068	1,084	21.85	36.81	7.98	38.58	6.66
42	Bibhutpur	552	1,046	1,099	1,099	18.39	33.07	5.19	33.07	5.19
43	Patori	707	1,056	1,047	1,047	21.13	34.66	8.22	34.66	8.22
44	Mohiuddinagar ..	474	1,040	1,071	1,071	21.76	36.89	7.78	36.89	7.78
Monghyr	..	**332**	**986**	**989**	**970**	**22.43**	**35.96**	**8.76**	**32.77**	**6.87**
1	Monghyr	614	871	902	933	40.78	56.10	23.61	41.30	9.80
2	Dharhara	189	970	942	942	25.59	42.49	7.67	42.49	7.67
3	Jamalpur	564	922	910	950	39.20	57.34	19.13	45.04	8.52
4	Surajgarha	260	1,018	1,018	1,018	24.07	40.00	8.60	40.00	8.60
5	Lakhisarai	318	971	995	1,017	20.39	33.17	7.59	29.44	6.00
6	Barahiya	356	948	936	944	25.52	39.98	10.99	35.26	7.63
7	Kharagpur	261	981	981	983	22.82	37.54	7.91	36.14	6.91
8	Sangrampur ..	420	992	988	988	24.88	39.48	10.27	39.48	10.27
9	Tarapur	519	993	1,004	1,004	23.41	36.96	10.01	36.96	10.01
10	Sheikhpura ..	350	1,034	999	1,010	25.76	41.04	10.43	38.43	8.52
11	Ariari	281	1,017	1,056	1,056	19.34	31.95	7.54	31.95	7.54
12	Barbigha	569	966	980	991	34.45	51.75	16.89	49.19	15.54
13	Gogri	420	952	958	958	21.59	34.17	8.34	34.17	8.34
14	Parbatta	355	956	944	944	25.15	39.63	9.79	39.63	9.79
15	Khagaria	423	952	956	975	22.13	34.01	9.62	29.10	6.38
16	Alauli	347	936	946	946	11.78	20.80	2.16	20.80	2.16
17	Simri Bakhtiarpur ..	436	966	965	965	15.60	26.02	4.80	26.02	4.80
18	Koparia	285	956	967	967	13.33	23.08	3.16	23.08	3.16
19	Chautham	320	920	943	943	18.27	29.41	6.33	29.41	6.33
20	Beldaur	300	898	901	901	14.72	24.94	3.18	24.94	3.18
21	Teghra	439	1,063	1,032	1,012	23.39	37.50	9.86	32.44	7.35
22	Barauni	752	995	994	1,037	24.99	40.34	9.59	34.29	7.22
23	Bachhwara	500	994	1,031	1,031	21.17	34.90	7.95	34.90	7.95
24	Bhagwanpur ..	533	1,124	1,093	1,093	21.38	35.68	8.54	35.68	8.54
25	Begusarai I	633	1,020	994	1,022	26.76	41.61	11.84	36.55	8.67
26	Begusarai II ..	289	973	995	995	24.71	38.26	11.08	38.26	11.08
27	Balla	409	1,064	1,024	1,024	20.67	32.99	8.74	32.99	8.74

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
28	Sahebpur Kamal ..	428	1,062	1,035	1,035	20.17	33.86	7.16	33.86	7.16
29	Cheria Bariarpur ..	399	962	1,037	1,037	17.88	29.47	6.76	29.47	6.76
30	Khudabandpur ..	576	1,010	1,059	1,059	17.88	32.01	4.72	32.01	4.72
31	Bakhri	634	1,007	1,021	1,021	16.54	28.22	5.14	28.22	5.14
32	Sikandra	279	1,044	1,061	1,061	18.68	32.17	6.14	32.17	6.14
33	Halsi	236	1,039	1,045	1,045	17.16	30.56	4.40	30.56	4.40
34	Jamui	386	1,016	1,013	1,048	25.24	40.60	10.15	34.77	7.47
35	Khaira	183	1,035	1,023	1,023	15.62	27.26	3.95	27.26	3.95
36	Chakai	101	1,013	1,041	1,041	14.32	25.65	3.47	25.65	3.47
37	Lakshmipur ..	168	1,042	1,028	1,028	16.57	28.90	4.73	28.90	4.73
38	Jhajha	211	969	972	997	19.56	32.12	6.60	23.33	2.31
39	Sono	171	962	997	997	11.88	21.23	2.51	21.23	2.51
Bhagalpur	..	**311**	**961**	**951**	**967**	**23.95**	**36.56**	**10.61**	**33.15**	**8.19**
1	Sultanganj	377	979	969	979	25.89	40.54	10.82	38.75	9.85
2	Shahkund	404	1,013	1,019	1,019	19.50	31.44	7.78	31.44	7.78
3	Sabour	394	993	949	949	24.10	38.25	9.03	38.25	9.03
4	Jagdishpur	461	955	970	970	42.56	55.43	27.32	33.67	11.73
5	Nathnagar	389	972	949	949	18.92	29.60	7.57	29.60	7.57
6	Colgong	389	941	936	942	23.04	35.67	9.39	33.35	7.72
7	Gopalpur	236	935	930	930	22.39	34.87	8.89	34.87	8.89
8	Pirpainti	517	979	923	923	20.27	32.54	6.81	32.54	6.81
9	Sonhaula	343	994	968	968	18.29	29.89	6.25	29.89	6.25
10	Bihpur	318	934	928	928	26.17	39.77	11.49	39.77	11.49
11	Naugachhia ..	382	929	930	938	25.22	37.71	11.53	35.65	10.47
12	Amarpur	431	970	984	984	21.65	34.74	8.40	34.74	8.40
13	Shambhuganj ..	339	964	973	973	25.19	37.71	12.50	37.71	12.50
14	Rajaun	343	786	976	976	20.28	32.94	7.27	32.94	7.27
15	Katoria	107	1,009	998	998	10.41	18.08	2.69	18.08	2.69
16	Chanan	113	972	1,007	1,007	11.63	20.69	2.68	20.69	2.68
17	Belhar	261	1,021	1,009	1,009	18.90	31.69	6.31	31.69	6.31

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
18	Banka	225	969	968	985	19.30	30.34	7.84	26.42	5.08
19	Barahat	347	1,024	999	999	26.15	40.62	11.77	40.62	11.77
20	Dhuraiya	305	990	976	976	19.62	32.52	6.36	32.52	6.36
21	Bausi	215	970	975	975	21.90	34.29	9.09	34.29	9.09
Saharsa	.. ..	**316**	**945**	**944**	**951**	**16.69**	**27.64**	**4.94**	**26.48**	**4.38**
1	Kahara	421	949	919	966	22.62	34.30	9.62	27.65	6.09
2	Nauhatta	308	1,003	981	981	15.20	26.05	4.20	26.05	4.20
3	Mahisi	300	997	1,001	1,001	16.04	26.82	5.24	26.82	5.24
4	Sour Bazar	354	973	963	963	16.97	28.36	5.02	28.36	5.02
5	Sonbarsa	388	959	948	948	18.36	29.65	6.27	29.65	6.27
6	Supaul	355	958	960	976	18.51	29.97	6.56	27.35	5.20
7	Pipra	322	978	979	979	14.69	25.90	3.19	25.90	3.19
8	Nirmali	201	925	950	955	14.73	25.65	3.03	23.04	1.95
9	Tribeniganj ..	315	887	952	952	15.33	26.07	3.88	26.07	3.88
10	Kishanpur	252	909	975	975	12.67	23.52	1.49	23.52	1.49
11	Marauna	207	1,017	1,002	1,002	11.60	21.50	1.62	21.50	1.62
12	Raghopur	306	988	955	955	18.49	30.75	5.54	30.75	5.54
13	Basantpur	218	949	817	955	25.75	38.87	8.59	33.46	5.65
14	Chhatapur	278	1,041	953	953	13.34	22.65	3.44	22.65	3.44
15	Madhepura ..	367	904	929	955	18.20	29.96	5.39	25.33	3.27
16	Murliganj	351	909	936	942	18.46	29.85	6.40	28.54	5.58
17	Kumarkhand ..	344	959	933	933	13.79	22.85	3.91	22.85	3.91
18	Singheswar ..	346	954	949	949	14.46	24.98	3.17	24.98	3.17
19	Kishanganj ..	407	915	925	925	17.33	28.04	5.60	28.04	5.60
20	Alamnagar	324	823	898	898	15.02	24.45	4.29	24.45	4.29
21	Chausa	360	922	911	911	15.18	24.97	4.11	24.97	4.11
Purnea	.. ..	**282**	**915**	**922**	**936**	**19.51**	**30.45**	**7.29**	**28.49**	**6.04**
1	Purnea East ..	339	874	904	1,011	27.07	39.83	12.11	30.78	4.90
2	Krityanandnagar ..	203	920	928	928	19.63	30.28	7.87	30.28	7.87
3	Kasba	276	889	915	914	21.82	32.51	9.85	28.83	8.65
4	Amour North ..	237	952	938	938	17.51	28.54	5.50	28.54	5.50
5	Amour South ..	336	947	955	955	14.68	24.93	3.66	24.93	3.66

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
6	Baisi	304	945	952	952	15.11	25.47	4.05	25.47	4.05
7	Barhara	314	924	935	935	18.21	29.25	6.36	29.25	6.36
8	Dhamdaha	280	940	936	936	15.24	24.59	5.00	24.59	5.00
9	Bhawanipur ..	312	986	949	949	15.49	25.12	5.24	25.12	5.24
10	Rupauli	310	957	937	937	17.81	28.98	5.82	28.98	5.82
11	Banmankhi ..	311	892	902	915	16.93	27.27	5.39	13.14	4.45
12	Jokihat	316	978	980	980	19.34	30.33	7.82	30.33	7.82
13	Araria	275	957	925	946	23.39	34.37	10.98	31.18	8.74
14	Palasi	270	940	966	966	19.73	32.57	5.66	32.57	5.66
15	Sikti	233	934	920	920	16.79	28.44	3.81	28.44	3.81
16	Kursakatta ..	263	910	951	951	17.72	30.25	4.28	30.25	4.28
17	Forbesganj	305	893	879	930	23.34	35.18	9.38	30.84	6.50
18	Narpatganj	285	869	946	946	17.34	28.91	4.97	28.91	4.97
19	Bhargama	330	948	936	936	14.71	24.58	4.01	24.58	4.01
20	Raniganj	232	882	934	934	15.44	25.08	4.72	25.08	4.72
21	Kishanganj	316	694	801	894	28.10	37.95	15.09	23.41	4.10
22	Dighalbank ..	194	909	866	866	17.14	26.68	5.66	26.68	5.66
23	Bahadurganj ..	300	927	920	920	18.90	30.69	5.66	30.69	5.66
24	Kochadhamin ..	290	937	915	915	20.47	32.91	6.45	32.91	6.45
25	Terhagachh	225	920	903	903	18.36	30.80	4.07	30.80	4.07
26	Pothia	194	795	842	842	17.29	27.77	4.07	27.77	4.07
27	Thakurganj	189	854	853	853	17.44	27.77	4.84	27.77	4.84
28	Korha	249	950	966	966	15.24	22.98	7.00	22.98	7.00
29	Falka	280	930	967	967	16.21	25.99	6.02	25.99	6.02
30	Barari	258	940	943	943	20.13	30.85	8.58	30.85	8.58
31	Balrampur	235	896	921	921	16.25	26.92	4.32	26.92	4.32
32	Kadwa	294	946	949	949	20.40	32.45	7.48	32.45	7.48
33	Barsoi	353	948	907	907	21.52	32.77	8.46	32.77	8.46
34	Azamnagar ..	308	967	946	946	18.10	28.94	6.41	28.94	6.41
35	Pranpur	299	960	981	981	14.92	24.73	4.46	24.73	4.46
36	Katihar	464	842	827	935	33.66	45.28	18.72	28.12	5.76

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
37	Amdabad	285	957	984	984	17.58	25.94	9.29	25.94	9.29
38	Manihari	286	940	952	952	21.06	31.96	9.44	31.96	9.44
Santal Parganas	..	**188**	**980**	**980**	**989**	**17.31**	**28.37**	**5.93**	**25.79**	**4.33**
1	Dumka	222	979	925	979	27.74	41.04	13.18	30.03	5.69
2	Jama	175	966	1,030	1,030	14.72	35.40	4.35	25.40	4.35
3	Shikaripara ..	150	1,009	985	985	12.36	20.72	3.82	20.72	3.84
4	Ranishwar	168	996	993	993	21.75	33.48	9.87	33.48	9.87
5	Ramgarh	160	979	1,003	1,003	9.68	17.65	1.68	17.65	1.68
6	Jarmundi	189	992	997	997	14.93	25.98	3.77	25.98	3.77
7	Masalia	143	984	988	988	13.58	24.10	2.87	24.10	2.87
8	Saraiyahat	191	983	984	984	14.22	25.04	3.17	25.04	3.17
9	Kathikund	117	994	985	985	12.58	21.03	3.93	21.03	3.93
10	Gopikandar ..	99	956	983	983	8.51	14.47	2.32	14.47	2.32
11	Deoghar	239	908	910	966	32.48	47.14	16.02	31.92	4.41
12	Sarwan	179	937	987	987	19.82	35.40	3.97	35.40	3.97
13	Mohanpur	170	966	984	984	12.80	23.12	2.21	23.12	2.21
14	Madhupur	182	930	979	1,002	23.61	37.04	9.74	27.54	2.40
15	Karon	203	949	959	959	17.33	29.96	4.09	29.96	4.09
16	Sarath	189	917	961	961	20.95	35.74	5.33	35.74	5.33
17	Palojori	190	975	971	971	18.06	32.51	3.17	32.51	3.17
18	Godda	272	982	982	1,001	21.45	35.65	6.94	33.63	5.60
19	Pathargama	327	1,031	991	991	19.92	33.38	6.22	33.38	6.22
20	Mahagama	375	1,144	986	986	16.79	29.23	4.16	29.23	4.16
21	Meherma	404	885	969	969	18.99	31.49	5.91	31.49	5.91
22	Poreyahat	179	1,014	1,004	1,004	15.29	26.45	4.15	26.45	4.15
23	Sundar Pahari ..	101	991	998	998	6.15	11.06	1.16	11.06	1.16
24	Boarijor	167	1,009	1,008	1,008	9.36	16.85	1.92	16.85	1.92
25	Jamtara	206	1,000	975	1,005	21.40	35.33	7.07	30.49	4.19
26	Narayanpur ..	199	1,005	977	977	13.25	24.14	1.96	24.14	1.96
27	Nala	167	974	987	987	16.33	27.84	4.53	27.84	4.53
28	Kundahit	152	975	990	990	22.42	37.90	6.55	37.90	6.55

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
29	Rajmahal	429	979	980	991	18.45	28.60	8.05	25.91	6.40
30	Barharwa	294	1,002	991	991	23.62	35.78	11.25	35.78	11.25
31	Sahibganj	332	896	878	931	36.23	50.17	19.87	28.85	4.67
32	Barhait	177	1,030	990	990	10.07	16.12	3.89	16.12	3.89
33	Pathna	221	1,011	1,018	1,018	9.95	15.79	4.18	15.79	4.18
34	Borio	201	1,013	1,013	1,013	8.18	13.93	2.49	13.93	2.49
35	Taljhari	234	993	967	967	11.18	18.22	3.87	18.22	3.87
36	Pakaur	383	1,020	1,006	1,027	17.40	25.78	9.02	18.11	3.85
37	Pakuria	190	968	1,004	1,004	13.22	22.72	3.63	22.72	3.63
38	Maheshpur	202	998	980	980	14.35	22.70	5.79	22.70	5.79
39	Hiranpur	212	984	973	973	14.38	23.65	4.85	23.65	4.85
40	Litipara	126	976	984	984	6.12	10.51	1.62	10.51	1.62
41	Amrapara	112	964	941	941	6.48	10.67	1.96	10.67	1.96
Palamau	.. ..	**93**	**977**	**984**	**993**	**16.41**	**27.54**	**5.00**	**25.45**	**3.84**
1	Daltonganj	341	909	914	999	38.14	53.87	20.52	36.87	5.59
2	Chainpur	100	987	983	983	13.75	23.55	3.73	23.55	3.73
3	Leslieganj	182	1,012	1,009	1,009	17.95	31.24	4.71	31.24	4.71
4	Panki	119	980	985	985	15.94	26.40	5.22	26.40	5.22
5	Chhatarpur	89	1,000	1,010	1,010	10.61	18.56	2.66	18.56	2.66
6	Hariharganj ..	135	975	973	973	17.32	28.94	5.31	28.94	5.31
7	Patan	153	969	990	990	14.86	26.75	2.78	26.75	2.78
8	Bishrampur	135	1,012	999	999	16.80	29.58	3.99	29.58	3.99
9	Manatu	83	1,002	992	992	15.64	27.36	3.81	27.66	3.81
10	Hussainabad ..	201	972	974	978	19.69	31.78	7.14	29.92	6.03
11	Meral	128	998	1,012	1,012	12.89	23.38	2.42	23.38	2.42
12	Garhwa	198	1,052	1,014	1,048	20.17	34.75	5.77	28.16	2.76
13	Untari	150	939	968	968	14.19	24.72	3.22	24.72	3.22
14	Dhurki	58	986	971	971	9.20	16.57	1.58	16.57	1.58
15	Ranka	49	974	971	971	10.45	18.42	2.20	18.42	2.20
16	Bhandaria	29	960	939	939	12.57	21.21	3.29	21.21	3.29
17	Majhiaon	133	1,000	1,006	1,006	16.30	28.44	4.11	28.44	4.11

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
18	Bhawanathpur	85	941	962	962	13.56	23.54	3.02	23.54	3.02
19	Balumath	59	968	1,056	1,056	10.66	18.58	3.19	18.58	3.19
20	Chandwa	61	1,004	994	994	14.15	22.96	5.12	22.96	5.12
21	Latehar	103	946	972	1,002	17.16	28.37	5.59	22.42	3.23
22	Manika	81	978	987	987	11.38	19.84	2.69	19.84	2.69
23	Barwadih	71	911	923	923	16.36	27.21	4.35	27.21	4.35
24	Mahuadanr ..	51	969	960	1,000	18.52	29.85	6.49	27.30	6.39
25	Garu	53	946	982	982	13.71	24.01	3.06	24.01	3.06
Hazaribagh	.. ..	**132**	**974**	**991**	**1,009**	**17.29**	**28.96**	**5.00**	**25.63**	**3.39**
1	Barhi	108	1,028	1,033	1,033	13.74	24.25	3.49	24.25	3.49
2	Barakatha	108	1,111	1,161	1,161	12.11	24.56	1.60	24.56	1.60
3	Bagodar	157	819	1,055	1,074	15.43	28.31	3.41	24.99	2.18
4	Bishungarh	105	1,015	1,049	1,049	10.95	19.87	2.51	19.87	2.51
5	Hazaribagh	275	824	912	992	34.41	51.87	23.37	30.12	4.77
6	Katkamsandi ..	110	1,132	1,056	1,056	13.93	25.54	3.05	25.54	3.05
7	Ichak	122	1,068	1,082	1,082	14.46	26.34	3.56	26.34	3.56
8	Barkagaon	90	1,270	1,009	1,009	10.20	17.61	2.84	17.61	2.84
9	Keredari	79	1,042	973	973	14.06	24.48	3.18	24.48	3.18
10	Tandwa	85	995	1,023	1,023	10.16	18.41	2.07	18.41	2.07
11	Mandu	140	756	876	876	14.11	22.42	4.02	22.42	4.02
12	Nagri (Churchu) ..	93	1,000	905	905	11.55	19.16	2.85	19.16	2.85
13	Ramgarh	285	906	882	968	26.15	39.95	10.12	29.35	5.63
14	Jainagar	192	1,075	1,127	1,127	12.34	23.75	2.30	23.75	2.30
15	Gola	171	937	992	992	15.18	25.36	4.40	25.36	4.40
16	Gumia	105	954	942	942	15.71	26.64	3.83	26.64	3.83
17	Peterbar	149	963	959	959	12.48	22.10	2.27	22.10	2.27
18	Kasmar	172	950	940	940	18.37	31.57	4.07	31.57	4.07
19	Jaridih	166	941	948	948	14.38	25.64	2.27	25.64	2.27
20	Kodarma	210	1,013	887	903	26.63	39.50	11.72	34.53	7.63
21	Markacho	131	1,040	1,166	1,166	13.42	27.47	1.51	27.47	1.51
22	Patratu	187	959	773	773	20.55	31.06	6.33	31.06	6.33

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
23	Chauparan	96	1,113	1,076	1,076	13.43	24.95	2.88	24.95	2.88
24	Itkhori	115	1,048	1,083	1,083	11.16	21.23	1.95	21.23	1.95
25	Hunterganj ..	100	1,028	1,005	1,005	12.24	20.65	3.85	20.65	3.85
26	Pratap Pur	59	1,134	979	979	9.83	15.46	3.94	15.46	3.94
27	Chatra	89	1,039	1,031	1,052	96.35	26.72	6.29	18.11	2.06
28	Simaria	48	963	981	981	10.40	18.39	2.16	18.39	2.16
29	Gawan	124	992	1,059	1,059	13.62	24.80	3.09	24.80	3.09
30	Tisri	84	1,031	1,013	1,013	14.05	24.79	3.46	24.79	3.46
31	Satgawan	84	1,164	1,098	1,098	17.23	30.96	5.03	30.96	5.03
32	Jamua	173	1,060	1,119	1,119	17.07	32.51	3.43	32.51	3.43
33	Deori	134	924	1,057	1,057	14.26	26.64	2.64	26.64	2.64
34	Dhanwar	216	1,012	1,142	1,142	16.01	31.35	2.88	31.35	2.88
35	Birni	153	1,051	1,184	1,184	13.17	26.14	2.53	26.14	2.53
36	Giridih	298	887	945	973	29.86	43.14	15.51	31.95	6.30
37	Bengabad	121	992	1,041	1,041	15.25	28.61	2.48	28.61	2.48
38	Gande	155	935	973	973	23.15	23.55	2.29	23.55	2.29
39	Dumri	168	895	977	977	14.52	25.55	3.08	25.55	3.08
40	Nawadih	168	997	989	989	12.39	22.72	1.79	22.72	1.79
41	Pirtanr	105	861	990	990	11.95	20.13	3.46	20.13	3.46
42	Bermo	523	806	773	750	31.89	44.35	14.92	33.49	6.03
Ranchi	.. ..	**117**	**984**	**987**	**1,007**	**22.66**	**34.38**	**10.67**	**29.76**	**7.22**
1	Lohardaga ..	204	978	1,007	1,032	24.73	37.73	11.81	27.95	4.63
2	Kisko	60	1,004	1,025	1,025	14.10	24.59	3.82	24.59	3.82
3	Gamharia ..	96	978	1,045	1,045	13.35	23.95	3.26	23.95	3.26
4	Kuru	145	1,020	1,043	1,043	22.81	38.55	7.68	38.55	7.68
5	Burmu	107	918	924	934	18.17	27.89	7.41	24.88	4.97
6	Mandar	146	1,060	1,053	1,053	19.98	33.30	7.39	33.30	7.39
7	Bero	145	1,016	1,053	1,053	19.00	30.38	8.25	30.38	8.25
8	Lapung	105	1,031	1,058	1,058	13.12	21.62	5.11	21.62	5.11
9	Ratu	240	988	917	917	18.75	29.97	6.40	29.97	6.40
10	Kanke	217	993	923	923	50.46	63.06	34.99	37.82	8.16

APPENDIX XVIII—*contd.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
11	Khijri	165	945	862	862	20.73	32.02	7.20	32.02	7.20
12	Ormanjhi	141	977	1,010	1,010	18.36	31.52	5.24	31.52	5.24
13	Silli	191	986	975	992	25.52	42.75	7.76	40.53	5.73
14	Angara	114	968	1,002	1,002	10.86	19.71	1.95	19.71	1.95
15	Karra	104	1,038	1,048	1,048	16.11	25.58	7.05	25.58	7.05
16	Torpa	100	1,010	1,028	1,028	20.32	30.57	10.41	30.57	10.41
17	Khunti	113	983	1,009	1,018	19.81	30.31	9.35	24.06	4.18
18	Murhu	111	996	997	997	18.84	28.54	9.10	28.54	9.10
19	Bundu	159	954	993	1,017	20.45	34.19	9.55	28.90	2.97
20	Sonahatu	148	1,010	1,011	1,011	18.40	33.53	3.27	33.53	3.27
21	Tamar I	132	1,000	1,006	1,006	14.45	26.17	2.70	26.17	2.70
22	Tamar II (Erki) ..	92	973	986	986	10.66	18.72	2.37	18.72	2.37
23	Bishunpur	45	957	981	981	14.51	24.10	4.57	24.10	4.57
24	Chainpur	64	967	1,011	1,011	30.20	42.43	18.05	42.43	18.05
25	Dumri	78	1,014	1,016	1,016	25.81	38.12	13.74	38.12	13.74
26	Ghagra	97	1,027	1,038	1,038	12.93	22.76	3.36	22.76	3.36
27	Sisai	115	1,018	1,035	1,035	12.94	22.80	3.36	22.80	3.36
28	Gumla	148	945	985	1,021	20.72	32.72	8.43	25.58	3.70
29	Raidih	77	990	1,032	1,032	22.18	34.14	10.51	34.14	10.51
30	Palkot	75	973	1,034	1,034	15.64	26.21	5.40	26.21	5.40
31	Basia	100	1,052	1,046	1,046	19.59	30.63	9.03	30.63	9.03
32	Konbir	113	1,009	1,037	1,037	22.30	33.26	11.76	33.26	11.76
33	Bano	89	1,071	1,005	1,005	21.18	31,29	11.03	31.29	11.03
34	Kolebira	80	993	1,011	1,011	22.31	32.18	12.51	32.18	12.51
35	Simdega	93	992	1,008	1,032	20.08	37.54	16.53	33.22	13.25
36	Thethai-Tangar ..	78	978	1,013	1,013	22.50	32.49	12.49	32.49	12.49
37	Kurdeg	94	952	1,037	1,037	23.10	34.35	12.37	34.35	12.37
38	Bolba	98	1,018	1,022	1,022	14.31	21.23	7.50	21.23	7.50
Dhanbad	.. ..	**403**	**819**	**792**	**846**	**29.43**	**42.13**	**12.65**	**36.09**	**6.57**
1	Gobindpur	235	973	959	959	20.64	36.67	3.64	36.67	3.64
2	Jharia-*cum*-Jorapokhar-*cum*-Sindri	1,538	647	638	619	39.92	49.03	24.63	37.65	15.17
3	Dhanbad-*cum*-Kenduadih-*cum*-Jagta	1,434	649	634	657	39.77	48.17	25.49	38.00	13.09

APPENDIX XVIII—*concld.*

Serial no.	District/Anchal	Map No. 13 Density of population per sq. Km.	Map No. 25 Number of females per 1,000 males in 1951	Map No. 25 Number of females per 1,000 males in 1961	Map No. 26 Number of females per 1,000 males in rural areas	Map No. 133 Percentage of literates 1961	Map No. 134 Percentage of male literates 1961	Map No. 135 Percentage of female literates 1961	Map No. 136 Percentage of male literates in rural areas 1961	Map No. 138 Percentage of female literates in rural areas 1961
1	2	3	4	5	6	7	8	9	10	11
4	Baliapur	290	1,011	994	994	19.07	34.53	3.27	34.53	3.27
5	Nirsa-*cum*-Chirkunda ..	374	877	820	882	29.22	42.34	12.69	35.98	6.41
6	Tundi	151	947	969	969	13.74	24.28	2.62	24.28	2.62
7	Topchanchi ..	294	914	924	972	28.25	44.74	10.05	36.88	3.90
8	Baghmara-*cum*-Katras ..	678	780	750	781	24.97	35.12	10.63	31.80	6.99
9	Chas	240	977	972	972	21.59	39.05	3.33	39.05	3.33
10	Chandankiyari ..	246	984	961	961	24.38	42.21	5.60	42.21	5.60
Singhbhum	.. ..	**154**	**970**	**960**	**1,010**	**26.86**	**40.79**	**12.18**	**31.54**	**4.60**
1	Chakradharpur ..	215	1,014	983	1,032	25.48	39.40	11.18	27.84	2.00
2	Goilkera	90	1,021	1,003	1,003	11.03	19.41	2.65	19.41	2.65
3	Sonua	139	1,007	993	993	16.16	28.56	3.64	28.56	3.64
4	Chaibasa	214	983	1,004	1,063	26.95	41.89	11.95	31.05	3.43
5	Manjhari	137	1,105	1,114	1,114	13.61	25.89	2.79	25.89	2.79
6	Jhinkpani	119	1,030	1,063	1,081	13.76	25.14	3.10	23.31	2.41
7	Majhgaon	128	1,052	1,083	1,083	11.58	21.62	2.37	21.62	3.37
8	Jagannathpur ..	161	994	980	1,009	19.08	32.20	5.50	28.68	3.63
9	Manoharpur ..	110	995	976	976	20.52	32.38	8.23	32.38	8.23
10	Golmuri-*cum*-Jugsalai ..	244	829	897	897	51.59	62.17	37.94	39.74	9.83
11	Potka	160	996	1,019	1,019	20.29	35.09	5.68	35.09	5.68
12	Ghatsila	157	971	970	1,006	27.20	41.35	12.40	31.92	5.34
13	Dhalbhumgarh ..	121	985	994	994	17.23	28.20	6.10	28.20	6.10
14	Musabani	155	945	939	978	19.36	30.85	6.98	24.98	3.46
15	Chakulia	153	952	971	971	22.53	37.03	7.58	37.03	7.58
16	Baharagora ..	208	962	983	983	27.24	43.37	10.72	43.37	10.72
17	Patamda	147	912	994	994	18.34	33.21	3.33	33.21	3.33
18	Kharsawan ..	178	1,030	1,003	1,010	25.92	44.35	7.44	41.37	5.25
19	Kuchai	87	984	996	996	14.38	26.36	2.26	26.36	2.26
20	Seraikela	169	956	991	1,003	23.12	38.93	6.97	35.26	4.49
21	Adityapur	186	958	931	931	29.17	47.76	8.69	47.76	8.69
22	Gobindpur (Rajnagar)	249	1,019	1,035	1,035	13.77	25.41	2.49	25.41	2.49
23	Chandil	127	1,023	999	999	20.14	34.84	5.39	34.84	5.39
24	Nimdih	189	1,029	987	987	21.42	38.85	3.58	38.85	3.58
25	Ichagarh	163	1,015	993	993	16.23	29.32	2.82	29.32	2.82

APPENDIX XIX

ANCHALWISE STATISTICS

Serial no.	District/Anchal	Map No. 27 Number of females per 1,000 males in urban areas	Map No. 137 Percentage of male literates in urban areas 1961	Map No. 139 Percentage of female literates in urban areas 1961
1	2	3	4	5
Patna	..	**813**	**68.54**	**38.65**
1	Patna Rural* ..	770	71.60	43.95
2	Dinapur-*cum*-Khagaul	847	67.26	33.16
3	Fatwah ..	859	54.44	17.27
4	Barh ..	856	61.72	28.82
5	Bakhtiarpur ..	855	64.44	31.35
6	Mokameh ..	907	57.20	26.71
7	Bihar ..	933	64.73	34.78
8	Rajgir ..	874	56.21	16.12
Gaya	..	**861**	**63.35**	**28.37**
1	Gaya Town Anchal	834	66.67	33.08
2	Bodh Gaya ..	715	55.00	9.23
3	Tikari ..	938	64.49	25.52
4	Sherghati ..	973	54.31	24.93
5	Nawada ..	877	63.79	27.21
6	Hisua ..	1,056	51.68	17.00
7	Warisaliganj ..	872	54.83	19.04
8	Jehanabad ..	899	59.36	24.61
9	Daudnagar ..	963	51.45	14.15
10	Aurangabad ..	810	66.88	29.78
Shahabad	..	**846**	**62.28**	**28.30**
1	Arrah ..	839	66.66	35.61
2	Jagdishpur ..	1,000	45.17	10.71
3	Buxar ..	867	62.76	27.59
4	Dumraon ..	906	56.77	21.38
5	Bikramganj ..	843	47.62	9.99
6	Sasaram ..	933	59.79	24.66
7	Dehri ..	676	67.00	35.47
8	Nasriganj ..	991	54.56	16.60
9	Bhabua ..	839	59.45	23.59

* Includes Patna M. C. including Patliputra Housing Colony

Serial no.	District/Anchal	Map No. 27 Number of females per 1,000 males in urban areas	Map No. 137 Percentage of male literates in urban areas 1961	Map No. 139 Percentage of female literates in urban areas 1961
1	2	3	4	5
Saran	..	**871**	**61.15**	**25.06**
1	Chapra ..	849	64.05	26.42
2	Revelganj ..	1,051	47.72	9.11
3	Maharajganj ..	943	58.42	18.29
4	Siwan ..	862	62.99	33.85
5	Mirganj ..	864	57.03	19.93
6	Gopalganj ..	816	57.12	25.39
Champaran	..	**832**	**53.29**	**26.25**
1	Motihari ..	718	65.73	37.68
2	Sugauli ..	842	38.44	12.61
3	Raxaul ..	783	57.79	28.09
4	Pipra ..	972	48.30	18.60
5	Bettiah ..	893	58.81	34.50
6	Chanpatia ..	922	38.81	11.40
7	Bagaha ..	923	35.63	13.02
8	Narkatiaganj ...	700	52.31	23.18
Muzaffarpur	..	**777**	**64.23**	**33.21**
1	Musahri† ..	695	69.53	42.44
2	Dumra ..	768	61.90	29.65
3	Lalganj ..	987	48.88	15.30
4	Hajipur ..	917	54.52	21.24
5	Mahnar ..	1,055	54.59	20.29
Darbhanga	..	**854**	**61.71**	**26.49**
1	Darbhanga ..	870	63.01	26.84
2	Jainagar ..	847	58.89	22.53
3	Madhubani ..	894	51.43	17.44
4	Samastipur ..	684	73.46	45.37
5	Rusera ..	939	55.08	20.23
6	Dalsinghsarai ..	938	54.33	20.28

† Includes Muzaffarpur (M)

APPENDIX XIX —*contd.*

Serial no.	District/Anchal	Map No. 27 Number of females per 1,000 males in urban areas	Map No. 137 Percentage of male literates in urban areas 1961	Map No. 139 Percentage of female literates in urban areas 1961
1	2	3	4	5
Monghyr	..	**903**	**59.93**	**24.80**
1	Monghyr ..	882	65.33	32.89
2	Jamalpur ..	864	71.35	32.63
3	Lakhisarai ..	893	50.58	16.30
4	Barahiya ..	910	49.69	21.03
5	Kharagpur ..	956	50.20	17.28
6	Sheikhpura ..	952	51.90	19.02
7	Barbigha ..	923	64.60	24.30
8	Khagaria ..	823	66.96	36.27
9	Teghra ..	1,060	44.64	13.24
10	Barauni ..	917	51.07	14.44
11	Begusarai I ..	885	60.79	26.27
12	Jamui ..	954	50.53	15.27
13	Jhajha ..	845	75.05	32.06
Bhagalpur	..	**832**	**61.72**	**31.96**
1	Sultanganj ..	914	50.65	16.91
2	Jagdishpur* ..	817	64.09	34.96
3	Colgong ..	875	58.40	27.42
4	Naugachhia ..	856	57.12	22.55
5	Banka ..	888	49.09	22.91
Saharsa	..	**793**	**53.36**	**20.23**
1	Kahara ..	735	59.94	28.44
2	Supaul ..	878	43.58	14.50
3	Nirmali ..	907	46.92	12.28
4	Birpur ..	630	64.29	27.64
5	Madhepura ..	749	62.32	25.04
6	Murliganj ..	883	40.75	13.90
Purnea	..	**724**	**56.36**	**29.49**
1	Purnea East ..	699	56.72	31.78
2	Kasba ..	923	50.60	15.68

* Includes Bhagalpur (M)

Serial no.	District/Anchal	Map No. 27 Number of females per 1,000 males in urban areas	Map No. 137 Percentage of male literates in urban areas 1961	Map No. 139 Percentage of female literates in urban areas 1961
1	2	3	4	5
3	Banmankhi ..	706	57.79	23.70
4	Araria ..	785	54.55	28.38
5	Forbesganj ..	691	50.42	23.50
6	Kishanganj ..	705	52.03	28.86
7	Katihar ..	714	61.89	35.04
Santal Parganas	..	**825**	**69.80**	**37.04**
1	Dumka ..	756	73.81	43.12
2	Deoghar ..	806	74.37	41.53
3	Madhupur ..	900	68.82	36.20
4	Godda ..	781	56.24	25.09
5	Jamtara ..	786	65.18	30.51
6	Rajmahal ..	844	59.28	30.73
7	Sahibganj ..	843	67.78	33.58
8	Pakaur ..	888	68.00	42.45
Palamau	..	**830**	**64.74**	**30.26**
1	Daltonganj ..	799	75.97	45.51
2	Hussainabad ..	944	48.74	17.59
3	Garhwa ..	880	59.26	19.24
4	Latehar ..	831	55.65	18.94
5	Mahuadanr ..	516	55.74	8.61
Hazaribagh	..	**815**	**60.75**	**29.84**
1	Bagodar ..	908	54.84	15.41
2	Hazaribagh ..	832	72.77	45.20
3	Ramgarh ..	638	68.92	29.95
4	Kodarma ..	838	54.70	25.43
5	Chatra ..	958	55.38	20.06
6	Giridih ..	881	68.24	38.40
7	Bermo ..	783	49.30	18.78

APPENDIX XIX—*concld.*

Serial no.	District/Anchal	Map No. 27 Number of females per 1,000 males in urban areas	Map No. 137 Percentage of male literates in urban areas 1961	Map No. 139 Percentage of female literates in urban areas 1961
1	2	3	4	5
	Ranchi ..	**817**	**73.33**	**47.47**
1	Lohardaga ..	920	71.31	40.03
2	Burmu ..	855	49.71	26.89
3	Kanke* ..	792	77.48	53.17
4	Silli ..	793	67.77	36.98
5	Khunti ..	960	64.18	39.14
6	Bundu ..	913	51.98	20.00
7	Gumla ..	777	71.86	43.56
8	Simdega ..	881	58.83	35.69
	Dhanbad ..	**647**	**57.91**	**34.31**
1	Jharia-*cum*-Jorapokhar-*cum*-Sindri	655	59.21	32.06
2	Dhanbad-*cum*-Kenduadih-*cum*-Jagta	609	58.82	39.86
3	Nirsa-*cum*-Chirkunda	679	56.49	31.70
4	Topchanchi ..	760	71.10	37.84
5	Baghmara-*cum*-Katras	632	47.72	28.20
	Singhbhum ..	**797**	**70.42**	**43.99**
1	Chakradharpur ..	832	74.09	46.76
2	Chaibasa ..	798	78.32	51.68
3	Jhinkpani ..	877	44.03	12.09
4	Jagannathpur ..	862	46.44	14.57
5	Golmuri-*cum*-Jugsalai†	784	71.62	46.68
6	Ghatsila ..	874	65.96	33.86
7	Musabani ..	685	68.42	41.76
8	Kharsawan ..	944	71.24	28.76
9	Seraikela ..	864	76.20	36.66

*Includes Ranchi (M) & Doranda (N)

† Includes Jamshedpur (Town) & Jugsalai (N)

LIST OF AGENTS FOR THE SALE OF GOVERNMENT OF INDIA PUBLICATIONS

(As on February 17, 1964)

AGARTALA—Laxmi Bhandar Books & Scientific Sales. (Rest.)

AGRA—
1 National Book House, Jeoni Mandi .. (Reg.)
2 Wadhawa & 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 Sastu Kitab Ghar, Near Relief Talkies, Pathar Kuva, Relief Road. (Reg.)

AJMER—
1 Book-Land, 663, Madar Gate .. (Reg.)
2 Rajputana Book House, Station Road .. (Reg.)
3 Law Book House, 271, Hathi Bhata .. (Reg.)
4 Vijay Bros., Kutchery Road .. (Reg.)
5 Krishna Bros., Kutchery Road .. (Rest.)

ALIGARH Friends Book House, Mulsim University Market. (Reg.)

ALLAHABAD—
1 Superintendent, Printing & Stationery, U.P. (Reg.)
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 Wadhwa & Co., 23, M.G. Marg (Rest.)
8 Bharat Law House, 15, Mahatma Gandhi Marg. (Rest.)
9 Ram Narain Lal Beni Prasad, 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, Putligarh. (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 .. (Reg.)
8 International Book House P. Ltd., 4F, Mahatma Gandhi Road. (Reg.)
9 Navakarnataka Pubns. Private Ltd., Majestic Circle. (Rest.)

BAREILY—Agrawal Brothers, Bara Bazar .. (Reg.)

BARODA—
1 Shri Chandrakant Mohan Lall 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—Granthick, Antiquarian Booksellers & Publishers (24-Parganas), 5/1, Amlica Mukerjee Road. (Reg.)

BHAGALPUR—Paper Stationery Stores, D.N. Singh Road. (Reg.)

BHOPAL—
1 Superintendent, State Government Press
2 Lyall Book Depot, Mohd. Din Bldg., Station Road. (Reg.)
3 Delite Books, Opp. Bhopal Talkies .. (Rest.)

BHUBANESHWAR—Ekamra Vidyabhaban, Eastern Tower, Room no. 3. (Rest.)

BIJAPUR—Shri D. V. Deshpande, Recognised Law Booksellers, Prop. Vinod Book Depot, Near Shiralshetti Chowk. (Rest.)

BIKANER Bhandani Bros. .. .. (Rest.)

BILASPUR—Sharma Book Stall, Sadar Bazar.. (Rest.)

BOMBAY—
1 Supdt., Printing and Stationery, Queens Road
2 Charles Lambert & Co., 101, Mahatma Gandhi Road. (Reg.)
3 Co-operators 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, Khetwari 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 & Co.(P), Ltd., 210, Dr. Dadabhai Naoroji Road. (Reg.)
14 Thacker & Co., Rampart Row .. .. (Reg.)
15 N.M.Tripathi Private Ltd., Princess Street (Reg.)
16 The Kothari Depot, King Edward Road .. (Reg.)
17 P.H.Rama Krishna & Sons, 147, Rajaram Bhuvan, Shivaji Park Road No.5. (Rest.)
18 C.Jamnadas & Co., Booksellers, 146-C, Princess St. (Reg.)

19 Indo Nath & Co., A-6, Daulat Nagar Borivli, Mahatma Gandhi Road. (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 Dowmadeo & Co., 16, Naziria Building, Ballard Estate. (Rest.)
25 Asian Trading Co., 310, the Miraball, P.B.1505. (Rest.)

CALCUTTA—
1 Chatterjee & Co., 3/1, Bacharam Chatterjee Lane. (Reg.)
2 Dass Gupta & Co., Ltd., 54/3, College Street (Reg.)
3 Hindu Library, 69-A, Bolaram De Street.. (Reg.)
4 S.K.Lahiri & Co., Private Ltd., College Street. (Reg.)
5 M.C.Sarkar & Sons Private Ltd., 14 Bankim Chatterjee Street. (Reg.)
6 W. Newman & Co., Ltd., 3, Old Court House Street. (Reg.)
7 Oxford Book & Stationery Co., 17, Park Street. (Reg.)
8 R. Chambrary & Co., Ltd., Kent House, P. 33, Mission Row Extension. (Reg.)
9 S. C. Sarkar & Sons Private Ltd., I.C. College Square. (Reg.)
10 Thacker Spink & Co. (1933) Private Ltd. 3, Esplanade East. (Reg.)
11 Firma K. L. Mukhopadhaya, 6/1A, Banchha Ram Akrar Lane. (Rest.)
12 K.K. Roy, P. Box No.10210, Calcutta-19 .. (Rest.)
13 Sm. P. D. Upadhyay, 77, Muktaram Baby Street. (Rest.)
14 Universal Book Dist., 8/2, Hastings Street (Rest.)
15 Modern Book Depot, 9, Chowringhee Centre (Rest.)
16 Soor & Co., 125, Canning Street .. (Rest.)
17 S. Bhattacharjee, 49, Dharamatala 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 .. .. (Rest.)

CHANDIGARH—
1 Supdt., Govt. Printing & Statinery, Punjab.
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 22-D. (Reg.)
5 English Book Shop, 34, Sector 22-D .. (Rest.)
6 Mehta Bros., 15-Z, Sector 22-B .. (Rest.)
7 Tandan Book Depot, Shopping Centre, Sector 16. (Rest.)
8 Kailash Law Publishers, Sector 22-B .. (Rest.)

CHHINDWARA—The Verma Book Depot .. (Rest.)

COCHIN—Saraswat Corporation Ltd., Palliarakav Road. (Reg.)

CUTTACK—
1 Press Office, Orissa Sectt. ..
2 Cuttack Law Times .. .. (Reg.)
3 Prabhat K. Mahapatra, Mangalabagh P.B.35 (Reg.)
4 D.P. Sur & Sons, Mangalabag .. .. (Rest.)
5 Utkal 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 & Brother, 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, Chamallian 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 Subhas 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. (Reg.)
21 Universal Book Traders, 80, Gokhale Market (Reg.)
22 Tech. & Commercial Book Co., 75, Gokhale Market. (Rest.)
23 Saini Law Publishing Co., 1416, Chaibiganj, 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 Nagar Ganeshpura. (Rest.)
30 Adarsh Publishing Service, 5A/10, Ansari Road. (Rest.)

DHANBAD—
1 Ismag Co-operative Stores Ltd., P.O. Indian School of Mines. (Rest.)
2 New Sketch Press, Post Box. 26 .. (Rest.)

DHARWAR—
1 The Agricultural College Consumers' Co-op. Society. (Rest.)
2 Rameshraya Book Depot, Subhas Road .. (Rest.)
3 Karnatakaya Sahitya Mandira of Publishers and Booksellers. (Rest.)

ERNAKULAM—
1 Pai & Co., Cloth Bazar Road .. .. (Rest.)
2 South India Traders, c/o. Constitutional Journal. (Reg.)

FEROZEPUR—English Book Depot, 78, Jhoke Road. (Reg.)

GAUHATI—Mokshada Pustakalaya .. (Reg.)

GAYA—Sahitya Sadan, Gautam Budha Marg .. (Reg.)

GHAZIABAD—Jayana Book Agency .. (Rest.)

GORAKHPUR—Vishwa Vidyalaya Prakashan, Nakhes Road. (Reg.)

GUDUR—The General Manager, The N. D. C. Publishing & Ptg. Society Ltd. (Rest.)

GUNTUR—Book Lovers Private Ltd., Kadriguda Chowrasta. (Reg.)

GAWALIOR—
1 Supdt., Printing and Stationery, M.B. ..
2 Loyal Book Depot, Patankar Bazar, Lashkar (Reg.)
3 M.C. Daftari, Prop. M.B. Jain & Bros., Booksellers, Sarafa, Lashkar. (Rest.)

HUBLI—Pervaje's Book House, Koppikar Road (Reg.)

HYDERABAD—
1 Director, Government Press .. .. (Reg.)
2 The Swaraj Book Depot, Lakdikapul .. (Rest.)
3 Book Lovers Private Ltd. .. .. (Rest.)
4 Labour Law Publications, 873, Sultan Bazar

IMPHAL—Tikendra & Sons, Bookseller .. (Rest.)

INDORE—
1 Wadhwa & Co., 56, M.G. Road .. (Reg.)
2 Swarup Brothers, Khajuri Bazar .. (Rest.)
3 Madhya Pradesh Book Centre, 41, Ahilya Pura. (Rest.)
4 Modern Book House, Shiv Vilas Palace .. (Rest.)
5 Navyug Sahitya Sadan, Publishers and Booksellers, 10, Khajuri Bazar. (Rest.)

JABALPUR—
1 Modern Book House, 286, Jawaharganj .. (Reg.)
2 National Book House, 135, Jai Prakash Narain Marg. (Rest.)

JAIPUR CITY—
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, Swami Manshingh Highway (Rest.)
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.

JAMNAGAR—Swadeshi Vastu Bhandar .. (Reg.)

JAMSHEDPUR—
1 Amar Kitab Ghar, Diogonal Road, P.B. 78 (Reg.)
2 Gupta Stores, Dhatkidih .. .. (Reg.)
3 Sanyal Bros., Booksellers & News Agents, Bistupur Market. (Rest.)

JAWALAPUR—Sahyog Book Depot .. (Rest.)

JHUNJHUNU .. .. .. (Rest.)
1 Shashi Kumar Sarat Chand .. .. (R.)
2 Kapram Prakashan Prasaran, 1/90, Namdha Niwas Azad Marg.

JODHPUR—
1 Dwarka Das Rathi, Wholesale Books and News Agents. (Reg.)
2 Kitab-Ghar, Sojati Gate .. .. (Reg.)
3 Choppra Brothers, Tripolia Bazar .. (Reg.)

JULLUNDUR CITY—
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.)

KARUR—Shri V. Nagaraja Rao, 26, Srivivasapuram. (Rest.)

KODARMA—The Bhagwati Press, P. O. Jhumri Tilaiya, Dist. Hazaribagh. (Reg.)

KOLHAPUR—Maharashtra Granth Bhandar, Mahadwar Road. (Rest.)

KOTA—Kota Book Depot .. .. (Rest.)

KUMTA—S.V.Kamat, Booksellers & Stationers (N.Kanara). (Reg.)

LUCKNOW—
1 Soochna Sahitya Depot (State Book Depot). (Reg.)
2 Balkrishna Book Co. Ltd., Hazaratganj .. (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., Government Press, Mount Road.
2 Account Test Institute, P.O. 760, Emgore (Reg.)
3 C. Subbiah Chetty & Co., Tripolicane .. (Reg.)
4 K. Krishnamurty, Post Box 384 .. (Reg.)
5 Presidency Book Supplies, 8, Pyerafts Road, Triplicane. (Reg.)
6 P. Vardhachary & Co., 8, Linghi Chetty Street. (Reg.)
7 Palani Parchuram, 3, Pyerafts Road, Triplicane. (Reg.)
8 MCBH Private Ltd., 199, Mount Road .. (Rest.)
9 V. Sadanand, The Personal Bookshop, 10, Congress Building, 111, Mount Road. (Rest.)

MADURAI—
1 Oriental Book House, 258, West Masi Street. (Reg.)
2 Vivekanand Press, 48, West Masi Street (Reg.)

MANDYA SUGAR TOWN—K. N. Narimhe Gowda & Sons. (Rest.)

MANGALORE—U.R. Shenoye Sons, Car Street, P.Box 128. (Rest.)

MANJESHWAR—Mukenda Krishna Nayak .. (Rest.)
MATHURA—Rath & Co., Tilohi Building, Bengali Ghat. (Rest.)

LIST OF AGENTS FOR THE SALE OF GOVERNMENT OF INDIA PUBLICATIONS—*contd.*

MEERUT—

1 Prakash Educational Stores, Subhas Bazar (Reg.)
2 Hind Chitra Press, West Kutchery Road.. (Reg.)
3 Loyal Book Depot, Chhipi Tank .. (Reg.)
4 Bharat Education Stores, Chippi Tank .. (Rest.)
5 Universal Book Depot, Booksellers & News Agents. (Rest.)

MONGHYR—Anusandhan, Minerva Press Building. (Rest.)

MUSSOURI—
1 Cambridge Book Depot, The Mal .. (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. Venaktaramiah & Sons, New Statue Circle. (Reg.)
2 Peoples Book House, Opp. Jagan Mohan Palace. (Reg.)
3 Geeta Book House, Booksellers and Publishers, Krishnamurthipuram. (Rest.)
4 New Paper House, Lansdowne Building .. (Rest.)
5 Indian Mercantile Corporation, Toy Palace, Ramvilas. (Rest.)

NADIAD—R.S. Desary, Station Road .. (Rest.)

NAGPUR—
1 Supdt., Govt. Press and Book Depot.
2 Western Book Depot, Residency Road .. (Reg.)
3 The Asstt. Secretary, Mineral Industry Association, Mineral House. (Rest.)

NAINITAL—Coural Book Depot, Bara Bazar .. (Rest.)

NANDED—
1 Book Centre, College Law General Books, Station Road. (Rest.)
2 Hindustan General Stores, Paper and 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 and Sons, 15-A, Khan Market.. (Reg.)
7 Jain Book Agency, C-9, Prem House, Connaught Place. (Reg.)
8 Oxford Book and Stationery Co., Schindia House. (Reg.)
9 Ram Krishna and 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, Chaparwala Kuan, Karol Bagh. (Reg.)
14 Navayug Traders, Desh Bandhu Gupta Road, New Nagar. (Reg.)
15 Saraswati Book Depot, 15, Lady Harding Road. (Reg.)
16 The Secretary, Indian Mot. Society, Lodi Road. (Reg.)
17 New Book Depot, Latest Books, Periodicals Sty. and 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 Pooplo 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-I, 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 and 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—The Krishna Book Depot, Main Bazar. (Rest.)

PATIALA—
1 Supdt., Bhupendra State Press .. (Reg.)
2 Jain and Co., 170 Shah Nashim Bazar .. (Reg.)

PATNA—
1 Supdt., Govt. Printing (Bihar).
2 J.N.P. Agrawal and 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.)

PITHORAGARH—Maniram Punetha and Sons (Rest.)

PONDICHERRY—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 Chow. (Rest.)
5 Utility Book Depot, 1339, Shivaji Nagar (Rest.)

PUDUKOTTAI—Shri P.N. Swaminathan Sivam and Co., East Main Road. (Rest.)

RAJKOT—Mohan Lal Dossabhai Shah, Booksellers and Sub-Agents. (Reg.)

RANCHI—
1 Crown Book Depot, Upper Bazar .. (Reg.)
2 Pustak Mahal, Upper Bazar .. .. (Rest.)

REWA—Supdt. Govt., State Emporium V.P.

ROURKELA—The Rourkela Review .. (Rest.)

LIST OF AGENTS FOR THE SALE OF GOVERNMENT OF INDIA PUBLICATIONS—*contd.*

SAHARANPUR—Chandra Bharata Pustak Bhandar, Court Road. (Rest.)

SECUNDERABAD—Hindustan Diary Publishers Market Street. (Reg.)

SILCHAR—Shri Nishitto Son Nazirpatti .. (Rest.)

SIMLA—
1 Supdt., Himachal Pradesh Govt.
2 Minerva Book Shop, The Mall .. .. (Reg.)
3 The New Book Depot, 79, The Mall .. (Reg.)

SINNAR—Shri N.N. Jakhadi, Agent, Times of India, Sinnar (Nasik). (Rest.)

SHILLONG—
1 The Officer-in-Charge, Assam Govt., B.D.
2 Chapla Bookstall, P.B. No. 1 .. (Rest.)

SONEPAT—United Book Agency .. .. (Reg.)

SRINAGAR—The Kashmir Bookshop, Residency (Reg.)

SURAT—Shri Gajanan Pustakalaya, Tower Road (Reg.)

TRICHINOPOLY—
1 Kalpana Publishers, Wosiur .. .. (Reg.)
2 S. Krishnaswami and Co., 35, Subhas Chander Bose Road. (Reg.)
3 Palamiappa Bros. .. .. .. (Rest.)

TRIVANDURM—
1 International Book Depot, Main Road .. (Reg.)
2 Reddear Press and Book Depot, P.B. No. 4 (Rest.)

TUTICORIN—Shri K. Thagarajan, 10-C, French Chapal Road. (Rest.)

UDAIPUR—
1 Jagdish and Co. Inside Surajapole .. (Rest.)
2 Book Centre, Maharana Consumers' Co-op. Society, Ltd. (Rest.)

UJJAIN—Manak Chand Book Depot, Sati Gate (Rest.)

VARANASI—
1 Students Friends and Co., Lanka .. (Rest.)
2 Chowkhamba Sanskrit Series Office, Gopal Mandi Road, P.B.8. (Reg.)
3 Globe Book Centre .. .. (Rest.)
4 Kohinoor Stores, University Road, Lanka (Reg.)
5 B.H. Un. Book Depot .. .. (Rest.)

VELLORE—A. Venkatasubhan, Law Booksellers (Reg.)

VIJAYAWADA—The Book and Review Centre, Eluru Road, Governpet. (Rest.)

VISAKHAPATNAM—
1 Gupta Brothers, Vizia Building .. (Reg.)
2 Book Centre, 11/97, Main Road .. (Reg.)
3 The Secy., Adhra University, General Co-op. Stores Ltd. (Rest)

VIZIANAGRAM—Sarda and Co. .. (Rest.)

WARDHA—Swarajeya Bhandar, Bhorji Market (Reg.)

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.

RAILWAY BOOKSTALL HOLDERS

1 S/S. A.H. Wheeler and Co., 15, Elgin Road, Allahabad.
2 Gahlot Bros. K.E.M. Road, Bikaner.
3 Higginbothams and Co., Ltd., Mount Road, Madras.
4 M. Gulab Singh and Sons Private. Ltd., Mathura Road, New Delhi.

FOREIGN

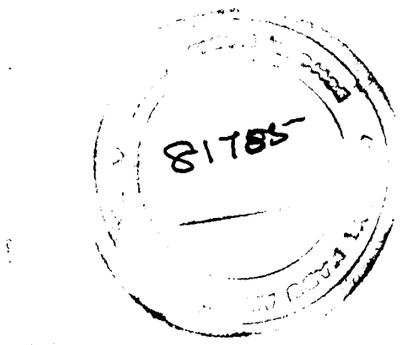
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