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**NATURAL RESOURCES AND THE STRUCTURE OF THE
TRIBAL WORKFORCE IN MID-INDIA : A CASE
STUDY OF THE GONDS AND THE SANTALS,
1971-81**

**Dissertation submitted to the Jawaharlal Nehru University
in partial fulfilment of the requirement for the
award of the Degree of**

MASTER OF PHILOSOPHY

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1994

***Consecrated to
my Parents***






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CERTIFICATE

This is to certify that this dissertation entitled "NATURAL RESOURCES AND THE STRUCTURE OF THE TRIBAL WORKFORCE IN MID-INDIA : A CASE STUDY OF THE GONDS AND THE SANTALS, 1971-81", submitted by SOHEL FIRDOS, in the fulfilment of six credits out of the total requirements for the award of the degree of MASTER OF PHILOSOPHY, is a bonafide work to the best of my knowledge and may be placed before the examiners for evaluation.


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(SOHEL FIRDOS)

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CHAPTER-I

INTRODUCTION

I.1 STATEMENT OF THE PROBLEM

For centuries, the tribes of India lived and adopted themselves with the rugged, hilly and forested tracts of the country. Their habitation in such areas of mid-India is the testimony to it. Out of the total tribal population of the country, the largest proportion lives in the mid-India. The study area comprises of M.P., Orissa & Chotanagpur region of Bihar. In this region, the greatest chunk of the Gonds and the Santals live. Though presently the Gonds are spread over Madhya Pradesh, Andhara Pradesh, Maharashtra, Orissa, Bihar and West Bengal, they are highly concentrated in two tracts of M.P. The first is the wide belt of broken hills and forest tracts of the state which forms the Satpura plateau, and is mainly comprised of Chhindwara, Betul, Seoni and Mandla districts, with portions of several others adjoining districts. And the second is the still wider and more inaccessible mass of hill ranges extending south of Chattisgarh plain, and south-west down to Godavari. The Santals are dominant in the north-eastern part of Chotanagpur plateau comprising the districts of Santhal Parganas, Dhanbad & Giridih.

The exploitation of the natural resources depends on the needs of the people, awareness of the environment & the level

of technological development of the society. Since the tribals had neither the perception nor the technology to exploit the resources, these were of no use to them. Out of the various resources, only the forest, had a direct impact on the tribal culture & economy. It may be said that the tribes and the forests are intertwined. "By the very nature of their habitat and ecology, the tribals depend heavily on forests for their survival, livelihood, occupation and employment".¹ The original human settlers in the forests were the tribals and their cultural diversity emerged as a counter-poise to ecological exigency. They considered the forests as a means of subsistence for their livelihood. They used and optimised the utilisation of the forest resources in a balanced productive eco-system. They subsist on edible leaves and roots, honey, wild game and fish. They build their homes with timber and bamboo and practice cottage crafts with the help of raw materials. They use herb and medicinal plants to cure their diseases and even their religion and folk-lore are woven round the spirits of the forests. Commercial transactions are predominantly by barter, being left to the outsiders who controlled the money economy.

If we trace out the evolution of the tribal economy, we find that starting from the food gathering to the shifting cultivation stage, their economy is totally dependent on forests. The first stage in the evolution of the tribal economies is marked by the food gathering. Tribes as food

gatherers were primarily concerned in digging out roots and tubers with some pointed tools and here man's relationship with the nature was unidirectional in the sense that forest produces were eatables and men were their eaters. When a community passes from one stage of techno-cultural efficiency to another, the process involved results in the accumulation of knowledge rather than substitution. Since the former stage was followed by hunting stage in addition to the unidirectional relationship of collection of forest produce also initiates the bilaterally reciprocal predatory-prey relationship thus exposing humanity to competition and challenge. For success and survival at this stage man needed to improve efficiency and technology. As the population pressure kept on increasing, they had to evolve a method of food production. Besides it, they also wanted to ensure security in terms of food supply. The first method adopted by them to produce food was shifting cultivation which still continues in the several hilly parts of the country. It's a very primitive type of agriculture in which a particular tract of forest is cleared & trees are burnt to ashes so that it would act as fertiliser in the fields. They use very primitive implements like hoe to cultivate the land. A particular tract is cultivated for 2 to 3 years and then abandon it and migrate to a different tract. The returns from this type of cultivation is minimum & there is no surplus.

As stated earlier, the tribal belts of the mid-India are very rich in mineral, water & forest resources. But the mineral & water resources were of no use to the indigenous people due to lack of knowledge & proper technology. Despite their stay in these belts for centuries, they even did not know that their habitats contain such valuable & vast resources. The Britishers came to India with perception and proper technology to exploit the natural resources. The colonial government started exploiting the mineral resources of the country. As a result of which once the isolated tribal regions were opened up with the help of transportation & communication network. Soon after the opening up of the region, a large number of immigrants started to flow in and after few decades the tribals became minorities in their own habitats. The tribals had to face problems to adjust with the much advanced non-tribal population. The Indian Forest Act deprived these people of their traditional rights over the forests. As the tribals were innocents, they were being exploited by non-tribal peasant communities. Their land were being grabbed by the non-tribals. Land alienation took place to such an extent that a considerable proportion of them was relegated to agricultural labourers; a occupation which was never known to tribal society.

A small proportion of them migrated also to the urban areas and the other parts of the country in search of petty jobs.

It's irony to note that despite rich in mineral, water and forest resources, these regions continue to be the most backward regions. Moreover, the indigenous people of the region are economically the most backward. The status of their economy can be judged from the fact that in general, more than 90 percent of their population are engaged in agricultural activities. Most of the tribals are now settled agriculturist. Only in few pockets of the region shifting cultivation is practised.

The different tribal groups share so many common characteristics but at the same time, the differences among themselves is no less perceptible. Though in tribal societies, there is less inequality, the inequalities in terms of economic gains have started emerging soon after they started to interact with the much advanced non-tribal community. The overall impact is that economic disparities have started to emerge within the tribal groups as well between the tribal groups. The Gonds and the Santals have been selected for the present study. The basic reason behind the selection of these two tribal groups is that (i) they are numerically very strong in the region and (ii) both of these tribal groups are socially & economically homogenous in themselves. It's assumed here that if we study the workforce structure of these two tribal groups with reference to natural resources, they would provide two different pictures regarding their respective workforce

structure. Moreover, it would also help to assess the intra-tribal group economic disparities.

Since the region is rich in terms of resources, one would expect that the indigenous people are prosperous. But the scene is reverse. The present study has also been carried out to assess the natural resources and its impact on the economic status of the tribals in general & the two tribal groups in particular can be made.

I.2 OBJECTIVES

The objectives of the present study may be stated as below :

- i) To analyse the spatial distribution & demographic structure of the Gonds & the Santals.
- ii) To give an account of the various natural resources available in the region.
- iii) To analyse the spatial distribution of the overall tribal, Gond and Santal workers in the different sectors of economy and the distribution of their workers in the nine industrial categories.
- iv) To compare the workforce structure of the above said three sections of the population;
- v) To find out the correspondence between the natural resources of the workforce structure;

- vi) To measure the levels of human resource development of the Gonds and the Santals; and
- vii) To have an assessment of the different special plans and programmes chalked out for the upliftment of the tribals.

I.3 CHOICE OF THE STUDY AREA

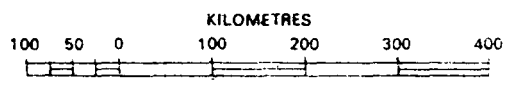
Since our purpose is to study the correspondence between the natural resources and the workforce structure of the overall tribals, the Gonds & the Santals, mid-India is the best suitable study area. This region contains vast resources and it also contains the largest proportion of the tribal population of the country. The largest chunk of the Gond and the Santal population also lives in this region. The study area comprises of entire Madhya Pradesh, Orissa and the Chotanagpur region of Bihar (sometimes this part of the Bihar is referred as Chotanagpur-Santhal Parganas region).

I.4 DATA BASE

All the data used for the study have been obtained from the Secondary sources. The data have been collected from the following sources:

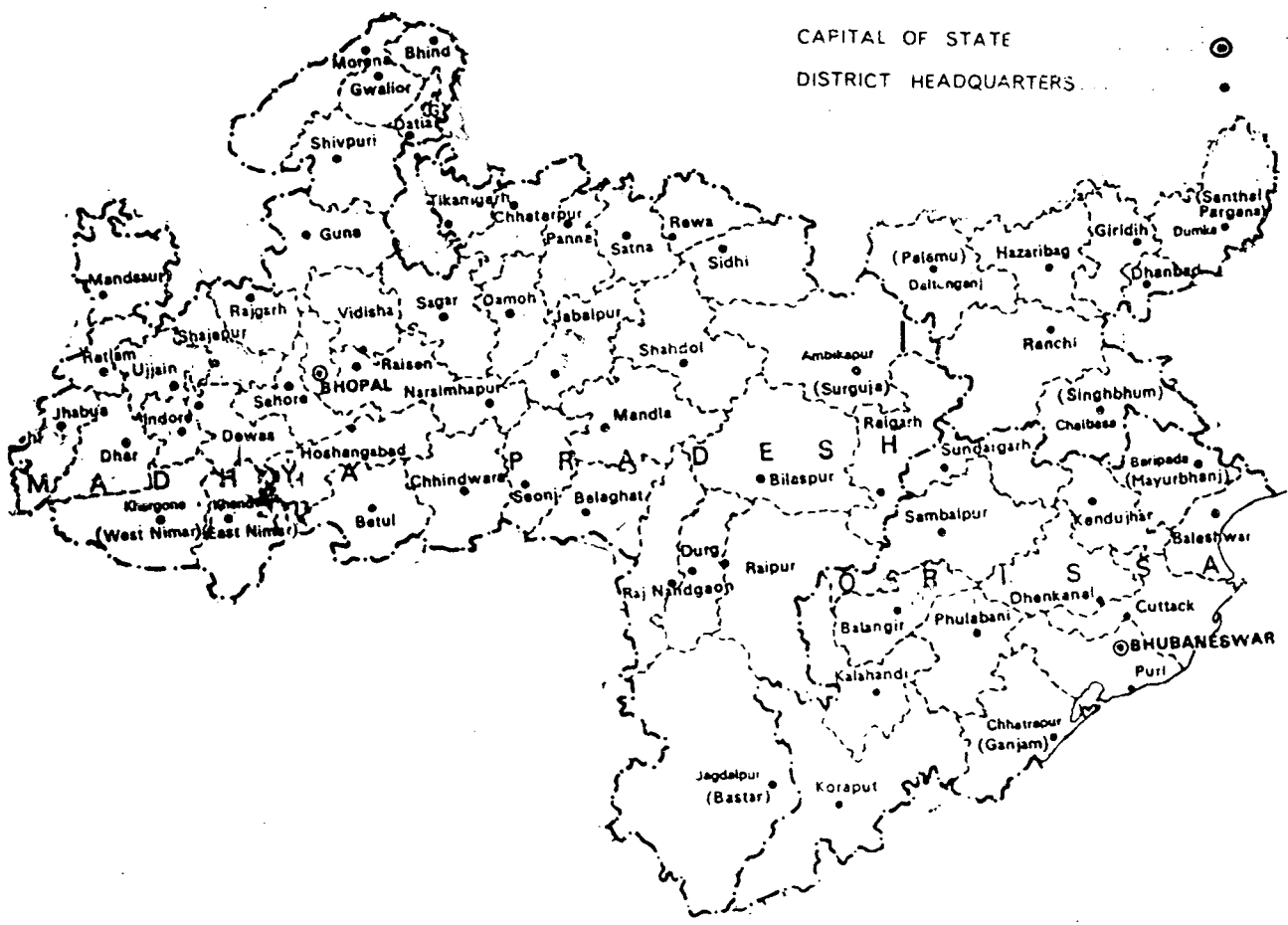
- i) Census of India, 1971, Series 10, Madhya Pradesh, Part II-C (i), Social & Cultural tables,
- ii) Census of India, 1971 Series 10, Madhya Pradesh, Part V-

MID INDIA STUDY AREA 1981



CAPITAL OF STATE

DISTRICT HEADQUARTERS



BOUNDARY, STATE

DISTRICT

A, Special Tables on Scheduled Castes and Scheduled Tribes,

- iii) Census of India, 1971, Series 16, Orissa, Part V-A, Special Tables on Scheduled Castes and Scheduled Tribes,
- iv) Census of India, 1971, Series 4, Bihar, Part V-A, Special Tables on Scheduled Castes and Scheduled Tribes,
- v) Census of India, 1981, Series 1, India, Part 11-B (iii), Primary Census Abstract -Scheduled Tribes,
- vi) Census of India, 1981, Series 11, M.P. Part IX (v), Special Tables for Scheduled Tribes,
- vii) Census of India, 1981, Series 16, Orissa, Part IX (iii), Special Tables for Scheduled Tribes,
- viii) Census of India, 1981, Series 4, Bihar, Part IX (iii), Special Tables for Scheduled Tribes,
- ix) Statistical Abstract of Orissa-1979,
- x) Statistical Abstract of M.P. -1971,
- xi) Statistical Abstract of Bihar-1971,
- xii) Indian Agricultural Statistics, Vol.II, 1977-78 to 1981-82,
- xiii) Indian Mineral Year Books 1981.

I.5 METHODOLOGY

- i) The percentage of the tribal population has been computed out of the total population of the district.
- ii) The percentage of the Gonds and the Santals has been computed out of the tribal population of the district and their rural & urban components has been computed out of the respective tribal population of the district. The percentage share of the rural as well as the urban Gonds has been computed out of the total population of the Gonds of the district while the percentage share of the rural & the urban Santals has been calculated out of the total population of the Santal of the districts. The percentage of all these attributes have been grouped with the help of mean & standard deviation taking, S.D. as interval, e.g.
Mean + 1 Standard deviation to Mean + 2 Standard deviation
Mean to Mean + 1 Standard deviation
Mean - 1 Standard deviation to Mean ... and so on.
- iii) The sex-ratio has been computed as follows

$$\frac{\text{Population of the females}}{\text{Population of the males}} \times 1000$$

- iv) The decadal growth rate has been computed with the help of the following formula :

$$\frac{P_2 - P_1}{P_1} \times 100$$

where, P1 is the population in 1971;
P2 is the population in 1981.

- v) To measure the levels of the human resource development of the Gonds and the Santals, Kundu's,² modified Principal Component Analysis has been used (See Appendix I.1.)

I.6 DESIGN OF THE STUDY

The present study has been organised into six chapters. The first chapter deals with the statement of the problem, objectives of the study, choice of the study area, data base & methodology. The second chapter describes the physical features of the region, the spatial distribution of the overall tribal population, Gonds and the Santals. It also deals with the demographic structure of the Gonds & the Santals. The third chapter deals with the natural resources of the region. In this chapter, an attempt has been made to see the spatial distribution of the mineral resources & to find out the mineral reserves in the states of the region. The other resources like soil, water, animal & land has also been described in the chapter. The fourth chapter deals with the structure of the workforce of the overall tribals, Gonds and the Santals. The fifth chapter tries to find out the correspondence between the natural resources & workforce structure of the three sections of the population. It also gives an idea about the levels of human resources development

of the Gonds and the Santals. It also seeks to explain the impact of the various programmes chalked out for the upliftment of the tribal population. The sixth chapter explains the inferences made from the study and its implications.

Bibliographical References

1. Childyal, V.C. (1982), "Tribe and Forest" in Singh K.S. (ed.) *Economies of the Tribes and Their Transformation*, New Delhi, Concept Publishing Company, p. 133.
2. Kundu A. (1980), *Measurement of Urban Process*, Bombay : Popular Prakashan.

APPENDIX I.1

In Modified Principle Component Analysis, we get a composite index, where sum of the squared projection of the original variables are maximized. Here scale transformation of the variables is done by dividing each of them by their mean. Advantage of scale transformation, divided by the mean, is that, one can get rid of the bias of the scale without affecting the relative position of the observations.

In this method weights are derived from projection matrix and a variable having greater disparity in space gets higher weightage.

This method of scale transformation ensures non-negativity of the matrix. When the data matrix is non-negative the method of maximising the sum of squared projections of the variables, would give non-negative weights. One of the property of non-negative square matrix is that, here the largest eigen value is real and non-negative and the associated eigen vector is also non-negative.

CHAPTER - II

SPATIAL DISTRIBUTION OF THE GONDS AND THE SANTALS AND THEIR DEMOGRAPHIC STRUCTURE

The present chapter seeks to explain the spatial distribution of the overall tribal population in general and the two tribal groups such as the Gonds and the Santals in particular in the region. It also portrays the demographic structure of these two tribal groups. The basic objectives of this chapter are as follow:

- i) To describe the Physiography of the region;
- ii) To analyse the spatial distribution of the proportion of the overall tribal population out of the total population of the district in the region and to identify their areas of clustering;
- iii) To analyse the spatial distribution of the proportion of the Gonds and the Santals out of the overall tribal population of the district in the region and to identify their areas of clustering. It also explains the spatial distribution of the proportion of the rural and the urban Gonds and the Santals out of the respective overall tribal population;
- iv) To portray the spatial nature of the rural and the urban composition of these tribal groups; their sex-ratio and the decadal growth in their population.

II.1 PHYSIOGRAPHY OF THE REGION

The following physiographic regions can be identified in the region:

i) Madhya Bharat Pathar:

East of the Chambal, the Madhya Bharat Pathar area has a rocky surface and dense forest. Near the Gwalior town the scarp face of sandstone rocks is characteristic. Further north in the Lashkar area, plains topography prevails; it continues northwards until the ravines of the Chambal and the Kunwari are reached. The main rivers of this upland is the Chambal which traverse the whole length in a southwest-northwest direction with the banks of its lower reaches dissected into ravines. Wherever there is an alluvial catering, as in the west of Shivpuri and South of the Chambal between Sabalgarh and Maharajpur, the countryside has a more pleasant looks and has invariably a large concentration of population.

ii) Bundelkhand Upland:

Another section comprises all that part of Bundelkhand which lies between the Yamuna and the northern arcuate scarp of the Vindhyan plateau. It presents an old erosion surface, carved out of granite known in Indian geology as Bundelkhand gneiss. The regional slope is to the northeast, and it falls in broad steps from the foot of the Vindhyan scarp to the Yamuna

river. Three surfaces with an average elevation of 150m., and 300m. cover practically the whole of the region, though individual mesas and buttes rise above the general level. The northern alluvial plains merge imperceptibly into granitic uplands. Then the landscape changes. Buttes of granite and sandstone, artificial tanks, and long narrow serrated ridges of quartz reefs and trap dykes diversify the topography. One of the oldest shore lines of India is to be seen near the point where the granitic plain surface abuts against the Bijawar hills on the south of Chattarpur.

iii) Malwa plateau:

To the north of the Vindhya range occurs this extensive lava plateau of Madhya Pradesh with a general northward slope, good drainage and black soil. Once heavily forested, it is now dotted with towns and villages. There are rolling plains, separated by flat-topped forested hill ranges and drained by a number of north-flowing rivers, the Betwa, Parbati, Newaj, Kali, Sindh, Chambal and Mah. It is the interfluvial areas that are more open and contain most of the towns and villages. Bhopal, capital of M.P., lies between Betwa and the Parbati.

iv) Vindhyan Scarplands

South of the Bundelkhand uplands a group of plateaus rise abruptly. They are principally composed of fluvio-marine deposits from an arid or subarid region in a remote geological

time, perhaps Cambrian, and became uplifted and peneplaned several times since then. A feature which distinguishes this region today is its remarkable erosional scarp tending east-west. Its structure in its simplest form is that of a flat-topped syncline and its present-day topography is clearly related to the structure and lithology. The strong sandstones of the Kaimur, Rewa and Bhandar series of the Vindhyan system are the principal scarp makers and also form the surface of the three constituent plateaus descending in steps from west to east. All the three plateaus are limited in the South by a great escarpment, locally known as the Kaimur hills; and in the north similar scarps, though notched by north-flowing streams and much reduced in elevation, separate them from the adjacent lowlands. Another series of transverse scarps trend north-south and separate more or less sharply one plateau from the other. Nearer these scarps the plateau surface is considerably dissected. This is most noticeable in the Bhandar plateau. The Kaimur plateau appears to be tilted slightly northwards and its southern slope facing the Son valley is marked by scarps and terraces, the former being developed on sandstones and limestones, and the latter on quartzites.

v) Vindhya range:

The Vindhya range is really an escarpment which varies in character and height, depending on the structure and lithology of the underlying rocks. For the first 100 km. from its western

terminus, Gomanpur peak (554 m) in the Dhar district of M.P. The Vindhya range runs in a curve, its convex side facing the Narmada valley and following a 300 m, contour line. These the country rock is basalt of the Deccan trap; on weathering it has given rise to a belt of hilly country, 10 to 20 km wide, heavily forested and sparse populated for the next 160 km a more open type of country prevails and the escarpment, still built of basalt becomes more prominent. Near Hoshangabad the rock type changes; the Vindya mountain comes down very close to the Narmada river and presents a terraced slope built of hard sandstones alternating with shales. The Kaimur range, that it eastern portion of the Vindhya mountain, is the most pronounced scarp of India, developed on sandstones and limestones, and is nowhere breached by any large stream and is not even notched by any prominent wind gap. The terraces below the scarp are carved out of quartzites and glauconites.

vi) Narmada valley:

The Narmada valley is exceptional in the sense that unlike the other river valley of India it has not been carved by the river itself which flows through structural depression. It is probably a subsided landmass between the Vindhya range on the North and the Satpura on the South, and appears to be an asymmetrical valley sloping westwards contrary to the direction of the flow of all the other rivers of Peninsular India except the Tapti and the Indravati.

The Narmada rises on the Amarkantak plateau from a spring at an elevation of about 1,057 m and soon descends 150 m over a precipitous basaltic cliff, and then begins to meander as far as Mandla. From Mandla town the river turns towards Jabalpur forming rapids through a rock bed, and at Bherghat it forms a magnificent waterfall 15 m high, the Dhuandhara. This is also known by the name Marble falls, as the bedrock here is marble. Below the waterfall there is a gorge 3 km long. Emerging from the gorge the Narmada flows West through fertile, alluvial plains for 350 km between Jabalpur and Handia with an average width of 50 km to the South of the river. Below Handia the hills again approach the river on both sides and are clothed with dense forests.

vii) The Satpura range:

Three distinct parts of the Satpura are easily discernible from West to East, rising almost to the same height of 900 m and are connected with each other by low lying plateaus. The Westernmost part still retains the name Satpura, though locally the name of Rajpipla hills is given to the western section. A high craggy, sharp-crested ridge formed of basalt dominates this western part of the Satpura and almost overhangs the Narmada valley between the two North-flowing tributaries of the Narmada: the Davanga and Goi. The Satpura broadens considerably in the central part and has radial drainage. This part is bordered on the north by the Mahadeo hills and on the South by

the Gawilgarh hills. The former consists of strong sandstones of the Gondwana age and slopes gently northwards but steeply southwards. The highest peak of the Satpura, Dhupgarh (1350 m), is near Pachmarhi hill-station.

viii) The Eastern Plateaus:

With the disappearance of lava in the East the plateau character changes and hills and basins diversify the landscape. This part of the Peninsular plateau consists of Baghelkhand plateau, Chotangapur plateau, Mahanadi basin and Dandakarange.

The Ranchi plateau: The largest and most typical part of Chotanagpur is the Ranchi plateau, which is developed on granite-gneiss. The average elevation of its upper part is 700 m. Rounded hills of massive granite (monadnock type) and slightly elevated terraces of older flood plains mark the topography of the Ranchi plateau. Apart from these low hills, the horizon is quite flat and one can safely presume that the Ranchi plateau is a peneplain. The Ranchi plateau is deeply dissected around its edges, giving rise to steep escarpments, locally known as ghats.

Rajmahal hills: The Rajmahal hills mark the end of the Chotanagpur plateau on the north-east. These hills, capped by lava flows of the Jurassic age, are flanked on the West by Gondwana sediments. Before the start of volcanic activities, the Archean terrain was base-levelled. A subsequent uplift with

eastward tilt gave rise to the present mesa-like appearance and then erosion produced typical scarps on the northern edge.

Dandakaranya : The tract Dandakaranya occupies a very sparsely populated and rugged terrain South of the Chattisgarh basin in extreme south eastern part of M.P. and south-western part of Orissa. The highest, Koraput plateau, is about 1200 m above sea-level.

The Garhjat hills: These hills in Orissa extend from the southern border of the Ranchi plateau almost to the Mahanadi river in the south. In absolute elevation the greater part of this region is much lower than the Ranchi plateau, but local relief is very much pronounced. The Bonaihills, the Keonjhar plateau and the Simlipal massif are relics of the oldest land-mass of India of the Dharwar age. They were repeatedly uplifted into mountains and eroded into peneplains, the evidence of which is found in the flat summits at elevation ranging from 400 to 1000 m.

ix) The Eastern Ghats of Orissa:

Nowhere do the Eastern Ghats exhibit their true mountain character so clearly as between the Godavari and the Mahanadi. The ancient name of the Eastern Ghats, Mahendragiri was given after a peak of that name (1501 m) which stands conspicuously above the coastal plain, about 80 km south-west of Berhampur in Ganjan district of Orissa. This mountainous tract, principally

composed of khondalites and Charnockites, is locally known as Maliyas (Highlands). The general trend of the ranges is from north-east to south-west, forming a watershed between West flowing & the East flowing streams.

x) The East-West of Orissa:

The coastal plains widen to the North of Barhampur and extend to the Chilka lake, the delta of Mahenadi, and the Balasore coastal plain, where they merge into the Ganga deltaic plains.

The costal plains in Orissa, called Utkal plains, extend for 400 km from a little north of the Subarnarekha river to a little south of the Rushikulya river. They include the Mahanadi delta with Cuttack at its heap. It differs somewhat from the Gange delta; its form along the seaward margin is more straight and is trained with sandiness because of stronger wave action.

South of the Mahanadi delta, the most important physiographic unit is the Chilka lake. Its origin is due to the formation of a bay-mouth bar, in places little more than 200 m wide. The lake, as it spreads out into a pear-shaped expanse of water, 70 km long, widens in the North-East and tapers in the South-West.

II.2 HISTORY OF THE GONDS

TH-4990

"The principal tribe of the Dravidian family, and perhaps

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the most important of the non-aryan or forest tribes in India is Gonds".¹ Though presently the Gonds are spread over Madhya Pradesh, Andhra Pradesh, Maharashtra, Orissa, Bihar & West Bengal, they are very much concentrated in two tracts of M.P. The first is the wide belt of broken hills and forest country in the centre of the state, which forms the Satpura plateau, and is mainly comprised in the Chhindwara, Betul, Seoni and Mandla districts, with portions of several others adjoining them. And the second is the still wider and more inaccessible mass of hill ranges extending South of the Chattisgrah plain, and South-West down to the Godavari.

There is a controversy among the different authors regarding the deviation of the word Gond. Russell considers that the name was given to the tribe by the Hindus or Muhammadans, as their own name for themselves is Koitur or Koi. General Cunningham considered that the name Gond probably came from Gonda, the classical term for part of the United Provinces and Bengal. Mr. Hislop considered that the name Gond was form of Khond, as the spelt the name of the Khond tribe. He pointed out that 'K' and 'G' are interchangeable. "It seems highly probably that the designation Gond was given to the tribe by the Telugus". The Gonds speak a Dravidian language of the same family as Tamil, Canerese and Taluge, and therefore it is likely that they came from South into the Central Provinces.

The Rajput dynasties had been ruling the various parts of

the Central Province from about the sixth to the twelfth centuries. They then disappear, and there is a blank till the fourteenth century or later, when Gond Kingdoms are found established at Kherla in Betul, at Deogarh in Chhindwara, at Garha-Mandla, including the Jubbulpore country, and at Chanda, fourteen miles of Bhandak. According to Russell the Hindu dynasties were subverted by the Gonds after the Muhammadan invasions of northern India and weakened or destroyed the central powers of the Hindus, and prevented any assistance being afforded to the outlying settlement. But the commonly held view runs contrary to this. The common view is that the immigration of the Gonds to the Central Provinces took place before the establishment of the Hindu kingdoms. There is no reason however to doubt that the Gonds came from the South through Chanda and Bastar. During the fourteen century and afterward the Gonds established dynasties at the places already mentioned the Central Provinces. For two or three centuries the greater part of the Province was governed by Gond kings. But the defence system of the Gond kingdoms was not strong as was shown when in the eighteenth century Maratha chiefs, having acquired some knowledge of the art of war and military training by their long fighting against the Mughals, cast covetous eyes on Gondwana. The loose tribal system, so easy in time of peace, entirely failed to knit together the strength of the people when united action was most required, and the plain country fell before the Maratha armies almost without a struggle. In

the hill regions, however, their chiefs continued to maintain an unequal resistance. In such areas, the Marathas continued to plunder and harass the Gonds until they obtained an acknowledgement of their supremacy and the promise, at least, of an annual tribute. Under this treatment the hill Gonds soon lost every vestige of civilization, and became the cruel, treacherous savages depicted by travellers of this period. With the pacification of the country and the introduction of a strong and equable system of government by the British, these wild marauders soon settled down and became the timid and inoffensive labourers which they now are.

II.3 HISTORY OF SANTALS

Santals are one of the major tribes of India inhabiting the states of Bihar, Orissa, West Bengal & Tripura. They prefer to live in the hilly and forest areas. They claim to have migrated from place to place as each locality they occupied was not large enough to contain their growing population. They commenced their migrations from Hihri Pipri to Nagpur and there from to Bihar. There had been such continuous migration of the tribal population to the middle India and adjoining western India that even during the historic period, it is difficult to locate their original places in absence of records. "Still the wandering condition explain their history of retreat being pushed by a few stronger sections of the India people".² Roy³ is of the opinion that till 6th century B.C. Santals and the

Mundas formed one tribe and he refers these two groups as Mundas. According to him, the Mundas before settling in Chotanagpur in the 6th century B.C. had inhabited a number of places. It is believed that Azamgarh (eastern U.P.) was the ancient residence of Mundas. General Cunningham in his Archaeological Report (Vol. XVII) has identified the Suiris of the area with the Saoras which is probably a generic name for all the Kolarian tribes, viz. the Kurkus, Bhils, Mundas, the Santals, the Bhuiyas the Hos, the Bhumijis and the Juags. From Azamgarh the Mundas migrated successively to different places following the circuitous route. From northern India southerward to modern Bundelkhand and central India, thence across eastern Rajasthan back to north-western India, thence through modern Ruhelkhand and Awadh to north Bihar, thence south Bihar in Magadh and finally before reaching Chotanagpur in Ruidasgarh (modern Rohtasgarh). The traditions of the Mundas as well as of their companions and Kinsmen, the Santals, speak of a struggle with another tribe - the Kharwar - before they left Rohtasgarh and retreated to the widler recesses of the Vindhya. Thence they crossed the Sone and marched on in a south-east direction to reach Omedanda, their first settlement in Chotanagpur. After a time the Santals and the Mundas parted company. The Santals crossed the Damodar and settled down in Sikharbhum (modern district of Hazaribag, Giridih) and later followed the course of the Damodar and went on to Dhanbad and to the Santhal Pargana.

II.4 CORES & PERIPHERIES OF THE GONDS AND THE SANTALS

Raza. Moonis & Ahmad, A.⁴ identified four types of cores and peripheries:

- i) both the core and periphery of the tribal groups are compact:
- ii) the periphery is compact but the core is fragmented
- iii) the core and the periphery are fragmented, and
- iv) the tribal groups has a compact core but there is no periphery.

Fragmented core and compact periphery

The Santal and the Gond territories offer best examples of situation in which the tribal periphery is still compact although the core has been subjected to great fragmentation.

The Santal core consist of two fragments-one in the Santhal Parganas and the other is Mayurbhnj. The periphery on other hand, encompass a wider region and is comprised by 22 taluks spread over Bihar and Bengal. The magnitude of non-tribal incursion in the Santhal region has been very high. The rich forest or the mineral resource base acting as powerful attraction.

The Gond homeland has also been equally disturbed by non-tribal incursions. The impact of these processes is evident

from the Gond core which consists of 5 fragments, each separated from the other by blocks on non-tribal settlements. The biggest of the fragments lies in Bastar and Raipur district. The other core fragments are contributed by three taluks of Mandla district and one taluk each of Bilaspur, Chhindwara, Mandla, Betul and Chandrapur. The Gond periphery extends over 43 taluks of M.P., Maharashtra and Orissa.

II.5 TRIBAL SUB-PLAN AREAS OF THE REGION

At the beginning of the Fifth-five year planning, it was considered that for the effective implementation of the tribal development programmes, sub-plans have to be prepared for areas of tribal concentration (50 percent or more tribal population at the block level or at any other level higher than the block. "By the end of 1978, the longterm objectives of the tribal sub-plans were stated to be as follows:

- i) to narrow down the gap between the levels of development of tribal and other areas; and
- ii) to improve the quality of life of the tribal communities covered by these sub-plans.

The tribal sub-plans are in operation in 44 tahsils fully and 63 tahsils partly in M.P., in 4 tahsils of Santhal Pargana, 6 tahsils of Ranchi, 5 tahsils of Singhbhum, 1 tahsil each in Sambalpur and Sundargarh, 2 tahsils of Keonjhar, 3 tahsils of Phulbani and 3 tahsils of Koraput.

II.6 PROPORTION OF THE TRIBAL POPULATION IN THE TOTAL POPULATION-1981

The tribal population is spread over all the districts of the region. But their concentration is very high in some pockets of the region which indicates towards the clustering nature of their population. The percentage of the tribal population to the total population of the district is highest in Jhabua (83.47). The proportion is very high in the districts of Mandla & Bastar. Out of the total population, the percentage of the tribal population is above 60 in these two districts. The percentage is above 50 in the districts of Dhar, Surguja of M.P., Sundargarh, Mayurbhanj and Koraput of Orissa; Ranchi of Bihar. In the districts of Shahdol, West Nimar, Raigarh of M.P., Keonjhar of Orissa and Singhbhum of Bihar, the percentage is above 40. The percentage is above 30 in the districts of Sidhi, Betul, chhindwara, Seoni of M.P., Phulbani & Kalahandi of Orissa and Santhal Pargana of Bihar. In five districts of M.P. and one district of Orissa, the percentage is above 20. In 12 districts of M.P., 2 districts of orissa and two districts of Bihar, the percentage ranges between 10 to 20. Some of the important districts of this category are Giridih and Palamu of Bihar. 16 districts of M.P., 4 districts of Orissa and two districts o Bihar is having less than 10 percent of its total population as tribals.

It is evident from the above analysis that the tribal concentration is very high in the three pockets of the region. One belt lies in the extreme western part of M.P., the second belt lies in the projected southern part of the region comprising the districts of Bastar & Koraput while the third belt lies in the extreme southern portion of Bihar, east part of M.P. and northern part of Orissa.

Table II.1

Frequency distribution of the districts according to the percentage of the tribal population to the total population of the district 1981

Sl. State	Percentage Categories							Total
	Above 70	50-60	40-50	30-40	20-30	10-20	Below 10	
1. M.P.	3	2	3	4	5	12	16	45
2. Orissa	-	3	1	2	1	2	4	13
3. Chotanagpur region of Bihar	-	1	1	1	-	2	2	7
Total	3	6	5	7	6	16	22	65

II.7 SPATIAL DISTRIBUTION OF THE GONDS-1981

"Among the tribal population of India the Gonds stand out by their numbers, the vast expanse of their habitat, and their historical importance".⁵ Though the Gonds are distributed in almost all districts of M.P., Orissa and the Chotanagpur region of Bihar, the inter-district variations in the share of the

Gond population is quite high. A vast majority of the Gond population is found in only a few districts of M.P. Their proportion is very low in the districts of Orissa and Bihar. In the following paragraphs, we will see their spatial distribution in the region :

The 1981 Census enumerated 7,447,071 Gonds of the total Gond population of the country, more than 80.62 percent were found in M.P., Orissa and Bihar. The share of the Gond population to the total tribal population in terms of percentages has been grouped with the help of standard deviation and Mean method. The average of the percentages of the Gond population to the total tribal population in the study area is 26.14 percent while the standard deviation of the same is 29.92. Seoni district of M.P. is having the highest percentage of Gond population to the total tribal population (90.45). This district is closely followed by Damoh and Narsimhapur with 85.59 and 89.37 percent respectively. All these three districts exceed the mean by two standard deviation. The spatial patterns depicted on the map suggests that all these three districts are situated at the central part of M.P. There are nine districts which come under the category Mean + 1 S.D. to Mean + 2 S.D. i.e 56.06 to 85.98. These districts are Panna, Raisen, Betul, Mandla, Chhindwara, Balaghat Rajnandgaon, Raipur and Bastar. The districts which ll under the category Mean to + Mean + 1 S.D. i.e. 26.14 to 56.06

percent are Shahdol, Sidhi, Sagar, Bhopal, Sehore, Hoshangabad, Jabalpur, Surguja, Bilaspur, and Durg districts of M.P., Bolangir and Kalahandi districts of Orissa. The remaining 23 districts of M.P., 11 districts of Orissa & all the 7 districts of Bihar comes under the category Mean - 1 S.D. to Mean i.e. 0.1 to 26.14. It can be suggested from the above description that the proportion of the Gond population to the total tribal population is considerably high in only twelve districts of M.P. which are situated in the central-east and southern parts of the state. In the western part of M.P., Orissa & the Chotanagpur region of Bihar the proportion of the Gond population is very low.

Table II.2

Frequency distribution of districts according to the percentage of the Gond population to the total tribal population of the district, 1981

Sl. No.	State	Percentage Categories				Total
		85.98 100	56.06 85.98	26.14 56.06	0.1 26.14	
1.	M.P.	3	9	10	23	45
2.	Orissa	-	-	2	11	13
3.	Chotanagpur region of Bihar	-	-	-	7	7
Total		3	9	12	41	65

Mean : 26.14

Standard Deviation : 29.92

II.8 DEMOGRAPHIC STRUCTURE OF THE GONDS - 1981

Distribution of Rural Gonds Among The Rural Tribal Population:

As tribes itself is a rural phenomenon, there is hardly any difference between the proportion of the Gonds to the Tribal population and the proportion of the rural Gonds to the total rural tribal population. The percentage categories and the districts in each percentage categories corresponds to the overall distribution of the Gond population.

Gonds Among The Urban Tribal Population

In the study area, 23.39 percent of the total urban tribal population are Gonds. It is one of the features of the tribal demography that their presence in the urban areas is very insignificant. In the recent past they have started migrating to the urban areas as a seasonal labour or as petty workers in the different shops and factories. They have started migrating to the urban areas due to the push factors in the rural areas. Either they have been uprooted from their original habitat or there is no economic opportunity to sustain their livelihood. The share of the urban Gonds to the total urban tribal population almost corresponds to their share in the overall tribal population. The proportion of urban Gonds to the urban tribal population is the highest in Rajnandgaon district of M.P. The other districts which come under the percentage

category Mean + 2 S.D. To Mean + 3 S.D. i.e. 74.57 to 100 percent are Raisen, Betual and Narsimhapur. The districts which fall under the category Mean + 1 S.D. to Mean + 2 S.D. are Sagar, Damoh, Hoshangabad, Mandla, Chhindwara, Seoni; Balaghat, Bilaspur, Raipur, Bastar and Durg districts of M.P. The other districts which exceeds the mean and comes under the category Mean to Mean + 1 S.D. i.e. 23.39 to 48.98 are Bhind, Shahdol, Datia, Panna, Dewas, Bhopal, Sehore, Jabalpur, and Surgaja. In the remaining 21 districts of M.P., Orissa & in all 7 districts of Bihar the proportion of the urban Gond population to the total urban tribal population is less than mean i.e. 23.39 percent.

Table II.3

Frequency distribution of districts according to the percentage of the Urban Gonds to the total urban tribal population of the district

Sl. No.	State	Percentage Categories				Total
		74.57 100	48.98 74.57	23.39 48.98	0.1 23.39	
1.	M.P.	4	11	9	21	45
2.	Orissa	-	-	-	13	13
3.	Chotanagpur region of Bihar	-	-	-	7	7
Total		4	11	9	41	65

Mean : 23.39

Standard deviation : 25.59

Rural-Urban Composition of The Gond Population

Rural Segment:

Most of the Gond population lives in the rural areas. To have a better understanding of the spatial distribution of the rural Gond population, an attempt has been made to analyse the district level data. The average of the percentage of rural Gond population to the total Gond population in the region is 84.93 while the Standard deviation for the same is 21.45. The almost entire Gond population of Sidhi is rural. In this district 99.91 percent of the total Gond population is rural. This district is very closely followed by Chattarpur, Damoh, Mandla Seoni. In all these districts, the proportion of the Rural Gond population is above 99 percent. There are five districts of Orissa also where the percentage of rural Gond population is above 99 percent . These district are Mayurbhanj, Dhenkanal, Bolangir, Kalahandi & Koraput. 28 more districts of M.P., 6 districts of Orissa and 3 districts of Bihar come under the category Mean + 1 S.D. i.e. 84.93 to 100 percent. The districts whose rural Gond population is less than Mean and falls under the category Mean - 1 S.D. to Mean i.e. 63.48 to 84.93 are Morena, Ratlam, Ujjain, Dhar, Shivpuri & West Nimar of M.P., Balasore of Orissa and Hazaribagh, Palamu districts of Bihar. The three district which fall under the category Mean - 2 S.D. to Mean - 1 S.D. i.e. 42.03 to 63.48 percent are Gwalior, Shajapur, districts of M.P. and Puri district of

Orissa. The districts having less than Mean - 2 S.D. rural Gond population are Bhind, Datia, Indore & Bhopal district of M.P., Dhanbad & Giridih district of Bihar.

Table II.4

Frequency distribution of districts according to the percentage of Rural Gonds to the total Gond population of the district

Sl. No.	State	Percentage Categories				Total
		84.93 100	63.48 85.98	42.03 56.06	Less than 42.03	
1.	M.P.	33	6	2	4	45
2.	Orissa	11	1	1	-	13
3.	Chotanagpur region of Bihar	3	2	-	2	7
Total		47	9	3	6	65

Mean : 84.93; Standard deviation : 21.45

Urban Segment

The presence of Gonds is very much insignificant in the urban areas. In 37 districts of the region, the percentage of Urban Gonds to the total Gond population is less than 5. However the average for the whole region is 15.05 while the Standard deviation is 21.45. The coefficient of Variation is 142.52. It indicates that inter-district variations are very much prominent in the spatial distribution of the urban Gond population. The percentage of Urban Gonds exceed the regional

average in 12 districts. In the Giridih district of Bihar, the percentage of urban Gonds exceeds the mean by more than 3 standard deviation. The districts whose percentages ranges from Mean + 2 S.D. to Mean + 3 S.D. i.e. 57.95 to 79.4 are Datia, West Nimar, & Bhopal districts of M.P., and Dhanbad district of Bihar. The percentage of Urban Gonds is from Mean to Mean + 1 S.D. i.e. 15.05 to 31.5 in six district of M.P. two districts of Bihar and in one district of Orissa. These district are Morena, Shivpuri, Ratlam, Ujjain, Jhabua & West Nimar of M.P., Hazaribag and Palamu of Bihar and Balasore of Orissa. In the remaining districts, the proportion of the urban Gonds is below regional average-

Table II.5

Frequency distribution of districts according to the percentage of the urban Gonds to the total Gonds population

Sl. No.	State	Percentage Categories					Total
		Above 79.4	57.95 to 79.4	36.5 to 57.95	15.05 to 36.5	0.1 to 15.05	
1.	M.P.	-	3	2	6	34	15
2.	Orissa	-	-	1	1	11	13
3.	Chotanagpur region of Bihar	1	1	-	2	3	7
Total		1	4	3	9	48	65

Sex-Ratio of The Gonds

The sex-ratio is in favour of females among the schedule tribes and the same holds true for the Gonds But there is discrepancy between sex-ratio of rural Gonds & Urban Gonds. To give a better picture of the sex-ratio of overall Gond population, rural Gond population and the urban Gond population, a vivid description in the following paragraphs has been given.

Sex-ratio of Overall Gond population:

The number of females per thousand males is the highest in Ujjain district of M.P. where it is 4224. In twelve districts of M.P., eight districts of Orissa and one district of Bihar, the number of female Gonds exceed their male counterpart. The females in the tribal society have a higher status than in the non-tribal society and contributes significantly to their economic pursuits. Right from the collection of wood from the forests to the agricultural work in the fields, the females work shoulder to shoulder with their male counterpart. "Although, the sex-ratio is in favour of females among the scheduled castes and tribes (Gonds, Baigas, Pradhan, in the Block, yet it is among them only that bride price is found. Women are of great economic help to tribal life since they help in agriculture, in collecting forest produce, looking after children and house-hold affairs. This shows the high economic and social status of women among the scheduled tribes and

castes. It is said that where sexual laxity is more girls are born and where it is restricted boys are born. This axiom seems to be true and applicable to tribal people and scheduled castes since among them premarital and extramarital sexual relations are permitted. The widow is remarried as many times as she wants. She is free to choose as many husbands as she likes. This may be one of the reasons indicating to why sex-ratio is in favour of women among SCs and STs. However, no satisfactory reason would be given with regard to this tendency. It may be due to racial, biological, dietary and climatic factor. All factors may be inter-mingling or any one factor may be dominating"⁶. It is also said that the proportion of men is the highest in those communities which are intellectually the most-developed & less in the primitive societies. In the forests, the risk to tribal males is greater while for the female counterpart it is lesser. It may be also added that there is hardly any premature marriage among the tribes & moreover they live an open air life. These might be some of the reasons which led the females to exceed the males.

In twenty districts of the region, the sex-ratio is in between 1000-1050. The districts which falls under this category are Shivpuri, Betual Mandla, Chhindwara, Seoni, Balaghat, Bilaspur, Raigarh, Rajnandgaon, Durg Raipur, and Bastar of M.P., Ranchi of Bihar. Sambalpur, Sundargarh, Keonjhar, Phulbani, Bolangir, Kalahandi & Koraput districts of

Orissa. The districts whose sex-ratios are fairly high i.e. 950 to 1000 are Bhind, Tikamgarh, Panna, Damoh, Satna, Rewa, Shadol, Sidhi, Dewas, East Nimar, Sehore, Raisen, Hoshangabad, Jabalpur, Narsimhapur, & Surguja of M.P., Hazaribag and Singhbhum of Bihar and Dhenkanal of Orissa. Sex-ratios varies from 900 to 950 in the districts of Morena, Guna, Sagar, Mandsaur, Ratlam, West Nimar, Rajgarh, & Vidisha of M.P., Santhal Pargana & Palamu of Bihar. In the Gwalior, Chattarpur, Dhar, Indore, Bhopal districts of M.P., Cuttack district of Orissa, the Gond sex-ratio is in between 850 to 900. The districts which come under the sex-ratio category of 800 to 850 are Datia, Jhabua of M.P. and Giridih district of Bihar. In the remaining three districts of Orissa, one district of M.P. and one district of Bihar, the sex-ratio is below 800.

Table II.6

Frequency distribution of districts according to the sex-ratio categories of the Gonds-1981

Sl. State No.	Sex-Ratio Categories							Total
	1050 1000	1000 1050	950 1000	900 950	850 900	800 850	Below 800	
1. M.P.	-	12	16	8	5	2	1	44
2. Orissa	1	7	1	-	1	-	3	13
3. Chotanagpur region of Bihar	-	1	2	2	-	1	1	7
Total	1	20	19	10	6	3	5	64

Note : In the Ujjain district of M.P. the sex-ratio of Gonds is exceptionally high, so it has not been included in the above categories.

Sex-ratio of the Gonds in the rural areas:

In fourteen districts of M.P., eight districts of Orissa and two districts of Bihar, the female Gond population outnumbers their male counterparts in the rural areas. Raipur district of M.P. and Mayurbhanj district of Orissa is having more than 1050 rural Gond females per thousand rural Gond males. The districts which come under the sex-ratio category of

Table II.7

Frequency distribution of districts according to the sex-ratio categories of Gonds in the rural areas-1981

Sl. State No.	Sex-Ratio Categories							Total
	1050 1000	1000 1050	950 1000	900 950	850 900	800 850	Below 800	
1. M.P.	1	13	13	8	4	2	3	44
2. Orissa	1	7	1	2	1	-	1	13
3. Chotanagpur region of Bihar	-	2	1	2	-	1	1	7
Total	2	22	15	12	5	3	4	64

1000 to 1050 are Shivpuri, Rewa, Betul, Jabalpur, Mandla, Chhindwara, Seoni, Balaghat, Bilaspur, Raigarh, Rajnandgaon, Durg and Bastar districts of M.P., Ranchi & Singhbhum district of Bihar; Smabalpur, Sundargarh, Keonjhar, Phulbani, Bolangir, Kalahandi & Koraput district of Orissa. The sex-ratio is above 950 but below 1000 in 13 districts of M.P., one district of

Orissa and Bihar each. Eight districts of M.P., two districts of Bihar & Orissa each comes under the sex-ratio category of 900 to 950. The sex-ratio varies from 850-900 in three districts of M.P. and one district of Orisa. Two districts of M.P. and one district of Bihar comes under the sex-ratio category of 800-850. The sex-ratio is below 800 in three districts of M.P. and one district of Bihar and Orissa each. The sex-ratio is exceptionally very low in Dhanbad district of Bihar where it is only 638.

Sex-ratio of the Gonds in the Urban areas

In most of the districts the proportion of urban male Gonds is more than their female counterpart. The sex disparity among the urban Gonds occurs not due to the social, economic or biological reasons. It generally occurs due to the selective nature of migration. The proportion of the urban Gonds to the total Gond population is very low in most of the districts. They have started migrating to the urban areas only recently for seeking petty jobs as they have been thrown out of the rural areas due to the lack of job opportunities there. Generally the male section of the population migrate to the urban areas during the slack seasons when there is very less opportunity of work in the agricultural fields or they migrate permanently to work as labourers in the various factories. However, in Bhand, Gun, Dewas and Bilaspur districts of M.P., Palamu district of Bihar and Phulbani district of Orissa, the number of urban

female Gonds exceeds the urban male Gonds. The urban sex-ratio is above 950 in Rajnandgaon and Raipur districts of M.P. It is above 900 in eight districts of M.P. and four districts of Orissa. In seven districts of M.P., one districts of Bihar and Orissa each, the sex-ratio is above 850 There are eight districts of M.P. and three districts of Bihar which comes under the sex-ratio category of 800 to 850. The sex-ratio is below 800 in 14 districts of M.P., two districts of Bihar and six districts of Orissa.

Table II.8

Frequency distribution of districts according to the sex-ratio categories of Gonds in the urban in the urban areas-1981

Sl. State No.	Sex-Ratio Categories								Total
	Above 1050	1050 1000	1000 950	950 900	850 800	800 Below 800			
1. M.P.	1	4	2	8	7	9	14	-	45
2. Orissa	-	1	-	4	1	-	6	1	13
3. Chotanagpur region of Bihar	-	1	-	-	1	3	2	-	7
Total	1	6	2	12	9	12	22	1	65

It we compare the sex-ratio of the Gonds in the rural areas with the sex-ratio of Gonds in the urban areas, a marked difference between the two is observed. In the rural segment, in 14 districts of M.P. the number of females outnumber the males while in the urban segment the females exceed males only in four districts. The sex-ratio is more than 1000 in the rural

areas of eight districts of Orissa while the number of districts is only one in the urban areas. The rural sex-ratio is in favour of females in two districts of Bihar while the urban sex-ratio is in favour of females in only one district.

Growth rates of Gonds - 1971-81.

There is a very wide variation in the growth rates of the Gond population. The data has been grouped into four categories using the Quartile method technique. The data has been grouped into $> n+1/4$, $n+1/4$ to $n+1/2$, $n+1/2$ to $3/4(n+1)$ and above $3/4(n+1)$ Santhal Pargana district of Bihar and Dhar district of M.P. registered a very abnormal decadal growth rate. In these two districts, the decadal growth rates are 2393.15 and 2647.61 respectively. There are ten districts whose decadal growth rates are above 119.23. These districts are Balaghat, Dhanbad, Jabalpur, Puri, Giridih, Ratlam, Indore & Ganjam. But in all of these proportion in these districts were low in the base year i.e. 1971, a slight increase in the number of population shows high positive growth rates. In twelve districts the growth rates are above 34.79. In another twelve districts, the growth rates are above 20.74. Palamu district registered the lowest positive growth rate. It's only 7.23 in this district.

In the districts where the proportion of the Gond population is significant, growth rates are normal. All these districts experienced a positive growth rate of 20 to 40.

Balasore registered second highest negative growth rate of -59.09 while West Nimar registered highest negative growth rate of -77.86. The three districts which registered a decline in the Gond population by more than 30 percent are Morena, Bhind & Hazaribag. There are other six districts which registered a negative growth rate.

Table II.9

Frequency distribution of the districts according to the decadal growth rate categories of Gonds - 1971-81

Growth rate categories	Frequency of districts
+ ve	
Above 119.23	12
34.79 - 119.23	12
20.74 - 34.79	12
Below 20.74	12
- ve	
Above 40	4
30 - 40	3
20 - 30	1
10 - 20	3
Below 10	1

II.9 SPATIAL DISTRIBUTION OF SANTALS - 1981.

1981 Census enumerated 4,260,841 Santals in the country. The share of Santals to the total tribal population is 8.25 percent in the country. The santals are widely distributed in Bihar, Orissa, Tripura and West Bengal. However, they are dominant over a region stretching from Chotanagapur plateau to extreme south-western part of West Bengal. 55.04 percent of the

total Santal population live in our study area comprising of Chotanagpur region of Bihar and the entire state of Orissa; and M.P. There is no Santal population in M.P. There exists a great inter-district variation in the share of Santal population to the total tribal population. The tribal population of the country tends to cluster in certain pockets and within these pockets there are specified parts, each part is inhabited by certain tribal groups.

In the following paragraphs we will explore the spatial variations in the distribution of overall Santal population as well as in the rural and urban segment.

Overall Santal Population

The percentage of Santals to the total tribal population is 85.62 in Giridih which is the highest figure in the region. Adjacent to Giridih to its west is Santhal Pargana & to its South-West is Dhanbad where the figures are 80.67 and 79.8 respectively. From the figures depicted on the map it is evident that the Santals are concentrated in the north eastern part of the Chotanagpur region. The districts where the percentage is above 20.07 are Hazaribag, Singhbhum district of Bihar, Mayurbhanj & Balasore districts of Orissa. The percentage is below 20.07 in Palamu & Ranchi of Bihar; and in all districts of Orissa excluding Mayurbhanj & Balasore.

Table II.10

Frequency distribution of districts according to the percentage categories of overall Santal population to the total Tribal population of the district-1981

Sl. No.	State	Percentage Categories			Total	
		Above 78.45	49.26 78.45	20.07 49.26		Below 20.07
1.	Bihar	2	1	2	2	7
2.	Orissa	-	-	2	11	13
Total		2	1	4	13	20

Mean : 20.07; Standard deviation : 29.19

Spatial distribution of Rural Santals among the Rural tribal population

Since a vast chunk of the Santals live in the rural areas, there is very close correspondence between the percentage of overall Santals to the tribal population and the percentage of

Table II.11

Frequency distribution of districts according to the percentage categories of the Rural Santals to the total rural tribal population-1981

Sl. No.	State	Percentage Categories			Total
		Above 80.86	20.42 50.64	Below 20.07	
1.	Bihar	3	2	2	7
2.	Orissa	-	2	11	13
Total		3	4	13	20

Mean : 20.42;
Standard deviation : 30.22

Rural Santals to the total rural tribal population. The percentage of Rural Santals to the total rural tribal population is above 80.86 in Santhal Pargana, Dhanbad & Giridih districts of Bihar. The figures are above 20.42 but below 50.64 in Hazaribag & Singhbhum districts of Bihar; Mayurbhanj and Balasore of Orissa. It's below 20.42 in Palamu and Ranchi district of Bihar; all the districts of Orissa except Mayurbhanj and Balasore.

Spatial Distribution of Urban Santals among the urban tribles population:

The average percentage of urban Santals to the urban tribals is lower than the average percentage of overall Santal population to the tribal population in the region. The proportion of Urban santals to the urban tribal is highest in Santhal pargana (84.67). The figures are above 41.57 in Dhanbad

Table II.12

Frequency distribution of districts according to the percentage categories of Urban Santals to the Urban tribal population - 1981

Sl. No.	State	Percentage Categories				Total
		65.36 89.15	41.57 65.36	17.78 41.57	Below 17.78	
1.	Bihar	1	1	2	3	7
2.	Orissa	-	1	2	10	13
Total		1	2	4	13	20

Mean : 17.78

Standard deviation : 23.79

district of Bihar and Balasore district of Orissa. In Singhbhum, Giridih district of Bihar; Mayurbhanj, Cuttack district of Orissa, the percentage is above 17.78. The figures are below 17.78 in Hazaribag, Palamu & Ranchi of Bihar; in all districts of Orissa except three.

II.10 DEMOGRAPHIC STRUCTURE OF THE SANTALS - 1981

Rural Urban Composition of The Santals

Rural Component

In all the districts where the Santal Concentration is high, the percentage of Rural Santals to the total Santal population is above 76.39. In all the districts of Bihar, Keonjhar, Mayurbhanj, Balasore, Dhenkanal and Phulbani districts of Orissa, the percentages are above this figure. The percentage figures are above 52.7 in Cuttack, Koraput and

Table II.13

Frequency distribution of districts according to the percentage categories of the Rural Santals to the Total Santals - 1981

Sl. No.	State	Percentage Categories				Total
		Above 76.39	52.7 - 76.39	29.01 - 52.7	5.32 - 29.01	
1.	Bihar	7	-	-	-	7
2.	Orissa	5	3	4	1	13
	Total	12	3	4	1	20

Mean : 76.39

Standard deviation : 23.69

Ganjam districts of Orissa. In the districts of Sambalpur, Sundargarh, Bolangir and Kalahandi, the percentage are above 29.01. Puri district of Orissa is having lowest percentage of rural Santals.

Urban Segment

On an average 23.59 percent of the total Santal population of the region lives in the urban areas. Though the average is impressive, the proportion of the urban population is low in about fifty percent districts of the region. The percentage figures for urban Santals is above 47.28 in Sambalpur, Sundargarh, Bolangir and Puri districts of Orissa. In Cuttack, Koraput, Ganjam and kalahandi districts of Orissa, the percentage is above 23.59. In all the districts of Bihar and five districts of Orissa, the percentage figures are below 23.59.

Table II.14

Frequency distribution of districts according to the percentage categories of Urban Santals to the total Santal population - 1981

Sl. No.	State	Percentage Categories			Total
		47.28 94.66	23.59 47.28	Below 23.59	
1.	Bihar	-	-	7	7
2.	Orissa	4	4	5	13
	Total	4	4	12	20

Mean : 22.59

Standard deviation : 23.69

Sex-Ratio of the Santals - 1981

The number of Santal females exceeds their male counterparts in three districts of the region. The number of the female Santals per thousand male Santals is above 1000 in Singhbhum district of Bihar and Mayurbhanj district of Orissa. The sex-ratio is high i.e. above 950 in Santal Pargana, Dhanbad, Giridih and Hazaribag districts of Bihar; Keonjhar and Balasore districts of Orissa. In Ranchi districts of Bihar, Sundargarh, Cuttack and Koraput districts of Orissa, the sex-ratio is moderate (above 900). It's above 850 in Dhenkanal district. The sex-ratio figures are above 800 in Palamu district of Bihar and kalahandi district of Orissa. The sex-ratio figures are low in Sambalpur, Bolangir, Ganjam and Puri districts of Orissa. the sex-ratio in Phulbani districts of Orissa is abnormally low (266).

Table II.15

Frequency distribution of districts according to the Sex-ratio categories of Santals - 1981

Sl. State No.	Sex-Ratio Categories						Total
	1000 1050	950 1000	900 950	850 900	800 850	Below 800	
1. Bihar	1	4	1	-	1	-	7
2. Orissa	1	2	3	1	1	5	13
Total	2	6	4	1	2	5	20

Sex-ratio of Santals in the Rural Areas

The sex-ratio in the rural areas are comparatively higher than that of overall sex-ratio. The females outnumber males in four districts of Orissa and one district of Bihar. The sex-ratio is very high in Kalahandi of Orissa. The number of females per thousand males is 1571 in that district. This district is followed by Bolangir where the sex-ratio is 1250.

Table II.16

Frequency distribution of districts according to the sex-ratio categories of Santals in the Rural area - 1981

Sl. No.	State	Sex-Ratio Categories					Total	
		Above 1050	1000 to 1050	950 to 1000	900 to 950	850 to 900		Below 850
1.	Bihar	-	2	5	-	1	-	7
2.	Orissa	2	2	2	3	-	4	13
Total		2	3	7	3	1	4	20

In Mayurbhanj, Koraput district of Orissa and in Singhbhum district of Bihar, the sex-ratio is above 1000. But among the districts of Orissa where the sex-ratio is very high, only in Mayurbhanj the proportion of the Santal population is high. In the remaining districts the proportion is negligible. The sex-ratio is fairly high (above 950) in Santhal Pargana, Dhanbad, Giridih, Hazaribag and Ranchi districts of Bihar; Keonjhar and Balasore districts of Orissa. In Sundargarh, Cuttack and Dhenkanal districts of Orissa the sex-ratio is above 900. Palamu districts sex-ratio is above 850. The ratio is below 850

in five districts of Orissa. In Phulbani district of Orissa, the sex ratio is very low (only 333).

Sex-ratio of Santals in the Urban Areas

The sex-ratio is fairly low in the urban areas in comparison to the rural segment. The females doesn't outnumber their male counterparts in any of the districts. In all the districts the sex-ratio is below 950. The sex-ratio figures are above 900 in Keonjhar, Balasore and Cuttack districts of Orissa and in Dhanbad districts of Bihar. In Sundargarh, Mayurbhanj district of Orissa, in Santhal Pargana and Singhbhum district of Bihar, the sex-ratio figures are above 850. It is above 800 in Giridih and Hazaribag districts. In Koraput, the sex ratio is above 750 while in Ranchi it is above 700. In Bolangir, Kalahandhi, Ganjam and Palamu districts the sex-ratio is very low. The figures in these districts are 250, 300, 444 and 421 respectively. Phulbani district is having no urban female population.

Table II.17

Frequency distribution of districts according to the sex-ratio categories of Santals in the Urban area - 1981

Sl. State No.	Sex-Ratio Categories						Total
	900 950	850 900	800 850	750 800	700 750	Below 700	
1. Bihar	1	2	2	-	1	1	7
2. Orissa	3	2	-	1	-	6	12
Total	4	4	2	1	1	7	19

Note : Phulbani district of Orissa is having no Urban female Santal population.

Growth Rates of the Santals 1971-81

The decadal growth rate is highest in Palamu district of Bihar. It registered a surprisingly high positive growth rate of 1659.57. Puri also registered a abnormally high growth rate of 1067.08. A very high growth rate of Puri seems to be due to two reasons. Firstly, the magnitude of the population was low in the base year, 1971. The second reason may be due to the immigration in this district. Since this district is having large number of urban areas, the Santals might have migrated to these places in search of work. The high growth rate in Palamu district may be accounted for the migration from the neighbouring districts. There are two other districts whose growth rates are above 148.13. These two districts are Ganjam and Bolangir with growth rates 155.55 and 600 respectively. There are four districts which registered a growth rate above 69.26. In the six districts the growth rates range between 15.73 to 69.26. All the Santal predominated districts except one comes under this category. It is worthwhile to mention here that all the districts having very low proportion of the Santals, registered a very high growth rate among the Santal population while in the Santal dominated districts, their growth rates are normal. Among the Santal dominated districts, Santal Paragana registered a low growth rate. It is 9.93 in this district. In the three other Santal dominated districts the rate is above 15.

Only two districts registered a negative growth rate of the Santhals over the decade. Out of these two districts, Hazaribag is having a high proportion of Santal population but it recorded a negative growth rate of -73.29. The other district which recorded a negative growth rate is Phulbani.

Table II.18

Frequency distribution of districts according to the decadal growth rate categories of the Santals-1971-81

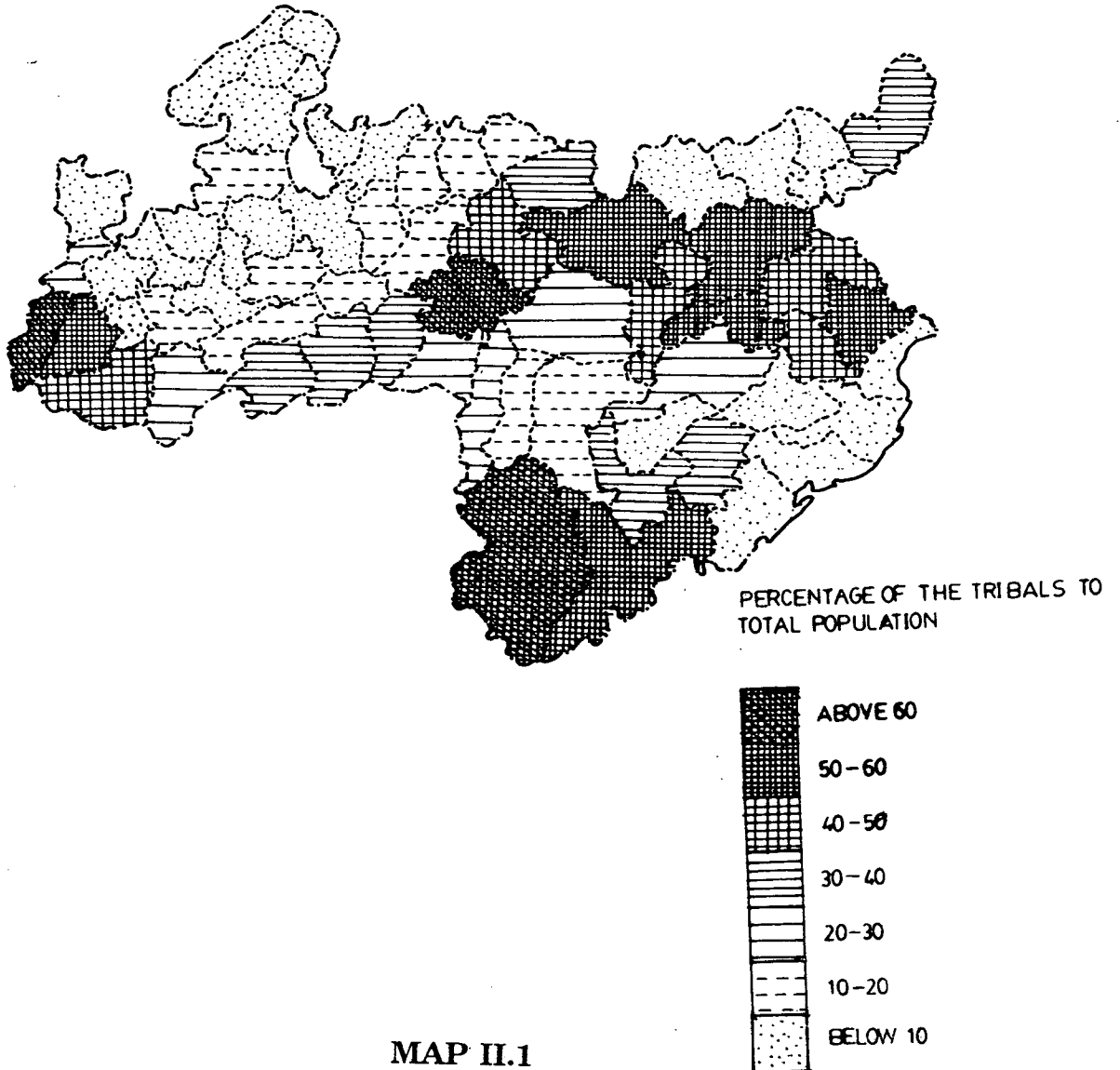
Growth rate categories	Frequency of districts

+ ve	
Above 148.13	4
69.26 - 148.13	4
15.73 - 69.26	6
Below 15.73	3
- ve	
-73.29	1
-47.22	1

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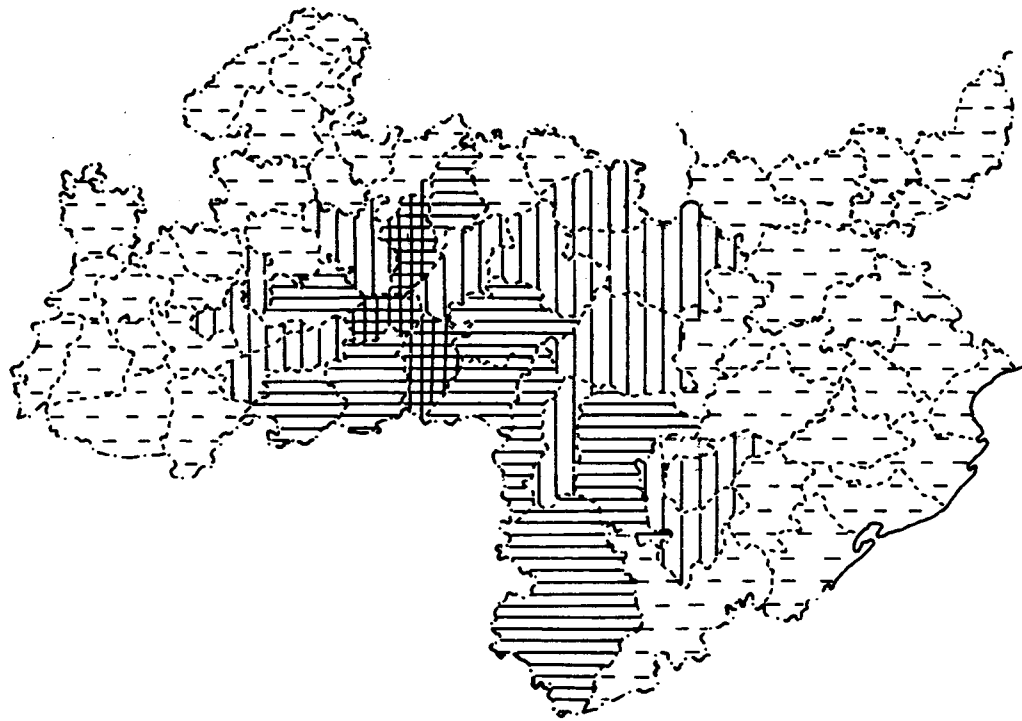
DISTRIBUTION OF THE TRIBAL POPULATION 1981



MAP II.1

MID INDIA DISTRIBUTION OF GONDS

1981



PERCENTAGE OF THE GONDS TO
THE TOTAL TRIBAL POPULATION



ABOVE 85.98



56.05 - 85.98



26.14 - 56.05

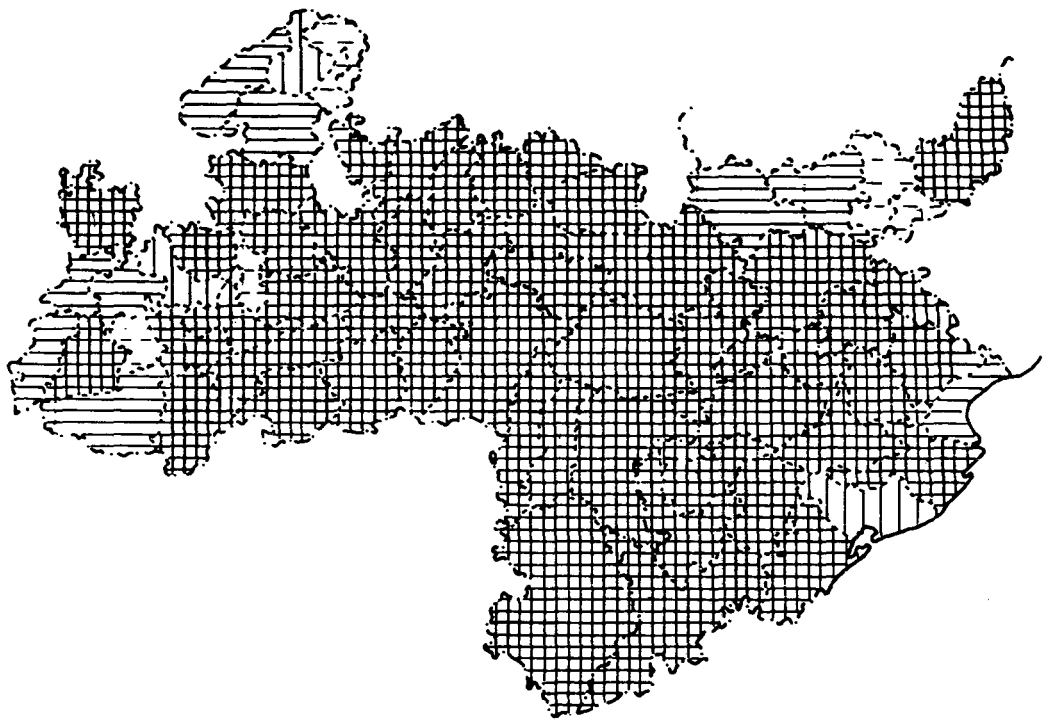


BELOW 26.14

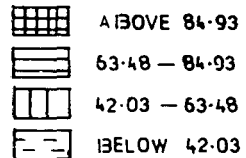
MAP II.2

MID INDIA
GONDS : RURAL COMPONENT
1981

KILOMETRES
100 50 0 100 200 300 400



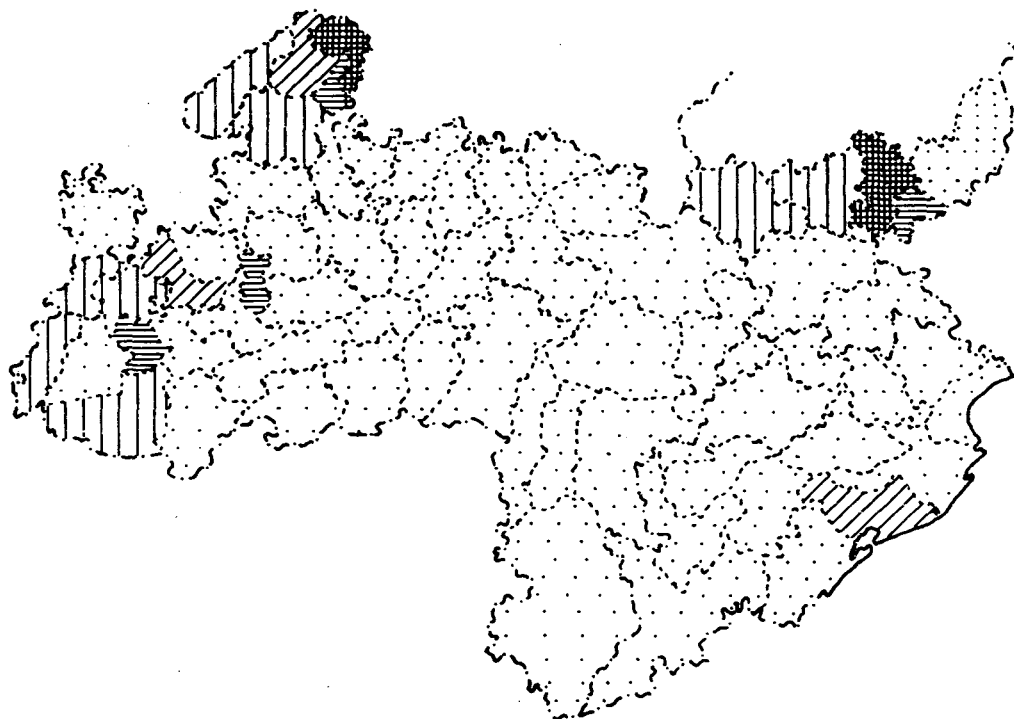
PERCENTAGE OF THE RURAL GONDS
TO THE TOTAL GOND POPULATION



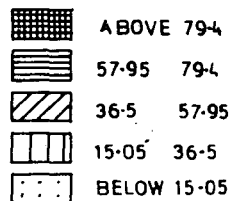
MAP II.3

MID INDIA GONDS : URBAN COMPONENT

1981

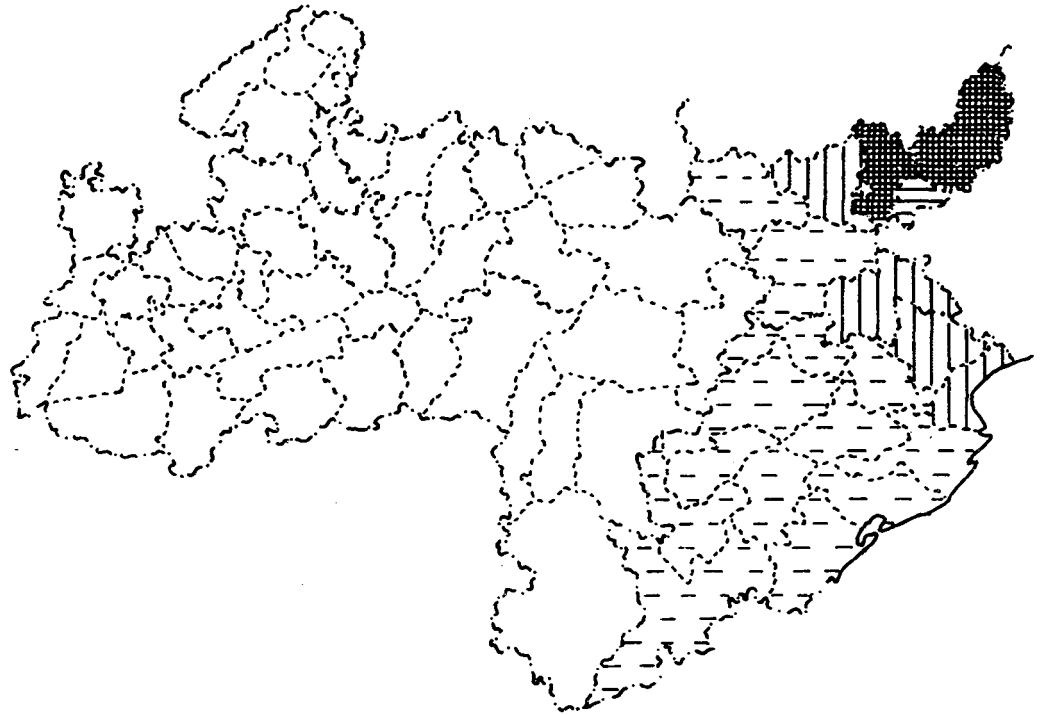


PERCENTAGE OF THE URBAN GONDS
TO THE TOTAL GOND POPULATION








MAP II.4

MID INDIA
DISTRIBUTION OF SANTALS
1981

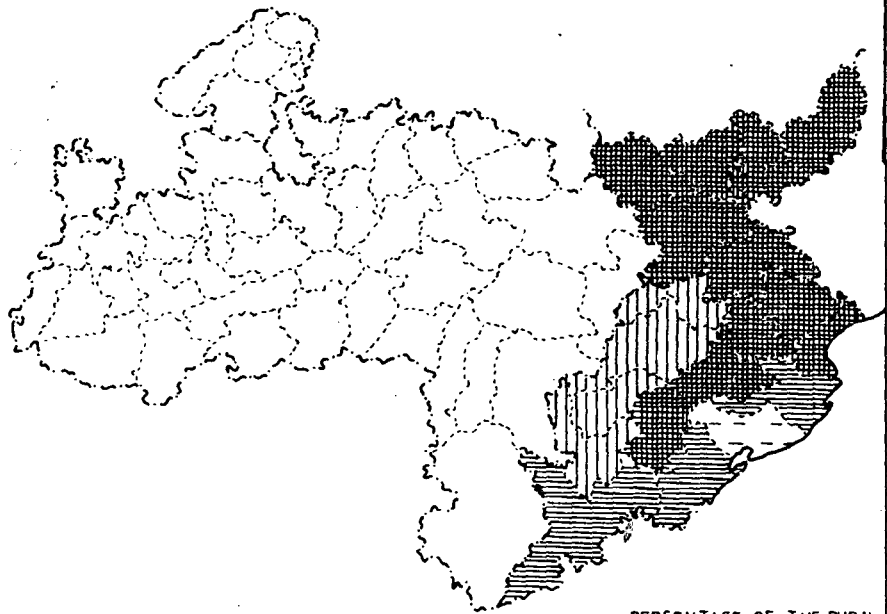


PERCENTAGE OF THE SANTALS
TO THE TOTAL TRIBAL POPULATION

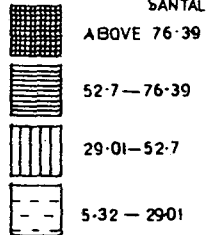
-  ABOVE 78.45
-  49.26 - 78.45
-  20.07 - 49.26
-  BELOW 20.07
-  NIL

MAP 11.5

**MID INDIA
SANTALS
RURAL COMPONENT
1981**

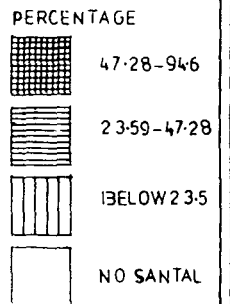
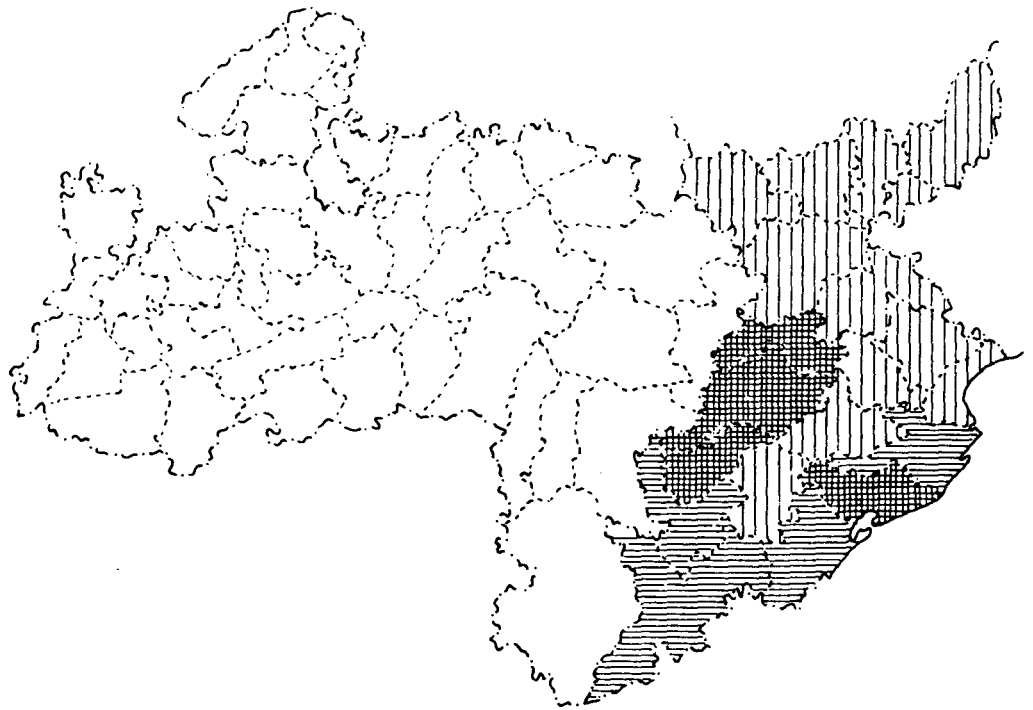


PERCENTAGE OF THE RURAL
SANTALS TO THE TOTAL
SANTALS



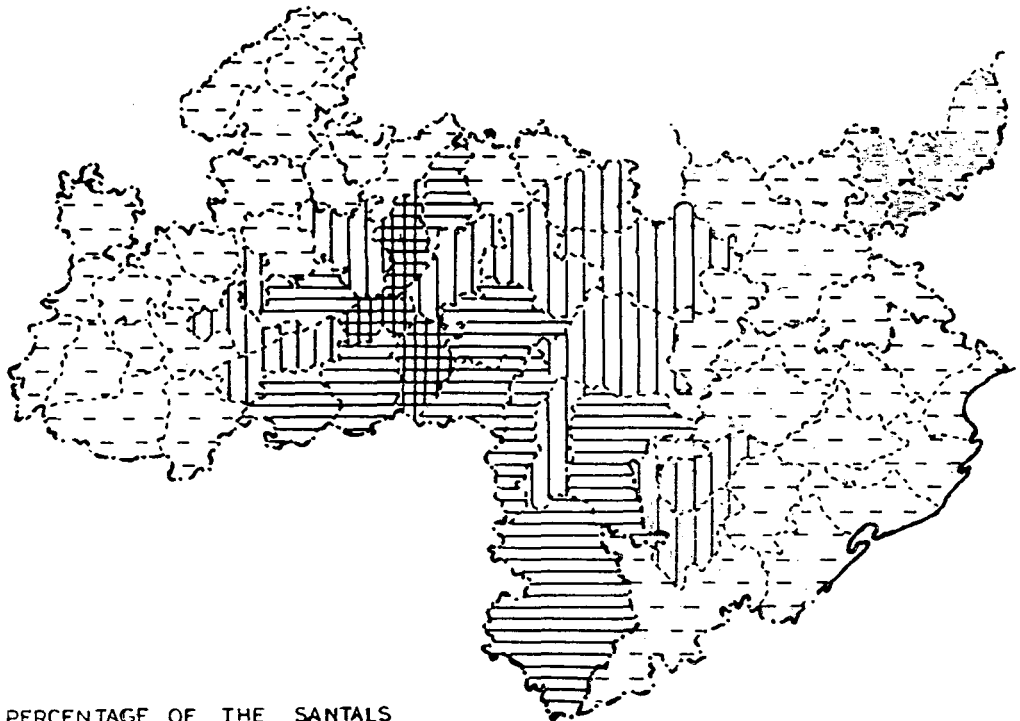
MAP II.6

MID INDIA
SANTALS
URBAN COMPONENT
1981

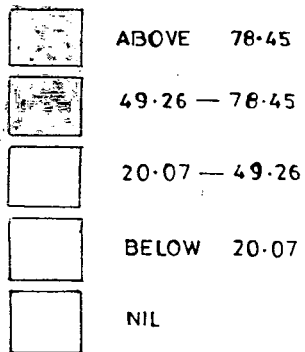


MAP II.7

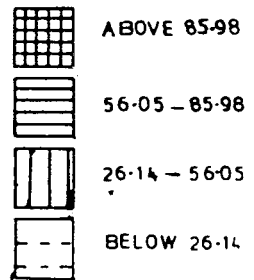
DISTRIBUTION OF GONDS AND SANTALS 1981



PERCENTAGE OF THE SANTALS
TO THE TOTAL TRIBAL POPULATION



PERCENTAGE OF THE GONDS TO
THE TOTAL TRIBAL POPULATION



MAP II.8

Appendix II.1

Percentage of Tribal Population in Mid India - 1981

S.NO.	DISTRICT	Percentage of Tribal Population to the Total Population of the District
MADHYA PRADESH		
1	MORENA	5.26
2	BHIND	0.13
3	GWALIOR	2.77
4	DATIA	1.37
5	SHIVPURI	9.98
6	GUNA	10.96
7	TIKAMGARH	4.15
8	CHATTARPUR	2.98
9	PANNA	14.12
10	SAGAR	8.68
11	DAMOH	11.96
12	SATNA	13.49
13	REWA	12.04
14	SHAHDOL	47.44
15	SIDHI	31.26
16	MANDSAUR	5.19
17	RATLAM	21.48
18	UJJAIN	1.48
19	SHAJAPUR	2.19
20	DEWAS	13.83
21	JHABUA	83.47
22	DHAR	52.06
23	INDORE	4.74
24	W.NEMAR	43.25
25	E.NEMAR	25.64

S.NO.	DISTRICT	Percentage of Tribal Population to the Total Population of the District
6	RAJGARH	2.96
27	VIDISHA	4.3
28	BHOPAL	2.3
29	SEHORE	9.11
30	RAISEN	17.96
31	BETUL	36.18
32	HOSHANGABAD	15.98
33	JABALPUR	17.43
34	NARSIMHAPUR	12.87
35	MANDLA	60.35
36	CHINDWARA	33.36
37	SEONI	36.35
38	BALAGHAT	21.82
39	SURGUJA	54.81
40	BILASPUR	23.39
41	RAIGARH	48.51
42	R. NANDGAON	25.28
43	DURG	12.63
44	RAIPUR	18.55
45	BASTAR	67.78
	ORISSA	
1	SAMBALPUR	27.2
2	SUNDARGARH	51.25
3	KEONJHAR	44.81
4	MAYURBHANJ	57.67
5	BALASORE	6.84
6	CUTTACK	3.32
7	DHENKANAL	12.26
8	PHULABANI	38.93

S.NO.	DISTRICT	Percentage of Tribal Population to the Total Population of the District
9	BOLANGIR	19.21
10	KALAHANDI	31.27
11	KORAPUT	55.21
12	GANJAM	9.47
13	PURI	3.45
	BIHAR	
1	S. PARGANA	36.79
2	DHANBAD	9.11
3	GIRIDIH	12.98
4	HAZARIBAGH	9.04
5	PALAMU	18.32
6	RANCHI	56.41
7	SINGHBHUM	44.08

Appendix II.2

Spatial Distribution of Gonds and Their
Demographic Structure (1981)

S. No.	DISTRICT	%age of Gonds*	% of Gonds		Sex Ratio	Growth Rate (1971-81)
			RURAL	URBAN		
	MADHYA PRADESH					
1	MORENA	1.19	69.84	30.16	918.03	-32.03
2	BHIND	19.65	15.53	84.47	960.93	-36.29
3	GWALIOR	4.58	43.08	56.92	871.18	382.53
4	DATIA	5.37	38.69	61.31	811.02	NA
5	SHIVPURI	0.35	80.9	19.1	1019.6	41.74
6	GUNA	1.89	87.94	12.06	915.36	-13.03
7	TIKAMGARH	2.79	97.66	2.34	956.62	-57.15
8	CHATTARPUR	23.29	99.36	0.64	889.84	22.51
9	PANNA	56.18	98.17	1.83	972.16	85.24
10	SAGAR	55.6	96.46	3.54	932.75	NA
11	DAMOH	85.59	99.21	0.79	982.32	NA
12	SATNA	21.81	98.79	1.21	954.68	20.53
13	REWA	6.53	97.94	2.06	995.59	35.66
14	SHAHDOL	48.42	96.64	3.36	993.9	26.59
15	SIDHI	47.76	99.91	0.09	974.34	17.31
16	MANDSAUR	2.86	85.29	14.71	904.95	459.05
17	RATLAM	0.63	69.54	30.46	910.23	174.22
18	UJJAIN	6.57	68.58	31.42	4224.88	-9.15
19	SHAJAPUR	0.56	60	40	615.38	-55.31
20	DEWAS	18.42	90.8	9.2	987.44	34.08
21	JHABUA	0.02	77.43	22.57	805.55	NA
22	DHAR	0.1	92.02	7.98	849.35	2647.61
23	INDORE	2.04	37.11	62.89	850.94	189.4
24	W.NEMAR	0.2	80.94	19.06	930.51	-77.86

S. No.	DISTRICT	%age of Gonds*	% of Gonds		Sex Ratio	Growth Rate (1971-81)
			RURAL	URBAN		
25	E.NEMAR	7.34	95.49	4.51	957.41	114.85
26	RAJGARH	1.74	94.44	5.56	934.57	20
27	VIDISHA	14.46	97.99	2.01	916.3	89.47
28	BHOPAL	29.96	38.4	61.6	864.71	NA
29	SEHORE	36.83	98.54	1.46	967.18	20.66
30	RAISEN	79.78	98.06	1.94	979.39	40.51
31	BETUL	72.3	96.99	3.01	1021.72	75.16
32	HOSHANGABAD	52.81	94.94	5.06	957.37	77.82
33	JABALPUR	50.34	90.24	9.76	985.48	138.29
34	NARSIMHAPUR	89.37	96.08	3.92	986.7	34.49
35	MANDLA	84.14	99.14	0.86	1030.31	21.17
36	CHINDWARA	80.62	95.18	4.82	1016.85	22.82
37	SEONI	90.45	99.36	0.64	1019.65	17.48
38	BALAGHAT	83.89	97.69	2.31	1034.89	123.61
39	SURGUJA	38.9	97.98	2.02	980.13	13.59
40	BILASPUR	50.23	96.55	3.45	1025.44	64.02
41	RAIGARH	14.09	96.6	3.4	1027.84	12.36
42	R. NANDGAON	66.98	97.62	2.38	1041.02	NA
43	DURG	55.64	85.09	14.91	1028.3	-13.3
44	RAIPUR	66.46	95.26	4.74	1045.91	54.58
45	BASTAR	84.1	98.9	1.1	1017.28	22.35
ORISSA						
1	SAMBALPUR	18.95	95.02	4.98	1016.41	21.59
2	SUNDARGARH	5.82	95.33	4.67	1009.45	22.38
3	KEONJHAR	11.83	98.62	1.38	1015.12	14.62
4	MAYURBHANJ	2.38	99.36	0.64	1058.17	-15.48
5	BALASORE	0.05	67.9	32.1	653.06	-59.09
6	CUTTACK	0.38	95.4	4.6	896.77	17.36
7	DHENKANAL	13.22	99.5	0.5	992.54	20.82

S. No.	DISTRICT	%age of Gonds*	% of Gonds		Sex Ratio	Growth Rate (1971-81)
			RURAL	URBAN		
8	PHULABANI	4.71	97.88	2.12	1022.28	35.18
9	BOLANGIR	30.14	99.18	0.82	1024.26	19.85
10	KALAHANDI	36.18	99.55	0.45	1038.55	22.46
11	KORAPUT	6.45	99.09	0.91	1005.02	32.21
12	GANJAM	0.13	93.94	6.06	797.92	209.82
13	PURI	0.71	50.83	49.17	795	163
BIHAR						
1	S. PARGANA	0.55	96.05	3.95	908.25	2393.15
2	DHANBAD	0.54	30.9	69.1	558.34	127.86
3	GIRIDIH	0.81	19.2	80.8	826.13	-
4	HAZARIBAGH	0.39	74.8	25.2	950.37	-32.53
5	PALAMU	0.67	79.57	20.43	942.62	7.23
6	RANCHI	1.11	97.82	2.18	1010.52	10.11
7	SINGHBHUM	1.46	88.53	11.47	998.15	55.56

* Percentage of the Gonds to the Total Tribal Population.

Appendix II.3

Spatial Distribution of the Santals and Their
Demographic Structure (1981)

DISTRICT	%age of Santal*	%age of Santal		S e x Ratio	Growth Rate	
		Rural	Urban			
ORISSA						
1	SAMBALPUR	0.02	34.28	65.71	627.9	0.71
2	SUNDARGARH	1.06	35.88	64.11	911.28	75.38
3	KEONJHAR	8.24	94.24	5.75	988.03	24.14
4	MAYURBHANJ	44.21	98.61	1.38	1006.04	12.21
5	BALASORE	38.57	90.17	9.82	964.55	26.73
6	CUTTACK	6.33	9.82	26.02	925.12	111.66
7	DHENKANAL	2.82	73.97	6.41	888.88	119.22
8	PHULABANI	0	93.58	15.78	266.66	-47.22
9	BOLANGIR	0.01	84.21	52.63	583.33	660
10	KALAHANDI	0	47.36	41.93	823.52	63.15
11	KORAPUT	0.14	58.06	25.25	944	15.92
12	GANJAM	0.05	74.74	28.26	642.85	155.55
13	PURI	1.86	71.73	78.49	658.42	1067.08
BIHAR						
1	S. PARGANA	80.64	99.24	0.75	985.66	9.93
2	DHANBAD	79.8	83.92	16.07	956.53	21.94
3	GIRIDIH	85.62	98.61	1.38	989.14	-
4	HAZARIBAGH	27.29	97.06	2.91	975.45	-73.29
5	PALAMU	0.23	96.73	3.26	837.77	1659.57
6	RANCHI	0.19	80.04	19.95	913.55	140.72
7	SINGHBHUM	24.32	93.93	6.06	1000.08	15.54

* Percentage of Santals to the Total Tribal Population.

Appendix - II.4

Numerical Strength of the Major Tribal Groups - 1981 (Madhya Pradesh)

DISTRICT	Agariya	Baiga	Bhaina	Bharia, Bhumia	Bhattra	Bhil, Bhilala, Barela, Patelia	Bhil, Mina	Binjhar	Dhanwar	Gond, Arakh, Arrakh ...
1. Morena		4				1470		1	2	819
2. Bhind	57					3		112		251
3. Gwalior		20	7	24		2121	110	140	3	1409
4. Datia	28	2				25	2		1	230
5. Shivpuri	180					2399		12		309
6. Guna	257	2	4	14	2	39945	328	150	4	2077
7. Tikamgarh						10			9	857
8. Chattarpur	1	5	4	20	1					6176
9. Panna	1	7	3	17795		84	4			42863
10. Sagar		6	13	874		166	6		15	63864
11. Damoh		40		1420		36		5	28	73913
12. Satna		98	3	2665		1	1		3	33945
13 Rewa	21	346	21	26		1	7	13	58	9509
14. Shahdol	9455	106388	3009	20775	23	59	1	30	668	309050
15. Sidhi	8015	32234		186	12	50		3	10	147914
16. Mandasaur	7	70	1	222		58756	2543	2	36	1884
17. Ratlam	37	3		162		165142	1062	26	8	1064
18. Ujjain	52	5		166	15	17138	94	5	1	1909
19. Shajapur	1	6		4		17779	151			105

DISTRICT	Agariya	Baiga	Bhaina	Bharia, Bhumia	Bhattra	Bhil, Bhilala, Barela, Patelia	Bhil, Mina	Binjhwar	Dhanwar	Gond, Arakh, Arrakh ...
20. Dewas	3	15	1	44	1	52393	25	11	6	20266
21. Jhabua	22	24	47	109	42	662030	37	13	2	195
22. Dhar	2	22	108	199	28	546764	361		5	577
23. Indore	2	8	65	138	13	60406	70	57	21	1366
24. West Nimar	120	74	57	225	22	685006	23	24	95	1417
25. West Nimar	53	11	1	389	4	131122	4		58	21743
26. Rajgarh	3	2	4	22	1	20580	101	80	27	414
27. Vidisha	104	25	154	212		3966	62	101	27	4877
28. Bhopal	59	5	36	88	3	3564	115	104	30	6189
29. Sehore		13	42	48		19975	32	7	5	22060
30. Raisen	29	1	106	349	4	4938	66	82	10	87497
31. Betul	2	1		173	1	38		114	84	242120
32. Hoshangabad	1	7		812	1	4408	50	12	198	84778
33. Jabalpur	42	5357	15	51840	83	121	1	4	28	193037
34. Narsimhapur	1		6	3186		74			13	74877
35. Mandla	2382	45532	1391	4514	83	52	23	19	269	526902
36. Chhindwara	126	31	14	13387	1	48	6	31	104	331759
37. Seoni	2	1018	54	2005	1	6	1	71	22	266237
38. Balaghat	138	14206	7	107	4	62	6	10753	161	210201
39. Surguja	23040	12790	167	39997	53	63	23	1437	1974	348357
40. Bilaspur	7102	17130	27989	10773	27	88	18	24482	24708	347028

DISTRICT	Agariya	Baiga	Bhaina	Bharia, Bhumia	Bhattra	Bhil, Bhilala, Barela, Patelia	Bhil, Mina	Binjhwar	Dhanwar	Gond, Arakh, Arrakh ...
41. Raigarh	3521	6	5311	21763	6	12	13	10386	4439	98682
42. Rajnandgaon	516	13311		42	5	22	2	32	19	197720
43. Durg	19	28	34	78	27	87	7	50	48	132939
44. Raipur	343	62	455	87	39	171	1	43674	1145	379849
45. Bastar	7	32	5	549	116796	108	3	42	34	1050632

Appendix Contd.

	Halba, Halbi	Kawar, Kanwar, Kaur ...	Kol	Korku, Bopchi, Mouasi	Mund a	Oraon, Dhanka, Dhangad	Panik a	Sahariya, Saharia	Saur	Sawar, Sawara	Sonr
1. Morena	4			2	1			64005	115	366	3
2. Bhind			15					150			
3. Gwalior	13	176		12		7		20389	7	5	2
4. Datia								3761			53
5. Shivpuri				1				75471	361		197
6. Guna	1	13						63637	521	37	5
7. Tikamgarh			5				4	1028	21303	1	7206
8. Chattarpur	5	16					16	347	7048	495	443
9. Panna		14	246				12	4	3514	3	1767
10. Sagar	16	5	577		1	6		5236	15937	14	24508
11. Damoh		17	257	1	102			327	2464	6	4587
12. Satna	125	53	21758	2	7	13	54	5		2	
13 Rewa	52	18	27383			2	44		1		

	Halba, Halbi	Kawar, Kanwar, Kaur ...	Kol	Korku, Bopchi, Mouasi	Mund a	Oraon, Dhanka, Dhangad	Panik a	Sahariya, Saharia	Saur	Sawar, Sawara	Sonr
14. Shahdol	13	5358	25201	15	12	115	29566	14		95	5
15. Sidhi		204	16593		7	217	23283			52	
16. Mandsaur	5	1						34		3	
17. Ratlam	14	25				1		6			
18. Ujjain	137	22				10		16	19		
19. Shajapur	6	11						34			
20. Dewas	4	23	1	6381				2			
21. Jhabua	3	75	4	1		102		174			
22. Dhar	7	3	5	94		7		37		30	
23. Indore	242	113	19	19	1	21		510	27	29	
24. West Nimar	7	1165	108	2797		59		9		228	
25. West Nimar	613	3093	89	25553		1		9			
26. Rajgarh	1	293	7					939	29	2	30
27. Vidisha	4	1	69			14		19070	1200		834
28. Bhopal	453	413	14	48		205		2393	142	15	53
29. Sehore	8	109	45	2148		1		726		6	1
30. Raisen	10	285	500	601		27		3065	1367	48	1255
31. Betul	53	104	28	16117				11		1	
32. Hoshangabad	60	260	37	12045	4	13		12	335	16	794
33. Jabalpur	371	110	23038	36	4	72		26	60	15	
34. Narsimhapur	1	10	120			9		1			

	Halba, Halbi	Kawar, Kanwar, Kaur ...	Kol	Korku, Bopchi, Mouasi	Mund a	Oraon, Dhanka, Dhangad	Panik a	Sahariya, Saharia	Saur	Sawar, Sawara	Sonr
35. Mandla	62	37	4263	1	10	117			3		33
36. Chhindwara	5186	19	137	75	9	9		10	3	1	
37. Seoni	1448	5	52	5		27				25	
38. Balaghat	6340	167	357	6		28				2	8
39. Surguja	76	136709	1209	588	264	33394		16	1	84	2
40. Bilaspur	178	143665	1516	83	211	4634		145		12656	200
41. Raigarh	14	165516	39	3	614	49262		23	1612	28364	510
42. Rajnandgaon	40912	41049	8		2	24		7		68	1
43. Durg	96563	4393	1		22	51		13	9	58	7
44. Raipur	14693	57591	27	8	291	268		1133	11662	20260	21008
45. Bastar	68676	1042	7	37	22	97		13	49	787	43

Appendix - II.5

Numerical Strength of the Major Tribal Groups - 1981 (Bihar)

District	Bedia	Bhumij	Chero	Chik Boraik	Gond	Ho	Karmali	Kharia	Kharwar	Kisan
1. S. Pargana	524	272	8	27	7654	83	2290	2518	46742	538
2. Dhanbad	411	487	28	169	1055	809	567	196	532	97
3. Giridih	1205	290		15	1817	167	7954	90	1082	22
4. Hazaribag	31220	99	259	288	786	106	21627	496	2065	27
5. Palamu	175	8	45632	1063	2370	70	38	113	102423	10348
6. Ranchi	24394	860	245	37367	19287	735	5297	124569	10799	10460
7. Singhbhum	133	134093	50	776	18423	534043	532	12387	513	522

Appendix Contd.

Bihar	Kora	Korwa	Lohara, Lohra	Mahli	Mal Paharia	Munda	Oraon	Parhaiya	Santal	Sauria Psharia
1. S. Pargana	13408	1095	27594	23972	75210	2911	10704	10320	1103506	37095
2. Dhanbad	6645	298	1716	7190	15	10211	7142	10	153843	113
3. Giridih	1670	50	689	5492	11	9045	2058	12	192030	25
4. Hazaribag	93	21	2235	2500	32	43797	34648	522	54256	15
5. Palamu	14	15767	10666	650	357	14762	128181	12256	827	51
6. Ranchi	182	2410	97029	32720	108	589600	749073	335	3387	115
7. Singhbhum	3186	1310	24330	16236	1074	164496	35197	25	306807	421

Appendix - II.6

Numerical Strength of the Major Tribal Groups - 1981 (Orissa)

District	Bathudi	Bhottada/ Dhotada	Bhuiya, Bhuyan	Bhumia	Bhumij	Binjhal	Dal	Gabada	Gond/ Gondo	Ho	Jatapu	Juang
1. Sambalpur	20	19	26025	74	124	58418	359	6	117648	993	-	9
2. Sundargarh	78	18	67522	57	6235	121	-	9	39976	2993	97	33
3. Keonjhar	53988	72	64272	21	10102	24	1	-	59136	7588	14	15467
4. Mayurbhanj	82478	13	41580	12	94214	189	-	-	21757	24367	4	5
5. Balasore	10418	3	1290	8	36529	14	-	2	81	273	2	2
6. Cuttack	685	5	444	3	5657	44	5	104	588	888	2	765
7. Dhenkanal	31	17	4720	-	3797	10	2	7	25658	6458	-	14573
8. Phulbani	13	33	38	75	18	109	-	1	13159		-	2
9. Bolangir	2	-	115	10	8	30042	14587	8	83523	1	-	3
10. Kalahandi	20	13574	356	32	8	5576	3180	348	151581	28	9	-
11. Koraput	34	233916	380	74739	462	68	7	56413	88970	31	17769	12
12. Ganjam	6	1	238	187	173	1	-	10	347	4	560	-
13. Puri	198	39	810	2	286	9	23	4	718	272	-	4

Appendix Contd.

District	Khond, Kond,Khandha	Kisan	Kolha	Konda- dora	Kotia	Koya	Mahali	Mirdhas	Munda,Munda Lohara	Mundari
1. Sambalpur	30693	115005	3168	49	113	22	418	19504	60607	437
2. Sundergarh	2184	96950	3790	29	18	26	3196	46	149418	12752
3. Keonjhar	1213	3802	124472	4	7	4	275	37	35626	1153
4. Mayurbhanj	197	52	143724	-	-	3	6489	-	25645	8214
5. Balasore	197	9	23826	7	5	5	361	43	6599	1015
6. Cuttack	5805	138	14231	23	13	9	27	72	26705	736
7. Dhenkanal	26500	11602	10116	4	70	-	659	370	17185	134
8. Phulbani	251634	3	235	12	2271	-	7	449	424	7
9. Balangir	71387	45	1635	190	36	-	67	6701	4250	10
10. Kalahandi	129749	101	458	588	3031	22	71	1219	4978	50
11. Koraput	366231	136	271	15971	13556	87052	105	32	4612	54
12. Ganjam	63848	47	13	527	5	72	61	-	126	15
13. Puri	36705	98	578	36	14	46	30	4	2466	100

Appendix Contd.

District	Omantaya	Oraon	Panja	Santal	Saora,Savar, Saura, Sahara	Shabar, Lodha	Sounti
1. Sambalpur	56	28670	34	140	107697	4682	24
2. Sundergarh	153	177828	61	7282	1388	828	13
3. Keonjhar	12	3719	17	41134	7929	14541	45874
4. Mayurbhanj	8	2944	11	403423	2903	8134	16882
5. Balasore	-	965	47	59465	1622	3334	1492
6. Cuttack	1	294	55	9745	22019	47473	137
7. Dhenkanal	1	412	23	5474	20298	33983	99
8. Phulbani	140	31	46	19	3362	176	
9. Balangir	23	48	8	38	46586	9680	3
10. Kalahandi	3	50	19451	34	5696	49900	15
11. Koraput	18793	177	247304	1944	45940	29970	26
12. Ganjam	236	27	82	138	69201	112619	1661
13. Puri	40	142	43	1879	35419	13878	1574

CHAPTER - III

NATURAL RESOURCES

In this chapter, an attempt has been made to have an assessment of the natural resources of the region. The basic objectives of the present chapter may be stated as below :

- i) To have an assessment of the reserves of the mineral resources,
- ii) To describe the types of soils of the region,
- iii) To assess the water resources,
- iv) To have an understanding regarding the area under forest in the different districts of the region, and
- v) To have an account of the animal stock.

An authoritative and comprehensive definition of the term "natural resources" as given by a UN committee of experts, runs thus : "A natural resource is anything found by men in his natural environment that he may in some way utilise for his own benefit. In this broad sense, the resources provided by nature include the rocks in which are contained mineral ore, energy sources (oil, coal, uranium, gas) and other useful products (ground water, building stones, etc.). They include the soils which nourish the plants, as well as all plant and animal life. They include the elements of the landscape which provide sites

for building roads, railways and other structures. They include surface and underground waters which are indispensable to human, animal and plant life. Water also provides a source of energy through hydro-electric power, a means of transport, and a setting for sports and tourism. Natural resources include the air and every thing that constitutes the atmosphere or reaches man by way of the atmosphere, such as the solar radiation, which is essential to life".¹ However a resource is of no use to man unless he knows the utility of the resource and possess the proper technology to exploit it. For example, the resources in the Chotangpur region of Bihar were there for centuries but these were of no use to the people of this region until Britishers came here with the perception of the utility of the resources and with the appropriate technology to exploit resources. "In spite of its abundance, the vast proportion of the earth's total stock of matter and energy is of very little interest to man. Either it is wholly inaccessible with our existing technology e.g., as is the iron and nickel core of the planet or it is in the form of substance man has not learned to use. Resources are a cultural concept. A stock becomes a resource when it can be of some use to men in meeting his needs for food, shelter, warmth, transportation and so on".² Man's needs, technological abilities and awareness of the environment differs from one culture to another. People in the developed societies always hunt for the resources to provide themselves with better amenities, infrastructure and to raise the

standard of living while people in the undeveloped societies i.e. primitive tribes use the natural resources simply to sustain their lives. "We can define resource as that porition of the total stock which could be used under specified technical, economic and social conditions. Resources as such are determined by human concept of what is useful, and we can expect resource estimates to change with technological and socio-economic conditions".³ It means men's perception, his knowledge in form of inputs and technology and his social organisation play very crucial role in exploitation of resources. "Sometimes, the attributes of the biophysical environment of a cultural region which functions as neutral stuff for the local people provide valuable resources for the people of other cultural zones. Under such conditions resources of such regions are exploited despite unfavourable social and cultural conditions existing there. Example of mineral resources of Bastar district can be cited. The iron, ore of Bailadila has no meaning as resources for the local people, though it is very valuable resource for the nation'.⁴

The mineral rich belt of mid-India coincides with the tribal regions of the same. The industrially important minerals like iron ore, coal, manganese, bauxite etc. are found here abundantly. In this region also lies vast tracts of important forests. Since this region exhibits a rugged hill and plateau type of landscape, the potential of harnessing water power is

also there. Though the mineral resources are of vital importance for the states like M.P., Bihar and Orissa in particular and for the nation as a whole, it has not played any role in shaping the economic activities of the indigenous people of the region. The impact of the economic development accruing from the mining activities is the least on the tribes. Forests are of great importance to the tribal life. For centuries forests provided them with food, shelter and their basic culture is inherited there. They lived in harmony with the forest environment. They never meddled with the ecosystem of it. But the Indian Forests Act deprived them of their basic right to sustain their economic system by banning them from entering to the forests. In this way forests are also of not great help to the tribal population though it is exploited commercially for the benefit of the other section of the population. Now-a-days most of the tribes of the mid-India has switched to agricultural activities and it seems that upto some extent, land resources are the only means through which they sustain their lives. It is pertinent to mention here that most of the tribal belt is composed of rugged hilly topography which is not suitable for agriculture.

In the ongoing paragraphs we will discuss the different natural resources of mid-India comprising of M.P., Orissa and Chotanagpur region of Bihar.

III.1 MINERAL RESOURCES

The mid-India is endowed with vast reserves of industrially important minerals. All the important minerals like iron, coal, copper, bauxite, manganese, tin, limestone are mined here. In terms of total value of mineral production, Bihar and M.P. occupies the first and the second positions. The distribution of the mineral resources in this region is as follows:

The distribution of the minerals in this region is very localised. Major tracts of their occurrence are the Bundelkhand plateau, Chattisgarh basin, Baster plateau, eastern Sahpura and Rewa plateau of M.P., Chotanagpur region of Bihar and north and north-western hilly region of Orissa.

Iron Ore :

Iron ore deposits are distributed in the southern part of Singhbhum district of Bihar, Bastar and Durg districts and minor occurrences in Jabalpur, Chattarpur, Khargone, Mandasaur, Narshimhapur and Rajgarh districts of M.P. and Keonjhar, Sundergarh, Cuttack, Mayurbhanj and Koraput districts of Orissa. The important producing centres in Bihar being Kiriburn, Noamundi, Gun and Manoharpur. Orissa is one of the leading producers of iron ore in the country and have vast reserves of high grade iron ores. The important deposits are Thakurani group, Bonai range, Joda East, Gandhamardan,

Malagtolli group, Khandachar, Barsua range, Daitari, Badampahar and Tomka. Average iron content of the ore is above 60 per cent. In 1981, the total reserves of iron ore in Bihar is 3661.64 million tonnes, in M.P. 2470.14 million tonnes and in Orissa 3123.87 million tonnes.

Table III.1

Reserves of Iron Ore in Mid-India - 1981
(in million tonnes)

Sl. No.	State	Reserves			Total
		Measured	Indicated	Inferred	
1.	Bihar	1353.08	1589.40	719.07	3661.64
2.	M.P.	1072.29	530.93	866.92	2470.14
3.	Orissa	1433.82	916.41	773.64	3123.87
	Mid-India	3859.19	3036.74	2359.63	9255.65

Source: Indian Mineral Yearbook, 1981.

Coal

Coal is found in Jharia, Katrasgarh, Bokaro, Giridih, North and South Karanpura divisions and in Ramgarh of Bihar, Betul, Bilaspur, Chhindwara, Rajgarh, Shahdol, Sidhi and Surguja districts of M.P. and in Ib river coalfield, Sambalpur district and Talcher coalfield, Dhenkanal district of Orissa. In 1981, the total reserves of coal in Bihar is 35,230 million tonnes, in M.P., 15,482 million tonnes and in Orissa 5,116 million tonnes.

Table III.2

Reserves of Coal in Mid-India - 1981
(in million tonnes)

Sl. No.	State	Reserves			Total
		Measured	Indicated	Inferred	
1.	Bihar	10,590	16,118	8,522	35,230
2.	M.P.	4,247	4,067	7,168	15,482
3.	Orissa	895	2,411	1,810	5,116
	Mid-India	15,732	22,596	17,500	55,828

Source: Indian Mineral Yearbook, 1981.

Bauxite

Bauxite is found in Palamu and Ranchi districts, the important producing centre being Lohardaga in Ranchi district of Bihar; Balaghat, Bastar, Bilaspur, Jabalpur, Mandla, Raigarh, Rajnandgaon, Satna, Rewa, Shahdol and Surguja districts of M.P. and in Koraput, Kalahandi, Bolangir, Sambalpur, Sundargarh and Baudh-Phulbani districts of Orissa. Bauxite is one of the major mineral resources of M.P. and Bauxite of Amarkantak plateau in Shahdol, Mandla and Bilaspur districts is used in aluminum smelter of HINDALCO located at Renukoot, U.P. and BALCO's aluminium complex at Korba, Bilaspur district. In 1981, the reserves of Bauxite in Bihar, M.P. and Orissa are 99.075, 187.464 and 1416.313 million tonnes respectively.

Table III.3

Reserves of Bauxite in Mid-India - 1981
(in million tonnes)

Sl. No.	State	Reserves			Total
		Measured	Indicated	Inferred	
1.	Bihar	18.626	17.703	62.746	99.075
2.	M.P.	61.198	05.119	61.147	187.464
3.	Orissa	209.037	360.248	847.028	1416.313
Mid-India		288.861	383.070	970.921	1702.852

Source: Indian Mineral Yearbook, 1981.

Copper

Copper ores are found in Singhbhum district of Bihar, Balaghat, Bastar, Chattarpur, Gwalior and Sindhi districts of

Table III.4

Reserves of Copper in Mid-India - 1981
(in million tonnes)

Sl. No.	State	Ore/Metal	Reserves			Total
			Measured	Indicated	Inferred	
1.	Bihar	(a) Ore	82.150	90.990	45.425	218.565
		(b) Metal	1.2590	1.1340	0.4754	2.8684
2.	M.P.	(a) Ore	-	76.190	23.581	99.771
		(b) Metal	-	0.8150	0.2498	1.0648
3.	Orissa	(a) Ore	-	1.16	0.50	1.66
		(b) Metal	-	0.0184	0.0079	0.0263
Mid-India		(a) Ore	82.150	168.34	69.506	319.99
		(b) Metal	1.2590	1.9674	0.7331	3.9595

Source: Indian Mineral Yearbook, 1981.

M.P. The copper ores in Singhbhum district are well known and have till recently been the only source of indigenous copper metal. Important deposits of copper ore in Bihar are Mosabani, Surda, Pathargora, Rakha, Roamsideswar, Ramchandra Pahar, Tama Pahar and Turamdih. In 1981, the reserves of copper ore in Bihar, M.P. and Orissa are 218.565, 99.771 and 1.66 million tonnes respectively while that of copper metal is 2.8684, 1.0648, and 0.0269 million tonnes respectively.

Manganese

M.P. is India's foremost source for manganese ore. The important deposits lie in the districts of Balaghat and Chindwara. Occurrences are recorded in Jabalpur, Jhabua and Khorgone districts. In Orissa, manganese ore occurs in (i) The Bonai-Keonjhar area in Sundargarh and Keonjhar districts, (ii) Koraput-Kalahandi-Patna area in Koraput, Kalahandi, and Bolangir districts, (iii) Gangapur area, Sundargarh district, and (iv) Sambalpur area, Sambalpur district. Most of the ore produced is consumed in the steel plants of Bihar and West Bengal besides meeting the requirements of two ferro-manganese plants located in the state and export requirements to some extent. The reserves of manganese ore in Bihar, M.P. and Orissa are 0.144, 24.806 and 32.81 million tonnes respectively.

Table III.5

Reserves of Manganese Ore in Mid-India - 1981
(in million tonnes)

Sl. No.	State	Reserves			Total
		Measured	Indicated	Inferred	
1.	Bihar	-	-	0.144	0.144
2.	M.P.	11.436	8.213	5.157	24.806
3.	Orissa	4.479	4.658	23.674	32.811
	Mid-India	15.915	12.871	28.975	57.761

Source: Indian Mineral Yearbook, 1981.

Mica

The Mica belt of Bihar yields ruby variety of excellent quality. The belt in this state extends from Nawadah district in the west for 145 Km through Hazaribag and Monghyr districts to Bhagalpur district in the east. The width of the belt ranges between 26 and 32 Km. Koderma, Domehanch, Gawan and Tisri are the important producing centres of Mica. In fact in this region only Bihar is the state where deposits of Mica are found. No figure for the Mica reserves is available.

Limestone

Limestone occurs in Hazaribag. Palamu, Shahabad, Santhal Pargana, Singhbhum and Ranchi districts of Bihar, in Bilaspur, Damoh, Durg, Jabalpur, Jhabua, Mandsaur, Morena, Raigarh, Raipur, Rajnandgaon, Rewa and Satna of M.P. and in Koraput,

Sambalpur and Sundargarh districts of Orissa. In Orissa, almost the entire quantity of limestone and dolomite is produced from Sundargarh district. This district is an important source of flux grade limestone and dolomite. The requirements of steel plants in Bihar - Orissa and West Bengal regions are largely met from this state. In 1981, Bihar is having 671.95 million tonnes of limestone reserve while the figures for M.P. and Orissa are 8217.93 and 840.68 respectively.

Table III.6

Reserves of Limestone in Mid-India - 1981
(in million tonnes)

Sl. No.	State	Reserves			Total
		Measured	Indicated	Inferred	
1.	Bihar	161.2	82.84	428.91	671.95
2.	M.P.	4212.98	1582.22	2462.73	8217.93
3.	Orissa	128.6	14.52	697.56	840.68
Mid-India		4502.78	1679.58	3589.2	9730.56

Source: Indian Mineral Yearbook, 1981.

Asbestos

It is mined at Roroburn, Singhbhum district of Bihar, Bastar, Hoshangabad, Jhabua, Narsimhapore and Sehore districts of M.P. In Bihar the reserves are 0.122 million tonnes while the figure for M.P. is not available.

Fireclays

Fireclays are found in the coalfields of Bihar, in Bastar, Bilaspur, Chattarpur, Dhar, Durg, Gwalior, Jabalpur, Mandsoor, Raigarh and Shahdol district of M.P. and in Cuttack, Dhenkanal, Puri, Sambalpur and Sundargarh districts of Orissa. Reserves in Bihar is 32.093 million tonnes, in M.P. 122.70 million tonnes and in Orissa 136.34 million tonnes.

III.2 SOIL RESOURCES

In the mid-India, the following broad categories of soils are found : (i) Black soil and Black cotton soils (Regur), (ii) Red soils, (iii) Lateritic soils. Besides these Saline and Alkaline soils and the Aeolian deposits are also found. In some patches Alluvium soil is also found.

Black Cotton Soils or commonly known as 'Regur' is highly argillaceous fine dark soil and it is, usually highly concretionary, chiefly with nodules of impure calcium carbonate known as 'Kenkar'. It is best developed in M.P. It contains a high proportion of Calcium carbonate, Magnesium carbonate and Iron and it is fairly rich in lime, magnesia and oxide of aluminium, it is however poor in phosphorus, nitrogen and organic matter. The soil has the remarkable property of swelling greatly when wetted and of forming wide cracks, when it dries up subsequently, it is also very plastic and very sticky when wet and therefore, such soils can not be irrigated.

A typical regur soil formed from limestone is near Raipur in the Chattisgarh basin of M.P. In this state, the variety of long staple cotton is grown with great success on such soils. Other black coloured soils, which may be calcareous or non-calcareous usually shallow in nature is also found in M.P. The deep and medium black soils are found in Rewa plateau and Narmada valley of M.P.

Black Clayey Soils are found on the western flanks of Rajmahal hills and in Santhal Pargana of Chotanagpur region of Bihar. When it is dried up it becomes hard but friable. The moisture retaining capacity of the soil is high. These characteristics of this soil is owing to the presence of high clay proportion which leads to larger aggregate of particle and hornblende yield clay and these are the constituent minerals of a trap soil, this soil is remarkably clayey while in granite, feldspar is the only source of clay. Terrain plays an important part in the nature and thickness of the soil. It is infertile, thin and of light colour on the uplands, but on the lowlands and in the valleys it is fairly deep enriched by washing from above and is given to paddy cultivation. Rice is also grown on upper terraced fields where the thickness of the soil is maintained.

Red Soils

These soils are usually thin and rather infertile in the uplands, while they are of a darker red colour and quite fertile in the valleys and plains. In Bundelkhand in M.P., red

soils are noticed at elevated spots; they are usually coarse grained. The Vindhyan soils are residual in origin having developed from the decomposition products of the sandstones, shales and limestone, and they are best observed in parts of the Chattisgarh plains and the Mahanadi basin of M.P., Orissa. The entire Chotanagpur region of Bihar except a narrow belt in Damodar valley, the Rajmahal traps and a few laterite areas of small extent, is composed of crystalline and metamorphic rocks, mostly granite and gneiss, while a large part of the Singhbhum district is occupied by the schistose rocks. Many of these gneisses and schists contain a large proportion of biotite and hornblende and as they are highly ferruginous, the soils derived from them are deep red, and even black in colour. The wide range of rocks in Archean rocks results in corresponding differences in the soils derived from them, but the soil as a whole is light with a relatively high sand proportion. There are great variations in consistency, depth and fertility. Generally these soils have inadequate content of nitrogen, phosphoric acid and humus, but potash and lime derived from feldspar, hornblende, and angite of the crystalline rocks are generally sufficient.

Laterite and Lateritic Soils

They are well developed in the mid-India region. These soils are distributed over Koraput Hill ranges and Kheria highlands of orissa, in the Seoni, Mandla, Balaghat districts

of M.P. in Rajmahal area in Santal Parganas, in south-eastern Dalbhum on Tertiary sediments and in the 'Pat' region of West Ranchi and South Palamu of Bihar. In the laterites zone of M.P. and Orissa, the soils are more heterogenous in character and yields soils of varying degree of fertility. Lateritic soils contain a high percentage of alumina and iron oxides and they are notably deficient in phosphorous, lime and magnesia. They are also lacking in alkalies and humus content. The typical red colour is due to the high percentage of iron oxides. the chief defect of laterite soil is its marked acid reaction. With the removal of acidity it can be rendered productive. Any rock containing some lumina and iron will be weathered into laterite. The red and yellow soils of Chotanagpur may be regarded as an initial stage in laterite formation.

Saline and Alkaline Soils

Salinised soils deposited by tidal action are found in the low lying coastal tracts of Orissa.

Aeolian Deposits

These include the Dune sand, which cover large coastal tracts of Orissa.

Alluvial Soils

In M.P. the north-western part of the Gird region are composed of alluvial soils analogous to Indo-Genetic alluvium.

III.3 LAND RESOURCES

"In a fundamental sense, land constitutes the most important natural resource of a country. The geographical area provides the basis not only for economic activity but for the every existence and development of the community".⁵ Land resources are of special significance because it is non-transportable and it yields benefits to the local people. But the extent of the land available for the agricultural purposes is limited in this region. A greater portion of this region is characterised by rugged hills and plateaus. The Malwa plateau, Madhya Bharat Pather, Bundelkhand upland, Vindhya-chal scarp land Vindhya-chal range, Satpura range, Baghelkhand plateau Bastar plateau, Chattisgarh basin and the Narmada valley of the north-central Peninsular India are the major physiographic units of M.P. which are not suitable for agriculture. However, there are some pockets of level land between hills and dissected areas. These areas are Bastar plateau, Baghelkhand plateau, Satpura range, Vindhyan range and Madhya Bharat pother. Most of these areas are under forests. however, there are certain regions of M.P. which are suitable for agriculture and these regions are the Chattisgarh basin, Narmada valley, Rewa plateau, Malwa plateau and on part of the Bundelkhand upland. The Chotanagpur region of Bihar, Eastern Ghats, the hilly areas in the north and north-west and the central and the western plateau of Orissa is also not suitable for agriculture.

III.4 WATER RESOURCES

About 70 percent of the population of the region lives on agriculture. Agriculture is wholly dependent on the supply of water whether from rain or from rivers and underground resources. Since the majority of the population is engaged in agriculture, the importance of water is obvious. Hydel power generation is the another major benefit obtained from the rivers flowing from higher to lower elevation in their course to sea. Both these developments have a tremendous impact on the economic development of the region, and therefore, it has been the endeavour to develop the water resources in the most beneficial manner. Of all the natural resources, water, naturally, has the pride of place as it is the water which sustains all plant and animal life on this planet.

The region has a vast volume of water resources. "Total volume of water drained by the rivers of M.P. is estimated at 183294 million cubic metres".⁷ Rivers radiate from highlands of this state and are dammed as they reach in the bordering states. The Narmada and the Tapi are the two major west-flowing rivers with their origin in central India and drain an area of 1,52,162 sq. Kms in M.P., Gujarat and Maharashtra with an annual run off of 57,110 million cm metres. "The Mahanadi with its source also in central India, drains a catchment area of 1,32,789 sq. Kms in M.P. and Orissa with an annual run off of 92819 million cm metres before out falling into the Bay of

Bengal".⁸ The Chotanagpur rivers descend across steep scarps and thus provide suitable head for power generation with the help of storage reservoirs. "The combined water power potential of only the Damodar and South Koel is estimated to be 0.6 m. KW".⁹ The potential of underground water is also vast in M.P., and estimated at 5865304 hectometres and the present utilisation is 599987 hectometres, which is only 10.2 percent of the net recharge. Again there is marked variation in distribution of these potentials, depending upon climatic and structural characteristics. usually, level lands are also endowed with rich water resources.

III.5 FOREST RESOURCES

The forests are the very abundant and important resource of Mid-India. One important characteristics about the distribution of forests in this region is that it corresponds to the dissected topography. Most of the dissected and rugged parts of the region are covered with forests. In the following areas the concentration of forests is high : (i) The Satpura-Maikal-Baghelkhand plateau, south of the Narmada. Son valley and extending west to east across the states; (ii) The Baster plateau; (iii) Sagar-Damoh plateau and Panna hilly tract; (iv) Southwestern fringes of the Malwa plateau; (v) the Morena-Shivpuri plateau of M.P.; (vi) The north western part of Chotanagpur plateau; and (vii) The north and northwestern parts of Orissa and the Eastern Ghats region of the same state.

Table III.7

Percentage of Area Under Forests - 1979-82

Name of the District	Percentage of Area Under Forest
1. Raipur	36.61
2. Durg	11.67
3. Rajnandgaon	35.23
4. Bastar	63.27
5. Bilaspur	38.98
6. Surguja	48.42
7. Raigarh	31.22
8. Jabalpur	15.97
9. Balaghat	52.85
10. Chindwara	37.65
11. Seoni	36.57
12. Mandla	43.01
13. Narsimhapur	26.56
14. Sagar	28.47
15. Damoh	36.85
16. Panna	33.29
17. Tikamgarh	12.72
18. Chattarpur	9.95
19. Rewa	10.35
20. Sidhi	41.47
21. Satna	17.44
22. Shahdol	38.66
23. Indore	13.39
24. Dhar	9.20
25. Jhabua	16.76
26. West Nimar	34.97
27. East Nimar	46.97
28. Ujjain	1.26

Contd.....

Name of the District	Percentage of Area Under Forest
29. Mandsaur	10.86
30. Ratlam	7.11
31. Deas	23.07
32. Shajapur	0.46
33. Morena	28.01
34. Bhind	1.62
35. Gwalior	20.90
36. Shivpuri	18.30
37. Guna	13.82
38. Datia	9.50
39. Bhopal	14.03
40. Sehore	25.86
41. Raisen	39.64
42. Vidisha	14.27
43. Betul	40.71
44. Rajgarh	2.18
45. Hoshangabad	35.98
46. Bolasore	6.33
47. Bolangir	23.73
48. Cuttack	12.56
49. Dhenkanal	41.93
50. Ganjam	45.40
51. Kalahandi	43.86
52. Keonjhar	49.01
53. Koraput	51.92
54. Mayurbhanj	44.92
55. Phulbani	74.37
56. Puri	33.68
57. Sambalpur	40.02
58. Sundargarh	56.25

Contd.....

Name of the District	Percentage of Area Under Forest
59. Hazaribag	46.44
60. Giridih	33.84
61. Dhanbad	7.86
62. Ranchi	21.86
63. Palamu	45.88
64. Singhbhum	25.65
65. Santhal Pargana	10.17

The percentage of triennium average of land under forests to the total geographical area is the highest in Phulbani district (74.37) of Orissa. This district is followed by Bastar (63.27) of M.P. The districts where the percentage of forest cover is above 50, are Balaghat, Koraput and Sundergarh. In fourteen districts it is above 40. The proportion of area under forests is above 30 in equal number of districts as it is in the previous case. In nine districts of the region, the percentage is above 20. In fourteen districts of the region, the proportion of the forest cover is low (10-20 percent). The proportion is very low in Chattarpur, Dhar, Ujjain, Ratlam, Shajapur, Bhind, Datia, Rajgarh, Balasore and Dhanbad. Out of these districts in Ujjain, Shajapur, Bhind, the proportion is negligible with 1.26, 0.46, 1.62, percentages respectively. In the western most portion of M.P. the proportion is very low.

III.6 ANIMAL STOCK

Animal husbandry of this region is an integral part of the rural economy. Its significance can be assessed from the fact that it provides services to the subsistence agriculture and it also supplies highly nutritive human food. The most important function of the castles and the buffaloes is to supply motive power for agricultural operations and for the transport of the products. As the roads and railways are not developed in the rural areas, bullock carts are the only means of transportation. Besides, the livestock also provide manure in the fields. Yet the another importance of livestock is to provide milk and milk products and other ingredients of human diet. "It is pertinent to note that animal-raising is the integral part of farming and not an independent economic activity. Therefore, least attention is paid to raise their efficiency".¹⁰ In spite of such vital roles of animals, paradoxically enough, no branch of agriculture is so much neglected as the animal husbandry. There is very limited grazing land and at the same time, no fodder crop is grown.

Spatial Distribution of the Livestock Population

Before presenting the statistics regarding the livestock population, it's worthwhile to mention that due to non-availability of the specified data of a particular point of time for all the states comprising our study area, data for the

three states have been analysed for the three different points of time. Since our purpose is to have an appraisal of livestock resources, it is expected that variations in points of time won't make any major difference in its assessment.

According to the Statistical Abstract of Orissa, 1979, the number of the cattle is the highest in the Cuttack district. In this district the number is 1.49 million. This district is followed by Puri (1.38 million). The other district whose number crosses the one million mark are Balasore, Ganjam, Keonjhar, Koraput and Sambalpur. The lowest number of cattle are in Phulbani district where the figure is 0.45 million. In Bihar, the highest population of the cattle is in Santal Pargana district where the figure stands at 1.31 million. The other two districts of the state which cross the one million mark are Ranchi and Hazaribag. In Palamu, Singhbhum and Dhanbad districts of the state the population of the cattle is in Raipur (1.24 million). Durg possesses the second largest population of the cattle. Here, the population of the cattle is 1.19 million. It is above 0.7 million in the districts of Bastar, Surguja, Shahdol. The districts having 0.6 and 0.7 million cattle population are Jabalpur, Sagar and Guna. There are eleven districts whose population varies from 0.5 to 0.6 million. In ten districts the figure is above 0.4 million mark. Six districts are having below 0.3 million cattle population.

Buffaloes

Ganjam with 0.21 million buffaloes is the leading district in Orissa. The second position is occupied by kalahandi with 0.10 million buffaloes. The population figure is 0.14. In the remaining districts the population varies from 0.02 to 0.10.

In Bihar, Santal Pargana, Ranchi and Hazaribag are the districts with about 0.23 million buffalo population each. The lowest population is Dhanbad (0.05 million).

Among the districts of M.P., Raipur is having the largest number of the Buffaloes (0.24 million) while Durg comes to the second position with 0.21 million buffaloes. The three districts whose population is above 0.15 million are Morena, Guna and Raigarh. There are eleven districts whose population is above 0.1 million while in nineteen districts the population is above 0.05 million. The population is low in five districts.

Sheep

The number of sheep is the highest in Koraput district in Orissa. The number of sheep in this district is 0.59 million. Keonjhar comes to the second place with 0.32 million sheeps. The lowest number of sheep in Orissa is in Balasore district (0.01 million). In Bihar, Singhbhum is having the highest number of sheep. the number of sheep in this district is about 0.26 million. Santhal Pargana with 0.24 million population

comes to the second position. In the remaining districts of the state the population is below 0.11 million. Among the districts of M.P., the higher number of sheeps is in Tikamgarh (0.08 million). This district is followed by Chattarpur (0.07), Mandsaur (0.06) and Shivpuri (0.07). In the remaining districts the population is below 0.05 million mark.

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CHAPTER - IV

STRUCTURE OF THE WORKFORCE

The objective of this chapter may be stated as below :

- i) to analyse the spatial distribution of the Tribal, Gond and Santal workers in the different section of economy,
- ii) to analyse their distribution in the nine industrial categories, and
- iii) to explore the differences that exist, if any, among them in their distribution in the different sectors of economy as well as in the nine industrial categories of workers.

It seems pertinent to mention at the very outset that the traditional economies of the tribes are entirely different from the economies that are practised by the non-tribals. However, in the recent times distortions have taken place in their economic systems due to the immigration of non-tribals into their territories.

"Economy of the tribe is a projection of tribal society, a response to the ecosystem in which it is placed, its function of production and distribution are governed by the bonds of Kinship within or between families, clans and Kindred".¹ Their means of subsistence is derived from the local resources and the implements used to exploit the resources is very primitive.

Production is generally meant for local consumption and there is hardly any surplus. Family is the unit of production, with little specialisation and division of labour beyond that based on sex and age. The collective ownership of land is still traced in the different parts of the country though, by and large peasant proprietorship or system of private ownership of land has prevailed. There is a collective effort for constructing houses, sowing, transplanting and harvesting of crops, weeding and irrigation of fields. "We find the tribals of India belonging to different economic stages, from food-gathering to industrial labour which present their overlapping economic stage in the broader framework of the stages of economy".² Moreover it is important to mention that every tribe is supposed to be an economically independent group of people having their own specific economy.

Classification of Tribal Economies

The tribal population of India lives in the diverse ecological setting and it represents a variety in their levels of techno-cultural attainments. The diversities in their habitats and the techno-cultural attainments sets a very difficult task for a comprehensive classification of tribal economy. "Tribal economy in general is non-differentiated in character though, because of adaptation in accordance with their respective techno-cultural efficiency to diverse ecological settings, we sometimes come across instances of

apparent economic specialisation even in tribal societies".³ There are several instances of tribal economy getting merged with peasant economy. It indicates that there is a coexistence of diverse economic activities of the tribes. It should be borne in mind that no tribe in India practises a particular economic activity exclusively. At the same time the tribes are mostly involved in primary economy and this characterises their typology.

Several scholars have made an attempt to classify the Indian tribes on the basis of their mode of economy. Mention may be made here of Majumdar and Madan⁴ (1970), Dube (1960), Prasad⁵ (1960-61), Das⁶ (1963), Oraon⁷ (1964), Bose⁸ (1968), Vidyardhi⁹ (1976) and Danda¹⁰ (1991). Majumdar and Madan gave a sixfold classification which includes (i) food gathering, (ii) agriculture, (iii) shifting axe cultivation, (iv) handicraft, (v) pastoralism and (vi) industrial labour. Dube also divided the tribal economy into six types - (i) food gathering, (ii) animal raising, (iii) primarily shifting cultivation, (iv) primarily settled agriculture, (v) crafts and Industries and, (vi) social destitute (practising crime of livelihood). Prasad has given a three fold classification - (i) Hunting and collection, (ii) shifting orjhum cultivation, lumbering etc., and (iii) settled agriculturalists, weavers, poultry keepers etc.

Das classified the tribal economy into five - (i) Nomadic food collectors and pastoral, (ii) shifting cultivation of hill slope, (iii) plough cultivators of plateau and Tarai areas, (iv) tribes who are partly assimilated with the Hindu social system, and (v) totally assimilated tribes who have gained a good social status among the Hindus.

Oraon gave the fourfold classification - (i) food gathering, (ii) pastoralism, (iii) shifting cultivation, (iv) settled agriculture.

Wandrekar identified four types of tribal economy - (i) food gathering and hunting, (ii) shifting cultivation, (iii) agriculture, (iv) industrial destitute (displaced through industrialisation programme).

Bose adopted a fourfold classification - (i) complete dependence on hunting, fishing and collection, (ii) shifting cultivation, (iii) plough agriculture supported by household industry, (iv) commercial capitalism.

Vidyarthi divided the tribal economy into eight types - (i) the forest hunting, (ii) the hill cultivation type, (iii) the plain agriculture type, (iv) the simple artisan type, (v) the pastoral and cattle herder type, (vi) the folk artist type, (vii) the agricultural and non-agricultural labour type - sections of the tribe, working in the minning and manufacturing

industries. Traditionally they belong to plain agriculture and simple artisan types and (viii) the skilled, white - collar job and traders type - some individuals of the families of the tribal communities are working in offices, hospitals, factories, business enterprises, doing business on a small scale and in All-India or State Government Services owing to the percentage of reservation of seats for the Scheduled Tribes and so on.

Donda gave a tenfold classification of the tribal economy - (i) collection of forest product, (ii) hunting, (iii) fishing, (iv) animal husbandry, (v) shifting cultivation, (vi) terrace cultivation, (vii) settled agriculture, (viii) crafts and profession, (ix) trade and commerce, (x) wage labour.

In the chapter, the structure of the workforce has been described as per the classification adopted by the Census of India. It divides the main workers into nine industrial categories. It is evident from the classification of the tribal economies in the foregoing paragraphs that the scheme adopted by Census of India does not suit the tribal economies. However, in the absence of another source of data relating to the structure of the tribal workforce, it is better to analyse whatever data are available to us through the Census of India. Another difficulty which arises out of the changing definition of the workers in the various census, is the comparison of the data between the two census - 1971-81.

IV.1 STRUCTURE OF THE TRIBAL WORKFORCE - 1981

Main Workers

The average percentage of the tribal main workers out of the total tribal population is 43.23 which is much higher than that of non-tribal population. This is due to the presence of a high proportion of the female tribal workers; and since the economic returns from their economic activities are minimum, a large number of population has to be employed to subsist themselves and finally due to their sense of collectiveness in their economic pursuits. The percentage is above 60 in Ujjain district of M.P. In the districts of Mandla and Rajnandgaon of M.P. the percentage is above 55. The district where the percentage is above 50, are Satna, Rewa, Mandasaur, Betul, Balaghat Durg and Raipur. The figure is above 45 in twelve districts of M.P. The important districts from the point of view of the tribal population which comes under this category are Sagar, Shahdol, Sidhi, Jabalpur, Chhindwara, Bilaspur and Bastar. In seventeen districts of M.P. and seven districts of Orissa, the percentage is above 40. There are four districts of M.P., four districts of Bihar and five districts of Orissa, where the percentage is above 35. The percentage of the tribal main workers is low in Morena and Bhind districts of M.P., Dhanbad, Giridih and Hazaribag districts of Bihar and Sundargarh district of Orissa. In all these district the

percentage ranges between 30 to 35. It is important to note here that the percentage of the tribal main workers is higher in the tribal dominant districts of M.P. than that of the Orissa and Bihar.

Table IV.1

Frequency Distribution of the District According to the Percentage of the Main Workers to the Total Tribal Population - 1981

Percentage Categories	Frequency of District
Above 60	1
55 - 60	2
50 - 55	7
45 - 50	12
40 - 45	24
35 - 40	13
30 - 35	6

IV.1.1 Primary Sector

On an average, 90.19 percent of the tribal main workers are engaged in the primary sector. This figure is very significantly higher than that of the non-tribals. The tribal workers were predominantly in primary sector in 1971 census and again the same position is reiterated by the 1981 census. The primary sector comprises of four industrial categories of workers i.e. cultivators; agricultural labourers; livestock, forestry, fishing, hunting, plantation, orchards and allied activities; and Mining, Quarrying. It clearly shows the underdeveloped condition of the tribal economy. "These not only show the practically undiversified nature of the economy, but

also the fact that the primary sector has failed to have significant multiplication effect in the secondary and tertiary sectors".¹¹ In about 2/3 of the districts. the percentage of primary workers are extremely high. In 33 districts of M.P. 12 districts of Orissa and 3 districts of Bihar, the percentage is above 90. Almost all the district having considerable tribal population comes under this category. Six districts of M.P. four districts of Orissa and three districts of Bihar are having 80 to 90 percent of the tribal working population as primary workers. The percentage is above 70 in the districts of Gwalior, Sagar, Ujjain and Indore of M.P., Dhanbad of Bihar. In Bhind, the percentage is above 50 while in Bhopal the percentage is above 40.

Table IV.2

Frequency of the districts according to the percentage of the primary workers to the tribal main workers - 1981

Percentage Categories	Frequency of District
Above 90	45
80 - 90	13
70 - 80	5
Below 70	2

IV.1.2 Secondary Sector

As we have seen in the foregoing paragraph that in the overwhelming majority of the districts, the percentage of the tribal workers in primary sector is above 90, we may expect

that the proportion of the workers in the secondary sector will be at a low ebb. In 2/3 of the districts, the percentage of the tribal workers in the secondary sector is considerably low. The percentage is above 25 in Bhopal. In six districts of M.P. and one district of Bihar, the percentage is above 10. Jabalpur which is important from the point of view of comprising significant tribal population comes under this category. The percentage is above 5 in Satna, Shahdol, Mandsaur, Hoshangabad, Balaghat and Durg of M.P., Sambalpur,, Dhenkanal and Puri of Orissa, Hazaribag and Singhbhum of Bihar.

From the above analysis, it may be generalised that the percentage of the tribal workers in secondary sector is very much well below the required level. The percentage of the non-tribal workers in this sector is well above the tribal workers with respect to their respective main workers. The third inference may be drawn that their economy is still at subsistence level.

Table IV.3

Frequency distribution of the districts according to the percentage of secondary workers to the tribal main workers - 1981

Percentage Categories	Frequency of District
Above 20	1
15 - 20	3
10 - 15	7
5 - 10	11
Below 5	43

Table IV.4

**Percentage of Tribal Workers in the Different
Sectors of Economy (1971-81)**

Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
MADHYA PRADESH							
1	MORENA	96.30	93.80	2.07	2.98	1.61	3.12
2	BHIND	88.80	54.80	2.39	16.20	8.78	28.60
3	GWALIOR	95.00	79.50	1.83	10.00	3.07	9.62
4	DATIA	94.10	86.00	0.89	2.90	4.97	11.00
5	SHIVPURI	97.90	96.50	0.63	2.03	1.42	1.41
6	GUNA	95.40	95.90	1.07	1.23	3.50	2.72
7	TIKAMGARH	97.20	92.90	1.97	3.01	0.76	3.98
8	CHATTARPUR	95.60	83.50	2.69	10.00	1.68	6.39
9	PANNA	96.00	95.30	1.70	2.49	2.21	2.13
10	SAGAR	NA	78.90	NA	16.00	NA	4.99
11	DAMOH	NA	83.00	NA	12.70	NA	4.25
12	SATNA	88.50	92.90	3.65	5.04	3.21	2.04
13	REWA	97.30	96.60	0.55	1.67	1.16	1.68
14	SHAHDOL	96.80	92.30	1.21	5.88	1.95	1.81
15	SIDHI	97.70	96.00	0.98	3.05	1.27	0.92
16	MANDSAUR	93.20	89.20	0.00	7.58	6.79	3.16
17	RATLAM	98.50	95.40	0.75	2.29	0.72	2.26
18	UJJAIN	20.10	78.60	31.38	13.70	48.48	7.56
19	SHAJAPUR	78.10	92.00	8.51	3.95	13.30	3.97

Contd.....

Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
20	DEWAS	98.00	94.10	1.01	4.30	0.93	1.57
21	JHABUA	98.10	97.60	0.26	0.75	1.54	1.57
22	DHAR	98.20	97.90	0.37	0.73	1.42	1.35
23	INDORE	36.30	77.70	21.02	10.70	42.61	11.40
24	W.NEMAR	98.40	96.70	0.37	1.66	1.21	1.60
25	E.NEMAR	98.50	96.80	0.50	2.00	0.91	1.15
26	RAJGARH	92.10	92.70	3.13	3.53	4.70	3.66
27	VIDISHA	96.60	93.00	1.31	4.17	2.00	2.77
28	BHOPAL	NA	44.30		29.60	NA	25.90
29	SEHORE	92.60	95.10	3.58	2.73	3.78	22.06
30	RAISEN	94.90	95.60	2.40	2.11	2.66	2.23
31	BETUL	98.50	96.20	0.38	2.16	1.12	1.56
32	HOSHANGABAD	89.30	90.20	5.60	6.14	5.04	3.55
33	JABALPUR	92.30	82.90	3.76	12.50	1.16	4.48
34	NARSIMHAPUR	93.40	93.50	1.66	2.90	2.60	3.53
35	MANDLA	97.50	96.60	1.25	1.67	1.00	1.70
36	CHINDWARA	96.60	94.90	0.67	2.21	1.58	2.85
37	SEONI	98.30	96.30	0.31	1.78	1.14	1.82
38	BALAGHAT	97.10	91.70	1.99	5.32	0.83	2.93
39	SURGUJA	96.60	95.90	1.85	2.05	1.08	1.94
40	BILASPUR	95.80	93.90	2.25	3.67	0.90	2.37

Contd.....

Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
41	RAIGARH	96.30	94.90	1.40	2.13	2.29	2.88
42	R.NANDGAON	NA	96.70	NA	1.61	NA	1.59
43	DURG	95.60	88.20	1.78	6.53	2.51	5.19
44	RAIPUR	96.30	93.60	2.00	3.49	1.61	2.82
45	BASTAR	97.90	96.90	0.84	1.43	1.22	1.71
ORISSA							
1	SAMBALPUR	89.40	88.67	5.71	7.02	4.83	4.30
2	SUNDARGARH	84.00	81.25	7.09	10.74	8.87	8.00
3	KEONJHAR	91.30	90.63	1.81	3.39	6.87	5.96
4	MAYURBHANJ	93.90	92.08	1.71	3.67	4.33	4.23
5	BALASORE	89.50	0.01	4.17	4.34	6.27	4.63
6	CUTTACK	88.20	87.49	2.01	4.84	9.77	7.66
7	DHENKANAL	94.70	88.68	1.72	6.04	3.47	5.26
8	PHULABANI	95.30	95.43	1.05	1.75	3.62	2.81
9	BOLANGIR	94.50	93.90	1.95	2.05	3.50	3.64
10	KALAHANDI	93.50	93.91	1.71	3.47	4.71	2.60
11	KORAPUT	94.50	95.40	1.23	1.77	4.21	2.82
12	GANJAM	94.80	95.84	1.91	2.11	3.27	2.04
13	PURI	91.10	92.66	3.08	6.25	5.76	5.06
BIHAR							
1	S.PARGANA	96.60	92.78	1.60	4.24	1.76	2.77

Contd.....

Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
2	DHANBAD	82.00	76.09	12.80	17.10	5.09	6.80
3	GIRIDIH	NA	92.67	NA	4.26	NA	3.06
4	HAZARIBAGH	93.70	86.76	3.10	6.53	3.14	6.69
5	PALAMU	96.40	94.58	1.19	2.05	2.34	3.31
6	RANCHI	90.80	89.42	3.72	4.42	5.44	6.15
7	SINGHBHUM	90.60	86.34	5.36	7.75	4.03	5.90

IV.1.3 Tertiary Sector

The average percentage of the tribal workers engaged in the Tertiary sector is 4.48. This figure is about four times lower than that of the non-tribal population. This figure is also slightly lower than the average percentage of tribal workers in secondary sector. It may be pointed out that in case of non-tribal population, the average percentage of workers in tertiary sector is considerably higher than that of secondary sector. But in case of tribals no such phenomena is observed. It indicates towards the undiversified nature of the tribal economy.

The percentage of the tribal main workers engaged in the tertiary sector is the highest in Bhind (30.1). But in this district, the proportion of the tribal population is insignificant. The percentage is above 25 in Bhopal district. In five districts of M.P., five districts of Orissa and four districts

Table IV.5

Frequency distribution of the districts according to the percentage of the tribal workers in tertiary sector - 1981

Percentage Categories	Frequency of Districts
Above 15	2
10 - 15	2
5 - 10	14
Below 5	47

of Bihar, the percentage is above 5. The districts where the proportion of the tribal population is considerable and comes under this category are Sundargarh, Keonjhar of Orissa, Dhanbad, Hazaribag, Ranchi and Singhbhum of Bihar and Sagar, Durg districts of M.P. In the other significant districts like Panna, Shahdol, Sidhi, Bhopal, Sehore, Raisen, Betul, Hoshangabad, Jabalpur, Mandla, Chhindwara, Balaghat, Surguja, Bilaspur, Rajnandgaon, Durg, Raipur and Bastar of M.P., Mayurbhanj, Balasore of Orissa, Dhanbad, Hazaribag, Ranchi and Singhbhum of Bihar, the percentage of the tribal workers in tertiary sector is below 5. This figure is valid for about 3/4 districts of the region.

IV.1.4 Non-Primary Tribal Workers

The percentage of the non-primary tribal workers (workers in secondary sector + workers in tertiary sector) to the tribal workers in primary sector has been computed to show the proportion of these two types of workers in the different

districts. The percentage is above 100 in Bhopal district. In other words, the total number of workers in non-primary activities exceed the total number of workers in primary activities in this district. The percentage is above 80 in Bhind while it is 30 in Dhanbad district. In six districts of M.P. and one district of Orissa, the percentage is above 20. Some of the important districts under this category are Jabalpur of M.P. and Sundargarh of Orissa. The districts where the percentage is above 10 are almost equally distributed over the three states. Some important districts which come under this category are Hoshangabad, Durg of M.P. Keonjhar of Orissa and hazaribag, Ranchi and Singhbhum districts of Bihar. In about 2/3 districts of the region, the percentage is below 5.

Table IV.6

Frequency distribution of the districts according to the percentage of the non primary workers to the primary tribal workers - 1981

Percentage Categories	Frequency of the districts
Above 100	1
Above 40	1
30 - 40	1
20 - 30	7
10 - 20	13
Below	42

IV.1.5 Industrial Categories of the Workers

In the foregoing paragraphs we have seen the spatial distribution of the tribal workers in the different sectors of

the economy. In the coming paragraphs we will see the distribution of the tribal workers in the different industrial categories over the space.

Cultivators

The percentage of the tribal cultivators to the total tribal main workers is above 80 in Jhabua and Bastar. The figure is above 70 in Dhar, Mandla, Surguja and Rajanadgaon of M.P. and Santhal Pargana and Ranchi of Bihar. In four districts of M.P., two districts of Orissa and one district of Bihar, the percentage is above 60. Some of the important districts which comes under this category are Bilaspur and Raigarh of M.P. and Giridih of Bihar. In ten districts of M.P. six districts of Orissa and three districts of Bihar, the percentage is above 50. This category comprises of some of the important districts

Table IV.7

Frequency distribution of the districts according to the percentage of the tribal cultivation to the total tribal main workers - 1981

Percentage Categories	Frequency of District
Above 80	2
70 - 80	6
60 - 70	7
50 - 60	19
40 - 50	8
30 - 40	11
20 - 30	7
10 - 20	4
Below 10	1

like Shahdol, Sidhi, Betul, Chhindwara, Seoni, Balaghat, Durg and Raipur of M.P., Sundargarh, Keonjhar and Mayurbhanj of Orissa; and Hazaribag, Palamu and Singhbhum of Bihar. In seven districts of M.P. and one districts of Orissa, the percentage is above 40. In all the districts where the proportion of the tribal population is considerable, the percentage is above 40.

Agricultural Labourers

The percentage of the agricultural labourers to the total main workers is the highest in Rewa but in this district the tribal population is not significant. The important district among the districts which come under the percentage category 70-80 is Bhopal. The important districts where the percentage is above 60 are Hoshangabad, Jabalpur, of M.P. The important district where the percentage is above 50, is Sehore. The important districts where the percentage is above 40 are Mayurbhanj and Betul. In the remaining districts having significant tribal population, the percentage is below 40. Traditionally the tribes used to pursue their economic activities collectively and everybody was treated equally and there was no concept of labourer in their society but since they were deprived of their rights over forests, their territories were infiltrated by non-tribals, the tribal had no option but to work in the neighbouring agricultural fields as labourers. Due to the infiltration of the non-tribals, land

alienation also took place among them which forced them to become agricultural labourers.

Table IV.8

Frequency distribution of the districts according to the percentage of the tribal agricultural labourers to the total tribal main workers - 1981

Percentage Categories	Frequency of District
Above 60	5
50 - 60	9
40 - 50	14
30 - 40	15
20 - 30	13
10 - 20	7
Below 10	1

Livestock, Forestry, Fishing, Hunting and plantation, Orchards and Allied Activities

The percentage of the tribal workers engaged in these activities is very negligible in the most of the districts. The tribals carried out livestock, forestry, fishing and hunting as an ancillary activity to agriculture. But as they were denied their traditional right over the forests, their participation in these activities has gone down to the minimum.

Mining and Quarrying

The percentage of the tribal workers employed in these activities are insignificant except in the district of Durg (3.07), Vidisha (4.12) and Satna (4.16) of M.P., Dhanbad (20.54), Giridih (7.03), Hazaribag (18.76) of Bihar, Sundargarh (5.01), Keonjhar (8.16) and Cuttack (4.10) of Orissa.

Household Industry

Traditionally the economic systems of the tribes is very primitive. There is hardly any surplus which could liberate some of its workforce for the higher stages of production. Moreover, the presence of technology in their production system is almost nil. Only recently some of them have been attracted towards the modern systems of production. And lastly, one important point to be noted is that more than 90 percent of the tribal population lives in the rural areas. So, in these circumstances one can't expect a considerable proportion of tribal workforce to be engaged in industrial activities.

There percentage of the tribal workers in household industry is insignificant in tribal districts in particular and other districts in general. Sagar district (122.33) is exception to its.

Other than Household Industry

In all those districts where the percentage of the tribal population is considerable, the percentage of the tribal workers engaged in non-household industry is below 2.0 except in the districts of Bhopal (16.0), Jabalpur (6.92), Durg (3.34), Dhanbad (10.67), Hazaribag (3.89), Singhbhum (5.0), Sundargarh (7.68).

Table IV.9

Industrial Categories of Tribal Workers (1971-81)

DISTRICTS	MAIN WORKER		CAT I		CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX	
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981
MADHYA PRADESH																						
1	33.69	34.87	60.48	56.38	33.86	33.37	1.50	2.79	0.47	1.34	0.06	0.39	1.68	0.60	0.33	2.00	0.99	1.32	0.08	0.35	0.54	1.46
2	42.01	30.38	0.00	12.63	82.71	24.48	5.59	6.96	0.53	10.82	0.27	6.44	2.13	1.55	0.00	8.25	2.93	20.10	0.00	0.52	5.85	7.99
3	42.40	39.53	24.99	24.49	66.46	47.59	1.13	4.89	2.52	2.57	0.10	0.30	0.81	4.29	0.92	5.44	1.31	2.28	0.01	0.92	1.75	6.42
4	51.66	39.43	11.49	19.45	79.16	57.71	3.49	8.78	0.00	0.06	0.62	0.30	0.16	0.36	0.12	2.25	1.94	6.23	0.04	0.42	2.99	4.45
5	40.86	39.02	43.70	45.39	52.03	45.13	1.42	2.56	0.79	3.47	0.22	0.38	0.26	0.55	0.15	1.10	0.31	0.39	0.10	0.14	1.00	0.88
6	46.82	40.16	31.44	47.67	62.10	44.95	1.83	3.06	0.06	0.31	0.31	0.36	0.22	0.16	0.55	0.72	0.82	0.78	0.13	0.12	2.55	1.82
7	43.71	42.56	43.33	40.56	51.29	48.88	2.66	2.93	0.00	0.63	1.75	2.32	0.15	0.29	0.08	0.41	0.05	1.23	0.09	0.02	0.62	2.74
8	39.47	43.62	22.62	36.78	70.41	45.24	2.60	1.45	0.00	0.03	1.45	0.65	0.30	0.26	0.93	9.19	0.17	0.48	0.03	0.06	1.48	5.85
9	48.02	43.59	37.07	33.40	57.71	54.58	0.98	4.65	0.34	2.75	1.27	0.26	0.28	0.20	0.16	2.03	0.30	0.97	0.04	0.10	1.86	1.06
10		45.27		27.80		47.20		3.06		0.90		12.94		1.43		1.67		1.29		0.39		3.32
11		41.84		34.72		44.18		3.89		0.25		9.65		1.07		2.06		1.24		0.33		2.68
12	49.14	53.13	15.38	21.60	75.13	64.97	1.88	2.17	0.42	4.17	0.33	0.39	3.37	2.94	0.13	1.72	0.10	0.48	0.75	0.90	2.52	0.66
13	47.39	53.93	12.52	8.21	83.93	87.13	1.82	1.13	0.00	0.17	0.28	0.20	0.18	0.25	0.09	1.22	0.17	0.08	0.14	0.25	0.86	1.35
14	36.02	45.59	49.34	50.97	45.39	38.23	0.74	0.71	1.37	2.40	0.75	0.78	0.30	0.51	0.16	4.60	0.14	0.29	0.27	0.57	1.55	0.95
15	47.04	46.54	46.77	53.56	48.59	40.31	2.27	1.70	0.12	0.44	0.78	0.58	0.19	0.30	0.01	2.18	0.07	0.14	0.05	0.13	1.15	0.66

Contd.....

DISTRICTS	MAIN WORKER CAT I				CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX	
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981
16 MANDSAUR	47.37	54.63	77.78	44.25	14.81	41.24	0.62	2.40	0.00	1.37	0.00	0.28	0.00	1.92	0.00	5.38	0.00	0.38	1.23	0.54	5.56	2.25
17 RATLAM	30.57	42.55	84.99	67.43	12.91	25.76	0.63	2.17	0.00	0.07	0.24	0.14	0.14	0.80	0.38	1.35	0.10	0.32	0.19	0.48	0.43	1.46
18 UJJAIN	34.32	63.21	3.04	30.17	17.10	45.39	0.00	2.19	0.00	0.91	3.98	0.41	22.48	4.84	4.92	8.52	3.04	1.19	5.62	1.76	39.81	4.61
19 SHAJAPUR	56.46	43.55	5.85	37.01	71.28	50.87	1.06	3.94	0.00	0.25	1.06	0.50	0.00	1.26	7.45	2.19	0.00	0.87	1.06	0.39	12.23	2.72
20 DEVAS	44.30	44.96	32.45	41.53	62.54	49.07	3.08	3.39	0.00	0.11	0.30	0.57	0.50	1.53	0.21	2.21	0.11	0.30	0.04	0.23	0.77	1.04
21 JHABUA	29.76	43.73	88.69	90.00	8.76	6.97	0.75	0.48	0.01	0.22	0.14	0.09	0.07	0.19	0.05	0.48	0.12	0.30	0.22	0.19	1.20	1.08
22 DHAR	32.38	45.70	70.09	73.19	27.33	24.00	0.79	0.72	0.00	0.00	0.12	0.09	0.12	0.30	0.13	0.34	0.14	0.22	0.07	0.12	1.22	1.01
23 INDORE	19.93	45.73	15.91	18.89	15.91	55.66	2.84	2.05	1.70	1.11	6.82	0.49	14.20	5.67	0.00	4.61	2.84	2.02	3.41	1.64	36.36	7.82
24 W.NEMAR	34.50	40.20	70.37	67.24	27.10	28.33	0.95	1.12	0.00	0.03	0.16	0.65	0.14	0.48	0.06	0.53	0.16	0.57	0.02	0.10	1.03	0.94
25 E.NEMAR	35.05	47.51	52.35	47.49	42.90	47.46	3.29	1.66	0.04	0.22	0.20	0.57	0.22	0.54	0.08	0.89	0.09	0.25	0.06	0.12	0.75	0.79
26 RAJGARH	48.12	41.09	50.00	54.48	40.22	35.03	1.86	3.29	0.10	0.00	1.96	0.59	0.68	0.38	0.49	2.56	0.20	0.47	0.10	0.30	4.40	2.90
27 VIDISHA	47.91	40.86	18.09	23.27	77.56	63.02	0.62	2.65	0.42	4.12	0.13	0.65	0.24	0.64	0.94	2.89	0.16	0.65	0.11	0.37	1.73	1.76
28 BHOPAL		38.47		11.15		27.35		4.09		1.81		1.72		16.01		11.93		4.46		3.56		17.90
29 SEHORE	45.02	41.00	32.54	40.39	58.43	51.71	1.23	2.69	0.42	0.40	0.78	0.57	1.02	0.46	1.79	1.70	0.73	0.56	0.48	0.36	2.57	1.15
30 RAISEN	36.36	44.28	31.48	31.13	60.27	62.21	1.78	1.75	1.42	0.56	0.20	0.31	0.21	0.75	1.98	1.05	0.25	0.33	0.21	0.28	2.20	1.62
31 BETUL	34.45	51.06	63.99	54.67	32.28	36.60	1.55	3.31	0.69	1.66	0.11	0.75	0.14	0.33	0.12	1.09	0.27	0.35	0.18	0.37	0.67	0.84
32 HOSHANGABAD	36.05	43.41	27.54	32.00	57.05	52.60	4.73	5.18	0.04	0.51	0.30	0.44	2.39	1.92	2.91	3.79	0.46	0.98	1.22	0.83	3.36	1.75

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DISTRICTS	MAIN WORKER CAT I				CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX	
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981
33 JABALPUR	45.54	46.68	25.05	30.12	65.14	49.78	0.49	1.15	1.68	1.89	1.70	1.45	3.26	6.92	0.28	4.20	0.27	0.69	0.69	1.25	1.44	2.55
34 NARSIMHAPUR	42.99	48.34	34.01	29.81	58.78	62.41	0.63	1.03	0.00	0.32	0.54	0.43	0.64	1.29	0.82	1.18	0.38	0.96	0.72	0.63	3.49	1.95
35 MANDLA	46.92	55.20	69.32	73.76	27.59	22.07	0.60	0.73	0.01	0.06	0.99	0.70	0.09	0.21	0.20	0.77	0.11	0.09	0.15	0.11	0.95	1.50
36 CHINDWARA	39.89	46.18	59.79	56.19	32.50	34.23	2.32	1.68	2.07	2.83	0.32	0.94	0.34	0.61	0.31	0.67	0.29	0.49	0.41	0.43	1.66	1.94
37 SEONI	49.61	49.78	60.37	56.37	37.38	38.40	0.57	1.50	0.00	0.12	0.13	0.22	0.13	0.23	0.09	1.33	0.12	0.32	0.08	0.34	1.13	1.16
38 BALAGHAT	431.47	50.07	65.01	54.17	29.78	32.19	1.10	3.02	1.28	2.37	1.85	2.98	0.10	0.69	0.05	1.65	0.09	0.70	0.08	0.40	0.66	1.83
39 SURGUJA	37.00	40.44	71.63	74.35	22.77	19.12	1.00	0.94	1.25	1.59	1.35	0.92	0.35	0.30	0.21	0.84	0.17	0.22	0.13	0.23	1.14	1.49
40 BILASPUR	42.84	46.96	63.30	60.56	31.29	31.24	0.71	1.11	0.52	1.04	1.86	1.24	0.29	0.88	0.40	1.55	0.23	0.47	0.36	0.44	1.04	1.46
41 RAIGARH	37.93	41.69	70.61	66.92	25.02	27.11	0.58	0.88	0.09	0.07	0.91	1.05	0.29	0.70	0.21	0.39	0.30	0.25	0.14	0.22	1.86	2.43
42 RAJNANDGAON		56.74		76.01		19.83		0.89		0.07		0.58		0.60		0.43		0.39		0.27		0.92
43 DURG	53.54	53.33	73.00	57.96	20.98	26.50	0.55	0.75	1.17	3.08	0.74	0.95	0.91	3.35	0.14	2.23	0.37	0.85	0.54	2.03	1.59	2.32
44 RAIPUR	46.90	51.90	55.86	56.50	40.03	35.86	0.48	1.20	0.02	0.13	1.59	1.43	0.30	1.15	0.11	0.91	0.39	0.68	0.13	0.60	1.09	1.54
45 BASTAR	37.49	46.08	78.34	80.61	18.87	15.54	0.53	0.64	0.20	0.21	0.59	0.45	0.14	0.35	0.11	0.63	0.18	0.25	0.13	0.25	0.92	1.21
ORISSA																						
1 SAMBALPUR	36.74	40.21	45.77	42.95	41.81	43.50	1.45	1.32	0.41	0.90	2.51	3.21	2.81	3.20	0.39	0.61	0.54	0.74	0.96	0.83	3.33	2.74
2 SUNDARGARH	30.87	33.30	57.22	51.28	20.83	24.01	1.67	0.94	4.30	5.02	1.07	0.91	5.65	7.69	0.38	2.14	0.85	0.82	1.68	1.86	6.35	5.32
3 KEONJHAR	32.05	35.85	50.34	50.68	29.97	29.84	2.00	1.95	9.00	8.17	0.72	0.57	0.86	1.67	0.23	1.15	0.58	0.79	1.57	1.32	4.73	3.86

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DISTRICTS	MAIN WORKER CAT I		CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX			
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981		
4 MAYURBHANJ	35.52	42.07	46.26	50.17	44.76	39.46	2.74	1.82	0.19	0.65	1.32	2.35	0.28	0.81	0.11	0.52	0.19	0.40	0.34	0.45	3.81	3.38
5 BALASORE	35.43	43.87	21.57	25.87	65.83	63.74	0.68	1.31	1.47	0.10	0.92	0.86	2.35	2.43	0.90	1.05	0.19	0.42	1.58	1.40	4.52	2.81
6 CUTTACK	35.31	39.93	26.23	22.27	55.63	53.76	5.60	7.37	0.75	4.11	0.61	0.85	1.03	2.82	0.39	1.17	3.47	1.16	1.31	1.88	5.00	4.63
7 DHENKANAL	33.81	39.90	36.43	33.33	53.65	51.31	4.27	2.63	0.45	1.42	0.74	1.07	0.25	1.35	0.73	3.63	0.19	0.47	0.24	0.29	3.05	4.51
8 PHULBANI	35.44	42.23	68.73	69.01	25.84	24.97	0.75	1.44	0.01	0.01	0.83	0.98	0.12	0.47	0.11	0.30	0.33	0.35	0.16	0.25	3.14	2.21
9 BOLANGIR	35.15	38.01	57.04	54.00	36.24	38.71	1.19	0.82	0.07	0.38	1.36	1.36	0.45	0.50	0.14	0.20	0.51	0.67	0.28	0.33	2.71	2.65
10 KALAHANDI	32.18	38.81	55.38	54.63	37.17	38.66	1.00	0.59	0.01	0.03	1.29	1.95	0.33	0.63	0.09	0.90	0.40	0.54	0.16	0.17	4.15	1.89
11 KORAPUT	36.40	41.58	60.22	62.90	33.13	31.09	1.11	1.37	0.08	0.04	0.80	0.69	0.25	0.59	0.18	0.50	0.51	0.58	0.41	0.27	3.29	1.97
12 GANJAM	37.71	42.83	64.69	59.73	28.32	34.33	1.80	1.77	0.00	0.02	1.56	1.24	0.25	0.76	0.10	0.11	0.70	0.34	0.22	0.21	2.36	1.49
13 PURI	36.53	40.51	31.88	32.37	51.65	52.20	7.54	6.30	0.08	1.79	0.61	1.39	2.37	4.29	0.10	0.58	2.86	1.55	0.16	0.88	2.75	2.64
BIHAR																						
1 S.PARGANA	36.12	38.01	72.95	72.68	21.90	17.97	1.68	1.63	0.10	0.48	1.16	2.23	0.40	1.64	0.04	0.17	0.11	0.64	0.29	0.24	1.37	1.88
2 DHANBAD	35.53	32.21	42.10	39.42	24.86	15.8	0.53	0.32	14.57	20.54	2.19	1.96	4.75	10.67	5.91	4.04	0.13	0.52	2.55	1.72	2.42	4.54
3 GIRIDIH		32.07		64.3		20.9		0.43		7.03		1.51		1.56		0.9		0.23		0.56		2.26
4 HAZARIBAGH	32.54	32.33	56.18	50.76	28.46	16.13	1.53	1.09	7.58	18.76	1.48	1.45	1.11	3.89	0.51	1.13	0.18	0.71	0.83	1.77	2.13	4.21
5 PALAMU	33.82	37.07	59.10	59.34	35.49	32.9	1.50	1.33	0.37	0.99	0.86	0.69	0.25	0.82	0.09	0.5	0.12	0.35	0.46	0.71	1.77	2.24
6 RANCHI	32.43	37.04	70.10	72.82	19.90	15.33	0.50	0.6	0.32	0.65	1.84	1.83	1.67	2.34	0.22	0.37	0.27	0.59	0.88	1.12	4.29	4.42
7 SINGHBHUM	36.27	38.13	53.15	54.72	34.78	28.28	1.05	1.13	1.62	2.19	1.34	1.62	3.51	5	0.52	1	0.29	0.79	1.27	1.61	2.47	3.48
Note :	CAT I - Cultivators; CAT II - Agricultural Labourers; CAT III - Livestock, Forestry, Fishing, Hunting and Plantation, Orchards and allied activities; CAT IV - Mining and Quarrying; CAT VA - Household Industry; CAT VB - Non-household industry; CAT VI - Construction; CAT VII - Trade & Commerce; CAT VIII - Transport, Storage & Communication and CAT IX - Other services.																					

Construction

In the most of the districts, the percentage of the tribal workers in construction activities is below 2.0.

Trade and Commerce

The percentage of the tribal workers engaged in trade and commerce is below 5.0 in all the districts except Bhind (20.73) and Datia (6.83). However in these districts, the proportion of the tribal population is insignificant.

Transport, Storage and Communication

In all the districts, the percentage of the tribal worker engaged in these activities is below 2.0 except Bhopal (5.6).

Other Services

The percentage of the tribal workers employed in other services is extremely high in Bhopal (17.89). In Indore district, the percentage is (7.82). In the remaining districts the percentage is below 5.

From the foregoing paragraphs, it can be discerned that the concentration of the tribal workers is very high in the primary sector. In other words, their economy is based on primary sector. Their proportion in the secondary and tertiary sector is very low. From the distribution of their workforce in the nine industrial categories of workers, it appears that a

very large proportion is accounted only for cultivators and agricultural labourers. Their distribution in the rest of the categories is almost even and very low.

IV.2 STRUCTURE OF THE GOND WORKFORCE - 1981

The Gond population is spread over all the districts of M.P. Orissa and Bihar but their proportion in some of the districts of M.P. is very high. While describing their workforce structure, we shall put some extra emphasis on these districts to know the exact nature of their workforce structure. The term 'important district' will be used to denote such districts which are having a considerable proportion of the Gond district.

Main Workers

The average percentage of the Gond main workers to the total Gond population is 43.14. The figure is very marginally lower than that of the overall tribal population while it is very much higher than that of the non-tribal population. The percentage is above 65 in Ujjain district of M.P. and Ganjam district of Orissa. The figure is above 55 in Mandla and Rajnandgaon. Both of these districts are important. There are three important districts in the category 50 to 55. Those districts are Betul, Durg and Raipur. In 13 districts of M.P. and one district of Orissa, the percentage is above 45. Out of these districts, Jabalpur, Chhindwara, Balaghat, Bilaspur and

Bastar is important. The important districts where the percentage is above 40 are Panna, Shahdol, Sehore, Raisen, Hoshangabad and Raigarh. In ten districts of M.P., ten districts of Orissa and three districts of Bihar, the figure is above 35. The important districts within this category are Bhopal and Surguja. There are two districts of Bihar and one district of M.P. and Orissa each where the percentage is above 30.

Table IV.10

Frequency distribution of the districts according to the percentage of the main workers among the total Gond population - 1981

Percentage Categories	Frequency of the districts
Above 60	4
50 - 55	4
45 - 50	14
40 - 45	16
35 - 40	23
30 - 35	1
Below 30	3

IV.2.1 Primary Sector

The average percentage of the Gond main workers engaged in the primary sector is 79.68. This figure is considerably higher than that of the non-tribal population but the figure is significantly lower also than that of the tribal population. In about 1/2 of the districts, the percentage is above 90. The important districts which come under this category are Panna, Sidhi, Sehore, Raisen, Betul, Mandla, Chhindwara, Balaghat,

Surguja, Bilaspur. Raigarh, Rajnandgaon, Raipur and Bastar. In nine districts of M.P. two districts of Bihar and one district of Orissa, the percentage is above 80. The important districts under this category are Hoshangabad, Jabalpur and Durg. In two districts of M.P., the percentage is above 70. In 7 districts of M.P. and one district of Orissa and Bihar each the percentage is above 60. In 9 districts only, the percentage is below 50. It becomes clear from the above analysis that the maximum number of districts having significant Gond population records more than 90 percent of the Gond workers as primary workers. One may infer that the economic state of the tribal population as whole and the Gonds as a tribal group is more or less the same.

Table VI.11

Frequency distribution of the districts according to the percentage of the Gond Main Workers in Primary Sector - 1981

Percentage Categories	Frequency of the districts
Above 90	33
80 - 90	12
70 - 80	2
60 - 70	9
50 - 60	1
40 - 50	3
30 - 40	2
20 - 30	2
10 - 20	1

Table IV.12

**Percentage of Gond Workers in the Different
Sectors of Economy (1971-81)**

Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
MADHYA PRADESH							
1	MORENA	48.04	69.52	48.94	12.69	3.02	17.77
2	BHIND	81.82	31.08	3.64	33.78	14.55	35.13
3	GWALIOR	37.31	21.69	35.82	52.94	26.87	25
4	DATIA	NA	68.96	NA	8.04	NA	24.13
5	SHIVPURI	40.70	61.34	41.86	26.89	29.07	11.76
6	GUNA	91.59	82.17	8.01	6.48	0.40	11.45
7	TIKAMGARH	98.01	94.55	1.22	0.27	0.77	5.47
8	CHATTARPUR	88.48	72.02	9.97	22.99	1.55	5.52
9	PANNA	97.99	95.15	0.85	3.2	1.16	1.63
10	SAGAR	NA	83.41	NA	13.04	NA	3.54
11	DAMOH		83.45		12.65		3.9
12	SATNA	96.91	92.91	1.47	5.51	1.63	1.59
13	REWA	98.25	93.85	0.79	4.33	0.96	1.81
14	SHAHDOL	97.99	93.47	0.60	4.81	1.41	0.96
15	SIDHI	98.88	97.26	0.43	2	0.70	0.73
16	MANDSAUR	96.18	62.62	0.00	26.4	3.82	10.85
17	RATLAM	NA	64.35	NA	26.73	NA	9.65
18	UJJAIN	13.95	79.44	33.59	14.72	47.29	5.71
19	SHAJAPUR	84.72	60.41	8.33	27.08	6.94	12.5

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Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
20	DEWAS	97.67	96.27	1.25	2.11	1.05	1.61
21	JHABUA	NA	69.56	NA	1.44	NA	28.98
22	DHAR	0.00	81.22	0.00	7.84	100.00	10.92
23	INDORE	45.78	42.94	31.33	22.43	22.89	34.42
24	W.NEMAR	94.94	86.53	0.27	6.34	4.78	7.12
25	E.NEMAR	97.04	93.56	0.81	3.93	2.16	2.46
26	RAJGARH	96.15	37.37	2.56	58.08	1.28	4.04
27	VIDISHA	97.08	89.58	1.28	4.5	1.64	5.86
28	BHOPAL		44.15		27.85		27.94
29	SEHORE	92.79	94.82	3.32	3.03	3.89	2.16
30	RAISEN	96.41	97.14	1.45	1.1	2.13	1.71
31	BETUL	98.85	96.8	0.35	1.65	0.81	1.64
32	HOSHANGABAD	90.58	87.66	4.94	7.82	4.47	4.51
33	JABALPUR	94.98	85.81	2.86	9.9	1.85	4
34	NARSIMHAPUR	95.01	94.78	1.34	2.09	3.64	3.08
35	MANDLA	98.32	97	0.88	1.47	0.79	1.38
36	CHINDWARA	97.05	96.12	0.83	1.24	2.12	2.62
37	SEONI	98.43	96.96	0.23	1.6	1.02	1.42
38	BALAGHAT	98.76	93.95	0.43	3.34	0.81	2.69
39	SURGUJA	96.40	97.27	2.42	1.15	1.18	1.56
40	BILASPUR	95.93	95.14	2.06	2.3	2.01	2.55

Contd.....

Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
41	RAIGARH	94.87	94.85	2.38	1.97	2.76	3.16
42	R.NANDGAON		96.84		1.39		17.53
43	DURG	95.53	87.27	1.70	7.3	2.77	5.39
44	RAIPUR	97.42	94.04	0.83	2.71	1.58	3.24
45	BASTAR	98.39	97.78	0.57	0.9	1.04	1.31
ORISSA							
1	SAMBALPUR	91.9	90.92	3.71	4.87	4.35	4.21
2	SUNDARGARH	91.9	90.65	1.91	2.52	6.17	6.83
3	KEONJHAR	94.6	92.27	0.56	1.76	4.81	5.97
4	MAYURBHANJ	94.4	91.39	0.32	60.35	5.27	-51.74
5	BALASORE	97.7	64.51	0	0	2.29	35.49
6	CUTTACK	94.1	83.33	0	2.56	5.88	14.11
7	DHENKANAL	97.3	95.45	0.38	1.49	2.24	3.06
8	PHULABANI	92.8	90.61	2.18	3.37	4.99	6.02
9	BOLANGIR	97.1	95.49	0.93	0.97	2.29	3.54
10	KALAHANDI	96.7	96.41	0.12	0.83	0.26	2.76
11	KORAPUT	98.2	98.58	0.41	0.34	1.38	1.08
12	GANJAM	62.2	22.41	20	71.55	17.7	6.04
13	PURI	82.5	15.86	1.25	70.65	16.2	13.49

Contd.....

Sr. No.	DISTRICT	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
BIHAR							
1	S.PARGANA	62.9	61.45	11.2	12.83	25.8	25.48
2	DHANBAD	58.1	58.77	19.7	21.63	22	18.06
3	GIRIDIH		85.41		3.26		11.13
4	HAZARIBAGH	90	44.44	3.59	44.73	6.35	11.11
5	PALAMU	95	90.39	1.71	2.34	3.23	7.04
6	RANCHI	96.6	95.61	1.27	1.99	2.04	2.41
7	SINGHBHUM	83.6	82.58	9.26	9.46	7.07	7.95

IV.2.2 Secondary Sector

The average percentage of the Gond main workers engaged in the secondary sector is 12.42. This figure is very marginally higher than that of the non-tribal population and this figure is more than twice of the tribals. But this average figure is giving misleading information about the percentage of Gond main workers in secondary sector as in the majority of the important districts, it is below 5. In fact the average figure is being pulled up by some very high figures of such districts where the proportion of the Gond population is insignificant. The figure is very high in the districts of Mayurbhanj (60.35), Ganjam (71.55), Puri (70.65) of Orissa; Hazaribag (44.73) of Bihar.

The percentage is above 30 in Bhind. Gwalior and Rajgarh of M.P. In the five districts of M.P. the percentage is above 5. The important districts in this category are Hoshangabad, Jabalpur and Bastar. More than 1/2 of the districts of the region is characterised by having less than 5 percent of the Gond main workers in the secondary sector. The important districts under this category are Sehore, Raisen, Betul, Mandla, Chhindwara, Seoni, Balaghat, Surguja, Bilaspur, Rajnandgaon, Raipur and Bastar. Thus most of the important districts come under this category. In other words, in general the percentage of the Gond main workers in secondary sector is low. At this level, a general statement may be made that the base of their economy is very weak.

Table IV.13

Frequency distribution of the districts according to the percentage of the Gond Workers in Secondary Sector - 1981

Percentage Categories	Frequency of the districts
Above 15	21
5 - 10	9
Below 5	35

IV.2.3 Tertiary Sector

The average percentage of the Gond main worker engaged in the tertiary sector is 8.83. This figure is about double than that of the overall tribals but it is half than that of non-

tribals. Seeing the figure, one can speculate that the Gonds are at a better position in the tertiary than the overall tribal population but this speculation might prove wrong because most of the districts, where the Gong population constitute a considerable proportion comes under the category - below 5. Actually, the average is pulled up by a large number of districts having insignificant proportion of the Gond population.

The percentage of the workers in the tertiary sector to the total Gond main workers is very high in the districts of Bhind, Indore of M.P. and Cuttack of Orissa. However, in these districts the proportion of the Gond population is insignificant. The percentage ranges between 25 to 30 in three districts of M.P. and one district of Bihar. The important district which comes under this category is Bhopal. The other important district where the percentage shots above 15 is Rajnandgaon. Durg is having more than 5 percent of the Gond workers in tertiary sector. In the most of the important districts like Raisen, Betul, Sehore, Mandla, Chhindwara, Seoni, Surguja, Bilaspur, Raigarh, Raipur and Bastar, the percentage is below 5. From the distribution of the Gond workers in the tertiary sector in the districts having considerable Gond population, it can be generalised that their share in this sector is low.

Table IV.14

Frequency distribution of the districts according to the percentage of the Gond Workers in Tertiary Sector - 1981

Percentage Categories	Frequency of the districts
Above 30	3
25 - 30	4
20 - 25	1
15 - 20	3
10 - 15	9
5 - 10	14
Below 5	31

IV.2.4 Non Primary Workers

The percentage of the non-primary workers to the Primary workers is above 100 in the districts of Bhind (221.73), Gwalior (359.32), Indore (132.43), Rajgarh (166.21), Bhopal (126.36) of M.P. Mayurbhanj (274.73), Ganjam (344.23) and Puri

Table IV.15

Frequency distribution of the districts according to the percentage of the non-primary workers^{to} primary workers among the Gonds - 1981

Percentage Categories	Frequency of the districts
Above 300	3
200 - 300	2
100 - 200	4
60 - 70	4
50 - 60	3
40 - 50	3
30 - 40	1
20 - 30	5
10 - 20	11
Below 10	29

(532.07) of Orissa and Hazaribag (125.65) of Bihar. However, all these districts except one contain insignificant proportion of the Gond population. The important districts where the percentage is above 10, are Hoshangabad, Jabalpur and Durg. In the other important districts, the percentage is below 10.

IV.2.5 Industrial Categories of the Workers

In the foregoing paragraphs, we have analysed the sectorwise distribution of the Gond workers and found that they are unevenly distributed in the different sectors though a extremely high proportion of them is concentrated in one particular sector i.e. primary. In the coming paragraphs we will see the spatial distribution of their workers in the specific categories of the sector.

Cultivators

Bastar is having the highest percentage of the Gond cultivators in the region. The percentage of the cultivators to the total Gond main workers is above 80 in this district. The important districts where the percentage is above 70 are Sidhi, Mandla, Surguja and Rajnandgaon. There are four districts of M.P. and four districts of Orissa where the percentage is above 60. Important among these districts are Shahdol, Bilaspur and Raigarh. The important districts where the percentage is above 50 are Betul, Chhindwara, Seoni, Balaghat, Durg and Raipur. It

reveals that in the majority of the important districts, the percentage is above 50.

Agricultural Labourers

"The Gonds are mainly engaged in agriculture, the great bulk of them are farm servants and labourers".¹² Since a very large proportion of the Gond workers comprises of cultivators and agricultural labourers. These two industrial categories of workers seem to be positively correlated. Wherever the the percentage of the cultivators is higher, the figure for the agricultural labourers is lower and vice-versa.

Table IV.16

Frequency distribution^{of} the districts according to the percentage of the agricultural labourers to the total Gond main workers - 1981

Percentage Categories	Frequency of the districts
Above 60	3
50 - 60	5
40 - 50	10
30 - 40	20
20 - 30	12
10 - 20	10
Below 10	4
Nil	1

The percentage of the agricultural labourers to the total Gond main workers is the highest in Sehore, Raisen and Narsimhapur districts. Among these, the former two are important districts. In these districts, the percentage is

above 60. In three districts of M.P. and two districts of Orissa, the percentage is above 50. Among these Hoshangabad is an important district. There are eight districts of M.P. and one districts of Bihar and Orissa each where the percentage is above 40. In 16 districts of M.P. and four districts of Orissa, the percentage is above 30. A great majority of the important districts come under this district.

Livestock, Forestry, Fishing, Hunting and Plantation, Orchards and Allied Activities

"The primary occupation of the Gonds in former times was hunting and fishing but their opportunities in this respect have been greatly circumscribed by the conservation of the game in Government forests".¹³ In a vast majority of the districts, the percentage of the Gond main workers engaged in these activities are insignificant.

Mining and Quarrying

In almost all the districts, the percentage of workers engaged in these activities are below 3.0.

Household Industry

In a vast majority of the districts, the percentage of the workers engaged in household industry is below 3.0. However in some of the districts, the percentage is notable. these districts are Sagar (10.9), Damoh (10.24) and Shajapur.

Table IV.17

Distribution of Gond Workers by Industrial Categories, 1971-81

DISTRICTS	MAIN WORKER CAT I		CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX			
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981		
MADHYA PRADESH																						
1 MORENA	27.47	38.46	9.06	30.79	24.17	26.98	14.80	11.74	0.00	0.00	0.63	47.13	3.8	1.81	8.25	0.00	14.28	0.91	0.31	2.11	3.17	
2 BHIIND	27.92	29.48	0.00	9.45	73.64	20.27	8.18	0	0.00	1.35	0.91	4.05	2.73	1.35	0.00	28.37	10.00	27.02	0.00	0	4.55	8.1
3 GWALIOR	22.95	38.6	0.00	12.13	28.36	6.61	1.49	2.94	7.46	0	0.00	1.65	16.42	14.15	19.40	37.13	4.48	5.51	1.49	4.04	20.90	15.44
4 DATIA	NA	37.82	NA	34.48	NA	31.03	NA	3.44	NA	0	NA	0	NA	1.14	NA	6.89	NA	2.29	NA	5.74	NA	16.09
5 SHIVPURI	44.04	38.51	0.00	21	27.08	30.25	9.38	10.08	0.00	0	3.13	2.52	34.38	23.52	0.00	0.84	5.21	5.88	0.00	0	20.83	5.88
6 GUNA	42.23	41.49	19.49	49.53	51.14	31.71	20.97	0.92	0.00	0	7.22	5.55	0.00	0.23	0.79	0.69	0.00	3.7	0.00	0.69	0.40	7.06
7 TIKAMGARH	45.20	45.04	46.57	45.85	49.00	40.93	2.43	6.21	0.00	1.55	1.22	0	0.00	0	0.00	0.25	0.00	0	0.00	0	0.77	5.18
8 CHATTARPUR	29.44	39.29	10.51	53.56	77.29	17.34	0.67	1.03	0.00	0.08	5.26	0.32	0.13	0.45	4.58	22.2	0.00	0.04	0.00	0.08	1.55	5.39
9 PANNA	53.03	40.8	28.50	41.18	68.36	46.09	0.88	4.84	0.26	3.03	0.74	0.32	0.02	0.31	0.08	2.56	0.28	0.61	0.05	0.16	0.83	0.85
10 SAGAR	-	43.16	-	38.13	-	42.17	-	2.96	-	0.13	-	10.9	-	0.74	-	1.39	-	0.52	-	0.26	-	2.74
11 DAMOH	-	40.81	-	39.48	-	39.94	-	3.84	-	0.17	-	10.24	-	0.99	-	1.42	-	1.29	-	0.34	-	2.26
12 SATNA	44.79	44.6	44.15	58.76	51.12	30.28	1.40	1.58	0.25	2.28	0.12	0.15	1.12	2.57	0.23	1.05	0.10	0.24	0.44	0.39	1.09	0.95
13 REWA	39.92	41.22	20.66	51.07	68.37	42.52	9.22	0.25	0.00	0	0.00	0.05	0.18	0.2	0.61	4.26	0.00	0.07	0.00	0.12	0.96	1.6
14 SHAHDOL	30.48	44.47	63.81	68.98	32.58	22.58	0.76	0.7	0.83	1.63	0.19	0.16	0.19	0.2	0.22	4.34	0.15	0.18	0.23	0.28	1.02	0.79
15 SIDHI	43.13	45.02	72.08	75.16	24.39	19.99	2.36	1.91	0.05	0.19	0.17	0.14	0.25	0.18	0.00	1.66	0.05	0.08	0.00	0.05	0.64	0.6
16 MANDSAUR	46.59	46.44	80.25	39.08	15.29	22.28	0.64	1.25	0.00	0	0.00	0	0.00	14.4	0.00	12	0.00	1.02	0.00	1.37	3.82	8.45

Contd.....

DISTRICTS	MAIN WORKER CAT I		CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX			
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981		
17 RATLAM	0.00	37.96	NA	40.34	NA	19.8	NA	4.2	NA	0	NA	0	NA	4.7	NA	22.02	NA	1.48	NA	2.97	NA	5.19
18 UJJAIN	30.53	72.16	0.54	40.48	14.17	35.4	0.00	3.229	0.00	0.25	3.81	0.12	25.89	1.26	5.72	13.32	3.54	1.01	4.90	0.38	41.42	4.31
19 SHAJAPUR	61.28	45.71	4.86	14.58	78.47	43.75	1.39	2.08	0.00	0	1.39	25	0.00	0	6.94	2.08	0.00	0	1.39	2.08	5.56	10.41
20 DEWAS	45.43	44.27	29.19	32.47	65.54	59.22	2.97	4.58	0.00	0	0.31	0.45	0.77	0.99	0.17	0.66	0.16	0.55	0.07	0.33	0.82	0.72
21 JHABUA	NA	35.38	NA	68.11	NA	0	NA	1.44	NA	0	NA	0	NA	1.44	NA	0	NA	5.79	NA	1.44	NA	21.73
22 DHAR	9.52	50.77	0.00	30.03	0.00	48.12	0.00	3.07	0.00	0	0.00	2.38	0.00	1.02	0.00	4.43	0.00	0.34	0.00	0	100.00	10.58
23 INDORE	17.58	37.84	31.33	7.93	12.05	33.84	2.41	0.77	0.00	0.38	7.23	1.93	24.10	15.66	0.00	4.83	1.20	8.31	4.82	6.18	16.87	19.92
24 W.NIMAR	22.85	45.58	49.28	35.6	44.50	41.95	1.16	6.5	0.00	2.47	0.21	1.39	0.00	3.71	0.07	1.23	0.96	1.39	0.21	0.77	3.62	4.95
25 E.NIMAR	38.04	43.86	43.71	39.61	46.88	47.5	6.18	3.9	0.26	2.53	0.34	0.55	0.31	1.84	0.16	1.53	0.31	0.81	0.31	0.44	1.53	1.2
26 RAJGARH	45.22	47.82	44.87	11.11	45.51	25.25	5.77	1.01	0.00	0	0.00	13.13	0.00	5.05	2.56	39.89	0.00	0.5	0.00	0	1.28	3.53
27 VIDISHA	42.58	40.53	23.63	222.25	72.63	58.72	0.36	5.76	0.46	2.83	0.82	0.65	0.27	0.7	0.18	3.13	1.19	2.27	0.18	1.41	0.27	3.03
28 BHOPAL	-	37.46	-	11.25	-	25.83	-	5.99	-	1.07	-	0.99	-	13.66	-	13.19	-	3.88	-	3.27	-	20.78
29 SEHORE	43.69	43.4	30.02	29.48	62.26	62.42	0.36	2.82	0.15	0.1	0.33	0.67	1.10	0.4	1.89	1.85	0.70	0.43	0.58	0.46	2.62	1.25
30 RAISEN	35.79	44.1	33.99	33.48	60.75	62.17	1.51	1.32	0.17	0.15	0.13	0.21	0.08	0.54	1.24	0.34	0.18	0.18	0.17	0.25	1.78	1.26
31 BETUL	44.30	51.85	61.92	54.48	34.45	37.05	1.65	3.42	0.82	1.83	0.10	0.19	0.13	0.32	0.12	1.07	0.22	0.35	0.15	0.39	0.45	0.83
32 HOSHANGABAD	36.02	43.69	28.77	29.46	57.99	53.26	3.77	4.32	0.05	0.6	0.32	0.56	1.77	2.41	2.85	4.84	0.41	1.24	1.15	0.99	2.91	2.27
33 JABALPUR	39.72	45.44	44.70	46.14	49.77	37.84	0.56	1.25	0.25	0.57	1.12	1.25	1.51	3.68	0.24	5.23	0.20	0.59	0.65	1.02	1.01	2.38

Contd.....

DISTRICTS	MAIN WORKER CAT I				CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX	
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981
34 NARSIMHAPUR	42.21	48.06	37.26	31.59	57.14	62.24	0.61	0.87	0.00	0.07	0.33	0.41	0.50	0.72	0.51	0.95	0.32	0.78	0.53	0.53	2.80	1.76
35 MANDLA	47.15	55.59	73.79	77.69	24.08	18.73	0.45	0.52	0.01	0.04	0.77	0.66	0.05	0.17	0.07	0.63	0.07	0.06	0.06	0.07	0.66	1.23
36 CHHINDWARA	40.66	47.18	62.72	56.86	30.26	35.17	2.14	1.56	1.93	2.52	0.27	0.26	0.28	0.38	0.28	0.58	0.21	0.42	0.38	0.38	1.52	1.81
37 SEONI	49.56	49.93	62.31	58.27	36.17	37.14	0.25	1.45	0.00	0.09	0.10	0.2	0.06	0.16	0.07	1.23	0.08	0.26	0.06	0.29	0.89	0.86
38 BALAGHAT	42.38	49.97	71.56	59.18	25.41	30.42	0.98	2.57	0.81	1.76	0.32	1.13	0.07	0.56	0.05	1.65	0.05	0.55	0.06	0.35	0.70	1.77
39 SURGUJA	36.55	39.57	72.74	78.06	20.78	15.68	0.98	0.99	1.90	2.52	1.95	0.11	0.31	0.15	0.16	0.87	0.17	0.23	0.17	0.23	0.84	1.1
40 BILASPUR	41.18	47.75	63.14	63.24	31.68	30.21	0.54	0.8	0.57	0.87	1.31	0.38	0.32	0.77	0.42	1.14	0.25	0.45	0.61	0.57	1.15	1.53
41 RAIGARH	39.02	43.98	64.61	62.65	29.59	31.34	0.49	0.78	0.18	0.02	1.54	0.58	0.49	0.8	0.34	0.57	0.47	0.38	0.22	0.28	2.07	2.5
42 RAJNANDGAON	-	56.86	-	74.06	-	21.83	-	0.89	-	0.05	-	0.37	-	0.63	-	0.38	-	0.45	-	0.3	-	0.99
43 DURG	54.23	52.78	69.84	50.01	24.19	34.14	0.57	0.82	0.92	2.28	0.47	0.362	1.07	3.76	0.16	2.91	0.47	1.03	0.49	1.68	1.81	2.67
44 RAIPUR	47.04	52.26	59.69	58.24	37.42	34.48	0.47	1.17	0.02	0.14	0.42	0.34	0.29	1.36	0.12	0.99	0.33	0.77	0.12	0.75	1.13	1.71
45 BASTAR	36.74	46.64	80.09	82.46	17.61	14.62	0.52	0.54	0.17	0.14	0.37	0.23	0.10	0.27	0.10	0.38	0.14	0.19	0.09	0.16	0.81	0.95
ORISSA																						
1 SAMBALPUR	33.11	38.56	50.55	48.03	39.61	40.38	1.14	1.29	0.63	1.22	1.19	1.56	2.38	2.93	0.15	0.39	0.77	0.85	0.63	0.65	2.96	2.70
2 SUNDARGARH	34.98	35.91	52.58	50.77	36.78	37.16	1.44	1.34	1.12	1.39	0.51	0.37	1.14	1.66	0.27	0.49	0.84	0.81	0.81	1.03	4.52	4.97
3 KEONJHAR	28.56	32.16	70.61	65.87	21.73	24.07	1.43	1.07	0.85	1.27	0.19	0.18	0.29	0.94	0.09	0.64	0.48	0.93	0.31	0.58	4.02	4.45
4 MAYURBHANJ	26.66	39.14	59.76	61.68	34.16	26.93	0.48	2.33	0.00	0.46	0.25	0.41	0.07	36.29	0.00	23.65	0.22	18.16	0.16	20.35	4.90	152.23

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DISTRICTS	MAIN WORKER CAT I				CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX		
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	
5 BALASORE	43.94	38.27	36.78	12.90	58.62	51.61	0.00	0.00	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.45	2.30	25.81
6 CUTTACK	33.93	39.80	14.71	22.65	77.65	54.70	1.76	1.28	0.00	4.70	0.00	0.00	0.00	2.56	0.00	0.00	0.00	0.85	0.00	2.56	5.88	11.11	
7 DHENKANAL	32.12	36.22	61.33	61.04	32.04	31.17	3.46	2.95	0.54	0.30	0.23	0.17	0.12	0.43	0.03	0.89	0.31	0.47	0.28	0.23	1.66	2.40	
8 PHULBANI	34.33	38.47	71.69	58.83	20.86	29.47	0.27	2.27	0.00	0.04	1.62	0.99	0.42	0.85	0.15	1.54	0.84	1.38	0.39	0.61	3.77	3.99	
9 BOLANGIR	34.62	37.77	63.94	57.74	30.83	36.45	1.92	0.68	0.10	0.63	0.52	0.35	0.32	0.41	0.09	0.21	0.28	0.58	0.16	0.31	1.84	2.62	
10 KALAHANDI	31.13	37.74	65.48	61.61	33.45	34.12	0.67	0.63	0.00	0.05	0.06	0.26	0.06	0.29	0.01	0.28	0.03	0.41	0.05	0.10	0.20	1.54	
11 KORAPUT	30.12	38.46	72.75	77.30	24.98	20.98	0.48	0.27	0.00	0.03	0.28	0.11	0.06	0.11	0.07	0.13	0.34	0.25	0.06	0.09	0.98	0.76	
12 GANJAM	40.18	66.86	44.44	7.76	17.78	12.93	0.00	1.72	0.00	0.00	20.00	0.00	0.00	71.55	0.00	0.00	4.44	0.00	0.00	0.43	13.33	5.17	
13 PURI	29.30	46.52	56.25	11.08	23.75	4.19	2.50	0.60	0.00	0.00	0.00	0.00	0.00	70.36	1.25	0.30	2.50	1.50	10.00	2.10	3.75	10.18	
BIHAR																							
1 S.PARGANA	35.98	28.91	75.13	48.03	21.05	10.21	1.66	0.71	0.10	1.49	0.09	5.7	0.37	5.28	0.04	0.31	0.05	18.57	0.26	1.62	1.25	5.2	
2 DHANBAD	33.80	37.25	50.42	9.09	28.31	1.01	0.55	0.5	11.97	53.43	0.26	1.35	3.21	17.3	2.08	3.05	0.06	5.85	1.35	4.83	1.80	7.3	
3 GIRIDIH		28.67		0.76		0.38		0.38		83.87		0		2.11		1.15		4.03		0.95		6.14	
4 HAZARIBAGH	32.54	43.51	61.08	1.75	32.18	17.83	1.56	1.46	2.90	23.39	0.26	0	0.23	44.44	0.29	0.29	0.11	4.38	0.22	3.21	1.18	3.5	
5 PALAMU	19.15	41.3	22.22	41.67	0.00	48.21	0.00	0.4	0.00	0.1	0.00	0.14	0.00	0.81	0.00	1.22	0.00	5.1	0.00	1.12	77.78	0.811	
6 RANCHI	57.07	39.57	26.28	74.96	53.30	19.06	0.00	0.15	9.46	1.42	0.00	0.9	3.24	0.87	0.00	0.09	0.00	0.27	1.25	0.36	6.48	1.76	
7 SINGHBHUM	36.63	38.43	52.97	51.82	38.06	24.92	0.78	1.68	1.97	1.15	0.15	0.35	3.06	7.99	0.35	1.07	0.16	1.68	0.73	2.16	1.78	4.13	

Note : CAT I - Cultivators; CAT II - Agricultural Labourers; CAT III - Livestock, Forestry, Fishing, Hunting and Plantation, Orchards and allied activities; CAT IV - Mining and Quarrying; CAT VA - Household Industry; CAT VB - Non-household industry; CAT VI - Construction; CAT VII - Trade & Commerce; CAT VIII - Transport, Storage & Communication and CAT IX - Other services.

Other than Household Industry

The percentage of workers in non-household industry is very high in the districts of Gwalior (14.15), Shivpuri (23.52), Mandsaur (14.4), Indore (15.66) and Bhopal (13.86). But in all these districts, the proportion of the Gond population is insignificant. In all the important districts, the percentage is below 2.0.

Construction

Among the important districts, Bhopal is having 13.19 percent of the Gond workers engaged in construction activities. In all the other important districts, the percentage is below 5.0.

Trade and Commerce

In these activities, only a fraction of the Gond workers are engaged.

Transport, Storage and Communication

Only a negligible proportion of the Gond workers are engaged in these activities.

Other Services

In some of the districts, the percentage of the Gond workers engaged in these other services is very high but in all

these districts, the proportion of the Gond population is insignificant. these districts are Bhind (8.1), Gwalior (15.44), Datia (16.09), Jhabua (21.73), Indore (19.52), Bhopal (20.78). Except Bhopal, in all the other important districts, the percentage is very negligible.

IV.3 STRUCTURE OF THE SANTAL WORKFORCE, 1981

Main Workers

The average percentage of the main workers to the total Santal population is 42.54 which is very much higher than the non-tribal population but very marginally lower than the overall tribals and the Gonds. The percentage of the main workers is extremely high in Phulbani district (84.21) of Orissa. In Bolangir, it is above 50. It is above 45 in Balasore, Kalahandi and Ganjam districts of Orissa. It is above 40 in the districts of Palamu, Sambalpur, Mayurbhanj, Cuttack and Dhenkanal districts. In Santal Pargana, Ranchi and Singhbhum districts of Bihar, the percentage is above 35. The districts where the percentage is above 30, are Dhanbad, Giridih and Hazaribag. It is relevant to mention here that though the Santals are spread over all the districts of Bihar and Orissa, they are mainly concentrated only in a few districts of these states. The districts where they are concentrated are Santal Pargana, Giridih, Dhanbad, Hazaribag and Singhbhum of Bihar and Mayurbhanj and Balasore districts of

Orissa. So, while describing any aspect of the Santal population, these districts should be given importance to present a better picture. On this basis, we can say that the percentage of the Santal main workers ranges between 35 to 45 as all these districts come under this category.

Table IV.18

Frequency distribution of the districts according to percentage of the main workers to the total Santal population - 1981

Percentage Categories	Frequency of the districts
Above 55	2
50 - 55	1
45 - 50	3
40 - 45	5
35 - 40	5
30 - 35	3
Below 30	1

IV.3.1 Primary Sector

The average percentage of Santal workers employed in primary sector is 64.82 which is very much lower than that of the non-tribal, tribals and Gonds. But this figure is not true representative of the proportion of the Santal workers in the primary sector. The average figure has been distorted by figures of the some of the districts where the proportion of the Santal population is insignificant. In such districts, the proportion of the Santal workers in this sector is very low. The percentage is above 90, in most of the districts where the proportion of the Santal population is significant. Some of

these districts are Santal Pargana, Giridih and Hazaribag of Bihar. All these districts come under this category. Besides these Mayurbhanj and Balasore districts of Orissa also comes under this category. In the other important districts from the point of view of Santal population, the percentage ranges between 70 to 90. Since most of the Santal dominated districts comes under the category - above 60, we can say that the proportion of the Santal workers engaged in primary sector is above 80.

Table IV.19

Frequency distribution of the districts according to the percentage of the Santal workers in Primary Sector - 1981

Percentage Categories	Frequency of the districts
Above 90	6
80 - 90	4
70 - 80	2
60 - 70	1
Below 60	6

IV.3.2 Secondary Sector

On an average, 14.03 percent of the Santal workers are engaged in the secondary sector. But this figure is distorted again by districts having insignificant Santal population. However, this figure is considerably higher than that of non-tribals. This figure is about 3 times greater than that of the tribals. It is also marginally higher than that of the Gonds.

Table IV.20

Percentage of Santal Workers in the Different Sectors of Economy (1971-81)

Sr. No.	DISTRIC T	Primary Sector		Secondary Sector		Tertiary Sector	
		1971	1981	1971	1981	1971	1981
ORISSA							
1	SAMBALPUR	65.30	10.00	12.20	13.34	22.40	76.66
2	SUNDARGARH	15.60	5.89	54.40	73.26	30.00	20.85
3	KEONJHAR	94.30	94.04	1.29	2.87	4.33	3.09
4	MAYURBHANJ	94.90	94.24	0.83	2.10	4.22	3.66
5	BALASORE	88.90	90.64	4.03	3.33	7.04	6.03
6	CUTTACK	65.20	61.56	10.30	13.58	24.30	24.86
7	DHENKANAL	94.70	71.47	0.48	21.60	4.76	6.93
8	PHULABANI	72.20	31.25	0.00	6.25	27.70	62.50
9	BOLANGIR	0.00	0.00	0.00	15.00	100.00	85.00
10	KALAHANDI	30.70	35.72	30.70	0.00	38.40	64.28
11	KORAPUT	97.80	83.01	0.21	6.06	1.93	10.93
12	GANJAM	45.00	6.34	0.00	34.93	55.00	58.73
13	PURI	29.50	20.77	6.81	43.82	63.60	35.41
BIHAR							
1	S.PARGANA	97.90	95.76	0.50	1.77	1.56	2.47
2	DHANBAD	91.00	84.69	5.53	10.93	3.20	4.38
3	GIRIDIH	NA	95.67	NA	2.16	NA	2.17
4	HAZARIBAGH	97.70	96.65	0.77	1.23	1.50	2.12
5	PALAMU	22.20	84.03	0.00	5.12	77.70	10.85
6	RANCHI	89.00	73.95	3.23	6.22	7.72	19.83
7	SINGHBHUM	93.70	89.44	3.55	6.09	2.65	4.47

The percentage of main workers in secondary sector is extremely high in Sundargarh (73.20). It is above 30 in the districts of Ganjam and Puri. However, in these districts the proportion of the Santal population is not considerable. In Dhanbad, the percentage is above 10. In the other districts having significant Santal population, the percentage is below 5. It indicates that the participation of the Santal population in secondary sector is very much well below the required level.

Table IV.21

Frequency distribution of the districts according to the percentage of the Santal workers in Secondary Sector - 1981

Percentage Categories	Frequency of the districts
Above 15	7
5 - 10	5
Below 5	6
Nil	2

IV.3.3 Tertiary Sector

The average percentage of the Santal workers engaged in the tertiary sector is 25.24 this figure is not true representative of actual percentage of the Santal workers in this sector due to the reason as stated in the case of secondary sector. Anyway, this figure is much higher than that of the tribal, non-tribal and Gonds. The percentage of the Santal workers engaged in the tertiary sector is extremely high

in Sambalpur (76.66), Phulbani (62.5), Bolangir (85.0), Kalahandi (64.28), Ganjam (58.73) and Puri (35.41). But the Santal population in these districts is insignificant. Almost all the districts having considerable Santal population comes under the category - below 5.

Table IV.22

Frequency distribution of the districts according to the percentage of the Santal Workers in Tertiary Sector

Percentage Categories	Frequency of the districts
Above 25	6
20 - 25	2
15 - 20	1
10 - 15	2
5 - 10	2
Below 5	7

IV.3.4 Non-Primary Workers

Table IV.23

Frequency distribution of the districts according to the percentage of the non-primary workers to the primary workers among the Santals - 1981

Percentage Categories	Frequency of the districts
Above 100	7
Above 40	1
30 - 40	2
20 - 30	1
10 - 20	4
Below 10	5

The percentage of the non-primary workers to the primary workers among the Santals is above 100 in Sambalpur (9000),

Sundargarh (1598.26), Phulbani (200), Kalahandi (150), Ganjam (1450) and Puri (396.71). As stated earlier the Santal population in all these districts is not considerable. In all the districts having significant Santal population, the percentage is below 20.

IV.3.5 Industrial Categories of the Workers

Cultivators

The percentage of the cultivators to the total Santal main workers is above 70 in two districts dominated by them. These districts are Santhal Pargana and Giridih. In the other districts having significant Santal population, the percentage ranges between 50 to 70. The percentage is very low in Sambalpur, Sundargarh, Ganjam and Puri districts of Orissa.

Table IV.24

Frequency distribution of the districts according to the percentage of cultivation to the total Santal main workers - 1981

Percentage Categories	Frequency of the districts
70 - 80	2
60 - 70	2
50 - 60	3
40 - 50	2
30 - 40	2
20 - 30	2
Below 20	6
Nil	1

Table IV.25

Distribution of Santal Workers by industrial Categories, 1971-81.

DISTRICTS	MAIN WORKER CAT I				CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX		
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	
ORISSA																							
1 SAMBALPUR	35.25	42.86	2.04	5.00	51.02	3.33	12.24	1.67	0.00	0.00	4.08	3.33	8.16	6.67	0.00	3.33	2.04	11.67	10.20	18.33	10.20	46.67	
2 SUNDARGARH	34.42	26.81	6.86	1.69	6.58	2.46	1.47	0.82	0.70	0.92	0.14	1.18	53.88	61.53	0.56	10.60	9.73	2.10	3.01	4.82	17.07	13.93	
3 KEONJHAR	33.21	36.05	59.19	60.76	28.45	26.87	1.94	1.80	4.78	4.62	0.11	0.34	1.01	1.40	0.18	1.12	0.15	0.14	0.81	0.75	3.39	2.20	
4 MAYURBHANJ	35.96	41.51	53.40	57.36	38.65	35.01	2.70	1.36	0.19	0.52	0.47	1.13	0.21	0.51	0.15	0.49	0.11	0.20	0.37	0.34	3.75	3.12	
5 BALASORE	44.27	46.21	22.72	26.99	65.42	62.93	0.40	0.71	0.39	0.01	0.31	0.16	2.37	1.71	1.36	1.48	0.16	0.42	2.05	2.13	4.83	3.49	
6 CUTTACK	35.88	44.24	27.48	19.55	35.23	36.95	2.30	0.90	0.24	4.15	0.12	0.00	7.32	10.04	2.91	3.55	0.30	0.65	5.51	12.87	18.58	11.34	
7 DHENKANAL	32.80	42.40	52.01	35.89	35.16	27.49	7.20	2.63	0.37	5.47	0.49	0.17	0.00	1.98	0.00	19.43	0.12	0.30	0.12	0.26	4.52	6.38	
8 PHULBANI	50.00	84.21	61.11	12.50	11.11	6.25	0.00	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.50	27.78	50.00
9 BOLANGIR	60.00	52.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	66.67	15.00	0.00	15.00	33.33	55.00	
10 KALAHANDI	68.42	45.16	23.08	21.43	0.00	21.43	7.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.77	0.00	0.00	7.14	15.38	28.57	23.08	28.57	
11 KORAPUT	27.67	39.97	61.85	58.30	18.10	22.27	0.00	2.32	17.89	0.13	0.00	0.51	0.00	0.77	0.22	4.76	0.00	0.90	0.22	0.77	1.72	9.27	
12 GANJAM	37.04	45.65	0.00	4.76	35.00	1.59	10.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.00	31.75	0.00	7.94	10.00	42.86	45.00	7.94	
13 PURI	27.33	56.20	0.00	NA	22.73	19.32	6.82	0.28	0.00	0.00	0.00	0.09	2.27	9.28	4.55	35.23	22.73	3.22	13.64	6.72	27.27	25.47	

Contd.....

DISTRICTS	MAIN WORKER		CAT I		CAT II		CAT III		CAT IV		CAT VA		CAT VB		CAT VI		CAT VII		CAT VIII		CAT IX		
	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	1971	1981	
BIHAR																							
1	S.PARGANA	28.99	38.1	3.37	76.58	55.06	17.36	4.49	1.35	0.00	0.44	2.25	0.15	8.99	1.4	0.00	0.16	19.10	0.26	4.49	0.35	2.25	1.83
2	DHANBAD	63.71	31.21	0.00	47.58	0.00	17.73	0.00	0.31	85.76	19.05	0.00	0.09	5.42	8.41	1.02	2.39	1.69	0.31	2.71	1.33	3.39	2.72
3	GIRIDIH		32		70		20.68		0.35		4.62		0.12		1.14		0.85		0.13		0.44		1.48
4	HAZARIBAGH	31.07	33.35	0.00	68.03	2.21	12.47	0.00	0.33	87.85	15.81	0.00	0.07	1.93	0.67	1.66	0.46	0.28	0.32	1.10	0.41	4.97	1.38
5	PALAMU	47.51	40.14	65.14	34.33	27.43	46.68	1.81	2.71	0.67	0.3	0.57	0	0.29	0.6	0.86	4.51	2.10	1.2	0.57	1.5	0.57	8.13
6	RANCHI	34.93	36.04	73.21	48.23	23.00	11.54	0.05	0.73	0.42	13.43	0.75	1.1	0.47	3.76	0.05	0.57	0.23	1.31	0.23	2.12	1.59	16.05
7	SINGHBHUM	33.99	36.95	52.24	54.99	28.49	30.82	1.52	0.87	1.42	2.75	0.27	0.25	8.40	4.7	0.60	1.06	0.99	0.53	1.81	1.15	4.27	2.76

Note : CAT I - Cultivators; CAT II - Agricultural Labourers; CAT III - Livestock, Forestry, Fishing, Hunting and Plantation, Orchards and allied activities; CAT IV - Mining and Quarrying; CAT VA - Household Industry; CAT VB - Non-household industry; CAT VI - Construction; CAT VII - Trade & Commerce; CAT VIII - Transport, Storage & Communication and CAT IX - Other services.

Agriculture Labourers

The percentage of the agricultural labourers to the total Santal main workers is extremely high in Balasore (above 60.0). It is above in Mayurbhanj and Singhbhum. In the other important districts, the percentage is below 30.

By analysing the percentage share of Santal workers as cultivators and agricultural labourers, it appears that like the overall tribal population and the Gonds they are also predominantly engaged in the agricultural activities.

Table IV.26

Frequency distribution of the districts according to the percentage of the Agricultural Labourers to the total Santal main workers - 1981

Percentage Categories	Frequency of the districts
Above 60	2
60 - 50	3
40 - 50	2
30 - 40	4
20 - 30	4
10 - 20	3

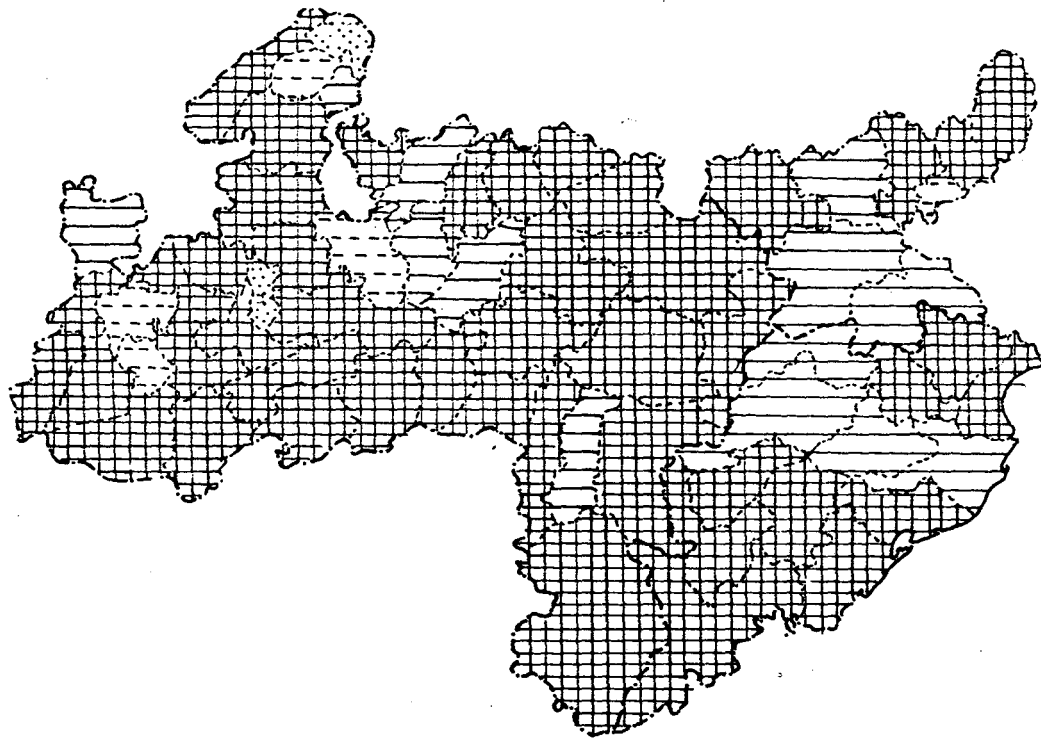
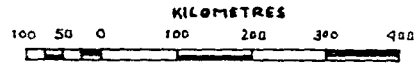
In the remaining seven industrial categories of workers, the percentage of the Santal workers is very low.

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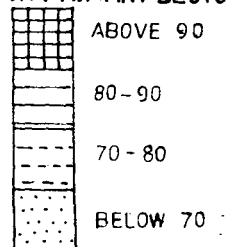
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TRIBAL WORKERS IN PRIMARY SECTOR 1981

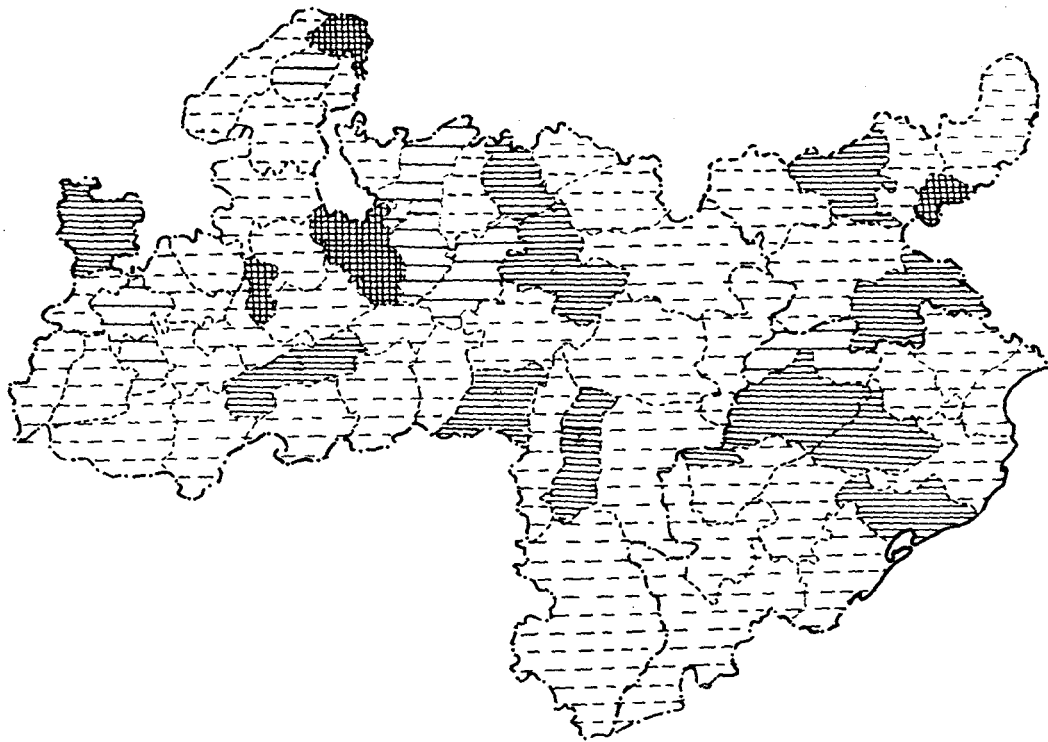


PERCENTAGE OF
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IN PRIMARY SECTOR

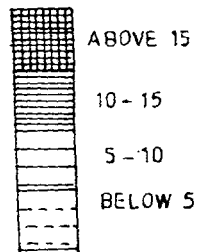


MAP IV.1

TRIBAL WORKERS IN SECONDARY SECTOR
1981



PERCENTAGE OF TRIBAL
WORKERS IN SECONDARY
SECTOR

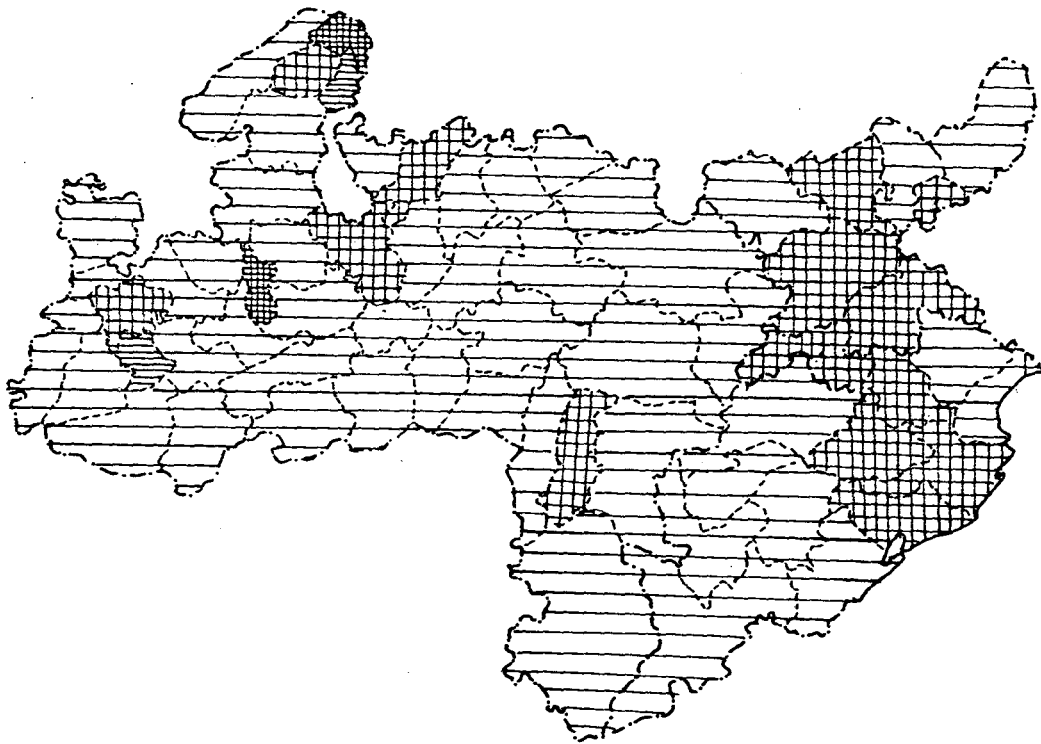


MAP IV.2

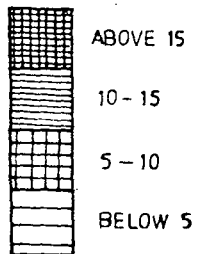
TRIBAL WORKERS IN TERTIARY SECTOR

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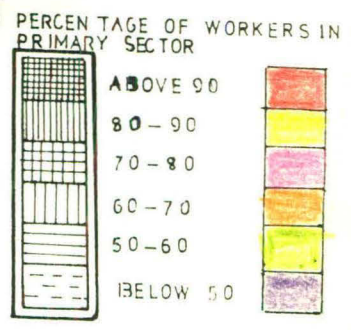
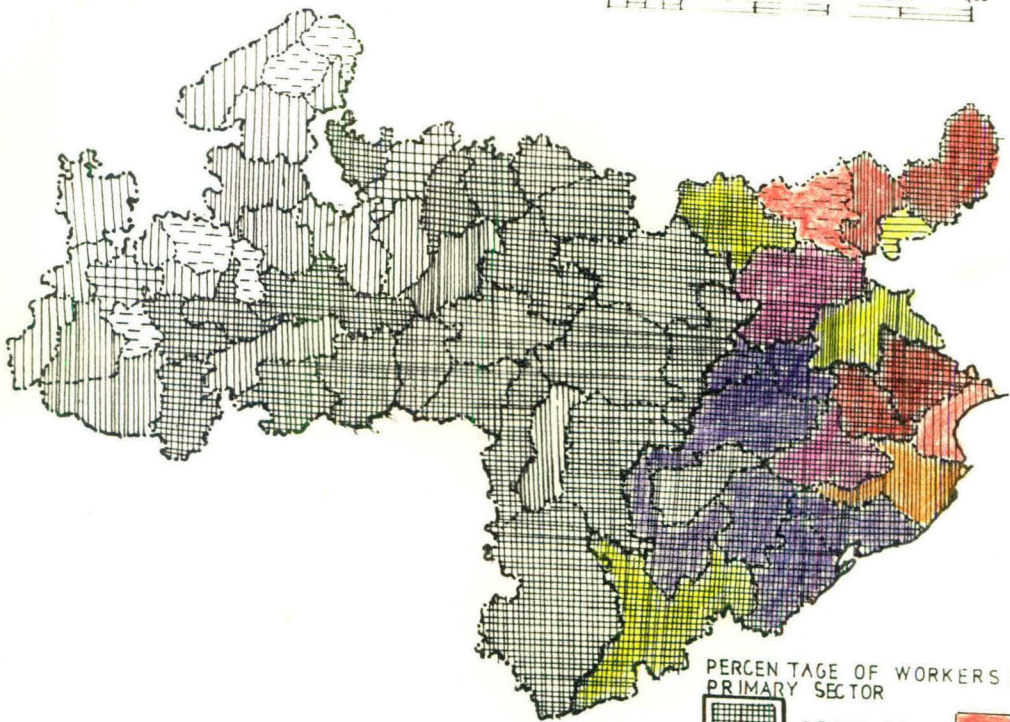
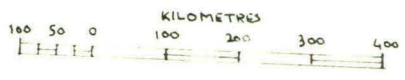
PERCENTAGE OF
TRIBAL WORKERS
IN TERTIARY SECTOR



MAP IV.3

WORKERS IN PRIMARY SECTOR GONDS AND SANTALS

1981



MAP IV.4

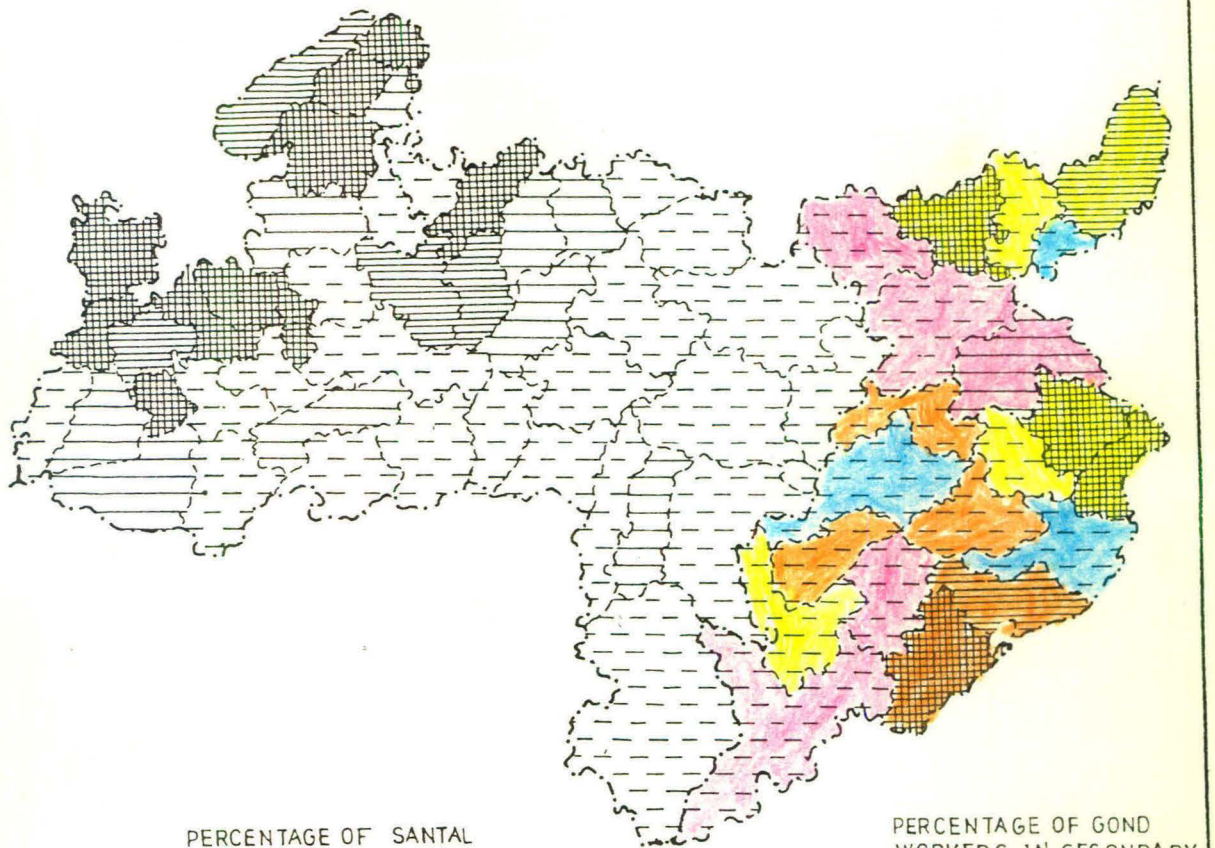
GONDS

SANTALS

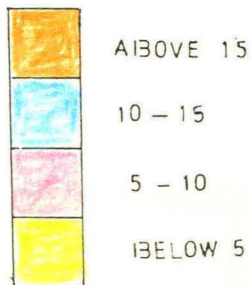
WORKERS IN SECONDARY SECTOR

GONDS AND SANTALS

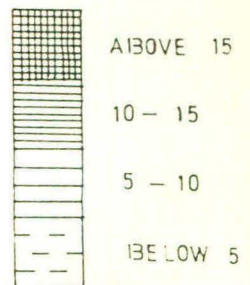
1981



PERCENTAGE OF SANTAL
WORKERS IN SECONDARY
SECTOR



PERCENTAGE OF GOND
WORKERS IN SECONDARY
SECTOR

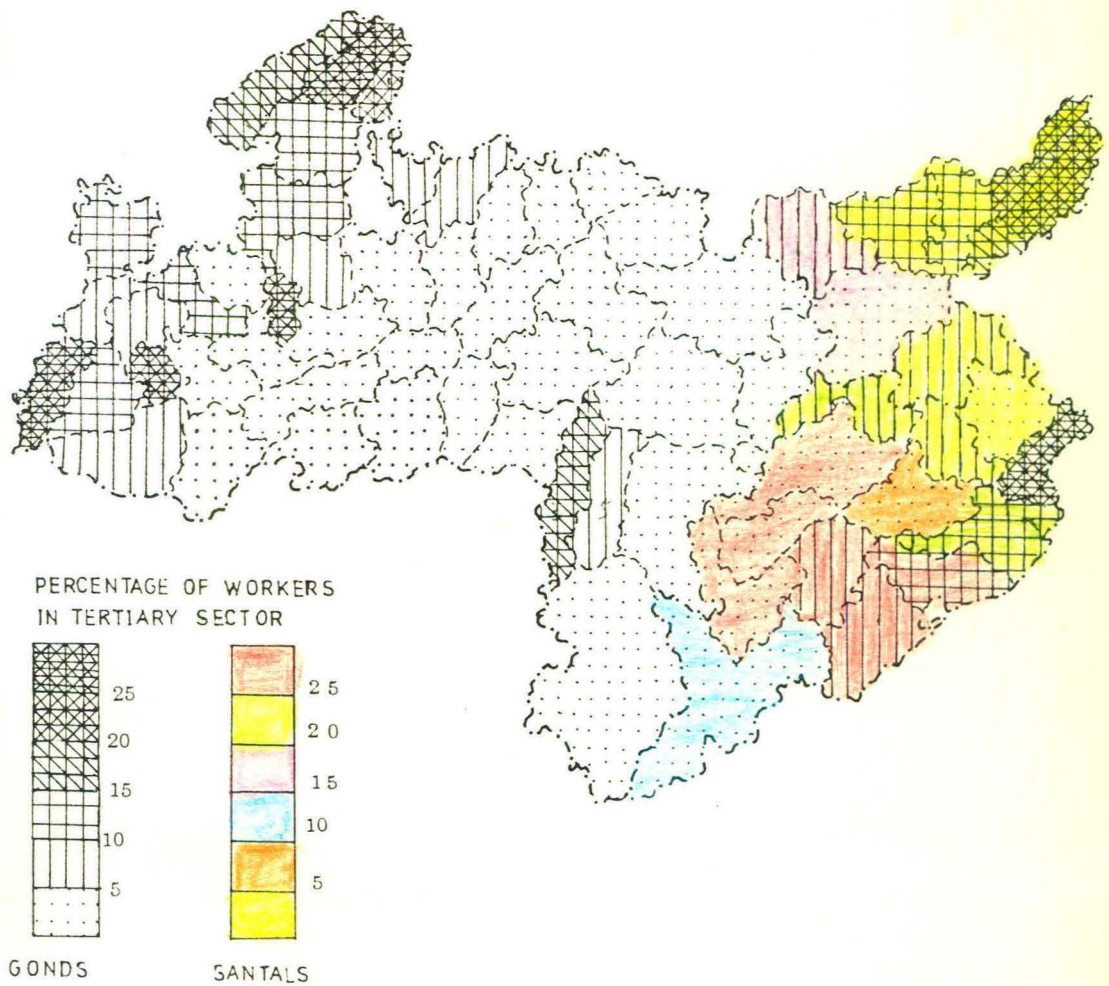


MAP IV.5

WORKERS IN TERTIARY SECTOR

GONDS AND SANTALS

1981



MAP IV.6

CHAPTER - V

LAND USE, CORRESPONDENCE BETWEEN THE NATURAL RESOURCES AND THE WORKFORCE STRUCTURE AND DEVELOPMENT PLANS FOR THE TRIBALS

The objectives of the present chapter are as follows :-

- (i) To analyse the percentage of net area sown and culturable waste land;
- (ii) To see the correspondence between the natural resources and workforce structure;
- (iii) To identify the levels of development of human resources among the Gonds and santals.
- (iv) To have an idea about the tribal development plans.

V.1 LAND USE

V.1.1 Net Area Sown

In mid-India, the entire area suitable for agriculture has been put under cultivation. It is the result of the pressure exerted on the agricultural land from which more than 70 percent of the population derives its livelihood. The net area sown reflects the extent of the land which provides basic needs to the population.

Table V.1

Land Use Patterns - 1979-82

Name of the District	Percentage of Area Under		
	Forest	Culturable waste land	Net area sown
1. Raipur	36.61	2.38	43.23
2. Durg	11.67	2.59	64.70
3. Rajnandgaon	35.23	2.07	44.26
4. Bastar	63.27	4.40	20.33
5. Bilaspur	38.98	1.74	40.87
6. Surguja	48.42	1.65	24.46
7. Raigarh	31.22	1.38	40.12
8. Jabalpur	15.97	6.83	42.10
9. Balaghat	52.85	3.10	28.98
10. Chindwara	37.65	2.16	40.09
11. Seoni	36.57	3.92	41.78
12. Mandla	43.01	3.22	29.95
13. Narsimhapur	26.56	5.63	53.06
14. Sagar	28.47	3.50	49.24
15. Damoh	36.85	4.88	37.43
16. Panna	33.29	10.30	28.57
17. Tikamgarh	12.72	7.12	43.62
18. Chattarpur	9.95	12.18	37.44
19. Rewa	10.35	1.88	55.94
20. Sidhi	41.47	4.21	30.78
21. Satna	17.44	7.00	44.56
22. Shahdol	38.66	3.75	29.88
23. Indore	13.39	1.34	66.03
24. Dhar	9.20	2.90	60.47
25. Jhabua	16.76	1.58	49.57
26. West Nimar	34.97	2.53	46.09
27. East Nimar	46.97	0.41	40.59

Contd.....

Name of the District	Percentage of Area Under		
	Forest	Culturable waste land	Net area sown
28. Ujjain	1.26	2.76	75.00
29. Mandsaur	10.86	5.28	53.99
30. Ratlam	7.11	7.65	62.35
31. Deas	23.07	0.77	49.80
32. Shajapur	0.46	5.30	67.02
33. Morena	28.01	7.98	32.73
34. Bhind	1.62	2.45	74.55
35. Gwalior	20.90	5.75	47.91
36. Shivpuri	18.30	13.59	33.25
37. Guna	13.82	10.23	52.25
38. Datia	9.50	11.33	52.12
39. Bhopal	14.03	5.16	55.21
40. Sehore	25.86	6.50	53.60
41. Raisen	39.64	3.24	48.12
42. Vidisha	14.27	3.16	68.61
43. Betul	40.71	4.43	38.11
44. Rajgarh	2.18	5.52	64.50
45. Hoshangabad	35.98	4.09	43.99
46. Bolasore	6.33	3.16	69.56
47. Bolangir	23.73	5.34	47.36
48. Cuttack	12.56	1.55	60.85
49. Dhenkanal	41.93	0.64	37.99
50. Ganjam	45.40	0.39	38.86
51. Kalahandi	43.86	0.48	44.93
52. Keonjhar	49.01	1.08	34.76
53. Koraput	51.92	0.11	30.62
54. Mayurbhanj	44.92	0.57	41.14
55. Phulbani	74.37	0.44	20.77

Contd.....

Name of the District	Percentage of Area Under		
	Forest	Culturable waste land	Net area sown
56. Puri	33.68	3.24	46.45
57. Sambalpur	40.02	3.67	35.03
58. Sundargarh	56.25	1.02	28.89
59. Hazaribag	46.44	3.07	15.70
60. Giridih	33.84	4.61	19.14
61. Dhanbad	7.86	6.63	21.74
62. Ranchi	21.86	4.05	39.79
63. Palamu	45.88	1.86	15.52
64. Singhbhum	25.65	9.31	5.92
65. Santhal Pargana	10.17	5.91	39.48

The percentage of the average of the triennium net area sown (1979-80,80-81,81-82) to the total geographical area is the highest in Ujjain district (75.00) of M.P. This district is very closely followed by Bhind (74.55). The other ten districts where the proportion of net area sown is above 60, are Indore, Dhar, Ratlam, Shajapur, Datia, Vidisha, Rajgarh & Durg of M.P. Balasore, Cuttack of Orissa. The percentage is above 50 in the districts of Narsimhapur, Rewa, Mandasaur, Guna, Bhopal & Sehore of M.P. In twenty districts of the region, the percentage is above 40. The proportion is above 30 in twelve districts of the region. In Hazaribag, Giridih & Palamu district of Bihar the percentage is 15.70, 19.14, & 15.52 respectively. The percentage is extremely low in Singhbhum (5.92). The pattern of

spatial distribution of net area sown depicted on the map suggests that on the north-western portion of M.P. the percentage of net area sown is high while in the eastern M.P. except in Burg, it is medium to low. In the two coastal districts of Orissa it is very high while in the rest of the state it is medium to low. In the extreme north and the south east part of Chotanagpur plateau, the percentage is very low.

In the foregoing paragraphs we have assessed the spatial distribution of the land put under the agriculture. Now let us concentrate on the nature of the distribution of this land among the population. The data for the average size of the operational landholdings is available only for the state of M.P. for 1980-81. Since this state accounts for the largest net sown area in the region, let us assume that this state represents the whole region.

"Like manufacturing units, size and ownership of operational holdings are among the determinants of the use of land, crop structure and the use of inputs and efficiency of farms".¹ Distribution of horizontal and vertical-of land holdings is very uneven in M.P. In 1981, the number of operational holdings is 6.4 million and their average size is only 3.42 hectares. Nearly one-third (32.8 percent) of holdings have less than one hectare of land and possess only 4.2 percent of area. More than half of the holdings are under 2 hectares in area. On the other extreme, 6.8 percent of landholders have

large and very large sized (more than 10 ha) holdings and own more than one-third of the total area. Only these large holdings are capable of using modern capital intensive technology for agricultural development, while marginal & small farmers are bound to be traditional because of the smallness of holdings.

The spatial distribution of the average size of the operational land holdings also vary greatly. The average size of the holdings ranges from 1.7 ha in Bilaspur to 6.7 ha in Vidisha district. It is exceptionally smaller in the eastern & southern parts of the state. It may be generalized that marginal, small and semi-medium holdings characteristics the eastern part; and semi-medium holdings, medium and large holdings predominate the western half of the state.

Table V.2

Size of Operational Holdings in M.P., 1980-81

Size class	Holding		Area	
	Nos. (000)	Per- cent	000 (hect)	Per- cent
Marginal (under 1 ha)	2102.5	32.8	930.2	4.2
Small (1-2 ha)	1226.4	19.1	1791.6	8.2
Semi-medium (2-4 ha)	1371.5	21.4	3871.5	17.7
Medium (4-10 ha)	1275.4	19.9	7875.9	35.2
Large (above 10 ha)	435.0	6.8	7462.0	34.0

Source : Commissioner, Land Records-Agricultural Census of M.P., 1980-81.

V.1.2 Culturable Waste Land

This is an important landuse category as this is the only category which can be brought under cultivation. The percentage of the average triennium culturable waste land to the total geographical area is as high as 13.59 in Shivpuri district of M.P. while it is as low as 0.39 in Ganjam district of Orissa. The other districts where the percentage is above 10, are Panna, Chattarpur, Guna & Datia of M.P. In sixteen districts of the region, the percentage is above 5 while in the remaining districts, the percentage is below 5.

V.2 CORRESPONDENCE BETWEEN NATURAL RESOURCES AND THE WORKFORCE STRUCTURE

It's evident from the distribution pattern of the net area sown that all the tribal districts are having high percentage of net area sown. Since the tribal areas are highly dissected and present high relief, the agricultural suitability of the land is low. But in general more than 90 percent of overall tribal population as well as the Gonds and the Santals are engaged in agricultural activities. It suggests that they are highly dependent on land-resources. Majority of them are engaged in cultivation of their own uneconomic small holdings. A substantial proportion of them are also engaged as agricultural labourers.

From the spatial distribution of the forest cover in the

region as described in the Chapter-III, one can infer that there is a close relationship between the distribution of tribal population and distribution of forest area in the state. Most of the tribal districts are having a very high percentage of the geographical area under forests. Keeping in mind the traditional economies of the tribes, it is expected that a substantial proportion of their workforce would be engaged in forestry. But it is not so. Though the census classification of workers includes livestock, forestry, fishing, hunting and plantation, orchards and allied activities in one category, if there would have been a considerable number of workers in forestry, it could have been reflected. The Indian Forest Act and several other provisions in the name of the protection original habitat. Prior to this act, they lived and subsisted on forests but after this act their activities in forests have dwindled to negligible.

Most of the mineral rich regions corresponds to the tribal regions. Being original inhabitants of the region, one may expect to have the presence of large proportion of their workers in these activities. But it is not so. In Dhanbad, Giridih and Hazaribag districts a large proportion of the overall tribal worker as well as the Santal workers are engaged in the mining and quarrying activities. In the other districts of the region, these activities have failed to generate employment for the tribal population. The employment

opportunities for them in these activities are not only limited but unscrupulous mining contractors exploit the workers to maximum possible extent. Even in the organised sector, the employment opportunities have been by and large shared by the non-tribals as the leadership of the trade union workers in these areas are mostly in the hands of non-tribals who are not much concerned about the problems of tribal labour force. Unionisation of the labour force has generally benefited the persons coming from outside the region.

As a follow up of the mining activities, a large number of industries came up in the tribal areas of the region due to the proximity of the raw materials. But these establishments also could not generate employment for the tribal population, as it is revealed by the percentage of the overall tribal, Gond and the Santal workers in manufacturing, processing and repairing works. Generally in these activities, their participation is insignificant. On the other hand most of the jobs in the industries have gone to the people coming from the non tribal areas to the tribal areas have not only failed to provide them employment opportunities but have also caused heavy migration of people from the non-tribal parts of the region. On the other hand, these enterprises have been set up with high social cost and suffering to the tribal population. There have been instances of out-migration of tribal population to instant areas as their lands have been acquired for establishing large

projects. This has reduced the original tribal population to a hopeless minority in several districts of the region.

Due to the establishment of the industrial enterprises in the tribal areas, a large number of employment opportunities were generated in the Service Sector. Since tribals are having very low literacy rate, only a small proportion have been absorbed in this sector.

V.3 LEVELS OF HUMAN RESOURCE DEVELOPMENT OF THE GONDS AND THE SANTALS

The composite index of the human resource development of the two sections of the population has been found out with the help of five selected indicators. To find out the composite index for the Gonds only those districts of the study area have been taken into consideration where more than 50 percent of the tribal population are Gonds. Similarly, to find out the composite index of the Santals, only those districts have been taken into consideration where the percentage of the Santals to the total tribal population of the district is more than 50. The composite indices have been calculated separately for the Gonds and the Santals.

In the tribal areas of the region, no district is having exclusively tribal population. In a overwhelming majority of the districts, the proportion of the non-tribal population is higher than tribals. Similarly no district is exclusively

inhabited by Gonds or the Santals. It is generally accepted that the benefits of the special funds earmarked for the tribal areas have gone to the non-tribals. So, here an attempt has been made to measure the levels of human resource development which would throw some light on the economic conditions of these two tribal groups and it would also reveal inter district disparities in their economic conditions.

Composite index has been computed using Kundu's modified Principle^a Component Analysis. The indicators which have been selected are percentage of Gond literates, percentage of urban Gonds, percentage of Gond main workers, percentage of Gond workers in Secondary Sector and percentage of the Gonds in Tertiary Sector. The same set of indicators have been used for Santals. 17 districts have been taken into consideration to calculate the composite index for Gonds while three districts have been taken into consideration to calculate the composite index for Santals.

V.3.1 Levels of Human Resources Development of the Gonds

The first Latent Root of the indicators is 6.00 which is having 76 percent explanatory power. On the basis of Factor Scores of the First Principle^a Component, the districts have been grouped into five levels of human resources development. The level is very high is Durg district. The level is high in Jabalpur and Rajnandgaon. The medium level of development is

observed in the districts of Sagar, Damoh, Hoshangabad, Balaghat and Raipur. It is low in eight districts. These districts are Panna, Raisen, Betul, Narsimhapur, Mandla, Chhindwara, Seoni and Bilaspur. It is very low in Bastar district.

Table V.3

Indicators of Human Resource
Development of Gonds

Districts	% age of Literates	% age of Urban Population	% age of Main Workers	% age of Secondary Workers	% age of Tertiary Workers
1. Panna	6.20	1.82	40.80	3.20	1.63
2. Sagar	10.11	3.53	43.16	13.0	3.54
3. Damoh	11.98	0.78	40.81	12.65	3.9
4. Raisen	5.97	1.93	44.10	1.10	1.71
5. Betul	7.49	3.00	51.85	1.65	1.64
6. Hoshangabad	11.38	5.05	43.69	7.82	4.51
7. Jabalpur	15.44	9.75	45.44	9.9	4.0
8. Narsimhapur	12.11	3.91	48.06	2.09	3.08
9. Mandla	14.96	0.85	55.59	1.47	1.38
10. Chhindwara	10.79	4.81	47.18	1.24	2.62
11. Seoni	12.79	0.63	43.93	1.6	1.42
12. Balaghat	20.89	2.30	49.97	3.34	2.69
13. Bilaspur	17.40	3.44	47.75	2.3	2.55
14. Rajnandgaon	17.18	2.37	56.86	1.39	17.53
15. Durg	27.15	14.90	52.78	7.30	5.39
16. Raipur	20.67	4.73	52.26	2.70	3.24
17. Bastar	6.55	1.09	46.64	0.9	1.31

Table V.4

Factor Scores of the Districts - 1981

District	Factor Score of the First Component
1. Panna	1.3000
2. Sagar	2.962
3. Damoh	2.658
4. Raisen	1.118
5. Betul	1.413
6. Hoshangabad	2.771
7. Jabalpur	3.671
8. Narsimhapur	1.879
9. Mandla	1.345
10. Chhindwara	1.795
11. Seoni	1.224
12. Balaghat	2.043
13. Bilaspur	1.934
14. Rajnandgaon	3.721
15. Durg	4.656
16. Raipur	2.371
17. Bastar	.974

V.3.2 Level of Human Resource Development of Santals

The first Latent root is 6.367 which is having an explanatory power of 87.83 percent. The Factor Score of the first component is highest in Dhanbad district (3.960) and this district is followed by Santhal Pargana (1.386) and Giridih (1.222). It means the level of development is very high in Dhanbad. It may be noted that there is wide gap in the level of

development between Dhanbad on one hand and Santhal Pargana and Giridih on the other. Dhanbad is more than two times developed than the two remaining districts.

Table V.5

**Indicators of Human Resource
Development of Santals**

	Percent of Lit- erates	Percent of Urban Popu- lation	Percent of Main Workers	Percent of Sec- ondary Workers	Percent of Ter- tiary Workers
1. S. Pargana	12.82	0.75	38.10	1.77	2.46
2. Dhanbad	12.36	16.07	31.21	10.93	4.37
3. Giridih	8.29	1.38	32.00	2.16	2.05

Table V.6

Factor Scores of the Districts, 1981

District	Factor Score of the First Component
1. Dhanbad	3.960
2. Santhal Pargana	1.386
3. Giridih	1.222

V.4 PROBLEMS OF DEVELOPMENT OF TRIBALS AND THE DEVELOPMENT PLANS

V.4.1 Problems of Development of Tribals

The dimensions of the problems of the development of the tribals and their area inhabited by them are various :

Because of the geographical seclusion of the tribals from the rest of the countrymen separated by mountainous terrains and forest ranges their cultural and educational level is primitive. Their sparse inhabitations in jungles and hills for centuries have inhibited the growth of civilized life. However, this very factor has fostered an intensive and integrated communal living and modes and habits of life among them. Absence of close physical communication has thwarted economic development. Land for agriculture in tribal areas is scarce. Paucity of communication channels block exchange and distribution of goods, commodities and services. This obstacle along with the low literacy is not conducive to the growth of skills, manipulative and industrial. The crafts are therefore plied at a rudimentary level. Deficit economy breeds money lending and appropriation of land by the moneylenders and intermediaries. The low agricultural yields and physical obstacles to imports of foodgrains and other essential eatables keep the level of nutrition low. Medical and health services are rudimentary; the geographical separation hampers the movement of the medical and health functionaries. The sparse community living and cultural and educational facilities distract the administrative personnel from the tribal areas which prevents the provision of various economic, infrastructural and welfare services on the part of the government agencies. The lag in the development of economic, cultural, education, social and infrastructural sectors adds up

cumulatively to the imbalances and disparities of development of the tribal and non-tribal areas and people.

Tribals have been subjected to exploitation for centuries. Compared with the exploitation of the non-tribal rural poor the exploitation of the tribals is more monopolistic in nature. So their problems are specific to them alone, apart from general.

V.4.2 Development Plans for the Tribals

Keeping those considerations in view, the Govt. of India initiated special schemes for the development of tribal areas to supplement the benefits accruing from general programmes of development in different fields such as agricultural cooperation health, housing and education. To carry out these programmes tribal development blocks were established on the line of the Community Development Blocks the Scheduled Area and Scheduled Tribes Commission recommended in 1961 that Tribal Development Blocks should be set up in areas with more than 50 percent tribal of population.

The second plan advocated the establishment of 40 multi-purpose pilot projects in the plan period (the actual number of projects started was 43) for "intensive and coordinated development of tribal areas".

Third Plan set a target of 300 tribal development blocks. But actual number of tribal development blocks was 415. During

the fourth plan period 4 new blocks were started and 8 blocks in Manipur were recognised into 20 sub-blocks functioning in the various tribal regions in the country. The fifth plan crossed the total outlay of 80 crores in which education was allocated 30.44 crores, 28.94 crores on economic uplift and 15.11 crores on health and housing.

As far as the tribal area development planning is concerned the Fifth plan can be considered the watershed period as an altogether new strategy was introduced in it. The various objectives which were proposed and introduced for the geographically and administratively viable area with tribal concentration were :

- (a) narrowing down the gap between tribal and other areas,
- (b) improving the quality of life of tribal communities,
- (c) achieving social and cultural integration of tribals with the rest of the society.

"The experience of Tribal Development through the Tribal Development Blocks was that not only were these blocks too small for evolving integrated strategies for economic activities, infrastructure and social services, but their impact was also marginal since the rest of the activities in the plan and non-plan sectors in these areas were insulated from the approaches and priorities relevant to tribal development".²

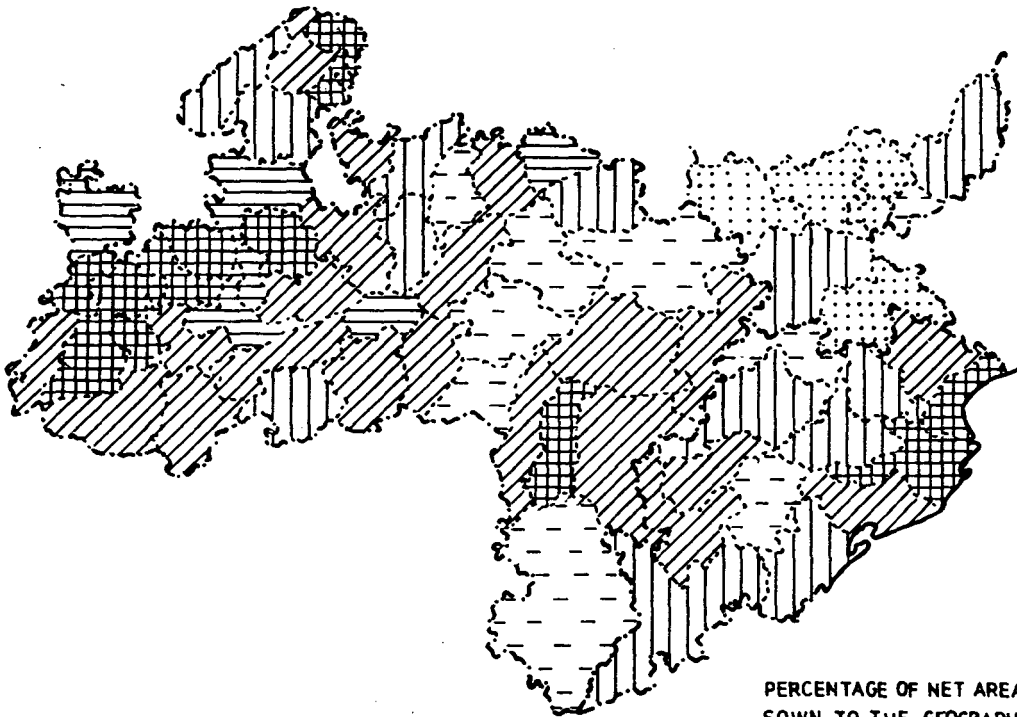
The approach of the subplan for the tribal areas too was to first of all persuade the states to earmark adequate funds from their own plan and non plan resources and thereafter make additional allocations in the light of the essential requirements identified in the sub plans.

Further in order to ensure greater flexibility as well as more effective planning, coordination, implementation and monitoring, organisational innovations were also introduced.







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2. Draft Five Year Plan, Govt. of India, Planning Commission, New Delhi, p. 285.

MID INDIA NET AREA SOWN



PERCENTAGE OF NET AREA
SOWN TO THE GEOGRAPHICAL
AREA

	ABOVE 60
	50 - 60
	40 - 50
	30 - 40
	20 - 30
	BELOW 20

MAP V.1

CHAPTER - VI

CONCLUSIONS

The spatial pattern of the distribution of the tribal population suggests that their concentration is very high in the three belt of the region. The first belt lies in the extreme south-western tip of the region. The second belt lies in the projected south part of the region while the third belt lies in the mid-eastern part where three states i.e., M.P., Orissa and Bihar meet. The percentage share of the tribal population is above 50.0 in five districts of M.P., three districts of Orissa and one district of Bihar.

Though the Gonds are distributed all over the region, they are mainly concentrated in the middle-east and southern parts of M.P. In 17 districts of M.P., more than half of the tribal population are the Gonds. They are predominantly rural. However, there are some districts where the proportion of the Urban Gonds is very high but in such districts the percentage share of the overall Gond population out of the total tribal population is very low. In a large number of the Gond dominated districts, the number of female Gonds outnumber their male counter parts. It means the sex-ratio is in favour of the females. As compared to the urban areas, the sex-ratio in the rural areas is higher which indicates towards the selective nature of their migration to the urban areas. The decadal

growth rate (1971-81) of the Gond population is abnormally high in Dhar district of M.P. and Santhal Pargana of Bihar. In these two districts the growth rates are +2647.61 and +2393.15 respectively. In both of these two districts, the proportion of the Gond population to the total tribal population is very low. Their population in the base year was very low so, a slight increase in their population in 1981, showed a very high positive growth rate. But the districts with significant proportion of the Gond population experienced normal growth rates. Most of these districts experienced +20 to +40 growth rate.

The spatial distribution of the Santal population reveals that they are spread over Orissa and Bihar of the region. Santal population does not inhabit in any of the districts of M.P. They are mainly concentrated in the extreme north-eastern part of the region comprising the districts of Santhal Pargana, Dhanbad and Giridih of Bihar. Like Gonds, they are also predominantly rural. But the percentage of the rural Santals is lower than the percentage of the rural Gonds in their respective dominant districts. Their sex-ratio is high in their dominant districts. But none of these districts is having more females than males. Like Gonds, their sex-ratio is also higher in rural areas than the urban areas. The growth rate of the Santal population is +15.00 in most of the districts of their dominance. Hazaribag, where the proportion of the Santal

population is significant experienced a very high negative growth rate (-73.29).

The spatial distribution of the reserves of the mineral resources suggest that the mid-India in general and the tribal districts of the region possess a vast reserves of all industrially important minerals. The reserves of iron-ore, coal, Bauxite, Copper, Manganese, Limestone and Asbestos in the region are 9255.65, 55.828, 1702.582, 319.99, 57.761, 9730.56 and 0.122 million tonnes respectively. A major chunk of these reserves are situated in the tribal districts.

Since the tribal districts of the region are situated in the hilly and rugged terrains, the quality of the soil in these districts are poor. The Black soils are well developed in M.P. Black Clayey soil are found on the western flanks of Rajmahal hills and Santhal Pargana of Chotanagpur region of Bihar. Red soils are noticed at the elevated spots of the Bundelkhand region of M.P. These soils are also noticed in parts of Chattisgarh plains and Mahanadi basin of Orissa and M.P. These soils are also found in Chotanagpur region of Bihar except a narrow belt in Damodar valley. Laterite and Lateritic soils are also well-developed in the mid-India region. Saline and Alkaline soils are found in the low-lying tracts of Orissa.

The region has also a vast amount of water resources. The percentage of the area under the forest is very high in a large

number of districts of M.P. and Orissa. The percentage is considerably high in the eastern part of M.P., south-western and northern part of Orissa and northern part of the Chotanagpur region. Generally as compared to the percentage of area under forests in tribal districts of M.P. and Orissa, it is low in tribal districts of Bihar. The percentage is very low in Dhanbad and Singhbhum.

The region contains a very large number of cattle, Buffaloes and sheep.

The percentage of the main workers among the tribal population is high. This phenomena may be attributed to two reasons - firstly, due the high participation of the females in economic activities and secondly, due to the concept of collective work in their society. A extremely high proportion of their workforce is engaged in primary sector. In most of the districts, it is above 90. The figure seems to be comparatively lower in the districts with low proportion of tribal population. In about 2/3 districts of the region, the percentage of the tribal workers engaged in Secondary Sector is below 5.0. It may be mainly due to the unskilled nature of their workforce. The participation of their workforce in Tertiary sector is very low. The percentage is below 5.0 in overwhelming number of the districts. It may be attributed to their low educational levels and dearth of finance. From the distribution of their workforce in the industrial categories of

the workers, it emerges that they are mainly concentrated in, two categories i.e. "Cultivators" and "Agricultural Labourers". Their participation in "mining and quarrying" is insignificant in most of the mining districts except a few. The participation of their workers in "Household Industry" is insignificant in most of the districts. Their participation in "Other than Household Industry" is extremely low. The participation of their workers in "construction", "Trade and Commerce", "Transport, Storage and Communication" and "Other Services" is also very low.

The percentage of the Gond main workers and the percentage of the tribal main workers is more or less same. Generally the percentage of their workers engaged in Primary, Secondary and Tertiary Sector corresponds to the respective figures of the overall tribal population. The figures are comparatively lower in the districts having very low proportion of the Gond population. Like the tribal workers, the Gond workers are also mainly concentrated in "Cultivators" and "Agricultural Workers Category" However, there is a marked difference in the percentage of the cultivators between the overall tribals and the Gonds. In the case of Gonds, it is significantly lower. The percentage of the agricultural labourers among the Gonds and the overall tribal agricultural labourers is more or less same. Like overall, tribal workers, their distribution in the rest of the categories is insignificant.

The percentage of the main workers among the Santals ranges between 35 to 45 in the districts of their dominance. This figure is lower than the respective figures of the overall tribals and the Gonds. The percentage of the Santal main workers in the Primary Sector is above 90 in the districts of their dominance. This figure corresponds to the respective figures of the overall Tribals and the Gonds. The districts with very low proportion of the Santal population comprise of low proportion of the Santal workers in Primary Sector. Generally proportion of their workers engaged in Secondary and Tertiary Sector correspond to the respective figures. They are also highly concentrated in only two industrial categories - "Cultivators" and "Agricultural Labourers". The distribution of their workers in the remaining seven industrial categories is generally insignificant. It may also be noted here that the percentage of the tribal, the Gonds and Santal workers in Secondary and Tertiary Sector is higher in all those districts where their respective proportion of population is very low.

The percentage of the net area sown is high in most of the tribal districts of M.P. and Orissa. The percentage is very low in Hazaribag, Giridih, Dhanbad, Palamu and Singhbhum districts of Bihar.

We studied in third chapter that the land surface of the tribal areas of the region is rugged and hilly. On the other hand in the fifth chapter, we have observed that the percentage

of net area sown is high and the size of the land holding in the most of the tribal districts of the region is small. It indicates that the people tend to bring under cultivation even the marginal lands which are not suitable for agriculture. Since more than 90 percent of the tribal, Gonds and Santals are dependent on agriculture, the pressure on land is very high. It seems that land is the only source of sustenance for the largest chunk of these three sections of the population.

The forest resources don't have any significant impact on the workforce structure of three sections of the population.

Mineral resources have also failed to create any considerable impact on the workforce structure of the three sections of the population.

The animal stock doesn't have any role in shaping the economic activities of the three sections of the population.

Despite the special provisions made in the constitution of India for the social, economic and political development of the tribes and translating the vision through the various plans in the form of Tribal Development Blocks and Tribal-Sub-plans, the socio-economic conditions of the tribals are developing very slowly and the fruits of development earmarked for them is yet to reach them properly.

Levels of the Development of Human Resources

The levels of development of the human resources for the Gonds and Santals has been grouped into five. The level of development of the human resources of the Gonds is very high in Durg district. The level is high in Jabalpur and Rajnandgaon. The medium level of development is observed in the districts of Sagar, Demoh, Hoshangabad, Balaghat and Raipur. It is low in Panna, Raisen, Betul, Narsimhapur, Mandla, Chhindwara, Seoni and Bilaspur. It is very low in Bastar districts.

The level of development for the Santals is highest in Dhanbad district followed by Santhal Pargana and Giridih.

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