

ORISSA DISTRICT GAZETTEERS



SUNDARGARH

BY

SHRI NILAMANI SENAPATI, I. C. S. (Retd.)

Chief Editor

SHRI DURGA CHARAN KUANR, M. A. (Alld.), O.E.S.,

State Editor

GAZETTEERS UNIT
DEPARTMENT OF REVENUE
GOVERNMENT OF ORISSA

© GOVERNMENT OF ORISSA

G
V 25427
N75



PREFACE

This is the first District Gazetteer of Sundargarh. The two former Princely States of Gangpur and Bonai constitute the present district of Sundargarh. As none of the ex-States had gazetteers worth the name and there was a dearth of records of the ex-State period, considerable difficulty was experienced in compiling the present volume. L. E. B. Cobden-Ramsay's 'Feudatory States of Orissa' written in 1908 devotes only a few pages to the ex-States of Gangpur and Bonai. All the available references which include the Report on Land Tenures and the Revenue System of the Orissa and Chhatisgarh States by R. K. Ramadhyani, Final Report on the Land Revenue Settlement of the Gangpur State, 1929—36; Final Report on the Land Revenue Settlement of the Bonai Feudatory State, Orissa (1910—12) by W. G. Kelly; the Annual Reports on the Administration of the ex-States of Gangpur and Bonai; Cobden-Ramsay's work and other old-time records have, however, been profitably used in building up the edifice of this Gazetteer. All possible care have been taken to keep abreast of the developments and rapid changes that have taken place in the district since its formation in 1948 following the merger of the ex-States with the Province of Orissa. Latest possible data from diverse sources have been collected and their veracity examined with a view to maintain the high standard of accuracy and thoroughness which are indispensable for a work of enduring nature like this. Useful appendices, a comprehensive index, glossary of Oriya words and terms used in the text, and maps have been provided. The spelling of place names in the maps and the text has followed the maps published by the Survey of India which at times differs from the local spelling, and when such difference occurs both the spellings have been given in the index along with their Oriya equivalent. To avoid repetition in the text and to simplify printing diacritical marks have been used in the Glossary.

The Gazetteer was compiled in the Gazetteer Section of the Revenue Department and was examined by a Sub-Committee of the Advisory Committee consisting of the Commissioner-cum-Secretary, Revenue Department; Padmabhusan Dr. Pranakrushna Parija; and Shri Nilamani Senapati, I. C. S. (Retd.), Chief Editor, Gazetteers. It was then placed before the Advisory Committee which consisted of—

- | | |
|---|---------------------|
| 1. Adviser-I to the Governor | .. Chairman |
| 2. Chief Secretary | .. Member |
| 3. Member, Board of Revenue | .. Member |
| 4. Dr. P. N. Chopra, Editor, Central Gazetteers Unit | .. Member |
| 5. Commissioner-cum-Secretary, Revenue Department | .. Member |
| 6. Dr. Pranakrushna Parija, Padmabhusan | .. Member |
| 7. Dr. Manmath Nath Das, Professor of History, Utkal University | Member |
| 8. Chief Editor, Gazetteers | .. Member-Secretary |

It was sent to the Central Gazetteers Unit for their scrutiny and comments. We will be failing in our duty if we do not express our thanks to Dr. P. N. Chopra, M. A., Ph. D., Editor, Gazetteers, and the staff of the Central Gazetteers Unit, Ministry of Education and Social Welfare, New Delhi, for their effective role in planning and Co-ordinating the work of preparation of the District Gazetteers. The Unit scrutinized the draft of this volume with meticulous care and made several helpful suggestions with a view to improving the standard and quality of the publication. It may also be mentioned here that a portion of the expenditure incurred on the compilation and printing of the District Gazetteers is being met by the Government of India.

In compiling this volume we have had the ungrudging assistance of the Geological Survey of India, the local officers of the Ministries of Finance, Communications, and Railways, Government of India; all the Departments of Orissa Government, all Heads of Departments; various branches of Sundargarh district administration, and a host of non-official persons and organisations whom we had occasions to approach. We are particularly indebted to Dr. B. D. Prusty, Director of Mines; Shri B. B. Tripathy, I. A. S., Director of Census Operations, Orissa; Dr. B. K. Behura, Professor of Zoology, Utkal University; the authorities of the Hindustan Steel Ltd., Rourkela; officers of the Orissa State Museum, officers of the Director of Public Relation, and the Deputy Director, Map Publications. We are also thankful to Shri Binode Chandra Nayak and Shri Harihar Patel, the noted poets and writers of Sundargarh district for supplying valuable information on the literary situation in the district. Chapter II (History) has been drafted by Dr. Karunasagar Behera, D. Litt., Reader in History, Utkal University.

The following staff of the Gazetteers Section have worked whole-heartedly in bringing out this volume—Shri Amulya Kumar Satpathy, Research Officer, Shri Basanta Kumar Das, Oriya Translator; Compilers—Shri Gour Prasad Patnaik, Shri Prafulla Behera, and Shri Pranakrushna Satpathy; Shri Sarat Chandra Mohapatra, Head Assistant; Shri Jayakrushna Sahu, Assistant; Stenographer—Shri Pratap Kumar Ray; Typists—Shri Satyananda Mahapatra, Shri Durga Charan Mohapatra, Shri Braja Kishore Parida and Shri Akshya Kumar Barik.

Our thanks are due to the Director, and the Deputy Director, Printing, Stationery and Publication, Orissa, and the staff of the Orissa Government Press, Cuttack, who have worked hard and have extended all their co-operation in bringing out this publication in scheduled time.

BHUBANESWAR

NILAMANI SENAPATI

The 26th January, 1975
(REPUBLIC DAY)

DURGA CHARAN KUANR

CONTENTS

	PAGES
CHAPTER I—GENERAL ..	1—40
Introducing the District—Origin of the name of the District—Location, general Boundaries, total Area and Population—History of the district as an Administrative unit—Subdivisions, Tahsils and Police Stations—Topography : Natural division—River System and Water resources—Geology—Flora—Fauna—Climate. Appendices I to III	
CHAPTER II—HISTORY ..	41—91
Pre-history—Proto-history—Archaeology of the historic period—Early, Ancient and Medieval history—The Sarabhapuriyas—The Tungas of Yamagartta Mandala—The Varahas of Bonai Mandala—Somavamsis—The Telugu Chodas and the Kalachuris—The Gangas—The Chauhans—Relations with the Marathas and the British—History of the Raj-families of the ex-States of Bonai and Gangpur—Glimpses of Freedom Struggle. Appendices I to III.	
CHAPTER III—PEOPLE ..	92—136
Population : Rural population, Urban population—Displaced persons — Migration — Language — Religion—Caste—Scheduled Castes—Scheduled Tribes—Customs and Practices—Inter-caste Relations—New Religious Movements—Social life : Property and Inheritance ; Marriage and morals—Communal life : Fairs and Melas, Festivals, Folk dance and music—Impact of the Abolition of Zamindari system on Social life—Appendices I to III.	
CHAPTER IV—AGRICULTURE AND IRRIGATION ..	137—166
Introduction—Land utilisation—Land reclamation and soil conservation—Irrigation—Soil—Classes of land—Crops —Progress of Scientific Agriculture—Agricultural Implements—Methods of Cultivation—Rotation of Crops—Seeds and Manures—Plant protection—Improvement of Agriculture—Agricultural Farms—Agricultural exhibitions and shows—State assistance to Agriculture—Co-operative Farming—Natural Calamities—Animal Husbandry—Fisheries—Forestry. Appendices I to V.	
CHAPTER V—INDUSTRIES ..	167—199
Old-time Industries—Power—Mining—Large-scale Industries—Small-scale Industries—Miscellaneous Industries—Cottage Industries—Co-operative Industries—State assistance to Industries—Industrial Estates—Industrial Potential and Plan for future Development—Labour and Employees' Organisations—Appendices I to III.	

CHAPTER VI—BANKING, TRADE AND COMMERCE .. 200—225

History of indigenous Banking in the District—Indebtedness and role of Financiers—Commercial Banks and Post Office Savings Banks—Co-operative Credit Societies and Banks—Role of Government—General and Life Insurance—State assistance to Industrial Development—Trade and Commerce—Rural Marketing Centres—Co-operation in Wholesale and Retail Trade—State Trading—Merchant Association—Weights and Measures—Appendices I to IV.

CHAPTER VII—COMMUNICATIONS .. 226—248

Old-time Routes and Highways—Road Transport—Vehicles and Conveyances—Public Transport : Regional Transport Authority, State Transport Service—Rail Roads—Water ways : Ferries and Bridges, Boats—Transport by Air—Travel and Tourist facilities—Posts, Telegraphs and Telephones—Radio and Pigeon Services—Organisations of the Transport Owners and the Employees—Appendices I to IV.

CHAPTER VIII—MISCELLANEOUS OCCUPATIONS .. 249—259

Pre-merger period—Post-merger period—Educational Profession—Medical Profession—Legal Profession—Other Occupations—Artisans—Appendix I.

CHAPTER IX—ECONOMIC TRENDS .. 260—283

Introduction—Economic Land-Marks—The General Price Level—General Level of Wages—Standard of Living—General Level of Employment in different Occupations—Community Development—Appendices I to III.

CHAPTER X—GENERAL ADMINISTRATION .. 284—289

Historical background : Gangpur, Bonai—Administration at District Level—Administration at Subdivision Level—Community Development Blocks and Other Offices—Appendices I and II.

CHAPTER XI—REVENUE ADMINISTRATION .. 290—335

History of Revenue System—The Present Settlement Operations—Relation between Landlord and Tenants—Agrarian Agitation—Land Reforms—Abolition of Land Revenue—Bhoodan—Rural Wages and condition of Agricultural Labourer—Administration of Other Sources of Revenue. Appendices—I and II.

CHAPTER XII—LAW AND ORDER, AND JUSTICE .. 336—359

Incidence of crime; Police : History of Police Organisation—Organisation of Police Force after merger—Recruitment, Training and amenities provided for police personnel—Jails: Medical, Educational and Recreational facilities; Nature of treatment offered to different classes of prisoners; Board of visitors—After-Care Shelter—Justice; Criminal Courts; Separation of Judiciary from Executive; Civil Courts—Bar Associations. Appendices—I and II.

CHAPTER XIII—OTHER DEPARTMENTS .. 360—367

Public Works Department—Veterinary Department—Agriculture Department—Forest Department—Co-operation Department—Industries Department—Mining Department.

CHAPTER XIV—LOCAL SELF-GOVERNMENT .. 368—380

History of Local Self-Government—Municipalities and Notified Area Councils; General Election—Town Planning—Zilla Parishad, District Advisory Council, District Development Advisory Board—Panchayat Samitis—Grama Panchayats—Appendix.

CHAPTER XV—EDUCATION AND CULTURE .. 381—413

Historical Background—Beginning of Western Education—Literacy and Educational Standard—Number of Literates—Spread of Education among Women—Spread of Education among Backward Classes and Tribes—General Education—Professional and Technical Schools and Colleges, Music and Dancing Schools—Cultural and Literary Societies—Cultural, Literary and Scientific Periodicals—Writers and Poets—Libraries. Appendices—I to III.

CHAPTER XVI—MEDICAL AND PUBLIC HEALTH SERVICES .. 414—434

Survey of Public Health and Medical facilities in early times—Vital Statistics—Diseases common to the District—Public Hospitals and Dispensaries—Family Planning—Sanitation; Activities of Health and Sanitary Organisation. Appendix I.

CHAPTER XVII—OTHER SOCIAL SERVICES .. 435—444

Labour Welfare—Prohibition—Advancement of the Backward Classes and Tribes—Charitable Endowments. Appendices I and II.

CHAPTER XVIII—PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS 446—467

Representation of the District in State and Union Legislatures—Political Parties and Organisations—Newspapers and Periodicals—Voluntary Social Service Organisations.

	PAGES
CHAPTER XIX—PLACES OF INTEREST	.. 468—480

Birmitrapur — Bisra — Bonaigarh — Gangpurgarh — Ghoghar —
 Hatibari—Hemgir — Jagatgarh — Kalunga — Kansbahal—
 Khandadhar Waterfall—Kuarmunda — Lathikata — Lefripara —
 Mandira — Panposh — Rajgangpur — Rourkela — Sarapgarh—
 Sargipali—Sundargarh—Tensa—Vedavyasa.

PLATES (I—XVI)	<i>facing</i> 480
GLOSSARY	481—486
INDEX: General, Person Names, Place Names	487—512

MAPS:

1. Forest and Mineral Map of Sundargarh District (facing p. 28)
2. Rourkela City (facing p. 180)
3. Sundargarh District (facing p. 512).

ABBREVIATIONS USED IN CHAPTER II (HISTORY)

CI	.. Corpus Inscriptionum Indicarum
EI	.. Epigraphia Indica
IHQ	.. Indian Historical Quarterly
JAS	.. Journal of the Asiatic Society
JASB	.. Journal of the Asiatic Society of Bengal
JBORS	.. Journal of the Bihar and Orissa Research Society
JBRS	.. Journal of the Bihar Research Society
JKHRS	.. Journal of the Kalinga Historical Research Society
OHRJ	.. Orissa Historical Research Journal

CHAPTER I

GENERAL

The two princely States of Gangpur and Bonai which constitute the district of Sundargarh had no alternative but to be wedded together to be a district. Although they are inhabited mainly by Scheduled Tribes, there is much difference between them ethnologically, physically and economically. While Bonai is thickly wooded, its adjoining area northern Gangpur is practically denuded of forests. The people inhabiting the Panposh subdivision are mainly Mundas and Oraons who are highly sensitive and are ever anxious to protect their rights. The Bhuiyans inhabiting the Bonai subdivision are of steady temperament, very hospitable and in appearance belong to a different race. While Mundas and Oraons are dark complexioned, Bhuiyans are nearer the upper Hindu castes.

The Rourkela complex of industries have drawn a large mixed population whose contact is evolving a new culture among the tribes. Its ultimate effect cannot be predicted.

Though Gangpur was advancing in consequence of the railway line going right through it, it was generally as backward as Bonai which had no railway communication touching it. In modern times the ex-Gangpur area is rapidly becoming industrialised with heavy and light industries springing up all over its northern portion and with the prospects of a very flourishing mineral economy round the lead-rich Sargipali. The entire district is covered with Community Development Blocks which aim at all-round development of the population agriculturally and industrially.

The Agharias who are not found elsewhere in such large numbers are a very advanced agricultural community who will undoubtedly take advantage of the Green Revolution which is coming over the country, and be an element in the culture, economy and evolution of the country.

Modern man has his eye on the mineral wealth of Sundargarh district. It is not known why ancient man thought of the district important enough to leave his mark in cave paintings and a mysterious language engraved on rock walls. From ancient time the district has been the home of many varieties of wild life. But in recent years wild animals are becoming extinct. While formerly in

Bonai you could meet a tiger on any forest path, now there is probably none. The only wild animal which is spreading is the elephant which has now no market and man cannot eat it.

Origin of
the name of
the District.

Sundargarh was first constituted a district on the 1st January, 1948. It comprised two ex-State areas of Gangpur and Bonai which merged with Orissa on that date. The town of Sundargarh, which was the capital of Gangpur ex-State, was made the headquarters of the district.

The district was named after its headquarters town "Sundargarh". The town was formerly known by the name Suadihi (Suadi) until sometime in the first decade of the present century. But although the reasons are obscure, Maharaja Raghunath Sekhar Deo, the 18th successor to the *Gadi*, presumably in an unwritten order renamed it as "Sundargarh" which literally means, "Beautiful Fort". It remained the headquarters of Gangpur ex-State till its merger with Orissa in 1948, when the district of Sundargarh was formed.

Location,
General
boundaries,
Total Area
and Popula-
tion.

Sundargarh occupies the north-western portion of the State and is situated between 21° 35'N and 22° 32'N latitudes and 83° 32'E and 85° 22'E longitudes.

The district is bounded on the north by the Ranchi district of Bihar, on the west and north-west by the Raigarh district of Madhya Pradesh, on the south and south-east respectively by the Sambalpur and Dhenkanal districts, and on the east by the Singhbhum district of Bihar and Keonjhar district. The district, as it is, does not form a compact geographical unit and is extremely irregular in shape. It extends over an area of 3,788 sq. miles or 9812.47 sq. km. But the area according to the Surveyor General of India is 3,751 sq. miles or 9,675 sq. km. It had a population of 1,030,758 persons (5,30,836 males and 4,99,922 females) in 1971. With the above area and population it ranks tenth and eleventh respectively among the districts of Orissa.

History of
the District
as an Admi-
nistrative
unit.

As mentioned earlier, the ex-States of Gangpur and Bonai on their merger with Orissa on 1st January, 1948, formed the present district. Since then it has been subjected to no territorial changes.

Both these ex-States were once under the suzerainty of Sambalpur which formed part of the dominions of the Maratha Rajas of Nagpur. They were ceded to the British Government in 1803 by the Maratha Chief Raghuj Bhonsla of Nagpur under the Treaty of Deogaon. But they were restored to him by a special engagement in 1806. They reverted to the British Government under the provisional agreement concluded with Madhuji Bhonsla (Appa Sahib) in 1818, and were finally ceded in 1826. In 1821 the feudal supremacy of Sambalpur over these

States was cancelled by the British Government and a fresh *sanad* was granted to the Chiefs. Both these States, for some time, formed a part of the South-Western Frontier Agency on its creation in 1833, but they were transferred to the charge of the Commissioner of Chota Nagpur in 1854. Again in 1905 they were transferred from the control of the Commissioner of Chota Nagpur to that of Orissa and a Political Agent was appointed. The ex-States remained under the control of the Political Agent till their merger with Orissa in 1948.

The district is divided into three subdivisions, viz., Sundargarh, Panposh, and Bonai. Of these, two subdivisions, viz., Sundargarh and Panposh originally belonged to the ex-State of Gangpur while the whole of Bonai ex-State became the third subdivision. Except Panposh which has its headquarters at Uditnagar, the other two subdivisions are named after their respective headquarters. Bonai derives its name from its forests (Bona in Oriya means forest) covering almost nine-tenth of its area.

Subdivisions,
Tahsils, and
Police
Stations.

The following table indicates the area and the population of the respective subdivisions.*

Subdivisions	Area in sq. km.			Population		
	Total	Rural	Urban	Total	Male	Female
1	2	3	4	5	6	7
Sundargarh ..	4,615.64	4,565.65	49.99	441,675	221,447	220,228
Panposh ..	1,840.19	1,683.24	156.95	412,019	219,565	192,454
Bonai ..	3,356.64	3,356.64	..	177,064	89,824	87,240

There are five Tahsils in the district. Sundargarh subdivision consists of three Tahsils, viz., Sundargarh, Hemgir, and Rajgangpur. Panposh and Bonai subdivisions have one Tahsil each. The headquarters of Panposh Tahsil is at Kuarmunda. The other Tahsils are named after their respective headquarters.

The table below shows the police station coverage of the Tahsils.

Name, Area and Population of Tahsils	Police Stations
1. Hemgir A-1, 450.4 sq. km. P-94,397	.. 1. Hemgir .. 2. Lefripara
2. Sundargarh A-1,816.4 sq.km. P-191,182	.. 1. Sundargarh .. 2. Bhasma .. 3. Talsara

* District Census Hand-book—1971, Sundargarh District, Part X-B. p. 6.

Name, Area and Population of Tahsils	Police Stations
3. Rajgangpur A-1,348.9 sq.km. P-156,096	.. 1. Rajgangpur .. 2. Bargaon
4. Panposh (Kuarmunda) A-1,840.2 sq.km. P-412,019	.. 1. Kalunga .. 2. Birmitrapur .. 3. Raiboga 4. Bisra 5. Raghunathpali
5. Bonai A-3,356.7 sq.km. P-177,064	.. 1. Bonaigarh .. 2. Banki .. 3. Gurundia 4. Tikayatpali 5. Maholpada 6. Koira 7. Kamarposh Balang.

The district has thus nineteen police stations of which Sundargarh and Bonai subdivisions have seven each while Panposh has only five. The population of each of the police stations will be found in Chapter-III, People.

TOPOGRAPHY

Natural Divisions

Geographically the district is not a compact unit and consists of widely dissimilar tracts of expansive and fairly open country dotted with tree-clad isolated peaks, vast inaccessible forests, extensive river valleys, and mountainous terrain. Broadly speaking, it is an undulating table-land of different elevations broken up by rugged hill ranges and cut up by torrential hill streams and the rivers Ib and Brahmani. The general slope of the country is from north to south.

Sundargarh and Panposh Subdivisions.

The territory covered by Sundargarh and Panposh subdivisions (comprising the ex-State of Gangpur) consists of a long undulating table-land about 700 ft. (213 m.) above the sea level dotted with hill ranges and isolated peaks of considerable height. On the west of Sundargarh subdivision lies the Hemgir Plateau, nearly 1150 ft (351 m.) high, in the centre of which is located the village Hemgir. To the north of Hemgir the land is considerably hilly while to the south it is relatively plain with a minimum elevation of 709 ft. (216 m.) near the Chuanbahal village. The eastern tract of the subdivision intervening between Chota Nagpur plateau and Mahabir range, for the most part, is open and well cultivated, the general elevation of which varies from 700' to 1000' (213 m. to 305 m.) but that of the reserved forests except,

of course, a few patches, comes under 1000' to 1500' (305 m. to 457m.). Besides, numerous isolated hills and sharp ranges running generally east to west are also evenly distributed throughout the country. On the north the Chota Nagpur plateau with its foot-hills gradually falls away to the plain while the Mahabir range, in the south, springs abruptly in an irregular wall of tilted and disrupted rock, and forms for some length the boundary between Sambalpur and this district. On the southern border, dense forests linking up with the forest-clad ranges of Bonai subdivision are also seen. Didrapahar, the highest peak 2509' (765 m.) of Sundargarh subdivision is located near the trijunction of Sundargarh subdivision, Bonai subdivision and Sambalpur district. The principal river the Ib, which enters the subdivision from Jashpur and passes through it from north to south, with its numerous tributaries drains the territory. Along the valley of the Ib, particularly to the south, an open and well cultivated plain country is found. Very rich and fertile soil formed out of the silts deposited through ages is seen in the areas along the river bank; black cotton soil is also found at places. The soil generally varies from pure sand or gravel in the upland, through various classes of loam on the slopes, to stiff clay loam with a sub-soil or pure clay at the bottom.

The South Eastern Railway running through Panposh subdivision from east to west makes nearly a sharp demarcation between two physically dissimilar tracts, one on the north and the other on the south. The block to the north formed by the broad valleys of the Sankh, the South Koel, and the Deo, although interspersed with isolated hills and series of small ridges striking east and west, is generally plain; but the tract to the south is comparatively more hilly and wooded excepting the valley of the Brahmani which extends to an appreciable distance south of Panposh. The region extending from south of Bisra to south of Chirobeda is much broken and hilly: it rises along the Singhbhum and Bonai boundaries to an elevation of 1800' to 2000' (549 m. to 610 m.) the highest peak being Bhaisamunda Pahar 2234' (681 m.). In the plains the elevation is about 600' to 700' (183 m. to 213m.) the lowest point on the Brahmani valley on the Bonai border near Banki village being 575' (175 m.). The land is completely denuded of its fertility and is unsuitable for cultivation. The predominant portion of the area is undulating where large tracts of ravines and rocky grounds are found. Forests with predominance of Sal (*Shorea robusta*) cover major portion of the area.

The Bonai subdivision (comprising the ex-State of Bonai) is chiefly an isolated hilly tract with an average elevation of about 800' (244 m.) above the sea level. It is shut-in on all sides by rugged

Bonai Sub-division.

forest-clad hills, intersected by a few passes or gorges which connect it with the surrounding areas. It is inaccessible to the travellers and beasts of burden except at the regular passes. The space within does not form an extensive valley, but is interspersed here and there with hills, most of which are densely wooded to the summit. The only river Brahmani flowing from north to south divides Bonai into two fairly equal parts. It receives the tribute of the surrounding hill streams and passes through a gently undulating beautiful and spacious valley containing large groves of mango and other fruit trees, but owing to its rocky bed, is of little use for irrigation and waterway communication. With the exception of the flat cultivated plain of about 90-100 square miles (145-161 sq. km.) varying from 190' to 600' (58 m. to 183 m.) in elevation on the left bank of the Brahmani between Bonaigarh and Kamarposh Balang, and the small patch in Koira situated at an elevation of about 2000' (610 m.), the whole of east Bonai is extremely mountainous. Several of the ranges exceed 3000' (914 m.) in altitude. The cultivated area consists of loamy, sandy, laterite and black cotton soil. The hilly and mountainous regions are chiefly occupied by aboriginal Bhuiyans-Kols and Gandas. Most primitive types of Bhuiyans who engage in destructive Dahi and Biringa cultivation mostly occupy the undeveloped areas. Exquisitely fine scenery abound this part of the country. Perennially flowing hill streams, along the bank of which exist beautiful wild orchards and variety of farms, are abundant. The Khandadhar fall which drops over the western face of Chelliatoka range from a height of 800' (244 m.) presents a magnificent sight in the wild surroundings. It can be seen from miles away.

Apart from the cultivated plain stretching from Bonaigarh in a south-westerly direction towards Sarsara Balang, the whole of west Bonai is exceedingly mountainous and wooded. But, unlike the east, it is more rugged especially in extreme west along the border of Kuchinda subdivision (Sambalpur district) where it has predominance of quartzite rocks. The hills gradually slope away to the plains and thus assume no outstanding feature. Excepting a few fairly large villages adjacent to the cultivated areas, small hamlets are scattered in the jungles of the western Bonai.

Hill System

The hills are mainly extensions of the Deccan and Chota Nagpur Plateau. In Sundargarh and Panposh subdivisions there are mainly three hill ranges apart from a few isolated outcrops. The one, in the reserved forest blocks of Mahabir Chhatam, Topkurlu, Bhaismunda and Chirobeda, on the south-east forming the boundary between Sambalpur and this district, runs east-west direction. The second, in the centres

starts from Gurabasa reserved forest in south-west to north-east direction and runs through Kumbahal, Runga, Peruabhadi, Panchra, and Brahmani reserved forests ending near the Sankh river. The third, on the western border of the district running south-east to north-west direction is an extension of the wide range of hills forming the watershed between the river Mahanadi and her affluent the Ib. Thus these mountain ranges seem to have started from a point in the middle of the southern boundary of the district and outflanking in three different directions divide the country into three separate plains.

The Hemgir plateau is flanked by a system of mountain which starts from Garjanjore (1966' or 599 m.) and runs due south-east up to Bendrichuan (1343' or 409 m.). There is an abrupt swing near the latter due west up to the water parting between the Garjhor and the Jhulenbar after which there is again a gentle bend due north-west up to the border of Raigarh district.

Among the ridges mention may be made of the great ridge, an extension of the Karampada range of Singhbhum, which apparently seems to be the spine of the Toda area in east Bonai. It extends from north-east to south-west and is capped with an immense deposit of high grade hematite. The Rontha plateau (2500'-3000' or 762-914 m.) from which descends the Khandadhar waterfall is also covered with iron ore. The Bichakhani hill yields millions of tonnes of iron ore which feed the Rourkela steel plant. A new railway line has been laid to the foot of the hill at Dumaro for transportation of the iron ore.

The principal peaks are Mankarnacha (3664 ft. or 1117 m.) and Badamgarh (3525 ft. or 1074 m.), both on Keonjhar boundary; Kumritar (3495 ft. or 1065 m.), the Bichakhani (2964 ft. or 903 m.), and Khandadhar (3000 ft. or 914 m.), all in Bonai police station; Rengalbera (2179 ft. or 664 m.) in Banki police station; Baghbindha (2650 ft. or 808 m.), Raipiri (2620 ft. or 799 m.) and the Kantamunda (2524 ft. or 769 m.), all in Gurundia police station; Chelliatoka (3331 ft. or 1015 m.), in Mahulpada police station; Balia (3313 ft. or 1010 m.) and the Karaspani (2483 ft. or 757 m.), both in Koira police station. All the above peaks are in Bonai subdivision. Besides, some unnamed peaks of considerable heights are also found. No hills of any significant height are found in Panposh subdivision. Among the peaks in Sundargarh subdivision mention may be made of Man (1935 ft. or 590 m.) on the Madhya Pradesh border; Satparlia (1327 ft. or 404 m.), and Jogijogan (1471 ft. or 448 m.), both in Sundargarh police station; Mahabir (1861 ft. or 567 m.) in Bargaon police station; Didra (2509 ft. or 765 m.) in Rajgangpur police station

Main Peaks

on the trijunction of Bonai and Sundargarh subdivisions, and Sambalpur district. Other peaks on the Didra range are Bhaisamunda (2234 ft. or 681 m.), and Kichimiri (2050 ft. or 625 m.). The last named peak is also in the Rajgangpur police station. Andiabira (1455 ft. or 443 m.) and Bilpahari (1333 ft. or 406 m.) are among the less prominent peaks¹.

RIVER SYSTEM AND WATER RESOURCES

The principal rivers are the Ib and the Brahmani. The Sundargarh subdivision is drained by the Ib; the Panposh subdivision by two rivers, the Sankh and the South Koel, from the confluence of which the Brahmani owes its origin. The Bonai subdivision is drained by the Brahmani which flows from north to south and passes through its centre.

Brahmani

The Brahmani is formed by the confluence of the South Koel and the Sankh at Panposh. After a course due south through the Panposh subdivision which is unnavigable owing to extensive rock barriers and rapids for about 14 miles (22 km.) it enters the Bonai subdivision and after a course of some 38 miles (61 km.) in that subdivision flows into the Sambalpur district. The total length of the river in the district is thus 52 miles (83 km.) The confluence of South Koel and Sankh is a spot of remarkable beauty and sanctity; and according to local tradition this place is the scene of amour between sage Parasara and the fisherman's daughter Matsya Gandha, the offspring of which was Vyasa, the reputed compiler of the Vedas and the Mahabharat. About half a mile below the junction of these two rivers a fine bridge of the South Eastern Railway spans the Brahmani. Common jasper was found in the bed of the river and the local gold-washers (Jhoras) earned a small livelihood by washing gold from the bed. The Brahmani has no feeder stream of any importance. The hill streams all along its course force their water in and most important of these streams is the Kurhadi stream in Bonai. Other smaller hill streams of the Brahmani in east Bonai are the Sarkunda Nala, the Amrudi Nala, the Samji or Saminj Nala, the Rangan Nala, and the Korapani Nala, all of which are perennial throughout their course. Along the western bank it receives only a few insignificant streams among which Katangmurha Nala and Rukura Nala may be mentioned; these streams, unlike the eastern ones, dry up in summer. The Chirobeda Nala which is close to Saranda forest area of Bihar drains the south-east corner of the Panposh subdivision.

1. Elevation figures are mostly taken from the map prepared by the Surveyor General of India.

The Sankh rises on the Banspahar in the west of Ranchi. It enters the district on the north-west of Panposh subdivision and after flowing for about 8 miles (13 km.) in a south easterly direction forms the boundary of the Panposh, and Sundargarh subdivisions for a considerable distance and meets the South Koel at Panposh. The total length of the river in the district is about 40 miles (64 km.). It drains the eastern part of the Sundargarh subdivision. The Dhhina and Lurgi Nalas are its main feeders in the Panposh subdivision.

Sankh

The South Koel enters the district from Singhbhum in Bihar from its eastern border close to the Jaraikela railway station and flows almost due west for about 28 miles (45 km.) till it joins the Sankh. The Deo, its main tributary on its north, rises in Ranchi district and drains the north-east corner of Panposh subdivision. The Katapur Jharia Nala, another small feeder, is on its northern bank. On the south the tributary that deserves mention is Bursuonjhor which rises in the forests of Saranda near Tiriposhi.

South Koel

The Ib rises on the Khudia plateau in the ex-State of Jashpur in Madhyapradesh and enters the district almost from the north at Tilijore. It flows slightly south-easterly till Gangpurgarh and then due south upto near Baurimundagaon where it turns due south-west for a certain distance and again turns due south at the district road near Sundargarh town. It forms the boundary between Sambalpur and Sundargarh for some distance before it leaves the district to meet the Mahanadi in Sambalpur. Its length in the district is about 60 miles (96 km.). Diamonds had occasionally been found in its bed and gold-washing was being done. Among other places Sundargarh, the headquarters town of the district, is located on its bank.

Ib

The main tributaries of the Ib are the Tumga and Ichha along the western bank and the Sapai on the eastern bank. The other affluents are the Ghoira, Bor, Sarsagati, Kasi, Bad, San Banda, Kasi II, Banda, and Khorung. Two streams starting from Panchra and Sahajbahal meet at Barun and the united stream known as Sapai discharges itself into the Ib at Kaintra. The Ichha rises in Danardampur area and flows into the Ib at Jamunadhipa. The Tumga starts from Megdega and meets the Ib at Kopasinga.

Among the smaller rivers mention may be made of the Bhedan, Basundhar, Hingir, Kur, Saphai, Suka, Kuchedega, Bendra, Kutra, Talda, Chodadia, and Lilari. The Bhedan which rises in the west Bonai and drains it leaves the district to meet the Ib near Brajraj-

nagar in the Sambalpur district. The other rivers which have the origin in this district leave it to meet the big rivers like the Mahanadi and the Ib in the adjoining districts.

All these rivers of the district are practically dry from the end of the cold weather till the rains and there is no systematic navigation on them. Their beds abound with great boulders and constant barriers of massive rock, forming in the cold and hot weathers large deep pools, the sanctuary of quantities of fine fish. Due to the presence of massive rocks and boulders in their beds only small boats ply on the Brahmani and the Ib and in the rainy season can go down the Ib to its junction with the Mahanadi. Transportation of timber to the coastal districts through river Brahmani which was being carried on until recent years has been almost abandoned due to the development of road and rail communications. The country is intercepted with numerous smaller streams, some of which are of considerable size; in the rainy season these hill streams sweep down in torrents rendering communication with the interior at this period of the year almost impossible.

Waterfalls

No waterfall worth the name occurs in the Sundargarh and the Panposh subdivisions. The Khandadhar in the Bonai subdivision which drops over the southern face of the Chelliatoka range (3,331 ft. or 1,015 metres) from a height of 800 feet (244 metres) presents a fine scenery from miles away. In a sweeping description Cobden-Ramsay writes * :

"In the wild hill tracts of Mayurbhanj, Keonjhar, Bonai, Kalahandi and at Barmul in Daspalla the soft beauty of the hill-clad ranges is relieved by wild precipitous bluffs scored and seamed by the storms of ages: in the rains raging torrents flashing for miles in the sunlight hurl themselves in fine waterfalls to the slopes below: the finest of these waterfalls drops over the sheer southern face of the Chheliatoka range (3308 feet) in Bonai". He further describes, "In the high lands of Kalahandi, Keonjhar, Mayurbhanj and Bonai clear pellucid hill streams flow perennially, babbling over stone and rushing in tinkling waterfalls between grass-clad banks and sedgy shores, shaded by towering trees many are the deep silent pools with the banks fringed with masses of white lilies, and the silence broken only by the gentle gurgle of the stream as it slowly trickles from the pools or by the splash of some rising fish: here the kingfisher darts to and fro in all his glory and birds of every hue imaginable brightens the scene: in the rains these streams become wild tearing torrents sweeping all before them".

* Feudatory States of Orissa by L. E. B. Cobden-Ramsay, p. 3.

Tanks are found almost in every village which serve as baths and sources of drinking water. They are also used for purposes of agricultural culture. To ensure supply of drinking water during the summer most of the villages have also wells.

Tanks

With the erection of the steel plant at Rourkela, the Hindustan Steel Ltd., authorities have constructed a dam across the river Sankh at Mandira, 12 about miles (19 km.) above its confluence with the South Koel which ensures regular water supply both to the plant site and to the township throughout the year. A separate weir on the South Koel has also been put for supplying drinking water to Rourkela.

A number of minor irrigation projects have been worked out since the formation of the district in 1948 by throwing embankments across good catchment areas which provide water facilities to the villages for agriculture and domestic purposes. In Chapter IV are given the important minor irrigation projects of the district.

In the hill ranges are found several perennial springs rising from underground water resources. Among them worthy of mention is the one at the foot of Vedavyas hill near Panposh: its water is considered sacred by the local people.

Springs

The rock formations found in the Sundargarh district belong mainly to the Gangpur and Iron-ore series of Precambrian Age, and to a minor extent to the other younger formations such as Gondwans in the west. The rocks of the Gangpur series are the oldest of all and are prevalent in the area covered by the former Gangpur State. The important rock types of Gangpur series are represented by mica-schists, quartzites, phyllites, calcitic and dolomitic marbles and lime stone, carbon phyllites, which are overlain by the rocks of Iron-ore series, viz. mica-schists, phyllites and quartzites. The rocks of the Iron-ore series are well exposed in the whole of Bonai area and in some part of the ex-State of Gangpur. These two groups of rocks are separated by a persistent zone of crushed conglomerate and quartzite, known as Raghunathpali conglomerate. Two groups of sedimentaries known as Dhanjori group and the Kolhan series are recognised in the Bonai subdivision which are younger than the Iron ore series as well as the Bonai granites (Singhbhum Granite). Rock formations of Gondwana Age are exposed to the west of the Ib river in the Hemgir area of Sundargarh subdivision.

GEOLOGY
Geological
Antiquity

The stratigraphy of the district in general, is represented by the following geological sequence:-

Recent .....	.....	Superficial laterite and alluvium
Permian to Upper Carboniferous	Gondwana	Himgir sandstones (Kamthi-Raniganj) Barakars Talchirs
.....	Unconformity	.....
Precambrian	Iron Ore Series.	Granite, pegmatite & vein quartz (main period of diastrophism) Basic igneous rocks, amphibolites and epidiorites mica-schists and phyllites with quartzites and carbonaceous phyllitic zones.
		Sheared conglomerate (zone of thrust) (Raghunathpali stage)
	Gangpur Series.	Mica-schists and phyllites with zone of Carbonaceous rocks (Laingar stage) calcitic & dolomitic marbles (Birmitrapur stage) mica-schists and phyllites with a zone of carbonaceous rocks (Kuarmunda stage) phyllites with Gonditic rocks (Ghoriajor stage).
	.....	Base not seen.

Rocks of the Gangpur area

A major portion of the former Gangpur State, in between Birmitrapur, Gatitangar, Jaraikela, Dharuadihi, Sundargarh and Lefripara is occupied by the rocks of the Gangpur series. Majority of the ridges and hills of the area are formed of Carbonaceous Phyllites.

Mica-schist, limestone and dolomite underlie the soil and alluvium of plain country throughout the area and are exposed along the stream and river sections. A few thin beds and lenses of lateritised gonditic rocks containing manganese ore, occur amidst the area, along a narrow zone between Kinjirma and Bargaon at the western part and

extend through Pandrisilla in the middle of the area. The country lying to the south of the railway line between Jaraikela and Bamra is underlain by mica-schists and phyllites of the Iron ore series. The line of ridges extending over a length of 90 km. to the north of railway line between Jaraikela and Bamra is of sheared conglomerates and quartzites, which form a well marked horizon indicating a zone of thrust at the junction of the Gangpur series and Iron ore series. Occasional veins and dykes of quartz traverse the mica-schists and phyllites in the area.

The area around Sundargarh and to its north and north-east is occupied by gneisses and granites which form the southern continuation of the Ranchi granites. Pegmatite and quartz veins traverse these gneisses and granites.

Exposures of the coal bearing Gondwana sandstone, shale carbonaceous shale, occur to the west of the Ib river. The country is covered with thick soil and alluvium ranging from 6.1 m. to 7.6 m. The low mounds and hills occurring here and there amidst the plains are capped by laterites derived from the weathering of the underlying rocks, mainly sandstones.

The rocks of the Gangpur series have been folded into an anticlinorium plunging to the east with the axis of the fold running in an E-W to ENE-WSW direction. The structure of the Gangpur anticlinorium is very well brought out by the outcrops of limestone and dolomite with the associated lower and upper horizons of the carbon phyllites. There are minor synclinal folds at Dublabera, Hatibari and Lanjiberna. The general strike of the rocks in the area varies from EW in the eastern and central part to NE-SW between Lanjiberna and the Ib river at the western part. The strike suddenly changes to WNW-ESE towards Lefripara, i. e., to the west of the Ib river. The dip of the rocks in the northern part is to the north and that in the southern part is to the south. The amount of dip is usually steep (60°—90°).

In the recent years, a few geologists have done considerable amount of work on the structure of this area, but have expressed different views regarding the structure. The following rock formations are met with in the Bonai area.

Recent	.....	Alluvium	
Precambrian	Newer Dolerite	Quartz reefs aplitic granite and gneiss dolerite and gabbro.	
	Kolhan Series	Carbonaceous phyllites and quartzites. Shales and phyllites quartzites and conglomerates.	

Rocks of Bonai area.

..... Unconformity.....		
Basic and Ultra-basic rocks.	Meta-gabbro and dolerites.	meta-peridotites and pyroxenites.
Volcanics	Ferruginous shales or altered lava and tuffs	Lava flows tuffs, hornblende chlorite rocks and amphibolites.
Dhanjori Group	Calcareous schists, quartzite, quartz-sericite-schists, sericite-chlorite phyllites	greywackes, grits and conglomerates.
..... Unconformity		
Singhbhum granite	Bonai granite and gneiss	
Volcanics in the Iron-ore series	Lava flows, hornblende-chlorite rocks and amphibolites.	
Iron-ore Series {	Iron-ore Stage	Banded granulites phyllites, banded hematite quartzite, tuffs, cherts lavas.
	Chaibasa Stage	Quartzites and quartz-schists, mica schists and chlorite schists.

In the eastern part of the Bonai area, typical rocks of the iron-ore series represented by phyllites, banded hematite, quartzite, tuffs, cherts and lavas are found.

Banded granulites occur as bodies enveloped by the Bonai granite at SWS and SE of Rengalbera (22°00':84°46') and at Lahunipara (21°53':84°56'). These rocks are considered to be the metamorphosed equivalents of the banded formations of the iron-ore stage of the iron-ore series.

Near Kantapali (21°54' : 84°48'), there are chloritic rocks and lavas overlying mica-schists. Associated with the Volcanics there is a band of conglomerate with concordant dip and containing water-worn pebbles of lava, quartzite and vein-quartz. The principal exposures of mica-schists are found south and SW of Darjin and west of Kantapali. Quartzites form a prominent range of hills extending in a general NE-SW direction diagonally across the area.

The Bonai granite is exposed in the plains west of Darjin (21°56' : 84°54'). It shows intrusive relation to the rocks of the Iron-ore series.

Overlying the Iron-ore series and probably the Bonai granite too with an unconformity, is a group of rocks namely quartzites, quartz-schists, phyllites, greywackes, grits and conglomerates. The conglomerates occur at or near the base of the argillaceous members of the group. They contain pebbles and cobbles of banded jasper, chert and granite. This group probably corresponds to the Dhanjori group of eastern Singhbhum. These rocks are exposed around Darjin, Bonaikela and Joraldi, etc.

Lavas and tuffs, overlying the Dhanjori formations are exposed around Kuljhari (21°59' : 84°51') and near Rengalbera (22°00' : 84°6'). The volcanics S-W of Kuljhari have developed the mineral chloritoids. Those around Rengalbera are thoroughly altered.

Gabbro, pyroxenites and peridotites have intruded into Dhanjori formations particularly along the horizons of conglomerate. They are more or less continuously exposed over the whole length of Dhanjori. The intrusions are evidently guided by the synclinal structure of the Dhanjoris. Basic and ultrabasic rocks are also found in the Bonai granite as xenolithic patches, whereas a younger suite is seen in the form of dyke.

Dolerites are found intrusive into the Iron ore series, the Bonai granite, and the Dhanjori formations. They are not found in the Kolhans and the aplitic granite.

Kolhan formations are exposed around Tamra (21°59' : 84°47'). There is a possibility that the main outcrop around Kuljhari may be of Kolhan Age. In the southern and western portions the unconformity between these rocks and the underlying Dhanjoris is quite evident.

These two sedimentaries, together form a synclinorium plunging towards NNE in the area lying north and west of Darjin, north of Bargaon (21°53' : 84°48'), north-east of Bonaikela (21°56' : 84°47') and north of Joraldi (21°56' : 84°46').

The aplitic granite exposed in the area west of Bargaon and Bonaikela shows intrusive relation with the Dhanjoris and older rocks. It also appears to be post Kolhan as indicated by the configuration of Kolhan outcrops against the intrusive force of this granite. There are no dolerite dykes in the aplitic granite.

Prominent reefs of quartz are found traversing the mica-schists and the Bonai granite south of Darjin.

ECONOMIC
MINERALS
AND ROCKS.

Sundargarh district possesses a sizeable portion of the mineral wealth of Orissa. The most important minerals of economic value in the district are iron ore, manganese ore, limestone and dolomite, which are at present being exploited on a large scale. Several valuable minerals like base-metals and fireclay occur in the district. These, as well as other deposits and occurrences are summarised below.

Asbestos

Asbestos of Tremolite variety occurs as irregular veins in the ultra-basic rocks near the village Renjra in the Bonai subdivision.

Barytes

About 0.8 km. east of Khatangtola ($22^{\circ}22' : 85^{\circ}4'$) in the Panposh subdivision occurrences of barytes have been recorded.

Bauxite

Occurrences of bauxite derived from lateritisation of shales, etc. of Iron-ore series have been noticed in Mitihurda area. The bauxite occurs in small pockets and patches. The percentage of alumina in the ore was found to be above 45 per cent as determined from few samples. Few occurrences have been recorded in and around the Koira valley associated with laterite capping rocks of the Iron-ore series.

Building
materials

Pockets of *Calc-tufa* containing lime occur in the valley of Asurkol Pahar about 2 km. due west of Kuljhor. A similar deposit, but smaller one, is seen along the course of Kuljhor Nala itself, about 1.6 km. to the north of the site referred to above. Building materials like epidiorites and dolerites near Maholpada ($21^{\circ}38' : 85^{\circ}07'$) and Siria ($21^{\circ}42' : 85^{\circ}05'$) are quarried for use as road metal. Thin slabs of slate upto 1.8 m. long and about 25 mm. in thickness have been used as fencing and paving slabs. These occurrences are recorded near Hetpos, Talsara and Kuarmunda. Besides, quartzites are also quarried for use as road building materials, and railway ballasts near Panposh.

Clays

Kaolin : A small, irregular deposit of kaolin associated with pegmatites occurs near Menjapara ($22^{\circ}02' : 84^{\circ}11'$), 9.65 km. north of Dharuadihi railway station. It is suitable as a "filler" and also for ceramic purpose, if mixed with felspar.

Barakar sandstones around Amatpani ($22^{\circ}13' : 83^{\circ}39'$) contain about 17.8 per cent of white clay as matrix, the rest of the bulk being made up of good quartz sand. Though reserves are indefinite, the deposit should be workable for both clay and sand. Near Kurdrigatu, there is a bed of kaolin associated with grey sandy shales adjoining carbon phyllites, extending for 274 metres with an average width of 45 metres. Similar material is also found near Lardga ($22^{\circ}25' : 84^{\circ}47'$) and Baraibera ($22^{\circ}23' : 84^{\circ}49'$).

Fireclay: The Barakar formations in the Hemgir coal field contain several occurrences of different varieties of clays. Fireclay beds are encountered in a number of places in the entire strip of the Barakars in Baisundar valley. But good variety of clay beds are recorded in and around Tentuligadi-Siarimal, Balinga-Bankibahal—Forkbahal, Kirpsara-Garjanbahal, Khuntijharia, Dulunga, Khajurdihi, and Jharपालंग-Girisuon.

Most of the areas mentioned above are held by mining leases. Detailed investigation of the fireclay deposits in Siarimal-Tentuligadi and Bankibahal-Balinga, Dulunga and Khejurdihi areas undertaken by the Directorate of Mines, Orissa, has indicated a reserve of 5.4 m. tonnes of fireclay of all grades. Besides, a reserve of 0.8 m. tonnes of clay has been estimated by detailed prospecting in the deposits near Garjanbahal and Khajurdihi.

China Clay: Kaolin originated from the altered felspars of the metamorphosed pegmaties are found at Kaintara (732), Bhaunra and Dharuadihi. They are locally used for white washing, but if exploited properly it can suitably support a pottery industry in a small scale.

A big stretch of Gondwana rocks in the former Hemgir Zamindari of Gangpur State, known as Hemgir coal field, extends from Amatpani ($22^{\circ}12' : 83^{\circ}39'$) to south east up to Ratakhand ($21^{\circ}54' : 83^{\circ}51'$). It forms the connecting link between the Ib river coal fields in the east and the Raigarh coal fields in the west.

Outcrops of coal have been reported from Jhujia Nala near Ghogarpali ($22^{\circ}8' : 83^{\circ}39'$), at the confluence of the Jhujia Nala and the Baisundar Nala, along the Baisundar Nala and near Dulunga ($21^{\circ}57' : 83^{\circ}48'$) in the Deodaria Nala. It is reported that systematic drilling was carried out under the guidance of Dr. King (1871) in three places at Ratansara ($22^{\circ}4' : 83^{\circ}40'$), Gopalpur and Bankibahal ($22^{\circ}2' : 83^{\circ}45'$) and three seams ranging in thickness from 1.2 m. to 6 m. (4 ft. to 20 ft.) were proved. The samples taken from the borings and other outcrops were in most cases disappointing due to high ash content and further exploration was, therefore, discontinued. A specimen analysis is as follows :—

	Per cent
Moisture	.. 4.24
Volatile matter	.. 32.98
Fixed carbon	.. 43.74
Ash	.. 19.04
Total	.. 100.00

Specific gravity—1.427 ; does not cake ; ash-white. The total reserves of coal in this field is yet to be assessed.

Felspar Pegmatite veins containing very coarse masses of potash felspar (orthoclase & microcline) suitable for use as refractories are fairly abundant in the granite tracts around Darlipali (21° 58' : 85° 55'), Sargipali (22° 03' : 83° 55'), Ghanthuru (22° 01' : 84° 05') and other areas.

Gold The gravels of the Brahmani river and some of its tributaries are washed for their gold content (placer gold) by the local Jhoras. The important occurrences are at 0.8 km. south of Jaraikela bathing ghat (21° 45' : 84° 39') opposite Birtola (21° 58' : 84° 53'), Dhenkia (21° 57' : 84° 52'), Kulghari (21° 59' : 84° 51'), and Siarkundar (21° 55' : 84° 52'). The recovery is said to be poor and of no economic importance.

According to Dr. M. S. Krishnan, gold washing was carried out in the Ib river and its tributaries like the Ichha Nala during the last century. Colonel Hanghton has recorded the occurrence of placer gold in the sediments contributed by the Koel, Karo, Sankha and Brahmani rivers.

Iron ore The Singhbhum-Keonjhar-Bonai (Sundargarh) Iron-ore belt constitutes the most important store house of India's iron-ore wealth. It has a striking length of nearly 48 km., out of which about 23 km. fall in the Bonai area of Sundargarh.

The iron-ore deposits form a series of ridges with a NNE-SSW strike and occur in the rocks of iron-ore series in association with the banded hematite Jasper. The banded hematite Jaspers consist of alternating bands of Jasper or chalcedony and hematite, containing varying proportion of Iron oxide and silica. The maximum thickness of hematite Jasper formation is stated by H. C. Jones¹ to be about 914 metres in Bonai area. From the present study by the Directorate of Mines, the thickness of BHJ is found to be between 150 m. to 300 m.

The banded hematite Jasper is seen frequently to change into hard massive Iron-ore where followed laterally. It occasionally passes also into laminated ore with a shaly appearance or into lenses or pockets of powdery ore.

1. Iron Ore Deposits of Orissa and Bihar 1934, H. C. Jones, p. 198.

The important iron-ore deposits in the district with their proved reserves and grade are as follows :—

Sl. No.	Location	Reserve (in million tonnes)	Grade per cent Fe.	Reserve proved by
1	2	3	4	
1. Baliapahar	..	25	64	Directorate of Mines, Orissa
2. Mitihurda Group (21° 50' : 85° 20').		25	63	Ditto
3. Badamgarh pahar (21° 48' : 85° 16').		21	64	Ditto
4. Basada	..	25	63	Ditto
5. Diringburu	..	4	64	Ditto
6. Khandadhar group	..	200	62	Orissa Mining Corporation.
7. Dandrapahar (21° 51' : 85° 09')		116	59	Hindustan Steel, Ltd. Rourkela
8. Taldihi	..	227	61	Ditto
9. Kulta	..	50	62	Ditto
10. Other minor deposits	..	100	62	—
Total		..	800 m. tonnes (approx.)	

(The indicated reserves are much more)

Kyanite occurs in association with vein-quartz at many places, but all the occurrences are comparatively small and of no economic value. The occurrences south of village Sialjor (22° 12' : 84° 27'), west of Kudumunda (22° 23' : 84° 32'), Ghariajor, Kumbakera (22° 29' : 84° 44') and Alapaka deserve mention.

Sillimanite occurs in the quartz-schists, south of Kahchua (22° 23' : 84° 31'). It is of no economic importance.

The earliest occurrence was reported by M. S. Krishnan, one mile (about 2 km.) SE of Sargipali (22° 05' : 85° 55') and immediate north of hill 1254', in which traces of galena were discovered in the dump near abandoned pits. Detailed investigation around Sargipali is under progress by the Geological Survey of India.

Kyanite and Sillimanite

Lead and Zinc ore

Sulphide mineralisation has been noted in an area S E of Giringkela ($22^{\circ}8' : 83^{\circ}47'$), which displays visible specks of pyrite, galena and chalcopryrite along with pyrrhotite, bornite and arsenopyrite. Occurrences of base-metals have been recorded in the core of limestone at Kiringsera ($22^{\circ}15'30'' : 84^{\circ}25'$). Prospecting operations by means of geochemical sampling in the area is under progress by the Directorate of Mines.

Limestone
and Dolomite

Limestone and dolomite which are the most important economic mineral deposits in the Gangpur area, occur in two series of outcrops, one along the northern limb and the other on the southern limb of the Gangpur anticlinorium. The deposits have been recorded by M. S. Krishnan while undertaking a systematic geological mapping of the State. Subsequently the deposits have been reassessed by the G. S. I. with a view to proving substantial reserves of limestone and dolomite for the Hirakud Dam Project and proposed steel plants of Orissa. The average width of the biggest horizons is between 610 to 760 metres of which the dolomite forms nearly 365 to 455 metres and limestone about 240 to 260 metres. The general strike of the bands varies from E W to ENE-WSW. The dip of the formations is generally steep. The limestone is fine to medium grained and is grey in colour. There is transition from pure crystalline limestone to calcareous phyllite. About one third of the limestone reserves in the area is of good quality and of a composition suitable for flux.

The limestone and dolomite occur in two distinct belts, one in the north, comprising the deposits at Raiboga ($22^{\circ}23' : 84^{\circ}37'$), Birmitrapur ($22^{\circ}24' : 84^{\circ}44'$), Hatibari ($22^{\circ}24' : 84^{\circ}51'$), Gatitangar ($22^{\circ}24' : 84^{\circ}54'$) and along the Khatma Nala and the Deo river and the other in the south, which stretches over a distance of more than 96 km. between Jaraikela in the east and Lefripara ($22^{\circ}7' : 83^{\circ}48'$) in the west. The important deposits in this belt are at Panposh ($22^{\circ}14' : 84^{\circ}49'$), Lanjiberna ($22^{\circ}15' : 84^{\circ}30'$), Kiringsera ($22^{\circ}15'30'' : 84^{\circ}25'$), Kukarbhuka ($22^{\circ}12' : 84^{\circ}30'$), Kinjirma ($22^{\circ}0' : 84^{\circ}06'$). The important deposits are discussed below :—

Birmitrapur deposit is the largest and forms the major source of flux grade limestone and furnace grade dolomite for the iron and steel plants in Eastern India. The limestone occurs over a total distance of nearly 6.4 km. with a width of 225 m. to 240 m. and forms a line of hills rising to an average elevation of 60 m. above plains. Dolomite occurs to the south of the limestone and occupy the plains, the width being 300 m. The strike of the beds is nearly EW and the average dip is 60° due north

There is a minimum width of 45 to 60 metres of limestone with less than 5 per cent silica, 90 to 105 m. width with 5 to 8 per cent silica. The percentage of iron oxide, alumina and magnesia in the limestone is 0.5, 1.5 and 2.4 respectively. Probable reserves of limestone containing less than 8 per cent insolubles within a depth of 60 m. are about 100 million tonnes of which 16 million tonnes would be with below 4 per cent insolubles but the total indicated reserve of limestone of all grades will be nearly 274 m. tonnes. The reserves of dolomite is estimated at 256 million tonnes. This deposit is being worked by Bisra Stone and Lime Co. Ltd. (Bird & Co.).

Exposures of limestone in Hatibari-Purnapani-Gatitangar-Katma Nala—Limbra belt section occur over an area of 12.8 km. by 8 km. between Kokrama and the Deo river and further east. The reserves of limestone with insolubles below 8 per cent will be about 20 million tonnes. The reserves of the individual areas are given below :

The limestone in Hatibari Block is being worked by the TISCO. The reserve of dolomite of furnace grade in this area is estimated at 0.5 million tonne and the same of flux grade limestone is about 1.5 million tonnes up to 30 m. depth.

The eastern portion of the deposit extending for a length of nearly 1.5 km. between the Hatibari quarry of the TISCO and Pahartoli, forms the Purnapani Block.

The limestone suitable for flux extends over a zone of 1.2 km. in length with a minimum width of 120 m. The probable reserves from this area are 7.3 million tonnes up to a depth of 30 m.

In the Gatitangar area, limestone is exposed for a length of about 1.5 km. with a width of about 0.4 km. The general strike of the bands is nearly EW and the dip is about 75° to 85° . The reserves for flux grade limestone (below 5 per cent insoluble) is estimated at 3.4 million tonnes up to a depth of 30 metres. But the reserves of limestone containing average 8 per cent insoluble would be about 5.5 million tonnes.

The Limra deposits lie to the east of the Deo river. The Hindustan Steel Ltd. have estimated a reserve of 4.5 million tonnes within 30 metres depth containing 12 per cent insolubles.

The limestone and dolomite deposits at Dublabera ($22^{\circ}18' : 84^{\circ}34'$) are situated at about 12.8 km. west of Kuarmunda railway station on the Rourkela-Birmitrapur branch. The limestone occurs in three bands with a thickness of 90 cm. to 120 cm. (3' to 4') each and separated from one another by 60—90 cm. (2' to 3') of impure limestone. The

dip is low (25°) and are grey to white in colour and medium to coarse grained in texture. The hills situated to the north-east of Dublabera consist of mainly dolomite though at the top limestone is exposed all along the southern and western escarpments. The hillock south of Sarmohan is composed mainly of dolomitic limestone. The limestone exposed in this region is not of good grade. The magnesia content in the limestone vary from 2.3 to 6.2 per cent. The Directorate of Mines have estimated a reserve of 3 million tonnes of limestone for the same deposits.

The limestone bands are exposed to the west, east and north of the village Lanjiberna ($22^\circ 15' : 84^\circ 30'$). The beds strike approximately EW and dip at $60^\circ-70^\circ$ on either side. The deposit is traceable for a distance of about 1.6 km. with a maximum width of about 0.5 km. The deposit is divisible into three zones, the southern, the central and the northern of which the central zone is dolomitic. In the southern zone the limestone is mainly medium grained and most of it is suitable for cement. The northern and the southern zones run parallel to each other and extend eastwards from the south of Dhaurara. A reserve of about 16 million tonnes of limestone has been estimated in the two zones of the deposit more than half of which would be suitable for flux. The deposit is being worked by M/S. Orissa Cement Ltd.

The Kiringsera (Ludhkutali) deposit is situated 16 km. north of the Garposh railway station. The limestone exposures are traceable over a length of 720 m. with a maximum width of 300m. The beds strike EW with a dip of 35° to 40° northwards. A reserve of 2 million tonnes of limestone averaging 10-11 per cent insoluble was estimated by the Geological Survey of India.

Detailed proving operations undertaken by the Directorate of Mines, have revealed a total reserve of 30 million tonnes of limestone of all grades.

Representative chemical analysis :—

SiO ₂	CaO	MgO	R ₂ O ₃
8.70	49.44	1.58	..
7.72	50.10	0.91	2.00
10.30	47.93	1.15	1.90
14.50	44.29	2.35	4.50

The deposit situated at Kukarbhuka ($22^\circ 12' : 84^\circ 30'$) about 8 km. NW of the Sonakhan railway station is traceable from Gumardihi, on the east to Sialjor on the west, over a distance of

about 6 km. with a width of about 600 m. The beds strike in a EW direction and dip at 60° to 70° due south. The northern part of the deposit is occupied by limestone, while dolomite occupies the southern part. The dolomite is light grey, fine grained, massive in nature and suitable for furnace lining. This area is under the lease hold of M/s. Bisra Stone & Lime Company and the Tata Iron & Steel Company. The dolomites are now being worked by the Tata Iron & Steel Company. Since a greater part of the area is covered by alluvium the reserves have not been estimated.

There are three deposits at Katang ($22^\circ 14' : 84^\circ 29'$) about eleven km. north-west of Sonakhan railway station and are under the leasehold of B. S. L. Co. The limestone deposit is situated about one km. north of the village and the dolomites occur to its SE and SW. Limestone is traceable along the strike for a distance of about 720 m. beyond which on either side, it is covered with laterite. The width of the exposed limestone and dolomite is nearly 300 metres.

Since a greater part of the deposit is under water, the reserves of different grades of limestone have not been assessed.

The Khatkurbahal deposit ($22^\circ 17' : 84^\circ 29'$) is situated at about 16 km. NW of the Sonakhan railway station. The deposit is traceable for a distance of nearly 1 km. with a thickness of about 600 m. The general strike of the beds is EW and dipping 45° to 60° due north. The southern part of the deposit exposes limestone of good quality, whereas the northern part is all dolomitic. The reserve of limestone exposed in the southern part (40 m. width) is about 1.5 million tonnes.

The Purkapali deposit ($22^\circ 10' : 84^\circ 23'$) is situated at about 6 km. NW of the Garposh railway station. The deposit is traceable for 0.8 km. along the strike and 2.8 km. ($1\frac{3}{4}$ mile) across it. The greater width of limestone at this place appears to be due to folding by which the beds have been repeated. The general strike of beds is approximately NE-SW, dipping between 25° to 50° to the SE. The limestone for greater part of the deposit is flaggy and contains plenty of tremolite crystals, which are predominantly seen on the exposed surface. Minute specks of pyrite are also seen. The deposit is traversed by large number of quartz veins, thereby deteriorating the grade of the limestone. The deposit does not contain good limestone in any part. The area is held under lease by the Bisra Stone and Lime Company.

The deposit at Kaduapara ($22^\circ 9' : 84^\circ 22'$) is situated SW of the Purkapali deposit and is probably the south-western continuation of the same deposit. The main exposures of limestone are seen on the footpath,

in the Nala just SE and in another Nala about 0.8 km. east of the Kaduapara village. The beds dip 30° to 40° to the SE. It is associated with phyllites and for greater part of the deposit the limestone is flaggy and in general the quality of limestone is not better than that of Purkapali and, therefore, is of no commercial importance.

The Directorate of Mines has brought to light a 6 km. long belt of limestone around Kutra extending from Litibera on the east up to Telighana on the west. The limestones occur in detached patches. Detailed investigation has indicated that the limestone is high in silica content and probably can be used commercially only after beneficiation and blending with high grade ore.

The following additional deposits have been discovered and assessed by the Directorate of Mines :—

Name of Deposit	Location	Reserve in M. T.	Grade
1. Litibeda ..	22°15' : 84°25'	3.1	High silica limestone.
2. Kutra south ..	22°14' : 84°27'50"	14.3	Ditto
3. Telighana ..	22°13' : 84°25'	2.55	Ditto
4. Bimta ..	22°23'30" : 84°49'	0.76	Ditto
5. Luaram ..	22°27'30" : 85°01'30"	0.80	Ditto
6. Khairtola ..	22°20' : 85°0'30"	6.00	Dolomitic

Dolomite

The belt of dolomite occurring at the southern and south-eastern portion of Gangpur is fairly extensive and is exposed intermittently over a distance of 45 km. from the bed of the Koel, 6 km. NNW of the Jaraikele railway station in the east, to near Amghat 10 km. NE of the Rajgangpur railway station in the west. The width of the dolomite zone varies between 270 m. at the eastern part and 630 m. at the western end. The general strike of the dolomite is E W to ENE—WSW, with south or SSE dips varying from nearly vertical at places to a range between 45°—70°.

A few outcrops of dolomite are seen exposed at intervals along the bed of the Sapai river at the south-western part of Gangpur, extending in a NE—SW direction over a distance of nearly 25 km. from the junction of the Ib river to as far as Birbira.

Good quality dolomite occurs only in the middle portion (1) adjoining Tumnigudi near the Ghoriajor Road (2) between Bandubahal and Tillaimalti and (3) to the SW of Kinjirma.

The dolomite is medium grained, grey to white saccharoidal variety. From analysis, it was found that percentage of MgO varies from 18 to 20, CaO from 25 to 33 and silica within 5 per cent. There are also some impure bands but in average the quality is fair and may be suitable for furnace lining.

Exposures of dolomitic marble at Lefripara (22° 7' : 83° 48') extend outcropping intermittently along the Ichha Nala for a length of nearly 3 km. from the Suruguda village in the east as far as the road bridge NW of Lefripara. The width of the dolomite band exposed, varies from 30 m. to 78 m. The nearest railhead is at Belpahar.

Here the dolomite is white to light bluish in colour and finely saccharoidal. The surface is traversed by thin veins of quartz and stringers of limonite. The outcrops at the western extremity carries grains of calc-silicates like tremolite, diopside, etc. But the central part of the deposit is more or less pure dolomite. But on the whole the dolomite here is fairly low in silica content and magnesia is above 20 per cent and R₂O₃ is less than 1 per cent. This can be used for furnace lining. About 1.7 million tonnes of dolomite has been estimated for this deposit.

The vast reserves of limestone and dolomite of all grades in the district are summarised as follows :—

Flux grade, cement grade and high silica limestones.	Indicated reserve — 320 million tones (approximate)
Dolomite ..	280 million tonnes (approximate).

Extensive deposits of manganese ore occur in the district in two regions namely Bonai and Gangpur. Manganese-ore

The manganese deposits of the well known Singhbhum, Keonjhar-Bonai belt occur in highly folded shales of the Iron ore series and in gently folded sandstone and shales of Kolhan series which overlie unconformably the rocks of the iron ore series. The rock associated with the deposits are intensely weathered and the area is largely covered by laterite, reddish ferruginous soil and chert.

The deposits in the iron ore series are tabular bodies conformably enclosed by shales whose upper extension and outcrop are capped by laterite and chert.

The manganese deposits that are associated with the rocks of the Kolhan series and their weathering products occur as small lenses and layers conformably enclosed in shales as cross cutting stringers in shale and as pockets in laterite. Low grade manganese ore also occur as small stringers and pockets in purple sandstone interbedded with shales.

The deposits associated with the rocks of iron ore series are the largest and are most important source of the ore in the belt. They range in length up to 305m. and in thickness up to 6.10 m. and some of the deposits have been mined down dip distance of 12.2 m. The deposits consist of manganese oxide that commonly are cavernous and exhibit various textures like botryoidal and mamillary.

The ores consist of pyrolusite, psilomelane, and braunite.

The grade of ore even in individual deposits has a wide variation. Only about 30 per cent of the ores of the area contain more than 40 per cent MnO_2 . Some deposits yield small amounts of chemical and battery grade ore containing up to 97 per cent MnO . Iron oxides are the chief adulterants of these ores.

Important manganese deposits in the Bonai area in the Koira valley are as follows:—

- | | | |
|-------------|-------------------|--------------------|
| 1. Malda | (21°45' : 85°25') | 8. Nadidihi |
| 2. Koira | (21°50' : 85°15') | 9. Harischandrapur |
| 3. Kalmong | (21°55' : 85°15') | 10. Nuagaon |
| 4. Patmunda | (21°50' : 85°20') | 11. Mahulsukha |
| 5. Bhutra | (21°45' : 85°10') | 12. Sarkunda |
| 6. Dengula | | 13. Orahun |
| 7. Ranisal | | 14. Kusumdihi |

The manganese deposits in the Gangpur region are associated with the Gonditic rocks, mica schists and phyllites of the Gangpur series. The rocks are highly folded. The deposits occur in the core of an easterly plunging anticlinorium, in a belt of about 64 km. in length. These deposits are tabular conformable bodies having maximum length of 305 m. and thickness of 6.10 m.

Most of the deposits are associated with typical gondites composed of quartz and spessartite with subordinate amount of primary braunite, rhodonite and other manganese silicates. Pyrolusite and psilomelane type oxides and hollandite are the principal supergene minerals.

The Ghariajor (22°03' : 84°08'), Manmunda (22°05' : 84°09') to Gantbur (22°06' : 84°12') group of deposits form the most promising block in this sector. These group of deposits have been worked

since long. Occurrences of bedded manganese ore varying in thickness from 10 cm. to 15 cm. have been reported from Amasdegi (22°01' : 84°03') to Gobira (22°19' : 84°44') in the eastern part of Gangpur. The other deposits in this area are located at Pandrisila (22°20' : 84°43') Kuhupani (22°18' : 84°27'), Panchra (22°17' : 84°22'). Dandijamira (22°14' : 84°20') etc. The ore occurring at all these places except Pandrisila, Dandijamira, Kuhupani is of low grade.

The reserves of deposits in the Gangpur area are not known but are probably small. Many of the working mines have been exhausted.

Probable reserves for the Bonai-Keonjhar belt are of the order of 20.3 million tonnes of all grades, of which 7 million tonnes of all grades (30 per cent and above including the oxide ores) may be available from Koira valley alone.

Occurrences of quartz of practically pure variety have been reported from Bamra (22°03' : 84°17'), Dandapara near Birmirapur (22°24' : 84°44'), Kuchinda (22°05' : 84°42'), Targa (22°27' : 84°39') and around Birbira. They may be useful as source of quartz for ceramic and other purposes. Some bands of Barakar sandstones of the Hemgir coal field occurring near Amatpani (22°13' : 83°39'), contain good grade quartz sand in a matrix of Kaolin. A part of the hill about one mile SW of Jara (22°01' : 84°39') contains pure quartzites.

Powdery red ochre occurs as thin band in association with coal in the Baisundar Nala north of Gopalpur (22°03' : 83°42') overlain by fireclay. The band varies in thickness between 20 cm. to 30 cm. and extends over a length of about 2.5 km. up to Tiklipara (22°04' : 83°44'). A probable reserve of about 29,100 tonnes of red ochre has been estimated in the area by the Directorate of Mines, Orissa. This ore can be used for manufacture of paints, etc.

Fine to medium grained, pure green and grey soap-stones occur near Jharbera (21°49' : 84°53') and Bhaludungri (21°51' : 84°50') in Bonai subdivision. The ultrabasic rocks near Bonaikela (21°56' : 84°47') and Bargaon (21°53' : 84°48') contain minor pockets and lenses of soap-stone. The reserves of soap-stone in the area are estimated to be fairly large. Pure white and soft variety soap-stone has been recorded in a well in Biribara area at a depth of about 7 m. Occurrences of talc schists have been marked near Katepur (22°04' : 84°43') and Jarmal (22°03' : 84°11') and steatite schists near Suimba (22°02' : 85°09').

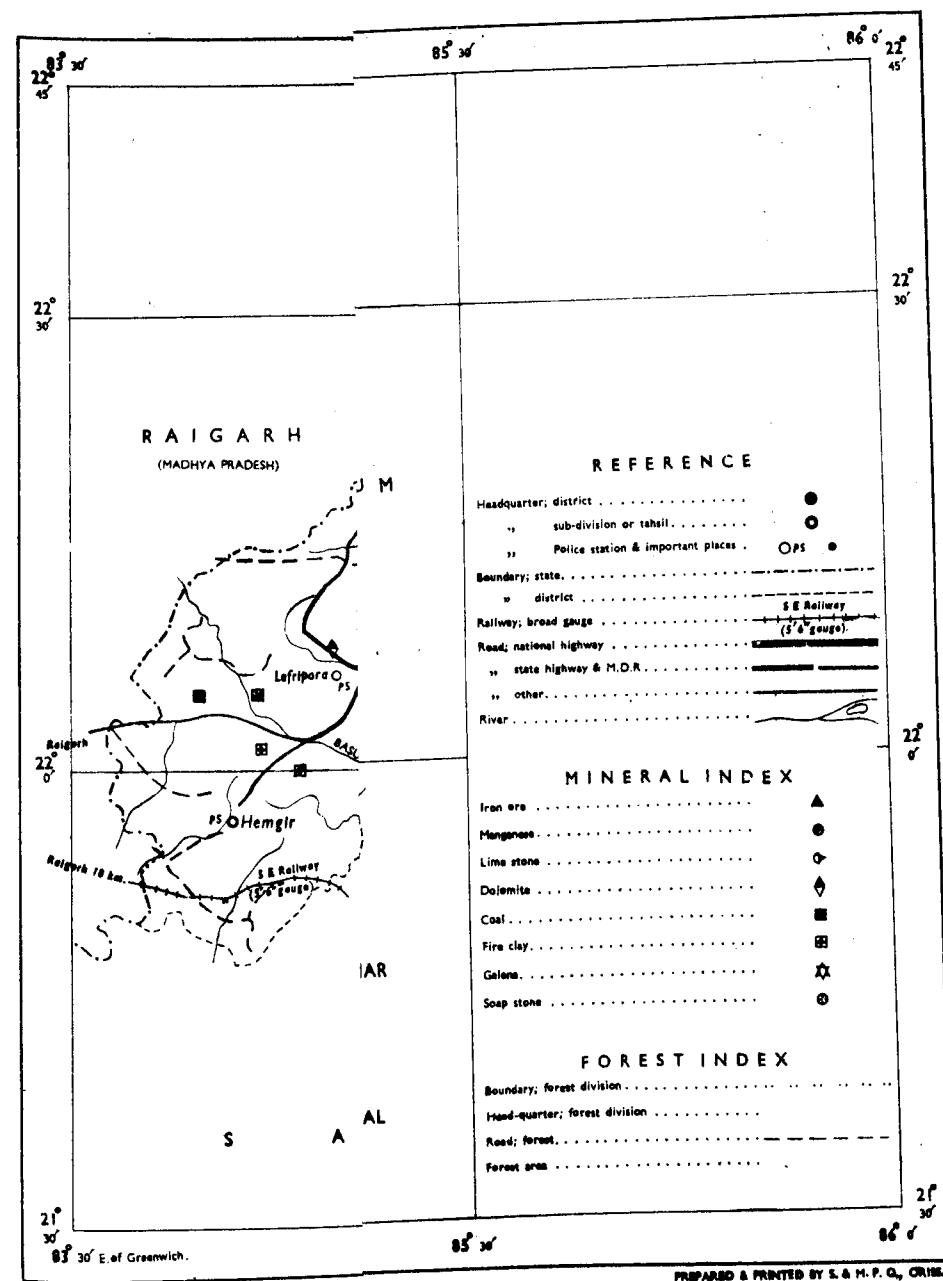
Numerous bands of talc and talcose rocks are also found associated with sheared chlorite-talc schists and ultrabasic rocks in the following places.

1. West-South-west and South-west of Bhaludungri.
2. Several places between Sisurdih and Bundhebhui.
3. Near Junadih and
4. At the western foot of the 1223 hill near Khajuribahal.

The district has not been surveyed by the Botanical Survey of India. The general treatment of Botany of the Feudatory States of Orissa by Cobden-Ramsay runs thus :—"The narrower Valleys are often terraced for rice cultivation, and these rice fields and their margins abound in marsh and water-plants. The surface of the plateau land between the valleys, where level, is often bare and rocky, but where undulating is usually clothed with a dense scrub-jungle in which *Dendrocalamus strictus* is prominent. The steep slopes of the hills are covered with a dense forest mixed with many climbers. *Sal* (*shorea robusta*) is gregarious; and among the other noteworthy trees are species of *Buchanania*, *Semecarpus*, *Terminalia*, *Cedrela*, *Cassia*, *Butea*, *Bauhinia* *Acacia*, and *Adina*, which are found also on the lower Himalayan slopes. Mixed with these, however, are a number of trees and shrubs, characteristic of Central India, such as *Cochlospermum*, *Soymida*, *Boswellia*, *Hardwickia* and *Bassia*, which do not cross the Gangetic plain."

Hooker and Thompson have divided the flora of Bihar and Orissa into four Botanical provinces, northern part of Orissa comprising one of them. Bihar and Orissa as a whole is characterised by complete absence of *Cupuliferac* a general scarcity of laurels and myrtles, and by a few or very few, *Ranunculaceae*, *Magnoliaceae*, *Cruciferae*, *Guttif. feraceae*, *Rosaceae*, *Umbelliferae*, and comparatively few *Orchidaceae*. Further, except for the genus *Ficus*, it possesses comparatively few of the *Urticales*. On the other hand, it possesses marked positive features in the presence, practically throughout, of the sal tree (but no other *Dipterocarp*) and in the almost general association with the sal in large numbers of individuals, if not species, of *Terminalia*, *Anogeissus*, *Bassia* (the Mohwa), *Butea* *Scleichera*, *Rubiaceae* (notably *Gardenia* and *Wendlandia*), *Acanthaceae*, *Bauhinia* *Diospyros* *Zizyphus*, *Cleistanthus*, *Nyctanthes* and of the grasses *Ischaenum anguisit-folium* (Sabai) and *Heteropogon Contortus* (spear grass). The presence of *Soymida febrifusa* and *Cleistanthus Ocollinus* in some localities is the effect of excessive browsing. The hill tops contain more of thorny species such as *Gardenia*, *Zizyphus* or trees which can remain leafless for about 6 to 8

months a year i e *Stereulia* *maria* *Amorpha* *...*



carpus marsupium) is an excellent wood, next in quality to Sal and teak

These rocks are also found associated

Gardenia, Zizyphus or trees which can remain leafless for about 6 to 8

months a year i. e., *Sterculia urens*, *Annogeissus* or *Cochlospermum* species. As per Champion's classification of flora of India, this district falls under Peninsular Sal type and dry deciduous mixed forest.

A type of forest is met in Raiboga, Birmitrapur and even up to Kuarmunda where the Sal forests exhibit a 'shola' type of vegetation. The undergrowth consists of only grass and in drier areas Sal, once removed, is replaced by grass.

The striking feature of the Bonai forest is the proportionately high percentage of pole crops between 8" to 12" diameter and scarcity of large trees. This unusual condition is due to shifting cultivation in the past and uncontrolled sleeper operation resulting in over exploitation.

The forests occupy an area of 2665 square miles (5826 square km. Forests or over 70 per cent of that of the district : reserved forests cover 995 sq. miles (2562 sq. km.) and protected forests 1670 sq. miles (3264 sq. km.) The entire forest area is under the administrative control of two Divisional Forest Officers with headquarters at Bonaigarh and Sundargarh. Sundargarh Division comprises 563 sq. miles (1440 sq. km.) reserved and 860 sq. miles (2200 sq. km.) protected forests and Bonai division covers 432 sq. miles (1122 sq. km.) reserved and 810 sq. miles (1064 sq. km., protected forests. The formation of Sundargarh forest division which started after the merger of Gangpur ex-State was concluded after transfer to its control of the forest areas of ex-Zamindary Estates, Sargipali, Raiboga, Nagra and Hatibari on 15th June, 1957 and Sarapgarh and Hemgir on 1st December 1963 under the provisions of the Orissa Estates Abolition Act.

The forests are of northern tropical dry deciduous type. The crop is a mixed one with Sal (*Shorea robusta*) as the dominant species. The eastern half of Bonai and the Rajgangpur range of Sundargarh division contain better quality of vegetation. The Sal which is the principal timber tree and more or less gregarious in these forests varies from a fairly pure to a mixed crop and occurs throughout the area. The Koiria forests and some portions of Toda Reserve contain best quality of Sal. A Sal forest is a delightful sight early in March at the commencement of the hot weather, when the trees come into leaf and flower. The following are the principal associates of Sal, commonly found in all the forests.

Asan or Sahaj (*Terminalia tomentosa*) being more durable than Sal is usually preferred for building houses. The wood of Kurum (*Adina cordifolia*) is used for making combs. The Bija or Piasal (*Pterocarpus marsupium*) is an excellent wood, next in quality to Sal and teak

and from this tree true gum is obtained. The wood of Gambhari (*Gmelina arborea*) being very light is excellent for furniture. The Kusum (*Schleichera trijuga*) is a very hard wood but its value consists in propagation of lac, its fruit is also eaten by aboriginal people. The Aonla, (*Phyllanthus emblica*) the leaves of which are used for tanning gives a good strong pole. The sour fruit is used medicinally, and is made into pickle and preserved. The flower of Mahula or Mahua (*Bassia latifolia*) is used as food by the poorer classes and for manufacture of country liquor; a thick oil is also pressed from its seed and used both for cooking and lighting. The outer covering of its fruit is also eaten. The Karda (*Claistanthus colinus*) gives a very hard and durable wood. The fruit of Char (*Buchanania latifolia*) is used as an ingredient of sweetmeats. The wood of Amltas, locally known as Sunari (*Casia fistiula*) is also used for house poles, this handsome tree is better known as the Indian laburnum, with its clusters of golden yellow flower which appear in April and May, the soft brown pulp round the seeds is used medicinally. The Tendu locally known as Kendu (*Diospyros melanxylon*) are common in all forests. From its heart wood a good ebony is obtained. Its leaves are used for making Biri and fruits serve as an article of food for the aboriginals. The Khair (*Acacia Catechu*) is an excellent wood. Its most important product is the resinous extract known as catechu. The Shisham or Sisoo (*Dalbergia latifolia*) another common tree, does not grow to a very large size and gives a very light wood excellent for furniture. Bandhan (*Ougeinia dalbergioides*) also gives a very strong wood. Among other fruit trees mango is commonly found in all the forests. A large number of edible root and indigenous drugs are also found.

The conspicuous shrubs are Dhatuki (*Woodfordia fruticosa*), Telai (*Wendlandia exserta*), Harssinghar (*Nyctanthes arbor-tristis*) and Kurdu (*Gardenia Gummifera*). Climbers are not abundant. The principal grass, Sabai or Panasi (*Eulaliopsis binata*) is used for paper pulp, rope making, and also used as fodder in young stage.

The provisions of the Orissa Forest Act, 1972 are in force since the 15th July 1972. Management of the forests are conducted strictly according to the prescriptions of the working plans. Indiscriminate felling is completely banned rendering homogeneous growth of vegetation possible.

Conservation
of wild life.

The shooting and hunting of wild animals and birds used to be regulated under the provisions of the Wild Birds and Animals Protection Act, 1912 and the Orissa Government Reserved Forests Shooting Rules, 1938. Cases of unauthorised shooting are severely dealt with.

Recently the Orissa Forest Shooting Rules, 1973 have been enforced in the entire State and apply to all the Reserved and Protected Forests. These Rules have been framed under the Orissa Forest Act, 1972 (Orissa Act 14 of 1972) and repeal the corresponding rules made under the Indian Forest Act, 1927 (Act 16 of 1927) and the Madras Forest Act, 1882 (Madras Act 5 of 1882). They aim at controlling and regulating the hunting, shooting, fishing, poisoning of water, setting traps or snares and collection of wild life in the reserved and protected forests. Hunting and shooting of any game during the close season as specified in schedule III of these rules separately in respect of each bird and animal are strictly prohibited. In Appendix I is given the list of species declared protected under these rules throughout the year majority of which are found in the district.

In keeping with the extensive and splendid forests, the district is FAUNA the abode of numerous big game and rich in varieties of animal lives. The forests of Sundargarh division are comparatively poorer than Bonai in regard to wild life.

The elephant, *Elephas maximus indicus* (Hati) is fairly numerous. Mammals They are mostly seen in the east and west of Bonai and usually move in a herds, occasionally causing serious damage to the standing crops, specially rice fields near the jungles.

The wild buffalo, *Bubalus bubalis* (Bana mainshi)—“The wild buffalo”, states L. E. B. Cobden-Ramsay “was at one time quite plentiful in Gangpur State (present Sundargarh and Panposh subdivisions) along the valley of the Brahmani and at Kumarkela some twelve miles west, but the advent of the railway proved his death-knell, and to-day there is not a single specimen left in Gangpur or Bonai. In 1900 the sole survivor, a solitary bull, was killed by a villager in the north-east corner of Bonai. Occasionally a solitary buffalo crosses the border from Jashpur to Gangpur”.

The bison, *Bos gaurus* (Gayal), a very retiring animal, is generally seen in the denser and remoter forests. It often lives in small herds and generally grazes in close proximity to elephants.

Among the principal carnivora may be mentioned the tiger, panther, hyaena, wild-dog, jackal and fox.

The tiger, *Panthera tigris* (Bagha) at the enumeration in 1968 numbered 28. The Census of 1972 put their figure at 6, two in Bonai and four in Sundargarh division. In the past, Bonai forests had an unenviable reputation for the number of man-eating tigers

with which they were infested. The aboriginal women frequently fell a prey to these beasts when they entered the jungle for gathering roots and leaves.

The panther, *Panthera pardus* (Kalara-patria) is found in great numbers in almost all the forests. It seldom exceeds two metres in length. It is mostly found in small hills adjoining the cultivated area, where it levies toll from the flocks of goats and sheeps. It is seldom found in the largest and more extensive forests. Black panther (*Panthera pardus negri*) is also met with in Bonai forests. A man-eating leopard is much more dangerous than a man-eating tiger.

The hunting leopard, *Acinonyx jubatus* (Chita), now extinct used to abound in the forests west of Sundargarh in Hemgir area.

The jungle cats, *Felis chaus* (Bana Biradi) and *Felis bengalensis* are fairly common in the forests. They usually frequent both the forest and open grass country and are very destructive to smaller ground games, such as peafowl, partridge and hare, etc.

The large civet cat, *Viverra zibetha* and the plam civet *Paradoxurus hermaphroditus*—The former is met with but not common while the latter is fairly common and seen mostly in areas adjoining the villages. They are very destructive to poultry.

The common grey mongoose, *Herpestes edwardsi* (Hatianeula), is occasionally seen in rocky hills in Sundargarh. It is usually larger in size and more yellow in colour than the common mongoose and has the tail tipped with black.

The jackal, *Canis aureus* (Bilua) is found all over the district usually in the scrub jungle near the villages and avoids dense forests.

The common fox, *Vulpes bengalensis* (Kokisial) is found in all the open parts of the district and is seldom seen in dense forests. It feeds chiefly on small birds and animals. It makes a fine pet when tamed.

The giant squirrel, *Ratufa indica bengalensis* (Gunduchi-musa) is a very handsome squirrel and is common in all the dense forests and lives in the branches of the tallest trees. The colour is chiefly of a chestnut red above with the rump and tail black, the lower parts are buff. They are easily tamed and make very amusing pets when taken young. Their delicate flesh is much appreciated by the forest tribes. The common striped squirrel, *Funambulus pennanti* is plentiful.

The common giant flying squirrel, *Petaurista petaurista*. "Although this variety of the large flying squirrel", writes Cobden-Ramsay "is supposed to be peculiar to Burmah, Mr. F. D. Whiffin has obtained several specimens in Gangpur and Bonai and in each case the colour has been the same ash coloured above and white on the belly. A specimen was sent by Mr. Whiffin to the Calcutta Museum in 1892. They are entirely nocturnal in their habits, and feed on fruits, nuts and insects, and breed in the holes of trees. With the parachute extended they have been seen to cover a flight of quite 100 yards".

The common porcupine, *Hystrix indica* (Jhinka) is met with in all the rocky hills. It is rarely seen due to its nocturnal habits. It feeds chiefly on roots.

The hare, *Lepus nigricollis* (Thekua) is found but rarely, mostly in bush jungles.

The pangolin, *Manis crassicaudata* (Bajrakapta). This quaint animal is seldom met with. It lives in deep burrows and feeds chiefly on insects, its favourite diet being the white ant. It grows from 2 to 2.5 feet (60 to 75 centimetres) in length and is covered with scales of a light olive colour.

The hyaena, *Hyaena hyaena* (Gadhia) is very common and is to be found over any carcase. They are nocturnal in habit and at times carry off dogs and goats.

The wild dog, *Cuon alpinus* (Balua kukura) is very rare but extremely destructive to game. They are of two varieties. The larger variety appears to be most common than the small light coloured one. The larger variety stands higher than a jackal and in the cold season has a bright chestnut brown coat: the ears are erect, the tail very bushy with a dark tip. The smaller variety is grey in colour. It is said to be most destructive to game, hunting in far larger packs than the larger ones. Tigers and leopards are known to have been killed by them.

The wolf exists but is very rare and is found only in pairs. They are destructive to goats and sheep.

The common Indian sloth bear, *Melursus ursinus* (Bhalu) is found all over the forests generally in caves in the hot and wet weathers and in heavy grass and bushes during the cold weather. It feeds chiefly on the mahua flowers (*Basia latifolia*), berries and white ants. They are a menace to sugarcane and maize.

¹. Feudatory States of Orissa.
(34 Rev.—3)

Sometimes a bear develops carnivorous tendencies. They seldom attack man except when disturbed, yet many people are killed or injured by them. A mother bear with cubs is formidable when met at close quarters. They are often met with in twos or even threes, a mother and cubs or a male and female together.

The ratel or honey-badger, *Mellivora capensis* measures about 3 feet (one metre) in length. The upper part of its body is ashy-grey and the rest coal-black. It is entirely nocturnal in habits and is seldom seen. It lives chiefly in rocky caves in the hills and feeds on lizards, insects and honey.

The Sambar, *Cervus unicolor*, the largest of Indian deer, is found in all the fairly thick forests and generally frequents the high and most inaccessible hills. It is nocturnal in its habits grazing chiefly at night and returning to the hill tops for rest during the day.

The spotted deer, *Axis axis* (Chital) is common in all the forests. It is generally found in small herds preferring open forests close to water, and is seldom met in more hilly tracts. They are gregarious in their habits and less nocturnal than the Sambar and care little for the neighbourhood of man.

The Indian mouse deer, *Tragulus meminna*, the smallest of its tribe is found only in dense forests living in the hollows of trees on the ground. Owing to its diminutive size it is seldom seen. It stands 10 to 12 inches (25 to 30 centimetres) at the withers and in colour is brown with white or buff spots and longitudinal stripes.

The muntjac or barking deer, *Muntiacus muntjak* (Kutra) occurs but is seldom seen. It is often heard and easily recognised by its dog-like bark.

The Nilgai, *Boselaphus tragocamelus*, is found specially in open forests, where it feeds largely on wild berries. One of its favourite fruits is the Aonla (*Phyllanthus emblica*) which it devours in large quantities. It is generally found in small herds.

The four-horned antelope, *Tetracerus quadricornis* (Charisinga) is fairly common, the female and young male so much resemble the barking deer that they are frequently mistaken for the latter animal.

The langur or hanuman (*Presbytes entellus*) and the bandar (*Macaca mulatta*)—of these, the former is plentiful. They are found both in the forests and in cultivated areas. The langur is destructive to crop, specially to gram and pulse. It is regarded as sacred.

The Indian boar, *sus cristatus* (Ghusuri) is very destructive to crops.

The otter, *Lutra perspicillata* (Ud) is also found in this district.

A fair number of game birds are met with in the district. The Birds common peafowl, *Pavo cristatus* (Mayura), the National Bird of India, is numerous. Two kinds of spurfowl, *Galloperdix spadicea* the common red spurfowl, and *Galloperdix lunulata* the painted spurfowl are found almost in all the forests, but the latter is not very common.

The black partridge, *Francolinus francolinus* and the grey partridge *Francolinus pondicerianus*, are found but rarely. The hornbill, *Tockus birostris*, is often met with in forest tracts.

During the cold weather great flocks of geese, ducks and teal are found in the district. The two species of whistling teals and the little cotton teal are common.

The common sandgrouse, *Pterocles exustus* and the painted sandgrouse, *Pterocles indicus* are also met with. The Jungle bush quail is found in all the forests.

The district is quite rich in other common birds, both terrestrial and aquatic.

Crocodiles of large size are not found in the district. Both the Reptiles snub-nosed crocodile and the long-nosed fish-eating Tania or Gharial (*Gavialis gangeticus*) are found in the rivers. The Godhi or monitor lizard (*Varanus monitor*) is commonly seen. They are likely to be exterminated soon due to the rising commercial value of their skin.

Various species of snakes occur in the district. Among the principal poisonous snakes may be mentioned the two varieties of cobra, *Naja naja kaouthia*, locally known as Tampa, and *Naja naja naja*, Naga or Gokhara, and the Chandra-boda or the Russel's viper *Vipera russelli*, the Kaudia Chiti or the common Krait, *Bungarus caeruleus*. The common non-poisonous snakes are the Ajagara (*Python molurus*), the Dhamana *Ptyas mucosus*, the Kandanalala (*Natrix stolata*), the Dhanda (*Natrix piscator*), the Domundia (*Eryx conicus*) and the Telia sapa (*Typhlops brahminus*).

The large deep pools in the beds of the rivers, the tanks and the Fish water reservoirs contain numerous small and large species of fish. The principal among them are Rohi (*Labeo rohita*); Mirikali (*Cirrhinay mrigala*); Bhakur (*Catla catla*); Sala (*Ophiocephalus marulius*); Seula (*Ophiocephalus striatus*); Balia (*Wallago attu*); Ilishi (*Hilsa ilisha*) and various other species.

The wild animals and reptiles annually take a heavy toll of human lives. The following is the mortality figures for the years 1968—71.

Period	Death due to snake bite	Death due to attack of wild animals				Total
		Ele-phant	Tiger & Panther	Bear & Wolves	Other wild animals	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1968	61	..	1	1	15	78
1969	90	..	..	2	14	106
1970	55	..	..	1	..	56
1971	59	..	..	..	2	61

CLIMATE

The climate of this district is characterised by a hot dry summer and well distributed rainfall in south-west monsoon season. The cold season commences in November and lasts till the end of February. The hot season follows thereafter and continues till about the end of June. The south-west monsoon season starts from mid-June and continues to the end of September, October and November constitute the post monsoon season.

Rainfall

Records of rainfall are available for only two stations in the district for 42 and 68 years. Appendices II and III give the rainfall at these two stations and for the district. The average annual rainfall in the district is 1647.6 mm (64.86"). The rainfall is fairly uniform in the whole district. About 86 per cent of the annual rainfall is received during the monsoon months extending over June to September, July being the month with heaviest rainfall. The variation in the rainfall from year to year is not large. In the period 1901 to 1948 the annual rainfall was the highest in 1943 when it amounted to 138 per cent of the normal. The lowest annual rainfall which was 73 per cent of the normal occurred in 1924. In the same 48 year period, the annual rainfall less than 80 per cent of the normal occurred in only two years. It will be seen from Appendix III that the rainfall in the district was between 1400 and 1900 mm. (55.12" and 74.80") in 37 years out of 47.

On an average there are 78 rainy days (i. e. days with rainfall of 2.5 mm. 10 cents or more) in a year in the district.

The heaviest rainfall in 24 hours recorded in the district was 333.5 mm. (13.13") at Bonai on July 20, 1920.

Temperature

There is no meteorological observatory in the district. The following description of the climate is based on the records of the meteorological observatories in the neighbouring districts where the climatic conditions are very similar to those in this district. The hot season

commences by about the beginning of March when temperatures begin to rise. May is the hottest month with the mean daily maximum temperature at about 41° C (105.3° F) and the mean daily minimum at about 27° C (80.6° F). On individual days the maximum temperature may reach 47° C (116.6° F). The heat in May and the early part of June prior to the onset of the south-west monsoon is trying. The onset of the monsoon by about mid-June brings some relief. In between spells of rain the weather is oppressive due to the high moisture content of the air. In September due to breaks in the monsoon, the day temperatures increase slightly and this increase continues during October, but the nights become progressively cooler from October. From about the middle of November, day temperatures also begin to decrease rapidly. December is usually the coldest month with the mean daily maximum temperature at about 27° C (80.6° F) and the mean daily minimum at about 12° C (53.6° F). In the wake of western disturbances passing across northern India in the cold season, the district is sometimes affected by cold waves when the minimum temperature may go down to 4° or 5° C (38.2° or 41.0° F).

The relative humidities are high in the south-west monsoon season. Later the humidity decreases and during the winter season the air is fairly dry. The driest part of the year is the summer season when the relative humidities are low especially in the afternoons when they are about 25 to 30 per cent. Humidity

During the south-west monsoon season the skies are heavily overcast with clouds. In the latter half of summer and the post monsoon months there is moderate cloudiness. In the rest of the year the skies are generally clear or lightly clouded. Cloudiness

Winds are generally light to moderate with some increase in force in late summer and the south-west monsoon season. In the post monsoon and winter months winds are mainly from directions between north and east. In March winds are variable in direction. By April westerlies and south-westerlies become more common, and these are predominant during the period from May to September. Winds

Storms and depressions from the Bay of Bengal during the monsoon season cross the east coast of India and move in a westerly to north-westerly direction. These cause widespread rain and strong winds. Occasionally storms from the Bay of Bengal in October may also affect the district or its neighbourhood. Thunder-storms occur during all the months of the year, their frequency being the least in November and December and highest during the monsoon season. Occasional dust storms and dust raising winds occur in the summer months. Special Weather Phenomena

APPENDIX I

Protected species throughout the year

English name	Local name
BIRDS	
The common peafowl (<i>Pavo cristatus</i>)	Mayura
ANIMALS	
Marbbed Cat (<i>Pardofelis marmorata</i>)	Meghua Chita Biradi
Wild Buffalo (<i>Bubalus bubalis</i>)	Bana Maini
Indian Pangolin (<i>Manis crassicaudata</i>)	Bajrakapta
Crocodile (<i>Crocodylus porosus</i>)	Kumbhira
Govial (<i>Gavialis gangeticus</i>)	Thantia Kumbhira
Black Buck (<i>Antelope cervicapra</i>)	Bali Harina
Four horned Antelope (<i>Tetracerus quadricornis</i>)	Chousingha
Tiger (<i>Panthera tigris</i>)	Mahabala Bagha (Except man-eater and cattle-lifters when specially declared dangerous by the competent authority).

APPENDIX II

Normals and extremes of rainfall

Station	No. of years of data	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	Highest annual rainfall as per cent of normal year **	Lowest annual rainfall as per cent of normal year **	Heaviest rainfall in 24 hours * Amount Date (mm.)
Rajgangpur	49 a	20.6	38.3	16.8	16.8	16.8	32.0	239.0	476.5	468.9	232.2	77.2	12.5	5.3	149 (1943)	61 (1924)	279.9 1938 Aug. 14th
..	b	1.3	2.3	1.6	1.3	2.5	11.0	19.7	19.1	19.1	11.9	4.2	0.8	0.5	76.2		
Bonai	45 a	19.1	35.1	21.8	23.4	50.3	262.9	483.9	447.5	215.7	74.7	19.6	5.3	5.3	168 (1920)	75 (1916)	333.9 1920 July 20th
..	b	1.3	2.1	1.8	2.0	4.1	11.5	19.5	18.6	12.7	4.4	1.3	0.5	0.5	79.8		
Sundargarh District	a	19.9	36.7	19.3	20.1	41.1	250.9	480.2	458.2	223.9	75.9	16.1	5.3	5.3	138 (1943)	73 (1924)	.. ..
..	b	1.3	2.2	1.7	1.7	3.3	11.3	19.6	18.9	12.3	4.3	1.1	0.5	0.5	78.2		

(a) Normal rainfall in mm., (b) Average number of rainy days (days with rain of 2.5 mm. or more).

* Based on all available data upto 1948

** Years given in brackets.

SUNDARGARH

APPENDIX III

Frequency of Annual Rainfall in the District

(Data 1901—1950)

Range in mm.		No. of years
1201—1300	..	2
1301—1400	..	3
1401—1500	..	4
1501—1600	..	9
1601—1700	..	9
1701—1800	..	9
1801—1900	..	6
1901—2000	..	2
2001—2100	..	1
2101—2200	..	0
2201—2300	..	2

47 years data only available.

CHAPTER II

HISTORY

Man has been living in Sundargarh district from very early times. He has left evidence in the shape of stone tools. As he could not live without water, the sites where the tools have been found must have been near sources of water. It is very understandable why so many of them have been found associated with river gravel. PRE-HISTORY

The tools of Early Stone Age were hand-axes, cleavers, scrapers, etc. They have been found at Bishalbury, Jangra, and Satkuta. Early Stone Age

The tools of Middle Stone Age were flakes. They have been found at Bishalbury, Bhanjgarh, Bhaludungri, Bonaigarh, Bisra, Jagannathposh, Jhirpani, Khadiakudar, Khuntgaon, Tumkelaghat, and Kurhadi. The tools found at Bonaigarh were in laterite quarries. Those found at Bhaludungri 5 km. to the south of Bonaigarh were on the slope of a quartzite hill. Middle Stone Age

During the Neolithic Age polished stone celts were in use. Nine microliths made out of red jasper were found at Bhaludungri. The other sites are Khuntgaon in Bonai subdivision in river Korapani, and at Jangra in the gravel of the Brahmani. A. C. Mittal in his book "An Early History of Orissa" thinks that Neolithic man made use of rock shelters in this district. These are found at Ushakothi, Manikmunda, and on a hill called Akhada Parvata near the ancient site of Belsaragarh. Late Stone Age or Neolithic Age

A significant discovery in the realm of pre-historic archaeology is the paintings found on a rock shelter at Manikmunda. The site is situated inside a reserved forest, about 5 km. to the south-west of Hemgir. To approach this site, one has to proceed along the Hemgir-Kanika road and turn to the right to reach the village named Sukhabandh. Then, one has to take the road branching off to the right from the Siva temple at Sukhabandh, and after proceeding to a short distance one reaches this place of great antiquarian interest. Here, paintings in red ochre or hematite illustrating hunting and other scenes are found in the inner walls of a rock shelter. The rock shelter is about 50 ft. in length. Similar paintings of the pre-historic man have been found at Singhanpur¹ in Madhya Pradesh, Ulapgarh in Sambalpur district, Gudahandi in Kalahandi district and Ushakothi in Sundargarh district. This seems Pre-Historic Paintings

¹. Amar Nath Dutta, Pre-historic Relics and the Rock paintings of Singhanpur, Calcutta—1931.

to suggest the close cultural inter-relationship that prevailed in pre-historic period. It may also be pointed out that the region formed a single political unit during the early historic period and was known as the South Kosala.

PROTO-HISTORY

The pictographic writing found on a hill range called 'Ushakuti' (also called Ushakothi) is an important discovery which throws light on the proto-historic culture of the region. Ushakothi is situated on a hill range within the jurisdiction of Lefripara police station of Sundargarh district. There are two villages named Amatpani and Rajbahal near the site. According to local traditions, Rama is said to have stayed at Ushakothi along with Lakshmana and Sita. The hill range consists of 3 hills, the eastern one is called Ushakothi. The hill situated in the middle is styled as the Nandi hill : for in the western hill Ramachandra is said to have worshipped Siva during his stay at the place. The site of Ushakothi is at once picturesque and awe-some. The record found at Ushakothi may be compared with the Vikramkhola inscription¹ discovered from Sambalpur district. The engraving, which we have tentatively taken to be an inscription, has not yet been deciphered.

ARCHAEOLOGY OF THE HISTORIC PERIOD.

As noted above, the Sundargarh district is rich in pre-historic archaeology whose importance has barely begun to be known. We present below the archaeological materials, so far known, of the historical period which are a valuable source for the reconstruction of the history and culture of the region.

Inscriptions

Three copper plate inscriptions have so far been discovered from the district. Of these, one belongs to Tunga dynasty, one to Mayura dynasty, and the remaining one to the Paramara-Sekhara dynasty of Gangpur.

Bonai copper plate grant of Vinita Tunga.

The Bonai copper plate grant of Vinita Tunga was sent by Rai Bahadur Sarat Chandra Roy from the Bonai State to Mahamahopadhyaya Haraprasad Shastri who edited the plate in the *Journal of Bihar and Orissa Research Society*². The inscription is engraved on a single copper plate measuring 9" by 6½". The royal seal soldered on it bears in relief a couchant figure of deer. The charter was issued by "Sri Vinita Tunga Deva" whose name also appears on the seal. Vinita Tunga is mentioned in the grant as a son of Khadga Tunga and the grandson of Vinita Tunga I who belonged to the Sandilya gotra and came from Rohitasi (Rohtasgarh). He was ruling over Yamagartta Mandala and he is endowed with subordinate

¹. Vide. *Sambalpur District Gazetteer*, pp. 551—554.

². Vide JBORS, Vol. VI, Plate II, pp. 236—241

titles like *Maharaja Ranaka*. The donee was a Brahman named Harsanala belonging to the Haritagotra. The village Konjari mentioned in the grant has been identified with Keonjhar.

The Bonai copper plate grant of Udaya Varaha was also published by Haraprasad Shastri¹. In this inscription, he wrongly read the name of *Talai mandala* but the correct reading of it is *Bonai Mandala*². The record reveals that *Bonai Mandala* was ruled by kings belonging to the Mayura family which originally came from Chitrakuta. The charter was issued by Udaya Varaha.

Bonai copper plate grant of Udaya Varaha

The Barapali copper plate grant of Hambhir Dev has been discovered from the village Barapali situated in the Bargaon police station of Sundargarh district³. The charter was issued by king Hambhir Dev who used imperial titles like Maharajadhiraja, and Maharaja. The record states that Hambhir Dev, donated a village named Barapali to Rajaguru Sri Narayan Bisi on the occasion of Solar eclipse. Barapali mentioned in the plate is obviously identical with the village Barapali, the find spot of the plate. King Hambhir Dev may be taken to be a member of the Paramara-Sekhara royal family of Gangpur. This Raj family ruled over Gangpur till 1948 when the State merged with Orissa.

Barapali copper plate grant of Hambhir Dev

A stone inscription was discovered at Akharsila, which is a village about 24 km. from Bonaigarh on the old Bamra-Bonai road. In 1936, under the direction of Rai Bahadur Chunilal Ray, the then Diwan of the Bonai State, a photograph of the inscription was sent to Calcutta. Sri S. N. Misra reports, "The word TA-LA-LI which was at the top of the inscription was read without any difficulty, but the reading of the other lines was difficult because of their worn-out condition and also because the surrounding stones blur the scene"⁴. We believe, the word *Ta-la-li* is a confusion for Bonai. However, further examination of the inscription is necessary to throw light on this matter.

Stone inscription

In June 1969, the Superintendent of Orissa State Museum, Bhubaneswar, brought four gold coins together with broken pieces of a gold chain having eight rings, and broken bits of one gold ring from the Nizarat officer of Bonai. On examination it was noticed that the collection contains one gold coin of Kushana King Huvishka. The other three pieces, bearing various figures on one side only, are not coins but copy of Huvishka's coins and were meant to be decorative. The gold coin of

Coins

¹. Vide JBORS, pp. 241—45

². JBRS, Vol. XXXI, Pt. III, pp. 159—71

³. N. K. Sahu (ed), *New Aspects of History of Orissa, Sambalpur University* 1971, pp. 52—54.

⁴. JKHRS, Vol. I, No. 2. p.166.

Huvishka (wt 8.500 gms.) is a unique discovery, and is a valuable addition to our knowledge of the Kushana coinage. The condition of the coin is fairly good. The coin was used as a pendant; is provided with a perforated projection at the top for suspension. The find of a Kushana gold coin in the Sundargarh district is interesting; a number of imitation Kushana coins (all in copper) along with the coins of both Kanishka and Huvishka have been brought to light in Balasore, Puri, Ganjam, Keonjhar, and Mayurbhanj districts of Orissa. We have a number of theories attempting to explain the discovery but till now it remains a subject of controversy. Some scholars suggest that the territory was once conquered by the Kushanas; but it is difficult to support this speculation. The use of gold coin and other three pieces representing copy of Huvishka's coins for the ornament purpose seem to suggest that Kushana coins were not the currency of Orissa, and had come there only for the ornament purpose. Though Orissa, in all probability, was not conquered by the Kushanas, foreign influence over Orissa can not be altogether ignored. This finds corroboration in the Asanpat inscription in which king Satrubhanja has been styled as a Devaputra¹. Some scholars have attempted to explain the presence of the Kushana coins in Orissa by assuming the Murunda occupation of Orissa².

Temples

The district contains a number of temples; these, however, have not been exhaustively surveyed or even counted. Most of these temples being built in comparatively later times, do not possess any artistic or architectural importance. But when classified on religious basis, they throw light on the influence and popularity of different religions in the region.

The Bonai copper plate grant of Udaya Varaha, which describes the king as a *Parama Saugata* (devout Buddhist) reveals that the region came under the influence of Buddhism. It is believed that the Varaha rulers built a Vihara on the bank of the Brahmani river at the modern village of Akharsila. S.N. Misra thinks that the Buddhist images which have been placed in front of a Siva temple at Deogaon, 5 km. to the west of Bonaigarh, may have been the images of that Vihara³.

Temples in honour of Jagannatha at Sundargarh, Bargaon, Raiboga, Talpatia, Kumarkela, Kupsinga, Rupidihi, Karamdihi, Bonai, etc., show that people had great reverence for Jagannatha of Puri. The Samalai temple at Sundargarh indicates the hold of goddess Samalai of Sambalpur on the religious life of the people.

¹. OHRJ, Vol. XIII, No. 2 p. 4

². *Ancient India* No. 5, pp. 100—101;

N. K. Sahu, Utkal University History of Orissa, Vol. I, pp. 418—28.

³. JKHS, Vol. I, No. 2, p. 166

Saivism was also a popular religion in this region, and there are number of Saiva shrines of which mention may be made of Dhabaleswara at Subdega, Dhabaleswara at Tildega, Dhabaleswara at Deogaon, Siva temple at Sukhabandh, Mahadeva temple at Sundargarh, Jhadeswara temple at Jouda and Kopeswara, and Baneswara temples at Bonai. The Chandrasekhar temple at Panposh attracts a number of devotees from distant places particularly on the Sivaratri day.

Gopaljew is worshipped at Bonai, while shrines in honour of Banshidhari exist at Deogaon, Kandakala, Bhaludungri, Kalaiposh, Jhirdapali, etc. Shri Ramji is worshipped at Indrapur and at Sundargarh. The Radha-Krishna cult had its influence upon the people and a Raja of Bonai, who appears to have been a follower of this cult, erected a temple for the worship of Radha and Krishna.

Stray images are found at different places in the district. Among the stray sculptures mention may be made of images of Ganesa and Durga found at the fortress of Junagarh. Several detached sculptures including an image of Bhairava, are to be found in front of a Siva temple at Sukhabandh near Hemgir. These architectural fragments evidently belonged to an earlier temple which stood at the place.

Stray
Images

The district contains the remains of a few forts which offer examples of the military architecture. The forts are Belsaragarh near Tangarpali, Jamsaragarh near Bisra, Junagarh near Hemgir, and Masabiragarh in Lefripara police station. In the Bonai subdivision, an elevated place near village Khadiakudar, which was probably the remains of a mud fort, is called Bhanjgarh, for according to local tradition, the Bhanja kings of Keonjhar used it as a camping place in their wars with the rulers of Bonai. Archaeological excavation and exploration of the forts may reveal to some extent their history. Of all the forts mentioned above, the old fort at Junagarh, is the largest of the ruined ones. Junagarh is about five kilometres to the south-west of Hemgir. Situated on the top of a hill and surrounded by hills which served as ramparts, it is a naturally formed hill fortress. A perennial stream flows on all the four sides of the central hill which houses the main fortress. Thus the stream serves the purpose of a natural moat. The top of the central hill is approached by a flight of steps. On the top, there is a huge piece of stone from which one can have a good view of surrounding rampart-like mountains. The armed guards placed on the ramparts could communicate through signs with the king if he stood at this spot. It is believed, the fort belonged to the local Kesari kings who ruled in the area several centuries ago.

Ruined
Forts

Traditionally, the territory of what is now called Sundargarh district formed a part of Dakshina Kosala. Kosala was an important Mahajanapada of Northern India and it continued as a single unit¹ atleast upto the rise of the Mauryas. But at a later period, a new kingdom called Kosala grew in the Vindhya region. Evidently, it was designated as *Dakshina Kosala* in order to distinguish it from *Uttara Kosala*. It is difficult, however, to say when and how the term Dakshina Kosala came into currency. Pargiter² believes that Rama's long stay in the region gave rise to this term, while Dr. D. C. Sircar³ asserts that South Kosala was colonised by the Ikshvaku princes of Ayodhya. By the time of poet Kalidasa, South Kosala had been already known as a distinct political unit, for in the *Raghuvamsa*⁴ he seems to suggest that Kusavati, the capital of Kusa, was located on the Vindhyan ranges. The territorial limits of South Kosala varied depending upon the ability and power of its ruler. In the widest sense, South Kosala comprised the modern districts of Raipur and Bilaspur in Madhya Pradesh and the district of Sambalpur, Sundargarh, Balangir, and Kalahandi in Orissa.⁵

An inscription discovered from Asanpat in Keonjhar⁶ district (c. 3rd—4th century A. D.) reveals that a king named Satrubhanja ruled over the kingdom of Vindhyavati, which probably denoted a vast kingdom extending up to the Vindhyas. It is thus apparent that Sundargarh region was also under the control of King Satrubhanja. The Vindhyavati, ruled by Satrubhanja, may be said to be the same as South Kosala. It is known from the Allahabad pillar inscription⁷ that South Kosala was ruled by Mahendra in the middle of the 4th century A. D. Mahendra is mentioned as one of the 12 kings defeated by Samudragupta. This proves the extension of the Gupta influence over South Kosala which may have included, besides the districts of Raipur, Bilaspur, and Sambalpur, a portion of Sundargarh district.⁸ The Balaghat

¹. Vishuddhananda Pathak, *History of Kosala*, Delhi, 1963, pp. 45—46

². F. E. Pargiter, *Ancient Indian Historical Tradition* London, 1922, p. 278.

³. R. C. Majumdar and A. S. Altekar (ed). *The Vakataka Gupta Age*, Banaras, 1954, p. 78.

⁴. *Raghuvamsa*, XVI, 32, XV. 97.

⁵. S. C. Behera, *Historical Geography of South Kosala*, *New Aspects of History of Orissa*, edited by Dr. N K. Sahu, Sambalpur University, 1971, p. 24.

⁶. OHRJ, Vol. XIII No. 2, pp.1—8

⁷. C. I. I. FI, Vol. III, p.7.

⁸. This appears plausible in view of the fact that Kosala and Mahakantara mentioned in the Allahabad pillar inscription have been located by scholars respectively in the Balangir-Sonepur region, and the forests of Koraput and Kalahandi districts. (See Balangir District Gazetteer, p.43)

plates¹ and the Ajanta inscription² seem to suggest that South Kosala was controlled by the Vakatakas. However, it is not possible to be definite as to what relation Sundargarh region had with the Vakatakas.

From the early medieval period different portions of the present Sundargarh district were under the control of different ruling families. Brief historical sketches of these ruling families, based on available evidence, are given below.

Towards the close of the fifth century A. D., a chieftain named Sarabha founded a kingdom in the eastern part of South Kosala with Sarabhapura as the headquarters. Sarabha, the founder of the dynasty, is identical with Sarabharaja, maternal grandfather of Goparaja of the Eran Inscription³ (Gupta year 191—511 A. D.) of the time of Bhanugupta. It is known from the Pipardula and Kurud grants⁴ that he was the father of Maharaja Narendra. Scholars like Dr. V. V. Mirashi⁵ and L. P. Pandey⁶ identify the city of Sarabhapura, apparently named after Sarabha, with Sarapgarh in the former Gangpur State, now included in the Sundargarh district of Orissa. However, it may be mentioned, that there is difference of opinion among the scholars as regards the correct identification of Sarabhapura. The identification with Sarapgarh of Sundargarh district, seems to be quite satisfactory in the present state of our knowledge. It is evident that in course of time Sarabhapura, came to be known as Sarabharah when the suffix 'pura' was replaced by 'garh' both conveying more or less the same meaning. The name 'Sarapgarh' is quite likely a variant of 'Sarabharah'.

Sarabha was succeeded by his son Narendra. The next successor was a king named Prasanna. He is also known to us from a number of gold and silver coins on which his name is mentioned as Prasannamatra. After Prasannamatra the throne of Sarabhapura probably passed to his son Jayaraja (also called Maha-Jayaraja but his real name appears to be Jaya). The Mallar plates⁷ reveal that Jayaraja had two sons, viz., Pravara and Vyaghra. Prasannamatra had another son named Manamatra who also became the ruler. It is known from the Kauvatal plates that his real name was Durgaraja (mentioned

¹. EI, Vol. IX, p.269.

². EI, Vol. XXVI, pp. 137 ff.

³. CII, Vol. III, pp. 91 ff.

⁴. IHQ, Vol. XIX, pp. 139 ff; EI Vol, XXXI, pp.263 ff.

⁵. EI, Vol. XXVI, p. 229, foot note 2.

⁶. Proceedings of the 5th Oriental Conference, p. 461 ff.

⁷. EI, Vol. XXXIV, pp.45—50.

as Maha-Durgaraja in the record). The next important ruler of Sarabhapura was Sudevaraja (styled as Maha-Sudevaraja in the inscriptions), who was the son of Durgaraja-Manamatra. He was a very powerful ruler. The extent of his dominion is indicated by his copper plate grants, viz., Khariar, Arang, Kauvatala, Sarangarh, Raipur, etc. While the earlier kings of the family are known to have ruled from Sarabhapura, Mahasudevaraja issued his charters both from Sarabhapura and Sripura. It appears that Mahasudevaraja founded the city of Sripura (identified with modern Sirpur in the Raipur district of Madhya Pradesh) and developed it as his secondary capital. The last Sarbhapuriya king, so far known, was Pravaraaja (also called Maha-Pravaraaja). He was the son of Manamatra, and therefore, he may be regarded as a brother of Mahasudevaraja. In his reign, Sripura was the capital of the Sarbhapuriyas. The Thakurdiya plates dated in the third regnal year of Maha-Pravaraaja was issued from Sripura. We have no information about the reign or achievement of any of his successors. The Panduvamsis invaded South Kosala during the reign of Nannadeva and completed the conquest during Tivaradeva some time in the 7th century A. D.

D. C. Sircar and G. Bhattacharya give the following genealogy of the Sarabhapuriya kings¹ on the basis of available evidence:

- | | |
|------------------------------|--------------------------|
| 1. Sarabha | |
| 2. Narendra | |
| 3. Prasanna or Prasannamatra | |
| 4. Jaya | 6. Durga alias Manamatra |
| 5. Pravara I Vyaghra | 7. Sudeva 8. Pravara II |

The Tungas
of
Yamagartta
Mandala.

The *yamagartta mandala* flourished in the second half of the 9th century A. D. under the rule of the Tungas. So far five copper plate grants² of the Tunga rulers have been brought to light. The copper plate grant discovered from Bonai³ gives the following genealogy of the Tunga kings:

Vinita Tunga I
|
Khadga Tunga
|
Vinita Tunga II

¹. EI. Vol. XXXIV, p. 47.

². Vide a descriptive catalogue of the Tunga copper plates given in OHRJ, Vol. XI, No. 4, facing p. 252.

³. JBORS, Vol. VI. pp. 238—40.

It is mentioned that Vinita Tunga I, the grandfather of Vinita Tunga II came from a place called Rohitasa (Rohitagiri) which has been identified with modern Rohitasgarh in the Shahbad district of Bihar. The charter reveals that Vinita Tunga was an influential feudatory chief. In the record, he is described as Maharaja Ranaka, lord of the eighteen Gondramas, and as one who obtained the 'five great sounds'. Vinita Tunga II is also known from his Kharga-prasad copper plate¹ (897 A. D.) where he is styled as Maharaja Vinita Tunga.

A collateral branch of the Tunga family is known from the Talcher plates² of Gayada Tunga. The exact relationship between the rulers of two branches is not definitely known, and as such, the genealogy and chronology of the Tungas are not yet satisfactorily settled. Vendunga mentioned in one copper plate of Gayada Tunga³ has been identified with Balanga in Bonai. The names of territorial units and other places⁴ mentioned in the copper plates of the Tunga rulers indicate that Yamagartta Mandala was an extensive territory comprising northern part of Dhenkanal district, the ex-State of Pallahara, and some portions of Keonjhar and Sundargarh districts.

Epigraphic evidence points to the existence of a royal family (Varahas) ruling in the Bonai Mandala about the 10th century A. D. The Bonai Mandala, known to us from the Bonai copper plate grant⁵ of Udaya Varaha, comprised, according to Dr. N. K. Sahu "the Eastern portion of modern Sundargarh district and a part of Deogarh subdivision of Sambalpur district".⁶ He also identifies Rokela Vishaya mentioned in the grant with modern Rourkela⁷. The Bonai copper plate grant reveals the existence of a group of three kings who belonged to the Mayura family, viz., Udaya Varaha, his son Tejo Varaha, and the latter's son Udaya Varaha who issued the above mentioned grant. The record describes Udaya Varaha as a *Parama Saugata* (devout worshipper of Buddha) and as Maharaja Ranaka who ruled over the Bonai Mandala. It is known from the grant that the family hailed from Chitrakuta, which may be identified with Chitor or Chitorgarh in Rajasthan. There is some truth in this tradition; for we know of the Mauryas or Moris as ruling over Chitor in the early medieval

The
Varahas of
Bonai
Mandala.

¹. OHRJ, Vol. XI, No. 4, pp. 242—254.

². EI, Vol. XXXIV, pp. 91 ff.

³. JASB (N. S.), Vol. v 1909, pp. 347-50.

⁴. Binayak Misra, *Dynasties of Mediaeval Orissa*, pp. 40-41.

⁵. JBORS, Vol. VI, pp. 241-45.

⁶. N. K. Sahu, *Utkal University History of Orissa*, Vol. I, p. 124.

⁷. *Ibid.*

(34 Rve.—4)

period¹. The Arabs, starting from their base at Sindh overran Chitor between 723 A. D. and 738 A. D. It was probably after this misfortune or at a somewhat later date, a scion of the Mauryas came to Orissa and established authority over the Bonai Mandala. The peacock emblem of the Varahas further lends support to the theory that the Varahas were an off-shoot of the Mauryas. The Maurya family of Bonai Mandala probably had some family connection with the Tungas². They had close connections with the Adibhanja royal family of Khijinga Mandala, and Pandita Binayak Misra suggests that Mayurabhanj³ owed its origin to the names of Mayura and Bhanja families⁴. The peacock emblem was also adopted by the later kings of Bonai in their seals⁵, and the name Bonai, mentioned in the copper plate of Udaya Varaha, also continues till today.

The Somavamsis

A glorious and eventful phase started in the history of Dakshina Kosala with the coming into prominence of the Somavamsis. Several records give an account of the family beginning with Udayana who flourished in the first half of the 6th century A.D. Indrabala, the son and successor of Udayana, held the post of *Sarvadhikaradhikrita* and *Dutaka* under Sarabhapuriya King Mahasudevaraja. The respectful manner in which Indrabala's successor Nannadeva is spoken of in the record of the Sarabhapuriyas indicate that he was a high official under the Sarabhapuriyas. After the death of Pravararaja II the Somavamsis who were the feudatories of the Sarabhapuriyas converted their gubernatorial status into a royal one. Mahasivagupta Tivaradeva, the son of Nannadeva, wrested the whole of South Kosala from the hands of the Sarabhapuriyas, and called himself *Kosaladhipati*. Tivaradeva was an ambitious ruler and eventually he became an enemy of Dharmaraja, the Sailodbhava King of Kongodamandala (Ganjam-Puri region of coastal Orissa). He made alliance with Madhava, a brother of Dharmaraja, but in the war that followed he was defeated by Dharmaraja. Thus his ambition to establish mastery over Utkal was foiled. Tivaradeva was succeeded by

¹. R. C. Majumdar (ed), *The Classical Age*, (Bharatiya Vidya Bhavan), pp. 161-62.

². The eulogical text of the Bonai grant of the Mayura family is a replica of the Tunga grants.

³. It is interesting to note that the name of the Dharani Varaha is mentioned in association with the name of Ranabhanja on an Avalokitesvara image found from Khiching, which was formerly the capital of the Bhanjas of Khijinga Mandala vide Annual report of Archaeological Survey of India 1922-23, p. 128.

⁴. Binayak Misra, *Dynasties of Mediaeval Orissa*, p. 62

⁵. See, above, p. 48.

Chandragupta, but the Adhabhara plates¹ seem to suggest that Nanna II succeeded his father Tivaradeva. The next known rulers of the family were Harshagupta, and Balarjuna who ruled from their capital at Sirpur.

About the middle of the 9th century A. D. the Somavamsis were ousted from the Sirpur region by the rising power of the Kalachuris, and under Janamejaya I Mahabhavagupta, who was probably the son and successor of Balarjuna, they established a new kingdom in the Balangir-Sonepur region. This is borne out by the discovery of copper plate grants of the family from the district of Balangir. Janamejaya I was a powerful ruler, and with him began the age of great Somavamsis in Orissa. He assumed imperial titles like *Maharajadhiraja* and called himself *Kosalendra* and *Trikalingadhipati*. Towards the close of his career, his kingdom was no longer confined to the Balangir-Sonepur region, but extended as far as the Baudh region. Ranabhanja, of the Bhanja family who exercised control over the Baudh regions, was probably defeated by Janamejaya. This supposition is quite consistent with the testimony of the Brahmesvara temple inscription² which reveals that Janamejaya had killed with his *Kunta* the king of Odra. Janamejaya I Mahabhavagupta also established matrimonial relationship with Bhaumakara ruling family, his daughter Prithvimahadevi being given in marriage to Bhaumakara ruler Subhakardeva IV.

Mahasivagupta Yayati I who became ruler after Janamejaya was a worthy successor of his illustrious father. The hostilities with the Kalachuris were continued during his reign. He seems to have attempted to establish mastery over Utkal in secret league with his sister Prithvimahadevi. Sometime after his 15th regnal year, he shifted his capital, probably due to expansion of his territory to the east, to Yayatinagar which Dr. N. K. Sahu identifies with modern village Jakati on the Mahanadi, 11.2 km. to the west of Baudh.³

The son and successor of Yayati I was Bhimaratha Mahabhavagupta. His reign was peaceful, and he seems to have devoted his attention for the consolidation of the Somavamsi dominions. It is known from a copper plate inscription⁴ found from village Kudopali in Sambalpur district, that Ranaka Punja, son of Boda, was ruling over Bamanda Patti as a

¹. *The Classical Age*, Bharatiya Vidya Bhavan p. 221, f. n. 2. and EI XXXI, p. 219.

². EI. Vol. XXIII, pp. 248-55.

³. N. K. Sahu, *Utkal University History of Orissa*, Vol. I, p. 137.

⁴. S. N. Rajaguru (ed), *Inscriptions of Orissa*, Vol. IV, pp. 237-41.

feudatory of King Mahabhavagupta who may be identified with Bhimaratha¹. Bamanda Patti² is identified with modern Bamanda. In all probability he also administered a part of the Sundargarh district under the Somavamsis.

The next ruler on the Somavamsi throne was Dharmaratha Mahasivagupta. His Khandapara plates³, which refers to the Antarudra Vishaya in the Puri district definitely proves that Somavamsis had already become the masters of the coastal region of Orissa by defeating the Bhaumakaras. Dharmaratha died childless, and he was succeeded by his step brother Indraratha⁴. Indraratha who was probably the same ruler as Naghusa or Nahusha, was defeated and killed by Rajendra Chola sometime in 1022-23 A. D.⁵. His death was followed by a period of anarchy but fortunately for the kingdom, Chandihara, son of Abihmanyu was chosen as the ruler, and he ascended the throne as Yayati II Mahasivagupta. Yayati II was one of the great rulers of the Somavamsi dynasty and his striking achievement was the construction of the famous Lingaraja temple at Bhubaneswar.

Yayati II was succeeded by his son Udyotakesari Mahabhavagupta. By his time, the Somavamsis had been able to establish a vast empire, and for convenience of administration, Udyotakesari divided his dominions into two political divisions, viz., Kosala and Utkal. While he himself directly administered the Utkal region, the Kosala division was assigned to Abihmanyu, and on his death, it was controlled by Kumara. Somesvara, who is known to us from his Kelga plates.⁶ After Udyotakesari, his son Janamejaya II⁷ became the ruler. No record issued by this monarch has been discovered as yet, but the Nuapatna copper plates⁸ prove that during his 5th regnal year, Yuvaraja Dharmaratha was the ruler of Paschima Kalinga. In all likelihood, after him, Kosala passed into the hands of the Telugu Chodas in about 1070 A. D. In the Utkal region, the rule of the Somavamsis, however, continued. Janamejaya II was succeeded by Puranjaya, and Karnadeva. The latter ruled till the Gangas under Chodaganga Deva dealt a blow to the Somavamsis and stepped into their place in the coastal region early in the 12th century A. D.

¹. Shri S. N. Rajaguru, however, takes Mahabhavagupta to be Udyotakesari.

². *Ibid.*

³. S. N. Rajaguru (ed), *Inscriptions of Orissa*, Vol. IV, pp. 280-280 F, Supplementary No. 33-A.

⁴. JAS, Vol. VIII, No. 4, pp. 271-76.

⁵. EI, Vol. IX, pp. 223 ff.

⁶. EI, Vol. XXVIII, pp. 322-26.

⁷. Ratnagiri Charter, EI, XXXIII, p. 263 ff.

⁸. The Copper plates discovered by Dr. K. S. Behera are being edited for publication.

Though the exact political condition of the region after the Somavamsis is far from clear, a brief reference to history of South Kosala, of which it formed a part, may be useful for our purpose. As noted above about 1070 A. D. Yasoraja I, the Telugu Choda lieutenant of Chhindaka Naga King Somesvara established supremacy over Kosala. The available copper plate grants of this Telugu Choda family show that Suvarnapur, modern Sonepur, was their political headquarters. Yasoraja I, Somesvara I, Yasoraja II, Somesvara II, Yasoraja III, and Somesvara III of the Telugu Choda line are known to have ruled the South Kosala. But by the time the Telugu Chodas occupied Kosala, the Kalachuris organised their power in Dahala with headquarters at Tummana. In course of time, rivalry started between these powers and it ultimately led to the defeat of the Telugu Chodas. The Kalachuri king Jajalladeva imprisoned Bhujavala of Suvarnapura and defeated Somesvaradeva in 1119 A. D. Bhujavala has been identified with Telugu Choda king Somesvaradeva III, and after his defeat, Kalachuris could occupy the South Kosala region.¹

Ananta Varman Chodaganga Deva of the Ganga dynasty conquered Utkal sometime in 1112 A. D. and in course of time, extended his kingdom from the Ganga to the Godavari. A great warrior as he was, he naturally desired to conquer western Orissa and invaded the Kosala territory which was then under the Kalachuris. It is known from the Kharod stone inscription² that Kalachuri king Ratnadeva II, the grandson of Jajalladeva, defeated Chodaganga Dev. Kamarnavadeva, the son of Chodaganga, also followed the footsteps of his father in waging war against the Kalachuris but he was defeated. The Ganga-Kalachuri conflict which had been continuing for a long time, reached a critical stage in the reign of Ganga monarch Anangabhima III. The Chatesvara inscription³ reveals that Vishnu, the able general of Anangabhima III, won a decisive victory over the Kalachuri king of Tummana in battles fought in the banks of the Bhima, in the outskirts of the Vindhya, and the sea shore. As a result of this, extensive tracts of land in western Orissa passed into the hands of the Gangas. A study of certain *maufi* grants reveals that Raja Anangabhima Deva had actually visited the Sambalpur region⁴. The Khamvesvari temple inscription⁵ proves that Sonepur region was definitely under the control of the Imperial Gangas during the time of Bhanudeva (1264

The Telugu Chodas and the Kalachuris

The Gangas

¹. K. C. Panigrahi, *Chronology of the Bhaumakaras and the Somavamsis of Orissa*, pp. 41-44.

². EI, Vol. XXI, pp. 161 ff.

³. EI, Vol. XXIX, pp. 127 ff.

⁴. N. K. Sahu (ed), *New Aspects of History of Orissa*, p. 60

⁵. EI, Vol. XXXII, pp. 326-328.

1279 A. D.), and placed under the charge of a Governor. These circumstantial evidences suggest that Bonai and Gangpur region was under the Ganga hegemony. It seems that after the conquest of the territory the Gangas allowed some feudatory chiefs to directly administer the territory and themselves remained content with the tributes paid by them. It was probably during the time of the Gangas that Bonai and Gangpur were consolidated as separate political units, and regarded as feudal states. Local traditions of Gangpur mention the existence of a Kesari line with sixteen kings who ruled over Gangpur. It is said, they had their headquarters variously at Belsaragarh, Junagarh, Masabiragarh, etc. The names of the Kesari kings, which vary in different statement about them, appear to be mostly imaginary, but the tradition about the rule of local Kesari dynasty is too strong to be ignored. The tradition persists till today and the earlier references to this tradition appear in the writings of Colonel Dalton, and Hunter. Regarding this Kesari dynasty, C. W. E. Connolly in his Settlement Report of 1911, observes as follows:—

“The earliest chiefs of Gangpur that there is any information of belonged to the Kishori Bans, and were descendants of the famous Kishori Bans of Puri, who after their defeat by the Mahrattas fled in all directions, one line settling here¹”.

Making allowances for his apparent mistakes, from all that could be gathered from the tradition, it would appear that some of the scions of the Somavamsis (famous as Kesari kings in the traditions), on their defeat by the Gangas, migrated to Gangpur region and established their authority. These Kesari rulers were apparently allowed to carve a self-contained principality in the Gangpur region and continued as vassals of the Imperial Gangas. The last of these Kesari rulers, whose name is given as Raja Deo Kesari in one tradition, was an oppressive ruler, and eventually he was murdered together with his family members by a powerful Bhuiyan leader named Madan Pradhan. The consequent political confusion that prevailed, provided the opportunity for the progenitor of the Paramara-Sekhara family to seize the land.²

The Chauhan dynasty, which played a very important role in the political and cultural history of western Orissa, started its rule about the middle of the 14th century A. D. with Patna, modern Patnagarh in Balangir district as the headquarters. The available evidence makes

The Chau-
hans

¹. Quoted in Indrabilas Mukherji, *Final Report on the Land Revenue Settlement of the Gangpur State, 1929—1936*, p. 2.

². Vide *Infra* p. 53

us believe that Ramai Deva was the founder of the Chauhan dynasty in Patna. The extent of Patna kingdom under Ramai Deva is, however, not definitely known. Vatsaraja Deva (C. 1386-1410 A. D.) the third ruler of the dynasty, was a capable warrior, and he extended his kingdom by waging a number of successful wars against his neighbours. It is known from *Koshalananda Kavya*, a semi-historical work on the Chauhan rule by Pandit Gangadhar Misra, that the contemporary chiefs of Bonai, Bamanda, Bastar, Baud, Gangpur, Khimindi, and Nandapuri were defeated by him and became his vassals¹. From this account it seems that the area covered by present Sundargarh district comprising Bonai and Gangpur came under the Chauhan supremacy. However, Major H. B. Impey, who was the Deputy Commissioner of Sambalpur and who also happened to be the first British writer to give a brief historical sketch of Chauhan rule, credits one Prithvisimha Deva with these conquests. He takes him to be the fourth ruler of Patna, and referring to his military achievements, he states: “The fourth Maharajah, Pirthee Singh Deo subjugated and made tributary to Patna, the three dependencies of Sirgooja, named Bunace, Gangpoor, and Bamra, and annexed to Patna itself by dispossession from the Rajah of Bamra the Zamindaree of Rehracole and so much of the lands (now) of Sumbulpore on the left bank of the Mahanuddy, as were contained between Rehracole and Bamra to the east, Bamra and Gangpoor to the north, and the west by the river Eebe to its sudden bend west ward and from thence by a line running south, to the spot at the extremity of the present city of Sumbulpore where now the jail bridge stands”². ‘Pirthee Singh Deo’ of Major Impey’s account can be no other ruler than Vatsaraja Deva of the *Koshalananda Kavya*. In this connection, it may also be mentioned that Cobden-Ramsay observes that Gangpur, Bonai, and other neighbouring States submitted to Baijal Deva, without a fight³. He makes Baijal Deva “the third chief from Ramai Deva”, but in reality Vatsaraja Deva was the third Chauhan ruler of Patna. Therefore, his account about the activities of Baijal Deva actually applies to Vatsaraja Deva who is credited with these conquests by the *Koshalananda*. But as this *Kavya*, is in the nature of a royal panegyric, being composed by the court poet of Chauhan ruler Baliar Singh, the question of its authenticity cannot be satisfactorily determined in the absence of corroborative evidence. However, it seems certain that Vatsarajadeva was a powerful ruler of Chauhan family. After Vatsaraja Deva, rulers like Baijal Deva I, Bhojaraja Deva,

¹. *Koshalananda*, (Orissa State Museum Ms. No. S. M. S. 12) Canto XXII—16—21

². Vide Major Impey’s account reprinted in *Balangir District Gazetteer*, pp. 64-65.

³. L. E. B. Cobden-Ramsay, *Gazetteer of the Orissa Feudatory States*, (1950 edn.) p. 285.

Prataparudra Deva I, Vikramaditya Deva I, Vijal Deva II, and Bajora Hiradhara Deva ruled over the Patna kingdom which, in course of time, incorporated the neighbouring territories including Sambalpur. Narasimha Deva was the last great Chauhan ruler of Patna. About the middle of the 16th century, probably to meet the problem of Kalachuri aggressions, Narasimha Deva allowed his brother Balaram Deva to carve out the semi-independent kingdom of Sambalpur. Balarama Deva was an ambitious ruler and under him, the new kingdom grew rapidly. From his time onwards, Sambalpur became a strong power and the glory of Patna began to decline. A great warrior as he was, he launched vigorous military campaigns against the adjoining States. He defeated the Haihaya ruler, and compelled him to cede Sarangarh, Raigarh, Sakti, etc. He then directed his armies against the Ganga kingdom of Bamanda, and there, he reinstalled Ramachandra Deva as a feudatory of Sambalpur. After this, his territory touched that of Surguja as Gangpur was then a vassal State of the former. In course of time, conflict started between Sambalpur and Surguja, and Balaram Deva sent an expedition against the latter through Gangpur. Tradition relates that the soldiers of Sambalpur camped at a place called 'Suadih' which has, at a later time, developed into the present town of Sundargarh. The ruler of Gangpur acknowledged the supremacy of Balaram Deva without any war and gave him his daughter Kamal Kumari who became the chief queen. The ruler of Gangpur also enjoyed a special privilege as a vassal; unlike others he could go to Sambalpur Durbar accompanied with open umbrellas. After passing through Gangpur, Balaram Deva attacked Surguja, and reduced it to a vassal State. He also married a princess of Surguja royal family and brought to Sambalpur the Anantasayi image of Visnu, probably as a trophy of his victory. The image is now worshipped at Sambalpur in a separate temple. After Balaram Deva, his son Hrudayanarayan Deva, through the Gangpur princess Kamal Kumari, became the ruler of Sambalpur. He was succeeded by Balabhadra Deva and the most significant event of his reign was the war against Baudh. After him, Madhukara Deva became the ruler. He had six queens of whom the Gangpur princess was the chief queen. Madhukara Deva had five sons viz., Baliar Singh, Madan Gopal, Banshi Gopal, Aniruddha Singh, and Ananta Singh. Of these, the eldest prince Baliar Singh succeeded his father. He proved to be an ambitious ruler. It was during his reign that his court poet Pandit Gangadhar Misra wrote the "*Koshalananda Kavya*" in Sanskrit. The *Koshalananda* reveals that Baliar Singh was a great warrior. He had two favourite horses—Parjang and Phatejang¹ who accompanied the king in all important expeditions.

¹. *Koshalananda Kavyam* (published by Sonepur Maharaja in 1929), Canto XXIII, 60.

The most remarkable military incident of his reign, as known from the *Koshalananda*, was the invasion of Bonai. In the war, Indra Deva, the lord of Bonai was defeated, and was obliged to acknowledge the overlordship of Maharaja Baliar Singh. Baliar Singh also crushed the pride of a Bhanja ruler and overran his territory 'Yamatangi'. Siba Prasad Das indentifies Yamatangi with Bonai and states that it was Indradeva Bhanja of Bonai who became a vassal of Sambalpur². But this suggestion does not seem to be correct. The *Koshalananda* mentions Indradeva as the ruler of Bonai. The title of Indra Deva is peculiar to the Kadamba rulers of Bonai, and none of them is known to have assumed the surname 'Bhanja'. From this it would appear that Bhanja of Yamatangi and Indra Deva of Bonai were two different rulers who sustained defeat in the hands of Baliar Singh. Yamatangi probably stands for the Yamagaritta Mandala which comprised portions of Keonjhar and Dhenkanal districts. The ruler of Yamatangi probably belonged to the Keonjhar Bhanja line. There can be no doubt about the conquest of Bonai by Baliar Singh. The *Koshalananda* being a contemporary record, its account should be taken as authentic. Baliar Singh was undoubtedly the most powerful ruler of Chauhan dynasty of Sambalpur. Gopinath Sarangi in his '*Chikitsa Manjari*' describes him as possessing the valour of a lion, and at whose name the enemies got terrified like deer. Under Baliar Singh, Sambalpur became very powerful commanding supremacy over a cluster of 18garhs(States). These 'Garhs' according to Major H. B. Impey, are as follows³.

1. Patna	10. Bonai
2. Sambalpur	11. Raigarh
3. Sonepur	12. Bargarh
4. Bamanda	13. Sakti
5. Rairakhola	14. Chandrapore
6. Gangpur	15. Sarangarh
7. Baudh	16. Bindra-Nuagarh
8. Athmallick	17. Khariar
9. Phuljhar	18. Borasambar

¹. *Koshalananda*, Canto XX 48—51.

ମନୋହରୋତ୍ତମ ସମନେକନିକତୋଦକାନୁରାଗୀ ବଳବର୍ଦ୍ଧନର୍ବନଃ
 ହିତରଥୀରିପୁରବିରାଧରା ବନାଜନାଥୋ ବ୍ୟତତାଗତେସ୍ୟ ସର୍ବ । ୪୮ ।
 ସମୁଦ୍ଗତା କୀର୍ତ୍ତିଲତା ସମାଶ୍ରିତା ବିବେକ ବୃକ୍ଷଂ ଯମତାଙ୍ଗି ମର୍ଦ୍ଦନେ
 ପରାପରୋଲ୍ଲାସବିଧୌ ବତାନିତା ସ୍ତମ୍ଭଲିତା ଭଞ୍ଜ ଗର୍ବ ଗଞ୍ଜନେ । ୪୯ ।
 ମୁହୂର୍ତ୍ତେ ଶୂରକ ଧୂପ ଧୂପିତା ବନାଜକ ରାଜିଭିତା ପଳାନିତା
 ପ୍ରତାପ ଚଣ୍ଡାଂ ଶୁଭ୍ରପୁଣ୍ୟ ବାରିଣାଂ ସଦା ସୁସଜ୍ଜା ସୁଖଦା ବିରାଜତେ । ୫୦ ।
 ରଣେଷୁ ନିଃଶାଣ ଗଣସ୍ୟ ନିଶ୍ଚନେ ସସମ୍ପନ୍ନା ଦୈରିବିଧୂବିନେ ବନେ
 ଇତି ସ୍ମୃତଂ ବେରିତୁ ବୀତ ବିଜୟଃ ସ ଇନ୍ଦ୍ରଦେବୋ ଜଳବୁଦ୍ଧବୋଗମଃ । ୫୧ ।

². Siba Prasad Das, *Sambalpur Itihas*, Oriya, (History of Sambalpur) 1962, pp 349—352.

³. Vide, *Balangir District Gazetteer*, p. 68.

From this it would appear that Baliar Singh established hegemony over almost the whole of western Orissa including some of the Chhatigarh States mentioned above. From that time onwards, the Chauhan rulers of Sambalpur styled themselves as the lord of 18 Garhs, indicating the confederation of 18 States under the hegemony of Sambalpur. The chiefs of 17 semi-independent States, continued to use the title of 'Raja' and could exercise supreme authority in internal affairs in their respective States. But they paid annual tribute to the Maharaja of Sambalpur. This political arrangement lasted till the advent of the British to this region. The Sundargarh tract, comprising Bonai and Gangpur, also continued under the Chauhan supremacy till the year 1818 A. D.

RELATIONS
WITH THE
MARATHAS
AND THE
BRITISH,

In 1751, Aliwardi Khan ceded the territory to the south of the Suvarnarekha river to the Marathas but the Sambalpur region remained outside their territorial limits. It was in 1794 that Jayanta Singh, the ruler of Sambalpur, being harassed by the Marathas, made peace with them by agreeing to pay an annual tribute of Rs. 32,000 cutcha coins. The rulers of Bonai and Gangpur were subordinate to the Raja of Sambalpur and acknowledged him as their overlord. They paid tribute to the Raja of Sambalpur who accounted with the Marathas. This arrangement continued till 1800, when the fort of Sambalpur was finally occupied by the Marathas. After occupation of the territory, the Maratha Government was seldom able to collect tributes regularly; "they took by force and tortures whatever they could obtain from all which fell into their public accounts". In these circumstances, the Raja of Bonai became virtually 'independent' of the Maratha authorities.¹

In the meanwhile, the British invaded Orissa and the fort of Barabati at Cuttack, which was the headquarters of the Marathas, fell on October 14, 1803. As a result of this, Cuttack became a separate Subah under the British. Soon after, British took a diplomatic step to conquer the territories which were outside the Cuttack Province by persuading the Rajas to solicit British protection by entering into an alliance with the Company on payment of 'five gold mohurs annually as wish of courtesy'. Major Broughton conquered Sambalpur in January 1804, and the Maratha Governor Tantia Pharnavis withdrew to Nagpur. In the meanwhile, the Treaty of Deogaon has been signed with the Marathas on December 17, 1803, by which Raghuji Bhonsla ceded to the East India Company "in perpetual sovereignty, the province of Cuttack, including the port and district

¹. H. N. Sinha (ed), *Selections from the Nagpur Residency Records* Vol. I, Nagpur, 1950.

of Balasore". The tenth Article of the Treaty further provided that "certain Treaties have been made by the British Government with feudatories of Senah Saheb Soubah. These Treaties are to be confirmed". This provision was meant to cover the engagements concluded by the British with the tributary chiefs of Orissa. Raghuji Bhonsla became reluctant to surrender Sambalpur and its dependencies which had submitted to the British authority. The British Government informed the Marathas that the Company's protection had been assured to the Rajas and that these territories can only be restored to the Marathas if the chieftains and the Zamindars themselves consented to return to the Bhonsla Government. In a petition, received by the British on 29th March 1804, the Rani of Sambalpur, and the principal Zamindars refused to return to the Maratha authority, and informed the British that they "voluntarily surrendered to the English Government", and were willing to pay to the British Government without excuse or irregularity any sum the Government would fix upon them¹. The unwillingness of the chieftains strengthened the hands of Wellesley who directed the Resident at Nagpur to inform Raghuji Bhonsla that the Rajas of Sambalpur, Patna, etc. had been taken under the British protection which the Bhonsla had to recognise and ratify as a part of the 10th Article of the Treaty of Deogaon failing which war would be renewed. It was with much reluctance that Raghuji accepted it, and the transfer

¹. H. N. Sinha (ed), *Selections from the Nagpur Residency Records*. Vol. I Nagpur, 1950, pp. 57—58.

Letter from the Rani and principal Zamindars of Sambalpur to Lt. Colonel Broughton in reply to his letter dated the 26th March, 1804 (English Translation). The important portion of the letter, which was signed among others by Raja Indra Deo of Bonai, and Raja Indra Suir Deo of Gangpur, is quoted below.

How there can be a voluntarily return under the dominion of "Government from which our families, honour and property have received so much injury and how can we be secure under such an authority. We sincerely and from our souls wish to remain under the British protection and our only dependence is on your favour; but with respect to the revenue you have been pleased to allude to, we beg to represent that we formerly used to pay our respective and legal tribute to our own Raja (the Raja of Sambalpur) who accounted with the Marathas; but, since they took the country into their own hands (three years ago), there has been nothing settled or defined: they took by force and tortures whatever they could obtain from all which fall into their public accounts, you, however, our master be pleased to take into consideration the produce and ability of the country and whatever sum you may fix upon, we are submissively willing to pay without excuse or irregularity. We and our families are ready to manifest our loyalty and obedience to the Company on all occasions and will acknowledge no other sovereign. You are our protector and we hope from you an arrangement which will place us under the permanent protection of the British Government."

was legally confirmed by the 10th Article of the Treaty of Deogaon. Thus Bonai and Gangpur were also ceded to the British Government by the Treaty of Deogaon.

After Wellesley left India, the British followed a policy of peace and non-intervention, and decided to transfer Sambalpur, and the adjoining territories to Bhonsla. Captain Roughsedge was deputed to Sambalpur to open negotiations with the Rani of Sambalpur and other Zamindars. After prolonged discussions, the chiefs, except Raja of Raigarh, were persuaded to return to the Maratha authority. Accordingly, Bonai and Gangpur were also restored to Raghuji Bhonsla by a special agreement in 1806. The two States continued under the Marathas till 1818, when they reverted to the British Government under the provisional agreement concluded with Madhoji Bhonsla (Appa Sahib). Formerly, Sambalpur Garhjats including Bonai and Gangpur were dependent on the king of Sambalpur; when they were ceded to the British Government in 1818, "advantage was taken of the circumstances under which Sambalpur and Patna were found to annul the dependency of the other Zamindars on these two chiefs; and in 1821, separate Sanads were granted to each Zamindar, and separate engagements taken". Thus Gangpur and Bonai ceased to be 'estates' of Sambalpur. They were formally and finally ceded to the British under the treaty of 1826. With regard to tribute, the British Government fixed it on a lower scale than that which was levied under the Marathas and fresh settlements were made in 1827.

After the Kol insurrection of 1831—33¹ a new province called 'South Western Frontier Agency' under an officer designated Agent to the Governor-General, was constituted under Regulation XIII of 1833. Bonai and Gangpur were under the jurisdiction of this Agency. In 1864, the designation of the Agency was altered from South West Frontier Agency to Chutia Nagpur (Chota Nagpur), and the Agent to the Governor-General became Commissioner. It was administered as a non-regulation province under the control of the Lieutenant-Governor of Bengal.

In 1860, Sambalpur group of States, with the exception of Bonai and Gangpur, were transferred to the Superintendent of Tributary Mahals, Cuttack, and subsequently on April 30, 1862, Sambalpur was made over to the newly constituted Central Provinces. Bonai and Gangpur, however, continued to remain with Chota Nagpur. In 1863, for the administration of justice, the Government of Bengal issued rules

¹ K. K. Dutta, *Anti-British Plots and Movements Before 1857, Meerut*, 1970, pp. 41-42.

for the guidance of chiefs of Tributary Mahals of Chota Nagpur. The chiefs were empowered to pass sentences of imprisonment up to 2 years, and they could also impose fines not exceeding Rs. 50. However, subject to confirmation by the Commissioner of Chota Nagpur, they were vested with judicial powers of sentences of imprisonment up to five years and fines not exceeding Rs. 200. They had no power of whipping and all orders passed by them were liable to revision by the Commissioner.

In 1891, the Secretary of State in Council decided that Chota Nagpur States do not form part of British India, and accordingly new Sanads were granted to Bonai and Gangpur in 1899 which regulated their relations with the British Government. The Sanad granted to Raja Raghu-nath Sekhar Deo of Gangpur is given in Appendix III in order to show his powers and position vis-a-vis the British.

On October 16, 1905, the two States were transferred from the control of the Commissioner of Chota Nagpur and placed under the charge of the Commissioner of Orissa. On partition of Bengal in 1905 the Sanads of Bonai and Gangpur were superseded by Sanads of December 23, 1905 fixing their tribute for a period of 14 years and appointing the Commissioner of Orissa as the officer to be consulted by the chiefs in place of the Commissioner of Chota Nagpur. In 1906, the post of a Political Agent was created for the Orissa States under the Commissioner of Orissa. In 1912, the Bihar and Orissa Province was constituted, and the control over the Feudatory States of Orissa was transferred to the new Government at Patna. Revised Sanads were granted to chiefs of Bonai and Gangpur in 1915 in which the clause requiring payment of nazrana on succession was omitted. The Sanads were again revised in 1919 to bring them more into conformity with those granted to the heirs of other Orissa States. The Orissa States continued to be under the Commissioner of Orissa Division till 1922, when the Political Agent was designated as Political Agent and Commissioner, Orissa Feudatory States, and was placed directly under the Governor of Bihar and Orissa. In 1924, the tribute fixed for these two States was enhanced. With effect from April 1, 1933, prior to the introduction of provincial autonomy, the States were placed in direct political relation with the Government of India through the Political Agent, Orissa States and the Resident for the Eastern States Agency. In 1937, revised Sanads were granted to the Rajas of Orissa. Since 1942 Bonai was under the direct management of the Political Agent, Orissa States, Sambalpur. The States became independent with the lapse of British Paramountcy on August 15, 1947.

In course of time, in the Sundargarh region, there developed two self contained political units, viz., Gangpur and Bonai, each having a distinct series of rulers. The accounts of these Raj-families are presented below.

Bonai

The earlier history of the ruling family of the ex-State of Bonai is not quite clear. Our knowledge of it is mainly derived from oral traditions. Regarding the origin of the family, E. A. Gait narrates the following episode :

"The ruling family claims a mysterious and foreign origin. They say that they came from Sakuldip or Ceylon, and that the founder of the family was abandoned by his mother under a Kadam tree. Being thus on the point of falling into the hands of an enemy, the infant was rescued by a peacock, which swallowed him, and kept him in its maw until the danger was passed. In gratitude for this service the peacock was adopted as the family crest. In reference to this early connection with the Kadam tree they describe themselves as Kadam Bansi Rajputs".¹ The legendary account of the circumstances of the origin, as given in the tradition, is valueless for historical purposes. Commenting on this tradition about the origin from Sakul Dwipa or Ceylon, Hunter observed in 1877, "Looking, however, to their position as rulers over powerful Bhuiya vassals, who hold the bulk of the land, command the militia of the state, and have even the right of conferring the tilak or token of investiture on the chief, there can be no doubt that the Raja of Bonai was originally nothing more than the tribal head of the Bhuiya clan. If Colonel Dalton's theory be correct, that the Bhuiyas formed a portion of the army with which Rama invaded Ceylon, and were, in fact, the veritable apes of the Ramayana, it would seem as if the family of the chief had taken advantage of an ancient legend, to conceal their obviously aboriginal ancestry under the fiction of Cinghalese descent".² The theory of the alleged Ceylonese origin of the Bonai Raj-family appears to be absurd, and later Durbar sources connect the ruling house with the Kadamba branch of Rathor Rajputs. They are kshtriya by caste and belong to the Lunar dynasty. The emblem of the state is peacock. One peculiarity of the Raja-family is that the ruler on succession to the *gadi* always takes his grand father's surname.

¹. Letter No. 2959, P. dated Calcutta, July 31, 1907 from E. A. Gait, Chief Secretary to Government of Bengal, Secretary to the Government of India, Foreign Department. The tradition is also mentioned by Cobden-Ramsay, in his *Gazetteer of Feudatory States of Orissa*.

². W. W. Hunter, *A Statistical Account of Bengal*, Vol. XVII, London, 1877, p.17

The Raj-family had chequered history and it moulded the destiny of Bonai till the merger of the State in 1948. In course of time, a branch of the Kadambas of Bonai also ruled over Rairakhol. There are no authentic records for reconstruction of the history. Local Oriya works like *Kadamba Gatha* of Pandit Madan Mohan Misra and *Vamsavali* of Pandit Gopinath Misra Kavibhusana throw some light on the traditional history of the Raj-family. According to the traditional account, Raja Pratap Bhanu Deo founded the State some time in the thirteenth century A. D. At that time, the State is said to have been divided into five principalities ruled by aboriginal Zamindars who were more or less independent of one another. The progenitor of the Kadamba Raj-family drove out four of these aboriginal Zamindars with the help of one Zamindar¹ and subjugated the land.

Our knowledge about the history of the Raj-family before the advent of the British suffers from much uncertainty due to paucity of reliable materials. It is believed that Makaradhwaja Govinda Deo, who was the 28th in descent from the founder of the Kadamba family, shifted his capital to the present town of Bonaigarh². It is known from the '*Vamsavali*' of Pandit Gopinath Misra Kabibhusana that there was a boundary dispute between Bamanda and Bonai which resulted in a war in the reign of Raja Kali Chandra Indra Deb³ of Bonai (C. 1626 to 1660 A. D.). The *Kadamba Gatha* relates that Dulha Deva, king of Bamanda, after destroying the subdued country entered into Kantasara, a village in the Bonai State. In this war, the king of Bonai got military assistance from his uncle Raja Gopinath Harichandan of Talcher. However, there is no authentic record to corroborate this tradition ; but being neighbouring States, there seems to have been occasional hostility between the two⁴.

In 1804, Rajah Indra Deo was the ruler of Bonai⁵. Bonai came under the control of the East India Company in 1818 under the provisional agreement concluded with Madhuji Bhonsala (Appa Sahib). During the Kol insurrection of Singhbhum (1820—1821), the peace of Bonai was affected. The main centres of depredation of Lurka Kols were Bamanghati, Keonjhar and north-east quarter of Bonai⁶. The

¹. Report on the Administration of the Bonai State 1945-46, p. 2.

². Vide JKHS, Vol. I, No. 2, 1946, p. 168.

³. *Vamsavali*, canto X, Quoted in JKHS, Vol. II, No. 1, p. 36, foot note.

⁴. JKHS, Vol. II, No. 1, P. 136, see also *Sambalpur District Gazetteer*, p. 82,

⁵. H. N. Sinha (ed), *Selections from the Nagpur Residency Records*, Vol. I, p. 58.

⁶. JBRS, Vol. XLIII, Parts I & 2, p. 74.

rebellion was, however, suppressed by the British Government. The chiefs of Bonai, Mayurbhanj, and Keonjhar were asked to extend facilities for the movement of British troops through their territories¹.

Bonai was finally ceded to the British under the treaty of 1826, when Raghujī Bhonsla III, attained majority. It was administered by the Governor General's Agent for the S. W. Frontier Agency. Major J. R. Ouseley, Agent to the Governor-General, who toured Bonai in 1840 has left a contemporaneous account which forms the earliest authentic record on the political, and economic condition of the State². The territory then ruled by Raja Indra Deo, was in a backward and chaotic condition being plundered by marauding bands of *Thakurs* from the neighbouring States. Major Ouseley has mentioned that the annual Government *Jama* of Bonai was Rs. 200, whereas the amount probably collected by him was Rs. 6000. He estimated that *Jama* would be increased to Rs. 1,00,000 in full cultivation³. However, no improvement could be marked with regard to cultivation. Touring in 1863-64, Colonel T. Dalton found Bonai "for the most part a mass of uninhabited hills, only of the whole $1\frac{1}{12}$ th being under cultivation⁴". He noticed 83 deserted village sites in the State. Raja Chandra Deo, who succeeded Indra Deo was an imbecile ruler, and during his insanity the State was administered by his eldest son Dayanidhi Deo. The State paid an annual tribute of Rs. 200 to the British Government. Besides this, it had to furnish a contingent of armed men for military service if required by the Government. During the Keonjhar disturbances of 1867-68, "the rural levy from Bonai amounted to a dozen match lockman, and between forty and fifty archers⁵". "Dayanidhi Deo rendered good service during this rising, and on August 1, 1868, twenty five insurgent Bhuiya leaders surrendered to him. This broke the backbone of the movement and paved the way for the capture of Ratna Naik and Nanda Naik on the 15th August, 1868. For his valuable services, the title of '*Bahadur*' was conferred upon him by the Governor-General⁶. The *Sawnt*, the Bhuiyan Zamindar of Bonai, the *Danpat* and *Mahapatra* (the two Gond Jagirdars of Bonai) were also presented with swords and shields.

¹ P. Mukherjee, *Orissa in the 19th Century*, Utkal University, p. 222.

² The tour diary of J. R. Ouseley has been given as Appendix I.

³ OHRJ, Vol. V, No. 3, p. 175.

⁴ Report of Colonel Dalton is given in Appendix II.

⁵ W. W. Hunter, *A Statistical Account of Bengal*, Vol. XVII p. 179.

⁶ Vide, Foreign Department No. 810F, dt. May 5, 1871.

Bonaigarh was the capital of the State. Hunter gives the following description of the place ; "Bonaigarh, the residence of the chief, occupies a picturesque bend of the Brahmani river in latitude 28° 49' and, longitude 85° 0', the site being 505 feet above sea level. The garh or fort itself, has the river on three sides, and is further defended by high mud wall and moat. Within this enclosure are about 150 houses, including those of the chief, his court house and jail"¹.

Regarding the ruling family he remarks, "The family live in good style, and are not in debt. They say themselves that the net income of the state does not amount to more than Rs. 5000 (£ 500) per annum. Their expenses, however, must largely exceed this, as they dress well, keep two elephants and several horses, and, inspite of their marked aboriginal features, have married into good Rajput families"².

After managing the affairs of the State as *Tikait*, Dayanidhi Deo succeeded to the *gadi*, under the title of Raja Bahadur Indra Deo on September 12, 1876. The State began to progress during his reign. Under the orders of J. E. K. Hewitt, the Commissioner of Chota Nagpur, the first land revenue settlement was conducted in certain areas in 1879. The settlement, made with the indigenous *padika*, was confined to cultivable wet lands only. The lands lying within the zamindari areas were not covered by the settlement. Hewitt fixed the rates of rent in consultation with kings, leadingmen and the raiyats. This brought to an end the hostility between the chief and the Swant, the recognised head of the Bhuiyans who was the only Zamindar in the State. The quarrel between the Chief and the Swant which had begun in 1871 had caused much distress to the people. When there was a satisfactory settlement, the raiyats were left unmolested to carry on their pursuits. The Chief granted various concessions to people to prevent them from emigrating to neighbouring States. He even encouraged Mundas, Oraons, and other people from Ranchi and Singhbhum to come into his State and occupy jungle areas on easy terms. In 1883, hostility started between the Chief and his Gond Jagirdars over the question of rents and cesses. This culminated in a veritable rising in 1888. Raja Udit Narayan Singh Deo of Saraikala rendered good service to the British during this Bonai rising of 1888³. At last a compromise was effected in 1889 between the conflicting parties by W. H. Grimley, Commissioner of Chota Nagpur Division. Raja Nilambar Chandra

¹ W. W. Hunter, *A Statistical Account of Bengal*, Vol. XVII, p. 174.

² Ibid p. 175.

³ Vide, P. C. Roy Choudhury (ed), *Singhbhum District Gazetteer*, p. 104,

Deo, who succeeded his father Raja Bahadur Dayanidhi Indra Deo, was not an able ruler, and during his reign the affairs of the State lapsed into a very chaotic condition. The Raja caused much complications by leasing out certain forests to timber merchants without reference to the Commissioner. As this was in contravention of the Government order, agreements made by the Raja were revised by the Commissioner in December, 1901. Raja Nilambar Chandra Deo died on February 19, 1902 and his eldest son Dharani Dhar Deo was recognised as the chief under the title of Raja Indra Deo. He was born on the 13th December, 1882 at Bonaigarh and was educated at Deogarh in Bamra. As he was a minor at the time of the death of his father, the state was brought under the Government management and G. M. Shanahan became the Manager of the State on a salary of Rs. 300 per month. E. A. Gait, Chief Secretary to the Government of Bengal makes the following observation about the chief in 1907 :

"The present chief is an intelligent lad, but hardly trained and educated. He has been brought to Ranchi for education and placed under the guardianship of a special-tutor-guardian appointed with the sanction of Government. A most serious charge in connection with the murder of one Brinda keot was preferred against him during the year, and from an enquiry held under Government orders by Mr. officiating Commissioner W. Muada it appeared that the two very gross outrages were committed on the persons of two of the subjects viz. Brinda and Madhab keot; that there was no doubt that these outrages were committed with the knowledge of the minor chief, though perhaps the perpetrators went further than he would have desired to go, and that the minor chief was aware of the efforts which had been made to hush up the case which ended in the death of Brinda keot. However, as it was considered that the minor chief was led into these evil courses by bad adviser, it was considered that it would suffice to require the minor chief to remain at Ranchi under the charge of a suitable tutor for such period as may serve to satisfy His Honour the Lieutenant-Governor that he is fit to exercise the responsible functions of a Ruling Chief"¹.

Raja Dharanidhar Indra Deo, who was the 57th ruler of the Bonai-Kadamba line, married the daughter of Basudev Sudhal Deb KCIE, the late Raja of Bamra. For organising the revenue administration,

¹. Letter No. 2959 P. dated Calcutta July 31, 1907 from E. A. Gait, Chief Secretary to the Government of Bengal, and the Secretary to the Government of India, Foreign Department.

the survey and settlement work in the State was started in 1910 and completed in 1913 by W. G. Kelley. In 1930, Indra Bilas Mukherjee started a Revisional Settlement, but it was stopped on financial reasons before the completion of the work.

In 1935, a Nayabadi settlement was made by N. C. Pattnaik. This brought an additional revenue of Rs. 16,000 to the State. Another settlement was made in 1940-41 for 167 villages exempting raiyats from the *Bethi* service in lieu of an enhanced rate of rent.

Raja Dharanidhar Indra Deo was an enlightened ruler¹. Under the patronage of the ruler Dharanidhar a recreation club was established at Bonaigarh in 1933. Reading the signs of time, he introduced certain reforms in the administration. With a view to save the *halias* from the tyranny of unscrupulous *sahukaras*, the Halia Regulation of 1943 was passed imposing various restrictions in respect of advances, wages, the period of service, etc. With the object of solving the problem of agricultural indebtedness, the practice of *kadhia*² loan was stopped. An arbitrary tax called 'Tika Pancha' realised from the Gountia, and the 'purohita tax' (imposed on the priests for their profession) were abolished. In August 1943, there was unprecedented flood in the Brahmani which affected nearly 66 villages. The Durbar distributed help and gave Taccavi loans to the affected people. With a view to associate the people in administration of the State, Panchayats were organised under the Bonai State Panchayat Orders of 1943. To placate the hill Bhuiyans³, Bhuiyan Durbar was held in 1944 at Bonaigarh on the Daschra day, in which Bhuiyan *Sardars* were presented with red *pagrees* and rewards.

In spite of the efforts of the Durbar for improving the condition of the people, no substantial change could, however, be marked in the material conditions of the people. For touring in the interior of the State, Bamadeb Misra, Dewan of Bonai observed in 1944 "I have been startled to find the people suffering from malnutrition and poverty in spite of abundant natural resources of the state"⁴.

¹. Bharat Chandra Naik, gives in his autobiography a contemporaneous account of conditions prevailing between 1924-1927, when he was the Dewan of the State. See, 'Mo Purba Smruti Katha', Bharat Chandra Naik, Sambalpur 1966, pp. 139-171.

². Under this system, Mahajans used to supply paddy or rice at the time of cultivation, and realised at the harvest time with exorbitant rate of interest.

³. Verrier Elwin, who visited the Bhuiyan areas in the state has given a report about their conditions. See *Report of a tour in the Bonai, Keonjhar and Pallahara States*, by V. Elwin, 1942.

Report on the Administration of the Bonai State, 1943-44, p. 63.

Raja Dharanidhar Indra Deo had no children. He adopted Kadamba Kesari Deo, the eldest son of his late younger brother Hira Bajradhar Deo, as his son on May 13, 1935. Dharanidhar Indra Deo was the last ruler of Bonai. A new chapter began in the history of the State when it merged with Orissa on January 1, 1948.

The early history of the Gangpur Raj-family is shrouded in obscurity. The ruling chiefs of Gangpur claim descent from the Paramara clan of Rajputs of Dharanagar or Ujjain through Raja Vikramaditya. It is said that during the Mahamedan period, two brothers came from Dharanagar. The elder brother settled in Panchet-Kasipur in the district of Manbhum where he established a kingdom; Gangadhar Sekhar Deo the younger brother came to Gangpur. Tradition preserves an interesting anecdote regarding his coming to Gangpur. Referring to this, Rani Janaki Rathnaya Ammerjee, who was the Regent of Gangpur State from 1936—44, states as follows:

“... there was a quarrel between Gangadhar and his elder brother at Sikharbhum, in Manbhum district. Gangadhar being helpless left his home and went towards Suruguja. On the way he saw a Brahmin who prophesied that Gangadhar would be Raja. Gangadhar told the Brahmin that if he would be a Raja, he would allow the Brahmin and his descendants to sit on his *Gadi* for 2 hours every year. The Brahmin accompanied Gangadhar. They arrived at Masabira near Laikera village, Police Station Lephripara. The Bhuiyan family (ancestor of the Zamindar of Sargipalli) made him king. In the meantime the brother of Gangadhar sent his emissaries in search of Gangadhar. But the Bhuiyan Zamindar of Sargipalli concealed Gangadhar on a platform, made in the midst of a tank, and the emissaries failed to find out Gangadhar and went back to Sikharbhum. The State is called Gangpur after the name of Gangadhar Deo.”¹ A second version of the story exists, according to which there was anarchy in the region following the collapse of Kesari vamsa. The leading men felt the necessity of a king, and they stole a child of the Sikhar family from Sikharbhum or Panchet and elected him as their chief². It is difficult to extract historical information from such oral traditions. It seems that several centuries ago, a soldier of fortune or a prince who was or claimed to be Rajput Kshatriya of Paramara clan found the country

¹. Vide, Indrabilas Mukharjee, *Final Report on the Land Revenue Settlement of the Gangpur State, 1929—1936*, p. 3.

². W. W. Hunter, *A Statistical Account of Bengal* Vol. XVII, London, 1877 p. 195, L. E. B. Cobden-Ramsay, *opcit*—p. 177.

an easy prey and became its master¹. The aboriginal Bhuiyans, who inhabited these area, were either subjugated or accepted the new ruler. Traditions about the early history of several of the Orissa States suggest that this is how they came into existence.

Gangadhar Sekhar Deo, who was the first ruler according to traditions, came to this region at a critical time. When the last ruler of the local Kesari dynasty was murdered by Madan Pradhan of Kirmadand, the territory plunged into a state of anarchy. In the absence of a king, life and property became insecure. Gangpur then appears to have been divided into a number of principalities which were held by Bhuiyan families. When marauders and rebels oppressed the people, it is said, Madan Mohan Singh, Zamindar of Hemgir, Bharathi Majhi, Zamindar of Sargipali and Prahlad Gartia, Zamindar of Sarapgarh secured help from the Rajas of Raigarh and Palikot and suppressed the rebellion². Later on, they invited or stole one son from the Sikhar family of Sikharbhum and acknowledged him as their chief. It is said that the Majhi of Sargipali, who was an influential Bhuiyan leader, put vermilion on the forehead of Gangadhar Sekhar Deo and helped him to subjugate the other Bhuiyans. Gangadhar Sekhar was installed as Raja at Masabiragarh. Afterwards, he established a new capital of Gangpur. The extent of his territory is not definitely known.

There appears to be some inconsistency in different statements about the names of the early members of the Gangpur Raj family. The Gangpur Durbar sources give the names of seventeen kings before Raja Raghunath Sekhar Deo with Raja Gangadhar Sekhar Deo as the

¹. However, it is to be admitted, that except for tradition there is no authentic record to substantiate the theory. Colonel Dalton believed (see Appendix II) that the Ruling family descended from the original Bhuiyan chiefs. The Bhuiyans are the sons of the soil (*Bhuin*—earth), and they are the earliest settlers of the region. Referring to the story of stealing a child from the Sikhar family of Sikharbhum, W. W. Hunter remarks, “This legend, however, is merely one form of the Brahmanical doctrine that all rulers should be Kshatriyas; and the wide prevalence of similar stories, together with the dark complexion and non Aryan features of the Raja, make it far more probable that he is, like most of his fief-holders a Bhuiya”. Vide *A Statistical Account of Bengal*, Vol. XVII, p. 195.

². Vide Letter No. 88, dated the October 28, 1938, from Zamindar of Hemgir to the Settlement Officer, Gangpur State, quoted as Appendix XX in *Final Report on the Land Revenue Settlement of the Gangpur State, 1929—36*.

progeny¹; while from archival records we get a somewhat different genealogy of the ancestors of Raja Raghunath Sekhar Deo. The genealogical table of the Gangpur Raj family preserved in the Orissa State Archives was compiled in 1860, therefore, its evidence, should be taken as more authentic. But in this chronological table also we find certain apparent mistakes.

Though there is some confusion about the names of the kings of Sekhar family for some generations, the authenticity of King Hambhira Deo, known from his Barapali copper plate, cannot be doubted. It is also certain that Indra Sekhar Deo was the ruler of Gangpur when Sambalpur came under the East India Company, for his name appears as one of the Principal Zamindars in a letter dated March 26, 1804 addressed to Lt. Colonel Broughton. According to the tradition preserved by the Durbar of Gangpur, Indra Sekhar Deo had his capital at Gangpurgarh but he subsequently removed his capital to Raibogagarh when Pratap Majhi, the Zamindar of Sargipali defied his authority and made preparations to attack Gangpurgarh. After Indra Sekhar Deo, his son Parasuram Sekhar Deo became the ruler. He received the first Sanad from the British Government in 1827 A. D. He had his capital at Nabarangpur, near modern Rajgangpur. He was a powerful monarch, and it is said that he attacked Sargipali to take revenge on Pratap Majhi who had been a bitter enemy of his father. Pratap Majhi escaped but later on when he was found addressing a meeting at Kupsinga, he was dramatically stabbed to death with a spear by Raja Parasuram Sekhar Deo from horse back. After Parasuram Sekhar Deo, Raja Jagadev Sekhar Deo came to the throne, and he removed the capital to Jagatgarh. In all probability, he is no other than Indrajit Sekhar Deo mentioned by Major J. R. Ouseley as the Raja of Gangpur in 1840. In his tour diary of 1840, Major Ouseley recorded that the annual Government *Jama* of Gangpur was Rs. 500 whereas the amount collected by the Raja was about Rs. 10,000. Ouseley believed that the collection could be increased to Rs. 1,00,00. if all lands would be brought under cultivation². The next successor

¹. The kings are (1) Raja Gangadhar Sekhar Deo, (2) Raja Jagannath Sekhar Deo, (3) Raja Jalandhar Sekhar Deo, (4) Raja Chandramani Sekhar Deo, (5) Raja Kandarpa Sekhar Deo, (6) Raja Hatamani Sekhar Deo, (7) Raja Jajahami Sekhar Deo, (8) Raja Tribhuban Sekhar Deo, *alias* Raja Kahnu Sekhar Deo, (9) Raja Pratap Sekhar Deo, (10) Raja Hamir Sekhar Deo, (11) Raja Baijnath Sekhar Deo, (12) Raja Indra Sekhar Deo, (13) Raja Parasuram Sekhar Deo, (14) Raja Jagdev Sekhar Deo, (15) Raja Chandrabhanu Sekhar Deo, (16) Raja Madan Mohan Sekhar Deo, *alias* Raja Panika Sekhar Deo, and (17) Raja Janardan Sekhar Deo.

². OHRJ, Vol.V., No. 3, p. 175

to the throne was Chandrabhanu Sekhar Deo, a cousin brother of Jagadev Sekhar Deo. Chandrabhanu Sekhar Deo had three queens, Kunjamani Kumari, Sarabanga Sundari, and Asha Kumari. Of these, the second queen Sarabanga Sundari, who was a daughter of Bonai family, gave birth to a posthumous son named Madan Mohan Sekhar Deo who survived only for six months. As there was no lineal descendant, there arose a dispute for succession to the *gadi* between Gajraj Sekhar Deo and Raghunath Sekhar Deo who were respectively the second son and the grandson of Danardan Sekhar Deo, Kharposhdar of Birbira. Raghunath Sekhar Deo was the only son of Pitambar Sekhar Deo, the eldest son of Danardan Sekhar Deo. Rani Kunjamani Kumari supported his claim. When the matter came up before the Bengal Government for decision, Danardana Sekhar Deo was considered as the legal heir, and therefore, he was recognised as the chief. Danardan Sekhar Deo further shifted the capital to Suadihi. He was killed by the family priest while proceeding to Ranchi for attending a Durbar, and Raghunath Sekhar Deo succeeded to the *gadi* in November 1858, when he was a minor. Rani Kunjamani Kumari, and after her death, Gajraj Sekhar Deo, the uncle of Raghunath Sekhar Deo, managed the affairs of the State as Sarbarakar during his minority. Raghunath Sekhar Deo took over the charge of the State on January 27, 1871. But after a few years he was implicated in a murder case of two women who were suspected as witches. Hunter makes the following observation on the chief :

“The present chief, Raja Raghunath Sekhar, is (1875) suspended and under arrest at Ranchi, for having been concerned in the murder of two women as reputed witches. The estate is in charge of the Rani and the judicial and police duties of the Raja are carried on by two of the most influential Jagirdars of Gangpur”¹. It is said that Raghunath Sekhar fell victim to the intrigue of his uncle Gajraj Sekhar Deo who wanted to get the *gadi* for himself. However, after the disposal of the murder case and stay at Ranchi for one year, Raghunath Sekhar Deo was again entrusted with the administration of the State. He has his capital at Suadihi. Hunter reports, “The residence of the Raja at Suadi on the river Ib, in latitude 22° 10' and longitude 84° 5', is a collection of low thatched buildings, one of which is used as a court house. There is also a school at which Oriya and Hindi are taught to about 30 boys”². This Suadihi, which was mentioned earlier by Dalton was renamed as Sundargarh by Raghunath Sekhar Deo.

¹. W. W. Hunter, *A Statistical Account of Bengal* Vol. XVII, p. 189

². *Ibid*, p. 195

In the sphere of revenue administration, Raghunath Sekhar Deo introduced Nazar-kut Settlement in some villages in 1874 A. D. Though the system of assessment made by seeing only was defective and was a sort of guess work, it helped to raise the revenue. While the revenue of the State, according to the Jamabandi prepared by Gajraj Sekhar Deo in 1865, was Rs. 5,200 and a number of abwabs, the Nazar-kut Settlement increased the revenue to Rs. 15,000 in addition to supplies of rice and pulses. In 1900 A. D., there was another settlement by which the rents of kuttid villages increased by 25 per cent and non-kuttid villages by 50 per cent. In the mean while, the Chief custed some aboriginal Gaontias by granting leases in favour of some rich Hindu bidders of Sambalpur. Great discontentment was consequently generated and eventually, it culminated in a rebellion in 1897, which was only suppressed by the British assistance. To improve the administration, the British Government appointed in 1900 A. D., Babu Surendranath Majumdar, Deputy Magistrate and Deputy Collector, as Dewan, with executive and judicial powers. However, he could not pull on well with the Chief, and in June 1902, J. A. Craven, Deputy Magistrate and Deputy Collector was appointed as Dewan of the State. E. A. Gait, Chief Secretary to Government of Bengal makes the following observation on the Chief in 1907 : "The only bar to progress is the chief himself, an uneducated and ignorant man, of a grasping and suspicious nature, who has obstinately opposed all efforts at reform excepting when likely to further his own personal interests". The regime of Raghunath Sekhar Deo was unusually long (he ruled from 1871 to 1917) and this ensured the continuity in administration. When Bengal-Nagpur Railway offered for the construction of railways, he made a free gift of all lands required by the Railways and helped the authorities by giving large quantities of material for the construction. Because of railway communications the untapped mineral resources, like lime-stone and dolomite, could be utilised. The effect has been a great development of trade and employment of thousands of subjects in the quarries. In 1899, Raghunath Sekhar Deo was granted Sanad by the British Government. His reign also witnessed some remarkable changes in the administration of Gangpur which was transferred from the control of the Commissioner of Chota Nagpur to the charge of the Commissioner of Orissa in 1905. The first regular survey and settlement of the State was taken up in 1907 and completed in 1911 by C. W. E. Connolly, a member of Bengal Provincial Civil Service. In 1915, His Excellency the Viceroy and Governor-General of India was pleased to confer upon Raja Bahadur Raghunath Sekhar Deo, the title of Maharaja as a personal distinction¹.

¹. Vide No. 98-IC dated Simla, June 3, 1915 in the Foreign and Political Department.

A new kachery building was constructed by him at Sundargarh at an expenditure of Rs. 1,67,218. The old kachery building was converted into a hostel for boys attending Sundargarh Middle English School. The new magnificent court buildings were formally opened by the Lieutenant Governor of Bihar and Orissa on December 20, 1915. Maharaja Raghunath Sekhar Deo died in June 10, 1917 and was succeeded by his grandson Bhawani Shankar Sekhar Deo. But as he was a minor, J. A. Craven, formerly Dewan of Gangpur was posted as Superintendent of State. He was a "sound and capable officer" and with the help of missionaries, he recruited as many as 1081 persons mostly from the Oraon class to serve in the labour corps of the First World War. These men did very good work in France with the Chota Nagpur Corps. After receiving training in the actual administration of the State, Bhawani Shankar Sekhar Deo received charge of the State on May 16, 1919 and was formally invested with the powers at a Durbar held by J. F. Grunning, Commissioner of the Orissa Division, at Sambalpur on 2nd February, 1920. He was a ruler with liberal ideas and he acquainted himself with the needs and conditions of the people. On the whole, he observed "economic conditions are good as can be expected, but the majority of the cultivators, particularly in the western half of the State, are poor despite low rents. It is a remarkable fact that the substantial cultivator is extremely well off and his prosperity continues to increase ; the poor cultivator, is however, very very poor and the reasons to me are obvious. One is that the system of *bethi* as we have it here is wrong ; the poor cultivator, who has to cultivate his fields single handed, has to render the same amount of *bethi* as his wealthy neighbour with two or three or more hired labourers or family member. *Bethi* hardly affects the latter whereas it makes all difference in the world to the former". Even though he was not prepared to give complete freedom from *bethi* and *begar*, he wanted that the system be revised so as to equalise the burden. He was also a patron of learning ; Bhavani Shankar High School, established by him at Sundargarh, was named after him. His reign witnessed many changes in the traditional life. Number of motor bus services increased, even an automatic fly shuttle loom imported from Manchester made its appearance in Gangpur. Referring to the progress in different branches of administration, the ruler reported in 1926 ; "We have excellent communications and public buildings which are in course of yearly improvement and on which we spend nearly a quarter of our income. There are eight State hospitals and dispensaries now in the State, which

¹. Review of the Annual Reports on the Administration of the Feudatory States of Orissa and Chota Nagpur for the year 1923-24, pp. 26-27.

is one to an area of every three hundred square miles, and male and female vaccinators who perform compulsory vaccination and revaccination of the people. We have fifty-nine State Primary Schools, in which teaching is given free of cost, primary education being compulsory there are in addition a Training School for teachers, three Middle Vernacular ; one Middle English and five Girls' schools ; and there are one hundred and thirty Mission Schools, a large number of which, complying with our conditions, are given aid. We have two veterinary assistants who tour the state, there are thirteen police stations, each in charge of a sub-inspector of police of whom several have been trained at the Hazaribagh Training College" ¹. The same ruler who was interested in the welfare of the people could also spend Rs. 78,000 on the marriage ceremony of his sister. During his reign, Sir Henry Wheeler, Governor of Bihar and Orissa with Lady Wheeler visited Gangpur in January, 1926. Raja Bhawani Shankar Sekhar Deo died on May 5, 1930 at the early age of 32; he was succeeded by his eldest son Bir Mitra Pratap Sekhar Deo. Raja Bir Mitra Pratap Sekhar Deo was born on March 10, 1920 and as he was a minor at the time of his father's death, the state was placed under the direct management of the British Government. In December 20, 1935, his mother Rani Janaki Rathnaya Amarjee was made the Regent at a Durbar held at Sundargarh by Lt. Colonel A. S. Meek, the Agent to the Governor-General, Eastern States Agency. At first certain departments of the State were placed under her administrative control. However, on November 15 1936 full regency power were conferred upon her. The Superintendent of the State became her Dewan and exercised executive powers. The Chief Judge had full control over the judicial branch of the administration. Raja Bir Mitra Pratap had his education at Raj Kumar College, Raipur. He visited Europe twice, and during his second visit he died of Pneumonia in London on June 26, 1938. The town of Birmitrapur has been named after him. On his death, his younger brother Raja Bira Udit Pratap Sekhar Deo ascended the *gadi*. His succession to the *gadi* was celebrated in a Durbar held on December 26, 1938 by the Political Agent, Orissa States. He was born on September 25, 1923, and during his minority the Rani Saheba J. R. Ammerjee continued as the Regent. She was the daughter of the Zamindar of Kurupam in the Vizagapatam district. She held the Regency from 1936 to November 27, 1944 when Raja Bira Udit Pratap Sekhar Deo was invested with ruling powers by H. J. Todd, the Resident for the Eastern States Agency in a special Durbar. The title of C. B. E. was conferred upon Shrimati Ammerje

¹. Review of the Annual Report on the Administration of the Feudatory States of Orissa and Chota Nagpur for the year 1925-26, p. 28.

on the New Year's Day of 1945. During her regency the revenue of the State was doubled. A general hospital, lighting and water supply system were completed at Sundargarh. On October 10, 1944 she set up a council. The Regent was the President of the council, the Dewan was the Vice-President and there were two other ministers. Bir Udit Pratap Sekhar Deo also continued the council form of Government. He was an enlightened ruler. Under the Village Panchayat Act, Panchayats were formed. The ruler toured in the Munda villages and took interest in their welfare. Raja Bira Udit Pratap Sekhar Deo was the last ruler of Gangpur, and during his administration, the State merged with Orissa in 1948. This ushered in a new chapter in the history of Gangpur.

Bira Surendra Sai, a claimant to the throne of Sambalpur had been kept in jail at Hazaribagh. The mutineers during the Sepoy Mutiny of 1857 got him out. It is presumed that he must have travelled through Sundargarh district to his home in Sambalpur. But there is nothing on record to show any incident during that period. It is, however, obvious that he must have had the sympathy of the population to be able to go through long tracts of country without being caught and handed over to the British. Ultimately he was kept in jail at Asirgarh in Raipur district of Madhya Pradesh. His son Mitra Bhanu who had been in jail at Asirgarh was released in 1877 on the security of his father-in-law, the Raja of Bonai who kept him at Bonai for 30 years. During this period two petitions to the British authorities to allow him to visit his native village Khinda near Sambalpur had been rejected. Ultimately it was allowed in 1907. These facts could hardly be taken into any account of a freedom struggle.

GLIMPSES OF
FREEDOM
STRUGGLE

When Raja Raghunath Sekhar Deo of Gangpur became greedy about 1897 A. D. and started displacing aboriginal Gauntias in order to replace them by Agharias and rich people from Sambalpur, an agitation started under the leadership of an aboriginal Gauntia, Madri Kalo which ended in the Raja giving up his attempt. The following extract from the report of Sir Edward Gait, Chief Secretary to the Government of Bengal, is interesting.

"The discontent had been smouldering for some years until in February 1897 it took the shape of open revolt by the malcontents, which culminated in a series of more or less serious dacoities and a general blackmailing of the villages in the disturbed tracts. It was

at length found necessary to depute the Deputy Commissioner of Singhbhum with an armed body of British Police to assist the Chief in restoring order and in arresting the insurgent leaders”.

These disturbances can hardly be called a freedom movement as they originated from the attempt on the part of the Raja to displace aboriginal Gaontias and culminated in pacification with the help of British police.

The Non-Co-operation Movement of 1921, the Civil Disobedience Movement of 1930, and the Quit India Movement of 1942 did not touch the district, even though Mahatma Gandhi's social reform had deep influence on the Harijans. Bhawani Shankar Sekhar Deo, the Ruling Chief of Gangpur, wrote in 1924:

“The Gandas still continue their abstinence movement, this is a people cognate to or the same as the Pan. After Mr. Gandhi was sentenced to imprisonment, this tribe or the most of them took a vow of abstinence from intoxicating liquors and flesh till he was released. The movement has nothing to do with non-co-operation; it is purely the religious and social side of what for want of a better term, one calls the Gandhian movement. Having taken the vow and kept it, the Gandas are now attempting to raise their social status, this being the logical and natural sequence in India of the former. Quite harmless meetings are occasionally held”.

This sensible view of the Raja of Gangpur in 1924 is quite unusual; as, to most other Rajas and other loyal citizens the name of Gandhi was like a red rag to a bull. Even though the political storms which were blowing over India, did not touch either Gangpur or Bonai, some of their subjects did leave the district to take part in the various movements. In 1927 Dwarikanath Kusum was imprisoned at Nagpur for joining the Gandhian Movement. The Salt Making Movement of 1930 in the coastal districts attracted Balabhadra Tanti who was detained at Bonai for a week. The following persons took part in the movement.

In 1921, Ghasiram Tanti, Jagan Tanti and Balabhadra Tanti were interested in the Non-Co-operation Movement of Mahatma Gandhi; but there was actually no such movement in the ex-Gangpur State. In 1930, there was no Civil Disobedience Movement as occurred elsewhere in India. But Balabhadra Tanti took part in the Salt Satyagraha in

the coastal areas of Orissa. Chhala Tanti, Ghasiram Tanti and Kendu Tanti were on their way to join the Salt Satyagraha but were arrested at Baudh and detained there for a week.

A serious agrarian movement took place in 1938 as a consequence of the enhancement of rent of the Munda tenants of north Gangpur. They were all Christians. The inspiration obviously came from Ranchi, even though the Mundas of Ranchi were paying higher rent than the Christian Mundas of Gangpur. The Raja brought two missionaries from Ranchi to pacify the Christian Mundas, but their speeches failed to produce any effect. It gradually gathered strength and ended in what is known as the Simko firing of 1939. This was purely an agrarian movement. It cannot go into an account of a freedom struggle. On February 9, 1939 a largely signed petition was submitted to the Regent Rani of Gangpur making a number of demands including abolition of Bethi and Begari. But these demands were not pressed very far. What was pressed was the enhancement of rent. Nirmal Munda, a Christian was the leader of the movement. The attempt to arrest him led to the Simko firing of 25th April 1939.

On this occasion strong representation was made by the Congress leaders of India asking for enquiry and redress etc. This was made the reason for the Congress leaders of Orissa demanding the taking over of Gangpur State by the Government. They also praised the bravery of the Mundas. However, this agrarian movement cannot be called a freedom struggle.

In 1938 under the patronage of the British Commissioner of the Chota Nagpur Division, the missionaries had brought Jaipal Singh to Ranchi to start the Jharkhand movement as a counter blast to the unexpectedly over-whelming victory of the Congress in the General Elections, 1936-37. It is not without significance that at the same time a no-rent campaign started among the Christian Mundas of the adjoining areas of ex-Gangpur State, even though the Mundas of Gangpur were paying lower rent than the Mundas of Ranchi. The source of inspiration of the movement is obvious.

In 1946 Praja Mandalas were formed in the ex-States of Bonai and Gangpur. It gradually gathered strength until the Ruler transferred power to the Government of India on the 15th December, 1947.

APPENDIX I

Tour Diary of J. R. Ouseley on Bonai, 1840.¹

Bonai was situated at a distance of two long and three ordinary marches from Keonjhar. The country was called by the name owing to its forest state in which it was, with some exception, supposed to have existed for many centuries. A small portion of the country was under cultivation although the country was particularly well-adapted to it. The *Raja Indra Deo*, a Rajput, and an elderly man had several sons, but all appeared to be in a degraded state of ignorance and depravity. The Raja experienced great difficulty in keeping his people in order, he complained of neighbours the *Rajas of Gangpur* and *Bamra* being unable to check the inroads of plundering *Thakurs* under them who visited his villages carrying off cattle and committing murders constantly. The productions were the same as those of Keonjhar, chiefly *rice*. But much could be done if taken directly under British management. The forest produce were *Hurra*, *Dhowra*, *Resin* and *Wild silk*. The wood could be applied to every purpose of architectural requisites. Some of the *Sakua* trees were of enormous size and height, and besides these there were a great variety of other superb timber. Near Bonai on the Brahmani a river about 600 ft. wide (sandy bed of 400 ft. included) was a small town with a *Garh* or *Killa* in which the Raja resided. The Killa was surrounded with a wet ditch and bamboo fence. At some distance from Joreikela on the dawk road 3 miles and 4 furlongs north, there were gold dust washing in the sands of Brahmani and the gold was reported to be excellent. Ouseley could procure a little at the market price of Rs. 15 per a tola weight (but the price varied from Rs. 12 to Rs. 15). For want of leisure he could not trace up the gold to the place it was washed down from. *Cheria Paut*:—Near the Kalapani dawk station about 12 miles east of Bonai were the *Cheria Paut* table lands from whence rushed down one of the most beautiful waterfalls that could be imagined. The rock was *Parphyry* and ribbon Jasper capable of being cut and polished and made into the most beautiful chimney pieces and tables. Great abundance of wild animals were stated to exist on the *Cheria Paut* where were also inhabited villages. Tigers abounded, but from having so much prey in the jungle, few accidents occurred.

It could not be expected that the Raja who was unable to live respectably would go to any extent in procuring the improvement of the people. No reports of offences or crimes now made, but it was believed that many offences were overlooked for the payment of a sufficient bribe. The complaint against the post office people were as general as elsewhere.

¹ This brief report on the tour of Major Ouseley in Bonai, compiled by Dr. K. K. Basu, is taken from *Orissa Historical Research Journal* Vol. V No. 3 (October 1956) pp. 167-68.

APPENDIX II

Report on Lieutenant Colonel T. Dalton's Tour in Bonai and Gangpur during 1863-64¹

Bonai is a small hilly district lying very snugly isolated from all civilization, between Sarundah the wildest part of Singhbhoom and the Tributary Mahals of Keonjhar, Bamra and Gangpur. It is 58 miles in greatest length from east to west and 37 miles in greatest breadth from north to south, with an area of 1,297 square miles. It is for the most part a mass of uninhabited hills, only 12th of the whole being under cultivation, but about its centre, on both banks of the Brahmini river, which bisects it, there is a beautiful valley containing sites of upwards of twenty good, and for the most part coterminous villages, the houses well sheltered by very ancient mango and tamarind trees, with a due proportion of graceful palms. The tal and date appear to grow very luxuriantly in the valley, and sugar-cane thrives there. Many of the villages lie close to the river and their luxuriant groves meet and form long undulating lines of high and wellwooded bank. On all sides, at the distance of a few miles are hills, some nearly three thousand feet above the level of the valley, and thus a very pleasing and varied landscape is disclosed at every turn of the broad and rapid rockbroken stream.

The Brahmini river in its progress from Gangpore has forced its way through the barrier of hills separating the two districts, and enters the valley I am describing, after a course of eight miles through a beautiful glen, in a succession of rapids and loughs, the latter swarming with alligators. The shortest route from Gangpur to Bonai is by a rugged path through this pass; but is only practicable in the dry weather.

Bonaigurh, where the Rajah resides, is in the valley, occupying a bend of the river in latitude 28° 49' N. and longitude 85° E. being 508 feet above the sea level. It has the river on three sides, and is surrounded by a mud wall and moat, within which are about 150 houses, including those of the chief, his court-house, and jail: the village altogether, inside and outside the gurh, contains about 300 houses, but nothing that can be called a bazar. The inhabitants are the Brahmins and other retainers of the Rajah; his own family, including most of the collateral branches, legitimate and illegitimate; people

¹ The above extract is taken from Lt. Colonel T. Dalton's paper "Notes of a tour made in 1863-64 in the Tributary Mahals under the Commissioner of Chota-Nagpore, Bonai, Gangpore, Odeypore and Sirgooja" published in *Journal of the Asiatic Society* Part II, No. 1 (1865) pp. 1-12.

practising trades workers in brass and pewter, potters, weavers, smiths; and people of low caste, Gonds, Pahans, Ghassees and Domes. Ooriah is the language spoken, and the costume and customs followed are those of the Orissa provinces. This includes a lavish use of saffron in their ablutions, hair neatly dressed with silver ornaments, and a general tidy appearance. They have good features and are rather fair complexioned. The young girls, till they attain the age of puberty, are very scantily dressed. The only garment usually worn by them is a "Kopin" a scarf, round the loins and between the legs. This is national and classical, as we find from the images of the oldest temples, that it was the favourite costume of the Hindu goddesses, who thus enjoyed the full play of their limbs. The young people of both sexes are fond of adorning themselves with wreaths of bright yellow flowers.

There are 217 inhabited villages in Bonai, and from the number of houses returned by the topographical survey recently completed, the population may be estimated at fifteen thousand six hundred souls. About one half of the agricultural population is of the "Bhooya" caste or race. They are doubtless the earliest settlers, and it was from their hands that the ancestor of the present Rajpoot Rajah first obtained his insignia as chief. The Bamra and Gangpore Rajahs are reported to have in the same manner derived their chieftainships from the Bhooya aborigines, and when a succession to the Raj takes place in any of these districts, the acknowledged head of the Bhooya clan goes through a ceremony of making over to the new chief the country and the people. The person who claims this prerogative in Bonai is titularly called "Sawunt". He holds, at the very trifling quit-rent of Rs. 18 a year, twelve villages with their hamlets, and claims to be the hereditary Dewan of Bonai, but the chief neither employs nor acknowledges him as such. There are two other similar tenures with the title of "Dhunput" and 'Mahapater', and subordinate to them are certain privileged heads of villages called Naiks. Under the Swunt, Dhunput, or Mahapater, the Subordinate officers of the Bhooya militia, all the able-bodied males of the tribe are bound at the requisition of the chief or of the Government, to turn out for service fully armed and equipped. There are no military tenures in the hands of people of any other caste. The Bhooyas thus have great power in the little state. Nor is it only in consequence of their being thus organised as a military body; I find they have also charge of the oldest temples and shrines, and discharge the duties of levites to the exclusion of Brahmins. Yet the temples

are dedicated to Hindu gods. Whatever their origin may be, the Bhooyas are now completely Hinduized. They have no peculiar language or customs of their own. In Bonai and the southern part of Gangpore they speak Ooriah. In the northern parts of Gangpore and Jushpore, Hindi. They are a dark-complexioned race, with rather high cheek-bones, but with nothing else in feature or form to distinguish them as of extraneous origin. According to their own traditions, they were once a great people in Eastern India and had a king of their own but were dispersed by invasion from the west. They are now found in all the districts between Cuttack and Behar, but they are most numerous in this and the adjoining estates, and here may be found the most civilised and respectable and the most primitive of the family. While in the low-lands, they dwell in villages, clothe themselves decently and otherwise follow the customs, adopt the manners, and, I may add the intriguing nature of the more civilised Brahminical races. In the hills of Bonai they are found as naked, as simple, as truthful and unsophisticated as the wildest of the Cole tribes. There are a great number of Bhooyas in the Singhboom district and it is said that they were driven out of the west portion of it, by the advance and spread of the Lurka Coles.

The Bhooyas call themselves 'children of the wind' 'pawun buns' this would establish their affinity to the Apes, as Hunooman is called "pawun—ka-poot", the son of the wind*.

The Bonai hills shelter some thousands of the race commonly called Coles, who all represent themselves as having at some period emigrated from Singhboom or Chota-Nagpore. They have not benefited by the change. Their brethren on the Chota-Nagpore plateau and in the plains of Singhboom are better off and better looking. The emigrants must be the most unimprovable of the race, who, finding that the old country is becoming too civilised for them, fly from the clearances they have made, hide themselves in the hillforests, and elapse into the condition of savages.

Amongst the races of Bonai yet to be noticed are the Kolitas, a very enterprising and respectable class of cultivators, that are found in these regions, Sumbulpore, and strange to say, Assam.

*They very probably formed a division in Rama's army, hence their adoption of Hunooman's pedigree, and their veneration for "Mahabir".

A very large proportion of the purely Hindu part of the Assamese population are Kolitas, and in accounting the different races that are found in that province, the antecedents of the Kolitas have always been a difficulty. They have none of the peculiarities of the Indo-Chinese stock. They are considered, in Assam, as of very pure caste, next in dignity to Kaists, and are on this account much in request amongst the higher classes as house servants. Another difficulty in Assam was to account for what was called the Bhooya dynasty, of which traces are found all through the valley, and it is recorded in their history, that the north bank of the Brahmapootra have Bishnath was known as the country of the Barra Bhooya, long subsequent to the subjugation of the districts of the southern bank by the Ahoms. It appears to me, that there is a strong reason for supposing that the purely Hindu portion of the Assamese Sudra population was originally from this part of India. There is, in idiom especially, a strong resemblance between the Assamese and Ooriah languages, and though the Ooriah written character did not take root in Assam, this may be owing to all the priestly families having been introduced from Bengal*.

The appearance of the Bonai Kolitas reminded me very much of the Assam Kolitas, and I may mention that Ram Chunder, the seventh Avatar, is the favourite object of worship with both.

Of the mineral and other resources of Bonai, I have not much to say. Iron is produced, but the hills are for the most part quite unexplored, and their riches, if they possess any, unknown. The population with so much room for expansion, does not increase. They are 83 deserted village sites, and what are now small hamlets appear to have been at one time large villages. The cause is not apparent, as the people of the more civilised class are well to do and content, and rent is very low, and as in all tributary mahals, fixed. It is Rs. 2-8 for a huli of 17 khundeas. Nevertheless the chief tells me he is obliged to grant all manner of extraneous, indulgences to his ryots to induce them to remain.

Wild beasts are very numerous, and in their ravages lie one great difficulty that villages bordering on or in the jungles have to contend against the ryots complain not of loss of life but of the destruction of

*In a paper in the Asiatic Society's Journal for June 1848, the Assam Kolitas are described by Col. Hannay as having the high and regular features of the Hindu, and many of them with the gray eye that is frequently found amongst the Rajputs of western India.

crops. They say they have to raise grain for the beasts of the forest as well as for their own families. On this account very little cotton is cultivated, though the soil is well adapted for it.

The store of Sal timber in Bonai is immense, but the isolated and almost inaccessible position of the forests will prevent their being utilised for years to come, except for the resin, to obtain which, so many noble trees are girdled and killed. Together with the Sal, are found vast quantities of the Asan tree on which the tusser silk-worm feeds and a considerable quantity of the wild tusser is exported from Bonai, but it is not much cultivated as the mass of the population look upon it as an impure or unorthodox occupation and non but people of the lowest castes, the Domes, Ghassees, Phans and Gonds practice it. (The Gonds are out of their element in Bonai and are thus classed).

We meet with no Rajput or Khettree family except that of the chief. Nothing can be more absurd than the tradition handed down to account for this possession of power by one Khetree family over an alien population. The Nagbunsi family of Chota-Nagpore admit that they are sprung from child found by and brought up in a "Moondah" *family, and that this child was made chief of the whole Moondah race. It is I think highly probable that the chiefs of Bonai and Gangpore were originally Bhooyas who becoming leaders of their people and Rajahs, and allying themselves by marriages with other Rajahs were gradually admitted into the fraternity of Rajpoots or Khettrees. It may be said indeed of both of them, that the inter-marriage with families of better certified khettree descent has not yet obliterated their Bhooya lineaments, for they bear a very remarkable likeness to that race in feature.

GANGPORE

This is a very extensive estate lying between Chota-Nagpore, Jushpore, Oodeypore, Sumbulpore, Bamra, Bonai and Singhbhum. It is kidney-shaped. Its greatest length from east to west is about 97 miles, and in breadth from north to south it varies from 15 to 50 miles. The topographical survey of the estate is not yet complete and its area cannot therefore be computed with accuracy, but I estimate it at double the size of Bonai or about 3,000 square miles. Of this area not more than a tenth is under cultivation.

The Sunkh and Keol rivers from the plateau of Chota-Nagpore, unite near Gurjun in Gangpore and form the Brahmini. The Eeb, another river of some magnitude, flows through Gangpore south on

*Kole

its way to the Mahanuddee. The ordinary level of Gangpore is about 700 feet above the sea ; the highest hill yet noted by the topographical surveyor is 2,240 not much above the general level of the Chota-Nagpore plateau. The descent, however, from the plateau to the ordinary level of Gangpore is gradual, and there is a tolerable road. As in Bonai, the majority of the population are Bhooya, and they were no doubt the first settlers. All the Zemindars under the Rajah are of that race, and hold their estates as fiefs at low fixed rates and terms of service. Consequently the Rajah is under the necessity of adopting a conciliatory policy towards some of them at least. There are generally one or two in opposition, but fortunately for the lord Paramount the great vassals are too jealous of each other readily to combine. The largest estate is held by the vassal who bears the title of Mahapater. Its border on Singhbhoom, extends to the Brahmini river and comprises 100 villages for which the Mahapater pays only Rs. 200. This part of Gangpore was at one time more densely populated than it is at present, but all the more peaceably disposed of the old inhabitants including it is said, several colonies of Brahmins, were slaughtered or driven out of the country by the Lurka Coles. To the south, another great vassal, under the title of Gurhoutea, holds the Hamzeer estate, consisting of 84 villages, and an unlimited run of hill and forest. Gungadhur the Gurhoutea, boasts that he can travel twenty-four miles in a direct line over his own ground without seeing a human habitation, all through hill and forest, which, united to enormous tracts of hill and forest of Raigurh and Sambalpore, forms perhaps the most extensive uninhabited region in all-India. The third of these vassals has his estate on the north-west of Gangpore and holds the passes into the country from Jushpore and Chhota-Nagpore. This estate is in advance of the passes, and looks as if it had been filched from Jushpore, to which from the geographical features it ought to belong.

The chief is of the 'Seekur' family and claims connectionship with the Rajah of Pachete. His ancestor the first Rajah of Gangpore, was, we are told, invited by the Bhooyas to take charge of their country ; from which, it is said, they had just expelled a Rajpoot family called the "Kaiserbuns", but as I stated above, I think it more probable that the ruling family are descended from the original Bhooya chiefs. The traditions, assigning to them a nobler birth, are founded on the supposition that the Rajpoots or Cshetryas were the only class qualified to rule, that where there was no one of this class over a nation or a people, "the Guddee" was vacant, and a Cshetrya had only to step in and take

it. The Cshetryas must have wandered about like knights-errant of old, in search of these vacant Guddee, as we do not find in the country any descendants of the followers whom they must have had, if they came in other fashion to oust the native chiefs and seize the country.

It was admitted to me that until these Tributary Mahals came under British rule, a human sacrifice was offered every third year before the shrine of Kali at Suadeeh, where the present Rajah resides. The same triennial offering was made in Bonai and Bamra, Bhooya priests officiating at all three shrines. This fact appears to me to be confirmatory of the theory that the Hindus derived from the aboriginal races the practice of human sacrifices.

In the above named districts, the practice of widows going "Suttee" was also generally followed in the family of the chiefs and in Brahmin families, up to a recent date ; many of the grand mothers of the present generation of chiefs and Brahmins having so distinguished themselves. One man was pointed out to me as having lost his mother by the rite of suttee. He would not say 'lost' ; he no doubt regards her as canonized by the act.

A rather romantic story of a suttee that occurred some fifty years ago in Gangpore is related.

A Brahmin took a dislike to a girl he had just married, and turned her out of door, a wedded maid. She took refuge with her parents who were poor, and who soon after died, leaving her destitute ; then she wandered from village to village subsisting on alms and leading a wretched widowed life. Her husband married a second time, and sons and daughters were born to him and grew up about him, and in the fullness of years he died. His second wife had preceded him, so this corpse was placed alone on the funeral pile, and the torch was about to be applied to it, when a poor emaciated and meanly clad female stepped forward, and as the first, the faithful and only surviving wife of the deceased, claimed the right of suttee. Her request was complied with. Bathed, anointed, clothed, and adorned with flowers like a bride she ascended the pile and clinging to the corpse of the husband who had so cruelly discarded her, and for the first time in her life pressing her lips to his, his flames arose and their ashes were mingled together !

There is no doubt still a strong sentiment in favour of suttee in the Tributary Mehals, and States under native government. Its prohibition has not been long enforced in the eastern parts of Rewa. Not long ago, in that territory, on the death of a Brahmin, his widow, notwithstanding the prohibition, was so vehement in her desire to join her

husband on the pyre, that her relatives as the only method of restraining her, locked her up. When the ceremony was over they proceeded to release her, but found that her spirit too had fled. She had attained her object, as my informant declared, by a special interposition of providence in her behalf.

Proceeding north-west from Nugra and the banks of the Brahmini river, you enter the Nuagurh division of Gangpore and come to Laingurh near the confluence of several streams, which was once the capital and promises to be so again, as the present Raja is just now building there. It is very prettily situated, and the guruh on a little hill in the centre of the valley has a commanding position, but I fear it is not a healthy site, from the number of enlarged spleens and cases of skin-disease I observed amongst the people. There are many fine old village sites in Nuagurh, now occupied by impoverished squatters, mostly Oraons from Chota-Nagpore.

The old inhabitants have died off or removed to more civilised and securer regions further south. The shabby huts of the squatters huddled together under the shade of the grand old trees, the monuments of the more civilised race that preceded them, look as much out of place as mud cabins in a street of palaces. The Rajah and other Zamindars give these new settlers, when they first come, three years of absolute immunity from demands of every kind. In the fourth year they are called on to pay a light assessment. It is difficult to describe on what principle it is imposed, but in old settled villages of Oraons it does not amount, including rent and contribution, to more than Rs. 1—8 per house or family. The soil in this part of Gangpore appears very fertile, and there is still available much of the slightly swampy rich looking land, that gives the best crops of rice. I find "Sirosha" now in flower growing in great luxurians. It is sold here at one maund for the rupee.

The Coles are evidently a good pioneering race, fond of new clearings and the luxuriant and easily raised crops of the virgin soil, and have constitutions that thrive on malaria; so it is perhaps in the best interest of humanity and cause of civilisation that they be kept moving by continued Aryan population. Ever armed with bow, arrows and pole-axe, they are prepared to do battle with the beasts of the forest, holding even the king of the forest, the "Bun Rajah", that is the tiger, in little fear. Mixed up with them are members of the Kherria tribe, who are as yet a mystery to me, and I will say nothing more about them till I learn more. I am assured that they have no affinity with either Moondahs or Oraons, i. e., with those who are generally called Coles.

Borgaon, near the Mahabeer hill on the borders of Bamra, is the largest village Gangpore possesses on this side. It contains 160 houses—20 of Brahmins, 20 of 'Telis' oil-pressers, 22 of various Hindu Ooriah Castes, and the remainder Oraons and Kherria. The two latter coming in contact with Brahmins, have at once succumbed and become their farm labourers. It appears to make little difference in the condition of Oraon emigrants, whether they are farm servants or farmers on their own account; they have the same wretched huts, scanty apparel, and generally uncared-for appearance, as if they had in despair given up all ideas of rendering themselves attractive; but the wonder is that they remain in this dependent position, when they can get land on such easy terms and become farmers themselves.

The village pays direct to the Rajah a rent of Rs. 34, magun or contribution Rs. 34, and 64 maunds of rice. The price of rice is from one maund to two maunds for the rupee. On births, deaths and marriages in the Rajah's family, the villagers are called on for additional contributions, and when that family, as it is just now, is a large one, the extra charge comes to from Rs. 30 to 40 a year. The total demand is therefore about Rs. 1.60 a year, and from the extent of land under cultivation, I do not think this would amount to more than three annas a beegah on the cultivated area. It is evidently a very old village site, surrounded by extensive groves of mangoes, and with several tanks of very insalubrious water overgrown with water lilies. Hills are seen on all sides, but the most remarkable feature in the landscape is the great Mahabeer hill; a mass of rock tilted up, and shewing towards Borgaon, an uneven wall of disrupted ends, forming a cliff of fantastic outline, nearly 2,000 feet high.

The tutelary deity of this hill is favourite object of worship with the Bhooyas, and is more or less revered by all the country. The top of the hill or rock being difficult of access, Mahabeer has studied the convenience of his votaries, and entered an appearance down below in the form of a stone, in a sacred grove or 'Surna' at the foot of the hill. The idea of a 'Surna' is pretty and poetical. It is or ought to be a fragment of the primitive forest left when the first clearance was made, as a refuge for the sylvan deities whom the clearing might have disturbed. The best villages and most thriving portion of the population in Gangpore are found on both banks of the Eeb river, as we approach the boundaries of Sumbulpore. Here the very industrious and respectable looking caste called Agureahs are first met with. They are found in Gangpore, Sumbulpore, Raegurh, Raipore and Rutenpore. They

number about 5,000 in the three first places named. According to their tradition, they are called Agureahs from having, ages ago, come from Agra.

They were a proud Cshettrya or Khettree family a stiff-necked generation, and refusing, when making an obeisance, to bow their heads, the Raja lowered some of them summarily by cutting them off. They therefore left Agra and wandered south through Central India till they came to Sumbulpore, and eventually settled in these regions. Acquiring lands, and determining to devote themselves entirely to the tilling of the soil, they divested themselves of their "paitas" making them over to the Brahmins, and no longer styling themselves or being styled Khettrees they became known as Aguriahs.

They bury their dead, and for this departure, from the usual custom of Hindus, they can assign no specific cause, but that they gave up the practice of incremation when they resigned their pretensions to be esteemed Khettrees. They nevertheless now profess to be vishnoovis divided into two denominations, 'Ramanundyas' and 'Kubeer Punthees'. The vishnoovi doctrines they have probably taken up, since their migration to tracts bordering on Orissa and approximating the great fane of Juggernath. They say they gave up the worship of Kali when they resigned their "Paitas" and took to the plough. It is probable that they were Boodhists, obliged to leave the Gangetic provinces for refusing to conform to Brahminism.

Their physique decidedly supports the tradition of their Khettree extraction : they are distinguished amongst the dark, coarse-featured aborigines of this country, as a tall, fair, well-made and handsome race, resembling the Rajpoots in every thing but swagger. That went with the 'Paitas' as a farewell offering to Kali. The women, who are not very jealously secluded, have good features and figures, and a neat and cleanly appearance.

The latter are subjected to no field labour, their sole business being to look after the domestic arrangements, to gin cotton and to spin. They do not weave. Their spun thread is made over to the weavers, who are paid in kind for their labour. Their villages, laid out in streets, are comparatively well kept, and their own houses in these villages substantial, clean, and comfortable. Munguspore, near the Sumbulpore boundary is, I think, the largest. It contains 200 houses, those of the Aguriahs occupying the centre of the village surrounded by huts of

Coles and others of the primitive races, whose services they have secured as their farm labourers, and who are not allowed to hold lands, but repaid for their labour at the rate of three seers of dhan per diem, and a modicum of clothing doled out annually.

The soil in this part of Gangpore is exceedingly rich, producing magnificent crops of sirosha, sugar-cane and tobacco, besides the staple rice. The plants of the country tobacco grown by the Aguriahs are the finest I ever saw, and they grow more cotton than they require for their own use, though they do not stint themselves in raiment. I am certain the soil and climate is well suited for the finer kinds of cotton.

Proceeding north up the Eeb from this, the Arabia Felix of Gangpore, we came again upon untidy Bhooya villages, and their patches of cultivation, separated by miles of the monotonous Sal forests, and there is no change in the features of the country or the population, till we come to the estate of Bhugwan Manjee, which, as above mentioned, does not appear as if it belonged to Gangpore, as it is separated by a range of hills, and approached by a very narrow and difficult pass. We are still amongst Bhooyas, but here they speak Hindi instead of Ooriah, and the peculiarities of Ooriah costume and decoration are rarely met with.

APPENDIX III

Copy of Sanad granted to the Chief of Gangpur State in 1899.

Whereas the status and position with reference to the British Government of the Tributary Mahal of Gangpur in Chota Nagpur has hitherto been undefined, and doubts have from time to time arisen with regard thereto ; His Excellency the Viceroy and Governor-General in Council is pleased to grant to you, Raja Raghunath Sikhar Deo, the following sanad, with a view to assuring you that the British Government will continue, as long as you remain loyal to the crown and abide by the conditions of the sanad, and of your other engagements with the British Government, to maintain you in the position and privileges which you have heretofore enjoyed or which are now conferred upon you :—

SANAD

I. You, Raja Raghunath Sikhar Deo, son of Lal Pitambar Sikhar Deo, are hereby formally recognised as the Feudatory Chief of the Gangpur State and you are permitted, as heretofore, to generally administer the territory of the said Gangpur State, subject to the conditions hereinafter prescribed. In like manner your heirs and successors shall become entitled to your privileges and liable to your obligations ; provided that no succession shall be valid until it has been recognised by His Excellency the Viceroy and Governor-General in Council.

II. You shall, during the next twenty years, pay a tribute or pesh-kash of rupees one thousand two hundred and fifty, and this amount may be revised thereafter, if His Excellency the Viceroy and Governor-General in Council should so direct. Your successors shall pay nazarana to the British Government on succession in accordance with the general rules on that subject for the time being in force.

III. You shall conform in all matters concerning the preservation of law and order and the administration of justice generally, within the limits of your State, to the instructions issued from time to time for your guidance by His Honour the Lieutenant-Governor of Bengal. You will appoint such officers, and pay them such emoluments as, on full consideration of the circumstances and of such representations as you may wish to make, may, from time to time, appear necessary to His Honour the Lieutenant-Governor of Bengal, for the proper hearing of cases and administration of justice in your State. It will also be competent to you to nominate for appointment by His Honour as Honorary Magistrates or Munsifs such other persons as you may wish to be so appointed from time to time.

IV. You shall deliver up any offender from British or other territory who may take refuge in your State. You shall aid British officers who may pursue criminals into your territory, and, in the event of offenders from your own State taking refuge in British or other territory, you shall make a representation on the matter to the authorities concerned.

V. You shall administer justice fairly and impartially to all alike.

VI. You shall recognise and maintain the rights of all your people, and you shall on no account oppress them or suffer them to be in any way oppressed.

VII. You shall levy no tolls or duties of any kind on grain, merchandise, or other articles passing into, or out of, or through your State without the permission of His Honour the Lieutenant-Governor of Bengal.

VIII. You shall consult the Commissioner of Chota Nagpur in all important matters of administration, and comply with his wishes. The settlement and collection of the land revenue, the imposition of taxes, the administration of justice, arrangements connected with excise, salt and opium, the concession of mining, forest and other rights, disputes arising out of any such concession, and disputes in which other States are concerned, shall be regarded as specially important matters, and in respect to them you shall at all times conform to such advice as the Commissioner may give you.

IX. The right to catch elephants in your State is granted to you as a personal concession and as a matter of favour, but this concession is liable to withdrawal whenever it may seem desirable either on account of abuse or for other reasons, and it will not necessarily be granted to your successor.

X. All questions as to boundaries between your State and British or other territory will be dealt with by the Commissioner of Chota Nagpur or such other officer as the Government of India or His Honour the Lieutenant-Governor of Bengal may appoint, either generally, or specially in that behalf, with two assessors, one of whom is to be nominated by yourself, unless in any such case you should prefer that the question should be decided by such Commissioner or other officer alone in which case the question shall be referred for his decision accordingly.

Calcutta, the 8th March 1899.

CURZON OF KEDLESTON,
Viceroy and Governor-
General of India.

CHAPTER III

PEOPLE

POPULATION

According to the 1971 Census the population of Sundargarh district was 1,030,758. The district comprises 3 subdivisions and 15 police stations.

The population of each subdivision is shown in the following table as per 1951, 1961 and 1971 Censuses.

Subdivisions	1951	1961	1971
Sundargarh ..	285,261	351,839	441,675
Panposh ..	161,451	267,937	412,019
Bonai ..	105,491	138,841	177,064

The phenomenal growth of 53.77 per cent during the last 10 years in Panposh subdivision is particularly due to the establishment of the steel industry at Rourkela. Out of three subdivisions, Sundargarh proper is the most thickly populated area in the district. It contains 42.85 per cent of the population of the district. Next in importance comes the subdivisions of Panposh and Bonai.

According to the Census of 1971, the population of the police stations in the district is as follows:

Police Stations	Persons	Males	Females
Sundargarh ..	68,953	34,614	34,339
Lefripara ..	46,948	23,294	23,654
Hemgir ..	47,449	23,733	23,716
Bhasma ..	50,927	25,198	25,729
Talsara ..	71,302	35,669	35,633
Bargaon ..	60,290	30,102	30,188
Rajgangpur ..	95,806	48,837	46,969
Birmitrapur ..	56,964	28,968	27,996
Raiboga ..	27,707	13,802	13,905
Bisra ..	90,698	45,429	45,269
Raghunathpali ..	31,320	16,069	15,251
Bonaigarh ..	75,104	38,107	36,997
Banki ..	12,428	6,213	6,215
Gurundia ..	26,117	13,187	12,930
Tikayatpali ..	12,778	6,329	6,449
Mahulpada ..	10,716	5,481	5,235
Koira ..	19,156	10,002	9,154
Kamarposh Balang ..	20,765	10,505	10,260
Kalunga ..	32,828	16,630	16,198

1. Census of India, 1971, Orissa, part II-A, pp. 33-34.

The population of the areas now comprising Sundargarh district was 277,173 in 1901. In 1971 it rose to 1,030,758 recording a rise of 271.8 per cent in 70 years. The significant growth of 30.7 per cent during the decade 1901-11 suddenly fell to 4.2 per cent during the next decade 1911-21 due to epidemic diseases (influenza, cholera, and small-pox) which burst over the district in 1918-19 and wrought havoc on the population. From 1921 onwards there has been a steady and progressive increase in the population which rose as high as 37.4 per cent during the decennium 1951-61, higher than in all other districts of Orissa and much higher than the State average of 19.8 per cent and the all-India increase of 21.6 per cent. Comparatively greater increase in population during 1951-61 may be attributed to the industrial advancement of the district. During this decade a cement factory and allied industries were set up at Rajgangpur and a modern steel plant started production at Rourkela. The construction of a fertiliser plant at Rourkela, and the development of mining industry in Birmitrapur and other areas of the district were the additional causes of prosperity. Between 1951-61 the Sundargarh College, the Regional Engineering College and the Rourkela Science College were opened for the spread of education in the district. Besides, large scale industrialisation has provided incentive for participation by the people from all over India. The last decade 1961-71 witnessed substantial rise in the population by 35.8 per cent due to agricultural prosperity combined with large scale industrialisation and the absence of natural calamities.

The decennial growth of population between 1901 and 1971 for the district is given in the following table:

Year	Persons	Decade variation	Percentage decade variation	Males	Females
1901	277,173	..	..	141,493	135,680
1911	362,138	+84,965	+30.65	182,149	179,989
1921	377,449	+15,311	+4.23	188,344	189,105
1931	436,860	+59,411	+15.74	216,985	219,875
1941	490,708	+53,848	+12.33	243,296	247,412
1951	552,203	+61,495	+12.53	274,401	277,802
1961	758,617	+206,414	+37.38	396,214	362,403
1971	1,030,758	+272,141	+35.87	530,836	499,922

The density of population in Sundargarh district has changed from decade to decade as will appear from the following table:

Year	Density per sq.km. in the district	Density per sq.km. in the State
1951	56	94
1961	78	113
1971	107	141

1. Census of India, 1971, Orissa, Part II-A, p. 107.

Growth of Population

Density

The above table reveals a continuous and steady increase in the density of population from 1951 onwards. According to the 1971 Census the density per square kilometre in different subdivisions was as follows: Sundargarh 96, Panposh 224, and Bonai 53. Among police stations density is the highest in Raghunathpali police station (194) and the lowest in Gurundia (27).

Rural/Urban ratio

The rural/urban population ratio is 76.75 to 23.25. The percentage of rural population to the total population of the district has decreased from 97.21 per cent in 1951 to 76.75 per cent in 1971 as compared to a similar fall from 95.93 per cent to 91.59 per cent in the State, indicating a faster trend of urbanisation in Sundargarh district than that of the State.

Rural Population.

The total number of villages in the district according to the 1971 Census was 1,712 of which 1,621 were inhabited. The total rural population of Sundargarh district was 791,073 giving an average of 488 persons per inhabited village as against 428 in the State as a whole. The percentage of rural population to the total population in the district, i.e., 76.75 is lower than similar percentage in the State which was 91.59 per cent.

The villages of various population sizes and the percentage of population living in them in 1971 are given below.

Village with No. of population	No. of villages	Percentage of No. of villages in this class to total No. of villages.	Total population	Percentage of rural population in this class to total rural population.
Less than 200	439	27.08	51,509	6.51
200—499	642	39.61	216,309	27.34
500—999	379	23.38	264,976	33.50
1,000—1,999	131	8.08	174,861	22.10
2,000—4,999	29	1.79	76,249	9.64
5,000—9,999	1	0.06	7,169	0.91
10,000 and above	..	..	..	..

According to the 1971 Census 1,081 villages (66.69 per cent of the total number of villages) of the district are small ones each having a population of less than 500 persons. Only 379 villages (23.38 per cent) have a population varying from 500 to 999 and 161 villages (9.93 per cent) have a population of 1,000 and above. It is worth mentioning that out of the total rural population, 33.85 per cent live in small sized villages, 55.60 per cent in medium sized, and only 10.55 per cent in large size villages.

The table below shows the growth of urban population in the district since 1951.

Year	Persons	Decade variation	Percentage decade variation	Males	Females
1951	15,367	..	..	8,077	7,290
1961	135,760	+120,393	+783.45	83,287	52,473
1971	239,685	+103,925	+76.55	133,907	105,778

It is clear from the above table that the population of the urban areas has been steadily increasing from decade to decade. It was 15,367 in 1951; 135,760 in 1961 and 239,689 in 1971. Their respective percentage to the total population are 2.79, 17.86 and 23.25. This gives a picture of rapid urbanisation due to industrialisation in the district. The number of towns has increased from two in 1951 to four in 1961. At the time of 1951 Census Sundargarh and Birmittapur were declared as Class V towns (containing 5,000 to 9,999 persons) for the first time in the district. Rourkela and Rajgangpur were added in 1961. Addition of these two industrial towns has substantially contributed to the growth of urban population during the decade 1951—61. For better administration Rourkela has been divided into two towns namely, Rourkela steel town and Rourkela civil town.

The urban population of the district numbering 239,685 persons according to the Census of 1971 is spread over the following towns.

Name of towns	Status of towns	Population
Rourkela Steel Town	Notified Area Council	125,426
Rourkela Civil Town	..	47,076
Birmittapur	.. Municipality ..	28,063
Rajgangpur	.. ..	21,876
Sundargarh	.. ..	17,244

The number of displaced persons in Sundargarh district from 1946 to 1951 was 681 (367 males and 314 females), out of which 86 (55 males and 31 females) were from West Pakistan (present Pakistan).

Displaced
Persons

and 595 (312 males and 283 females) from East Pakistan (present Bangladesh). All these were settled in different parts of the district. Various facilities were provided to rehabilitate them and loans were also given to enable them to become self-sufficient.

When the Rourkela steel plant was established 32 villages were acquired and 2,465 families were uprooted. For their resettlement, three resettlement colonies have been set up by the State Government and some reclamation blocks have been opened in the interior. To help the displaced persons to resettle and rehabilitate themselves the following assistance has been given and expenditure incurred which are shared equally between Hindustan Steel Limited and the State Government:—

- (a) A plot of land measuring 60' X 40' in the resettlement colonies free of cost for construction of houses by each family.
- (b) A subsidy to each family ranging from Rs. 200/- to Rs. 400/- for the construction of new houses.
- (c) Grant of cultivable waste land in lieu of acquired cultivated land free of cost up to a maximum of 33 acres to each recorded tenant and,
- (d) Land reclamation subsidy of Rs. 100/- per acre to each family.

The Mandira Dam was built by Hirakud Dam organisation for the Hindustan Steel Limited. The work started in February 1957 and was completed in June 1959. For the construction of the Dam, 31 villages were acquired and 941 families comprising 8,785 persons were uprooted. The displaced persons were rehabilitated in two colonies, namely, Liang resettlement colony and Usra colony.

Due to the establishment of the Utkal Machinery Limited at Kansbahal, 236.27 acres of land were acquired from four villages of Kainsbahal (129.65 acres), Pourposh (97.08 acres), Dheluan (5.38 acres) and Chungimati (4.21 acres) of Sundargarh subdivision. As a result, altogether 34 families having a total population of 183 were uprooted. The displaced persons were rehabilitated at Kansbahal resettlement colony. Each displaced family has been allotted a plot of homestead land. Out of these displaced families, 13 families were given a subsidy @ Rs.400 each and 6 families @ Rs.300 each for construction of their new houses.

The volume of migration in the district was very low up to 1951. According to the 1961 Census, due to rapid industrialisation and urbanisation this district attracted a large number of migrants who constitute 16

Migration

per cent of the total population, i.e., 758,617. Out of these ten per cent are born outside the State. The majority of migrants hail from Bihar Madhya Pradesh, West Bengal, Punjab and Andhra Pradesh. Besides there were 2,677 persons belonging to different foreign countries who were residents in this district at the time of 1961 Census. These people came mostly from West Germany and other European countries at the time of the establishment of the steel factory at Rourkela with West-German collaboration. Migrants born outside the district, outside the State and outside the country, as per 1961 Census¹ are indicated below:—

Place of birth	Males	Females	Persons	Percentage
Persons born at place of enumeration.	285,637	180,448	466,085	61.4
Persons born elsewhere in the district of enumeration.	47,283	123,626	170,909	22.5
Persons born in other districts of the State.	24,266	22,021	46,287	6.1
Born in other States in India.	36,822	34,327	71,149	9.4
Born in countries outside India.	1,733	944	2,677	0.4
Unclassifiable ..	473	1,037	1,510	0.2
Total ..	396,214	362,403	758,617	100.0

The 1961 Census also reveals that 39,278 males and 77,770 females have lived for more than 10 years and are treated as semi-permanent or permanent migrants. Out of them, 18,090 males and 59,335 females were born within the district. 14,811 males and 27,513 females have stayed for periods varying between 6 to 10 years of whom the majority belonging to both the sexes were born in the district. Majority of the males might have migrated for jobs, but the females appear to have migrated consequent to their marriage, besides pursuing some economic activities. 34,969 males and 48,191 females have resided for periods varying between 1 to 5 years of whom the majority in both the sexes belong to the district, 16,441 male and 16,378 female immigrants have resided for less than a year. Males might have migrated for short periods in order to get educational facilities and better economic pursuits. But large number of female immigration is due to marriage².

The distribution of population by place of birth and by the categories of workers and non-workers given below shows that the migrants are

1. District Census Handbook, Sundargarh, 1961, p.15

2. Ibid. p. 17

for most part engaged in non-agricultural pursuits like Other Services, Transport, Storage, Communication and Industries¹.

Industrial Category	Born elsewhere in the district of enumeration	Born in other districts of the State	Born outside the State
<i>Workers</i>			
Cultivator ..	55,289	5,450	10,292
Agricultural labourer ..	13,692	1,410	1,856
Mining, quarrying, livestock Forestry, Fishing, Hunting and plantations, orchards and allied activities	1,528	697	1,158
Household industry ..	5,321	1,564	1,991
Manufacturing other than household industry	2,628	2,277	9,460
Construction ..	424	971	2,927
Trade and Commerce ..	801	767	2,109
Transport, Storage & Communications	1,526	1,707	2,417
Other Services ..	15,233	10,394	14,220
Non-workers ..	74,467	21,050	24,719

LANGUAGE

Out of 58 languages returned in the State in 1961, 36 are spoken in Sundargarh district. Of these 36 languages, Oriya is spoken as mother-tongue by 460,255 persons or 60.73 per cent of the total population. Next to Oriya other important languages are Mundari, Kurukh/Oraon, Hindi, Kharia, Kisan, Laria, Bengali, Urdu, Ho, Kol, Telugu, Kui, Bhumij, Malayalam, Punjabi and Tamil. The number of speakers of other mother-tongues is insignificant. Among the non-tribal languages the popularity of Hindi is only next to Oriya. Despite low proportion of speakers, tribal languages, namely, Mundari and Kurukh/Oraon occupy the second and third position respectively.

The sexwise distribution of different languages spoken in the district according to the Census of 1961 is given in Appendix-I.

Further, it is interesting to analyse the pockets of concentration of language groups which bear testimony to the peculiar history of the region. Those who have migrated in search of cultivable land,

1. District Census Handbook, Sundargarh, 1961, p. 17

employment, trade, and commerce have introduced their mother-tongues. Thus Bengali, Urdu, Telugu, Malayalam, Gujarati and Laria mother-tongues are found in this district. Laria, Bengali, Kharia, Kisan and Turi showed concentration in the Sadar subdivision while Kora, Urdu, Oraon, Mundari, Binjhia and Gujarati in the Panposh subdivision. The Bonai subdivision showed concentration of tribal languages like Ho, Kol, Kui, Bhumij and non-tribal languages like Telugu and Malayalam. Oriya is spoken through the length and breadth of the district, but the Oriya spoken in the district of Sundargarh is slightly different from the Oriya spoken in the districts of Sambalpur, Bolangir and Kalahandi a few examples of which are given below.

In the district of Sundargarh some of the Oriya words have synonyms which are different from those used in the district of Sambalpur.

Sambalpur Oriya	Sundargarh Oriya	Oriya
Niko (ନିକୋ)	Bane (ବନେ)	Bhala (ଭଲ)
Apne Narduchhe (ଆପ୍ନେ ନର୍ଦ୍ଦୁଚ୍ଛେ)	Tapne Batkuchhe (ତାପ୍ନେ ବାଟକୁଚ୍ଛେ)	Se Dauduchhi (ସେ ଦୌଦୁଛି)
Kanduchhe (କାନ୍ଦୁଚ୍ଛେ)	Roo-Chhe (ରୁଚ୍ଛେ)	Kanduchhi (କାନ୍ଦୁଛି)
Kenta (କେନ୍ତା)	Kentu (କେନ୍ତୁ)	Kemiti (କେମିତି)
Khabad (ଖାବଡ଼)	Labad (ଲାବଡ଼)	Phopad (ଫୋପଡ଼)
Tukli (ଟୁକ୍ଲି)	Daki (ଡକି)	Teki (ଟେକି)

The verbal forms in the Oriya spoken in Sundargarh also differ to a certain extent from those used in Sambalpur.

Sambalpur Oriya	Sundargarh Oriya	Oriya
Nai Jain (ନାଇଁ ଜାଏଁ)	Ni Jaisin (ନି ଜାୟିସି)	Jibinahin (ଜିବିନାହିଁ)
Nain Karen (ନାଇଁ କରେଁ)	Ni Karsin (ନି କାର୍ସିନି)	Karibinahin (କରିବିନାହିଁ)
Karisarichhen (କରି ସାରିଛେଁ)	Karisarichhena (କରି ସାରିଛେନା)	Karisailini (କରିସାଇଲିନି)

Karisarichhena (NA) ନ is always used after the finite verb as an emphasis. But these differences are gradually evaporating due to quick development of communications and mobilisation of population for the development of industries in this district. Standardization of primary education in Oriya is also responsible to a great extent in gradually removing these dialectical variations of the language.

According to the 1961 Census¹, 86,018 persons or 11.33 per cent of the total population used another language in their day to day life in addition to their mother-tongue. These people speak Oriya, Hindi, English,

Bilingualism

1. Census of India, 1961, Vol. XII, Orissa, part II C, pp. 126—132.

Bengali, Gujarati, Telugu, Ho, Munda-unspecified, and Urdu as subsidiary language. The most important among these are Oriya (47,593), Hindi (22,685), English (13,020), and Bengali (2,460) followed by Gujarati (120), Telugu (70), and Ho (49). Among the languages Oriya claims the highest proportion of bilingual speakers (19,235) of whom 11,139 speak Hindi as a subsidiary language. Besides Oriya, Hindi is the most important subsidiary language of those whose mother-tongue is Urdu and Telugu. For persons with Bengali, Bhumij, Hindi, Ho, Kharia, Kisan, Kol, Kui, Kurukh/Oraon, Laria and Mundari as their mother-tongue, the most important subsidiary language is Oriya.

Script

All Oriya speaking people use the Oriya script. The tribal languages do not have any script of their own and are mostly used as spoken languages. When needed to write they usually prefer Oriya script while a few use Devanagari. People speaking other modern Indian languages use their respective scripts.

**RELIGION
AND CASTE.**

The Hindus, Christians, and Muslims constitute the major religious communities in the district. The Sikhs, Jains and Buddhists form a small minority. According to the 1971 Census the Hindus constitute 80.35 per cent, Christians 16.55, Muslims 2.19, Sikhs 0.45, Jains 0.05, Buddhists 0.02, other religions and persuasions 0.32 and religions not stated 0.07. The distribution of population by religion is given below according to 1951, 1961 and 1971 Censuses.

Name of religious community	1951	1961	1971
Buddhists	..	28	171
Christians	71,943	1,06,342	1,70,639
Hindus	4,74,716	6,40,760	8, 8,236
Jains	..	29	550
Muslims	5,213	10,530	22,567
Sikhs	271	928	4,597
Other Religions and Persuasions	..	..	3,290
Religions not stated	..	..	708
Total	5,52,203	7,58,617	10,30,758

It is found from the 1971 Census that the Hindus, the Christians and the followers of other religious faiths are numerous in rural areas. The remaining four religious communities namely, Muslims, Sikhs, Jains and Buddhists are found in higher proportion in urban areas and are mostly engaged in various types of trade and commerce.

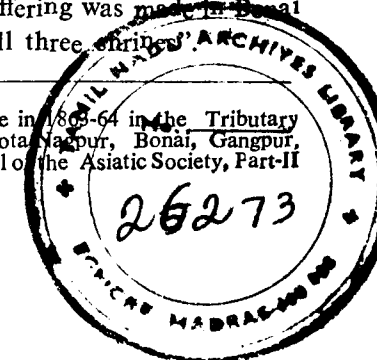
Analysing the percentage of decadal growth rate (1961—71) of each religious community it is found that the growth rate is the highest among the Jains (1796.55), followed by Buddhists (510.71), Sikhs (395.37), Muslims (114.31) and Christians (60.46). The Hindus have recorded the lowest percentage growth rate during the decade 1961—71, i.e., 29.26 per cent.

The majority of the people in this district profess Hinduism. The 1961 Census reveals that most of the tribals belong to Hindu religion but each tribe is having its specific faith and they all believe in totemism, magic and sorcery. They also believe in the existence of the malevolent and benevolent spirits. The malevolent spirits are supposed to be the cause of death and diseases and as such are appeased by the offerings of fowls and goats made with elaborate tribal rituals.

The Hindus worship Samalei, Siva, Jagannath, Krishna, Hanuman and other deities of which the temples dedicated to Jagannath and Banshidhar (Krishna) appear to be numerous. The Hindus in general gather on festive occasions like Durga Puja, Sivaratri, Ratha jatra, Dola jatra, Ramanabami etc. and worship. Usually when a child in the family falls ill, the parents make vows to offer special Puja to some deities, such as Samalei, Siva or the village deity. Soon after recovery, the Puja is offered in proper manner; until this is done a fresh danger of a more serious magnitude is apprehended. Housewives also offer Puja to Siva with the hope of having his grace in getting male issues. Mangala Thakurani is propitiated so that there may not be any epidemic of cholera or smallpox in the village.

It is said that this region was under the influence of Buddhism at about the 10th Century A. D. The territory was once a centre of Tantric cult. Some Tantric diagrams (yantras) and a mithuna figure have been discovered on the ancient fort at Junagarh. Tantric rites, even human sacrifices, were practised in some Devi temples. Lt. Colonel Dalton writes, "It was admitted to me that until these Tributary Mahals came under the British rule, a human sacrifice was offered every third year before the shrine of Kali at Suadech, where the present Raja (of Gangpur) resides. The same triennial offering was made in Bonai and Bamra; Bhooya priests officiating at all three shrines."

1. Lt. Colonel Dalton's "Notes of a tour made in 1803-64 in the Tributary Mahals under the Commission of Chota Nagpur, Bonai, Gangpur, Odeypore and Sirgooja", published in journal of the Asiatic Society, Part-II No 1 (1865).



Mahima
Dharma

This religion is also called **Alekha Dharma** because the only God it believes in is **Param Brahma**, one of whose attributes is **Alekha** which means indescribable. The followers of **Mahima** cult are found in Sundargarh, Panposh and Bonai subdivisions. (For a detailed account of this cult see—Orissa District Gazetteers: Dhenkanal).

Christianity

The Christian population in the district are mostly spread over in the rural areas of Sundargarh and Panposh subdivisions. According to the 1961 Census the subdivision of Bonai had also a Christian population of 14,086. Most of these Christians belong to the Scheduled Tribes and were converted to Christian faith by the Christian missions operating in the area. The Lutheran mission started their activities in the Raiboga police station area as early as 1870. A branch of the German Evangelical Mission, with its headquarters at Kumarkela, has been at work since 1899 and has made several converts. The Roman Catholic Jesuit Mission with headquarters near Ranchi, in Bihar, also claims many converts chiefly among the Oraons. While following the religious festivals and rituals of their new faith these converted Christians also observe some of the customs and festivals which belong to their tribal past.

Islam

The Muslims of the district mostly belong to the Sunni, Wahabics Ahle-Hadish and Qadians (Ahmadies) sects. All these sections of Muslims (except the Ahmadies) profess a common faith although they differ from one another in certain beliefs and practices.

Sikhism

The Sikhs residing in the district are mostly immigrants from outside the State. In 1971 they numbered 4,597 in the district which was the highest in the State. They are mostly found in urban areas and their concentration in the Rourkela Steel Township is more. The Gurudwar at Rourkela-1, founded in 1956, is supposed to be the oldest in the district. There are also other Gurudwaras located at Rajgangpur, Birmitrapur, Kansbahal and Rourkela Sector-18. The chief festival observed by the Sikh community are the birthday of Guru Nanak and Guru Govind Singh, the days of Martyrdom of Guru Arjuna Singh and Guru Teg Bahadur and Baisakhi.

Caste

Caste plays an important role in the social life of the people of the district. The traditional division of occupation of different castes has changed considerably due to the impact of modern education, urbanisation and industrialisation. The caste-wise figures in the Census Report of 1951 and onwards have been dropped and it is not possible to discuss their numerical strength at different periods. This omission was done with a view to discourage caste-consciousness.

A brief account of the principal castes is presented below.

The Agarias, a dominating caste of industrious agriculturists, are mostly found in Sundargarh, Leftipara, Tangarpali, and Bhasma police station areas. They speak a local dialect called Laria, which is akin to Ardha-Magadhi language.

According to the local tradition the forefathers of the Agarias were Rajputs who lived around Agra in Uttar Pradesh about 400 years ago. Since they migrated from Agra they are designated as Agarias. Out of the total 84 clans of Agarias, 44 clans came to Orissa and adopted cultivation as their occupation by the order of the then Gajapati king of Orissa. They put off their sacred threads and gave them to the youngest brother who was termed as Disondhi. They all agreed to support him with the produce of their fields.

The Agarias are usually tall, fair complexioned and well built. Dalton¹ writes that they have high Aryan features and tawny complexion, they look like Rajputs and are very industrious and intelligent.

They are divided into three sub-castes, namely Chaudhury, Naik and Patel. Their caste symbol is the dagger, but it is differently named for the above three classes. The Choudhurys call their symbol 'Kuil Katar', the Naiks call it 'Jamdarh Katar', while 'Meghnada Katar' is the symbol of the Patels.

Child marriage was a rule among the Agarias in the past, but at present it is rare. Widow marriage is allowed in their society. Brahmin priests officiate in their socio-religious functions.

The Agarias of the districts of Sundargarh and Sambalpur have formed a caste assembly since 1904, which is a well-knit organisation looking into all caste matters and the general welfare of the community.

The Badheis are found in all the subdivisions of the district. They prepare various kinds of agricultural implements and wooden furniture to meet the requirements of the local people. Cultivation is their subsidiary occupation apart from their traditional caste calling of carpentry. Widow marriage is in vogue in their society. Customarily Lord Biswakarma, the god of instruments and engineering skill, is worshipped in the month of Asvin (September-October).

The Bhandaris are found in almost all the villages and towns of the district. They are barbers. They render their traditional services on the occasions of marriage and death of clean castes. The women are also

1. E. T. Dalton—Descriptive Ethnology of Bengal

required to render services at the time of child birth and other social functions. They get remuneration both in cash and in kind. In town they maintain hairdressing saloons.

Bania

The Banias are also known as Sunaris in this district. They are found in almost all the towns of the district. They make ornaments of gold and silver. There are two groups among them. The Jharua group prepare only gold ornaments but the Oriya group deal in both gold and silver ornaments. They do not differ much from one another in regard to food, dress, speech and other customs and practices, but marital relationship is forbidden between the two groups. Child marriage is strictly prohibited among them.

Brahmin

The Brahmins do not form a major caste group in the district. Their traditional profession is priesthood and at present several of them are engaged in agriculture, business and some other professions. Broadly, there are three classes of Brahmins in the district : (a) Aranyka or Jharua, (b) Utkaliya or Oriya, and (c) Raghunathia.

The Aranykas who claim to be the original inhabitants of the district, are found mostly in Sundargarh and Bargaon police station areas. Their traditional occupation is priesthood. They have retained their traditional profession more or less till today. They bear the surnames of Purohit, Pujhari, Bisi, Panda, Panigrahi, Joshi, etc.

The Utkaliya Brahmins, according to the prevalent opinion, are immigrants from the coastal districts of Orissa. Their main occupation is agriculture. The surnames of this category of Brahmins generally are Nanda, Mishra, Mohapatra, Pati, Pani, etc.

The Raghunathia Brahmins are mostly found in Sundargarh subdivision. They are considered to be the migrants from the district of Sambalpur. Their principal occupation is to act as cooks ; agriculture as a secondary calling is gradually being adopted by some of them. They bear the surnames of Natha, Dhara, Behera, etc.

Out of these three classes of Brahmins, the Raghunathias are regarded as low class Brahmins. They take cooked meals in the houses of Oriya and Jharua Brahmins but Jharua Brahmins do not take cooked food in the houses of Raghunathia Brahmins. The Oriya Brahmins do not accept cooked food from the Jharuas or Raghunathias. Though, intermarriage is forbidden among these three classes of Brahmins, marriages involving the three caste groups have taken place in recent years. Generally while performing the sacred thread ceremony the

Jharuas are to conduct nine out of ten religious rites and all the ten rites are observed by the Oriya Brahmins. The Oriyas are mostly the believers in the Siva cult whereas the Jharuas are Vaishnavas.

The Gaudis are the herdsmen and milkmen. They are also known as Ahir, Goala, Golla, Gopa, Idaiyan in different parts of India. The traditional occupation of this caste is rearing cattle and selling milk and milk products. At present, most of them have left their traditional occupation and have taken to agriculture. Some members of the poorer section of the community act as water suppliers.

Gauda

They are found in large numbers in Sundargarh subdivision and sparsely in Panposh and Bonai subdivisions. They are divided into the following sub-castes, Gopapuria, Mathurapuria, Jharua and Magdha. Each sub-caste is endogamous. Among educated people inter sub-caste marriage is being performed and encouraged.

They are comparatively found to have a high ritual status. Higher castes accept water from them. They do not bear the stigma of polluting food and water by their touch. Their co-operation is required on social occasions such as marriage and religious performances.

They observe the day of full moon of the month of Phalguna (February-March) as their caste festival. Cattle worship is performed by them on the full moon day of the month of Asvina (September-October). They worship Lord Krishna and trace their origin from His dynasty. They bear the surnames of Gahir (ଗହୀ), Naga (ନାଗ), Bagha (ବାଗ), Dangua (ଦାଂଗୁ), Hansa (ହଂସ), Bhainsa (ଭଂସ), Sunani (ସୁନାମ), Mahakuda (ମହାକୁଡ଼ା), Harna (ହରନା), Dhare (ଧର), and Chandan (ଚନ୍ଦନ), in the district.

The Gurias have mostly migrated from the coastal districts of Orissa and have settled down in almost all the towns of Sundargarh district. The term 'Guria' is derived from 'Gur' meaning unrefined sugar. The traditional occupation of this caste is to prepare sweetmeats. Apart from their customary calling many of them have taken to agriculture. The caste group is divided into two classes : Oriya and Jharua. In the past intermarriage and interdinning were strictly forbidden between the two classes but nowadays such restrictions are no longer observed.

Guria

The Hansis customarily weave cloths for the local market. The cloths made by them are somewhat finer than those woven by the Panas or Gandas of the locality.

Hansi

The Jhoras are the boatmen and fishermen of the district and are found generally in Bonai and Panposh subdivisions. In the past they were

Jhora

also engaged in collecting gold particles from the sands of the river Brahmani and its tributary streams. The Jhoras are believed to be of Gond extraction and of Dravidian origin.

Kaltuya

The Kaltuyas are substantial cultivators and they occupy a very dominant position in Bonai subdivision. Partly because of their numerical preponderance and partly for their landed wealth they are considered as a dominant caste. They are the followers of Ramananda, the Vaishnavite teacher of the 13th century. On festive occasions they gather and worship at the temple of Radha-Krishna located at Bonai. According to local tradition, they were the original inhabitants of Mithila. In course of time their forefathers left the place and settled in Sambalpur. Subsequently they emigrated from Sambalpur into Bonai.

About Kaltuyas of Bonai, Colonel Dalton in his book *"Ethnology of Bengal"* (1872), says "They form a considerable portion of the agricultural population of Sambalpur and appear as the best cultivators and most substantial people in Bonai. I found them occupying villages together with Gonds and Khonds; but these, the probable representatives of the aborigines of the place, had nearly all fallen into the position of farm servants to the Kaltuyas, who had large substantial, well-stocked farmyards and very comfortable houses. I was freely admitted into their domiciles and the women and children were all presented to me. They afterwards came to my tent and sat there. The *Pardah* system of excluding females was entirely unknown to them. Though doubtless, best part Aryan in blood, there is, I think, a slight deterioration arising from admixture with the less comely aborigines. Their colour varies from coffee to tawny yellow. The mouths are well formed, though large; eyes generally large, full and clear, many hazel. I especially observed that many of the fair sex were distinguished by well-marked eyebrows and long eyelashes. The noses are not aquiline or prominent, but there is no remarkable deficiency of nasal bone, though this feature is often inclined towards the pug species. They have straight foreheads, but a want of breadth across the temples which takes from the oval of the face. The men show moustache and beard, but little whisker. They are well proportioned and about the average height of Hindus in the Lower Provinces. The Kaltuyas generally allow their girls to grow to maturity before they give them away in marriage."

Kamara

The Kamaras are commonly found in Sundargarh subdivision. They are broadly divided into two groups: Kothimada Kamaras and Dhuka Kamaras. The Kothimada Kamaras at the time of smelting or

forging iron implements pump the air bag by their legs, whereas Dhuka Kamaras pump it by their hands. They do not, however, have any specific social distinctions with regard to food, clothing, ornaments, etc., and there exists no marital restriction between the two groups. Unlike the marriage customs of other castes, the bride goes to the groom's house in ceremonial fashion. Widow marriage is allowed in their society.

The Kansaris are found mostly in Bonai and Panposh subdivisions. Kansari They make brass and bell-metal utensils for domestic use and cheap brass ornaments such as anklets, bracelets, rings, etc., for poorer classes. The work on brass is of inferior quality for which circulation of these materials is confined to local markets. Their principal deity is goddess Kali. The goddess is represented and symbolised by an iron rod.

The Karans are a small minority group in the district. They are of Karan two categories, viz., Jharua and Oriya. Most of them are agriculturists and some follow other vocations. There is no restriction between the two groups in matrimonial relationship. The surnames of the Karans are Mohanty, Bakshi, Bohidar, Pruseth, etc.

The Keutas are found in Sadar, Talsara, Lefripara, Bhasma, Rai-Keuta boga, Bonai and Raghunathpali police stations. Their principal occupation is fishing; preparation of puffed and flattened rice is their subsidiary source of income. Some of them are also engaged in cultivation and business. They are of two groups: *Kodie-gharias* and *Das-gharias*. Marriage is not permissible between the two.

Goddess Samaleswari is worshipped in their families. Though, according to tradition, married women do not apply vermilion on their forehead, yet they are using vermilion now a days. On the full moon day of the month of Chaitra (March-April), they perform Dahi Puja on the bank of the river Ib at Jagatgarh and worship fishing implements.

The Khyatriyas are not numerous in the district of Sundargarh. Khyatriyas The Gangpur Raj family claim descent from the Paramara Clan of Rajputs and the Bonai Raj family, though their origin is not clear, claim to be Kadam Banshi Rajputs. The kith and kin of the former ruling families mostly live in the towns of Sundargarh and Bonai. Besides, the people of Khyatriya community are also found scattered in other parts of the district. In the social hierarchy they claim to be next to the Brahmins and observe upanayan. With the change of time the Khyatriyas, like other higher castes, have been engaged in various occupations.

Kosta

It is generally believed that the forefathers of the Kostas migrated from Chhatishgarh and Raigarh area of Madhya Pradesh since long and settled down in Barpali, Sambalpur and Sundargarh. In this district they are found in considerable number only in the Sadar subdivision.

Generally they weave *tassar* cloth to meet the needs of the local people. Since demands for these cloths have been considerably reduced nowadays, they are gradually giving up weaving, and taking to other occupations.

Kumbhar

The name of the caste Kumbhar is derived from Kumbha, an earthen pitcher. They prepare various types of earthen pots and earthen toys for the local market. Besides, they manufacture roofing tiles and bricks. Two classes of Kumbhars viz., Jharua Kumbhars and Udia (Oriya) Kumbhars are found in the district.

Kurmi

The Kurmis are chiefly found in Bisra police station. According to prevalent opinion the Kurmis of this district are immigrants from Ranchi in Chota Nagpur and from Madhya Pradesh. Their usual surname is Mahanto. They speak Oriya and Kurmali, a colloquial Hindi of the Maithili group. Their traditional calling is agriculture. Nowadays several of them are carrying on business and also some educated men are service holders in the Government offices.

Marriage is strictly confined to their caste. Cross-cousin and inter-caste marriages are not allowed. Child marriage is still in vogue to some extent among them though the present tendency is towards adult marriage. They worship Hindu gods and goddesses such as Siva, Durga and Kali along with Karama and Tushu. Brahmins act as priests and perform all socio-religious functions in their society.

They accept food from the Brahmins. Food-stuff prepared by the Gurias (the confectioner caste) is also accepted by them. The educated Kurmis do not usually follow the customary taboos so far as taking food from others is concerned. They are a hard working people and are economically self-sufficient to a great extent. Begging is considered derogatory to their caste prestige; as a result it is discouraged in their community.

Maji

Selling of flowers and garlands is the chief occupation of the Malis. They also prepare artistic and decorating materials out of Sola (pith), such as crowns for the brides and grooms, and toy boats, etc. They are also taking recourse to other types of profession because of insufficient income from their traditional calling. In their society, usually women

play a very important role and in case of partition of patrimony women used to get equal share with men even before the Hindu Code was enacted.

The Routias are found mostly in Panposh and Sundargarh subdivisions. Originally their ancestors, it is believed, were serving in royal households, for which they are called 'Routia'. They are supposed to have migrated to this district from Chota Nagpur long ago. They are divided into three sections, viz., Bargahari, Pachasi and Chhotgahari. Clan exogamy is strictly maintained within their caste, but cross-cousin marriage is allowed. Their main occupation is agriculture.

Routia

There are not many Sundhis in the district. Their traditional occupation is to deal in wine. Most of them are understood to have given up their customary occupation and have taken to business and agriculture. There are two sections of Sundhis: Jharuas and Oriyas. The Jharuas are original inhabitants whereas the Oriya Sundhis are migrants from coastal districts of Orissa. The Oriya Sundhis do not establish any marital relationship with the Jharuas. Widow remarriage is not allowed in their society.

Sundhi

The Telis are mostly found in Bargaon area of Sundargarh subdivision. The main occupation of this caste is oil pressing. They are divided into two sub-castes. One section presses oil by the help of the bullocks and the other extracts oil by manual labour. They are gradually changing their traditional occupation due to the impact of industrialisation and urbanisation. They are conscious of their hierarchical status. The practice of hypergamy is found to be prevalent and child marriage is no longer in vogue.

Teli

In the past people belonging to Scheduled Castes suffered from various social and religious disabilities. Most of them were considered untouchables due to their traditional professions which were considered unclean by the caste Hindus. Such depressed position in the society is also responsible for their backwardness in economic and educational spheres. Untouchability is now forbidden by law and these backward population are being given some special privileges for their improvement.

Scheduled
Castes

In 1971, the population of Scheduled Castes in the district was 82,692 (42,184 males and 40,508 females), which was 8.02 per cent of the total population of the district. According to the 1961 Census there were 53 Scheduled Castes of which the most numerous were Ganda (21,322), Pana (17,209), Panatanti (9,549), Dhoba (4,884), Ghasi (4,065),

Badaik (2,979), Chamar (2,517), Turi (1,634), Dcm (1,335) and Pap (1,026). The population of these ten Scheduled Castes were calculated to be 91 per cent of the total Scheduled Castes population of the district.

The Census of 1971 recorded the highest Scheduled Caste population in the Sundargarh subdivision (41,640) and the lowest in the Bonai subdivision (11,962). They were mainly concentrated in the Bhasma (7,443), Birmitrapur (7,098), Sadar (6,566), Hemgir (6,372), Bisra (6,203), Talsara (5,876), Lefripara (5,748), Rajgangpur (5,331) and Bargaon (4,304) police stations.

The literate and educated persons among the Scheduled Castes number 8,476 and constitute 11.58 per cent of their total population in the district. Literates claim 11.36 and 12.76 per cent of their population respectively in rural and urban areas ¹.

The working or the economically active among them account for 35,471 or 48.49 per cent. Workers in special occupations like (a) tanning and curing of hides and skin and (d) scavenging, number 344 (0.47 per cent) and 139 (0.19 per cent) respectively of the total population of Scheduled Castes of the district².

Badaik

The Badaiks seem to have migrated from Chota Nagpur in Bihar. They are mostly found in Lefripara police station. According to the 1961 Census the number of Badaiks was 2,979 (1,510 males and 1,469 females) in the district.

The Badaiks are divided into two sections, viz., Badaik and Panika Badaik. The Brahmin priest performs their socio-religious functions and ordinarily the barber and washerman serve them. In this respect there exists no discrimination between them and the neighbouring caste groups.

They are mainly cultivators. They supplement their income as agricultural labourers and also by weaving cheap cotton cloth.

Literacy is confined to 5.7 per cent only. This is low when compared with the corresponding figures for the Scheduled Castes of the district as a whole which is 11.5 per cent.

Chamara

The Chamaras are found mostly in Bargaon and Talsara police stations and numbered 2,517 according to the 1961 Census.

1. District Census Handbook, Sundargarh, 1961, pp. 230—232.

2. Ibid, pp. 222—225.

They are mainly engaged in agriculture and household industries such as basket making and leather work. At present some of them are serving in public and private firms and have taken to other occupations.

The incidence of literacy among them is low. In the 1961 Census, only 204 males and 15 females were found to be literates including two matriculates.

Remarriage of a widow is allowed among them and caste endogamy is followed. Their staple food consists of cereals such as jowar, gulji, etc. Rice beer and liquor made of Mahua are their favourite drinks.

The Dhanwars are found in Hemgir and Talsara police stations. According to the 1961 Census their population was 648. They are Hindus. They speak Laria language along with Sambalpuri. They live on hunting animals with the help of their bows and arrows, hence they are known as Dhanwar. Dhanwar

According to a legend, about 2,000 years ago they were moving in forests in batches. Then they were wearing bark of a tree while some of them remained naked. They were eating the flesh of the wild animals. At first they were known as Lodha Sabar and later they were called Dhanwar.

There are two types of Dhanwars : Jhara Dhanwar and Dhanwar. They consider turmeric plant as their gotra (Clan God). In their society widow marriage is permissible. Divorce is allowed. In socio-religious functions Brahmin priests do not perform the worship. The barber and washerman render services to them.

The economic condition of the Dhanwars appears to be very miserable. Most of them are illiterates. According to the 1961 Census, only 5 males and one female were found to be literate including one man who read up to primary standard.

In the 1961 Census, the Dhobas numbered 4,884 (2,756 males and 2,128 females). They are found in every village. Dhoba

Their traditional occupation is to wash garments. In spite of external influences they have not changed their calling. Their services are essential for the Hindus on social occasions such as marriage, *Sradha* and child birth. In the 1961 Census, 15.04 per cent of them were returned as literates.

According to the 1961 Census, the population of Doms in Sundargarh district was 1,335 of whom only 5.69 per cent were literate. They are also locally known as Dombo or Duria Dom. They are mainly Dom

engaged in household industries, such as basket making and some earn their livelihood as agricultural labourers and cultivators. In addition to their normal work some of them were engaged in tanning and curing to supplement their income.

Ganda

In the 1961 Census 21,322 persons with 10,473 males and 10,849 females were enumerated as Gandas, of whom about 91.25 per cent were returned from rural areas. They are found mostly in Sundargarh and Bonai subdivisions.

There exist four subdivisions among them such as Oriya, Laria, Kandhria and Kabhria. The Oriya Gandas are those who speak Oriya. The Laria Gandas are those who reside in villages bordering Chhatisgarh and speak Laria dialect. The Kandhria Gandas are so called because they live among the Kandhas. The Kabhrias are Kabirpanthis or followers of Kabir.

Marriage between the two groups—the Oriya and the Laria is permissible. They also eat, drink and smoke together but not with the Kandhria or Kabhrias. The Kabhrias do not eat fish or meat. The Kandhria Gandas eat beef, pork and fowl but refrain from eating monkeys and snakes. The Oriya and the Laria Gandas neither kill a cow nor eat beef. But Kandhrias do both.

The Gandas claim to be higher in caste hierarchy than the Chamar, Ghasi and Hari. They worship the Hindu gods and goddesses and especially revere Mahalakshmi.

Child marriage is still prevalent among them. If a girl is unmarried when she attains puberty she is married to a bow or an arrow tied to a post made of *mahua* wood. Divorce is allowed.

The Gandas weave coarse cloth. They are also professional pipers, drummers and are regularly employed as musicians at Hindu marriages. Most of them are cultivators and agricultural labourers. In the past they served as village watchmen.

As regards their education it was found that 2,692 persons, i. e., 12.62 per cent of the total population were literate. The following table shows the levels of education of the Gandas according to the 1961 Census.

Level of education	Persons	Males	Females
Illiterate ..	18,630	8,069	10,561
Literate without educational level ..	2,372	2,100	272
Primary or Junior basic ..	305	290	15
Matriculation or Higher Secondary	13	12	1
University degree or Post-graduate degree.	2	2	..

Out of 54,647 Ghasis in Orissa, in the Census of 1961, 4,065 were enumerated in this district. They are found in majority in Sundargarh subdivision and sparsely in Panposh and Bonai subdivisions.

Ghasi or Ghasia

They are divided into three sub-castes, such as Sonnati, Simar-Lokha and Hari. They work as musicians at weddings. Their chief means of livelihood are agriculture, livestock, forestry, bamboo work, etc. Tanning and scavenging are their subsidiary occupation. In the villages Ghasi women usually act as midwives at the time of child birth.

The incidence of literacy among them is very low. Widow marriage is allowed. Divorce is very common.

The Panas were 17,209 (8,205 males and 9,004 females) according to the 1961 Census. They are mostly concentrated in areas under Bargaon and Talsara police stations. They are Hindus and worship gods and goddesses such as Durga, Kali and Mahadev.

Pana or Pano

Girls are married after they come of age. Marriage among the cross-cousins is in practice. Divorce is effected only with the sanction of the caste Panchayat.

Though their traditional occupation is weaving, some of them were also employed as village chowkidars. They have adopted agriculture as their subsidiary source of income.

They are educationally backward. According to the 1961 Census there were 1,704 literates (1,480 males and 224 females) of whom 179 were of primary or Junior basic standard and only 16 were matriculates.

In Sundargarh district 9,549 persons, i. e., 29.04 per cent of the total Panatanti population of Orissa were enumerated. They are more or less evenly distributed throughout the district.

Panatanti

Not much is known about the origin of the Panatantis. They are largely employed as weavers and call themselves Patra Pana or Buna Pana. These Patra Panas or more correctly Patar Panas, are now known as Panatantis who are a recent accretion to the Tantis.

Many of them are cultivators and agricultural labourers although household industry and other services are popular.

They are educationally very backward. According to the 1961 Census of 1,237 literates, 1,129 were literates without educational level and only 107 persons had primary education. There was only one matriculate among them.

Rev.—8)

Pab or Pap

The Paps are found mostly in Hemgir, Bhasma and Sundargarh police stations. In 1961, they numbered 1,026 (549 males and 477 females).

The term Pab or Pap, it seems, has been derived from the word *pada* (feet). According to a legend the people of this caste were staying near Hirakud in Sambalpur district. They had rebelled against the ruler of Sambalpur for which they were ruthlessly suppressed and killed. A section of these people surrendered to the king by holding his *pada* (feet). From that time onwards this section of people were known as *pada* which subsequently become Pab or Pap. Being banished by the ruler, they left Sambalpur and a group of them came to Sundargarh and settled down in some villages in the Sundargarh subdivision. They are divided into two divisions : Dalapatia Pap and Pap, but both have a common gotra called *Naga*. They have a spoken dialect of their own but it has no script. The language commonly used by them is Sambalpuri Oriya.

Most of the Paps are poor and landless. Generally they collect fuel, leaves, mahula flower and other forest products and sell in weekly markets.

They observe most of the Hindu and Adivasi festivals and worship *Ratimaya Devi* and *Duleha Devta* as their family deity.

According to the 1961 Census the population of Turis in Sundargarh district was 1,634. Out of the total population, 1,632 lived in rural areas and only two persons were found in urban settlements.

They are mainly engaged in household industries such as basket making and mat making. Among them a few are cultivators and agricultural labourers.

Literacy among the Turis is very low. Literacy without any educational standard was calculated in 1961 to be 78, Primary or Junior Basic 15 and Matriculates nil.

They are Hindus and worship the gods and goddesses of the Hindu Pantheon and observe Hindu festivals.

Scheduled Tribes

The district has a large tribal population (440,910 according to the 1961 Census¹) which accounts for 58.1 per cent of its total population. Of the 62 tribes notified as Scheduled Tribes for Orissa State as many as 40 tribes are found in this district alone (vide Appendix II)

¹. According to the 1971 Census the population of the Scheduled Tribes is 5,50,401 which is a little over 53 per cent of the total population of the district.

The numerically important tribes are Oraon, Munda, Kharia, Kisan, Bhuiyan and Gond. They have been discussed later in this chapter. The concentration of the Scheduled Tribes was the highest in the Sundargarh subdivision (210,224). Among the police stations, Rajgangpur (55,934), Bisra (49,022), Talsara (35,114), Bargaon (33,671), Bonaigarh (30,524), Birmiritapur (28,671) and Sundargarh (27,936) claimed more tribal population than the other police stations of the district¹.

In Census reports, during British rule, the tribal population were classed as either Hindu, Christian or Animists. The distinction between Hindu tribals and Animist tribals is often arbitrary. A large number of tribal people have adopted Hindu religion and worship Hindu gods and goddesses excepting those living comparatively isolated for a long time. But gradually with the spread of education, implementation of various development projects and establishment of industries they have come in close contact with their Hindu neighbours. In general, the tribals believe in a Supreme Being residing in the Sun. They believe in ancestral spirits and a number of natural and malevolent spirits. Among the total tribal population (440,910) in the district 353,751 were Hindus and the rest 87,159 were Christians according to the 1961 Census.

The tribals lead a primitive way of life and inhabit the remote and less accessible areas of the district where there was no facility for schools previously. In the larger villages schools were established by the Durbar administration, but the tribals looked upon them as useless encumbrances. In the past, if a parent was taken to task for irregular attendance of his children, he would, in perfect good faith, offer to attend on their behalf. From their early childhood they are used to assist their parents in various economic pursuits and attendance at school is of secondary importance.

The Christian Missionaries operating in that area were the pioneers in spreading western education and culture among the converted tribals. After Independence a number of schools were started by the State Government. Gradually these people are being attracted for higher education as a stepping stone for better employment.

According to the 1961 Census 10.21 per cent (45,008 persons) of the tribals were literate. Out of these, 37,344 never qualified themselves in any examination. Only 7,069 passed primary or Junior basic examinations. There were 503 Matriculates and the number of degree and diploma holders was 92.

¹. District Census Hand-book, Sundargarh, 1961, p: 219.

As per 1961 Census there were 223,201 workers and 217,708 non-workers among the Scheduled Tribes. Among the workers, 80 per cent were cultivators and agricultural labourers.

Besides, some of the tribals have adopted household industries like, hand-pounding of rice, rope-making, basket weaving, pottery, etc., as a source of livelihood. The rich forests of the district provide them with seasonal employment, and also they collect minor forest produce as a subsidiary occupation. The steel and fertiliser plant at Rourkela, the Cement Factory at Rajgangpur and the numerous mines of the district have provided gainful employment to a number of Adibasi people. (For details see Chapter-XVII, Other Social Services) They have not been able to adjust themselves to the wage-earning economy and often spend the hard earned money on liquor and other unessential fashionable articles. The savings are utilised for purchasing lands. The majority of the non-workers were females, engaged in household duties. The number of students was 25,773 (17,735 males and 8,038 females).

During the last one hundred years the tribals of the district have changed considerably. The opening of railways and construction of roads were responsible for their contact with outsiders. Besides, the rapid growth of industrial and mining centres, establishment of hospitals, schools and various government offices have contributed remarkably to the change in the social, cultural and economic life of the tribals in the last decades. They have developed political consciousness and are taking active part in organising political parties and trade unions in the district. But these simple and gullible people are often exploited by self seekers and political opportunists.

Important
Tribes:

Oraon

Cobden-Ramsay has recorded in his gazetteer* that the Oraons of Gangpur ex-State were immigrants from Chota Nagpur and some Oraons had migrated to Bonai from Singhbhum. Previously they mostly served as agricultural labourers and never attempted to procure lands for cultivation. But gradually they have felt an urge to possess lands and are now cultivating rice, small millets, vegetables, etc. well-to-do Oraons of the district employ labourers. Besides, they have acquired proficiency in some cottage industries like rope making and mat weaving which are generally done by the females.

The Oraons are the most numerous tribe in the district. Their population according to the 1961 Census was 114,103 (108,228 rural and 5,875 urban). They are found mainly in Rajgangpur, Talsara,

*Feudatory States of Orissa—L. E. B. Cobden-Ramsay.

Bisra, Birmitrapur and Sundargarh police stations. The Oraons are of good physique. They are short statured, narrow-headed and broad nosed. The colour of the skin is dark-brown often approaching black, their hair is black and coarse with an occasional tendency to curl. The colour of the iris is dark and no obliquity is traceable in the opening of the lids. Projecting jaws and thick lips are some of the peculiar physical characteristics of the Oraons. By nature they are cheerful and lighthearted.

The Oraons are divided into a number of exogamous clans (*gotra* or *varga*), which are named after some birds, fish, animals, plants or minerals. The individual totems are regarded as sacred and are respected by them as ancestors. Although the totemic objects are tabooed for use by the particular tribal group, there are some relaxations. For example, the members of *Bhek* totem do not eat raw salt but can take any food in which salt is being mixed. The clan is patrilineal. But marriage with a maternal aunt or cousin on the mother's side is not permissible. Marriage with members of other tribes is strictly prohibited.

The Oraons have their own tribal council for each village. The headman is called *Sian*. He presides over all socio-religious functions of the village. He is also assisted by the old and leading Oraons in settling disputes. The *Sian* renders honorary services but in case of widow remarriage and divorce he is remunerated.

The Mundas are found more or less in all the districts of Orissa Munda but their concentration in Sundargarh is the highest. They live mainly in the northern and north-eastern part of the district. They are more numerous in Bisra, Kamarposh Balang, Raiboga, Birmitrapur, Raghu-nathpali, Rajgangpur, Bargaon and Talsara police stations. In 1961, they numbered 1,13,431.

They are divided into two groups—Mahali Mundas and Mundas. Their skin colour is dark brown, often approaching black. Their head is long; nose is thick, broad, and depressed at the root; their lips are thick and the cheek-bones appear to be prominent. They are strong and stout and possess a good physique. Most of them are less than medium statured. They look fresh and cheerful.

The Mundas are divided into a number of exogamous clans. The clans are totemistic and derive their names from some natural objects, such as, fish, bird, snake, plant, etc. The members of the clan do not eat the totemic objects. They believe that all the members of a clan are descended from a common ancestor. The clan is patrilineal.

To perform the socio-religious functions of the village a representative called *Pahan* is selected. He worships to propitiate the local spirits to save the village from the ravages of wild animals, and to ensure successful hunts and good harvests. As head of the village Panchayat he also settles disputes; punishments are inflicted upon deviants for violating tribal customs. If the culprit is dissatisfied with the decision, he is at liberty to refer the matter to the head of the *Parha*. Generally a *Parha* consists of eight to twelve villages. Each *Parha* is managed by a committee or Panchayat. The office bearers are known as 'Raja', 'Diwan', 'Thakur', 'Lal', 'Pande', and 'Karta'. They have borrowed these titles from their Hindu neighbours. Usually complaints are lodged before the 'Raja' or 'Diwan' by the *Pahan* of the village in which the offence has been committed. Then necessary arrangements are made to call the assembly of the *Parha*. All the members of the clan are entitled to attend the assembly. Then the 'Raja' as president, explains the complaints or cause of the dispute to the assembly. After confirming evidences and statements from the witnesses he declares their decision. The most common complaints are concerning marriage. If the offender repents then he is simply fined. The fine is usually realised by the 'Diwan'. In the past the decision of the Panchayat was honoured but at present parties dissatisfied with the decision go to law courts.

The Kharias are found chiefly in the north-western districts of Dhenkanal, Sambalpur, Sundargarh and Mayurbhanj. In Sundargarh district they are scattered in Talsara and Rajgangpur police stations of Sundargarh subdivision; Bisra and Raiboga police stations of Panposh; and Gurundia and Bonaigarh police station of Bonai subdivision. The 1961 Census reported 53,243 Kharias (50,822 in rural area and 2,421 in urban area) in this district.

They are broadly divided into three sections, namely the Pahari, the Dhelki, and the Dudh Kharia. The Pahari or Hill Kharias are the most primitive and depend mainly on food gathering economy. They collect honey, silk cocoon, lac, edible herbs and tubers and other minor forest products. The Dhelki and Dudh Kharias have adopted cultivation and are somewhat better off than the Hill Kharias. They do not have marital relationship with each other. The Hill Kharias live in remote villages situated on the tops or slopes of hills. But Dhelki and Dudh Kharias live in villages along with other castes and tribes.

Their household articles constitute a few datepalm leaf mats, string cots, earthen vessels, metal and aluminium utensils and bamboo baskets. Besides, they possess hunting, fishing and agricultural implements. Drums and flutes are the popular musical instruments of the tribe.

The traditional occupation of the Kharias was to carry palanquin, but at present they are mostly agriculturists. Besides agriculture they also depend on daily wages.

The social organisation of the Hill Kharias differ widely from the Dudh or Dhelki Kharias. The Hill Kharias have no regular clan organisation. Though they claim to belong to some clan or *gotra* as *Nag*, *Saluk* or *Sal*, they do not maintain any taboo in eating and killing totemic animals and plants. They also do not observe clan exogamy. The Dhelki Kharias are divided into eight clans, namely, Muru (tortoise), Soren (Stone), Samad (deer), Barliha (a kind of fruit), Charha (a bird), Hansa (eel), Mail (dirt), and Topno (a bird). The Dudh Kharias recognise nine clans as the original clans of the tribe who came to Chota Nagpur along the banks of the river Koel from the north-west. These are Dungdung (eel), Kulu (tortoise), Kerketta (quail), Bilung (salt), Soren (stone), Ba (paddy), Tote (a bird), Kiro (tiger), and Topo (a bird).

The Pahari, Dhelki and Dudh Kharias are strictly endogamous. They never allow any marital relationship with one another. Boys generally marry at the age of twenty or twenty one while the girls marry at the age of fifteen or sixteen.

The seniormost man of the village is selected as priest. He is known as *Dehuri* among the Hill Kharias, *Kalo* among the Dhelki, and *Pradhan* among the Dudh Kharias. In addition to the priest, the council of elders decide all important local problems. The council of elders also raise funds for public worship. They are invited to attend all social functions like child birth, marriage, funeral ceremony, etc.

The Kisans are a tribe of settled cultivators and agricultural labourers. Kisan It is probable that the tribe has acquired its Hindi appellation from the devotion of the people of the tribe to the occupation of agriculture. The origin and ancestry of the tribe is obscure. They migrated to this district from Chota Nagpur area of Bihar and from Madhya Pradesh.

The tribe is divided into a number of exogamous and totemistic clans. Each clan is further subdivided into a number of sub-clans basing on the names of the villages from where the forefathers of the members of the sub-clan originally came.

Cultivation is the principal occupation of the Kisans and the festivals they observe are mostly agricultural. Nuakhia in the month of Bhadrap (August—September) is their most important festival.

Every Kisan village has a tribal council consisting of old and experienced members. The headman is called *Mukhia* who is assisted by the "Katwal". The tribal council resolves all caste disputes. Over and above the tribal councils they have the Kisan Mahasabha which sits irregularly.

Bhuiya

The Bhuiyas are mostly found in Bonai subdivision. Out of the total Bhuiya population of 45,168 in the district, 43,878 persons lived in rural areas and 1,290 constituted the urban population ¹.

The Bhuiyas are chiefly noted for their fidelity, hospitality and love for liberty. They are frank and honest and are very fond of dance and music. While dancing a young man is at liberty to escape with a girl whom he intends to marry. Thereafter a group of relatives of the girl follow to search them out in the forest and ultimately marriage is performed.

The tribe is divided into four principal classes, namely, Paharia Bhuiya, Khandait Bhuiya, Rajkoli Bhuiya and Paraja Bhuiya. The Paharia Bhuiyas generally live in hills and are known as Hill Bhuiyas. This section retains almost all the characteristics of the tribe. The other three classes generally live in the plains and depend on agriculture. They are considered as a degenerate class. Many customs and practice prevalent among them have been influenced by the Hindu traditions.

In lieu of clan-exogamy, they practise village exogamy. According to prevalent norm, they will not enter into marital alliances in the villages where their agnatic kins live. Village for marital alliances is called a Bandhu village.

Binjhia

Out of 2,230 Binjhias in Orissa, 2,140 (1,157 males and 983 females) were enumerated in Sundargarh in 1961. At present they are mainly concentrated in Birmitrapur and Raiboga police stations under Panposh subdivision. They are mostly agriculturists.

They speak Jaspuri, a crude type of Hindi. Due to their long association with the local people many Oriya words have infiltrated into their dialect. Consequently both Oriya and Hindi are prevalent among them. According to the 1961 Census, 84 or 3.92 per cent of the total population were found to be literate. None had read up to matriculation.

They are divided into seven exogamous groups, viz., Matha, Majhi, Karji, Pathan, Badek, Mirdha and Parasganjha. Marriage with cross-cousin is prevalent in their society, but they prefer to marry

1. District Census Hand-book, Sundargarh, 1961, p. 240

father's sister's daughter. Their marital rituals are similar in style to those of the neighbouring Hindus. Brahmin priests perform their marriage ceremony.

Like the Bhuiyas, the Gonds are also a Dravidian tribe of considerable influence in the district. They are mainly found in Bonai and Sadar subdivision with concentration in Bonaigarh, Sundargarh and Rajgangpur police stations. In 1961, they numbered 34,849 in the district. The Gond headmen in Bonai are called *mahapatra* and *dandapat* who used to hold fiefs on terms of military service under the ex-Ruler. The Jhoras or Jhora Gonds found in both the ex-States of Bonai and Gangpur are believed to be of Gond extraction, their traditional occupation being gold-washing, fishing and boating. Educationally, the Gonds are somewhat better than the Bhuiyas having a slightly higher percentage of literate and educated among them. They are thoroughly Hinduised and speak Oriya as their mother-tongue.

According to the Census of 1961 the Khonds numbered 3,329 in the district. Only 17.42 per cent among them were literate. They probably immigrated from Baudh but have long occupied a menial position in the society as farm labourers and have lost all the typical characteristics of their race owing to culture contact.

During the period of pregnancy a Hindu mother is subjected to various taboos for a safe delivery like restriction to cut anything during an eclipse and wearing of amulets to ward off the evil eye. After delivery on the sixth day the ceremony called Sasthi is observed in which Sasthi Devi, the goddess of fate, is worshipped. The period of birth pollution is observed for twelve days after which the mother resumes her normal work. A midwife attends upon the mother and the child during the period of birth pollution. The child is named on the 21st day and it is observed with rejoicing. Another important ritual is *Mundan* or the first shaving of the child which is observed generally at the age of one. Besides, there are other important rituals like the ear-boring, and *upanayana* (sacred thread ceremony) mostly confined to Brahmin and Khyatriya communities.

Customs and
Practices
Birth

In tribal societies the expectant mother has to observe many restrictions of movement in order to save herself from malevolent spirits. After delivery a number of practices are followed most of which have similarities with those of the Hindus. In a Bhuiya family birth brings pollution for 8 days. An elderly woman of the community acts as midwife and attends the mother and the newborn. The baby is named after a dead ancestor. Restrictions on food and movement are imposed on a Kharia

woman during pregnancy. The Oraons observed the first stage of purification on the 7th or the 8th day after the birth, when the remnant of the navel cord wilts off. The house is cleaned and all the earthen pots are replaced. The child is given to wear a thread on the waist.

Mortuary Customs

Every village or town has its own cremation ground called *Smasans*. Usually a deceased is cremated in the Hindu society. The dead body of a child, a sannyasi or a person suffering from leprosy or pox is buried. The last rites are generally performed by the eldest son of the deceased. Muslims and Christians have their separate burial grounds. The tribals bury the dead bodies in the family ossuary. Some rich tribal families practice cremation.

The Oraons put the dead body in a pit with the head towards the north and the face upwards. The first stage of purification takes place on the 5th day whereas the last day of purification is observed after a few months. The caste priest arranges a libation and the departed spirit is called.

The Bhuiyas adopt both cremation and burial for disposing of the dead. Usually persons dying of cholera, small pox, snake bite etc., or the dead body of a pregnant woman are buried. The Kisans after disposing of the dead body make a diminutive effigy of the deceased and worship it. On the next fullmoon day of Margasira (November—December) the effigy is thrown away into a river and the final purification ceremony ends.

Generally Mundas erect big memorial stones in the burial ground called *sasan*. After a memorial stone is erected a goat or sheep is slaughtered by the priest and a feast is held in which friends and relations take meat and rice beer.

Among Kharias burial is common, but important persons are generally cremated. In the burial ground the corpse is put in a pit. An utensil, a few grains of paddy, oil, and some coins are also deposited in the pit along with the corpse. The mourning is observed upto the 12th day. On the final day friends and relations are invited and entertained with a feast after which death pollution ends.

Inter-Caste Relations

There have been radical change in inter-caste relations due to the impact of industrialisation and urbanisation. The movement of Mahatma Gandhi against the social disabilities of the untouchables has broken the barrier between them and the high castes. Untouchability is now punishable under law. People of various castes dine

together in hotels and restaurants. Spread of education among the masses and appointment in various public and private undertakings have shrunk the traditional difference between various castes. Briefly speaking, change in customary callings, economic mobility, introduction of adult suffrage irrespective of castes, and administrative safeguard for backward classes, etc., have created a new environment of social transformation. Inter-caste marriages are now tolerated. However, the caste consciousness still prevails and to accelerate the process of liquidation of this age-long social stigma economic uplift of the backward classes and proper social education of the people are needed.

The individual tribes maintain their identity based on clans and dialects, but they have cordial relationship and reciprocity between themselves. Sometimes marriage between members of two different tribes, though not socially approved, are tolerated after the observance of certain ceremonies. Although social relationship of converted Christians is almost confined within their own group, they do not hesitate at times to participate in the social life of the tribes to which they originally belonged.

There has been no new religious movement in the district worthy of note. During the British regime, however, the Christian missionaries were very much active in the ex-State of Gangpur and had succeeded in converting a large number of tribal people to Christianity. The lure of obtaining pecuniary and other benefits from the missionaries and the general apathy of the Hindu community as well as the Government towards the tribals were chiefly responsible for this large scale conversion. The tide has somewhat turned after independence and many converted Christians are now preferring to come back to their former Hindu fold. The Bharatiyakaran Sabha, Vedavyasa, Rourkela, was established in 1953 by Swami Bramhananda Saraswati with a view to convert intending persons from one religion to another. Within last 21 years (from 1953 to 1973) 2111 persons (1085 males and 1026 females) changed their religion from Christianity to Hinduism. The reconversion takes place in a simple religious ceremony to the chanting of Vedic hymns before a sacred fire. After being initiated to Hinduism the person changes his Christian name and adopts Hindu name. Most of the reconverts are of tribal origin, and one Sukra Munda has played a leading role in this movement.

New Religious Movement

As regards property and inheritance, the Hindus of the district are governed by Hindu Law and the Muslims by the Mohammedan Law. The Hindu Succession Act, 1956 has amended and codified the law on the subject. It has defined the rights of Hindu women

PROPER AND INHERITANCE

to property and has conferred rights on them which they did not enjoy previously. The most outstanding feature of the law is that it has placed both the sons and the daughters on an equal footing by virtue of which they can share the property of their parents in equal proportions.

In tribal societies the rules of law are not strictly followed. Particularly in remote places far away from the Government headquarters, they take recourse to traditional customs and ethical principles for deciding cases of inheritance. For example, among the Kharias the daughters do not get any share from the immovable assets of the parents. In case of no male issue the nearest relations of the father inherit the property. Further, the daughter may claim the property if her husband stays with her at the residence of her father. In course of time her sons inherit everything belonging to their maternal grandfather.

Traditionally, a Hindu marriage is monogamous though polygamy is in vogue under special circumstances. But at present according to law there has been strict regulation to maintain the monogamous pattern*. A Christian or a tribal is invariably monogamous.

Almost every caste and tribe maintains clan exogamy. Marriage with prohibited degree of kins is not allowed. The Bhuiyas and Oraons generally marry outside the village. There is no restriction on marriage among the Bhuiyas within the same sept. Among Kharias, rules of avoidance with younger brother's wife and wife's elder sister are strictly followed.

Dowry system is prevalent in the society and the problem is more acute among the so called educated and the sophisticated society. Among the tribals giving away a daughter in marriage is considered as an economic loss. As a corollary to the loss, alternatively exchange of sisters take place. In the absence of such a reciprocal system, the girl's parents are duly compensated by a payment of bride price, which includes some money in cash and a few heads of cattle.

Divorce is rare among the upper caste Hindus. They also do not allow widow remarriage. But these are permissible under certain circumstances among many castes and tribes. Divorce on the

* The Hindu Marriage Act, 1955.

grounds of sterility, impotency, neglect of household duties and adultery is common. If adultery is committed between a Bhuiya man and woman the matter ends in marriage, but if the man belongs to another caste, the woman is outcasted.

The Government of India's Special Marriage Act was first passed in the year 1872. It was substituted by the Special Marriage Act, 1954 with certain modifications. This new Act was enforced on the first day of January, 1955, and the Government of Orissa framed rules to implement the Act in the same year. Under these rules Civil Marriages are registered by the Sub-Registrar.

About 50 civil marriages were registered in the district during the period 1961-70 with an average of 5 marriages per year.

Most of the houses of the district are small huts made of mud, bamboo, grass and tiles. Tiled roofs are common and about 70 per cent of the dwelling houses have been built with mud tiles, and about 60 per cent of the houses have mud walls. The impact of economic development has brought in some changes in the type of houses in the rural areas. Costly building materials like iron sheets, rods, asbestos, cement and brick are gradually being used to construct houses in rural and urban areas by the people of the higher income group.

Adibasi settlements are usually built on undulating lands and in some rare cases they also construct their huts on the top or on the slopes of hills. Tribes like the Kharias and the Hill Bhuiyas who are mostly dependant upon the forest for their living prefer to remain in its proximity. An Adibasi hamlet is always kept neat and clean. The huts are very small in size and the space inside is scanty for a family dwelling. The interior is divided into two compartments. An Adibasi village maintains separate dormitories for the youths. These are usually located at the entrance of the village having separate halls for boys and girls to sleep.

Housing accommodation is acute, especially in the industrial areas. As per 1961 Census 3,746 families (12.17 per cent) had no dwellings of their own and lived in rented houses. Besides, 75 per cent of the houses are very small having one or two rooms. Electricity is now available in some villages and in all the towns of Sundargarh.

No proper attention for sanitation is given in constructing houses in villages. They are ill ventilated having no drainage system. The cattle shed is constructed as a part of the house and compost pits are

Civil
Marriage

HOME LIFE
Dwellings

Marriage
and
Morals

dug near the dwellings. Conditions in most of the towns of the district are far from satisfactory. Congested markets, narrow and ill-maintained lanes and slums are common. But the picture of the well planned steel township at Rourkela is an exception. It is neat and well maintained having many modern facilities.

Furniture and Decoration

The possession of furniture varies with the economic status of a person and his social standing. In an average household absence of costly furniture is noticed. The poorer section of the population possess a Khatia (indigenous cot) strung with rope. A well-to-do family usually have chairs, tables, almirahs, stools, teapots, cots, etc. Radios and transistors, attractive wall clocks and fans, etc., are no longer articles of luxury but of comfort and necessity for the upper strata of society.

The poor tribals have a few mats which their women weave with date palm leaves. In a very few tribal homes are found one or two string stools (called Manchia by Oraons and Pidhar by Mundas) to sit upon. Many people squat on small planks of wood called *kandos* or on similar seats made of straw while taking their food. All these furniture are made by the tribes themselves.

Among the tribes, the Oraons in particular are very meticulous in keeping their houses neat and clean. They wash the floors and walls of their houses with cow-dung almost twice a week and keep the courtyard and the surroundings clean. On special festive occasions the floors and walls of the other caste people are washed with cow-dung and alpana designs are drawn on the floor. The drawings of birds, animals, flowers and geometrical designs are also found on the walls.

Dress

The common dress of the people is a *dhoti* for the male and a *sari* for the female. A humble cultivator never bothers to cover the upper portion of the body and occasionally wears a banyan or a *kurta* (half shirt) made of cheap mill made cloth. In winter he uses a coarse cotton *chaddar*. Use of shoes or chappals is very rare in rural areas. The traditional tribal dress is a loin cloth and a coarse towel. In the past the male Oraons were using *banna-kareya* (multi-coloured loin cloth) which is no longer popular and are used only by some older people in remote villages.

The women-folk use colourful *saris* and generally prefer the handloom *saris* woven by local weavers. Use of blouse as an upper garment is limited to the females of the well-to-do families and the Christian tribal women.

Children wear half shirts and frocks. The use of miniature dhoties and saris are no longer in vogue. In remote tribal villages small children go naked or use a narrow loin cloth between the legs. In recent years there has been a remarkable change in the dress among the urban people and the young students. Bush shirts and drain pipe trousers have become very popular among the males.

A variety of ornaments are worn by the females. The people belonging to low income group wear beads, and bell-metal, lac and plastic ornaments. Those who can afford go in for silver and gold ornaments. The principal indigenous ornaments are *Sinthe*, *Chaurimundi*, *panpatra* and *Jhumpa* for head; *khagla*, *kanthimal* and *hansuli* for neck; *dhal*, *bali*, *karnaphula*, *phasia*, and *baulkadhi* for ears; *dandi*, *nakaphula*, *notha*, *phuli*, and *basuni* for nose; *Baha tada*, *bahna suta* and *anant* for arms; *katurlia* and *banduria* for wrist; *kardhani* and *anta suta* for waist; and *parjhari*, *goda mudi* and *Jhunta* for feet. These ornaments are popular only in rural areas. Women of well-to-do families generally use gold necklaces, trinkets, and other silver or brass ornaments. Young girls wear plastic and silver ornaments and other modern ornaments including bracelets, armlets, chains, and earrings. Nose ornaments which disappeared temporarily are again becoming popular. The ornaments like *banduria* and *katurlia* have pointed protrusions and are massive and strong. Instead of fulfilling the urge for decorating the body such ornaments were probably used for defence. They are gradually losing popularity. This aversion is invariably marked among the women of the urban areas. Males in the urban areas do not generally wear any ornament except rings.

The traditional tribal ornaments are now becoming obsolete. Usually they procure cheap metal or plastic ornaments from village *hats* or from distant markets. Flowers, feathers, wild nuts and *cowrie* shells are also used by the tribals for decoration.

The tribals are very fond of personal decoration. At the time of social functions, both men and women wear gaudy costumes. The girls adorn their hair with jungle flowers. Sometimes they decorate their head with so much flowers that coiffure is hardly visible. Generally the coiffure is of Sambalpuri type. The khosa or the hair knot is set to the right or left at the back but the educated girls coil the plaited hair and fix hair pins. The men generally cut their hair short and shave their beards. Among women tattooing on face and other parts of the body is common but the educated girls are averse to it. The use of modern cosmetics is limited only to the sophisticated few, even the use of soap is rare.

Personal decoration

Food and
drink

Rice is, of course, the principal food, but is supplemented by millets. Maize and pulses form a large part of the dietary of the people. About 30 years ago use of wheat and wheat products was almost confined to a few rich families, but on account of the rising prices of rice and supply of wheat at comparatively cheaper rates many people are now changing over to wheat for their night meal. Besides, bread has become very popular among the urban people. The poorer section of the community specially the tribals supplement their food by many kinds of edible roots, fruits and flowers collected from the forest.

Generally the people take three meals a day, but those with meagre resources can hardly afford this throughout the year. A poor man's menu consists of boiled rice, either hot or soaked in water, chilly, onion, salt, fried edible leaves (*sag*) or boiled pulses (*dal*). Flattened rice (*chuda*) or puffed rice (*murhi or lia*) is usually served as tiffin.

All kinds of fish and meat are relished but the taste and habit differ from one caste or community to another. Goat meat and mutton are preferred. The Hindu community and some Adibasis do not eat beef and pork. Some tribals even relish the meat of bear, crab, tortoise, etc.

Milk is hardly included in a common man's diet. Most of the tribals do not drink milk at all. Different kinds of sweets and savouries are prepared by the house-wife on special occasions and during festivals.

Mustard oil is the main cooking medium. Ghee is rarely used due to its scarcity and high price. Hydrogenated oil has almost replaced ghee in many kitchens. A cheap edible oil extracted from *mahua* seeds is generally used by the poorer people throughout the district.

During the last few decades drinking of tea has become very popular. A tea stall can be found in every big village even in the remote corner of the district.

Drinking of country liquor (*handia/kushna*) is customary with the Adibasis. Besides, people drink *daru* (country liquor prepared from *mahua* flower) and *tadi*. Consumption of liquor is more in the industrial and mining areas. Both country and foreign liquor are sold openly. Drinking is on the increase in all the strata of the society.

Smoking of tobacco is very popular among the males. The tribals use *kahali*, i. e., a cheroot made of country tobacco enclosed in sal leaves. Besides, *bidis* and factory made cigarettes are sold throughout the district. Chewing of betel leaves is also common. Smoking of *ganja* is on the increase and its consumption in the district is very high (567 kg. of *ganja* was sold in the district during 1971-72).

The district with its alluring legend and history contains many temples and shrines where people of different faiths congregate on many religious and festive occasions.

COMMUNAL
LIFE
Pilgrim
Centres

Vedavyasa, a beauty spot near Rourkela, located at the confluence of the rivers—Sankha and Koel, is a famous place of pilgrimage for the Hindus. Its sanctity is due to the location of the temple of Lord Siva. According to local tradition sage Vyasa, the celebrated author of "The Mahabharata" is said to have been born here.

The fairs and melas are common in the district and are held throughout the year. Some of these fairs have a religious or economic origin. On such festive occasions the people get scope to rejoice and also avail the opportunity of purchasing many articles from outside traders who come with their merchandise from distant places. Tribal dance, Chhow dance, opera and magic shows, etc., are some of the usual features of these melas.

Fairs and
Melas

A list of some important fairs of the district is given in appendix III.

The people observe a number of festivals in accordance with their respective religious beliefs. Besides the Hindu festivals, the tribals also celebrate some peculiar festivals of tribal origin. The Christians, Muslims, Jains, Sikhs and Buddhists celebrate festivals enjoined by their respective religions.

Festivals

The important Hindu festivals of the district are Mahavisuva Sankranti, Akshaya Trutiya, Raja, Ratha jatra, Janmastami, Ganesh Puja, Durga Puja, Dasahara, Kumar Purnima, Kalipuja or Dipavali, Makar and Saraswati puja. Besides, Nuakhia, Bhai Jauntia, etc., are observed as important social festivals.

Most of the tribal festivals synchronise with their agricultural operations. They have also adopted many Hindu festivals due to years of close cultural contact with their Hindu neighbours. Their principal festivals are Makar, Sarhul, Nuakhia, Akshaya Trutiya (Muthi Chhina), Gamha, Pausa Purnima (Pus Punei), Karama, Ind, Dolo jatra or Faguna jatra.

Dance and music is a part of the life of the tribal people of the district. After the tiresome day they congregate in the evening and sing and dance to the tune of high pitched *madal*, *phechka*, *gini* and *flute*. No festival or ceremony is considered complete which goes without a dance performance in which both men and women participate. Because of the impact of Christianity some tribal people have relinquished many of their customs, rites and dances. Christian missionaries discourage

Folk Dance
and
Music

folk dancing and it is forbidden to the followers of Christianity. The tribes do not need any special preparation by way of costumes or ornaments to begin a dance, and they perform it at their own sweet will.

Though much akin to each other, each tribe maintains its own characteristic dance which they have preserved for centuries. But during recent years it is not surprising to find Adibasi belles singing in popular film tunes in remote villages.

Brief accounts of some important communal dances are given below:

Oraon Dance

The dance always takes place in open air, in front of the 'mandap' (village club house) which is in close proximity to the village headman's house. Whenever the young men go to the mandap (literally means pandal) and beat drums, the girls come out of their houses to join them. They have the characteristic round dance. The young men begin the dance by holding each others hand and make several rounds being headed by an expert dancer. Then the rhythm of the drum changes, giving an indication to the beginning of the real dance. Then the girls who so long waited patiently for the dance to begin go and join. They make circles bending forward and backward, placing left leg in the front and the right leg at the back. The hands are placed on the neighbour's waist band and are crossed. The steps of the dance vary with the change in the rhythm of the drum beats.

Waving of the body from the waist and up, bending of the knees, stamping of the right foot backward and lifting the left foot forward, hip movements are some of the peculiar characteristics of the dance.

The dance continues to the late hours of the night to the accompaniment of songs and music. Sometimes fun makers appear in the scene. They are usually elderly persons in funny dresses and drunk. They provide much amusement to women and children.

Kharia Dance

The Kharias of Sundargarh district perform dance during the festivals of Phaguna Punei, Bhai Jauntia, Karama, Biha, etc. Though they perform the common round dance, their steps are different. Both men and women take part in the dance. While dancing they sing Biha, Baramasi and Jatra songs which are in local Oriya dialect.

The Kharia girls wear different types of ornaments and adorn their coiffure with flowers and leaves. The males wear a turban of ordinary cloth and decorate it with bunches of flowers and leaves. Madal remains the only accompanying instrument to their dance.

The Kisans perform Phagua, Jadur, Karama, Jhumar and Biha dance on different occasions. Each dance has its own peculiar steps and movements. Their dance is also of round type in which both men and women take part. In Biha or marriage dance they sing marriage songs in their own dialect. Madal is the only musical instrument used in all their dances.

Kisan Dance

The changu dance is still prevalent among the Hill Bhuiyans living in the wild highlands of the inaccessible hill ranges of Bonai. The Bhuiyan boys and girls of the same village or of the neighbouring villages are free to dance together at their sweet will and during the dance a youngman is at liberty to seize the hand of a girl he intends to marry and escape with her to the jungle. Such marriages are not infrequent and have customary social sanction.

Changu Dance

The Changu dance of the Bhuiyans possesses some peculiar characteristics, though it is not as lively as the dances of some other tribes. The men, having a Changu (a crude kind of tambourine nearly two feet in diameter) each march round hopping in a circle, beating these. They sing Chhanda, Chaupadi and other amorous songs mostly composed by the village composers. The girls while dancing are usually veiled and dance opposite to the boys. When they move forward, the boys move backward and vice-versa. Hip movements predominate in the dance.

Jhoomar dance is prevalent among the Mundas of Bonai area. As it is danced in accompaniment to the Jhoomar songs, it has been so named. It is a group dance and men and women both participate in it. Mahantos also do the Jhoomar dance, but only men take part.

Jhoomar Dance

Chitra Parva, Karama and Kali Puja are some of the festivals on the occasion of which this dance takes place. Movements of hips, wrists and wary movements of the body are some of the peculiar characteristics of this dance. The dance looks very beautiful for its symmetrical movements and is marked for its harmonious blending of rhythm and movement.

Bandi Butal means a broken bottle. It is not known why it has been named so. This dance is performed in fairs, festivals and on some auspicious occasions. Two or three boys dress themselves as girls and dance with amorous movements. Another person dances with them with loose movements not pertaining to any style. All of them sing and dance, love songs being common. The songs are repeated by a band of chorus singers. Sometimes story songs from the mythologies are

Bandi Butal

also sung. Dholak and brass cymbals are played in accompaniment to the dance. Sometimes the movements and the songs are vulgar. It provides light type of entertainment.

Chhow
Dance.

Chhow dance is prevalent in Bonai and is usually performed during the Chaitra Parva. It is not an indigenous dance of this area. It is said that the tradition has been imbibed from Sareikala, the seat of Chhow dance. As the rulers of Bonai took fancy in this dance, they brought dance teachers from Sareikala who taught the art to the local artists. Though the dance is from Sareikala, local techniques of folk dances have been infused into it, especially the techniques of Jhoomar, Kol, and Munda dances are clearly discernible. As Chhow dance is connected with some rituals, it is not danced during other times of the year.

Gauda
Dance

The Gauda dance is prevalent among the Gauda caste people of Hemgir area. In the month of *Pausa* (December-January), they assemble and dance with beating of drums and sticks accompanied with song. Only male members take part in the performance.

These are the important folk dances in the district of Sundargarh which have been handed down through generations and are maintained in a fluid tradition, which manifest the temperament, art, culture, customs and the creed of the people. The impact of the modern sophisticated civilization has not been able to efface them yet.

Folk Music

For the tribal people of Sundargarh, music is predominantly a matter of tradition, of rituals and of physical or spiritual well-being. Music plays an important part in village life. Music is associated not only with dance, songs proper but also with rituals associated with spring customs, wedding and other ceremonies. Almost all the tribes sing in their own dialects excepting on a few occasions when they sing Oriya songs (in local dialects) but with tribal accent.

Folk songs play an important part in the village life of the people. Beginning from pain to pleasure, they cover the entire gamut of human emotions. As folk songs are liable to growth and change, these songs are also changing in Sundargarh. But it is a pity that the impact of modern industrial civilisation is sophisticating their genuine characteristics.

Recreation

Most of the people are poor and have neither time nor money to enjoy leisure.

Hunting, fishing, and cock-fighting are the traditional pastimes of the rural people. Dance and music also constitute the most popular and favourite pastime. The festivals and other social functions round

the year never leave them in want of mirth. They trek long distances to fairs and markets to enjoy social life as well as fun and gaiety. Occasionally opera parties and itinerant cinema and circus visit the rural areas. During that short period the people forget their drab daily routine work and enjoy life. Community radio listening sets supplied by the Government to different institutions of the district also draw good audience.

In urban area cinema is a common source of entertainment. Out of eight cinema houses in the district, Rourkela has got four. The remaining four are located at Sundargarh, Rajgangpur, Birmitrapur and Bandamunda. Recreation clubs, associations, sports, games, variety shows and religious discourses, etc., provide recreation to the people of the district. Hockey and foot ball matches are popular and draw large crowds. In inter-district and all Orissa athletic meets Sundargarh district has earned distinction on many occasions. Parks and gardens also play a dominant role in offering recreation to the people.

The former Princely States of Gangpur and Bonai constitute the present district of Sundargarh. In these two ex-States there were estate holders who were known by different names, viz., Zamindar, Jagirdar, Kharposhdar and Praganadar. Besides, commensurate with the feudal order various service tenures were also in vogue which kept such tenure holders in a state of semi-slavery. With the merger of the feudatory States of Orissa with Orissa Province on the 1st January, 1948, and the subsequent abolition of all intermediary interests in land the age-long feudal rule in the area came to an end and direct contact between the Government and the tenants was established. The abolition of the intermediary system brought in a rational system of land revenue collection and the cultivators were assured of their right over the land they cultivated. This was an important change and vital for the socio-economic life of the people. Under the changed circumstances the common man feels more secured and free. The rapid industrialisation of the district and the spread of education have helped in a steady rise in the living standard of the people and in broadening their mental horizon. The tribal population are also getting accustomed to the modern way of life.

IMPACT OF
ABOLITION
OF
JAMINDARI
SYSTEM ON
SOCIAL
LIFE.

APPENDIX I

Mother-tongue*

Sl. No.	Name of mother-tongue	Persons	Males	Females
1	Bengali	13,905	7,358	6,547
2	Bhuiya/Bhuyan Oriya	141	69	72
3	Bhumij	2,787	1,216	1,571
4	Birja/Brijia/Binjha	803	401	402
5	Dhelki-Oriya	309	137	172
6	English	126	114	12
7	French	2	1	1
8	German	372	303	69
9	Gondi	59	30	29
10	Gujarati	747	344	403
11	Hindi	46,754	2,227	23,527
12	Ho	7,014	3,971	3,043
13	Kannada	161	83	78
14	Karmali	356	174	182
15	Kashmiri	1	..	1
16	Kharia	36,361	17,243	19,118
17	Khond/Kondh	93	13	80
18	Kisan	24,948	12,319	12,629
19	Koda/Kora	366	179	187
20	Kol	6,620	3,328	3,292
21	Kui	2,964	1,445	1,519
22	Kurukh/Oraon	48,117	23,967	24,150
23	Laria	16,793	8,237	8,556
24	Mahili	23	13	10
25	Malayalam	2,539	2,041	498
26	Marathi	66	31	35
27	Marwari	270	150	120
28	Mirdha-Kharia	4	2	2
29	Mundari	64,388	33,572	30,816
30	Nepali	859	746	113
31	Oriya	460,255	244,231	216,024
32	Punjabi	2,398	1,294	1,104
33	Tamil	1,608	1,120	488
34	Telugu	4,635	3,054	1,581
35	Turi	110	56	54
36	Urdu	11,663	5,745	5,918
Total		758,617	396,214	362,403

*District Census Handbook, Sundargarh, 1961, p. 203

APPENDIX II

Population of Scheduled Tribes*

Sl. No.	Name of Scheduled Tribes	Persons	Males	Females
1	Bagata	1	..	1
2	Banjara or Banjari	800	391	409
3	Bathudi	75	75	..
4	Bhottada or Dhotada	172	117	55
5	Bhuiya or Bhuyan	45,168	22,664	22,504
6	Bhumia	23	23	..
7	Bhumij	4,288	2,278	2,010
8	Binjhal	612	313	299
9	Binjha or Binjhoa	2,140	1,157	983
10	Dal	14	6	8
11	Dharua	101	51	50
12	Gadaba	89	59	30
13	Gond, Gondo	34,849	18,127	16,722
14	Ho	785	419	366
15	Holva	13	13	..
16	Kawar	193	97	96
17	Kharia or Kharian	53,243	26,578	26,665
18	Kharwar	464	245	219
19	Khond, Kond or Kandha including Nanguli Kandha and Sitha Kandha.	3,329	2,000	1,329
20	Kisan	50,632	24,146	26,486
21	Kolha	4,099	2,150	1,949
22	Koli including Malhar	13	13	..
23	Kondadora	110	110	..
24	Kora	14	6	8
25	Korua	74	31	43
26	Lodha	47	28	19
27	Madia	2	2	..
28	Mahali	1,474	690	784
29	Mankidi	248	134	114
30	Mirdhas	39	32	7
31	Munda, Munda-Lohara or Munda-Mahalis.	113,431	56,338	57,093
32	Mundari	3,094	1,892	1,202
33	Oraon	114,103	56,098	58,005
34	Paroja	1,220	1,220	..
35	Rajuar	4	4	..
36	Santal	2,262	861	1,401
37	Saora, Savar, Saura or Sahara	647	298	349
38	Shabar or Lodha	1,076	649	427
39	Sounti	71	39	32
40	Tharua	2	..	2
Unclassified		1,889	704	1,185
Total		440,910	220,058	220,852

*District Census Handbook, Sundargarh, 1961, p. 240

SUNDARGARH

APPENDIX III

Fairs and Festivals*

Sl. No.	Occasion	Name of place	Approximate number of persons attending	Month
<i>Rural Areas</i>				
1	Makar Jatra ..	Karamdihhi, P. S. Sundargarh.	5,000	January
2	Gokulastami ..	Sargipali, P. S. Lefripara.	5,000	December
3	Shivaratri ..	Tumapali, P. S. Hemgir.	10,000	February
4	Dasahara ..	Kanika, P. S. Hemgir.	10,000	October
5	Jhulan Jatra ..	Dharuadihi, P. S. Bhasma.	5,000	August
6	Shivaratri ..	Raishpara, P. S. Talsara.	10,000	February
7	Ramanavami ..	Bargaon, P. S. Bargaon.	5,000	April
8	Birth day of Jesus Christ.	Kesramali, P. S. Rajgangpur.	7,000	December
9	Ratha Jatra ..	Kuarmunda P. S. Birmitrapur.	6,000	July
10	Bojar Danda Jatra.	Dalki, P. S. Raiboga	8,000	February
11	Indra Jatra ..	Khuntagaon, P. S. Bistra.	5,000	October
12	Jagar Jatra ..	Panposh, P. S. Raghunathpali.	10,000	February
13	Chaitra Parab	Bonaigarh, P. S. Bonaigarh.	5,000	April
14	Indra Parab ..	Pankadhi, P. S. Gurundia.	5,000	December
15	Makar Jatra ..	Sole, P. S. Gurundia	5,000	January
<i>Urban Areas</i>				
1	Ramanavami ..	Sundargarh Town P. S. Sundargarh.	12,000	April
2	Ratha Jatra ..	Sundargarh Town, P. S. Sundargarh.	15,000	July
3	Dasahara ..	Sundargarh Town, P. S. Sundargarh.	12,000	October
4	Durga Puja ..	Rajgangpur Town, P. S. Rajgangpur.	3,000	October
5	Ratha Jatra ..	Birmitrapur Town, P. S. Birmitrapur.	15,000	July

* District Census Handbook, Sundargarh, 1961, pp. 267-270

NOTE: With the growth of the Steel Township of Rourkela many fairs and festivals are now being observed by the different communities inhabiting the place. Of the many festivals observed the Car Festival of Lord Jagannath in Sector-III attracts huge crowds and has assumed considerable importance. Durga Puja has also become popular and is observed at different places in the city with due pomp and eclat.

CHAPTER IV

AGRICULTURE AND IRRIGATION

The economy of the district is essentially agricultural, as 59.6 per cent (1971 Census provisional figures) of the total population depend on agriculture for their living. The configuration of the land being undulating, the success of cultivation depends upon irrigation for which there is no adequate facility in the district. The cultivators have to depend mostly on rainfall. Besides, they use the age old primitive type of implements. The weak and unhealthy cattle maintained in an uneconomic manner further contribute to backwardness in agriculture.

The best cultivated lands of Sundargarh are located along the valleys of the two main rivers, the Brahmani and the Ib and their tributaries viz., the Sankh, the Koel, the Safai, the Ichha etc. Out of the total district area of 9,81,000 hectares only 2,19,622 hectares were utilised for cultivation in the *kharif* season and 24,375 hectares in the *rabi* season during 1970-71.

The statement below gives a picture of land utilisation in the district (1970-71).*

	(In hectares)
Total cropped area	.. 2,43,997
Area sown more than once	.. 24,375
Fallow	.. 86,600
Forest	.. 5,82,700
Area not available for cultivation	.. 55,800
Other uncultivated land including pastures	.. 75,600

The problem of soil erosion is acute in this district which includes the upper catchment areas of the Mahanadi and the Brahmani. It is estimated that about 1.30 lakh hectares of land have been affected. Measures to check erosion were started in 1954 with the establishment of a demonstration-cum-training centre at Jharbeda. Its main object was to train field workers and other personnel, and to carry out research on problems relating to soil and water conservation. In addition, the centre rendered technical assistance to the cultivators and executed soil conservation measures in the locality. The Training Centre has been shifted to Bhubaneswar since August 1970.

*SOURCE—Directorate of Agriculture and Food Production, Orissa

The anti-erosion measures include contour bunding, tree planting, pasture development, paddy field terracing, stream bank protection, gully reclamation, and construction of structures for silt retention.

Soil conservation in the Hirakud catchment (portions lying in Sundargarh district) was initiated in 1957 around Bargaon in a selected sub-catchment of the Ib river. Subsequently the area of activity was extended to other sub-catchments where soil erosion was acute and required proper attention. Till the end of 1970-71 an amount of Rs. 39,77,444 was spent in implementing various soil conservation measures under the River Valley Scheme covering an area of 3,295 hectares.

The Kuradhi Irrigation Project has a total ayacut area of 3,319 hectares distributed over 22 villages in Lahunipada and Koira Blocks. The ayacut area, having an uneven and falling topography, needs land shaping and levelling. The cultivators are being given cash loans for development of their lands by the Agricultural Refinance Corporation. Plans and estimates for development of these lands are being prepared by the Soil Conservation Organisation. It has been proposed to cover 1,200 hectares with an estimated cost of Rs. 18.42 lakhs.

Sisal plantation has been taken up in only 112 hectares from vast stretches of Government waste lands which are subjected to severe erosion and are unsuitable for cultivation.

Besides, soil conservation measures have been proposed to be taken up in the catchment area of Mandira Dam Reservoir. The survey is being conducted by the soil conservation organisation and a comprehensive scheme costing Rs. 26 lakhs has been prepared.

IRRIGATION

There is very little facility for irrigation and the cultivators have to depend mostly on rainfall. The net irrigated area compared to net area sown is only 3.18 per cent. Though the rainfall of the district exceeds 60 inches, the sub-soil water level goes deep down the surface soon after the rains and the land is left dry.

Tanks, Wells and Nalas

There are many tanks and *katas* in the villages throughout the district and these are filled up during the rains. These tanks and *katas* are mostly utilised in dry seasons for bathing and drinking purposes and occasionally the water is used for irrigating vegetable gardens by ordinary lift (*tenda*) system. At places, irrigation by small streams is taken recourse to, by means of which the water is diverted and carried into the fields.

Cash loans under Grow More Food scheme were issued for sinking of wells, renovation of old tanks, minor irrigation works other than wells or tanks, reclamation of waste lands and for purchase of plough and cattle. After the discontinuance of the Grow More Food cash loans in 1949-50, the execution of minor irrigation projects were taken up by the Revenue Department. Subsequently the Rural Engineering Organisation has been entrusted to execute all these projects in the district.

The Adibasis who form the majority in the population of the district do not generally carry out together the schemes of artificial irrigation and each individual makes his own petty dam to water his fields. The Agharia cultivators, however, join hands with others to construct reservoirs to irrigate large areas in a systematic manner. In a few cases small hill streams are dammed to irrigate rice crops. Vegetable gardens and sugar-cane fields are irrigated by sinking of wells or by raising water from available tanks.

Sundergarh is one of the six districts of the State which have very low achievements under major and medium irrigation. It has no major irrigation project. Only one medium irrigation project has been taken up at Pitamahal which is likely to be completed soon.

The Project is situated at a distance of 15 km. from Rourkela. The estimated cost of the project is Rs. 157 lakhs. There are two distributaries which consist of 21 number of minors and sub-minors with a total length of 88 km. This project, when completed will irrigate 4,800 hectares of land.

During the last 20 years 109 minor irrigation projects have been taken up in the district for construction, out of which 65 projects are providing irrigation, 8 are under construction, and the rest 36 projects have become derelict. The total ayacut now being commanded by minor irrigation is 8,237 hectares in *kharif* and 1,315 hectares in *rabi* season. The Kuradhi Irrigation Project located at Koira in Bonai subdivision is the largest minor irrigation project in the district at present. It has been constructed at a cost of Rs. 66,75,000 and irrigates about 2,800 hectares in *kharif* and 280 hectares in *rabi* season. Among the projects now under execution the Ichha Project in Lefripara Community Development Block is of importance. When completed it will provide irrigation to 2,400 hectares in *kharif* and 400 hectares in *rabi* season.

Besides the minor irrigation projects mentioned above there are 53 very small projects in the district and they irrigate about 600 hectares of land.

Irrigated Area

Irrigated area from various sources (1969-70) is 8,211 hectare which is split up as follows *.

	(In hectares)
Government canals ..	1,023
Private canals ..	228
Tanks ..	1,234
Wells ..	462
Other sources ..	5,264

SOIL

The soil of Sundargarh, on the whole, is not very fertile except in the river valleys. The northern part of the district, which is occupied generally by the tribal people, the soil is less fertile. Mixed red and black soil, red sandy soil, gravelly and lateritic soil are found in this area. The mixed red and black soil contains a large quantity of calcium and magnesium carbonates, but is generally deficient in nitrogen and phosphorous. The red sandy soil, gravelly, and lateritic soils are generally deficient in potash, phosphoric acid and lime. Soil are in general open in texture and well drained. Plenty of iron concretions are present in the soil.

The soil of Sundargarh subdivision is productive in the Ib valley towards the south, and here the skillful and industrious Agharias make the most of their land. In the northern portion, the soil is less fertile and the cultivators are at a disadvantage owing to the ravages of wild animals. The cultivated lands in Panposh and Bonai subdivisions are along the river valleys, with a few small scattered areas in valleys lying between the hill ranges.

CLASSES OF LAND

The cultivated lands of the district are classified as *bahal*, *berna*, *mal*, *goda*, and *baribagait*. Short description of them are given below:—

Bahal

Bahal is a term used for flat land at the bottom of a depression or drainage line. The best *bahal* lands called *pani bahal* are served by reservoirs and so are secure from crop failure.

Berna

The term *berna* denotes lands towards the bottom of a depression, which receive the drainage from the slopes on either side and also from drainage line between them. *berna* lands are classified into two classes viz., (i) *berna*, (ii) *pani berna*. The only degree of comparison between these two is that *pani berna* gets more percentage of water.

Mal

Mal is the embanked land and slopes which are terraced to catch the surface drainage coming down from uplands. The lower *mal* lands called *pani mal*, get excellent drainage and grow good varieties of rice.

* State Bank of India—Survey Report on Sundargarh District.

Goda is generally the uplands of the area, entirely depending on *Goda* rain water. These lands are used for crops which are less dependent on moisture. It is more suitable for *rabi* cultivation.

The *Baribagait* is generally the homestead land ordinarily used as *Baribagait* kitchen gardens. Besides, lands which are used for growing vegetables, and fruit orchards are also called *baribagait*.

The principal crops of the district are paddy, maize, wheat, ground-nut, mustard, potato, kulthi, mung and biri. The area under different crops and their yield-rate are given in appendix I.

Paddy is the most important crop of the district and occupies 85 per cent of the total cultivated area. There are three regular paddy crops, viz., *Godadhan* or high land paddy, autumn paddy and winter paddy. High land paddy is sown at the commencement of the rains i. e., in June-July and harvested towards the last part of September. The autumn paddy is sown in June and harvested in October. The winter paddy is grown on low lands known as *Bahal*, and is sown or transplanted in July-August and harvested in November and December. There are many promising varieties of local paddy, viz., *Sonakhadika Jhilli*, *Karpurbasha*, *Chinamati*, etc. Besides these local varieties, improved varieties of paddy such as T.842, T.90, T.1242, T.141, etc., have become popular among the cultivators. High yielding varieties were introduced in this district since 1967 Kharif season and have been widely accepted by the cultivators. Particularly, the short duration high yielding varieties viz., *Padma*, *Ratna*, *Bala* etc., have been found to be very suitable for this district and have been successfully incorporated in the cropping patterns of various climatic zones. Total area covered under paddy crop during 1971-72 was 2,08,204 hectares, out of which 4,385 hectares were under high yielding paddy, 70,447 hectares under improved paddy, and the rest 1,33,372 hectares were under local paddy. The average yield of high yielding paddy and local paddy are 20 qtls. and 7.5 qtls., per hectare respectively. To a very limited extent another kind of rice crop known as '*Dahidhan*' is grown on forest lands by the hill tribes mostly in Bonai subdivision. For this no ploughing is required; the trees are cut down and burnt on the land and the ashes are mixed up with the surface soil. The seed is put as soon as the rain commences. But after about two years such lands become exhausted and new plots have to be prepared afresh.

Wheat is the next important cereal crop of the district. It is sown in October after the cessation of monsoons. High yielding varieties viz., *Safed Lerma*, *Lerma Rajo*, S.308, *Sonalika*, *Sarabati*, *Sonara*, S.64, S.63, *Kalyan-Sona* etc., have been introduced in the district since 1967,

and these varieties are gradually replacing the earlier introduced Pusa, and red grain high yielding varieties. During the *rabi* season of 1971-72, an area of 1557 hectares was put under the improved varieties introduced since 1967. Only a small area of 378 hectares was sown with the red grain high yielding variety of wheat. The average yield is 18 quintals per hectare.

Other Cereal

Among other cereals grown in the district mention may be made of maize, Jowar, Bazra, and Ragi. Maize is the most important among these crops. The introduction of composite maize varieties, viz. Bikram, Vijaya, Jawhar, etc., have helped the cultivators in getting a higher yield by using their own seed stock. During 1971-72 an area of 85 hectares was put under composite maize, where as the local varieties were cultivated in 2,135 hectares. The remaining crops cover an area of nearly 2,000 hectares.

Pulses

Green gram (Mung), blackgram (Biri), horse gram (Kulthi), arhar and gram are cultivated in the district. Their yield is not sufficient even to meet the local needs. Pulses are cultivated both in *kharif* and *rabi* seasons and cover an area of about 700 hectares.

Mung and *biri* are usually sown in the last part of August and first part of September. These crops do not thrive well due to comparatively colder climate prevailing from September onwards, particularly in the year in which heavy rainfall is received. A very small grained variety of *mung* locally known as *barai* is sown in July on a very limited scale. 'Pusa Baisakhi', a short duration variety (65 days) was introduced during the *rabi* season of 1970-71 and the result was promising. It is well suited to three crop pattern and can be sown from February to March. The produce can again be utilised for June sowing. Seeds of the variety have been supplied to the local cultivators for large scale multiplication. Similarly the short duration T.9 *biri* variety is also expected to gain popularity and the seeds are under multiplication in the seed farms of the district since 1971-72.

Oil-seeds

Groundnut, mustard, sesamum, and castor are cultivated as oil-seed crops. Groundnut is the most important and is cultivated both in *kharif* and *rabi* seasons. During 1971-72 groundnut was sown in 1,728 hectares of land mainly by two improved varieties, viz., S. B. 11, and AK 12-24. Mustard covered an area of 1,467 hectares. Sesamum and castor covered 1,038 and 108 hectares respectively. The short duration mustard variety M-27 has gained popularity as the plants are short in height and give good yield within 75 days. It is also taken as a mixed crop with high yielding wheat. Besides, oil is also extracted from *kusum* and *mahul* seeds obtained from the forests.

Sugarcane, cotton, jute and groundnut are the principal commercial crops of the district. Potato, chillies and tobacco are also cultivated on a limited scale. Commercial crops

Sugarcane is grown luxuriantly in some of the river valleys and in homestead lands. The molasses extracted are highly esteemed and exported to great distances. The noticeable feature in the manufacture of *gur* in the district is its reduction to solid lumps which look very attractive. Improved Coimbatore canes have not yet replaced the local varieties to an appreciable extent. The area under this crop is 305 hectares and the annual yield is 1,754 tonnes of *gur* (1971-72).

Cotton, which was once being grown extensively in the district is found no more in such large scale though short-staple variety is still grown in some dry areas. In recent years improved long-staple varieties have been introduced, but the area under cotton is reduced as the cultivators are not interested in its cultivation due to extensive use of mill-made yarn. The soil of the district is not suitable for jute cultivation but during recent year its cultivation in some suitable areas have proved a moderate success. Potato, chillies and tobacco are also cultivated in a small scale. Tobacco is grown only for local consumption. The local varieties however, are of very good quality.

Country vegetables such as pumpkin, brinjal, arum, sweet potato, ridge gourd, little gourd, plantain, onion etc., are grown during rainy season. Winter vegetables like cauli flower, cabbage, carrot, french bean and potato have also become very popular among the cultivators and are cultivated mostly in the Agharia villages of the Sundargarh subdivision. Vegetables

Mango, lemon, guava, banana, papaya, orange and pineapple are grown in this district. Grafts and seedlings of various fruit plants are sold to the farmers every year through the Agriculture Department. A progeny orchard and a fruit nursery have been established at Sundargarh and Kuliposh respectively to supply fruit grafts and seedlings. Fruits

Grow More Food Campaign, Banamahotsava, and crop competitions etc., have created incentive among the cultivators. Introduction of high yielding and short duration varieties of crops is also an important factor for the progress of agriculture. Cultivators are gradually feeling inclined to adopt improved methods of cultivation by use of better seeds, manures and implements. Fruit gardens as a source of income were almost unknown a few years back, but are gaining popularity with the annual observation of Banamahotsava. During the past few

years, several orchards have been started at different places, and cultivation of vegetables is widely undertaken. Farmers are now almost accustomed to chemical fertilisers for better yields of potatoes and other vegetables. Fallow lands are gradually being brought under cultivation.

Japanese method of paddy cultivation was introduced in the district and it gained popularity among the farmers. During 1961-62, 1,319 hectares of land were covered by this method of cultivation and the number of cultivators who adopted it was 2,484. Gradually many high yielding varieties of paddy, wheat, maize, *jowar* etc., were introduced from 1967. During 1967-68 the area under high yielding paddy was 1,124 hectares and the area increased to 4,385 hectares during 1971-72.

Agricultural Implements

Traditional agricultural implements of various types are still in vogue. The general backward condition of the agricultural class, their poverty and want of adequate irrigation facilities are responsible for the non-mechanization of agriculture in the district. The cultivators prefer the age old implements like country plough, *kodali*, *khurpi*, and *sekle* as they are mostly manufactured by the village smiths, and carpenters and are mended easily. The farmers are gradually becoming acquainted with modern implements. The number of various agricultural implements, available from statistical report * is given below :

Wooden plough	..	1,05,160
Iron plough	..	1,592
Sugar-cane crushers	{ (bullock driven)	522
	{ (power driven)	143
Carts	..	15,379
Oil engines	..	20
Electric pumps and pumps for tube-wells		50
Tractors	..	6
Oil crushers (Ghani)	..	579

Methods of cultivation.

Generally the farmers follow the age-old method of cultivation. The country plough is still the only implement which is used in all kind of cultivation though mechanized cultivation through tractors has been recently experimented in a small measure by well-to-do cultivators. No crop except small patches of vegetable gardens in homestead land

* Statistical Abstract of Orissa, 1969, p. 600-601

is grown during the hot season as the soil gets very hard and water becomes scarce. Paddy is the main crop of the land and ploughing generally begins in summer to get the land ready for sowing. The seeds are sown broadcast though varieties of winter rice are sometimes sown in July in nurseries and then transplanted. Weeding in the fields where early varieties of paddy are grown, begins early in the monsoon and after the monsoon settles paddling operation in the fields sown with winter rice is undertaken with country ploughs having pointed plough shares. *Rabi* cultivation is done on *goda* lands towards the end of September but the yield is generally low. In the irrigated areas like Lahunipada and Koirā, high yielding varieties of paddy are taken up in *rabi* season. The broadcasting method as adopted in 1971-72 is being followed in the cultivation of high yielding paddy. Similarly the line sowing of high yielding wheat adopted till 1969-70, which needed at least one interculture i. e., hoeing is now replaced by broadcasting. This method gives comparatively better yield.

Most of the cultivators in this district raise a single crop (mainly paddy) in a year during *kharif* season and keep the land fallow for the remaining period. Only a few well-to-do farmers raise more than one crop in a year. Demonstrations have been conducted in cultivator's fields under various schemes by the Agriculture Department during the past few years. In 1970-71 inputs (investments of goods and services) worth Rs. 8,500 were supplied to cultivators and multiple cropping with the cropping pattern: Padma paddy-M. 27 mustard-SB. 11 Groundnut was adopted in an area of 42 hectares. Similarly during 1971-72 inputs worth Rs. 7,100 were supplied under diversification of cropping pattern demonstration. Intensive Agricultural Area Programme and multiple cropping was adopted in an area of 16.4 hectares. Out of the total demonstration area, the cropping pattern : Padma paddy-M. 27 mustard-SB. 11 groundnut was followed in 10.8 hectares and the cropping pattern : Padma or IR. 8 paddy-high yielding variety wheat-Pusa Baisakhi *mung* was followed in the rest area of 5.6 hectares. Such demonstrations have a good impact on the cultivators and create initiative for intensive cultivation.

ROTATION OF CROPS

Increased attention is being paid by cultivators to the quality of seeds and seedlings for better production with the introduction of high yielding varieties. More and more area is being covered under high yielding varieties of paddy, wheat, maize, and *jowar* etc. The nucleus seeds for the purpose are supplied by the Agriculture Department. The cultivators also raise their own seeds and collect by mutual exchange.

SEEDS AND MANURE

Seeds

Quantity of seeds supplied (categorywise) to the cultivators by the Agriculture Department during 1970-71 and 1971-72 is given below :

Category of seeds	Quantity supplied (in quintals)	
	1970-71	1971-72
High yielding paddy ..	557	300
High yielding wheat ..	135	156
M-27 mustard ..	20	13
Groundnut ..	210	295
Composite Maize ..	2	..

Manure

Cow-dung still remains the principal manure. Oil-cake and silt of old tanks are also applied in the fields. With the efforts of the Agriculture Department the local cultivators are gradually using compost which is usually a mixture of cow-dung, ashes, leaves and house-hold refuses. During 1970-71, 1,52,000 tonnes of compost were prepared in the district. Green manuring of paddy fields is also becoming popular. In 1970-71, 6,285 hectares of land were green manured with sunhemp and *dhanicha*. In recent years the use of chemical fertilisers like ammonium sulphate, calcium ammonium nitrate, super phosphate and potash etc., are increasing. The district consumed 583 tonnes of chemical fertilisers during 1969-70. The consumption went up to 2,286 tonnes in 1971-72. The main drawback of extensive use of chemical fertilisers is want of proper irrigation facilities.

PLANT PROTECTION

Almost every year paddy crop is attacked by stemborer, gallmidge jassids and gundhy bugs. Sugar-cane is affected by stemborer and top short borer. Mustard is affected by aphids. Groundnut falls prey to the attack of termites, whit-grads and aphids. Besides, grass-hoppers, caterpillars and various types of pathogenic bacteric, fungi and virus cause a lot of damage to different crops.

Protection of crops from the ravages of pests has become easier with the help of modern pesticides. During 1970-71 an area of 7,600 hectares was covered under plant protection measure. Insecticides and pesticides alongwith dusters and sprayers have been stored in Community Development Blocks and also in Grama Panchayats within easy reach of cultivators at times of need. Damage to crops by wild animals, specially by elephants, wild boars and bears is also common in hilly areas of the district.

IMPROVEMENT OF AGRICULTURE

The district is deficient in various crops like fruits, vegetables, pulses, oilseeds and wheat. The prospect of any long term agricultural development is associated with adequate irrigation facilities, supply of improved

seeds, fertilisers, manures, and adoption of improved techniques of scientific agriculture.

The area commanded by irrigation is 7,850 hectares in *kharif* season and 1,588 hectares in *rabi* season (1969-70). It has been envisaged to increase irrigation facilities to 17,180 hectares during *kharif* and 4,528 hectares during *rabi* by the end of the 4th Five-Year Plan period (April 1969 to March, 1974). The cultivators of the district own 360 diesel engine pumps (5 h. p. capacity) and 3 electric pumps (20 h. p. capacity).

There are four small seed farms located at Sundargarh, Bargaon, Rajgangpur and Kendudihi with a total area of 80.94 hectares ; and a large farm located at Kuliposh of 334.28 hectares for production of nucleus seeds. There is a progeny orchard at Sundargarh with an area of 6.87 hectares for supply of seedlings and grafts to the cultivators. Besides, a fruit nursery on 4.85 hectares of land is attached to the Kuliposh farm and two transit nurseries are located at Sundargarh and Panposh.

To popularise and propagate the improved agricultural practice and the use of improved seeds, manures, and implements annual exhibitions are held at district headquarters or Community Development Block headquarters. The successful cultivators are awarded prizes which give them incentive to improve.

Though special loans for the Grow More Food campaign were discontinued from 1949-50 cash loans under Agriculturist's Loan Act, and Land Improvement Loan Act are regularly given to deserving tenants.

The Agriculturist's loan was intended for the purchase of seed or cattle or for any other purpose connected with agriculture. Later this loan was also advanced for rebuilding of houses of the agriculturists, if the houses were damaged or destroyed by flood.

Land Improvement loan is advanced for any work which adds to the letting value of land. The land improvement work includes construction of wells, tanks, and other works for storage of water, preparation of land for irrigation, reclamation of land for agricultural purposes etc.

Joint farming on co-operative basis was started in the district since 1956-57 and 3 such societies were registered till 1960. During 1966-67 there were 6 Joint Farming Co-operative Societies having 21 land holders and 100 agricultural labourers as members. These societies had 137 hectares of land of which 98 hectares were under cultivation.

There was irrigation facility in only 29 hectares. They invested a capital of Rs. 27,715, out of which Rs. 21,396 was provided by the State Government. At present (1971-72) the number of societies has been reduced to three, located at Kukuda, Budelkani and Timadihi, and only 24 hectares are being cultivated. Their working capital is Rs. 35,535.

Each individual society has its own problems. Sometimes they also liquidate due to strained relations among members or for reasons beyond the control of the society. However, the future will speak about the success of this movement in the district. At present, the experiment may be treated as a failure.

NATURAL CALAMITIES

Ravages by famines and scarcity due to frequent droughts and occasional floods have created havoc in the economic and social life of the people. The rivers in this district flow down to plains and no flood usually occurs. Only when there is widespread heavy rain in catchment areas they overflow. Drought and attacks of insect pest are the main causes of crop failure. There is very little second crop except paddy which is cultivated in *kharif* season. When paddy crop fails the cultivator becomes helpless. Moreover most of the agriculturists own very small holdings and they supplement their income as agricultural labourers on other's fields. When agriculture deteriorates they become unemployed. Worse is the case with landless labourers who have nothing to fall back upon. Much remains to be done by way of repair, renovations or construction of minor irrigation works for storing up an increased volume of water and make it available for irrigation with the ultimate aim of insuring against drought caused by deficient and ill distributed rains and also to raise a second crop or to raise money crops.

Worst calamities of the present century (20th.) are discussed below.

Flood of 1943

The highest flood in living memory was seen in the river Brahmani in August 1943. The flood affected 66 villages, the worst affected being San-Kansara. Crops were badly damaged over an area of 240 hectares. On the otherhand, about 400 hectares were benefitted by the deposit of silt. The Durbar Administration organised gratuitous relief to supply food to the victims of flood, and seedlings for transplantation of the damaged fields. Considerable help was given in the shape of Taccavi loan and house building advances.

Flood of 1960

Unprecedented rain from 15th to 18th August, 1960, caused a heavy flood in the river Brahmani. It caused considerable damage to an area of 600 hectares. The affected people were given help in the shape of loan

and subsidies. To provide employment various development works were undertaken by the State Government.

Heavy rains during 1971 caused high floods in the rivers Ib, and Sankh. The agricultural areas and several villages were flooded. The damage was more intensive in Panposh subdivision. To render help to the affected people of the subdivision test relief works were undertaken through Blocks and 3 Projects at an estimated cost of Rs. 38,000.

Bonai subdivision was in the grip of severe famine in 1908 due to failure of crops caused by drought.

In 1954 the total rainfall in the district was 34.75 inches. The average monthly fall during the period May to September was 6.75 inches. Nearly 827 square miles (2,142 sq. km.) in the three subdivisions of Sundargarh, Panposh and Bonai were affected involving a population of 2,68,223 having an average outturn of 6 to 8 annas (40 to 50 per cent).

In 1955, rainfall was freakish and not enough for either transplantation or interculture of paddy plants. As a result, paddy crop of Mal and Gora lands in Sundargarh subdivision and that of Panposh subdivision suffered to some extent. The yield of crop on above lands in Sundargarh subdivision was about 50 per cent and that in Panposh was 37 per cent. But the yield on other classes of land such as Bahal and Berna was better. The crop condition was not normal in as much as the average crop condition on all classes of land was 50 per cent of the normal crop.*

Due to the alarming situation prevailing for two consecutive years the economy of the district was upset. Relief was given to the people in various ways. Loans were advanced to encourage *rabi* cultivation wherever possible. Mid-day meal centres were started for school-going children and for persons old, infirm and in indigent conditions. Relief works were also started for providing employment in the distressed areas.

There was a failure of winter rains. This was followed by failure of pre-monsoon rains in the early months of 1972. The long dry spell in the first few months damaged the crops, particularly, early millets and other food crops grown by Adivasis and poorer sections of the community. As a result of continued dry spell water and irrigation sources were dried up. Prices of food grains began to

* Drought in Orissa during 1954 and 1955—Final Report

rise in the Western districts. Sundargarh along with some other districts developed scarcity conditions and required test relief, agricultural loans and other assistance.

Relief measures

Various types of relief measures were undertaken including gratuitous relief, provision for test relief works, and agricultural loans. During the period from 1st April 1972 to 15th June, 1972 Rs. 7 lakhs were allotted for test relief, and rupees ten thousand for gratuitous relief. Rs. 2,50,000 has been allotted for the district during 1972-73 under the Agriculturists Loans Act. The CARE Feeding Programme for children, and expectant and nursing mothers continued to meet the needs of various situations, and 1,41,460 people have been benefitted by this organisation till August, 1972.

ANIMAL HUSBANDRY

The local breeds of cattle are generally stunted in growth and are not well cared for. Bullocks and buffaloes are employed in ploughing, the latter being specially useful in tilling hard soil. Cows and she-buffaloes are prized for their milk. Goats, sheep and pigs are reared for table purpose. Ponies were used for riding by a few well-to-do people in the past but they are now scarce, owing to the introduction of bicycles on a large scale. These ponies were of small stature, but were hardy. Poultry keeping is a common practice with the Adibasis and the local breeds require almost no care for their survival.

The livestock population (according to Livestock Census, 1966) are given below.

Cattle	..	4,72,636
Buffaloes	..	75,828
Sheep	..	56,299
Goats	..	2,44,144
Horses and ponies	..	5,890
Mules	..	129
Donkeys	..	892
Pigs	..	19,441
Fowls	..	5,51,265
Ducks	..	5,522

Fodder

There are extensive areas of forests and waste lands in the district. Plenty of green grass is available for the cattle to graze during the rains. Every village has its own pasture (*gochar*). Cattle of all categories graze upon it throughout the year. Acute shortage of grass is felt after the rains and they remain underfed during the summer

months mostly depending on paddy straw. In recent years particular attention is being given to preserve the greens in form of silage and hay. Silo pits have been dug at various veterinary centres for demonstration. Moreover cultivation of perennial grasses like elephant grass, napier grass, anjan, *kanchan* etc., have been taken up by the State Government. The Soil Conservation Department have introduced grass cultivation in village waste lands. A pasture centre has been established near Panposh in 1966-67 where grass, maize, jowar and cowpea are cultivated as fodder crops to meet the requirements of the Rourkela city.

Milk yield of the local cows is very meagre and they remain dry Milk Supply for most part of the year. Generally the cows are neglected and preference is given to bullocks because of their utility in agriculture. Till recently no systematic attention was given by the local people for improved breeds. Good cows and she-buffaloes were only found with a few rich business men who had come from outside the State, or with a few affluent people.

During 1968 there were 1,14,909 cows in the district out of which 42,969 were milch cows and the rest 71,940 were dry.* The average daily milk yield of a local cow is 1/4 litre.

A small dairy farm was started at Sundargarh in 1939 by the Dairy Farms Durbar administration. There were 13 Sindhi cows, 2 bulls, 6 male and 6 female calves during 1940, with the idea that in course of 3 to 4 years the ex-State would have a model breeding farm and will be able to distribute bulls for improvement of the local variety. The farm was almost of a private nature and was meant for supply of milk to the palace. It was closed in 1948. A small dairy farm was also maintained for a few years at Kuarmunda by the ex-Zamindar. Nothing tangible was done to encourage dairy farming in this district till 1957, and in that year the State Government launched a scheme of subsidised dairy. Under that scheme a person from Kalunga started a small farm with six milch cows and a Red Sindhi bull. The milk produced was marketed at Rourkela but the unit continued to function for a short period.

A dairy farm has been established by the State Government at Kuarmunda at a distance of 19 km. from Rourkela during 1966-67. It maintained pure breed of Hariana cows and Murraha buffaloes. These Hariana cows are being artificially inseminated with the Jersey breed at present. The cows and heifers are often sold on auction

* Source—District Statistical Hand-book, Sundargarh, 1968.

and young bulls for breeding purpose are supplied to the Utkal Gomal Samiti to be distributed in rural areas. It was originally planned to keep 694 heads of cattle and to supply about 1,500 litres of milk daily to Rourkela City maintaining 300 milch animals throughout the year. At present only 200 litres of milk a day is produced. 200 hectares of land have been provided for this farm, out of which 40 hectares have been reclaimed for growing different fodder crops.

Another dairy farm is going to be established by the State Government at Sundargarh. Besides, the Government farm at Kuarmunda, there are a number of private dairy farms at Rourkela and Rajgangpur run mostly by people of the neighbouring States and a few local milkmen of the district. A *gosala* has been established at Rajgangpur. Its primary objective is to take care of old and invalid cattle.

Cattle
Breeding

The Veterinary and Animal Husbandry Department maintains 31 Red Sindhi bull centres at different parts of the district for improving the cattle breeds. Besides, there are 5 Artificial Insemination sub-centres, where Jersey semen is being supplied from Cuttack. A Key Village Unit with 10 sub-centres at Rourkela and its neighbourhood are conducting artificial insemination.

Sheep and
Goats

Sheep and goats are reared by the people mainly for mutton. The sheep are of non-woolly type. The goats are of Black Bengal breed and yield very little milk, barely sufficient for their kids. These goats produce kids twice a year dropping twins and triplets.

A goat-multiplication farm was started at Sundargarh in 1957-58 with a view to augment supply of mutton to Rourkela, but it was later discontinued as the local breeds did not survive well under farm condition. To upgrade the local goats, Betal bucks were supplied to the people in many villages.

Poultry

Poultry keeping is almost a hereditary occupation with the Adibasis who constitute the bulk of the population in the district. They keep poultry mainly for the purpose of offering sacrifice and gambling through cock-fights. The eggs are either consumed by them or are sold in village markets. The modern idea of keeping poultry for profit is novel to these people. The Veterinary and Animal Husbandry Department maintains some poultry units from October to March to supply hatching eggs of white Leghorn breed to the local people. There is also a Departmental Poultry Unit at Koira. It supplies eggs, laying pullets and breeding cocks.

In 1958 the Regional Poultry Farm at Sundargarh was started with pure white Leghorn breed. At present it possesses 2,000 adult birds and 20,000 chicks. The farm caters to the needs of various poultry development projects of the districts of Sundargarh, Sambalpur, and Keonjhar. Hatching eggs, laying pullets and breeding cocks are supplied to Departmental Poultry Units, Block Poultry Units, All-India Poultry Development Centres and also for Expanded Nutrition Programme. Besides, eggs and birds are sold for table purpose. This farm is managed by the Veterinary and Animal Husbandry Department.

Regional
Poultry
Farm,
Sundargarh

A project was started in 1965 to provide loan and technical assistance for establishing 200 poultry units on commercial scale near Rourkela. 52 units, each consisting of 100 layers, were started at Rourkela, Birmitrapur, Hatibari, Kuarmunda and Kalosihiria. Within a few years 50 per cent of the units were closed down and the scheme was discontinued. At present the Government poultry farm at Kuarmunda supplies birds, chicks, eggs and premixed poultry feeds. There are about 600 private poultry farms having 7,000 birds located at Jhirpani, Jalda, Balanda and Kalunga.

Intensive
Egg and
Poultry
Production-
cum-
Marketing
Centre

A poultry feed mixing centre has been established at Sundargarh to supply balanced premixed feed to different poultry farms and private poultry keepers of the northern districts of the State. The unit is managed under the administrative control of the Deputy Director, Poultry Development, Orissa.

Poultry
feed mixing
centre

The common contagious diseases of the cattle in the district are rinderpest, haemorrhagic septicaemia, black-quarters, anthrax, and foot and mouth disease. The incidence of rinderpest is not severe as it can be prevented by Goat Tissue Vaccine. Haemorrhagic septicaemia and black-quarter generally occur during rainy season. A large number of cattle are infected by foot and mouth diseases, but cases of fatality are few. Mostly the old and invalid animals are left to their fate and are uncared for. The principal poultry diseases are ranikhet and fowlpox. The former is a virulent type of disease, which spreads rapidly and takes a heavy toll.

Cattle and
Poultry
diseases

A statement showing number of attacks and deaths from animal diseases has been given in Appendix II.

To check Rinderpest disease the cattle are being vaccinated with Goat Tissue Vaccine. One Check-post has been established at Kuarmunda to vaccinate cattle coming from outside the State. The

technical staff of different hospitals, dispensaries, and Stockman Centres also vaccinate animals and birds to immunise them against various contagious diseases.

Tables showing number of cases treated in different veterinary institutions and vaccinations done are given in Appendices III and IV.

Veterinary Institutions.

There is only one veterinary hospital in the district located at Sundargarh. Besides, there are 19 dispensaries and 46 stockman centres. A list of all these institutions with their location is given in Appendix V.

Cattle fairs and shows.

Since 1948 cattle shows at the district headquarters and subdivisional headquarters are being held regularly to encourage people to possess improved breeds.

A cattle fair sits every year at Bonaigarh during the Chaitra Parva festival (April) where large number of cattle are brought for sale.

FISHERIES

The district depends upon inland fisheries for the supply of fish, inland waters like rivers, *nalas*, tanks and *katas* being the main sources. During summer most of these tanks dry up creating considerable obstruction to pisciculture. Fish from outside the district are imported in large quantities to meet the local needs especially in the industrial areas of Rourkela, Rajgangpur etc. In recent years pisciculture is being taken up by various Grama Panchayats in their respective areas on a commercial basis. Trade in dry fish is carried on in the district by traders coming from Sambalpur and even from some coastal districts of the State. Small varieties of fish obtained chiefly from paddy fields during rainy season are occasionally dried and sold by a caste known as Jhara. There are a number of fisherman families in the district who fish from rivers, tanks and swamps and sell them in local markets. In 1961, there were 489 (310 males 179 females) fishermen in the district.

Varieties of fish available in the district have been given in Chapter I (General).

Implements

Traditional fishing implements, like bamboo traps, nets and angling rods are in common use. During recent years nylon nets and different types of floats made of plastic and rubber have been introduced in the district. The Fisheries Department is supplying fry dragnet, fishing nets, gill nets, shooting nets and plankton nets.

Breeding Centres

There is no breeding centre in Sundargarh and the fry is obtained from the centre at Sambalpur by the Fisheries Department. Some fishermen also collect fry from rivers in a small quantity. The Fisheries Department have started three Pisciculture Demonstration Centres located at Sundargarh, Bonaigarh and Tudaloga. These farms consist

of some nursery tanks, rearing tanks and stocking tanks. These three centres are the source of supply of fry. Eight lakhs of fish fry were supplied to different Grama Panchayats during 1971-72. Some Grama Panchayats have also taken interest in fry culture in their own nurseries. The Kenaveta Grama Panchayat in Bonaigarh Block produced 66,000 of pituitary fry during 1971, and a nursery centre has already been constructed by the Talsara Grama Panchayat in Balisankra Block for fry culture in 1972.

Oxygen packing with plastic bags have been introduced by the Fisheries Department for safe transportation of fry to distant places.

The present district of Sundargarh was a very inaccessible tract FORESTRY having no proper communications before the advent of the Bengal Nagpur Railway (now South Eastern Railway). The tribal people living in the area subsisted for the most part on shifting cultivation which meant wanton destruction of forests. There was no regular department to deal with the forests, into which the local people had free access to destroy what they liked. The outstanding event in the history of the forests of the district was the construction of the Railway in 1883 and this gave rise to great demand for forest products. About this time the Durbar Government levied a forest cess on tenants of Gangpur ex-State for the supply of timber for their domestic requirements. The Railway Company required large quantity of timbers for which an Inspector was appointed to collect royalty from the company and to control the activities of the forest contractors who used to cut the trees irrespective of size and marking. Till about 1890 the forests of the Gangpur ex-State were regarded as the property of the ruler but with timbers assuring an ever increasing importance as a source of revenue, the Zamindars put forward their rights in their respective areas and their claims were recognised by the then Divisional Commissioner of Ranchi. Attempts were made to regularise the operation of the contractors. On the initiative of the Commissioner, regular terms of contract ranging from 10 to 15 years were fixed but no provision was made for proper management of the forests. In 1908 efforts were made to organise a Forest Department by appointing two Forest Rangers and 13 Forest Guards. A Land Revenue Settlement was in progress at the time and the opportunity was taken to declare several forest blocks as reserved forests. The work of demarcating these forests continued for the next 10 years. In 1920 a set of forest rules were published. The next mile stone was the preparation of the working plan under the guidance of H. F. Moony, who

revised the plan in 1948. With the inauguration of the Forest Department and introduction of forest rules, the subject of conservation developed on scientific lines.

In Bonai a few rules were framed for the management of the forests during 1892 when the contractors worked in the forests for supply of sleepers to the Bengal Nagpur Railway (now South Eastern Railway). These rules provided for the division of the forests into reserved and unreserved areas and restricted the rights of the tenants in the reserved forests. Proper management and controlled felling in both reserved and unreserved forests commenced in 1918. Prior to that there were long-term leases hampering conservation. It was only in 1931 that the first preliminary working plan of the Bonai forests for systematic working and regulation of exploitation in the reserves was prepared.

At present the forests are being managed and worked according to the prescription of a well regulated working plan.

During the period of war forests were recklessly destroyed in spite of well-regulated plans in furtherance of war efforts and timbers of all sizes were removed for military purposes.

The management of the forests of both Bonai and Gangpur was taken over by the State Government with the merger of the States on 1st January, 1948.

Ex-Zamindari
Forests

There were six estates within Sundargarh division, and three in Bonai division where the estate holders enjoyed rights over the forests.

After the abolition of the zamindaris all these forests were merged with their respective forest divisions excepting Hemgir and Sarapgarh which were being managed by the Revenue Department. Subsequently these two forest areas were included under the jurisdiction of Sundargarh Forest Division.

Improvement
of forest in
the economy
of the
district.

The people of the district depend upon the forests to a great extent. Their requirements consist mainly of timber for house building, agricultural implements and bullock-carts; bamboo for fencing, roofing, and basket making; grass for thatching and rope making; and fuel for the kitchen. Demand for grazing is also met from the forest.

The poor people search out from the forest edible roots, leaves, fruits and flowers for their living. The carpenters, basket makers and blacksmiths require timbers, bamboos and firewood in large quantities than the ordinary cultivators for their profession.

A part from the excellent revenue obtained from sale of forest produce, the various works taken up in the forests involve utilisation of manual labour. In the season when labour is not utilised for agriculture people get employment in various works of the forest like picking of *kendu* leaves, cutting of timber, rearing cocoons and lac. Other minor forest produce like myrabolan, *mohua* flowers and seeds, *dhatuki* flowers, resins, etc. are collected by the local villagers and sold or bartered in the weekly markets in exchange of salt, rice and other necessities.

The principal forest produce of the district are timber and *kendu* leaves. *Sal* timber is exported in the form of sleepers, poles, logs, pit-props etc. Logs of *bija*, *bandhan*, *sisu* and *gambhari* have also good markets outside the district. There are various kinds of forest produce like *kendu* leaf, *sabai* grass, lac, tassar, myrabolan, *mohua*, *kusuma* seeds, resin and catechu. Of these, *Kendu* leaf brings the largest revenue. Bamboos are exported mostly from the Kunjar range of Bonai division. In Sundargarh division bamboos are not abundant except in a region to the extreme west, on the border of Hemgir ex-Zamindari. Elsewhere there are a few stunted clumps which meet the ordinary requirements of the people. Charcoal is exported in huge quantities although the industry is of comparatively recent origin.

Forest
produce

Exports of forest produce are made mainly through roads and railways. Facilities of road communication have solved the difficulties to a great extent and the timbers are easily removed to the rail heads by motor trucks. Attempts made to float sleepers down the Brahmani river have failed due to rapids and rocks with which the river abounds in this district up to its entry into the Talcher subdivision of Dhenkanal district.

The rights and concessions enjoyed by the people of the district in different classes of forests vary widely from area to area. Nistar (forest cess) is a commutation of payments to be made by the tenants for free use or use at concessional rates of timber and other forest produce from the Khesra or 'B' class Reserves. The royalty for taking bamboos by tenants vary from 0.50 paise to Rs. 2.00 per hundred.

Rights and
concessions.

In 'A' class Reserved forests of Bonai division unreserved species at half of scheduled rate are supplied to the tenants if the same are not available in Khesra forests. Thatch grass and *sabai* grass are supplied to tenants at half the scheduled rate. In Khesra or unreserved

forests reserved species are given at half of the royalty. Firewood, bamboos, minor forest produce and timber of unreserved species are allowed free, excepting the minor forest produce prohibited for collection. Grazing of cattle is allowed free. There is no restriction in collecting edible fruits, roots and flowers in both the reserved and Khesra forests.

In 'A' class Reserved forests of Sundargarh division, the tenants living close to the forest are allowed to collect dry firewood, edible fruits, roots and leaves without payment on condition that they render service in extinguishing fire, and cutting boundary and fire lines. The tenants have to pay a fee of Re. 1.00 and Re. 0.75 per head of buffalo and bullock respectively. In 'B' class reserved forests, the cess payer gets plough timber and timber of unreserved species from annual coupes free for his personal use. In Khesra forests the cess-paying tenant is allowed to remove unreserved species, fire-wood and minor forest produce freely.

Marketing of forest products.

In the past practically the whole outturn of the forests was in the form of sleepers. With the exception of *sal* a few other economic species were being extracted in the log form. The principal market for the sleepers was the Railway.

With the establishment of the steel plant at Rourkela, construction of Bandamunda-Dumarao Railway line, establishment of a mining township at Barsuan, and execution of several other construction works demand for timber has increased considerably. Timbers are also exported to Calcutta, Jamshedpur, Asansol and various other places outside the district. The coal fields of Jharia and the copper mines at Musabani provide a good market for pit props.

Minor forest produce is generally leased either annually or for more than one year to contractors. Kendu leaves, though a minor forest produce, has attained considerable importance and the revenue derived from it has increased enormously during the last decade.

All the forest coupes in Sundargarh Forest Division are worked out by the Orissa Forest Corporation Ltd. It has established the saw mills in this division. Besides local supply large quantity of timber, fire wood and charcoal are exported. A Kendu leaf unit is being worked out by the Forest Corporation since 1971. In Bonai Division the Corporation is the main lease holder of timber coupes.

The following statement shows the revenue earned from forests of the districts during 1971-72.

Name of Forest Division	Revenue earned (in rupees)			
	From Timber	From Kendu leaf	From Other Sources	Total
Sundargarh	.. 3,45,148	20,35,740	11,10,271	34,91,159
Bonai	.. 9,67,565	4,96,544	2,71,473	17,35,582

APPENDIX I

Area, Production and Yield Rate of different crops for the Agricultural year 1970-71*

Sl. No.	Crop	Area (in hectares)	Production (in tonnes)	Yield Rate (quintals per hectare)
1	Rice	.. 180336	142532	7.19
2	Wheat	.. 1293	2313	18.0
3	Ragi	.. 1615	807	5.0
4	Maize	.. 2447	1767	7.2
5	Jowar	.. 1645	825	5.0
6	Bajra	.. 227	114	5.0
7	Small Millets	.. 7327	2198	3.0
	<i>Total Cereals</i>	.. 194890	150556	7.8
8	Gram (Bengalgram)	.. 2069	828	4.0
9	Tur (Arhar)	.. 3364	1346	4.0
10	Green gram	.. 2359	406	1.7
11	Black gram	.. 5103	1021	2.0
12	Horse gram	.. 7051	1763	2.6
13	Cowpea	.. 178	44	2.5
14	Field pea (Rabi)	.. 117	35	3.0
15	Other Rabi Pulses	.. 40	8	2.0
	<i>Total pulses</i>	.. 20281	5451	2.6
16	Sweet Potato (Rabi)	.. 2321	11605	50.0
17	Onion	.. 949	2372	25.0
18	Other Kharif Vegetables	.. 4406	35248	80.0
19	Other Rabi Vegetables	.. 4467	31046	69.5
	<i>Total Vegetables</i>	.. 12602	84172	66.7
20	Mangoes	.. 2610	35510	..
21	Bananas	.. 1026	5570	..

* Source—Director of Agriculture & Food Production, Orissa

22	Citrus Fruits	.. 24	50	..
23	Papaya	.. 24	372	..
24	Cashewnut	.. 2,195	373	..
25	Other Fresh fruits	.. 34	..	..
	<i>Total fruits</i>	.. 5,913	..	..
26	Groundnut	.. 1,392	1,483	10.7
27	Sesamum/Gingilley (Til)	.. 2,453	942	3.8
28	Castor	.. 321	128	4.0
29	Niger	.. 1,580	461	2.9
30	Mustard	.. 1,194	478	4.0
	<i>Total oilseeds</i>	.. 6,940	3,492	5.0
31	Chillies	.. 833	407	4.9
32	Coriander	.. 214	64	3.0
33	Garlic	.. 105	262	25.0
34	Ginger (dry)	.. 30	22	7.5
35	Turmeric	.. 122	390	32.0
	<i>Total Condiments and Spices</i>	.. 1,304	1,145	8.8
36	Jute*	.. 51	168	3.3
37	Mesta*	.. 937	4,123	4.4
38	Sunhemp*	.. 109	272	2.5
39	Cotton*	.. 132	198	1.5
	<i>Total Fibres</i>	.. 1,229	4,761	3.9
40	Sugarcane	.. 659	3,295 (gur)	50.0 (gur)
41	Tobacco	.. 179	89	5.0

* Production and yield rate of fibre crops are in bales (1 bale—180 kg.)

APPENDIX II

Attack and death from animal diseases (1966-67 to 1970-71)

			1966-67	1967-68	1968-69	1969-70	1970-71
Haemorrhagic Septic-aemia.	Attack		69	81	37	40	18
	Death		48	64	19	30	10
Black Quarter	Attack	..	17	Nil	5	5	4
	Death		24	Nil	4	5	4
Anthrax	Attack	..	23	11	104	100	Nil
	Death		14	9	51	100	Nil
Foot and Mouth Disease.	Attack		Nil	225	7,866	Nil	22,833
	Death		Nil	Nil	4	Nil	Nil
Rinder Pest	Attack	..	43	37	Nil	Nil	Nil
	Death		24	28	Nil	Nil	Nil
Ranikhet Disease	Attack	..	Nil	Nil	30	272	301
	Death		Nil	Nil	30	Nil	182
Foul Pox	Attack	..	Nil	Nil	Nil	Nil	Nil
	Death		Nil	Nil	Nil	Nil	Nil

APPENDIX III

Cases treated in different Veterinary institutions during 1966-67 to 1970-71

	1966-67	1967-68	1968-69	1969-70	1970-71
Number of cases treated including in and out patient.	136,759	155,595	166,090	166,669	177,810
Number of cases supplied with medicines.	14,518	29,488	33,443	37,816	49,238
Number of castrations performed at head-quarters.	20,418	21,746	20,698	25,993	29,902
Number of villages visited.	22,838	11,616	11,968	11,558	12,759
Number of cases treated on tour—					
(a) Contagious ..	2,457	6,487	11,579	4,545	23,408
(d) Non-contagious	83,234	91,467	94,721	45,821	96,644
Castrations performed on tour.	18,785	19,005	20,882	21,301	25,52

APPENDIX IV

Vaccinations and Inoculations (1966-67 to 1970-71)

		1966-67	1967-68	1968-69	1969-70	1970-71
Haemorrhagic Septicaemia.	..	40,667	59,095	74,373	14,5372	12,9957
Black Quarter	..	12,169	22,399	14,442	12,107	30,555
Rinderpest	..	3,435	3,157	2,729	393	175
Anthrax	..	381	219	2,397	16,42	1,821
Ranikhet Disease	..	6,761	12,094	22,682	15,700	44,516
Foul Pox	..	1,295	2,284	3,406	5,798	8,051

APPENDIX V

List of Veterinary institutions

Sl. No.	Name of Block	Location of Hospital/ Dispensaries	Location of Stockman Centres
1	Sundargarh	1. Sundargarh (Hospital)	1. Bhedabahal 2. Kundukela 3. Balakmal 4. Birbira 5. Majhapara 6. Kinjirima
2	Hemgir	2. Hemgir	1. Kanika 2. Gopalpur 3. Laikera 4. Toporia
3	Lefripara	3. Lefripara	1. Nuadihi 2. Dumabahal 3. Gundiadihi
4	Tangarpali	4. Tangarpali	1. Sanpatrapali 2. Mahulpali 3. Mangaspur 4. Nialipali
5	Balisankra	5. Balisankra	1. Talsara 2. Bandega 3. Bandhabahal 4. Sagabahal 5. Sikajore 6. Kinjirkela
6	Sabdega	6. Sabdega	1. Rajpur 2. Karmdihi 3. Kiralaga
7	Bargaon	7. Bargaon	1. Itma 2. Ekma 3. Sahajbahal 4. Barangakachar 5. Salepali
8	Kutra	8. Kutra	1. Panchara 2. Biringatoli 3. Latalaga 4. Khatkurbahal
9	Rajgangpur	9. Rajgangpur	1. Kukuda 2. Kutunia

Sl. No.	Name of Block	Location of Hospital/ Dispensaries	Location of Stockman Centres
1	2	3	4
10	Bisra	.. 10. Kansbahal	
		11. Bisra	1. Barsuan
		12. Rourkela	2. Jareikela
11	Kuarmunda	.. 13. Kuarmunda	1. Raiboga
		14. Birmitrapur	2. Kacharu
12	Lahunipara	.. 15. Lahunipara	3. Andali
			1. Darjing
			2. Khutgaon
			3. Mahulpada
13	Bonai	.. 16. Bonai	1. Kenaveta
			2. Ruguda
			3. S. Balang
			4. Badgogua
14	Koira	.. 17. Koira	1. K. Balang
			2. Patmunda
			3. Cengula
			4. Jamdihi
15	Lathikata	.. 18. Lathikata	1. Birkera
			2. Ramjodi
16	Gurundia	.. 19. Satkuta	1. Sole
			2. Jarada
			3. Chandiposh
			4. Narendra
			5. Tamra
17	Nuagaon	.. 20. Hatibari	1. Sorada
			2. Nuagaon
			3. Khuntgaon

CHAPTER V

INDUSTRIES

The present district of Sundargarh comprises the two ex-States ^{OLD TIME INDUSTRIES} of Gangpur and Bonai. These ex-States had no special manufactures in the past. Villages were self contained with their own black-smiths, potters, carpenters, and weavers, etc. Iron smelting, gold washing and the making of vessels of soap-stone for domestic use were some of the important old time industries of the district. Gold washing has been discontinued due to economic reasons, and iron smelting is now confined to a few villages in Bonai subdivision and the other industries are still continuing in a cottage stage. Cobden Ramsay in his Gazetteer * has given the following account of the gold washing in Bonai. "Gold washing is done by the Jhora caste, men and women alike sharing in the work. The gold is obtained from the sands in the bed of the Brahmani river and its tributary streams. The earnings of a Jhora washer will average about 3 annas (20 paise) a day. Though the quantities of gold obtained in this way are small, probably most of the gold ornaments worn by people in Bonai are made of gold obtained locally from the Jhoras".

Large quantities of wild tassar cocoons were being exported from Bonai at the beginning of the present century (20th). Artificial culture of the tassar worm did not flourish as the local people considered it an impure occupation. Tassar cocoons and stick lac were the most valuable of the forest products.

Prior to Independence the industrial activities in Sundargarh were confined only to Birmitrapur, the site of the limestone quarry. The establishment of the cement factory at Rajgangpur in 1951 and the steel plant at Rourkela in 1955 were mainly responsible for rapid industrial development in the district. During the past decade large, medium, and a number of small-scale and ancillary industries in and around Rourkela began to concentrate and created an industrial complex. All the large-scale industries of the district viz., (i) the Steel Plant at Rourkela, (ii) the Fertiliser Plant, Rourkela, (iii) Cement Factory at Rajgangpur, (iv) Messrs. Utkal Machinery Ltd., at Kansbahal, and (v) the Limestone Quarry, Bisra, are in the complex.

* Feudatory States of Orissa-L.E.B. Cobden-Ramsay P-13

Sundargarh has emerged as one of the industrially advanced districts of Orissa. Industrial activities including mining and quarrying engaged 56,044 persons (17.29 per cent of the total working population) in 1971.

POWER

The first Electrical Power House (diesel engine) was installed in the district in the early forties. It was of 130 K. W. capacity and was meant to electrify the streets of Sundargarh town and supply electricity to a limited number of consumers.

In 1950, a thermal power station of 3,000 K. W. was installed at Rajgangpur for the exclusive use of the newly installed cement factory. In 1955, the Rajgangpur town was electrified and power was supplied from the above thermal station. After the completion of the Hirakud Project the thermal power station was closed. Since 1957 Sundargarh is getting electricity from Hirakud Hydro-electricity Project situated in the district of Sambalpur and the Talcher Thermal Station in Dhenkanal district. The total power consumption in the district (including seven police station areas of Sambalpur district) during 1971-72 was 52,51,20,476 K. W. H. Out of which 47,04,95,816 units were consumed by industrial establishments. While the consumption of electricity for agricultural purposes is negligible that for industrial purposes is very high which accounts for more than 90 per cent of the total power consumption. This is because of the location of a number of large-scale industries in the district.

All the five towns (Sundargarh, Rajgangpur, Birmitrapur, Rourkela civil township, and Rourkela steel township) and 182 villages out of 1,588 inhabited villages (1961 Census) have been electrified.

MINING

Sundargarh occupies a prominent position in the mineral map of the country. The important minerals occurring in the district are iron-ore, limestone, manganese, dolomite and fire-clay. Besides, a few other minerals like mica, bauxite, quartz, lead, copper and zinc etc., are also found.

Except dolomite and fire-clay which are exploited only by private agencies at present, the other minerals are exploited both by the government and by private agencies.

Limestone
and
Dolomite

Commercial exploitation of limestone and dolomite was started by E. G. Barton in 1898. He was granted a lease over an area of 12 acres (4.85 hectares) near Panposh. He took lease of another 23 acres (9.30 hectares) at Jhirpani in 1902. Barton transferred

these two leases to Josef Zobel and the latter took another lease over 2,317 acres (937.45 hectares) in 1910. The next year Zobel again transferred a major portion of the lease area to Messrs Bisra Stone Lime Company and the rest to the Tata Iron and Steel Company. In course of time many lease-holders were attracted to exploit limestone deposits in the district. During 1971 there were 7 limestone and 6 dolomite mines in operation.

Production and export of limestone and lime from Sundargarh is continuing since 1900. During 1969-70, 19.2 lakh tonnes of limestone and 5.66 lakh tonnes of dolomite were produced in the district.

Manganese-ore deposits first came to light in 1907. In that year a prospecting licence over an area of 96 square miles (248 square kms.) was granted to Madhulal Deogar. In 1909 two other persons, Isaac Shrager and B. N. Basu joined Deogar as partners. A light tram-way was constructed from Dharuadihi railway station to Gharajor in 1908 for haulage of ore and it was completed in 1909. A mining lease was granted to the firm over 7.25 square miles (18.77 sq. kms.) in 1912. But the lease lapsed in 1914 due to improper mining operation. A second lease was granted in 1917 to the New Gangpur Mining Syndicate. The lease was surrendered in 1927 since the working became uneconomic due to the fall in the market price of manganese.

Many agencies took lease of manganese mines in the district at different periods. During 1960 there were 43 working mines in the district and 52,432 tonnes of ore were raised. In 1969-70 the number of mines was reduced to 20, but the production increased to 1,17,967 tonnes. Generally ores of second grade (35 to 44 per cent) and third grade (below 35 per cent) are produced. Ore of first grade (45 per cent and above) and chemical grades are very limited. The proportion of high grade ore is about 15 per cent of the total production.

The exploitation of iron-ore in the district is very recent. The Iron Ore first lease was granted in 1955 to a private party over an area of 153.32 acres (62 hectares) at Bandhabahal in Sundargarh subdivision. The huge deposit of iron-ore in Bonai area was not tapped in the past, probably due to the absence of proper communication facilities. A lease was granted in 1959 over 300 acres (121 hectares) at Nadi-kasira. During 1960, two mining leases over 6,144 acres (2485.86 hectares) in Barsuan and 192.64 acres (77.84 hectares) in Joda were granted to M/s. Hindustan Steel Limited. Production started in the same year in both the mines. The Barsuan mine is fully mecha-

nised. Mining is carried out by top slicing method with benches of 10 metres height each. Blast holes are drilled in the ore body, which are blasted by liquid oxygen and high explosives. Then the ore is loaded by electric shovels into dumpers, which carry it to the crusher plant to be crushed down to minus (less than) 3" size and then conveyed down hill by conveyers. The ore is also screened and loaded mechanically into wagons for despatch to the Rourkela Steel Plant. A special broad-gauge Railway line has been built over a distance of about 50 miles (80km.) from Barsuan mines to Rourkela for haulage of iron ore.

At present there are 10 working mines in the district with an annual production capacity of 1,201,969 tonnes of ore (1959).

Fire Clay

Messrs Orissa Cement Ltd. was granted a lease for fire-clay at Khunti Jharia. Mining started in 1960 and 1,195 tonnes of clay was raised in that year. In 1961 another lease was granted at Dabunga area. But both the mines were closed as the clay was found unsuitable. The firm was then permitted to exploit the Kiripsira deposits in Hemgir Tahsil. There are 3 working mines in the district at present and they produced 19,800 tonnes of fire-clay in 1969.

Other mines

There are 3 quartz, a quartzite, a china-clay and a bauxite mine in the district at present. During 1969, 71,807 tonnes of quartz was produced.

Mineral-based Industries

The important mineral-based industries of Sundargarh are the Steel Plant of M/s. Hindustan Steel Limited at Rourkela, Cement and Refractory Plants of M/s. Orissa Cement Limited at Rajgangpur and the Refractory Plant of M/s. Orissa Industries Limited at Lathikata. All these industries draw on the mineral resources of the district. The extensive lime-stone and dolomite reserves of the district cater to the needs of all the steel plants in the eastern region of the country besides meeting the growing requirements of other industries in the State and outside.

The tremendous iron-ore potential of Sundargarh (Bonai subdivision) and Keonjhar districts can sustain several integrated Iron and Steel Plants. M/s. Dastur and Co., who had been appointed to prepare feasibility reports for additional steel plants, have recommended the establishment of a second steel plant in Orissa either at Nayagarh or Bonai or at Paradeep with an initial production capacity of 2 million tonnes depending upon the iron-ore resources of the Bonai-Keonjhar belt, and the limestone potential of the Sundargarh district. Plans for the establishment of a lead-smelter

based on the lead deposits near Sargipali, in collaboration with the Central Government, have been finalised. This smelter would produce about 10,000 tonnes of lead metal per annum besides 3,00,000 kgs. of silver as by-product. With the progressive advancement achieved in the field of industry and technology, Sundargarh holds promise for the establishment of a wide range of mineral-based industries in future. Those which merit mention are :— (1) palletisation/agglomeration plant based on iron-ore mines, (2) electrolytic manganese based on the manganese ore potential of the Koira region (3) beneficiation plant for low grade manganese ores, (4) precipitated chalk and calcium carbide, based on the high grade limestone deposits, and (5) magnesium metal and magnesium carbonate, etc. based on the dolomite resources of the district.

There was no uniformity in the rate of royalty during Durbar administration and the individual lease-holders were paying royalty as per the condition laid down in their respective lease deeds. After the formation of the present district in 1948 grant of lease was regulated and the rate of royalty was fixed according to Central laws. There was a remarkable rise of the revenue. The collection rose from Rs. 15,47,486 in 1960-61 to Rs. 32,06,178 in 1966-67. During 1971-72 collection figure reached Rs. 59,10,852. A statement showing mineral wise collection of revenue from 1966-67 to 1971-72 is given as Appendix I.

Mining
Revenue

The following large-scale industries are established in this district.

LARGE-SCALE
INDUSTRIES

- (i) Hindustan Steel Limited, Rourkela, which produces steel plates, strips, steel sheets, tin plates, etc.
- (ii) Hindustan Steel Limited, Fertiliser Plant, Rourkela.
- (iii) Orissa Cement Limited, Rajgangpur, which produces cement, cement products and refractories.
- (iv) Utkal Machinery Limited, Kansbahal, which manufactures machinery and equipment for sugar mills, paper mills, steel plants, etc.
- (v) Orissa Fertilisers and Chemicals Limited, Kalunga, which produces phosphatic fertilizer.
- (vi) Indian Dynamitors Limited, Rourkela, producing high explosives.
- (vii) Orissa Industries Limited, Lathikata, producing refractories.

These industries are more or less based on the minerals available in Sundargarh and its neighbouring districts. Details about the Steel Plant and the Fertiliser Plant have been given as Appendix II (Rourkela, where steel is tempered). The rest are discussed below.

Orissa
Cement
Limited,
Rajgangpur

The Orissa Cement Ltd. was established at Rajgangpur in pursuance of an agreement in December, 1948, between the State of Orissa and M/s. Dalmia Jain Agencies Limited (now M/s. Dalmia Agencies Private Limited originally Managing Agents of the Company). The company have invested a capital of Rs. 8,10,00,000 including the State Government's share of Rs. 40 lakhs and provide employment to 3,500 persons at present. The factory was established in a period of 1½ years and it was put well in time to cater to the entire requirements of the construction of the Hirakud Dam Project. Limestone, the principal raw material for manufacturing cement, is obtained from the company's own quarries at Lanjiberna situated at a distance of about 10 km. from the factory site. Beginning with a modest start of an annual capacity of 1,67,648 tonnes in 1951, it has grown into a big industrial complex since 1957 onwards increasing its annual installed capacity to 4,01,000 tonnes of Portland and Pozzolana cement; 1,20,909 tonnes of high quality fire clay, silica, burnt basic and chemically bonded refractories; and 35,268 tonnes of spun R. C. C. pipes, prestressed concrete products, etc.

The refractory plant was put up in technical collaboration with a West German Firm and it was planned to meet the needs of special refractories by the three Public Sector Steel Plants located at Rourkela, Bhilai and Durgapur. The erection work commenced in 1956. Fire bricks and silica plants started production in 1958, and the plant for burnt basic bricks was put into commission in 1959. Manufacture of chemically bonded steel clad basic bricks was started in 1962.

The finished products, their quantity and value for the period 1969 to 1971 is given below:—

Articles	1969		1970		1971	
	Quantity (in tonnes)	Value (in Rs. lakhs)	Quantity (in tonnes)	Value (in Rs. lakhs)	Quantity (in tonnes)	Value (in Rs. lakhs)
1	2	3	4	5	6	7
Cement ..	4,53,670	433.03	3,83,554	377.07	3,97,655	390.93
Cement .. products.	10,058	18.86	8,881	12.93	10,750	19.68
Refractories.	72,163	436.09	92,942	622.42	1,08,486	738.56

Distribution of cement is regulated by the Government of India and the marketing zone of the factory includes the States of Orissa, West Bengal, Assam, and Bihar. R. C. C. poles and pipes are generally supplied to the Railways, the Electricity Boards of Orissa, West Bengal, Bihar and Uttar Pradesh, and to big public undertakings viz., the Bokaro Steel Plant, the Bharat Aluminium Company and the Hindustan Steel Limited, etc. The steel factories and also some chemical, textile, cement, copper, and other non-ferrous industries are the main consumers of refractories. Besides, some portions of the products are exported to foreign countries.

Marketing
of the
products

Established in 1960 at Kansbahal, about 20 km. from Rourkela, the Utkal Machinery Ltd. manufactures equipments for steel plants, pulp and paper plants, chemical plants, crushing and screening machinery, and hydraulic equipments. The firm also undertakes special machining works and site erection of the machinery supplied by it.

Utkal
Machinery
(P) Limited,
Kansbahal

The company have invested Rs. 3.35 crore and provides employment to 1,230 persons.

The Orissa Fertilizer and Chemical Ltd. has been established near Kalunga with a capital investment of Rs. 73 lakhs. The plant produces phosphatic fertilizer, having an installed capacity of 45,000 tonnes per year. The raw materials consist of imported rock phosphate, basic slag and sulphuric acid. The factory which employs about 250 persons has started production since May 1973.

Orissa Ferti-
lizer and
Chemical
Limited,
Rourkela

Established in 1969 at Rourkela, the Indian Detonator Ltd. produces high explosives. It has an annual installed capacity of 10,000 tonnes. The basic raw materials required by the plant are ammonium nitrate, sodium nitrate, aluminium powder and gums. The factory built with a capital investment of Rs. 150 lakhs provides employment to 234 persons.

Indian
Detonator
Limited,
Rourkela

The Orissa Industries Ltd. was established at Lathikata near Rourkela in 1963 with a capital investment of Rs. 52 lakhs. The plant has an annual installed capacity of 34,000 tonnes of refractories. The important raw materials required are fire clay and bauxite. It produces all types of refractories and has provided employment to 650 persons.

Orissa
Industries
Limited,
Lathikata

The establishment of the Steel Plant at Rourkela and the Cement Factory at Rajgangpur was responsible for many small-scale industries to grow in the district during the last decade. These industries are largely concentrated in the areas around Rourkela and Rajgangpur.

SMALL-SCALE
INDUSTRIES

During 1955-56 there were about 15 small-scale industries in the district including two saw-mills located at Hemgir and Jaraikela. In 1972 the number went up to 222 factories registered with the Directorate of Industries. Besides, there were many unregistered factories.

These 222 small-scale industries provided employment to 2,240 workers.

Some details about these units are given below.

Basic Metal Industries

The Basic Metal industries which are mainly located at Rourkela and Rajgangpur are ancillary in nature. They manufacture engineering articles like gears, slotted shafts, couplings, liners, bushes etc., to be supplied to the large scale engineering industries. Some of these industries manufacture steel furniture, stainless-steel utensils, aluminium grills, agricultural equipments, wire ropes, chains, and bolts and nuts. There are 50 engineering industries employing 1,256 persons.

Sheet Metal Industries

The Sheet Metal industries mainly manufacture sheet metal products like tin containers, trunks and automobile spares etc. These industries are 9 in number and employ 64 persons.

Food Processing and manufacturing Units

The large factory population has naturally led to the establishment of a number of concerns engaged in food processing industries. These include rice and oil mills, flour mills, ice and ice-cream units, toffee and confectionary, bread and bakery units. There are 57 such units which employ 364 workers.

Forest-based Industries

The rich forests of Sundargarh with its useful timber have led to the growth of the forest based industries. There are 10 saw mills and carpentry units employing 60 persons. The Forest Corporation of Orissa have got 3 saw mills in the district located at Rourkela, Kalunga and Chandiposh. The saw mills are fed from the timbers obtained from the forests and the furniture produced get good market in the urban areas of the district.

Chemical Industries

Insecticides, acids, fine chemicals, phenyle, candles, soaps etc., are manufactured by the chemical industries. These units are mostly concentrated at Rourkela and Rajgangpur. Their number was 17 in 1972 and they employed 105 workers. Some important chemical industries producing sodium silicate, aluminium shots, knotted bars, and bentonite powder, etc., are ancillary to the Rourkela Steel Plant and other large-scale industries.

Electrical appliances

The Electrical appliances industries are ancillary to the Rourkela Steel Plant and are located at Rourkela. They produce storage batterief, carbon brushes, electric coils etc. There are 5 units at present employing 25 persons.

Various types of demand based industries engaged in manufacturing of brick and tile, tyre retreading, polythene and hessian bags, motor repairing, rope-making, shoe-making, tailoring etc., are included in this category. These industries are 64 in number and they employ about 330 workers. A shoe factory established in 1970 at the Rourkela Industrial Estate is ancillary to the Bata Shoe Company. Besides, there are 8 printing press units in the district employing 60 persons.

Miscellaneous Industries

The important household industries in the district are hand-loom weaving, carpentry, black-smithy, pottery, hand-pounding, shoe-making, oil pressing, stone-carving, basket making, and limestone processing etc. These activities are mostly hereditary in nature. The number of artisans engaged in each category of these industries according to 1961 Census is given below.

COTTAGE INDUSTRIES

Category of artisans

Spinners, weavers, knitters, dyers and related workers	..	4,815
Black-smiths, hammersmiths and forgerman	..	3,294
Basket weavers and related workers	..	2,912
Pottery and related clay formers	..	2,503
Leather-cutters, lesters and sewers	..	1,650
Carpenters, joiners, cabinet makers and related workers.	..	466

Hand-spinning and weaving of cotton is one of the oldest industries of the district. In almost all the villages are found the local cotton weavers, who are Panas or Gandas and Hansis. The cloth woven is very coarse, but durable. The looms used by both castes are the same, but clothes turned out by the Hansis are somewhat finer than those woven by the Panas. The weavers eke out a precarious existence from the proceeds of their sale. In the past the entire local requirement of linen was met by the local weavers and spinners. Cotton was grown extensively in the district, specially in Bonai subdivision. This local trade had to face a challenge when mill-made yarn from Calcutta began to find its way during the beginning of the present century and ousted the locally produced articles. Gradually cheap mill-made clothes were imported and the hand-loom weaving lost its former position. Cotton cultivation was almost discontinued and the weavers were reduced to mere wage-earners or petty cultivators. To preserve the traditional skill of these artisans some Co-operative Societies have been organised during the recent years and they get financial and technical help from the Government.

Weaving

In 1966-67 there were 24 societies having 1903 members. The number of looms in the district was 11,863. During the same year only 4 societies made some profits, 13 sustained loss and the rest 7 worked on no profit no loss basis. There were only 59 working looms and the rest 1,804 looms remained idle. Products worth Rs. 13,945 were sold during 1966-67.

Basket-making

Bamboo mat and wicker work is done by the Turi, Dom and Khond castes. The Turis do by far the finest work. The Doms make the bamboo wicker trunks, called *petras* and bamboo and palm-leaf mats and fans, while cheap and rough mats and baskets are made by the Khonds. At present there are 4 bamboo workers Co-operative Societies in the district located at Khuntgaon, Gopalpur, Birtola, and Bargaon.

Brass and bell-metal

Brass and bell-metal utensils for domestic use are being made by Kansari caste. They make also the brass ornaments, anklets, bracelet rings, etc., worn by women of the poorer classes. Tangarpali is one of the important centres of brass and bell-metal production in the district. At present the cheap aluminium and plastic products have almost replaced the use of bell-metal utensils by the common men. Use of stainless steel utensils is gradually becoming popular among the richer section of the society.

Soap-stone

Another unique old time industry which is still continuing is the manufacture of vessels of soap-stone or *khadi* for culinary and other domestic use. This industry is run by the men of the Bhumij or Bhandwal caste. Two varieties of stone are found in Bonai subdivision. One is an opaque variety of a greyish-white colour known as *dudh-khadi*, the other variety is of a greenish tinge and of a hyalescent or semi-crystalline character and is highly prized of the two. The stone vessels find good market in the neighbouring areas.

Iron Implements

The local black-smiths (*kamar*) were smelting iron-ore picked up from the surface and producing excellent iron. All the domestic and agricultural implements used throughout the district were made from that iron. At present they depend upon factory made iron and steel for their living. A black-smithy co-operative society has also been organised in the district having 14 members.

Co-operative Industries

There are 22 Industrial Co-operative Societies excluding the Panchayat Industries. Out of these, 19 societies have been financed either by the Government or by the Orissa Khadi and Village Industries Board. These societies have provided employment to about 374 village artisans either fully or partly. The extent of assistance towards capital is Rs. 2,14,757. They deal in hand-pound rice, edible and non-edible oil,

pottery, leather, carpentry, black-smithy and lime products. They are very small-sized units operating in the villages.

Panchayat Samiti industries have been established in 13 Grama Panchayats of the district, out of which 9 carpentry units, a tile making unit, and a black-smithy unit are located in the areas around Birmittapur, Rajgangpur and Bonai. Besides, there is a rice huller at Raidihi; and a rice huller-cum-oil mill at Kinjirma. These societies have received assistance towards capital to an extent of Rs. 3,85,708 and they employ 66 persons.

The State Government have provided many facilities for the development of existing industries as well as for the establishment of new industries (both small-scale and cottage). Suitable plots of land with all sorts of infrastructural facilities are being provided to the entrepreneurs at concessional rate. Under the State-aid to Industries Act, these industries are allowed financial assistance, supply of controlled raw materials, and assistance to obtain raw materials from outside India, on liberal terms. They are assisted to obtain machinery on hire purchase basis. Electricity is made available at subsidised rate and steps are being taken for proper marketing of their products. The industries avail free technical advice and the State Government awards stipends to technical students in view of getting technical hands for different industries. A Training School has been established at Rourkela to train students in different technical trades.

There is an industrial estate in the district at Rourkela with 64 sheds. It provides modern type of factory accommodation and 52 factories have been established in the completed factory sheds of the estate. The rest 12 sheds are under construction. Besides, many industrial units in the district are housed either in residential buildings or in factory sheds owned or rented which in many cases do not conform to modern standards.

The State Government have acquired about 360 hectares of land at Kalunga (about 10 km. from Rourkela) for accommodation of various ancillary industries. The area is being developed by the Industrial Development Corporation of Orissa for allotment to entrepreneurs or setting up of industries.

Another area under Commercial Industrial Estate is being developed at Rourkela with financial assistance from the Central Government. An area of 2 hectares (5.2 acres) has been acquired for this purpose. Construction of 2 blocks having 10 units each has already been started at a cost of Rs. 8 lakhs. It has been envisaged to provide small industrial accommodations to unemployed educated persons.

Industrial Potential and Plan for Future Development

Sundargarh is very rich in both mineral and forest wealth. These resources can feed many industries in future. Besides, the Rourkela Industrial Complex has built up the necessary infrastructure for the industries to grow. Recently discovered minerals like lead, zinc, and copper in Sargipali area near Sundargarh have created vast scope for establishment of industries. A 32 crore mineral development project is coming up in Sargipali area which will be a joint venture of the State and the Central Government.*

The small Industries Service Institute, Cuttack, and the Ancillary Industries Advisory Committee constituted by the State Government have recommended that there is scope for establishment of a number of industries in the district (Given as appendices III and IV). In the meantime some of these industries have already been established as an inspiration to the entrepreneurs of the future.

LABOUR AND EMPLOYEES ORGANISATION

There were 27 Labour Unions in the district in 1971. Generally the workers of registered factories and mines have formed trade unions to safeguard their interest. Almost all the major factories and mines of the district have provided amenities to their employees. The welfare measures include recreation clubs, subsidised canteens, housing accommodation, facilities for schools, hospitals, and sports. Besides, the Labour Department takes necessary steps for proper implementation of various labour laws in force in the district through their district level office located at Rourkela. Details about the industrial labours of the district have been given in Chapter XVII—Other Social Services.

Labour Contract Co-operative Societies

These co-operative societies accept orders from different concerns and execute the works. There were 17 such societies in 1968-69. They had a total membership of 3,599 and working capital of Rs. 1,40,000. Out of these 17 societies, 6 societies made profit to the extent of Rs. 1,68,000, 8 societies incurred a loss amounting to Rs. 6,107, and 3 worked on no profit no loss basis during 1969-70. There is a Mining Labour Contract Co-operative Society at Sundargarh having 586 members. In 1971-72 the society executed work orders amounting to Rs. 97,439. Its total assets exceeded Rs. 17 lakhs.

Labour Contract Union

To keep co-ordination among various Labour Contract Co-operative Societies in the district a Labour Contract Union has been organised in Sundargarh. During 1968-69, 15 out of 17 co-operative societies were members of the Union.

* State Bank of India—Survey Report on Sundargarh District (1972).

APPENDIX I

COLLECTION OF MINING REVENUE IN SUNDARGARH DISTRICT

(figures in rupees)

Sl. No.	Minerals	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Iron Ore	12,62,580'82	10,18,587'15	8,61,712'32	14,67,821'49	9,19,281'62	13,20,301'03
2	Manganese	5,43,090'69	3,03,283'75	6,69,087'61	4,05,287'92	7,48,238'61	5,88,717'05
3	Limestone & Dolomite	13,25,333'02	30,19,998'21	32,41,860'69	37,20,951'10	40,34,080'55	35,33,177'08
4	China-clay	..	391'22	..	..	..	354'38
5	Fire-clay	35,420'02	22,610'25	6,004'27	33,585'53	28,392'57	34,190'74
6	Asbestos	5,850'00	5,850'00	13,431'57	..	2,471'93	..
7	Kaolin	21,697'87	..	..	..	..	..
8	Crush Conglomerate	1,388'50	986'37	..	..	..	..
9	Quartzite	..	..	..	..	..	3,662'64
10	Quartz	..	..	38,497'38	72,641'34	56,172'32	62,010'94
11	Bauxite	..	..	..	..	..	2,302'79
12	Miscellaneous (Application fees, etc.)	10,817'71	1,91,031'07	2,40,417'57	7,755'28	3,10,879'98	3,66,155'91
	Total	32,06,178'63	45,62,738'02	50,71,011'41	57,08,042'66	60,59,517'58	59,10,852'56

APPENDIX II

ROURKELA, WHERE STEEL IS TEMPERED

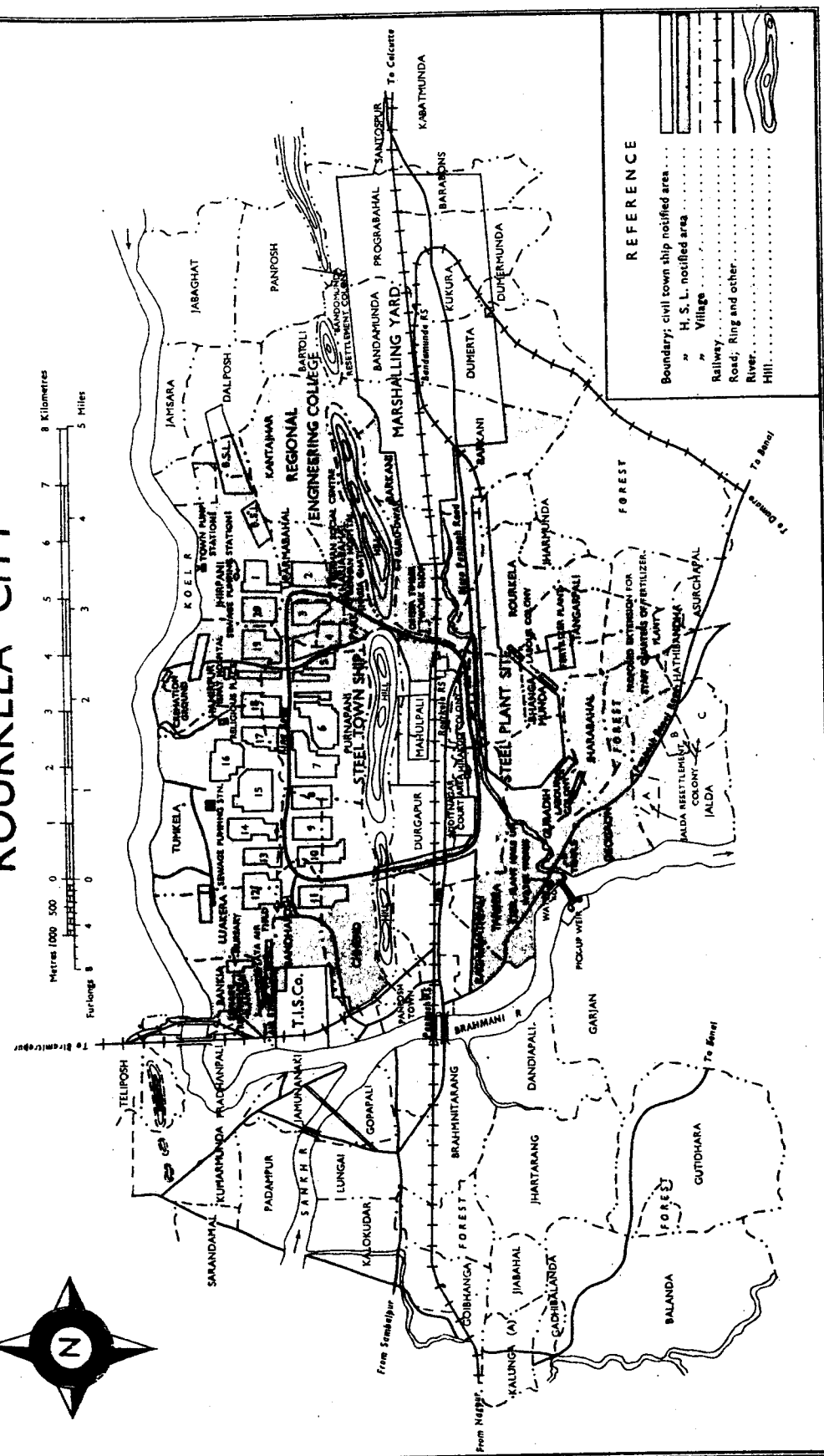
GROWTH
OF IRON AND
STEEL INDU-
STRIES IN
INDIA

The art of smelting iron was known in ancient India. Reference to iron has been made in the Rig Veda (2000 B. C.) and it is said that India is the first producer of carbon steel. The most celebrated mass of ancient Indian iron is the Iron Pillar standing near the Kutab Minar at Delhi which shows no sign of rust and provides complete testimony of the skill and art of the Indian iron-making 1,500 years ago. The iron pillar at Dhar, the ancient capital of Malwa, 33 miles west of Indore has a length of about 50 feet and its lower portion is square in section, $16\frac{1}{2}'' \times 16\frac{1}{2}''$ and the upper is octagonal and 10" to 11" across. The weight of this pillar is about 7 tonnes more than that of the Iron Pillar at Delhi. This pillar was probably made and erected about the year 321 A. D. Besides, there are numerous beams and smaller pieces at the Sun Temple at Konarka in Orissa built in the earlier part of 13th century A. D. The beams were constructed by welding short blooms together. The blacksmiths of Orissa produced various types of weapons and also smooth barrelled guns known as Oriya Nali or Oriya barrel. Weapons and articles made of Indian steel and wrought iron were available all over the country even after it came under British occupation.

In early days the smelting of iron took place in small charcoal fired furnaces, which consisted merely of pits on the ground. Air was blown by the only process in vogue at that time i. e., the foot-bellows. It was not possible to separate the iron from the slag by this method and wrought iron was made by further working the furnace product. Each furnace was worked with two goat-skin bellows so that a continuous blast of air could be produced. The charcoal fuel was made from various hard woods such as Teak, Babul and Sal. Some of the smelters of this type can still be seen near Manoharpur, hardly 50 km. from Rourkela. Piles of metallic modules found at different places in North Orissa indicate the existence of a smelter not long ago.

The first smelter for smelting iron ore in India was started by J. M. Heath, a civil servant of the East India Company at Porto Novo, Madras, in 1830. In 1833, furnaces, forges and rolling mills were established at Porto Novo. After the liquidation of this company in 1874, the Napier Foundry Company was set up for manufacture of iron in 1875 which lasted only up to 1877. In West Bengal the indigenous industry was highly developed in the Birbhum district. The furnaces were comparatively large. In 1852, there were about 70 furnaces in different parts of West Bengal. The annual out-put of each furnace was about 34

ROURKELA CITY



tonnes of iron. About the year 1874, the Bengal Iron Company was formed and in 1878 the works consisted of 2 blast furnaces yielding 40 tonnes of pig iron per day. Attempts for smelting the local iron ores were also made in Kumaon region of Uttar Pradesh.

The foundation of the iron and steel industry on a stable footing was only laid in 1907 when the Tata Iron & Steel Company was formed and it started building the factory at Sakchi, a village in the district of Singhbhum. Production of pig iron by TISCO started in 1911 and of steel in 1913. The Government of Mysore started the Mysore State Iron & Steel Works in 1923 at Benkipur (now called Bhadravati) and the first blast furnace of the Company was blown in January 1923. In March 1930 a steel plant was set up and in April 1930 steel rolling mills were started. The Indian Iron & Steel Company was formed in March 1918. These plants were expanded under the first Five Year Plan (April 1951 to March 1956) and during the second Five Year Plan (April 1956 to March 1961) three new integrated steel plants at Rourkela (Orissa), Bilai (Madhya Pradesh) and Durgapur (West Bengal) under the Hindustan Steel Limited started production.

Iron occurs in nature in the form of iron oxide mixed with other oxides such as aluminium oxide and silicon dioxide. The important iron bearing minerals are magnetite, hematite and limonite. In pure form of magnetite the iron content is 72.4 per cent and 27.6 per cent is oxygen. Generally, the iron content of magnetite ores varies from 65 per cent to 68 per cent due to presence of other oxides as impurities. In pure hematite the iron content can be 70 per cent maximum and the rest is oxygen. But, in commercial hematite ore, the iron varies from 60 per cent to 65 per cent due to the presence of impurities. This type (hematite) of ore is present in large deposits in Orissa and practically all the iron ore deposits of India are of this type. Limonite is nothing but hematite with varied amount of moisture content, present as water of crystallization.

As mentioned above, iron is present in iron ores as iron oxides. To get iron from iron ore (oxide) we need to get rid of oxygen. This can be done by any reducing agent like carbon and hydrogen which can combine with oxygen to form a gas. But, for commercial purposes, carbon is found to be more suitable as it is available abundantly in nature in the form of coal. Coal can be burnt in absence of air to form coke which is a concentrated form of carbon. The other oxides (aluminium oxide and silicon dioxide) which are present in iron ore are made to combine with lime (present in limestone) to form a liquid slag

which separates out from iron at higher temperature due to its lightness. Therefore, iron is reduced at a very high temperature in a blast furnace. The heat in the blast furnace is supplied by burning of carbon (available from coke) in presence of air which is blown into the furnace. Thus to manufacture one ton of pig iron the following raw materials are needed:

Iron Ore (hematite)	..	1500-1600 kg/ton Pig	Iron
Lime Stone (to form slag)	..	300	Ditto
Dolomite (to form slag)	..	100	Ditto
Coke (to supply reduction carbon and heating carbon)	..	900	Ditto
Air (to supply oxygen for Coke—burning)		3500 to 4000	Ditto

The iron produced in a blast furnace has the following chemical compositions:

Carbon	..	4.0 to 4.1	per cent
Silicon	..	1.0 to 1.30	per cent
Manganese	..	1.8 to 2.00	per cent
Sulphur	..	0.04 to 0.06	per cent
Phosphorous	..	0.20 to 0.24	per cent

When this iron is cast into small moulds it is called pig iron.

Wrought Iron

This is a mixture of almost pure iron with slag and was produced in olden times when separation of slag and metal was not possible due to inability to attain high temperature. It was produced from iron ores in smaller hearths using charcoal as reducing and heat supplying source. The product of this type of smelting was spongy mass of pure iron intermixed with considerable amount of slag. Usable articles were produced by hammering the hot spongy mass to expel most of the slag. However, with the development of modern technique of producing higher temperature, wrought iron production from iron ore is replaced by production of pig iron by blast furnaces which is subsequently converted to steel.

Steel Making

Most of the iron produced in blast furnaces is converted to steel either by Open Hearth or by L. D. process. Bessemer process which was used for steel making in the past, has now become more or less obsolete. In steel making the carbon, silicon, and manganese, present in molten iron is removed to the desired levels by oxygen. In Open Hearth process oxygen is supplied by air and in L. D. process pure oxygen is blown through the molten metal. In both the processes carbon is removed by the formation of carbon dioxide, which is a gas and thus escapes out. The silicon and manganese are removed as their oxides which being lighter floats on the metal bath. After the removal of these

elements, the molten metal consists of almost pure iron. This is very soft and its strength is less. But, the actual steel has to contain some amount of carbon, manganese, silicon, chromium, etc. to have proper strength. This is done by calculated addition of carbon (when carbon falls below the desired level during blowing), ferro-silicon, ferro-manganese, ferro-chromium, etc. Another use of ferro-manganese and ferro-silicon is to remove dissolved oxygen from the molten metal which otherwise have harmful effects. The additions are done mostly during the time when the molten metal is poured into ladles. Thus, a typical low carbon steel which had undergone all the above processes as will contain:

Carbon	..	0.15 to 0.25	per cent
Silicon	..	0.02 to 0.35	per cent
Manganese	..	0.30 to 0.80	per cent
Sulphur	..	0.03 to 0.05	per cent
Phosphorous	..	0.03 to 0.05	per cent

The unique feature of the Rourkela Steel Plant is the adoption of L. D. process of steel making for the first time in India.

Although the L. D. process is the newest method of making steel, it is basically a delayed fulfilment of the dream of Henry Bessemer, who invented the familiar Bessemer Converter about a century ago. In devising the Converter, named after him, Bessemer blew air through molten iron and realised only half of his plan of making steel in large quantities at a low cost and in a short time. He could not go the whole way and lower the nitrogen content of steel and improve its quality by replacing the air blast by oxygen. Bessemer failed because it was exceedingly difficult in his time to get a regular supply of oxygen in bulk points. As a consequence, the steel industry developed the basic open hearth method of making high quality steel.

Today, with the improved techniques of producing pure oxygen in large quantities Bessemer's original dream of an oxygen-blown steel-making process has become a reality. As the Indian steel industry is launched upon its greatest expansion programme in history, the development of the L. D. process could not have come at a more auspicious time.

The L. D. process is named after the two steel towns in Austria, Linz and Donaowitz where it was developed by the Austrian steel manufacturing company, the VOEST. In L. D. process 99.5 per cent pure oxygen is blown through the molten iron kept in the L. D. vessel by water-cooled lance.

The L. D. process is eminently suitable for the production of low-carbon steel which is used for cold and hot rolled sheets, strips and tinplates. The investment costs of an L. D. plant, including the oxygen plant and the gas-cleaning equipment are considerably lower and works out to 60 to 70 per cent of those of an open hearth steel plant of the same annual capacity. The building site required by an L. D. plant is much smaller than that required by an open hearth plant of the same capacity. The processing costs of L. D. steel are much lower too. Including capital costs, they are, per ton, about 30 to 50 per cent lower than those of open hearth steel. The oxygen plant, in the process of making oxygen releases nitrogen which is used for manufacturing nitro-limestone fertilizer as a by-product. The operational methods of an L. D. plant are simple and the maintenance of the converters is easy. The entire process of cooling the converter, removal of damaged brick linings, relining with fresh bricks and preheating the lining can be done in about three to four days.

Alloy steel

According to composition the steel can be broadly divided into two types (i) plain carbon steels, (ii) alloy steels. The plain carbon steels contain the usual five elements up to the following percentage —

Carbon	up to	1.82 per cent
Silicon	up to	0.5 per cent
Manganese	up to	0.8 per cent
Sulphur	up to	0.06 per cent
Phosphorus	up to	0.06 per cent

Alloy Steels contain beside the above elements other alloying elements like chromium, nickel, molybdenum, and vanadium. When the contents of silicon and manganese are higher than the above mentioned level, it is also taken as alloying elements. Steel containing alloying elements totalling up to 5 per cent, are called low alloy steel. When the alloying elements exceed 5 per cent in total they are called high alloy steels. The typical example of a high alloy steel is 18/8 stainless steel used for household utensils. This contains 18 per cent chromium and 8 per cent nickel in addition to its usual carbon, silicon and manganese content. Low alloy steels are used for making various types of tools and are, therefore, commonly known as tool steels.

**ROURKELA
STEEL PLANT**

A new era in the Indian steel industry was heralded when construction work on India's first of the three public sector steel plants at Rourkela started in October 1956, in collaboration with the Federal

Republic of Germany. This Plant is being managed by the Hindustan Steel Limited, a Government of India undertaking. A capital of Rs. 330,53,37,426 has been invested in this undertaking.

Rourkela was chosen as the site for a steel plant owing to its naturally advantageous situation. Situated in the minerally rich State of Orissa, Rourkela has the advantage of being barely 80 km. away from rich iron-ore deposits. Manganese ore and limestone deposits are even closer. Water is obtained from the river Brahmani which is hardly 2 km. away from the plant. The requirements of raw materials are met mainly from its own captive mines. The completely mechanised iron-ore mines at Barsuan have a capacity to handle 800 tonnes of iron-ore per hour. A beneficiation plant has also been set up to improve the quality of the ore. Washed coal for Rourkela comes from Hindustan Steel's modern washeries situated at Dugda, Bhojudih, Patherdih and also from Kargal Washery of the National Coal Development Corporation. Limestone is obtained from the Plants' quarries at Purnapani and Satna. Manganese ore is brought from nearby mines in Orissa while dolomite is obtained from Birmitrapur and Baradwar.

A detailed project report for this plant prepared by Messrs Indian Gemeinschaft Krupp-Deamag GmbH was finalised in November 1955 and was accepted by the Government of India in February, 1956. The work started soon after that and its various units went into production on different dates during 1958 and 1960. The first battery of Coke Ovens was commissioned on December 1, 1958; the first Blast Furnace on February 3, 1959; the first Open Hearth on April 28, 1959; the first L. D. Converter on December 27, 1959; the Blooming Mill started production on December 15, 1959, and the Plate Mill on September, 12, 1960.

The plant was originally designed to produce 1 million tonnes of steel ingots per year. To meet the growing demand of flat steel in the country the plant has been expanded to 1.8 million tonne ingot steel capacity per year. At the 1 million tonne stage the technical know-how and most of the equipments had to be imported from W. Germany. A remarkable feature of the present expansion is that considerable amount of material of indigenous manufacture has been utilised in various units.

The plant consumes as much electricity as a fairly large city needs and the bulk of its power requirements is met from two sources, its own 100 m. w. thermal power station, and the Orissa State Electricity Board Grid consisting of the Hirakud system and the Talcher Thermal Power Station.

**Power
Supply**

Finished Products The plant produces a large variety of products meeting the demands of some of the most important industries like ship building, wagon building, automobile and barrel manufacturing, tube making, manufacturing of domestic appliances, canning, packing, etc. Some of these industries have to depend entirely on Rourkela.

Main Units The main units of the plant are Coke Ovens and By-products Plant, Blast Furnaces, Steel Melting Shop and Rolling Mills.

Coke ovens and by-products The Coke Ovens at Rourkela comprise 3 batteries of 70 ovens each, and one battery of 80 ovens which has been added under the expansion scheme. In the Coke Ovens blended coal is heated to about 1,250° C out of contact with air for about 18 hours. The volatile matter is expelled and the coal is converted to a hard porous mass called coke. From the gas obtained during this process crude tar, crude benzol, and ammonia are recovered in the By-products Plant. The remaining gas is supplied to the Fertilizer Plant where hydrogen is removed by fractionation for making calcium ammonium nitrate.

The By-products Plant, one of the largest in India, treats 1,05,000 cubic metres of gas per hour. Here crude tar is refined to produce extra hard pitch, heavy oil, creosote oil, wash oil, tar fuel, road tar, dolomite tar, neutral oil, hot pressed naphthalene, phenol, cresol, and xylene. Crude benzol is refined to produce benzene, toluene, xylene and solvent naphtha. This is the only plant in India where extra hard pitch is produced. Valuable products like phenol, cresol and xylene are produced in the Carbolic Acid Unit of the plant.

Sintering Plant Mechanised mining produces large quantities of iron ore fines which previously used to go waste. To gainfully utilise these fines with other plant wastes like mill scale, coke breeze and limestone fines, and to economise on the Blast Furnace operations a Sintering Plant with a capacity to produce 4,000 tonnes of self-fluxing sinter per day has been set up. Use of sinter in Blast Furnace reduces coke rate and flux rate ensuring higher iron production with better and uniform quality of hot metal.

Blast Furnaces The Plant has four Blast Furnaces. Three having a capacity of producing 1,000 tonnes of hot metal each existed in the 1 million tonne stage. Under the expansion scheme one blast furnace having a capacity of 1,500 tonnes of molten iron per day has been added. Iron ore in lump form, sinter, coke, limestone and dolomite are charged from the top in measured quantities. Preheated air is blown from the bottom through tuyeres. Coke provides the heat and energy for

reaction and reduces the iron oxide in the ore to molten iron. Limestone and dolomite help in the removal of impurities by combining with them to form slag which is removed through the slag holes in the furnaces.

The molten iron is tapped every four hours into ladles and taken to the mixers at the Steel Melting Shop. A part of iron is also cast into pigs at the two pig casting machines.

The Oxygen Generating Plant has been erected to supply 99.5 per cent pure Oxygen to the L. D. converters. It is the largest oxygen plant in India and has a total capacity to produce 500 tonnes of oxygen per day. The pure nitrogen, obtained as a by-product from the Oxygen Plant is being utilised in the Fertiliser Plant.

At this Plant, bulk of steel is made by L. D. process. The first L. D. plant went into production in 1959. From then onwards, the development of the L. D. process has been a story of steady progress. Two more L. D. converters of 60 tonnes capacity each have been added recently to the existing three of 50 tonnes capacity each. There are four Open Hearth furnaces of 80 tonnes capacity each. The capacity of production of ingot steel from L. D. converters constitutes 86 per cent of the total steel making capacity of the Plant.

The molten steel produced is tapped into ladles and then teemed into moulds and transferred to the stripper bay where ingots are stripped from these moulds and sent to soaking pits for reheating before rolling.

A serious accident took place in the Steel Plant when the roof of the Steel Melting shop collapsed in July 1971. A brief account of the accident is given below.

The accident of 1971 in the Steel Melting shop

The gas coming out from the L. D. converters during the blowing is directed through the uptakes and the horizontal connecting duct to the associated gas conditioning tower. The object of this gas conditioning tower is primarily to cool the gas from a temperature of about 1200° C to about 250° C which is achieved by spraying atomized water through several nozzles supplied with high pressure water and secondarily to arrest the coarser particles of dust and collect it at the bottom through a controlled gate valve. The gas further is directed through two horizontal type dry electrode precipitator units with connected power packs for cleaning a total gas volume of about 2,38,400 cubic metres at N. T. P. per hour. An induced draft fan assists to draw out the entire gas creating a suction and letting out through chimney at the end. The precipitators accommodate horizontal rows of dis-

charge electrodes and collecting electrodes which form the main components of the entire system of dust extraction. The dust that is collected at the bottom is conveyed through individual chain conveyors to a main system leading to a central storage whereby periodically it is cleared away. As the dust is rich in iron content, efforts are being made to utilise it usefully in iron and steel making. Each converter has its own gas conditioning tower but the induced draft fan and the precipitators remain common to all. The equipment is highly sophisticated with electronic controlling device and high voltage power supply. According to the present blowing practice in L. D. converters, the dust collection amounts to 2 per cent of L. D. production as against 1.2 per cent envisaged by the supplier.

However, the dust escaping from the L. D. converters contains fine particles of iron-oxide which unless arrested, deposit themselves on the roof of the Steel Melting Shop. This deposit is fairly heavy, and as per the Technical Enquiry Committee which enquired into the roof collapse in July, 1971 was the primary cause for the disastrous roof collapse in that year. In fact, following the roof collapse, the column and roof of the Steel Melting Shop have been strengthened during the rebuilding and also following the rebuilding. Apart from the overbearing weight of such a deposit, the atmospheric pollution caused by such dust is also a potential health hazard. In fact, in the foreign countries the atmospheric pollution that would be caused by the L. D. dust forms the major consideration for installation of the Dust Catcher Plants. This plant has been working very satisfactorily since February, 1972.

Rolling of
Steel

The Rolling Mills at Rourkela have two main sections viz., Hot Rolling Mills and Cold Rolling Mills. Hot Rolling Mills comprise of a Blooming and Slabbing Mill, Hot Strip Mill, Plate Mill and Electrical Sheet Mill.

Hot Rolling
Mills

Blooming
and Slabbing
Mill

The Blooming and Slabbing Mill may be called the mother product mill for all other units. It is the main unit through which all the steel ingots pass before being rolled into finished products. The Blooming and Slabbing Mill is designed to produce slabs and blooms. Since the Rourkela Steel Plant produces flat products, this mill rolls slabs mainly. Though the mill had an inherent capacity to roll 1.8 million tonnes of steel ingots annually, to cope with increased production four batteries of Soaking Pits, one Ingot Bogie, a Hot Scarfing Machine and a Water Wheel have been provided under expansion scheme.

About 25 per cent of the slabs produced at the Slabbing Mill are rolled into plates ranging in thickness from 5 mm to 63 mm. The plates are used for making locomotives, wagons, bridge-girders, ships, boilers, trucks, cranes, penstock, railway coaches and many heavy equipments including electrical equipment.

The modern semi-continuous wide Hot Strip Mill, the first of its kind in India, converts slabs into strips ranging from 1.6 mm to 10 mm in thickness. Hot rolled strips are further processed in Cold Rolling mills, Pipe Plant, Electrical Sheet Mill at mill's own Dividing lines. Strips are also sold as such. The plates and sheets produced at the mill's own Dividing lines are used for making wagons, coaches, ships, boilers, bridges, telephone posts, etc. Chequered plates are used for flooring. Hot rolled strips are mainly used for making tubes and liquid-petroleum-gas cylinders.

Before cold reduction in this Mill, coils from Hot Strip Mill have to be pickled where scale formed during hot rolling is removed. This is done in two pickling lines, the new one having a capacity of 450,000 tonnes per year and the earlier one having a capacity of 318,000 tonnes per year. Hot rolled pickled coils, 2 mm to 4 mm in thickness are cold reduced to 0.15 to 1.6 mm in thickness in three Cold Rolling units:

The newly installed 1420 mm 4—High 5—Stand Tandem Mill, The earlier existing 1700 mm 4—High Reversing Mill and 1200 mm 4—High Reversing Mill.

The 1420 mm 4—High 5—Stand Tandem Mill is one of the most sophisticated units of the Rourkela steel plant. It has a delivery speed of 1,800 metres per minute. It rolls material for autobody sheets, galvanised sheets and tin plates. To ensure quality, provision of an X-Ray gauge to measure the thickness of the strip and data logging equipment to record the thickness along the entire length of the strip has been made. Capacity of this Mill is 600,000 tonnes per year.

After cold reduction the steel becomes hard and needs relieving of stress before further processing. To restore the requisite workability it has to be annealed. Annealing is done either in stack annealing furnaces or in a continuous annealing line with built-in degreasing facilities. Both types of annealing furnaces have been installed at this Plant. The average output of the continuous annealing line is 11 tonnes per hour. The nominal speed of the line is 120 metres per minute. To avoid oxidation of the strip, inert atmosphere of 4 to 6 per cent hydrogen and 94 to 96 per cent nitrogen is maintained inside the furnace.

Cold Rolled strips must be tempered after annealing. This is done in Skin Pass Mills where necessary physical properties, surface finish, and flatness are obtained. Cars, railway passenger coaches, panel boards of electrical and mechanical equipment, refrigerators, air conditioners, steel furniture and office equipment, oil drums and many more things are made out of cold rolled sheets.

Galvanising

Production of galvanised sheets in continuous hot dip galvanising lines by Armco-Sendzimir process has been introduced in the country for the first time at Rourkela Steel Plant. In this process, cleaning, annealing and coating of the strip are done in a continuous process in the same line. There are two lines of 80,000 tonnes per year capacity each. The cold rolled strip is uncoiled, trimmed and passed through open flame oxidising furnace which also serves as a flame degreaser. The strip is annealed under a reducing atmosphere. The strip is cooled in the next zone of the reducing furnace to a temperature slightly higher than the galvanising temperature. It is then passed through the molten zinc bath. As the molten zinc solidifies, the spangles come out on the galvanised strip surface. The hot galvanised strip is cooled by passing through a long cooling zone. It finally passes through finishing section for cutting to the required sizes. The galvanised sheets are also given a passivation treatment for increasing the resistance against corrosion. These sheets are supplied both in plain and corrugated condition. Corrugation is done in two tandem corrugating lines.

Galvanised sheets are widely used for roofing and panelling purposes. They are also used in refrigeration and air conditioning. Agriculture sector is a major user of galvanised sheets. These can also be used in the automobile industry.

Tinning

The Tinning Plant has a capacity to produce 2,00,000 tonnes of tin plates annually—1,50,000 tonnes per year from the new electrolytic tinning line and 50,000 tonnes per year from the hot dip process.

At the Electrolytic Tinning Line, Acid Ferrostan process is employed. Long bars of tin constitute the anode and the cold rolled strip acts as cathode. Solution of stannous sulphate in phenol sulphonic acid is used as the electrolyte.

Electrolytic tin plates produced at Rourkela have uniform coating which ensures perfect protection against corrosion. These are widely used in the manufacture of containers for packing of various products like processed and unprocessed food, cosmetics, etc. They are also used in electronic and automobile industry.

The Electrical steel sheets which must have low electrical losses, high magnetic permeability and high electrical resistance are used for making magnetic cores of generators and other electrical equipments. Electrical Sheet Mill

Very low carbon steel with high silicon content and low sulphur is rolled in Hot Strip Mill to strips of 4 mm. to 6 mm. thickness. These are further pack-rolled with unidirectional grain deformation in the Electrical Sheet Mill. Heating is done in intermediate stages in walking beam furnaces. The sheets, after finishing to the required size, are skin passed to obtain dead-flat surface. They are then heat treated in Walzwerk-Naviges patented annealing furnaces or Roller Hearth furnace for grain orientation and for lower watt-loss.

The Pipe Plant at Rourkela is designed for production of large diameter Electric Resistance Welded (ERW) pipes suitable for gas and oil transmission, water well casings, irrigation, drainage, structural and mechanical uses and also for piling, prospecting, mine shafting, etc. Pipe Plant

This Plant is among the few in the world entitled to use the quality stamp of the American Petroleum Institute. Besides supplying API pipes to several pipe lines in India, viz., Naharkatuya-Noonmati-Barauni pipe line ; Gauhati-Silliguri pipe line ; Haldia-Barauni-Kanpur pipe line ; and Gujarat pipe line, this plant has the distinction of exporting pipe to several countries against stiff international competition.

Hot rolled steel strips are fed into the forming mill where they are progressively formed into a tubular shape. Continuous resistance welding machine welds the butting edges. The pipes are finished and thoroughly tested to maintain high standards of quality.

To keep a steel plant of the size of Rourkela operating smoothly a number of service departments and auxiliary units perform vital functions. The important among them are discussed below. Other Units

The plant's requirements of casting of various sizes are met by the Foundries. Bulk of these are supplied by the Grey Iron Foundry which has an annual capacity to make 64,000 tonnes of grey iron castings. Main requirements are in the form of ingot moulds and base plates required by the Steel Melting Shop and slag pots required by the

Blast Furnace as well as by the Steel Melting Shop. The steel foundry and the non-ferrous foundry have an annual capacity of 5,000 tonnes and 300 tonnes respectively.

Research and Control Laboratory A well-equipped Metallurgical Research and Control Laboratory has been set-up in the Plant. Its function is to check the quality at every stage through highly qualified staff of Metallurgists, Physicists and Chemists.

Training The dearth of skilled personnel to man industrial units posed serious problems in India. A modern technical Institute has been established at Rourkela to train its own technicians and engineers. It also trains personnel for other steel plants.

The modern Technical Institute at Rourkela has training facilities for 18 different trades and maintains different shops for these trades. The institute has so far trained over 6,300 trainees under its regular training schemes. The institute has facilities to train nearly 2,000 trainees every year. Training facilities at Rourkela have been appreciated even by the more industrially advanced countries. Trainees from Australia, Germany, Burma, Ceylon, Phillipines, Spain and South Vietnam have been trained at this institute.

Besides organising technical training courses the institute also conducts Employees Training Schemes and Management Development Schemes.

Fertilizer The Fertilizer Plant is a Public Sector undertaking and has been constructed at a cost of Rs. 268.7 millions. It is the only fertilizer plant in the country based on the utilisation of surplus gas from a steel plant.

The Plant is designed to gainfully utilise the by-products like hydrogen from Coke Oven gas, nitrogen from the Oxygen Plant and limestone fines from Purnapani. Designed to fix 1,15,000 tonnes of nitrogen per year in the form of calcium ammonium nitrate (CAN), the Plant has a gas fractionation section, a naphtha steam reforming unit, an ammonia synthesis unit, a nitric acid plant and a nitrolime plant. A naphtha reformation unit has been set up recently to augment the supply of hydrogen.

In terms of CAN the plant has a rated capacity to produce 5,60,000 tonnes of calcium ammonium nitrate per year. This product is conventionally marketed with 20.5 per cent nitrogen content. With technological improvements at Rourkela the product has been enriched to 25 per cent nitrogen content which is marketed under the trade name 'SONA'.

A further quantity of fertilizer is produced in the By-Products Plant. Ammonia recovered from the Coke Oven gas is absorbed in Sulphuric acid to obtain ammonium sulphate. This Plant produces about 20,000 tonnes of ammonium sulphate annually.

APPENDIX

NEW SMALL-SCALE INDUSTRIES RECOMMENDED BY SMALL

Type of Industry	No. of Units	Location	Capacity
(1)	(2)	(3)	(4)
<i>Resource based</i>			
Doors and Windows ..	2	Rourkela/Rajgangpur ..	Rs. 2.1 lakhs per annum.
Tannery ..	1	Rourkela ..	25 pieces of hides for sole leather, 25 pieces of hides for chrome upper leather.
<i>By-product based</i>			
Coke briquets ..	1	Rourkela ..	600 mt.
Nitro benzene ..	1	Rourkela ..	150 mt.
Calero benzene ..	1	Rourkela ..	120 mt.
<i>Demand based</i>			
Baby walkers, tricycles and perambulators.	1	Rourkela ..	Rs. 1.50 lakhs per annum.
Carriers, Crash guards, side boxes, etc., for motorcycles and scooters.	1	Rourkela ..	..
Garden tools like forks, knives, rakes, etc.	1	Rourkela ..	Rs. 5 lakhs per annum.
Agricultural implements and tools.	1	Rourkela ..	Rs. 6 lakhs per annum.
Aluminium builders hardware.	1	Rourkela ..	Rs. 3 lakhs per annum.
Anodised aluminium articles.	1	Rourkela ..	Rs. 1 lakh per annum.
Cement products ..	3	Rourkela/Rajgangpur Birmitrapur.	Ditto
Fertiliser mixtures ..	2	Rourkela/Sundargarh	10 tonnes per day.
Plastic toys, and novelty goods.	1	Rourkela ..	Rs. 1 lakh per annum.
Paper bags ..	1	Rourkela ..	Rs. 5 lakhs per annum.
Waxed paper ..	2	Rourkela ..	..
Exercise note books, ledgers, file covers, letter pads, etc.	3	Rourkela/Rajgangpur/Sundargarh.	..
Holdalls, travel bags and school bags.	2	Rourkela/Rajgangpur	Rs. 0.60 lakh.
Readymade garments..	2	Rourkela ..	Rs. 2 lakhs.
Cold Storage ..	1	Sundargarh ..	5,000 mds.
Phenyle ..	1	Rourkela ..	40 mt. per annum.
Printing Ink ..	1	Rourkela ..	48 mt. per annum.
Re-rolling mills ..	1	Rourkela ..	3,000 mt. per annum.
Gas Cylinders	1	Rourkela ..	6,000 pieces per annum.

SOURCE :—Report on the Industrial Development Potentialities of Sundargarh.

III

INDUSTRIES SERVICES INSTITUTE, CUTTACK

Estimated capital investment per unit		Total (Rs. in lakhs)	No. of workers per unit
fixed	working	(7)	(8)
(5)	(6)		
Rs.	Rs.		
52,000	40,000	0.92	35
1,60,000	2,80,000	4.40	38
..	Not mentioned	0.80	8
..	Ditto	2.25	15
..	Ditto	5.00	20
..	Ditto	1.00	25
..	Ditto	0.25	10
..	Ditto	4.00	25
..	Ditto	5.00	30
..	Ditto	1.95	30
..	Ditto	0.40	15
..	Ditto	0.25	8
..	Ditto	0.70	14
..	Ditto	0.50	15
..	Ditto	0.75	10
2,500	2,500	0.05	5
..	Not mentioned	0.36	30
..	Ditto	0.25	10
..	Ditto	0.30	15
..	Ditto	1.00	12
..	Ditto	0.50	8
..	Ditto	3.50	16
..	Ditto	6.70	31
..	Ditto	3.50	15

District (Orissa)—Small Industries Service Institute, Cuttack.

APPENDIX

POSSIBILITY OF ANCILLARY INDUSTRIES IN

Name of Industry	Items to be manufactured	Annual capacity (quantity & value)
(1)	(2)	(3)
1. Grey Iron Foundry	.. General castings	.. 200 tons Rs. 10 lakhs
2. Silicate Factory	.. (i) Sodium silicate	.. 250 tons
	.. (ii) Sodium orthosilicate	.. 150 tons
	.. (iii) Exothermic cover powder	300 tons Rs. 4.5 lakhs
3. Aluminium Knotched Bars and Shots.	Aluminium knotched bars and shots.	200 tons Rs. 10 lakhs.
4. Polythene lined Bitumenised hessain bags.	Rolls of polythene lined bitumenised hessain bags.	45 lakhs bags Rs. 65 lakhs
5. Pipe Plant	.. Conduit pipes of different diameters.	10 lakhs metres Rs. 15 lakhs
6. Structural Factory	.. Structural like plate and sheet metal work.	1,000 tons Rs. 15 lakhs
7. Saw Mill-cum-Wood working unit.	Sawn timber	.. 50,000 cft. Rs. 3.5 lakhs
8. Bolts and Nuts	.. Metric size bolts and nuts	.. 300 tons Rs. 6 lakhs
9. Rubber Moulded Hoods	.. Oil seals bushes, rubberising rolls.	Rs. 10 lakhs
10. Safety Boots and Shoes	.. Safety boots, other shoes, including children shoes.	15,000 pairs 10,000 pairs. Rs. 5 lakhs.
11. Safety Gloves	.. Weather-canvas and all type of hand gloves.	15,000 pairs Rs. 1.5 lakhs.
12. Electrical Accessories.	.. Parts of electric motors. etc.	Rs. 5 lakhs
13. Small Hand-Tools Unit	.. Hammers, chisels, wrenches etc., for steel plant.	Rs. 10 lakhs
14. Printing Press	.. Printing and stationery including special job.	Rs. 5 lakhs
15. Manufacture of stopper rods	Stopper rods	.. 1,000 rods Rs. 5 lakhs.
16. Chains, wire rope slings, pulley blocks.	Chains, ropes, pulleys, etc.	.. Rs. 10 lakhs

IV

SUNDARGARH DISTRICT

Employment potential	Capital outlay (Rs. in lakhs)	
	Fixed Capital	Working Capital
(4)	(5)	(6)
50	1.5	2.0
20	0.8	1.5
20	0.5	2.0
20	1.2	10.0
20	0.9	3.0
40	2.0	3.0
40	0.4	1.0
20	2.8	1.5
20	1.2	2.0
30	0.8	1.2
15	0.4	0.3
15	0.8	1.5
20	2.0	2.0
30	2.0	1.2
10	1.0	1.5
20	5.0	2.5

Name of Industry	Items to be manufactured	Annual capacity (quantity & value)
(1)	(2)	(3)
17. Instruments Repair Shop	Repair and manufacture of metering and indicating instruments like water meters, ammeters, dial indicators, pressure gauges, etc.	2,000 nos. of different types. Rs. 4 lakhs
18. Machine Shop (Small spares).	Small spares like collars, sleeves, pins, special head bolts, flanges.	Rs. 10 lakhs
19. Machine Shop (medium and heavy parts).	Medium and heavy parts like shafts, rolls, and plates, sleeper pads, heavy head bolts, scrapars, etc.	Rs. 15 lakhs
20. Machine Shop (Precision repeat job).	Precision repeat jobs like gears, sprockets, circlips, precision rings, conveyor rollers, precision bearing-sleeves and such other jobs.	Rs. 10 lakhs
21. Machine Shop (non-ferrous spares).	Various non-ferrous spares.	Rs. 10 lakhs
22. Machine Shop (forge shop and boring jobs).	Forging jobs and boring items.	Rs. 4 lakhs
23. High Pressure Valves ..	Hydraulic valves for replacement, repairs valves and fittings.	2,000 nos. Rs. 3 lakhs.
24. Steel Foundry ..	Steel castings ..	75,000 tons Rs. 70 lakhs
25. Non-ferreous Foundry ..	Non-ferreous blanks a n d castings.	Rs. 6 lakhs
26. Wood working joinery Shop.	Furniture of different types..	Rs. 3 lakhs
27. Magnesite Nozzles, and Fireclay Sleeves.	Nozzles and sleeves ..	2 lakhs nos. 1 lakh nos.
28. Automobile Spares ..	Fast-wearing spares for the heavy vehicles.	Rs. 5 lakhs
29. Manufacture of bearings...	Bush, ball and roller bearings	Rs. 20 lakhs
30. Asbestos Packings ..	Asbestos ropes, steamline packings, etc.	Rs. 4.5 lakhs
Total ..	..	352.0

SOURCE :—Report on Ancillary Industries, Rourkela, 1969, published by the

Employment potential	Capital outlay (Rs. in lakhs)	
	Fixed Capital	Working Capital
(4)	(5)	(6)
20	1.8	8.0
20	1.0	1.5
20	3.5	2.5
20	3.0	1.5
15	1.5	2.5
20	3.0	1.0
15	1.8	0.8
150	35.0	15.0
20	1.5	2.0
30	0.8	0.5
20	1.5	1.5
15	2.2	1.5
50	10.0	6.0
15	0.8	1.0
820	90.7	74.3

Directorate of Industries, Government of Orissa, Cuttack.

CHAPTER VI

BANKING, TRADE AND COMMERCE

HISTORY OF
INDIGENOUS
BANKING IN
THE DISTRICT

The first institutional Banking organisation in the district came into existence in 1955, with the opening of the District Central Co-operative Bank, Ltd., at Sundargarh. Prior to it, the old pattern of credit system maintained by the village money-lenders, who were mostly Gaontias, and traders, had obtained unchallenged rank for generations. The money-lenders who were primarily wealthy agriculturists played an important role in the rural economy.

They were the only agency engaged in providing agricultural finance, but usually at high rate of interest which differed from place to place. In addition to this, the loanees were forced to offer free labour to the money-lenders at the time of agricultural operations. In the Bonai ex-State, people were free from debt except for occasional small loans amongst themselves, and the money-lender was conspicuous by his absence.

At present, no reliable data are available about the number of money-lenders. There are many private money-lenders carrying on business without a licence. The number of registered money-lenders in 1970 was 62, of which 23 were in Sundargarh subdivision, 25 in Panposh subdivision, and 14 in Bonai subdivision. The rate of interest usually charged by the money-lenders at present varies from 25 per cent to 50 per cent and in some cases with compound interest as per the contract. In spite of the high rate of interest, people take loan from such private money-lenders as it is available to them easily at the time of their requirement.

The district is inhabited mostly by Adivasis and backward classes. Their economic condition is not sound. Indebtedness is a common feature with them. They do not mind paying higher rate of interest to the money-lenders when no other sources of credit exist. Local traders who also lend them money take the fullest advantage of the barter system and the ignorance of the people. A class of money-lenders called Kistiwalas who come from South India have been operating in this district. They usually lend small sums of money and realise the principal along with interest in weekly instalments. In case of failure on the part of the borrower to repay the instalments, force and other coercive measures are often applied. Money-lenders are also

operating in the industrial areas of Rajgangpur, Rourkela, and Birmitrapur who lend money to the labourers and realise it with interest on their pay days. The credit requirements of the people engaged in the household industries are being met by the village money-lenders. The exorbitant rate of interest charged by the money-lenders leave them with no surplus. Instances are also there where the money-lenders take away all the finished products, sell them at a marginal price by which the skilled artisans are reduced to the rank of wage-earners. The credit needs of these people should be met by the credit institutions so that the traditional skill of these artisans can be preserved and the artisans will be able to improve their occupations.

It is said that credit supports the farmer as the hangman's rope supports the hanged. So an analysis of the state of indebtedness is imperative to assess the economic condition of the people. An economic survey conducted by the Government of Orissa in 1954-55, revealed the indebtedness of the cultivating families only. Nevertheless, since these families form the overwhelming majority, the condition with regard to their debt will be a broad picture of the state of rural indebtedness.

INDEBTEDNESS
AND ROLE OF
FINANCIERS

The Survey* revealed that the most important purpose for which a debt was incurred was family consumption which amounted to more than a half (58.34 per cent) of the total debt. This was closely followed by debts incurred for social ceremonies which accounted for 17.45 per cent. For the repayment of old debts and to meet the expenses of litigation 3.92 per cent of the total debt were expended. These were responsible for 79.71 per cent of the total debt of the farmers, which were distinctly burdensome. Of the total debt 20.29 per cent were incurred for various productive purposes, of which 6.35 per cent accounted for expenditure on cultivation; 12.15 per cent for purchase of land and bullocks; and 1.79 per cent for building houses.

As regards the source of credit, the chief source was the money-lender. The data revealed that 97.16 per cent of the total amount of debt were obtained from money-lenders. Some of them were professional and some others, agriculturists. At times and on certain occasions, some farmers were able to secure loans either from Government or from co-operative societies, but these were exceedingly small and constituted only 2.84 per cent.

As the data revealed, 81.71 per cent of the total loan carried 25 per cent as the rate of interest. Some money-lenders also charged 5 per cent and above. It is indeed a matter of concern that 84.22 per cent

*Economic Survey of Orissa, Vol. I

of the total loan of the agriculturists bore an interest of 25 per cent and more. Loans at 6.25 per cent and 12.50 per cent would perhaps appear reasonable, but only 6.82 per cent of the total rural credit were obtained at such rates of interest. These rates were charged usually in case of loans from Government agencies and Co-operative Banks.

However, the Government of Orissa have passed the Money-lenders Act to protect the poor people from the clutches of the village *mahajans*. The registered money-lenders are required to register themselves and obtain licences for carrying on money lending business. They are also required to maintain regular account books. The committee appointed to hold an enquiry into the working of the Orissa Money-lender's Act, 1939 observed that there were certain gaps in the provisions of the Act, as a result of which the Scheduled Tribes and the Scheduled Castes inhabiting the Scheduled Areas were unable to derive any significant benefit out of it. So, in order to control and regulate the business of money-lending in the Scheduled Areas, the Orissa (Scheduled Areas) Money-lender's Regulation, 1967, was promulgated under Paragraph 5 (2) of the fifth schedule to the Constitution of India. The Orissa (Scheduled Areas) Money-lenders Rules 1970, framed under the said Regulation was brought into force on the 30th May, 1970.

According to the Regulation, no person shall carry on business of money-lending at any place in the Scheduled Areas without obtaining a licence from the concerned Tahsildar, who is the licensing authority. The Additional District Magistrate is the appellate authority within his Jurisdiction. All the Assistant District Welfare Officers posted in subdivisional headquarters and all the Circle Inspectors of Police have been appointed as the Inspectors with their respective jurisdictions for the purpose of this Regulation.

A money-lender may charge simple interest of 9 per cent per annum in case of secured loan and up to 12 per cent per annum in case of unsecured loan. He is to maintain Cash Book, and Ledger and deliver statements of accounts to the licensing authority. A money-lender is punishable with imprisonment or fine or both in case of default. The offences punishable under this Regulation are non-cognizable.

Besides, Government have amended the Orissa Co-operative Societies Act so that people can avail loans easily. Paddy loan is advanced under 'Crop Loan System' to the agriculturists at the time of their need. The Commercial Banks have come up to render necessary credit assistance to the agriculturists, traders, manufacturers and others at low rate of interest.

The institutional financial sector comprises 19 offices of different commercial Banks, 4 offices of District Central Co-operative Bank, 3 Primary Land Development Banks, 84 Service Co-operative Societies, 184 Post Office Savings Banks and 2 offices of the Life Insurance Corporation of India. The Orissa State financial Corporation which operates in the district does not have any office here. There is no non-scheduled commercial Bank.

The average population served by an office of the commercial Bank in the district works out to about 54,200 as against 151,000 in the State and 52,000 in India as on the 30th September 1970. Although it is the best banked district in the State banking facilities are mostly concentrated only in one centre i.e., Rourkela City. The average population served by an office of a commercial Bank in this city is 12,300. As many as 8 Banks with 14 offices are centred in this City. If we exclude the offices concentrated in Rourkela City, only 5 offices serve 8.58 lakhs of people in the remaining areas of the district giving an average of about 1.72 lakh people per office. Thus excepting at Rourkela, Banking is not much developed in the district. In some areas of the district, the nearest office of a commercial Bank is about 50 to 60 kilometres away. People in these areas have to depend largely on money-lenders and other non-institutional sources to meet their credit requirements. All the subdivisional headquarters have been covered by commercial Banks. Among the tahsil headquarters, Hemgir is still unbanked. Of the 18 Community Development Block headquarters, only four places are being served by commercial Banks. The total number of Post Offices with Savings Bank facilities in the district is 84. The average population served by a Post Office Savings Bank works out to about 5,600. The gross institutional savings mobilisation in 1969-70 in the district was Rs. 340.14 lakhs.

The deposit growth of the commercial Banks (except State Bank of India) operating in the district during the years 1967, 1968, 1969 and 1970 is summed up in the table below :

Type of Deposits	Number of Accounts				Amount of deposits up to 31st December (Rs. in thousands)			
	1967	1968	1969	1970	1967	1968	1969	1970
Current ..	2,518	2,450	2,611	2,729	13,523	9,744	15,630	16,219
Savings ..	18,605	22,411	27,236	32,801	12,694	14,785	16,417	20,468
Fixed ..	2,806	3,355	3,740	4,573	10,789	14,542	21,165	28,385
Total ..	23,929	28,216	33,587	40,103	37,006	39,071	53,212	65,072

COMMERCIAL
BANKS AND
POST OFFICE
SAVINGS
BANK

Between 1967 and 1970, total deposits of the commercial Banks increased by 75.8 per cent and the number of their accounts increased by 67.6 per cent. Fixed deposits increased more rapidly (163.1 per cent) compared to Current and Savings Bank deposits which increased by 19.9 per cent and 61.2 per cent respectively. The average annual rate of deposit growth during 1968, 1969 and 1970 worked out to about 25 per cent. At the end of 1970, current deposits constituted 25 per cent, Savings Bank deposits 31.4 per cent, and fixed deposits 43.6 per cent of the total deposits. Average deposits per office was about Rs. 36.15 lakhs at the end of 1970.

The deposit mobilisation of the State Bank of India in the district is summed up below :

Type of Deposits	Number of Accounts				Account of deposits up to 31st December (Rs. in thousands)			
	1967	1968	1969	1970	1967	1968	1969	1970
Current ..	524	552	591	712	6,942	4,082	6,304	5,987
Savings ..	3,704	3,884	6,127	7,791	3,066	3,259	3,576	5,175
Fixed ..	423	419	53A	799	3,434	4,417	4,339	5,615
Total ..	4,651	4,855	7,250	9,302	13,442	11,758	14,219	16,777

Between 1967 and 1970, deposits of the State Bank of India increased by 24.8 per cent and the number of accounts by 200 per cent. The total deposits of this Bank at the end of 1970 constituted 25.8 per cent of the total deposits of all commercial Banks in the district. The average balance per Savings Bank account at the end of 1970 amounted to Rs. 664 whereas it was Rs. 8,409 for a current account and Rs. 7,027 for a fixed deposit account.

Post Offices are the most important outlets for the savings of the people, specially in the interior areas. The number of Post Office Savings Banks is increasing steadily from year to year. Between 1967-68 and 1970-71, the number of deposit accounts increased from 34,776 to 46,842 and the amount of deposits from Rs. 109.53 lakhs to Rs. 150.47 lakhs. The average annual rate of deposit growth was about 12.5 per cent as against 25 per cent for the commercial Banks and 2 per cent for the District Central Co-operative Bank. The savings in Postal Time Deposits and the Cumulative Time Deposits in 1970-71 was Rs. 135.44 lakhs and Rs. 41.26 lakhs respectively. The savings in National Saving Certificates in 1971-72 and 1972-73 were 3.24 lakhs and 3.42 lakhs respectively.

Between 1967 and 1970, total credit granted by all the commercial Banks in the district was increased from Rs. 45.99 lakhs to Rs. 408.96 lakhs. The Banks finance all types of industries, trade, commerce, agriculture, and unemployed technologists to establish themselves.

A list of commercial Banks with their location, and year of opening in the district is given in Appendix I of the Chapter.

The Sundargarh District Central Co-operative Bank, Ltd. with headquarters at Sundargarh was the first institutional banking organisation in the district. It was established on the 1st June 1955. Prior to the existence of this Bank the co-operative societies of this district were affiliated to the Sambalpur District Central Co-operative Bank, Ltd., Sambalpur. The area of operation of the Bank extends to the whole of the district and it is catering to the agricultural credit needs of the people. The Bank has four offices with headquarters at Sundargarh, Rajgangpur, Bonaigarh, and Rourkela. The total membership up to the end of June 1971 was 116 persons. The average population served by an office of the Co-operative Bank worked out to about 2.58 lakhs as against 3.31 lakhs in Orissa in 1967. The average population served in the district by an office of commercial and co-operative Bank taken together worked out to about 44,800 as against, 1,35,000 in Orissa and 48,000 in India in 1967.

CO-OPERATIVE
CREDIT
SOCIETIES
AND BANKS

Sundargarh
District
Central Co-
operative
Bank Ltd.

The Bank has paid up capital of Rs. 12.76 lakhs and reserve fund of Rs. 1.57 lakhs. The total working capital at the end of June 1971 was Rs. 45.26 lakhs. During the year 1970-71 (1st July 1970 to 30th June 1971) the Bank advanced Rs. 4.69 lakhs as short-term loans (Rs. 4,05,000 for seasonal agricultural operation, Rs. 28,000 for processing of agricultural produce, and Rs. 36,000 for miscellaneous purposes) and Rs. 2.98 lakhs as medium term loans (Rs. 1,05,000 for purchase of cattle, Rs. 65,000 for purchase of machineries, Rs. 85,000 for sinking and repairing of wells, and Rs. 43,000 for improvement of land). During this period it had made a net profit of Rs. 35,000. The rate of interest charged by the Bank varies in between 7.5 per cent to 9 per cent per annum on different loans.

Between June 1967 and June 1970, total deposits of the Bank increased by 5.2 per cent. At the end of June 1970, current deposit accounted for 12.5 per cent, savings deposit for 80.2 per cent, and fixed deposit for 7.3 per cent of its total deposits. The average annual rate of deposit growth worked out to about 2 per cent.

There are 3 Land Development Banks operating at Sundargarh, Bonaigarh, and Rourkela. The average population served by an office of the Bank in the district worked out to 3.43 lakhs.

Land De-
velopment
Banks

The Banks had a total membership of 2,389 at the end of June 1971. These Banks had a total working capital of Rs. 46,62,623, of which paid up capital was Rs. 3,77,077 and borrowings Rs. 42,85,431. Their statutory reserve funds of Rs. 115 were negligible.

These Banks sanctioned Rs. 20,85,676 as long-term loans to 576 members up to the end of June 1971 and made a net profit of Rs. 50,226. (The Bank at Sundargarh Rs. 48,660 and the Bank at Rourkela Rs. 1,566. The Bank at Bonai had sustained a loss of Rs. 198 during this year). The bulk of the loans is available for purchasing tractors, pump sets, for digging wells and land improvements. The Banks have financed the purchase of 2 tractors and 92 pump-sets in the district.

Service Co-operative Societies

There are 84 Service Co-operative Societies with a total membership of 47,879. These societies function at village level as the agencies for distribution of agricultural inputs and agricultural credit to the farmers. The societies had a total working capital of Rs. 71,58,942 up to June 1971, and comprised Rs. 19,69,244 as paid-up capital, Rs. 9,39,932 as reserve fund, Rs. 7,18,625 as deposits, and Rs. 35,31,141 as borrowings. The societies during the above period advanced Rs. 8,99,622 as short-term loans and Rs. 1,26,885 as medium-term loans. The Service Societies distributed fertilisers worth Rs. 87,287 and food-grains worth Rs. 76,607 during 1970-71. Out of the total 84 Service Co-operative Societies, 57 Societies had made a net profit of Rs. 3,93,734 and 27 Societies sustained a total loss of Rs. 1,43,170.

Employees' Credit Co-operative Societies

There were 10 Employees' Credit Co-operative Societies with a total membership of 2,536 up to the end of June 1971. The Societies had a total working capital of Rs. 5,15,546 consisting of Rs. 2,22,881 as paid-up capital, Rs. 2,49,734 as deposits, and Rs. 44,931 as statutory reserve fund. The societies had made a profit of Rs. 29,011 during the year 1970-71.

Role of Government

Taccavi loans are granted by the Orissa Government both under the Agriculturist Loans Act, and the Land Improvements Act. The number of farmers assisted and the amounts disbursed varied sharply from year to year. In 1967-68, 952 farmers were granted loans of Rs. 1,55,000. In the next year 656 farmers were assisted with Rs. 1,46,000, and in 1969-70, 305 farmers got Rs. 23,000 as Taccavi loan. These loans are mainly granted in years of scarcity and in abnormal years.

GENERAL AND LIFE INSURANCE
Life Insurance Corporation of India

The Life Insurance Corporation of India has a branch office at Rourkela, established in 1956; and a sub-office at Birmitrapur. A drive has been made to spread the insurance business to remote corners by posting Development Officers in various rural areas. Salary Savings Scheme and Group Insurance Scheme have been introduced and there is the possibility of introducing the Superannuation Scheme. The organisation advances loan to the people for the construction of residential buildings within the limits of Rourkela Notified Area Council and for other productive purposes against mortgage of property.

The following figures show the transaction done by this organisation during the years 1970-71, 1971-72 and 1972-73.

	1970-71	1971-72	1972-73
1. No. of policies in force.	1,73,425	1,88,751	2,05,250
2. Sum assured (in Rs.)	74,81,87,613	87,61,32,759	102,54,08,687
3. Total Receipts (Income)	2,78,75,800	3,60,38,664	3,89,68,619
4. Total payment (Outgo)	1,35,04,554	1,52,72,914	1,04,49,975

From 1964 to 1972, this office was doing business in General Insurance. The volume of business per year was approximately rupees ten lakhs. Since 1972, the Life Insurance Corporation of India has stopped doing business in General Insurance. Other organisations, such as, the Hindustan General Insurance Ltd., the New India Insurance Ltd., the Ruby General Insurance Ltd., the National General Insurance Ltd., and the Oriental Fire and General Insurance are operating in this field in the district.

Under the State Aid to Industries Act, the State Government have assisted 37 units up to the end of December 1970 with an aggregate loan of Rs. 1.88 lakhs. These units include tile factory, carpentry units, saw mills, printing presses, bakery, leather works, radio assembling, brick manufacturing, rope making, etc. The State Financial Corporation has financed 15 industrial units to the tune of Rs. 10.33 lakhs. The industrial units include miscellaneous industries producing engineering goods, soft drinks, rubber goods, fabricated materials, and cold storage. During the years 1971-72 and 1972-73 the State Government have assisted 31 units with a total amount of Rs. 1,33,800. A detailed account with the amount granted as loan to each industry and number of units has been given in Appendix II of the Chapter.

STATE ASSISTANCE TO INDUSTRIAL DEVELOPMENT

The routes passing through the Ib and the Brahmani river valleys in the district served as ancient trade routes. The people of this area were carrying on trade with Madhya Pradesh, Bihar and other neighbouring areas in various forest products like peacock feather, ivory, lac, and myrobalan, etc.

TRADE AND COMMERCE

During the beginning of the present century, in the ex-State of Gangpur, the principal articles exported were cotton, sesamum, lac, honey, arrow-root, catechu, sabai-grass, and wax; and the principal articles imported were salt, sugar, piece-goods, spices, and kerosene oil. During this period in the ex-State of Bonai, the main articles exported were lac, myrobalans, sabai grass, and other forest products. Large quantities of wild tusser silk cocoons were also exported.

Towards 1930 the export of timber, hides, oilseeds, and jungle produce took place and the imports consisted of piece goods, salt, kerosene, petrol, and fancy articles brought in by Katchi and Marwari traders. Within the ex-States trade was chiefly carried on by women of the labouring class at small weekly markets. The system of barter was in vogue and the commodities consisted of rice, millets, vegetables, and tobacco. Beyond this, there was no special trade in the ex-State of Bonai. During this period, in the ex-State of Gangpur lime was exported by the Bisra Lime Stone Company through Birmitrapur-Rourkela branch railway line. The railway station at Bisra, Kalunga, Rourkela, and Panposh drained rice and timber of Nagra ex-State. Lac and timber of Talsara, Rajgangpur and Raiboga police stations and of the southern portion of Ranchi district (which is in Bihar) were exported; and salt, cloth, oil, and other fancy goods were imported through Rajgangpur railway station. Timber and rice of Sundargarh, Bhasma, and Lefripara police stations were exported through Jharsuguda railway station which is in Sambalpur district. Bamboo, rice timber, and sleepers of Hemgir police station were exported through Hemgir-Road railway station.

A fair at Vedavyasa in Panposh subdivision which is held every year on the Sivaratri festival attracts shopkeepers from distant places. The cattle fairs at Sundargarh, Sargipali, and Rajgangpur were wellknown. Rajgangpur, Birmitrapur and Bisra were trade centres from which cloth, kerosene and petrol were distributed to Bonai and many other places.

The steel township of Rourkela has now emerged as the nerve centre of trade and commerce in the district. Most of the wholesalers and retail traders are concentrated in the Rourkela City. In 1971, the number of licensed wholesalers and retail traders were 14 and 1,223 respectively in the district. The number of unlicensed retailers and petty shop-keepers, who are many in the district, is not known. Rajgangpur, Sundargarh, Bonai, and Birmitrapur are other important trade centres which also serve as marketing centres for the surrounding areas. Trade relations of Rourkela City are mostly with Jamshedpur, Ranchi, Calcutta, Raipur, and Bombay. The district has trade links with Madhya Pradesh and Bihar being a border district of these two States.

Weekly markets are important channels of local trade. Agricultural and forest products are mostly marketed in these markets. There is no regulated market in the district. Barter still prevails to a large extent among the local Adivasis.

The principal items of import of the district are ferro-manganese, ferro-silicon, coal, chemicals, medicines, engineering goods, food stuff, fertilisers, textile goods, petrol, edible oils, stationery, etc. The main items of export are minerals like iron ore, dolomite, limestone, manganese and forest products like bamboo, timber, kendu leaves, mohua flower, sialifibre, lac, etc. Besides, engineering goods, fabrication works, machinery, steel products, fertilisers, brooms, cement and refractories are being exported.

Imports and exports of the district are handled by the railways and road transport. The total goods traffic through railways during 1970-71 in the district was 2,38,48,629 tonnes.

The goods traffic in different railway stations of the district from 1965-66 to 1970-71 is shown in Appendix III of the Chapter.

The rural marketing centres are mostly weekly or bi-weekly markets (hats) which serve as centres of local trade. Foodgrains constituting mostly of rice and pulses, vegetables, cloths, forest products, toilets and other cheap fancy articles are being transacted in these rural markets. These hats are managed by the Grama Panchayats and leased out to the highest bidders.

Rural
Marketing
Centres

A list of rural marketing centres with their market days is given in Appendix IV of the Chapter.

There are two wholesale co-operative stores at Rourkela, of which one is for the employees of the Hindustan Steel Limited. These co-operative stores, during 1971-72, had a total working capital of Rs. 5, 26,338 with 333 individuals and 30 consumers' stores as members. During this period they have made transactions of Rs. 35,15,352 with a net profit of Rs. 59,039.

CO-OPERATION IN
WHOLESALE
AND RETAIL
TRADE
Whole-sale
Consumer's
Co-operative
Stores

There are 47 Primary Consumers' Co-operative Stores in the district with a total membership of 11,890 persons, and 60 co-operative stores. During 1971-72, they have made business worth Rs. 46,805.

Primary
Consumers'
Stores

There are two multipurpose co-operative stores with headquarters at Utmal, and Bisra. The store at Bisra has a working capital of Rs. 223 with 11 persons as members. The store at Utmal is more active with a working capital of Rs. 23,200, and 2,016 individuals as members. During 1971-72, it has done transaction in foodgrains worth Rs. 2,50,570 with a net profit of Rs. 5,788.

Multipurpose
Co-operative
Stores

Joint-Farming Co-operative Societies

There are three Joint-Farming Co-operative Societies, located at Kukuda, Budelkani, and Timadihi. They are cultivating 24 hectares of land with a total working capital of Rs. 35,535. Of the three societies, the society at Kukuda has produced and sold, during 1971-72, food grains of the value of Rs. 9,651.

Regional Co-operative Marketing Societies

The Regional Co-operative Marketing Societies are organised for handling various types of agricultural produce grown within its jurisdiction. Two societies, located at Sundargarh and Rourkela, are functioning in the district. The number of villages in their area of operation is 1617 with 183 membership. The total working capital is Rs. 4,74,044 of which Rs. 4,15,497 is their paid-up share capital. During 1971-72, these societies purchased agricultural produce worth Rs. 66,228, fertilisers worth Rs. 1,86,427, and consumer goods of the value of Rs. 4,141. During this period they sold paddy, wheat, oil-seeds, and consumer goods of the value of Rs. 62,182, Rs. 2,795, Rs. 2,392, and Rs. 4,518, respectively. The societies are engaged in the distribution of chemical fertilisers to the service co-operative societies, who in their turn, supply them to the producers of their areas. During 1971-72, they have distributed fertilisers worth Rs. 96,486.

Forest Marketing Co-operative Societies

There are three Forest Marketing Co-operative Societies located at Jamdihi, Bargaon, and Bisra. The total number of villages in their area of operation is 30. The working capital is Rs. 29,219 constituting Rs. 4,607 as paid-up share capital. The value of sales, during 1971-72, was Rs. 28,010.

Milk-Supply Co-operative Society

There is one Milk-Supply Co-operative Society at Koira. It is functioning with a working capital of Rs. 20,220 and 28 membership. During 1971-72, it earned a profit of Rs. 70'00.

STATE TRADING Fair Price Shops

In August 1972 there were 411 fair price shops in the district serving a population of 9,30,800. Through these shops, 1,31,350 quintals of rice and 24,531 quintals of wheat were sold during November, 1971 to August, 1972.

Trade in Kendu Leaves

Kendu leaves provide raw materials for Bidi industries both inside and outside the State, and thus bring in large revenue to the State exchequer. Kendu leaf bushes grow spontaneously in the forests and on 'at lands' mainly in the districts of western Orissa and in some pockets of other districts. In order to regulate the trade the State Government declared Kendu leaves as essential commodity and promulgated Kendu Leaves (Control and Distribution) Order, 1949, which was replaced by another control order viz., the Orissa Kendu Leaves Control Order, 1960. Under both the control orders Government were leasing out Kendu leaves growing areas to the private persons on annual royalty basis. These systems were not found to be fool-proof against smuggling of Kendu leaves and leakage of Government

revenue. Besides, it was considered necessary to maintain the quality and to ensure fair price to the pluckers and growers of Kendu leaves. Keeping in view the above aspects, and in pursuance of the recommendations of "The Orissa Taxation Enquiry Committee", the State Government enacted and enforced the Orissa Kendu Leaves (Control of Trade) Act, 1961 and framed the Orissa Kendu Leaves (Control of Trade) Rules, 1962. Under the provisions of the above Act and Rules the State Government took up monopoly trade in Kendu leaf from 1962. The monopoly system of trading and the income of the State from Kendu leaf was raised from 1 crore in 1962-63 to 2'83 crores in 1971-72.

With a view to ensuring increased revenue to the State exchequer by eliminating middlemen in this trade as well as to bring in some profit to the Orissa Forest Corporation Ltd., which is a State Government undertaking, the State Government nationalised the trade in Kendu leaf since January, 1973 and evolved a system of joint working of the trade. According to the joint scheme the Forest Department is in-charge of the production of Kendu leaves, and the storage, collection and bagging of processed leaves; and the Orissa Forest Corporation Ltd., is entrusted with the marketing of the processed bags inside and outside the country as the selling agent of the Government.

This system of operation of Kendu leaf trade is working within the general frame-work of the Orissa Kendu Leaves (Control of Trade) Act, 1961 and Rules made thereunder. In addition, a Manual entitled "The Orissa Kendu Leaf Manual, 1973" has been framed which specifies the duties and responsibilities of various field staffs and contains the guide-lines for the functional part of the trade entrusted to the Forest Department. The accounting part of the trade, so far as the Departmental portion is concerned, is being governed by the accounting procedure formed under the Orissa Kendu Leaves (Control of Trade) Act, 1961.

In pursuance of the provisions under Section 4 of the Orissa Kendu Leaves (Control of Trade) Act, 1961, the State Government, in consultation with the Advisory Committee, have fixed the following purchase rates of Kendu leaves from the growers and pluckers for the year 1974.

1. 30 (thirty) green leaves per paise.
2. A minimum of Rs. 60/- (rupees sixty) per bag of one quintal of processed leaves subject to the condition that the growers supply the dry leaves and get the leaves processed at the places fixed by the Forest Department.

Purchase Rates from Growers

Rate of
collection
from
pluckers

30 (thirty) green leaves per paise.

To ensure proper and timely payment of the price to the growers and wages to the pluckers, Village Committees have been formed to supervise payments.

In order to ensure smooth working of the trade, particularly to ensure the estimated revenue to the State exchequer, an agreement is being executed between the Forest Department and the Orissa Forest Corporation Ltd., every year on the terms and conditions as decided by the Government. The salient features of the agreement executed for the year 1974-75 are given below :—

The agreement was made on the 1st May, 1974 between the Government of Orissa and the Orissa Forest Corporation, Ltd. according to which the State Government have appointed the Orissa Forest Corporation Ltd., as the Selling Agent under Section 10 of the Orissa Kendu Leaves (Control of Trade) Act, 1961 for the disposal of the Kendu leaves purchased by the Government.

The agreement shall remain in force from 1st April, 1974 to 31st March, 1975 and may be renewed as may be agreed upon by both the parties.

With effect from April, 1974, Government in the Forest Department will collect the Kendu leaves by purchase or otherwise through their officers and employees in the Forest Department and process the same. The Orissa Forest Corporation Ltd., will market these Kendu leaves on behalf of the Government as their Selling Agent. The Government will ensure collection and production of processed Kendu leaves and will give delivery of the bags of processed leaves to the Corporation for the purpose of marketing.

The Orissa Forest Corporation Ltd., will make advance payment of its dues to the Government obtaining it from the State Bank of India as per Cash Credit Facility granted to the Orissa Forest Corporation Ltd., by the said Bank. The Government have agreed to allow the Orissa Forest Corporation Ltd., to hypothecate the Kendu leaf crop, raw and processed, at the disposal of the Government to the State Bank of India in order to enable the Orissa Forest Corporation Ltd., to obtain the loan from the State Bank of India.

The Orissa Forest Corporation Ltd., shall pay the Government Rs. 230 per quintal of processed Kendu leaf or for 133 kg. of loose leaves (Phali bags) delivered to them, and the aforesaid amount of Rs. 230 shall include Rs. 130 per quintal for meeting the cost of

collection and processing. The Corporation will pay towards royalty Rs. 3.60 crores (State figure) to the Forest Department by selling 3.60 lakh quintals (State figure) of Kendu leaves supplied by the Government, at the rate of Rs. 100 per quintal of processed leaves or 133 kg. of loose leaves (Phali bags), after deducting its administrative charges limited to a maximum of Rs. 25 lakhs plus the Bank interest. For any excess production and sale, the same charge at the rate of Rs. 100 per quintal towards royalty shall be payable. The payment towards royalty will be made in three equal instalments.

In case average sale value of all the Kendu leaves supplied by the Government below Rs. 255 per quintal, for reasons beyond the control of Orissa Forest Corporation Ltd., necessary deduction on account of royalty, as per the decision of Kendu Leaves Co-ordination Committee, will be made. In case the average sale value exceeds Rs. 255 per quintal, the amount towards royalty payable by the Orissa Forest Corporation Ltd., will be increased by such amount, as may be decided by the Kendu Leaves Co-ordination Committee.

Government will be kept informed about the sale programme by the Orissa Forest Corporation Ltd., in the interest of securing Government revenue.

Over and above the aforesaid arrangements, Co-ordination Committees at the district level have been formed with the District Collector as Chairman to review the progress of operation periodically and to find out solutions of the bottle-necks, if any.

The State level Co-ordination Committee meets periodically to review the progress of the trade as a whole, solves the difficulties, if any, and *inter-alia* determines the sale-policy of the Kendu leaves produced.

At present the Orissa Forest Corporation is adopting the following methods of sale inside the country for the disposal of Kendu leaves delivered to them by the Forest Department.

1. Forward sale by tender.
2. Sale against ready stock by tender/auction.
3. Sale through retail sale centres.
4. Sale through commission agents.

The Orissa Forest Corporation Ltd., is also exporting Kendu leaves to Sri Lanka and is endeavouring to search markets in other countries.

As envisaged under Section 11 of the Orissa Kendu Leave (Control of Trade) Act, 1961, not less than 50 per cent of the net profit derived from the Kendu leaves trade continues to be distributed as grant-in-aid to the Grama Panchayats and Panchayat Samitis.

MERCHANT ASSOCIATION

There is one Merchant Association at Rourkela called 'Rourkela Chamber of Commerce'. The object of the Association is to promote matters of business. It collects and provides information relating to trade, commerce and industry to the members of the business community. The management of the business of the Chamber is vested in a Managing Committee, the members of which are elected for a period of five years. Up to the 11th March 1972, there were 193 members on the roll. The Association is taking keen interest in the economic development of the district.

WEIGHTS AND MEASURES

Prior to the enforcement of the metric system of weights and measures Katha and Tambi were used in the ex-State of Gangpur. These were standardised by the ex-State authority and bore the seal of the ex-State. The Tambi was double of the Katha. Paila was used by the tenants of Nagra ex-Estate. By actual weighment, the weight of one standard Katha measure of paddy, rice, and fine rice was as follows :

Paddy	..	60 tolas
Rice	..	85 tolas
Fine rice	..	85 tolas

In the ex-State of Bonai, the following three types of measures were in use.

1. The Korua Paila, so called because all payments in kind or Kor were made with this measure.

2. The Bhuti Paila was the measure by which Bhutis or field labourers were paid.

3. The Seer Paila, a capacity of 80 tolas for measuring rice, was used at all markets.

In the absence of any of these measures the difficulty was got over by measuring with hand—fuls, one handful being a Pos. Ten Pos were equal to one Korua Paila equivalent to 2 seers of rice and $1\frac{1}{2}$ seers of paddy. Six Pos were one Bhuti Paila equivalent to $1\frac{3}{16}$ seers of rice and $14/16$ seer of paddy. Five Pos were equal to one Seer Paila equivalent to one seer of rice and $3/4$ seer of paddy. Twenty Pailas made one Khandi, and 10 Khandis were equal to one Purug.

These measures varied not only in nomenclature but also in capacities from area to area, and the buyers were generally cheated. Besides, the traders were in difficulties while transactions were done with other districts. So, with a view to overcome these difficulties, the metric system of weights and measures has been introduced as an All India Standard from the 1st April 1960.

The metric system of weights and measures has been made compulsory in the district from the 1st April, 1962. Initially difficulties were experienced by both the consumers and traders, but after regular practice and propaganda through distribution of conversion tables, charts, and pamphlets the system is now easily understood by the people.

The following table shows the old measures and their equivalent in metric units.

Old measures		Metric equivalent	
Tambi	.. For measuring paddy	120 tolas	1'400 grams.
	For measuring rice ..	170 tolas	1'983 grams.
Katha	.. For measuring paddy	60 tolas	0'670 grams.
	For measuring rice ..	85 tolas	0'991 grams.
Korua Paila	.. Ditto ..	160 tolas	1'863 grams.
Bhuti Paila	.. Ditto ..	120 tolas	1'400 grams.
Seer Paila	.. Ditto ..	80 tolas	0'933 grams.
Khandi	.. Ditto ..	20 seers	18.662 grams.

APPENDIX I

The list of Banks in the district up to 1970-71

Name of the Bank		Year of establishment	Location of the Bank.
State Bank of India	..	1957	Sundargarh
State Bank of India	..	1958	Rourkela
State Bank of India	..	1970	Bonai
Central Bank of India	..	1966	Rourkela
United Bank of India	..	1958	Rourkela
United Commercial Bank	..	1961	Rourkela
United Commercial Bank	..	1964	Rajgangpur
Bank of Baroda	..	1964	Rourkela
Bank of India	..	1963	Rourkela
Bank of India	..	1967	Rourkela
Punjab National Bank	..	1967	Rourkela
Union Bank of India	..	1966	Rourkela

APPENDIX II

State aid loan sanctioned during the years 1971-72 and 1972-73 to different industries

Name of Industry	Number of units	Amount advanced
Sheet Metal Factory	1	Rs. 5,000'00
Brick Manufacturing Unit	17	Rs. 69,100'00
Ready-made garments	2	Rs. 6,800'00
Confectionary	1	Rs. 5,000'00
Automobile Workshop	1	Rs. 5,000'00
Photograph Unit	1	Rs. 4,500'00
Gurakhu Factory	1	Rs. 4,400'00
Rolling-Shutter	1	Rs. 5,000'00
Book binding	1	Rs. 5,000'00
Tile Factory	4	Rs. 20,000'00
Flour Mill	1	Rs. 4,000'00

APPENDIX III

The following table shows the goods traffic in different railway stations of the district from 1965-66 to 1970-71

(Weight in Quintals)

Railway Station	Years					
	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
Bisra ..	56,879	55,469	42,144	43,829	34,790	42,380
Rourkela ..	45,739,696	54,814,378	54,415,189	59,221,738	62,557,559	63,991,033
Panposh ..	3,804	7,274	8,020	3,161	..	..
Kalunga ..	112,630	136,807	161,726	131,756	76,670	68,040
Kansbahal ..	138,889	118,304	102,896	98,375	27,860	17,770
Rajgangpur ..	6,597,099	7,523,438	7,106,826	7,832,644	5,248,410	4,869,370
Sonakhan ..	..	992	1,106	3,942	2,420	2,160
Dharuadihi ..	7,877	1,151	529	1,099	6,690	4,390
Birmiltrapur ..	754,992	1,095,195	642,705	1,423,687	16,466,880	158,374,610
Dumerta ..	2,114,729	2,421,703	2,666,199	3,055,278	1,408,980	922,180
Lathikata ..	267,773	264,120	119,785	281,193	333,484	414,095
Chandiposh ..	15,243	84,333	69,734	25,176	9,919	9,399
Bimalgarh ..	1,108	53,807	261,146	590,778	1,742,443	589,789
Barsuan ..	9,395,779	6,022,528	7,900,623	10,577,697	10,470,469	9,791,035

APPENDIX IV

A detailed list of rural markets and market days in the district

Tahsils and Police Stations	Location of the markets	Market days
Sundargarh Tahsil		
Sundargarh Police Station	.. Chakramal	.. Tuesday
	Tangarpali	.. Tuesday
Talsara Police Station	.. Sagjori	.. Friday
	Telia	.. Monday
	Balisankra	.. Saturday
	Rampur	.. Tuesday
	Rauldega	.. Thursday
	Titheitangar	.. Saturday
	Hutupani	.. Saturday
	Tangargaon	.. Tuesday & Friday
	Kiralaga	.. Sunday
	Tumulia	.. Sunday
	Tileikani	.. Friday
	Kinjirkela	.. Friday
	Sabdega	.. Wednesday
Bhasma Police Station	.. Birbira	.. Saturday
	Majhapada	.. Tuesday
	Dharuadihi	.. Friday
	Gadiagore	.. Sunday
Hemgir Tahsil		
Hemgir Police Station	.. Jamkani	.. Wednesday
	Laikera	.. Tuesday
	Garjanbahal	.. Friday
	Gopalpur	.. Sunday
	Bilaimunda	.. Monday
	Taparia	.. Saturday
	Ratakhandi	.. Saturday
	Kanika	.. Monday
	Julumbahal	.. Wednesday

Tahsils and Police Stations	Location of the markets	Market days
Lefripara Police Station	.. Alapaka ..	Sunday
	Gundiadihi ..	Monday
	Bailama ..	Wednesday
	Rajbahal ..	Friday
	Behramal ..	Tuesday
	Fuldhudi ..	Wednesday
	Lefripara ..	Saturday
	Sargipali ..	Thursday
	Aunlabahal ..	Wednesday
Rajgangpur Tahsil		
Rajgangpur Police Station	.. Gairbahal ..	Thursday
	Kahapani ..	Sunday
	Falsakani ..	Saturday
	Khatkurbahal ..	Saturday
	Kutra ..	Wednesday
	Litibeda ..	Wednesday
	Lanjiberna ..	Monday
	Kukuda ..	Friday
	Kesramal ..	Wednesday
	Lamloi ..	Sunday & Tuesday
	Jharbera ..	Tuesday & Saturday
	Kutunia ..	Tuesday
	Dheluan ..	Saturday
	Bijakhman ..	Thursday & Sunday
	Talkudar ..	Thursday & Sunday
	Buchukupada ..	Thursday & Sunday
	Malidihi ..	Thursday and Sunday
	Ranipia ..	Thursday & Sunday

Tahsils and Police Stations	Location of the markets	Market days
Bargaon Police Station	.. Nuagaon ..	Tuesday
	Ekma ..	Wednesday
	Siamal ..	Saturday
	Panchara ..	Friday
	Sahajbahal ..	Tuesday
	Jarangloi ..	Thursday
	Dandijamira ..	Saturday
	Gangajal ..	Monday
	Tudalaga ..	Friday
	Bargaon ..	Sunday & Thursday
	Itma ..	Wednesday
Panposh Tahsil		
Bisra Police Station	.. Sahilata ..	Saturday & Tuesday
	Kokerama ..	Tuesday
	Baidyanathpur ..	Thursday & Saturday
	Korkotnasa ..	Saturday
	Gutitatangar ..	Thursday & Saturday
	Nuagaon ..	Monday & Thursday
	Sanjojoda ..	Wednesday
	Katepur ..	Tuesday & Friday
	Surda ..	Sunday
	Hatibari ..	Thursday
	Ankurpali ..	Tuesday
	Baraigoda ..	Friday
	Ghodabandh ..	Thursday
	Patrapali ..	Thursday
	Jareikela ..	Wednesday
	Kupsinga ..	Monday

Tahsils and Police Stations

Location
of the
markets

Market days

	Khuntgaon	.. Saturday & Wednesday
	Bangurkela	.. Wednesday
	Dhodhari	.. Wednesday
	Bhalulata	.. Thursday
	Bisra	.. Sunday
	Puruna Bisra	.. Sunday
	Dumermunda	.. Sunday
	Borahbas	.. Tuesday
Raghunathpali Police Station ..	Jalda	.. Monday & Friday
	Ataghat	.. Thursday
	Budikudar	.. Thursday & Monday
	Suidihi	.. Thursday
	Turiberna	.. Thursday & Saturday
	Ramjodi	.. Monday
	Jagada	.. Saturday
	Jhirpani	.. Monday
	Jabaghat	.. Friday
	Bandamunda	.. Thursday
	Kukuda	.. Tuesday
Kalunga Police Station ..	Malikapali	.. Monday & Thursday
	Kalunga	.. Monday & Thursday
	Birkera	.. Tuesday
	Sanbirkera	.. Tuesday
	Musapali	.. Thursday
	Bad Dalki	.. Thursday
	Tainsar	.. Wednesday

Tahsils and Police Stations

Location
of the
markets

Market days

Birmitrapur Police Station ..	Padmapur	.. Tuesday
	Kurumunda	.. Wednesday
	Kacharu	.. Thursday
Raiboga Police Station ..	Raiboga	.. Sunday & Thursday
	Jhunmur	.. Tuesday
	Andali	.. Wednesday & Saturday
	Dungabandh	.. Wednesday
	Budikuda	.. Sunday & Thursday
	Kantabeda	.. Tuesday, Thursday and Sunday.
	Jhandapahar	.. Wednesday
Bonai Tahsil		
Bonaigarh Police Station ..	Lahunipara	.. Wednesday & Sunday
	Tibupada	.. Wednesday & Sunday
	Badsahajbahal	.. Thursday & Sunday
	Raikela	.. Sunday & Friday
	Barsuan	.. Friday & Sunday
	Bhutuda	.. Sunday
	Tensa	.. Daily Market
	Kurda	.. Tuesday
	Bonaigarh	.. Monday & Thursday
	Kurdapali	.. Saturday
	Gadapali	.. Saturday
	Kenavata	.. Wednesday
	Sendhpur	.. Friday
	Indarpur	.. Friday
	Jangla	.. Sunday

SUNDARGARH

Tahsils and Police Stations

Location
of the
markets

Market days

Gurundia Police Station	.. Sol	.. Friday
	Jara	.. Tuesday
	Pankdihi	.. Saturday
	Jamudarh	.. Sunday
	Rayatsatkuta	.. Tuesday
	Gurundia	.. Friday
	Kansara	.. Wednesday
	Kundheidiha	.. Saturday
Banki Police Station	Lachhada	Sunday
	.. Banki	.. Saturday
	Dharbeda	.. Thursday
	Chandiposh	.. Tuesday
	Kusumdihi	.. Monday
	Tamada	.. Monday
	Jhirpani	.. Monday
	Birtola	.. Friday
Kamarposh Balang Police Station	.. Badabaliore	.. Friday
	Fakirmunda	.. Saturday
	Dalimdihi	.. Saturday
	Bimalgarh	.. Saturday
	Kamarposh Balang	Tuesday
Koira Police Station	Chordhara	.. Monday
	.. Kalmang	.. Tuesday
	Malda	.. Sunday
	Kenaveta	.. Tuesday
	Deogharia	.. Tuesday
	Gidei	.. Tuesday

Tahsils and Police Stations

Location
of the
markets

Market days

	Koira	.. Saturday
	Dengula	.. Sunday
	Patmunda	.. Thursday
Tikayatpali Police Station	.. Sarsara	.. Tuesday
	Phuljhar	.. Friday
Mahulpada Police Station	.. Jadibahal	.. Friday
	Uskela	.. Friday
	Sasa	.. Friday
	Kiri	.. Friday
	Keta	.. Friday
	Hatisal	.. Friday
	Patamunda	.. Friday
	Senabasa	.. Friday
	Nagaria	.. Friday
	Upargenia	.. Friday
	Mahulpada	.. Monday

CHAPTER VII

COMMUNICATIONS

OLD-TIME
ROUTES AND
HIGHWAYS

Communication facilities in the ex-States of Gangpur and Bonai improved perceptibly during the second quarter of this century. Cobden-Ramsay describes the road condition of the ex-Gangpur State in 1907-08 as follows¹:

"There is only one good road in the State, the road from the headquarters, Sundargarh, to the Jharsuguda railway station; half of the road lies within the State and half in the district of Sambalpur; the road is bridged throughout except at the large Sapai nullah, where a good ferry is maintained. A large and substantial bridge is, however, in course of erection. There is a fair surface track with small wooden bridges from Kumarkela or Raj Gangpur, an important village on the line of rail, to Sundargarh: a surface track continues north from Sundargarh to Loakara, on the Ib in the Jashpur State. In the Nagra zamindari a good road, some 13 miles in length, is under construction from Panposh on the railway line to Banki, just across the boarder in the Bonai State: this road will be continued through to Bonaigarh. Elsewhere the only means of communication are tracks used by pack-bullocks and the solid wheeled country carts, known as *sagars*. Communications are defective, but are gradually improving". About communication in the ex-State of Bonai in 1907-08, the same author remarks², "With the exception of the road to Banki, there are no regular roads in the State. At the best there are a few bullock-tracks, and travelling is a most difficult and slow process. Formerly carts could scarcely proceed from the railway to Bonaigarh owing to the difficulties of the road through the Champajharan Pass: the pass has, however, been recently opened out by blasting and through communication for carts is no longer a difficulty: a good road from the line of rail to the headquarters is now under construction".

The traffic in the interior of these two ex-States was made almost entirely by pack-bullocks or by coolies and during rainy season it was usually at a stand still. In the rains small boats were carrying goods down the Ib to Sambalpur. Carts drawn by bullocks were used by people in general while horses and elephants were used by the rulers, zamindars and other wealthy people.

1. Feudatory States of Orissa, p. 183

2. *Ibid.*, p. 154

In 1932, the Chief Editor motored from Sambalpur to Bihar. The only unbridged river crossing was at Vedavyasa where two country boats tied together took his car (Oakland Tourer) across the Brahmani.

By the end of 1946, most of the existing roads of the district were constructed. That year the ex-State of Bonai maintained about 250 miles (400 km.) of roads of which 49 miles (78.4 km.) were all weather while the ex-State of Gangpur had 351 miles (561.6 km.) including 108 miles (172.8 km.) of all weather roads.

After the expiry of twenty years ending 1966, the district had 980 km. of roads maintained by the Public Works Department of which 398 km. were metalled.

At present, the Public Works Department maintains in this district 249 km. of State Highways, 324 km. of Major District Roads, 31 km. of Other District Roads and 388 km. of classified village roads. For the construction and maintenance of these roads, this Department has spent 20.04 lakhs in the 1st Plan period (April 1951 to March 1956), 138.88 lakhs in 2nd Plan period (April 1956 to March 1961), 350.13 lakhs in 3rd Plan period (April 1961 to March 1966) and 207 lakhs up to March 1971 of 4th Plan period. A list of some of the important roads is given in Appendix I.

Different Grama Panchayats and Panchayat Samitis of the district maintain about 2,500 km. of roads. Most of these are dust roads.

The four urban local bodies located at Sundargarh, Rajgangpur, Birmittapur, and Rourkela (Civil Township) are in charge of 166.58 km. of roads.

Besides, the Forest Department and the Rural Engineering Organisation are also maintaining 482 km. and 380 km. of roads respectively in the district.

Like other parts of the country, bicycle is used in both rural and urban areas of the district. Bullock-carts still play an important role in transportation of goods in rural areas. Cycle rickshaws are generally seen in urban areas. Besides, trucks, taxis and cars are also used as means of conveyance.

By the end of 1970, about 13,000 bicycles, 1,400 cycle rickshaws and 30 bullock-carts were registered in different Municipalities and Notified Area Councils of the district. In this year there were 9 horse-drawn carriages plying at Rourkela. By the end of 1971, 10,099 motor vehicles including 5,170 motor cycles and scooters, 1,836 trucks, 1,423

ROAD
TRANSPORT

VEHICLES
AND CONVEYANCES

cars, 92 buses, 1,114 jeeps, 224 taxis and auto-rickshaws, 64 station wagons, 168 tractors and trailers and 8 petrol and water carriers were registered in the office of the Regional Transport Authority, Sundargarh.

In urban areas, cycle rickshaws charge about 50 paise per km. The average taxi fare per passenger is slightly higher than the fare in a public bus. There is no fixed rate for hiring a truck. But usually the truck owners charge Rs. 1.50 to Rs. 2 per km.

PUBLIC TRANSPORT

Nationalised buses are plying in most parts of the district. In some of the routes private parties are also permitted by the Regional Transport Authority to run their buses.

Regional Transport Authority

The Regional Transport Authority of the district consists of three non-official and five official members of which the Regional Transport Officers posted at Sundargarh and Rourkela act as the Secretary and the Additional Secretary respectively.

The Transport Authorities have allowed eleven private bus owners to ply their vehicles in twelve routes viz., (a) Rourkela to Malda (179 km.), (b) Jareikela to Kalunga (43 km.), (c) Laxmiposh to Jhurmur (139 km.), (d) Lathikata to Jhirpani (40 km.), (e) Purunapani to Koira (178 km.), (f) Bisra to Purunapani (72 km.), (g) Bargaon to Rourkela (72 km.), (h) Jareikela to Lathikata (50 km.), (i) Dalki to Bonaigarh (65 km.), (j) Sundargarh to Sikaljore (48 km.), (k) Sundargarh to Lulkidihi (65 km.) and (l) Sundargarh to Kanika (75 km.). Of these, the first eight are all-weather routes. The private bus owners charge from each passenger 3.5 paise per km. as fare.

State Trans- port Service

Rourkela zone of State Transport Service comprising Rourkela and Sundargarh sub-zones with headquarters at Rourkela, plies buses in 26 inter-State, inter-district and intra-district routes. The Divisional Transport Manager controls the zone.

The following routes are operated under both the units.

Sundargarh Unit

Sl. No.	Name of the route	Km.	Daily trips	No. of buses plying
1.	Sundargarh-Bhubaneswar	.. 406	1	2
2.	Sundargarh-Sambalpur	.. 86	2	2
3.	Sundargarh-Jharsuguda	.. 35	1	1
4.	Sundargarh-Rajgangpur	.. 69	1	1
5.	Sundargarh-Rourkela	.. 112	1	1
6.	Sundargarh-Gangpur border	.. 53	1	1
7.	Sundargarh-Bonaigarh	.. 174	1	1

Sl. No.	Name of the route	Km.	Daily trips	No. of buses plying
*8.	Sundargarh-Dumabahal	.. 45	1	1
9.	Sundargarh-Dhama	.. 118	1	1
10.	Sundargarh-Darlipali	.. 34	1	1
11.	Sundargarh-Daldali	.. 37	1	1
12.	Jharsuguda-Jashpurnagar	.. 171	1/2	1
13.	Sundargarh-Birbira	.. 35	1	1
14.	Sundargarh-Jamankira	.. 125	1	1

Rourkela Unit

1.	Rourkela-Bhubaneswar	.. 514	1	3
2.	Rourkela-Cuttack (de luxe)	.. 484	1	3
3.	Rourkela-Cuttack (Day)	.. 484	1	3
*4.	Rourkela-Talcher	.. 224	1	3
5.	Rourkela-Jashpurnagar	.. 248	1/2	1
6.	Rourkela Town	.. ..	..	3
*7.	Rourkela-Bonaigarh via, Kalunga	96	1	1
8.	Rourkela-Jajpur	.. 385	1	3
9.	Rourkela-Bhadrak	.. 406	1/2	2
10.	Rourkela-Deogarh	.. 315	1	1
11.	Rourkela-Purunapani	.. 103	4	4
12.	Rourkela-Birmitrapur	.. 77	2	1
13.	Rourkela-Kiriburu	.. 383	1	2

Besides, the buses of other units of the State Transport Services operate between Sambalpur and Ranchi, Deogarh and Rourkela, and Keonjhar and Rourkela.

The rate of passenger fare in the zone is 4 paise per km. per passenger in upper class and 3 1/2 paise per km. per passenger in lower class. In addition, a traveller pays at the rate of 0.15 paise per every rupee of his fare as passenger tax. A child above the age of three years and below 12 years is charged half of the rate mentioned above. The freight is charged at the rate of 0.02 paise per km. per 20 kg. after allowing an uniform luggage allowance of 14 kg. per adult passenger and 7 kg. per child below the age of 12 years.

*The asterisk marked routes are fair-weather.

Reservation of Buses.

Buses on reservation are given to intending parties on advance payment of the approved rates of reservation. Concession at 25 per cent of the usual passenger fare is allowed to students on request of the heads of their institutions for visiting historical places and taking part in games and sports. Concession is also extended to athletes, visitors from outside the State, delegates of conferences within and outside the State and such other cultural parties with the express orders of the Government.

The rate of reservation charge for a State Transport bus, both loaded and empty is Rs. 1.74 paise per km., the detention charge being Rs. 2 per hour or part thereof for 1st two hours, Rs. 3 per hour or part thereof for next two hours, and Rs. 4 per hour or part thereof for subsequent hours. But the minimum rate of reservation of a bus is Rs. 85.

Special amenities provided for passengers

Bus stands and waiting rooms are provided at Sundargarh, Rajgangpur, old Rourkela, and Sector 2 of Rourkela (Steel township). Wayside passenger sheds have also been constructed at important places of Rourkela Steel township for the convenience of the passengers. During the summer season, drinking water facilities are provided at the roadside stations.

First-aid boxes are provided in all the buses of the State Transport Service. Suggestion boxes, inviting suggestions from the general public regarding the improvement of State Transport Service, are placed in all the station office premises and complaint books are provided to all the vehicles going on lines as well as kept in the station offices.

Statement given below shows the number of passengers travelled in different routes of both the units and amount received from them as fare and freight from 1968-69 to 1970-71.

Year	Name of Unit	No. of passengers	Fare (in Rs.)	Freight (in Rs.)
1968-69	Rourkela	10,72,291	16,83,210.55	23,913.83
	Sundargarh	6,54,383	11,40,385.57	16,387.42
1969-70	Rourkela	10,59,186	20,94,187.06	30,132.70
	Sundargarh	6,72,339	11,96,733.15	14,928.61
1970-71	Rourkela	11,71,023	22,14,400.30	38,119.76
	Sundargarh	6,85,102	13,14,739.29	20,523.49

RAIL ROADS

The main line of South-Eastern Railway passes about 105 km. in Panposh and Sundargarh subdivisions of the district, the stations being Jareikela, Bhalulata, Bisra, Bandamunda, Rourkela, Panposh, Kalunga

Kansbahal, Rajgangpur, Sonakhan, Garpos*, Bamra*, Dharuadihi, Bagdihi*, Dhutra*, Jharsuguda*, Brajarajnagar*, Belpahar*, Hemgir, and Daghora. The line was opened in 1890-91.

Mainly there are three branch lines in the district, one of which starts from Rourkela and the other two from Bandamunda Railway Stations on the main line. The branch lines from Rourkela to Birmitrapur (28.9 km.) and from Bandamunda to Barsuan (68.6 km.) were constructed in 1927 and 1960 respectively mainly for carrying ores to the steel plants. From Bimalgarh Railway Station of the last named branch line, there is a rail link to Kiriburu passing about 26.2 km. within the district. The third line which starts from Bandamunda, crosses the State border at about 24 km. near Nuagaon Railway Station for Ranchi in Bihar State. The stations in the branch lines are Quarry siding, Kuarmunda, and Birmitrapur (Rourkela-Birmitrapur line), Dumerta, Lathikata, Champajharan, Chandiposh, Patasahi, Bimalgarh, Gagnaposh, and Barsuan (Bandamunda-Barsuan line), and Bangurkela, Bispur, and Nuagaon (Bandamunda-Ranchi line). There is a rail link between Nuagaon and Purunapani for a distance of about 10 km. These two branch lines were constructed in 1953-54. Except the branch lines from Nuagaon to Purnapani, and from Bimalgarh to Kiriburu other lines are opened to passenger traffic. Rourkela is the busiest station for both passenger and goods traffic. In 1960-61, this station handled 9,42,150 passengers. After a decade, in 1970, the passenger traffic in this station has increased to 16,15,414.

The statement given below indicates number of passengers travelled outward with money collected from them as fare and number of inward passengers for two years in some of the important stations of the district.

Name of the station	Year	Outward passengers	Fare collected from them (in Rs.)	Inward passengers
Rourkela	1970	8,56,909	49,93,570	7,58,505
	1971	8,69,340	54,24,283	8,27,455
Rajgangpur	1969	2,00,447	3,14,395	96,641
	1970	2,09,806	3,52,717	1,15,543
Kalunga	1970	83,739	58,891	33,476
	1971	77,583	54,287	29,346
Birmitrapur	1970	80,447	93,272	79,317
	1971	72,732	79,200	69,766
Bisra	1970	71,598	59,166	71,703
	1971	72,243	53,189	68,360
Bimalgarh	1970	17,421	26,729	13,125
	1971	16,257	27,311	15,028

*The asterisk marked stations are within Sambalpur district.

Road-rail competition can be well studied in this district. People prefer not only to send their goods by road but also to travel even long distances by motor bus.

Bimalgarh-
Talcher
Rail-link
Survey

The Railway authorities conducted preliminary engineering and traffic survey for rail link between Bimalgarh and Talcher in 1969 and 1970 respectively. The survey report has been submitted to the Government of India.

WATERWAYS,
FERRIES AND
BRIDGES

The rivers Brahmani, Ib, Sankha, and Koel flow in the district. The river Brahmani is not navigable owing to rocks and rapids : small dug-outs work up and down, but it is unsafe for boats carrying merchandise. In the rains, small boats carry goods down the Ib to Sambalpur. The other two rivers are not suitable for navigation.

There are ferry-ghats in almost all the rivers of the district. Now these ferry-ghats are maintained mainly by different Grama Panchayats.

A list showing the ferry-ghats, name of the river, the Grama Panchayats maintaining them has been given in Appendix—II.

Besides, a ferry ghat on the river Brahmani at Tumkela is maintained by the Public Works Department. This is an important ghat as it connects the headquarters town of Bonai subdivision with other parts of the district. Another ferry-ghat at Sundargarh on the river Ib is also maintained by the Sundargarh Municipality. These two ghats are leased out every year.

A list of fifteen major bridges of the district has been given in Appendix-III.

BOATS

As mentioned earlier, small dugouts are generally used for crossing the rivers. There are about seventy ferry boats in the district.

TRANSPORT
BY AIR

There is an air port at Rourkela owned and maintained by the Hindustan Steel Ltd., which is licensed for private use.

The Indian Airlines and the Air India have their own representatives at Rourkela.

TRAVEL AND
TOURIST
FACILITIES

Besides the steel and fertiliser plants and other industrial workshops of Rourkela and the cement factory of Rajgangpur, other places of interest are Vedavyasa temple, Saranda forest, Mandira Dam and Khandadhar water-fall.

The Vedavyas temple is situated at a distance of 6.4 km. west of Rourkela town on the confluence of the rivers Sankh and Koel and is said to be the birth place of Maharsi Vedavyasa, the author of the epic Mahabharata. The Saranda forest, famous for game, is about 25 km. in distance from Rourkela. The Khandadhar water-fall (30.4 km. from Bonaigarh) which drops over the sheer western face of the Chheliatoka

range and can be seen from miles around provides a magnificent sight. The Mandira Dam has been built at a point where the river Sankh enters a gorge flanked by the hill ranges. It is also a picturesque spot. The scenery of Bonai subdivision is exceptionally fine, specially in the east where the soft beauty of the hill ranges is enhanced by wild precipitous gorges and beautifully clear and perennially flowing hill streams along the banks of which exquisite wild orchids and lilies and a variety of ferns are to be seen.

There are Dharmasalas at Sundargarh, Rourkela, Rajgangpur, Dharmasalas Lahunipara, Salepali, Jarmal, and Lahandabad. The Sundargarh Dharmasala was constructed in 1933 by two contractors to preserve the memory of their father Daya Dosa Chanda. The Dharmasala which is managed by the Sundargarh Municipality has 13 rooms and is open for everybody. Rourkela has three Dharmasalas managed privately. They are (a) Lakhmi Narayan Dharmasala, (b) Harinarayan Bhaban and (c) Sarbajanik Dharmasala. Of these, first two are located near the daily market and the last one at Bisra road.

The Dharmasalas at Lahunipara and Rajgangpur are managed by private bodies. The other three Dharmasalas are maintained by the Grama Panchayats.

In the steel town of Rourkela, hotels of both Western and Indian Hotels style are available for boarding and lodging. Some of these hotels are (a) Rourkela Hotel with 30 rooms, (b) Apsara Hotel with 18 rooms, (c) Hotel De Luxe with 20 rooms (Bar attached), and (d) Solemn Hotel.

Hotels for boarding purposes are also available in the towns of Sundargarh, Rajgangpur, and Birmitrapur.

There are Circuit Houses at Sundargarh and Panposh and Public Works Department Inspection Bungalows at Kaintara, Sundargarh, Bargaon, Rajgangpur, Jangra, Rourkela, Bisra, Koira, Birmitrapur, Kalunga, Lahunipara, Banki, Kuarmunda, and Darjin. There are also rest sheds at Bonaigarh, and Vedavyasa maintained by Public Works Department. The Forest Department is also maintaining houses at Kahachhan, Ujalpur, Kanika, Tamra, Jarda, Jamdihi, and Dolaisara.

Besides, the Revenue Department also maintains one inspection bungalow at Bargaon and 55 rest-sheds (as shown below) in different parts of the district.

Biringatoli, Panchra, Katkurbahal, Sabdega, Tangargaon, Bargaon, Ekma, Rungaon, Hemgir, Kanika, Lefripara, Gumardihi, Sargipali, Darlipali, Mangaspur, Bandhabahal, Bandega,

Kinjirkela, Kundukela, Birbira, Majhapada, Khuntgaon, Khuntadara, Balisankra, Kankiora, Sanpatrapali, and Ujalpur (all in Sundargarh subdivision), Bargaon, Gopna, Kamarposh Balang, Jamdihi, Badalijor, Sankhposh, Kuliposh, Bandhabhuin, Mahulpada, Jamdora, Sarsora, Tanda, Tumkela, Dharnidharpali, Gurundia, Jarda, and Lamsi (all in Bonai subdivision), Uditnagar, Andali, Raiboga, Kumjharia, Kachanu, Hatibari, Nuagaon, Sarda, Birkeria, Jareikela, Vedavyasa, and Lathikata (all in Panposh subdivision).

All these bungalows are meant to accommodate government officials touring on duty, and when vacant are also available for reservation by the public on payment.

Besides, the Steel authorities also maintain guest houses at Rourkela called 'Rourkela House' with 16 rooms of which 12 are air-conditioned and 'Ispat Guest House' with 4 air-conditioned rooms and accommodation facilities for another 20 boarders.

Before merger, there were 3 post offices in the ex-State of Bonai but there was no telegraph office. Gangpur ex-State had 13 post offices, six of them being combined Post and Telegraphs Offices. Both the ex-States were served by the Indian Postal Department.

In 1961, there were 128 post offices in the district which included one Head Post Office, 19 Sub-Post Offices, one Extra Departmental Sub-Post Office and 107 Branch Post Offices. These Post offices were controlled by the Superintendent of Post Offices, Sambalpur Division, with headquarters at Sambalpur.

Since the 2nd March, 1970 a separate Postal Division for Sundargarh district has been created with headquarters at Sundargarh. One Superintendent has been placed in charge of the Division.

At present, besides the Head Post Office at Sundargarh*, there are 7 Lower Selection Grade Sub-Offices, 32 Time Scale Sub-Offices, one Extra Departmental Sub-Office and 172 Extra Departmental Branch Offices in the district. The district has 27 telegraph offices located at Sundargarh, Birmiritrapur, Bisra, Bonaigarh, Balisankra, Kalunga, Kuarmunda, Kansbahal, Lahunipara, Lefripara, Purnapani, Rajgangpur, Rourkela (6 offices), Sabdega, Tensa, Ujalpur, Bargaon, Bhasma, Kamarposh Balang, Bankibazar, Kalamegha, and Talsara. Average area and population served by each post office of the district comes to about 45.65 sq. km. and 2,592 persons respectively. Rourkela is the only town of the district where there are eight delivery offices.

* Another head post office at Rourkela has been opened in January, 1973.

In 1960-61, the post offices of the district remitted 3, 13, 915 money orders with a value of Rs. 1,64,26,926.48 whereas deposits and withdrawals in the Savings Banks of the district during the above mentioned year were Rs. 33,51,021.88 and Rs. 26,67,762.43 respectively. In 1961, 1,64,549 letters and 18,583 parcels were registered in different post offices.

A statement given in Appendices IV & IV-A shows the number of post offices and the volume of business transacted by them from 1968-69 to 1971-72.

There are seven Telephone Exchanges* in the district, located at Sundargarh, Rourkela, Rajgangpur, Bisra, Bonaigarh, and Birmiritrapur.

Telephone
Exchange

A small auto-exchange at Sundargarh was established in February, 1965, with the capacity of 50 lines. In 1962-63, it was converted to a central battery non-multiple 100-lines exchange. At present, the exchange has 92 working connections with 12 extensions.

At Rourkela, a small 25 line exchange was installed in the office of the Chief Engineer, Township of Rourkela, in 1956. The next year, another 50 line exchange (central battery) was set up to be expanded to 400 lines in the following year. In 1961, the capacity of the exchange was increased to 700 lines. But the exchange failed to cope with the increasing telephone traffic resulting from the expansion of the steel plant and the growth of several ancillary industries in and around Rourkela. So in 1962, the 1800-lines Automatic Telephone Exchange, the first of its kind in the district, was commissioned. This exchange has 1472 direct working connections and 199 extensions.

Another 1000 line auto-exchange has been opened at Rourkela township since May 1962. It has 864 direct working connections and 22 extensions.

The details of other four exchanges are given below :

Name of the exchange	Date of opening	Type and capacity	Number of working connections
Rajgangpur	17-8-1964	100 lines (Central battery Non-multiple Exchange)	Direct—43 Extension—1
Bisra ..	20-2-1970	25 lines (small Auto-Exchange).	Direct—5
Bonaigarh ..	19-2-1970	25 lines (small Auto-Exchange).	Direct—8
Birmiritrapur	30-8-1969	25 lines (small Auto-Exchange)	Direct—18
Kalunga ..	17-3-1973	50 lines (SAX)	Direct—7

* In the meantime three more Telephone Exchanges have been opened at Kalunga, Lahunipara, and Tensa.

RADIO AND
PIGEON
SERVICE

The district has no radio station, In 1960, licenses were issued for 6,311 radio sets of the district. Number of radio sets licensed during 1968 to 1971 and the fees realised therefrom are given below.

Year	Number of radio sets	Fees realised in Rs.
1968	.. 9,404	2,35,106
1969	.. 12,101	3,02,519
1970	.. 19,013	4,75,315
1971	.. 19,058	3,95,823.50

The police organisation of the district maintain pigeon lofts at Sundargarh with 44 trained birds and at Bonaigarh with 21 trained birds. Boomerang services are in operation from Sundargarh to Hemgir and Sundargarh to Bonaigarh.

ORGANISA-
TION OF THE
TRANSPORT
OWNERS AND
EMPLOYEES

The transport owners and employees in the district have their own organisations. Two of the organisations are given below.

Paribahan
Karmachari
Sangha,
Rourkela.

Paribahan Karmachari Sangha, Rourkela is a part of the State Transport Employees' Union. It was established in 1961 with the object of achieving justice for the workmen of the State Transport Service. The organisation has at present 330 members.

Rourkela
Truck
Owners'
Association,
Rourkela

Rourkela Truck owners' Association was founded in 1971. The association with 300 members, provides quick and efficient service for transport of goods. The members of the organisation also extend their help at the time of emergency.

APPENDIX I

IMPORTANT ROADS OF THE DISTRICT MAINTAINED BY THE PUBLIC WORKS DEPARTMENT

Name of the road	Classification	Important places through which it passes	Black tapped (in km.)	W.B.M. (in km.)	Gravel (in km.)	Total length (in km.)	All weather/ Fair weather/ All weather
Jharsuguda-Sundargarh—Rourkela-Rajamunda—Keonjhar border road (portion from Gangpur ex-State boundary to Keonjhar border).	State High Way No. 10	Sundargarh, Bargaon, Rajgangpur, Kansabahal, Pauposa, Banki, Chandiposh Darjin, Rajamunda, Lahunipara.	207	13	..	220	29 Ditto
Barkot—Darjin road (From Bonai ex-State boundary to Lahunipara).	State High Way No. 10 A.	Mahuldihi, Khuntagaon.	1	10	18	29	Ditto
Sundargarh—Lefripara road.	M. D. R. No. 27	Bandhapali, Surgura, Lefripara.	7	19	1	27	Ditto
Karamdihi-Talsara-Luakera road.	M. D. R. No. 30	Dumerabahal, Sabdega, Talsara.	..	37	..	37	Ditto
Sulgura-Balichuan road ..	M. D. R. No. 29	..	..	..	6	6	Ditto
Kiraibamra road ..	M. D. R. No. 31	Dharuadihi	..	..	36	36	Ditto
Kukurbhuka-Ranchi road	M. D. R. No. 28	Lanjiberna, Dalki, Salangabahal.	..	..	31.44	31.44	Fair weather
Barkot—Bonai—Rangamatia—Kalunga road.	M. D. R. No. 26	Jhartarang, Tainsar, Tamra, Bonaikela, Gurundia, Upara-para.	1	7	86	94	Ditto
Hatibari-Birmitrapur, Raiboga-Salangabahal road	M. D. R. No. 28	Hatibari, Birmitrapur, Indrapur, Raiboga, Salangabahal.	1.6	17.40	18.02	36.48	Ditto
Rourkela—Bisra—Jareikela road.	M. D. R. No. 32	Rourkela, Bisra, Jareikela.	17.6	6.04	5.20	28.30	All weather

Gopali—Birmiritrapur road	M. D. R. No. 32	Birmiritrapur, munda.	Kuar-	21	..	21	Ditto
Rajamunda—Bonaigarh road	O. D. R. No.	Rajamunda, Bonaigarh		4	2	8	Fair weather
Balichuan—Baligaon—Beni—jharia—Hemgiri—Kanika—Belpahar road.	C. V. R.	Hengir, Kanika		..	..	.. (earthen)	Ditto
Duduka—Gopalpur—Taparia road.	C. V. R.	Gopalpur		..	..	29 (earthen)	Ditto
Lefripara—Gurundiadihi—Tidega—Bandhabahal road.	C. V. R.	Gurundiadihi, Tildega, Bondabahal.		..	..	50 (earthen)	Ditto
Talsara—Bandega—Ludukidhi road.	C. V. R.	Bandega		..	..	27 (earthen)	Ditto
Tangargaon—Rouldega road	C. V. R.	Ditto		..	..	15 (earthen)	Ditto
Lajiberna—Khatkurbahal—Panchara—Ekma—Tangargaon—Sabdega road.	C. V. R.	Khatkurbahal, Panchara, Ekma, Tangargaon.		..	..	59 (earthen)	Ditto
Jamdi—Soyamba—Balijore—Bihar border road.	C. V. R.	Soyamba, Balijore		..	..	13 (earthen)	Ditto
Kodadihi—Budhbhuin—Khadadhar road.	C. V. R.	Budhabhuin		..	..	17 (earthen)	Ditto
Kusumi—Jar da—Ramachinda—Gurundia road.	C. V. R.	Jarda, Ramachinda		..	..	30 (earthen)	Ditto
Bisra—Birkera—Manko—Lathikata road.	C. V. R.	Bisra—Birkera—Manki—Lathikata road.		..	..	24 (earthen)	Ditto
Nuagaon—Bisra road	C. V. R.	Nuagaon, Khuntageni		..	..	20'80 (earthen)	Ditto
Kuarmunda—Nuagaon road via Hatibari—Purnapani.	C. V. R.	Kuarmunda, Kaimadi, Hatibari, Purnapani, Nuagaon.		21	..	29'20 (earthen)	Ditto

M. D. R.—Major District Road, S. H.—State Highway, O. D. R.—Other District Road, C. V. R.—Classified Village Road

APPENDIX II

LIST OF FERRY-GHATS MAINTAINED BY GRAMA PANCHAYATS

Name of the Block	Name of Grama Panchayat	Name of ferry-ghat	Name of the river where the ferry-ghat is located
Lathikata	.. Birda	{ Tainsar Baghalata	Brahmani
	Birkera	Birual	Do.
	Jhartarang	Garjan	Do.
	Jalda	Kansara	Do.
	Kalunga	Bhalupatra	Sankha
Tangarpali	.. Mangaspur	Argapita	Ib
	Nialipali	Kiripsira	Ib
Kuarmunda	.. Kacharu	{ Rium Pasra Bijubandh Chainpur	Koel Do. Do. Do.
	Dalki	{ Ranchi Road (Dalki) Tarkera Kunmendra	Sankh Do. Do.
Lahunipara	.. Lahunipara	Narendra	Brahmani
	Kaleiposh	Thakurpali	Do.
	Darjin	{ Ludhuni Koijhar	Do. Do.
	Kurda	Lalei	Do.
	Khuntagaon	{ Pigaon Dighi	Do. Do.
Balisankra	.. Balisankra	Telijore	Ib
	Kusumura	{ Kaintara Kusumura	Ib Ib
Bisra	.. Jareikela	{ Sukuda Badbanua Masukuda	Koel Do. Koel
	Jhirpani	Jamgarh	Do.
	Bhalulata	Udusu	Koel
Bonaigarh	..	Jangra	Brahmani
		Deoposh	Do.
		Lalai	Do.
		Phalsa	Do.
		Poigaon	Do.
		Digi	Do.
		Tendra	Do.

APPENDIX II

LIST OF FERRY-GHATS MAINTAINED BY GRAMA PANCHAYATS

Name of the Block	Name of Grama Panchayat	Name of ferry-ghat	Name of the river where the ferry-ghat is located
Sundargarh	Lankahuda Kundukela	Kupsinga	Ib
		Bhasma	Ib
		Kundukela	Ib
		Kudaboga	Ib
		Pandermal	Safai
Nuagaon	Kinjirma Majhapada Kulta	Subi	Safai
		Medha	Do.
		Filingabahal	Do.
		Tumelbud	Do.
	Khuntagaon	Lankoi	Deo
Gurundia	Limida Bagdega Nuagaon	Mitkundari	Koel
		Lahanda	Deo
		Jamsara	Koel
		Kundra	Deo
		Teterkela	Koel
Sabdega	Narendra	Jharbera	Deo
		Turamura	Brahmani
		Rukura	Rukura Nala
		Kapanda	Brahmani
	Bhaludungri	Mahodar (near Satekuta)	Do.
Lefripara	Jamuna Kukuridihi	Jaisar	Bonda
		Kukuridihi	Ib
Rajgangpur	Sargipali	Sargipali	Ichha
Rajgangpur	Alanda	Bangla	Sankha
		(Kukudamunda) Hatimunda]	Do.

APPENDIX III

LIST OF MAJOR BRIDGES IN THE DISTRICT

Sl. No.	Name of the bridge	Number and length of spans	Type of bridge
1.	Ib Bridge at 2/0 of Sundargarh-Lefripara road.	9 spans of 30'-0" and 11 spans of 50'-0" each.	R.C.C. Bridge
2.	Tamaga nullah ..	5 spans of 30'-0" each	Ditto
3.	Ichha bridge ..	9 spans of 50'-0" each	Ditto
4.	Safai bridge on Gariamal-Bamra road.	2 spans of 60'-0" each and 2 spans of 42'-6" each.	Ditto
5.	Safai bridge on Kirai-Bamra road	11 spans of 50'-0" each	Ditto
6.	Bilagarh bridge on S. H. 10 ..	7 spans of 50'-0" each	Ditto
7.	Kalunga nullah bridge ..	4 spans of 45'-0" each	Ditto
8.	Badsemji bridge on S. H. 10 ..	7 spans of 50'-0" each	Ditto
9.	Balijor bridge on Barkot-Bonai road.	4 spans of 30'-0" each	Ditto
10.	Guradhi bridge on S. H. 10 ..	1 span of 30'-0" ..	Ditto
11.	Brahmani bridge on S. H. 10 ..	7 central spans of 160' 0" and 2 end spans of 158'-0".	R. C. C. pressed bridge.
12.	Jamdihi bridge at 23/6 of Rajamunda-Koira road.	3 spans of 40'-0" ..	R.C.C. Bridge
13.	Bridge over Karapani nullah ..	3 spans of 50'-0" and 2 spans of 20'-0" each.	Ditto
14.	Kuradhi bridge on S. H. 10 ..	8 spans of 50'-0" each	Ditto
15.	Lahunipara bridge ..	4 spans of 40'-0" ..	Ditto

APPENDIX IV

VOLUME OF POSTAL BUSINESS TRANSACTED DURING THE LAST FOUR YEARS ENDING 1971-72

242

	1968-69		1969-70		1970-71		1971-72	
	Number	Amount Rs.	Number	Amount Rs.	Number	Amount Rs.	Number	Amount Rs.
1. (a) Money Order issued	215,588	2,59,27,680	25,91,852	28,544,244	4,64,592	2,70,43,762	5,74,801	29,035,716.48
(b) Money orders paid	89,268	70,15,680	84,724	81,15,154	85,580	8,039,040	76,080	74,61,694.54
2. (a) Savings Bank deposits	48,624	82,55,400	50,796	88,41,048	62,040	1,05,69,328	64,403	1,15,54,308.40
(b) Savings Bank withdrawals	32,640	66,12,588	36,780	75,60,060	41,088	89,16,536	47,132	99,26,480.88
3. Certificates issued	3,508	95,87,700	1,380	2,15,460	4,956	3,31,080	2,369	3,95,910.00
4. (a) Registered letters issued	252,708	..	2,64,264	..	2,72,040	..	3,75,147	..
(b) Registered letters delivered.	4,16,040	..	3,86,088	..	4,04,824	..	3,78,939	..
5. (a) Registered Parcels issued.	24,396	..	25,548	..	24,194	..	26,272	..
(b) Registered Parcels delivered.	23,840	..	16,092	..	22,512	..	37,352	..
6. (a) Ordinary letters issued	48,29,000	..	45,71,400	..	49,37,200	..	24,82,759	..
(b) Ordinary letters delivered	66,15,800	..	6,47,99,200	..	6,94,38,400	..	23,93,821	..
7. Telegrams—								
(a) Telegrams issued	51,504	77,256	54,989	82,483	52,400	78,600	54,344	1,45,751.75
(b) Telegrams delivered	1,83,394	..	1,88,291	..	1,89,746	..	81,985	..

SUNDARGARH

COMMUNICATIONS

243

APPENDIX IV (A)

LIST OF POST OFFICES IN SUNDARGARH DIVISION

(As on 1st April, 1971)

SUNDARGARH HEAD OFFICE, SECOND CLASS

Sundargarh Head Office C. O., P. C.,*

1. Badbahal	..	S
2. Baladmal	..	S
3. Bhasma	..	S
4. Birbira	..	S
5. Bhedabahal	..	S
6. Chhattasargi	..	S
7. Dharuadihi	..	S
8. Deuli	..	S
9. Gadiajor	..	S
10. Jamtalia	..	E
11. Karamdihi	..	S
12. Karda	..	S
13. Katra	..	S
14. Kinjirma	..	S
15. Kundukela	..	S
16. Kukurdihi	..	E
17. Kulba	..	S
18. Kupsinga	..	S
19. Kurga	..	S
20. Lankahuda	..	S
21. Lahandabud	..	E
22. G. Mahulpali	..	S
23. Majhapara	..	S
24. Mangaspur	..	S
25. Panchmahala	..	S
26. Rajpur	..	S
27. Ratnapur	..	E
28. Remanda	..	S
29. Sankara	..	S
30. Sanpatrapali	..	S
31. Tasladihi	..	S
Bargaon C. S. O., P. C. O.* (B) (T. P. O.)		
1. Biringatoli	..	S
2. Ekma	..	E
3. Itma	..	S

4. Jarangloi	..	S
5. Kumbahal	..	S
6. Kurebaga	..	S
7. Latalaga	..	E
8. Lampti	..	E
9. Nuagaon-Jhoren	..	S
10. Pamra	..	E
11. Panchra	..	S
12. Runga	..	S
13. Sahajbahal	..	S
14. Tudalaga	..	S
Barsuan E. D. S. O. (T. P. O.)		
Balisankra C. S. O.* (C)		
1. B. Karuabahal	..	S
2. Bandhbahal	..	S
3. Beheradihi	..	S
4. Kaintara	..	S
5. Kinjirkela	..	S
6. Kinikibandh	..	S
7. Sikajore	..	S
8. Tildega	..	S
Birmitrapur C. S. O., P. C. O. (L. S. G.)*		
1. Andali-Jambahal	..	S
2. Dalki	..	S
3. Indrapur	..	E
4. Jhumur	..	S
5. Kardega	..	E
6. Kapilas	..	S
7. Raiboga	..	S
Bisra C. S. O., P. C. O.* (B)		
1. Ajaikela	..	E
2. Bagdega	..	S
3. Bhalulata	..	S
4. Birkera	..	S
5. Jareikela	..	E
6. Jabaghat	..	E
7. Kulenbahal	..	S
Bonaigarh C. S. O., P. C. O.* (A)		
1. Bhaludungri	..	S
2. Bonaikela	..	S
3. Dalaisara	..	E

4. Gurundia	..	S
5. Jareikela	..	S
6. Jhirdapali	..	S
7. Jangra	..	S
8. Jarda	..	S
9. Jamdar	..	S
10. Kenabhata	..	S
11. Kuliposh	..	S
12. Khuntgaon	..	S
13. Kurda	..	S
14. Kansar	..	S
15. Lachhada	..	S
16. Mahulpada	..	S
17. Mahuldiha	..	S
18. Narendra	..	S
19. Majurdima	..	S
20. Sarsara Balang	..	S
21. Satkuta	..	S
22. Tendra	..	S
23. Tumkela	..	E
24. Tikayatpali	..	S
Bandamunda S. O. (B)		
Daily Market (Rourkela) * (B) (T. P. O.)		
Hemgir S. O. (C) (T. P. O.)		
1. Balinga	..	S
2. Bilaimunda	..	S
3. Daghora	..	S
4. Garjanjor	..	S
5. Gopalpur	..	S
6. Hemgir Road	..	S
7. Topria	..	S
Ispat (Rourkela) + C. S. O., P. C. O. (L. S. G.)		
Industrial Estate (Rourkela)+(C) (T. P. O.)		
Kalunga C. S. O., P. C. O.+(C)		
1. Balanda	..	S
Kansbahal C. S. O., P. C. O. (A)		
1. Liang Colony	..	S
2. Usra Colony	..	E
Kuarmunda C. S. O., P. C. O.* (C)		
1. Kelosihiria	..	E
2. Kumjharia	..	E

Lahunipara C. S. O.* (B)

1. Bimalgarh	..	S
2. Gopna	..	E
3. Jamdihi	..	S
4. Kamarposh Balang(C. O.)	..	S
5. Kalaiposh	..	E
6. Nandapara	..	S
7. Sardhapur	..	S
8. Sayamba	.	S
9. Topadihi	.	S

Lathikata S. O.* (C)

1. Bankibazar	..	S
2. Barghat	..	S
3. Birda	..	S
4. Chandiposh	..	S
5. Darjin	..	S
6. Pankdihi	..	S
7. Ratobirker	..	S
8. Ramjodi	..	S
9. Tainsar	..	S
10. Tamra	..	S

Lefripara C. S. O.* (C) (T. P. O.)

1. Dumabahal	..	S
2. Gundiadihi	..	E
3. Kalamegha (C. O.)	..	S
4. Kuturma	..	S
5. Mashabira	..	S
6. Raidihi	..	S
7. Patuadihi (T.P. O.)	..	S
8. Sarapgarh	..	S

Loco colony, Bandamunda+(C) (T. P. O.)**Purnapani C. S. O., P. C. O.* (C) (P. T. O.)**

1. Hatibari	..	S
2. Kandarkela	..	S
3. Luaram	..	E
4. Nuagaon	..	S
5. Surda	..	S

Railway colony (Rourkela)+(C) (T.P.O.)**Rajgangpur C. S. O., P. C. O.* (LSG)**

1. Garbhana	..	S
2. Gyanpali	..	E
3. Jharbera	..	S
4. Kesramal	..	S
5. Khatkurbahal	..	E
6. Kutra	..	S
7. Kutunia	..	S
8. Lanjiberna	..	S
9. Malidihi	..	S
10. Raj-Kukuda	..	S

Ranibandha+(C)**Regent market (Sundargarh)+(C)****Rourkela—1* (LSG) S.O.****Rourkela—2 C.S.O., P.C.O.* (LSG)**

1. Jhirpani	..	S
2. Kaoharu	..	S

Rourkela—3 C.S.O., P.C.O. (LSG)**Rourkela—4 C.S.O., P.C.O.* (LSG)**

1. Garjan	..	S
2. Gopapali	..	S
3. Jalda	..	S

Rourkela—7 C.S.O., P.C.O. (A) (T.P.O.)**Rourkela—8 C.S.O., P.C.O. (A)****Rourkela—9 S.O. (B) (T.P.O.)****Rourkela—10 S.O. (C) (T.P.O.)****Sector—2 (Rourkela)+(C)****Sector—7 (Rourkela)+(C)****Sector—15 (Rourkela)+(C) (T.P.O.)****Sector—16 (Rourkela)+(C) (T.P.O.)****Sector—19 (Rourkela)+(B)****Sabdega C.S.O., P.C.O. (C)* (T.P.O.)**

1. Bandega	..	S
2. Hutupani	..	S
3. Jamuna	..	S
4. Kiralaga	..	S
5. Khampur	..	S

6.	Kusummura	..	S
7.	Lulkidihi	..	E
8.	Rampur	..	S
9.	Rauldega	..	S
10.	Sagbahal	..	S
11.	Sagjor	..	E
12.	Talsara	..	S
13.	Tangargaon	..	S
14.	Temlia	..	S

Tensa C.S.O., P.C.O. (B)

Uditnagar (Rourkela)+(C)

Ujalpur C.S.O.* (C)

1.	Badabanga	..	S
2.	Darlipali	..	S
3.	J. Raiboga	..	S
4.	Nialipali	..	S
5.	Chhattenpali	..	S
6.	Sargipali	..	S
7.	Tangarpali	..	S
8.	Bilaigarh	..	S

SYMBOLS USED IN THE CLASSIFIED LIST OF POST OFFICES

- (LSG) — Lower Selection Grade Office.
 (A) — Class I (more than 2 hands) Office.
 (B) — Class II (Double handed) Office.
 (C) — Class III (Single-handed) office.
 (+) — Non-Delivery Town Sub-Office.
 (*) — Cash Office.
 (E) — Branch Office not vested with Savings Bank Power.
 (S) — Branch Office vested with Savings Bank power.
 CSO — Combined Sub-Office.
 ED — Extra-Departmental Office.

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS

In the ex-State of Bonai (present Bonai subdivision), during the beginning of the twentieth century almost in every village there were small settlements of Panas, who wove cloths from locally grown cotton. The people of Hansi caste also wove coarse cotton cloth somewhat finer than those woven by the Panas. These people wove the clothes for the village community. There were also the village plough-makers and potters who worked for two or three villages in the neighbourhood. The jungle tribes collected tusser, lac, myrobalans, sabai grass, and other jungle products for the contractors and received payment in cash or kind. Bamboo mat and wicker work were done by the Turi, Dom, and Khond castes. Brass and bronze vessels, dishes and ornaments of all usual forms in rough description were made by Kansari caste. Iron smelting was done by men of the Kamar caste and they prepared fine domestic and agricultural implements. Gold-washing was done by the Jhora caste. Gold was obtained from the sands in the bed of the Brahmani river and its tributary streams. The earnings of a Jhora gold-washer averaged about twenty paise per day. A unique occupation was that of the manufacture of vessels of soap-stone or *khari* for culinary and other domestic use. This occupation was followed by men of the Bhumij caste. Very neat vessels of all the usual domestic shapes and sizes were turned out of this stone. The number of persons engaged in these occupations is not available.

During the beginning of the twentieth century, in the ex-State of Gangpur (present Sundargarh and Panposh subdivisions), the principal occupation of the people was agriculture. Out of the total population 84.5 per cent were agriculturists, 10.8 per cent followed industry, 1.1 per cent were engaged in trade, and only 0.4 per cent followed professions. There were no indigenous manufacturers. The village weavers prepared the cloth required by the people and eked out a precarious livelihood owing to the competition of mill-spun goods. The lime quarries at Bisra ; two large timber companies with their headquarters at Rourkela, and Kalunga ; and the manganese quarries employed a considerable amount of labour. Gold-washing was carried out in most of the rivers and streams by Jhora Gonds, who thus gained a sustainable livelihood.

After the merger of the ex-States, a regular Census enumeration was undertaken in 1951. The Census of 1951 showed that of the total

PRE-MERGER
PERIOD

POST-
MERGER
PERIOD

population of 552,203 as many as 479,415 pursued agricultural occupation as their principal means of livelihood. Thus about 86.82 per cent of the total population depended on agriculture for their living, and the remaining 13.18 per cent on industries and services. Of those who lived on agriculture 415,218 persons (69.29 per cent) belonged to the class of cultivators of land wholly or mainly owned by themselves and their dependants, 47,749 persons (8.65 per cent) were agricultural labourers, 15,051 persons (2.73 per cent) were cultivators of land unowned and their dependants, and only 1,397 persons (0.25 per cent) were non-cultivating owners of land and their dependants. Only 25,305 persons (4.78 per cent) derived their principal means of livelihood from production other than cultivation and 37,398 persons (6.77 per cent) were dependent on other services and miscellaneous sources of income. Only 7,759 persons (1.42 per cent) obtained their income from commerce, while a small number of 2,326 persons (0.42 per cent) depended on transport.

During 1954-55, an economic sample survey¹ was undertaken for the rural population of the district in which the family was taken as a unit. The survey showed that 82.3 per cent were agricultural families and 17.5 per cent were non-agricultural families. Of the agricultural families 70.3 per cent belonged to the class of cultivators of land wholly owned, 1.5 per cent were cultivators of land unowned, 0.5 per cent were non-cultivating owners, 9.9 per cent were agricultural labourers, and 0.1 per cent did not come in any of these classes. The significant feature was that the district stood second in the State so far the number of owner-cultivators is concerned.

The non-agricultural classes were divided into four main occupation-groups. Of the total non-agricultural families 8.7 per cent derived their major source of income by working as labourers, 0.5 per cent from trade, 4.0 per cent from production other than cultivation, and 4.3 per cent from service and profession.

In comparison with the occupational figures of 1951 Census this survey has also indicated, more or less, the same number of persons engaged in different occupations.

The economic classification adopted in the Census of 1951 underwent a substantial change in the Census of 1961. In the Census of 1951 the chief criteria were "economic dependance" i. e., a dependant

who earned some amount of income which was not adequate for maintaining himself, and "income"; while in the Census of 1961 the population was divided into two broad classes viz., workers and non-workers. The term "workers" included all persons working as well as the working children irrespective of their earning income.

In 1961, there were 383,029 workers in the district which comprised 252,755 males and 130,274 females, and constituted 50.5 per cent of the total population. Besides, there were 143,459 males and 232,129 females treated as non-workers. Students of no income, housewives and other adult females who did no other work than house-hold duties, infants, disabled persons, beggars, convicts in jail, and unemployed persons were grouped under this category.

Out of the total working population 214,829 persons were engaged as cultivators and 44,316 persons as agricultural labourers. Besides, 5,581 persons were engaged in mining and quarrying, 15,948 in household industry, 21,567 in other manufacturing works and 5,976 in construction work and 7,025 in trade and commerce. In transport, storage and communication 7,060 persons were engaged. There were 60,727 persons who followed other vocations not enumerated above.

According to the Census of 1971 the district had a total population of 1,030,758 as against, 758,617 of 1961 Census, of which 530,836 were males and 499,922 females. In the district-wise rural and urban composition of population in the State the highest percentage of urban population is recorded in this district (23.25 per cent) which is mainly due to the development of the Rourkela township during the last decade. Incidentally it may be mentioned that although Cuttack (in Cuttack district) is the largest city of the State its population constitutes 5.07 per cent of the total population of the district whereas the population of Rourkela city makes up 16.74 per cent of the population of Sundargarh district.

The total number of workers in the district is 324,122 of which 293,053 are males and 31,069 females. The number of workers constitutes 31.6 per cent of the total population, the male and female workers respectively accounting for 55.3 and 6.6 per cent of the total male and female population. In 1961 the total number of workers made up 50.5 per cent of the total population and the male and female workers respectively constituted 63.8 and 36.0 per cent of the corresponding total population.

In the total working population cultivators, agricultural labourers, and other residual workers respectively accounted for 43.0, 16.6 and 40.4 per cent in 1971. The corresponding figures for 1961 were 56.1,

1. Economic Survey of Orissa, vol. I. Sadasiv Misra, M.A., Ph. D. (London)

11.6, and 32.3 per cent and for 1951 were 78.17, 8.65, and 13.18 per cent. The reason for the sharp decline in the participation rates specially among females could partly be attributed to the change in the definition of workers adopted for 1971 Census as compared to that of 1961. The definition adopted in 1961 was elastic allowing for inclusion as workers of housewives, students, who rendered only casual assistance in some economically productive work like cultivation, household industry done by other members of the family. But according to 1971 Census a man or woman who was engaged primarily in household duties or a student attending an institution, even if such a person helps in the family economic activity but not as full time workers should not be treated as a worker for the main activity. Application of this test might have resulted in non-inclusion, particularly in the rural areas, of a large number of housewives and students as workers in the 1971 Census although they would have been classified as such in 1961.

It is noticed from the above figures that while the percentage of actual cultivators is gradually decreasing, the rate of participation in agricultural labour and other occupations is steadily increasing.

In 1971, there were 1,40,027 persons engaged as cultivators; 54,297 persons as agricultural labourers; 5,727 persons in livestock, forestry, fishing, hunting, plantations, orchards and allied activities; 2,569 persons in mining and quarrying; 43,475 persons in manufacturing, processing, servicing and repairs of household and other than household industries; 2,089 persons in construction; 14,523 persons in trade and commerce; 11,548 persons in transport, storage, and communication; and 39,867 persons in other services. Besides, there were 7,06,636 persons treated as non-workers who do not have substantial contribution towards any economic activity of the district.

The occupational pattern of the district, and of Rourkela City, Sundargarh town, and Rajgangpur town and the subdivisions, viz., Sundargarh, Panposh, and Bonai in 1971 is given in details in Appendix I of the Chapter.

For the establishment of the Rourkela steel plant, the State Government had initially acquired 20,000 acres of land affecting families in 31 villages. In addition to this 725.31 acres were acquired at Mandira, and Purnapani. The rehabilitation of these displaced persons thus become a responsibility of the Government and the State was obliged to ensure them jobs in the Hindustan Steel Limited. In October 1966, a formula was devised on the basis of which one able-bodied person from each displaced family was given priority consideration for a job in the Rourkela steel plant. By the 1st January 1971, 2,899 persons had found jobs in the Hindustan Steel Limited

The Hindustan Steel Limited is the biggest employer engaging 34,014 persons, up to December 1971. The Orissa Cement Limited, Rajgangpur, has employed 3,470 persons. The Utkal Machinery Limited, Kansbahal, has employed 1,231 persons. Besides, there are a number of small-scale industries in and around Rourkela which have employed a number of technical personnel, ministerial staff, and labourers. There were 67,439 persons in the entire district in 1971 employed both in public and private sectors. After the nationalisation of the Banks, the scheme of self-employment has taken a moderate shape due to the insecurity involved in advancing loans without adequate security. The Credit Guarantee Corporation, which was started in 1971 helped in this matter by taking over the functions of underwriting a loan or standing guarantee for security.

The Union Government employees of the district besides the employees of the Rourkela steel plant, numbered a few hundreds mostly engaged in the departments of the Posts and Telegraphs, and the Railways. In the departments of the State Government, employees of different grades are working whose duties and spheres of activity vary.

During 1972, the strength of the police force in the district was 1,601. There were two Superintendents of Police, one Additional Superintendent of Police, three Deputy Superintendents of Police, 14 Inspectors, 91 Sub-Inspectors, 64 Assistant Sub-Inspectors, 137 Havildars, and 1,289 Constables. In 1972, there were 567 employees (356 officials and 211 Conservancy staff) working in the local self-Government organisations. There are employees in other departments which have been dealt in the Chapter, Other Departments.

Besides, there are people who pursue other vocations as discussed below.

In the ex-State of Gangpur there were 137 schools and the teaching staff consisted of 331 persons including 12 females. In the ex-State of Bonai there were 76 schools and the teaching staff consisted of 144 persons of which 31 were trained teachers.

EDUCATIONAL
PROFESSION

In 1972, there were 73 H. E. schools with 683 teachers (584 males and 109 females), 180 M. E. Schools with 905 teachers (856 males and 49 females), 1268 Primary schools with 2,418 teachers (1,927 males and 491 females), four Junior Basic schools with 8 male teachers, one Arts and Crafts school with 4 teachers, four Ashram schools with 30 teachers (23 males and 7 females), 91 Sevashram schools with 177 teachers,

three Elementary Training schools with 12 teachers, one Polytechnic school with 47 teachers, and one school with a single teacher each in the jails at Rourkela, and Sundargarh.

As per the statistics available in 1972 as many as 217 college teachers, both technical and non-technical, were serving in different higher educational institutions in the district.

MEDICAL PROFESSION

In the past there were a few Kavirajas who prepared medicines from indigenous roots and herbs in ayurvedic formulae. The most notable among them was Late Braja Sundar Purohit who distributed medicines free of cost to the patients. Allopathy was first introduced in 1875 with the opening of a dispensary in Sundargarh.

Allopathy

In 1972, there were 23 allopathic hospitals, 15 dispensaries, 16 Primary Health Centres, one Mobile Health Unit, one Medical Aid Centre, and 577 Maternity Centres and sub-centres. In all these institutions 202 allopathic doctors, 171 nurses, 40 midwives, 20 Health Visitors, and 77 pharmacists and compo unders were working in the district. Besides, there are a few private allopathy doctors practising in Rourkela City, Rajgangpur, and Sundargarh.

Homeopathy

There are four homeopathic dispensaries located at Khuntagaon, Darlipali, Bandhabahal, and Sankobahal each provided with a doctor. In 1972, there were 750 registered homeopathic doctors in the district.

Ayurveda

Ayurveda is also preferred by a number of persons. In 1972 there were 10 ayurvedic dispensaries located at Nandapara, Sarsara-Balang, Beladamal, Sikajore, Chungimati, Rouldega, Sole, Khatkurbahal, and Khuntagaon, each provided with a Kaviraja. In 1972, there were 56 registered Kavirajas in the district.

LEGAL PROFESSION

In 1972 there were 74 advocates practising at the district and the subdivisional headquarters, namely Sundargarh, Uditnagar, and Bonai-garh. Most of these advocates practise both in civil and criminal courts.

In Sundargarh town there were 30 advocates of whom five are practising in civil courts, fifteen in both civil and criminal courts, and nine in criminal courts. Among them there were two Bar-at-Laws. Out of these advocates four get an average income of Rs. 3,000 per month, five earned an income of Rs. 1,000 to Rs. 1,500 per month, and the other twenty averaged between Rs. 200 to Rs. 700 per month.

In Bonaigarh there were nine advocates whose monthly income ranged between Rs. 200 to Rs. 300. The advocates are practising in the courts of Munsif, Subdivisional Magistrate, Subdivisional Officer, Magistrate 1st Class, and Tahasildar.

In Rourkela there were 35 advocates practising in different courts.

In 1972, in the district in other occupations there were 11 bakeries and biscuit factories employing on an average 227 persons daily. These were located at Sundargarh, Rajgangpur, and Rourkela. In 1972 in publicity, printing and allied occupations about 64 persons were working daily and eighty-five persons were engaged in milling of rice and wheat. During the said year, there were four ice factories at Rourkela engaging 48 persons and 1,417 people were engaged in manufacturing of suitcases, grills, gates, rolling shutters, bolts, nuts, tin-containers, agricultural implements, and mechanical spare parts from iron and steel. In the manufacture of chemicals, such as, insecticides, phenyle, soap, and cosmetics 100 persons on an average were engaged daily. Besides, there are many people who are engaged as cooks, maids, water-bearers, and butlers. Their number was 3,627 in the Census of 1961.

Many artisans are engaged in various crafts of which a few are mentioned below in order of their numerical importance. The figures relate to 1961 Census.

Sl. No.	Name of occupation	Number of artisans
1.	Spinners, Weavers, Knitters, Dyers and related workers.	4,815
2.	Blacksmiths ..	3,294
3.	Bakers, Confectioners, and Sweetmeat makers	3,019
4.	Basket makers ..	2,912
5.	Potters ..	2,503
6.	Washermen ..	1,910
7.	Goldsmiths and Silversmiths ..	1,908
8.	Shoe-makers and repairers ..	1,650
9.	Masons ..	1,299
10.	Tailors ..	948
11.	Barbers ..	495
12.	Carpenters ..	464

OTHER
OCCUPA-
TIONS

ARTISANS

APPENDIX I

A detailed list of the occupational pattern of the district and Rourkela City, Sundargarh town and Rajgangpur town, and the Subdivisions in 1971.

(1)	Population			Total workers			Cultivators		
	Persons	Male		Persons	Male		Persons	Male	
		(2)	(3)		(5)	(6)		(8)	(9)
Sundargarh District	..	10,30,758	5,30,836	4,99,922	3,24,122	2,93,053	31,069	1,40,027	1,34,120
Rural	..	7,91,073	3,96,929	3,94,144	2,44,973	2,21,585	23,388	1,37,317	1,31,501
Urban	..	2,39,685	1,33,907	1,05,778	79,149	71,468	7,681	2,710	2,619
Rourkela City	..	1,72,502	98,667	73,835	57,849	53,701	4,148	492	471
Sundargarh Town	..	17,244	9,038	8,206	4,852	4,391	461	583	556
Rajgangpur Town	..	21,876	11,753	10,123	7,106	6,500	606	835	800
Sundargarh Subdivision	..	4,41,657	2,21,447	2,20,228	1,39,518	1,25,209	14,309	71,871	68,629
Panposh Subdivision	..	4,12,019	2,19,565	1,92,454	1,28,551	1,16,760	11,787	36,372	34,880
Bonai Subdivision	..	1,77,064	89,324	87,240	56,053	51,079	4,974	31,784	30,611

(1)	Agricultural Labourers						Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and allied activities						Mines and Quarries						Manufacturing, Processing, Household Industry					
	Persons			Male			Female			Male			Female			Male			Persons			Male		
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
Sundargarh District	54,297	46,281	8,016	5,727	4,731	996	12,569	8,317	4,252	8,854	7,063	1,791	7,155	4,897	2,258	8,101	6,357	1,744	753	706	47	346	327	19
Rural	52,771	44,926	7,845	4,419	3,512	907	7,155	4,897	2,258	8,101	6,357	1,744	7,155	4,897	2,258	8,101	6,357	1,744	753	706	47	346	327	19
Urban	1,526	1,355	171	1,308	1,219	89	5,414	3,420	1,994	753	706	47	5,414	3,420	1,994	753	706	47	753	706	47	346	327	19
Rourkela City	528	456	72	897	854	43	216	173	43	346	327	19	216	173	43	346	327	19	346	327	19	346	327	19
Sundargarh Town	556	500	56	162	155	7	3	3	..	111	107	4	3	3	..	111	107	4	111	107	4	111	107	4
Rajgangpur Town	275	234	41	144	118	26	1	1	..	132	123	9	1	1	..	132	123	9	132	123	9	132	123	9
Sundargarh Subdivision	36,847	30,811	6,036	2,148	1,626	523	771	495	276	5,085	3,931	1,154	771	495	276	5,085	3,931	1,154	5,085	3,931	1,154	5,085	3,931	1,154
Panposh Subdivision	6,546	5,925	621	2,146	1,884	262	8,424	5,375	3,049	2,197	1,912	285	8,424	5,375	3,049	2,197	1,912	285	2,197	1,912	285	2,197	1,912	285
Bonai Subdivision	10,904	9,545	1,359	1,433	1,222	211	3,374	2,447	907	1,572	1,220	352	3,374	2,447	907	1,572	1,220	352	1,572	1,220	352	1,572	1,220	352

(1)	Services and Repairs				Construction				Trade and Commerce				Transport, storage and Communication			
	Other than household Industry															
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
Sundargarh District	..	34,621	32,312	3,309	2,089	1,962	127	14,523	13,670	853	11,548	11,035	513	11,548	11,035	513
Rural	..	11,792	10,140	1,652	950	894	101	3,286	2,915	371	2,925	2,779	146	2,925	2,779	146
Urban	..	22,829	22,172	657	1,139	1,113	26	11,237	10,755	482	8,623	8,256	367	8,623	8,256	367
Rourkela City	..	19,320	18,890	430	777	764	13	8,533	8,244	289	7,069	6,883	181	7,069	6,883	181
Sundargarh Town	..	191	186	5	140	136	4	733	675	58	353	346	7	353	346	7
Rajgangpur Town	..	2,997	2,802	195	116	114	2	986	947	39	519	463	56	519	463	56
Sundargarh Subdivision	..	7,447	6,460	987	402	387	15	2,918	2,619	299	1,534	1,443	91	1,534	1,443	91
Panposh Subdivision	..	25,285	24,235	1,050	1,454	1,369	85	10,863	10,380	483	9,163	8,825	338	9,163	8,825	338
Bonai Subdivision	..	1,889	1,617	272	233	206	27	742	671	71	851	767	84	851	767	84

(1)	Other Services				Non-workers			
	Persons	Male	Female	Persons	Male	Female	Persons	Female
Sundargarh District	..	39,867	33,526	6,305	7,06,636	2,37,783	4,68,385	4,68,385
Rural	..	16,257	13,709	2,548	5,46,100	175,344	3,70,756	3,70,756
Urban	..	23,610	19,853	3,757	1,60,536	62,439	98,097	98,097
Rourkela City	..	19,671	16,634	3,037	1,14,653	44,966	69,687	69,687
Sundargarh Town	..	2,020	1,727	293	12,392	4,647	7,745	7,745
Rajgangpur Town	..	1,101	898	203	14,770	5,253	9,517	9,517
Sundargarh Subdivision	..	10,495	8,809	1,686	3,02,157	96,238	2,05,919	2,05,919
Panposh Subdivision	..	26,101	21,980	4,121	2,83,468	1,02,800	1,80,663	1,80,663
Bonai Subdivision	..	3,271	2,773	498	1,21,011	38,745	82,266	82,266

CHAPTER IX

ECONOMIC TRENDS

INTRODUCTION

The tract comprising the present Sundargarh district formed a part of ancient South Kosala and was connected with Madhya Pradesh through the Ib and the Brahmani River Valleys. The routes passing through the Ib river valley and the Brahmani river valley in the district served as ancient trade routes. In the past, diamonds were occasionally found in the sands of the Ib river, and gold-washing was carried on in most of the rivers and streams by Jhora Gonds, who thus gained a sustainable livelihood. There is an open well cultivated plain land along the valley of the Ib particularly in the south. The east and the west of the Brahmani valley is filled with high ranges of mountains principal among which are Mankarnacha, Chheliatoka, and Bichakhani in the east. Bichakhani hill has acquired great importance by yielding millions of tons of iron-ore for use in the Rourkela Steel Plant, which is transported by a railway line running at the foot of the hill at Dumaro. The forests of the district are of northern tropical dry deciduous type, mainly containing Sal, Assan, and Kurum. Among forest produce are bamboo, honey, gum, and Kendu leaf. Most of the hills of Bonai subdivision are densely wooded to the summit, and except at the regular passes are inaccessible. Tiger, bear, leopard, elephant, deer, and peafowl were met with in the forests. The Bonai subdivision enjoyed an unenviable reputation for a number of man-eating tigers with which it was infested. The entire tiger population is now very nearly extinct. The principal crops in order of importance are rice, blackgram, green gram, kulthi, maize, jowar, sesamum, mustard, gram, arhar, sugar-cane and potato. The district occupies a prominent position in the mineral map of the country. There is a stretch of coal bearing rock along the valley of the river Ib. Manganese, limestone, iron, kaolin, fire-clay and dolomite mines are now being worked out extensively, giving a strong industrial base to the economic activity of the people. The Geological Survey of India have unearthed a rich belt of lead, copper and zinc in Sargipali area of Sundargarh Tahsil; the reserves of which have been estimated at 700 million tonnes. An industrial township is going to develop in the area in the near future. Minerals of the district contribute about half a crore of revenue to the State Exchequer. The total value of the minerals raised during 1969-70 was about rupees ten crores.

The district is now a land of possibilities and economic experiments. The socio-economic effects of large-scale investment in a predominantly

primitive agrarian pattern of society can suitably be studied here. That after eighteen years of high industrial production, the vicinity of the producing area does not adjust to modern trends but tries to remain primitive, is a point for intensive social study.

However, many changes have taken place during the last two decades. A visitor to Rourkela today would feel like Rip Van Winkle waking up after long years of sleep. Growth of heavy and light industries in and around Rourkela, Rajgangpur, Kansbahal, Lathikata, and Birmitrapur have transformed the pastoral countryside into a centre humming with activity with large concentration of people both from within and outside the State. Established in a backward district in an area with large concentration of Adivasis, the Rourkela steel plant has opened up new vistas of progress by utilising indigenous raw materials, employing local people, and developing large number of infra-structure facilities. It is one of the world's most modern plants producing flat products which has employed the latest machinery and technique. It is also one of Asia's largest plants producing coke oven gas and a wide range of chemicals as by-products and the only steel plant in the country with a fertilizer complex producing Calcium Ammonium Nitrate.

Life in rural areas is also very different. Zamindars, Gaontias, and Chowkidars are no longer there. The Scheduled Castes and the Scheduled Tribes people of the district are primarily agriculturists. They cultivate one crop in a year due to lack of irrigation facilities and produce paddy, millets, oil-seeds, and pulses. Unlike the Adivasis in Koraput, and Boudh-Khondmal districts, the Adivasis of this district have taken up settled cultivation. Shifting cultivation is hardly prevalent. Poultry, dairy, and piggery are found among them but on a domestic scale. The important house-hold industries of these people are hand-pounding of rice, pottery, basket-weaving, rope-making and stitching of 'Siali' leaves.

The people of the district depend upon the forests to a great extent. Their requirements consist mainly of timber for house building, agricultural implements and bullock-carts; bamboo for fencing, roofing and basket making; and fuel for the kitchen. The poor people search out from the forest edible roots, leaves, fruits and flowers for their living. Collection of minor forest produce is an important subsidiary occupation and a large number of people are engaged in collection of 'bidi' leaves and cutting of bamboos for paper mills. Other minor forest produce like myrobalans, *mohua* flowers and seeds, *dhatuki* flowers, resin, etc. are collected by the local villagers and sold or bartered in the weekly markets in exchange for salt,

rice, and other necessities. As the district is full of mines, many tribal people have been employed in mining industries. Gradually these people are coming to the mainstream of modern life and their peculiar habits, festivals, rituals and social ceremonies are undergoing a change in the process.

Barring the Rourkela Complex, the economy of the district is mainly dependant on agriculture, which employs about 60 per cent of its labour force. The establishment of a number of industries in recent years has not changed the agrarian character of the district. The majority of the people depend upon subsistence farming. Due to lack of irrigation facilities the scope for introducing high-yielding crops, double and multiple cropping has been limited. Two Community Development Blocks namely, Lahunipara and Koira are under Intensive Area Agricultural Project and High Yielding Variety Programme.

However, the cultivators are gradually inclined to adopt improved methods of cultivation and make use of better seeds, manures and implements. Seeds of improved quality are being supplied by the Government agricultural farms. Agriculture is gradually being mechanised with the use of tractors and pump-sets. The cultivators of the district own 360 diesel pumps and 3 electric pumps. Fruit gardens as a source of income were almost unknown a few years back, but are now gaining popularity. During past few years several orchards were started at different places, and cultivation of vegetables was widely undertaken. Japanese method of paddy cultivation was introduced and has gained popularity among the farmers. Protection of crops from the ravages of pests has become easier with the help of modern pesticides. Government loan is being given for the purchase of seeds or cattle or for any other purpose connected with agriculture. Land Improvement Loan is advanced for any work which adds to the letting value of land such as construction of wells, tanks, reclamation of land, etc.

Summer paddy was introduced for the first time in the year 1970. Groundnut in *rabi* season is also a new crop. Ragi, hybrid maize and jawar are the other crops which have been introduced. In un-irrigated villages the land remains fallow and the cultivators remain idle for almost half of the agricultural year and during this time they migrate for daily wages to the nearby towns. The Kuradhi Minor Irrigation Project has a total ayacut area of 3,319 hectares distributed over 22 villages in Lahunipara, and Koira Blocks. It has been constructed at a cost of Rs. 59,54,000 and irrigates about 2,800 hectares in *kharif* and 280 hectares

in *rabi* season. Five new projects have been taken up recently at an estimated cost of rupees one crore and the designed ayacut (irrigated area) of these projects is 8,000 hectares in *kharif* and 2,000 hectares in *rabi* season. Improved variety of potato is being grown and found to be very profitable. The area under this crop is increasing from year to year. Other minor crops like tobacco, winter vegetables, chillies, garlic, and tomato are also grown with an increased acreage. There are many promising varieties of local paddy viz., Sonakhadika, Jhilli, Karpurbasha, Chinamati, etc. Among the high yielding varieties of paddy 1242, BAM 9 in wet land; T. 90, 141 and 1141 in medium land; PTB. 10. in high land; IR 8, Taicchung, Jaya, Padma, and Jagannath are getting popular with the cultivators. The total area covered under paddy crop during 1971-72 was 208,204 hectares, out of which 4385 hectares were under high yielding paddy, 70,447 hectares under improved paddy, and the rest 1,33,372 hectares were under local paddy. Orchards are growing as people are interested in lemon, orange, guava, papaya, plantain and mango trees in their back-yards. Experiments have been successful in planting up-to-date varieties of pineapple and cashew. Area under cashew plantation has increased up to 6,000 acres. Pisciculture, horticulture, and poultry rearing are gaining momentum. The expansion of agriculture, communication, education, health, water supply, housing, and industrial activities have been sponsored through Community Development Blocks. Family Planning and Child Welfare measures are also gaining popularity.

In brief, on one side the industrial activities are developing rapidly in and around Rourkela, Rajgangpur, and Birmitrapur changing the economic character of the people, while on the other the old agrarian pattern alters gradually through the efforts of Co-operative Societies and Community Development Projects.

During the years 1901-1910, the material condition of the people was good. There was ample room for agricultural expansion which encouraged immigration from neighbouring areas. The construction of the Bengal Nagpur Railway line through the district brought it in direct contact with the outside States. The produce of the district could find better market outside which brought about a rise in the price of agricultural produce to the prosperity of the large section of agricultural people. This resulted in the influx of settlers from Chota Nagpur in large numbers. In 1908, Bonai subdivision was in the grip of a great famine due to failure of crops but in all other years the harvest was plentiful and large extent of waste lands were reclaimed.

ECONOMIC
LAND-
MARKS

In the next ten years from 1911—20, the district had suffered from bad harvests; and epidemics like influenza, cholera and smallpox had taken a heavy toll of life. Agricultural activities were badly affected.

In the decade 1921—30, there was great agricultural prosperity both in the shape of good harvests and by way of extension of cultivation by reclamation of waste lands and forests. In Bonai subdivision, the harvest in 1926—27 was not satisfactory which was the singular case of low outturn of crops in the whole decade. Material prosperity increased owing to the extension of the railway line to Birmitrapur in 1922. The limestone and manganese quarries developed further during this decade.

The period from 1931—40 was a period of general peace and prosperity for the district. Agricultural conditions in Sundargarh and Bonai subdivisions were favourable but in Panposh subdivision the outturn of crop was not satisfactory in some years. There was poor rainfall in 1932, 1936 and 1938 when the outturn of crop was lower than in other years but no scarcity was felt. The severe economic depression of the thirties from which the whole world suffered, passed over Sundargarh district without causing much distress. Except in the mining area of Birmitrapur where labourers in the limestone quarry got very low wages, elsewhere the whole district lived on the crop it raised which did not depend on prices. Only when it came to selling the surplus for other expenditure that they got very little money for the purpose but their needs were so few that they did not feel the pinch.

During 1941—50, the harvests were good and there were no severe epidemics. In 1943, the highest flood in living memory was seen in the river Brahmani when sixty-six villages were affected and damage to crops and houses resulted. This was the singular incident of natural calamity during the decade. But the material condition of the people was affected on account of war-time measures and high price-level. The district suffered from economic and health hazards during the Second World War. Forests were denuded to supply timber for war purposes. A large number of Mundas were recruited for the Civil Pioneer Force as well as for the Stil-Well road in Burma. They came back with large sores on their legs which, however, did not take long to heal in the dry climate of the district. Although some of the forests have recovered, large areas are still devoid of tree growth as villagers destroyed all chances of re-generation by chopping off every stick for fuel.

The decade 1951—60 was remarkable in the history of the district. Industrial advancement outweighed agriculture. A cement factory and allied industries were set up at Rajgangpur, while a steel plant was commissioned into production on the 3rd February, 1959, at Rourkela. A Fertiliser Plant was also constructed in Rourkela. The mining area in Birmitrapur has developed fully.

A college for general education at Sundargarh and an engineering college at Rourkela for technical education were opened. Industrialization has provided incentive for mixing with people from all over India. The major part of the district was covered by the Community Development Block. Agricultural prosperity combined with large scale mining and industrialization contributed to the prosperity of the district.

During the years 1961—72, there was spectacular development of small scale industries in and around Rourkela. To meet the growing demand for flat steel in the country the Rourkela Steel Plant was expanded to 1.8 million tonne ingot steel capacity per year. For the development of various ancillary industries an area of about 900 acres was acquired at Kalunga which is about 10 km. from Rourkela. This project is named as the Rourkela Developed Area Project. The work has been taken up by the Industrial Development Corporation, Orissa. By the financial assistance received from the Government of India, a Commercial Estate is under construction at Rourkela. In 1972, two blocks were under construction at a total cost of rupees eight lakhs. Provision has been made for the construction of two additional blocks. It has been envisaged that these units will be let out to unemployed educated persons for both accommodation and starting of small scale industries like steam laundry, radio repairing and servicing, etc. Industries are developing rapidly along the Rourkela-Rajgangpur road, and Rourkela-Barsuan road.

Food grains are the cheapest immediately after harvest and are dearest immediately before the harvest. This is a seasonal phenomenon which occurs every year. Prices are also lower or higher according to the nature of the harvest. A good harvest means lower price and a bad harvest means higher price. This fluctuation from year to year does not take into account the general level of prices of food grains which depends on many other factors which are governed by the laws of supply and demand. If population increases, as has been happening, and production of food crop does not keep pace with it, prices must rise, obviously because the same food has more mouths to feed.

THE GENERAL PRICE LEVEL

The price of well cleaned rice in the ex-State of Bonai in 1873 was 25.220 kg. per rupee, of common rice 50.500 kg. per rupee, and of unhusked coarse paddy one quintal per rupee. The price of common rice during the decade 1893-1902 averaged at 16,800 kg. per rupee. During this period (1893-1902) in the ex-State of Gangpur, the average price of wheat, rice, and gram was 10.320 kg., 15.0 kg., and 11,300 kg. per rupee respectively. In the year 1907 the rate of rice varied from 11 to 13 kilograms a rupee at which it remained stationary till 1913.

In 1914-15 the price of common rice decreased and ranged between 15.0 kg. to 12.0 kg. per rupee in the ex-State of Bonai. In the ex-State of Gangpur, during this year the failure of paddy crop entailed hardship on the raiyats who were accustomed to depend on it for the payment of rents. The price of rice averaged about 13.0 kg. and that of greengram 9.350 kg. to 11.210 kg. per rupee. In the next year, in spite of a good harvest of paddy, price of rice increased. Rice was sold at 12.0 kg. per rupee and greengram, blackgram, kulthi, and arhar, were sold at 5.600 kg., 9.340 kg., 8.400 kg., and 6.500 kg., respectively. In the successive two years harvest of paddy was excellent and enabled the people of the ex-States to recover from the stringent condition of preceding lean years. The years 1918, 1919, and 1920 were bad years for agricultural operations. Price of rice increased abnormally, and was available at 3.700 to 9.340 kilograms a rupee. It was found necessary to import rice in large quantities to meet the demands for the labourers of several companies working in mineral area of the ex-State of Gangpur.

In 1921-22, the monsoon was favourable for the harvest and the maximum and minimum of rice available per rupee was 15.0 kg. to 11.0 kg. in Bonai ex-State, and 15.0 kg. to 5.600 kg. in Gangpur ex-State. In 1922-23 there was a bumper crop of paddy and people were able to replenish their empty granaries. Though prices of imported goods remained high, good prices were obtained for grain and people were able to pay easily to meet their demands. The maximum and minimum price of rice in Gangpur, and Bonai ex-States were 17.0 kg., and 7.500 kg.; and 15.0 kg., and 9.340 kg., per rupee respectively. From 1923-24 to 1929-30, prices rose higher and rice was available at 15.0 kg. at the maximum and 5.600 kg. at the minimum per rupee in both the ex-States. In 1930, rice became cheaper and from 1930-31 to 1940-41 it averaged between 30.0 kg., to 10.0 kg., per rupee.

The price level was again seriously disturbed in the decade 1941-50 and rose in undue proportions. In 1943-44 there was a phenomenal rise in the prices of agricultural produce resulting from the

conditions of Second World War and the famine in Bengal. The average price of rice was 7.400 kg. to 5.600 kg. per rupee. In 1944-45, Price Control Committees consisting of officials, non-officials, merchants, and cultivators were formed for fixing the maximum price of all essential commodities. Price lists were circulated and hung at prominent places for the information of the people. During this year rice was available at 4.600 to 5.600 kilograms and greengram, blackgram, arhar, and til at 3.700, 5.600, 3.700, and 4.600 kilograms per rupee. In 1945-46 and 1946-47 the price of food grains further rose and rice was available at 5.0 kg., to 3.700 kg. per rupee.

It was thought at first that this sharp rise might be only a temporary phase, but the prices started stabilizing at the high level without any prospect of recession. However, the rise of prices during the decade 1951-60 was not as drastic as in the decade 1941-50. But the common man was hit hard and was worse off during 1951-60, because the increase in the price index in this decade, though comparatively small, came on the top of the price spiral of the decade preceding, the cumulative effect of which was good enough to break the economic back-bone of the middle and the lower middle class people. Towards 1954-55 the harvest price of rice, gram, and rape and mustard, as available per rupee, was 2.500 kg., 2.650 kg., and 2.650 kg. respectively. In 1959 the foodgrains became dearer and the retail price of rice, wheat, greengram, and blackgram was 2.0 kg., 1.800 kg., 1.700 kg., and 1.800 kg., per rupee respectively. In 1960 the wholesale price of rice, wheat, greengram, and arhar was 1.990 kg., 2.400 kg., 1.600 kg., and 1.400 kg., per rupee respectively. With the launching of the Third Five year Plan (April 1961 to March 1966), prices began to rise rapidly and in 1963 the wholesale price of rice, wheat, blackgram, greengram, and sugar was 1.5 kg., 2.400 kg., 1.400 kg., 1.400 kg., and 0.650 grams per rupee respectively. In between 1966 to 1969 the prices of all commodities still grew higher and in 1966 rice, wheat, and sugar were sold at 0.925 grams, 1.160 kg., and 0.510 grams in wholesale rate per rupee respectively. The prices of all commodities rapidly grew higher in 1973 and in the month of October 1973 at Rourkela rice, wheat, greengram, blackgram, bunt, mustard oil, cocoanut oil, sugar, potato, and onion were sold at 0.700 grams, 1.110 grams, 0.416 grams, 0.476 grams, 0.444 grams, 0.114 grams, 0.102 grams, 0.277 grams, 0.800 grams, and 0.572 grams, per rupee respectively. In recent years, people have been hard hit due to rise in prices, and it is becoming difficult for lower, and middle class people to make both ends meet.

In the beginning of the present century there was little of skilled labour in the ex-States of Gangpur, and Bonai, except carpenters, **GENERAL LEVEL OF WAGES**

blacksmiths, and masons. Unskilled labour did not cost more than twelve to twenty paise per day while agricultural labour was generally paid in kind. The custom of paying the village artisans, watchmen and menials in kind at harvest time was common. The system of free labour (Bethi and Begar) was prevalent.

During the first three decades of the present century, in the ex-State of Gangpur, a superior mason earned a daily wage of Re. 0.50, while a superior blacksmith and a carpenter got about Re. 0.67 each. Common carpenters, masons, and blacksmiths were paid Re. 0.33, Re. 0.22, and Re. 0.33 per day respectively. The rate of wages in the ex-State of Bonai during this period was determined by custom, and money payments were not usually adopted. The daily rate of wages paid to imported labour was: superior mason Rs. 1.25, common mason, and carpenter Re. 0.75 each. A common blacksmith could get Re. 0.25 per day. It was extremely difficult in the two ex-States to obtain paid daily labour. The cultivators were well off and the landless field labourers obtained sufficient good remuneration in kind from the farmers and preferred irregular labour eked out by the spoil of the chase or the numerous edible products of the jungle to regular hours and good cash wages. The only system of obtaining local labour was the system of forced labour rewarding the labourers with their daily allowance of 1.867 kg. of rice.

Towards 1942 the wages of different classes of labourers began to rise. In the ex-State of Bonai, during 1942-43, the daily rate of wages was Re. 0.25 to Re. 0.31 per male labourer and Re. 0.19 to Re. 0.25 per woman labourer, while in the interior areas it was a little lower. The agriculturists continued paying in kind as usual, viz., paddy, and their rate was lower but in spite of this the 'Halias' felt more secure as they preferred payment in kind to cash. Many labourers were engaged in the extraction of timber and the construction of a portion of the Bombay-Calcutta Trunk Road. In the next year the daily rate of wages of male labourer was increased while the rate of wages for female labourers remained stable. The carpenters and masons earned Re. 0.60 to Re. 1.00 per day. Blacksmiths got Re. 0.50 to Re. 0.75 per day. In the next year the wages of both male and female labourers were increased and varied from Re. 0.31 to Re. 0.44 and Re. 0.25 to Re. 0.31 respectively. Masons were paid at the rate of Re. 0.50 to Rs. 1.25 and carpenters Re. 0.75 to Rs. 1.50 according to their skill. The labourers found no difficulty in getting remunerative employment in various public works of the ex-State as well as in the fields of tenants. In 1945-46 the mining works, public works, and forest operations of the ex-State continued to afford sufficient

employment to a large number of people. The wages of skilled labour ranged from Re. 0.75 to Rs. 1.50 and those of unskilled labour from Re. 0.25 to Re. 0.44 per day. According to practice followed here, the agricultural labour was paid in kind which was almost equivalent to Re. 0.31 per male adult and Re. 0.25 per female adult a day. Owing to the availability of sufficient employment within the ex-State very few preferred to go outside in quest of better wages. In the ex-State of Gangpur, during 1943-44 the rate of wages varied from Re. 0.31 to Re. 0.37 for a man and Re. 0.19 to Re. 0.25 for a woman. People were getting sufficient employment in limestone quarry of the Bisra Stone Lime Company, Limited, Birmitrapur; dolomite and lime quarry of the Tata Iron & Steel Company Limited at Panposh; the ex-State's own engineering department, and the public works undertaken by the ex-Zamindaris. There was also a considerable drain of labour to the tea gardens of Assam and the various military works in the country. In the next year the rate of wages for both skilled and unskilled labour increased highly. The wages of skilled labour ranged from Re. 1.00 to Rs. 2.50 and that of unskilled labour from Re. 0.37 to Re. 0.62 per day. The rate of cart hire per day ranged from Rs. 2.00 to Rs. 3.00. There was no increase in the rate of wages next year. In 1946-47, the rate of wages increased and varied in between Rs. 1.25 to Rs. 2.50 for skilled labour and Re. 0.37 to Re. 0.75 for unskilled labour per day.

During 1954-55 an economic survey¹ was undertaken by the Government of Orissa. It was observed that in the rural economy a major portion of the families derived its livelihood by earning wages in farm and non-farm occupations. The Survey showed that more than half of the labourers, i. e., 54.26 per cent were employed on casual basis. About one fifth of the total number of labourers (21.71 per cent) was engaged on annual terms. Labourers engaged on weekly and monthly terms constituted 20.15 per cent and 3.58 per cent respectively. A labourer, on the average, got work on 279 days a year.

In 1957, with the rise in prices of foodgrains, the wage level was also increased. A carpenter would get Rs. 3.50, a cobbler Rs. 2.50, and a blacksmith Rs. 3.00 per day during the years 1957 to 1961. During this period the field labourers and the herdsmen were paid in between Rs. 1.50 to Re. 1.00. Other agricultural labourers, such as, those who water fields, carry loads or dig wells were paid at Rs. 1.25 per day.

1. Economic Survey of Orissa, Vol. I, Prof. Sadasiv Misra, M. A. Ph. D., (London)

Since 1965 the wage rates have been enhanced further with the rise of prices. In 1967 the skilled labourers, such as, carpenter, cobbler, and blacksmith got Rs. 4.00 per day, Male labourers got Rs. 2.50, female labourers Rs. 2.00, and children Rs. 1.25 per day. Other agricultural labourers got about Rs. 2.00 per male, Rs. 1.75 per female, and Rs. 1.50 per children. A herdsman, whose work is grazing the cattle, got Rs. 2.00 per day. In 1972, carpenters, blacksmiths, and masons got Rs. 5.00 each per day. In urban areas wages of skilled artisans were higher and they got about Rs. 7.00 to Rs. 8.00 per day according to their skill. Field labourers and other agricultural labourers were receiving at the rate of Rs. 3.00 per male, Rs. 2.00 per female, and Rs. 1.50 per child per day. A herdsman was getting Rs. 2.25 per day. In the interior parts of Sundargarh subdivision male labourers got Rs. 2.00 in cash or 2.500 kg. of paddy in kind. Female labourers got Rs. 1.50 in cash or 2.0 kg. of paddy in kind per day. In Bonai subdivision the rate of wages per male and female labourers was the same as that of Sundargarh subdivision. But when they demanded wages in kind, it was paid at the rate of 4 kg. of paddy to males and 3.500 kg. of paddy to females per day.

STANDARD OF LIVING

At the beginning of the 20th century the material condition of the people of the ex-State of Bonai was prosperous. They had enough for their wants which were few and lived a happy and contented life. There was, however, a marked difference between the condition of the people living along the valley of the Brahmani and those dwelling in the forest tracts. The villagers along this valley were neat and clean, the houses were large and well cared for. The villagers possessed considerable herds of cattle and buffaloes. The people, however, were extremely backward and scarcely left the limits of their own villages. In fact, the villages were self-contained and self-managed. The Pahari Bhuiyans and the Hos lived in the interior part of the ex-State and their method of living was in marked contrast to their more favourably situated brethren. Their raiment consisted of a scanty cloth round the loins and in some cases a body wrap; their ornaments, a few glass beads strung round the neck. Their wants were few and they ate mostly maize which they raised on clearings in the jungle on the hill sides. Fuel was readily available; so too was timber for their houses and agricultural purposes. The necessities of life could be cheaply obtained, of luxuries few were known except opium and a considerable consumption of 'Handia' (rice beer). The people of the ex-State were free from debt except for occasional small loans amongst themselves.

During this period in the ex-State of Gangpur the condition of the people was, on the whole, good. The soil was fertile, prices were low, and the land assessment was very light. No rent was paid for the vast tracts of upland cultivation and in return free labour and certain contributions in kind were paid to the Chief. The railway had added enormously to the prosperity of the people and had given them a ready market for surplus stocks and forest products. The pinch of severe distress was almost unknown. The better classes had ample stocks and the aboriginals and landless classes lived, to a very large extent, on the products of the forests.

Towards 1935 in the ex-State of Gangpur people lived in better houses and wore more gold and silver ornaments than they did twenty years ago. There was an increase in trade in 1918 to 1925. But the general prosperity was not reflected upon the labouring class and the poor raiyats. Every year a large number of them went to Jamshedpur, and Assam to eke out their livelihood. Their earning in tea gardens was quite substantial and the relatives of these tea garden labourers received Rs. 60,000 to Rs. 80,000 yearly by money orders from the labourers. The Agharias grew fine rice, groundnuts, onion, blackgram, greengram, and sugarcane. Sugarcane cultivation was first introduced by them in the Gangpur ex-State. The standard of comfort was not much altered. The food, furniture, and clothing of an average villager were very much the same as they were before. But the Gaontias and the tenants generally used bicycles. The aboriginal races did little rice cultivation. Their principal food crop was Gulji. Many of them lived as much upon forest produce as upon their cultivation. In Bisra, Panposh, and Birmitrapur police stations most of the aboriginals lived upon rice and *Mahua* from June to October. The Mundas and the Oraons were hard working men and their work in tea gardens was much appreciated.

The average cost of cultivation of rice in Bahal land was not more than Rs. 8.88 per acre and the average net profit per acre was Rs. 16.75 when paddy was sold at 77.500 kg. per rupee. The cost of cultivation in Mal land was less and the yield was also less. Surplus paddy which a tenant got after meeting the cost of cultivation and payment of rent was his profit, the price of which fluctuated with the rise and fall of the price of paddy in the market. During this period there was no marked change in the general condition of the people of the ex-State of Bonai. The population consisted of agriculturists and labourers and very few people followed trade and other professions. Rabi and oil-seeds played an important part in the rural economy. These were exported and gave handsome profit to the tenants. Any damage done to these crops brought distress to the tenants.

Towards 1945 the economic condition of the people was satisfactory. The worst of the economic depressions was not imminent. People did not feel the pinch of penury as paddy was available at a comparatively cheaper rate than in the surrounding British districts. The works undertaken by the Public Works Department, supply of timber to War, and mining operations provided sufficient labour to the poorer classes and they had no necessity to go outside in search of employment. Apart from the ready market for labour, there were other subsidiary occupations such as collection of Sabai grass, Kendu leaves, cultivation of Tassar, and Lac which could supply labour to those classes which had the lowest economic margin. The increased prices that the agricultural products fetched helped to ameliorate the condition of the peasants considerably. The Pans and the Kolhas improved their economic condition by taking to wet cultivation.

In recent years, the impact of urban life, the modern means of communication, education, the impact of Five Year Plans through Community Development Blocks and the modern outlook to which people are fast taking, have much bearing on the food-habits and luxuries even in the remote parts of the district. The district is now one of the most industrially advanced areas in the State. The industries in and around Rourkela are providing ample scope for the employment of the people on higher wages. In spite of the increased prices of food-grains and other commodities people are able to meet the expenses.

The tribal people are economically very backward. Their annual income is hardly sufficient to provide them even with the bare subsistence of life. Much of their income is spent on social ceremonies and on drinks leaving little or no savings. For social expenses and to meet daily necessities of life in most parts of the year, they depend on money-lenders from whom they borrow small amounts of money on extremely onerous terms, at times pledging their standing crops in the field. The State Government in a bid to help these people have undertaken a number of welfare measures including the opening of Agricultural Credit Societies, Co-operative Banks, and schools to spread education among them.

In the family budget of the upper class people expenditure on cereals is much less than on other food items. They live in expensive houses in towns provided with modern amenities. On an average about 33 per cent of their income is expended on toilet, amusements, clothing, light, fuel, medicine, and education.

The middle-class people live in better houses. In respect of food items rural people depend more on home-grown stock than their counter

parts in the urban areas, while for the non-food items dependence on market is more or less the same for all. They could hardly save money for a Bank balance.

The lower class people generally live in cottages and huts. A major portion of their earning is spent on food, mostly cereals. The expenditure on education, health, fuel, and light is very meagre.

Monthly consumption of food items and non-food items per household in rural/urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by expenditure groups has been given in appendix II of the Chapter. These figures are based on the report on Family Budget Enquiry, 1960. In this study, 103 households from the rural area and 73 households from the urban area have been surveyed.

The District Employment Exchange, Rourkela, came into existence on the 3rd May, 1955. To meet the increased activities of this Employment Exchange a sub-office was opened at the district headquarters under the control of a Junior Employment Officer. The District Employment Exchange is under the control of the District Employment Officer.

GENERAL
LEVEL OF EM-
PLOYMENT IN
DIFFERENT
OCCUPATION
Employment
Exchange

The Live Register in 1971 had a strength of 25,217 persons of which 2,918 were matriculates and under-graduates, 142 graduates in Arts, 197 graduates in Science, and 38 graduates in Commerce. Under-matriculates accounted for 5,731 persons. There were 10,975 male labourers and 1,036 female labourers. Diploma holders in civil, mechanical, electrical, chemical, and metallurgical engineering accounted for 40 persons, 100 persons, 60 persons, 12 persons and 30 persons respectively.

In the last three years there has been a fall in the number of registrants, notification of vacancies, and placements. The Scheduled Caste and the Scheduled Tribe applicants constituted the bulk of the Live Register amounting to 7,400 persons in 1968, 10,019 persons in 1969, and 10,847 persons in 1970. Against these, 342 persons in 1968, 282 persons in 1969 and 126 persons in 1970 were placed in employment.

There are 132 employers in the public sector employing 49,375 persons, and 69 employers in the private sector employing 18,064 persons in the entire district. These figures are according to the information given by the employers engaging 22 persons and above in the private sector, and all the employers in the public sector.

Employment
Market
Information

The Vocational Guidance Unit is functioning in this district since August 1961 under the charge of a trained officer in vocational guidance.

Vocational
Guidance

During the period January, 1971 to January, 1972, 890 individuals received information regarding jobs, 160 applicants received individual guidance, 111 group discussions were conducted in which 855 persons attended, and applications of 552 persons were forwarded to different organisations for training.

Crash
Programme
for Rural
Employment

In view of the current unemployment and underemployment situation in rural areas, efforts to counter the situation have been undertaken on a country-wide basis. The Government of India have, accordingly, formulated a scheme called the 'Crash Scheme' for rural employment. Already several schemes, notably those relating to small farmers, marginal farmers and rural works in drought-prone areas, as also the Rural Manpower Programme are covering selected areas of the country. It would take some more time for these schemes to spread beyond the limited areas assigned to each one of them. Meanwhile, in the residue areas, as also in the areas where the substantive schemes have not yet fully spread out, or are likely to afford only limited benefits, a minimum measure of effort needs to be urgently mounted to relieve the distress caused by unemployment or under-employment or seasonal unemployment. The present scheme has been conceived in this context and seeks to provide quickly and directly employment to at least some specific numbers in each of the districts of the country. The scheme is operated through the State Governments with 100 per cent central assistance as grants.

More specifically, the objective of the scheme is to generate additional employment through a net-work of rural projects of various kinds which on the one hand are labour intensive and on the other create productive assets or complementary facilities which are part of the area development plan of each district. Due to the operation of the several employment-production-oriented special schemes, not all areas in a district would require further employment facilities. There would be developed areas, developing areas and under development areas in each district. It is in the relatively undeveloped areas where the need for employment is the greatest that this Crash Scheme should be implemented. The scheme should provide employment to minimum of 1,000 persons for ten months in a year in each district. Wages to be paid would be in terms of locally prevalent off season wage rates not exceeding in all Rs. 100 per head per month.

The scheme is designed to provide employment primarily to those who belong to families where no adult member is employed. The scheme has, however, also to take note for employing others keeping in view the problems of under-employment and seasonal unemploy-

ment. To secure durable quality of the works under the scheme, funds are also provided not exceeding one-fourth of the total wage bill for any project for purchase of materials and equipment.

The work-projects undertaken should generally be such as can be completed within two working seasons and may, as found necessary, relate also to stabilisation of existing assets like repair of roads, soil-conservation, afforestation, minor irrigation works like construction and restoration of storage tanks, etc.

In this district, during the period April, 1971 to March, 1972, Rs. 12,50,000 were provided of which Rs. 3,18,300 for renovation and excavation of tanks, Rs. 2,10,366 for improvement of minor irrigation projects, Rs. 27,500 for deepening of nursery tanks and stocking tanks for pisciculture, and Rs. 6,93,834 for improvement and construction of roads. During this period Rs. 10,58,816.71 were expended and 3,97,562½ man-days were employed. A detailed list of the expenditure incurred and man-days employed by the different Community Development Blocks and other offices has been given in Appendix I of this Chapter.

The Community Development Programme was introduced in the district with the inauguration of the Community Development Block at Sundargarh on the 2nd October 1953. The district has been divided into 17 Community Development Blocks covering a total area of 788,087 hectares.

COMMUNITY
DEVELOP-
MENT

The achievements of the Community Development Blocks in the district are narrated below.

In 1968-69, improved seeds of paddy 7648.12 quintals, wheat 256.83 quintals, jowar 12.88 quintals, maize 19.30 quintals, mung 94.95 quintals, sugarcane 44.80 quintals, and groundnut 218.38 quintals were distributed. Fertilisers, such as, Calcium Ammonium Nitrate 4179.87 quintals, Super Phosphate 857.70 quintals, Ammonium Phosphate 283.80 quintals, and other chemical fertilisers of 2526.67 quintals were distributed. An area of 1511.89 hectares was under green manuring. Chemical pesticides of 384.68 litres were distributed.

Agriculture

In 1971-72, there were 17 Veterinary hospitals, 59 Stockman Centres, and 12 Artificial Insemination Centres. 154,966 animals were treated and 8,939 animals were castrated.

Animal
Husbandry
and
Veterinary

In 1971-72, there were 17 Primary Health Centres, 21 dispensaries, 36 Maternity and Child Welfare Centres, and 21 Family Planning Centres. Besides, there were 3 training centres for Dhais. 124,528 patients were treated in dispensaries, and 10,446 patients in Primary Health Centres.

Health and
Rural Sani-
tation

Education

In 1971-72, there were 1312 Primary schools, 4 Junior Basic schools, 185 M. E. schools, and 68 H. E. schools. A total number of 40,002 boys and 19,696 girls were enrolled in Primary schools of which 27,681 boys and 13,541 girls belonged to the Scheduled Castes and the Scheduled Tribes.

Social Education

In 1971-72, there were 214 Yubak Sanghas with 4,789 members. Besides, there were 77 Adult Literacy Centres, 56 libraries and reading rooms, 31 Community Centres, and 47 Rural Radio Forums.

Women's Programme

In 1971-72, there were 344 Mahila Samitis with 11,285 members. Besides, there were 3 Balwadi Centres imparting education to the children. 169 expectant and nursing mothers, and 576 school children were medically examined. On an average 8,163 expectant and nursing mothers, and 32,729 pre-school children were fed per day.

Communication

In 1971-72, 924 km., 1,389 km., 701 km., and 343 km. of roads were maintained by Panchayat Samitis, Grama Panchayats, Public Works Department and Rural Engineering Organisation respectively. Besides, 50 km. length of National High Way, 176 km. length of State High Way and 205 km. length of rail roads were passing through the Community Development Blocks of the district.

General

During 1971-72, there were 68 electrified villages and 1,239 villages were provided with primary schools. 182 villages and 8 villages had Post Offices, and Post and Telegraph offices respectively. There were two Gramadan villages and 8 model villages.

A list of Community Development Blocks with their headquarters, number of villages, number of Grama Panchayats and areas has been given in Appendix III of this chapter.

APPENDIX 1

A list of expenditure incurred and man-days employed during 1971-72, under Crash Programme for Rural Employment.

Name of Community Development Blocks and Offices	Expenditure incurred	Man-days employed
Sundargarh	62,088.00	31,044
Tangarpali	54,588.00	14,635
Lefripara	70,605.07	28,242
Hemgir	46,612.40	18,844
Sabdega	89,588.00	33,625
Balisankra	99,588.00	39,611
Bargaon	89,573.47	38,986
Kutra	44,588.00	15,761
Rajgangpur	28,318.35	8,273½
Kuarmunda	71,588.00	23,044
Bisra	35,778.96	11,674
Nuagaon	69,588.00	23,215½
Lathikata	69,478.88	28,147
Bonaigarh	24,312.65	10,480
Lahunipara	32,810.45	11,841
Koira	42,897.49	9,342
Gurundia	51,143.01	14,351
Divisional Forest office	65,669.98	31,763½
Office Superintendent of Fishery	10,000.00	4,583
Total:	10,58,816.71	3,97,562½

APPENDIX 11

TABLE 1

Monthly consumption of cereals per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by Expenditure Groups.

	Rural			Urban		
	Cash	Non-cash	Total	Cash	Non-cash	Total
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	.. 14.41	9.43	23.84	18.95	0.83	19.78
51—100	.. 22.86	18.40	41.26	27.76	1.08	28.84
101—150	.. 14.14	45.27	59.41	43.20	..	43.20
151—300	.. 9.11	74.67	83.78	37.60	..	37.60
301—500	.. 1.03	129.93	130.96	98.46	..	84.96
501—1,000	.. 25.00	313.12	338.12	51.50	..	51.50
1,001 and above	.. ..	..	..	49.60	..	49.60
All Expenditure Groups.	17.15	33.78	50.93	34.03	0.66	34.69

TABLE II

Monthly consumption of milk and milk-products per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by Expenditure Groups.

	Rural			Urban		
	Cash	Non-cash	Total	Cash	Non-cash	Total
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	.. 0.91	1.18	2.09	0.93	..	0.93
51—100	.. 0.96	0.75	1.71	2.33	1.11	3.41
101—150	.. 1.25	1.51	2.76	5.00	..	5.00
151—300	.. 14.51	1.50	6.01	14.50	..	14.50
301—500	.. 26.75	..	26.75	19.10	..	19.10
500—1,000	.. ..	32.50	32.50	48.75	..	48.75
1,001 and above	.. ..	..	..	20.00	..	20.00
All Expenditure Groups.	2.84	2.22	5.06	8.09	0.32	8.41

TABLE III

Monthly consumption of other food items per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by Expenditure Groups.

	Rural			Urban		
	Cash	Non-cash	Total	Cash	Non-cash	Total
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	.. 4.93	0.83	5.76	9.50	0.01	9.51
51—100	.. 7.88	2.73	10.61	19.58	0.31	19.89
101—150	.. 17.58	7.24	24.82	33.71	..	33.71
151—300	.. 34.26	11.27	45.53	55.95	..	55.95
301—500	.. 112.12	18.34	130.46	94.89	..	94.89
501—1,000	.. 151.21	118.37	269.49	120.69	..	120.69
1,001 and above	.. 15.74	5.71	21.45	31.80	0.13	31.93
All Expenditure Groups	.. ..	..	..	115.62	..	115.62

TABLE IV

Monthly consumption of fuel, light and intoxicants per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by Expenditure Groups.

	Rural			Urban		
	Cash	Non-cash	Total	Cash	Non-cash	Total
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	.. 1.67	2.13	3.80	5.25	..	5.25
51—100	.. 3.59	4.28	7.87	8.47	..	8.47
101—150	.. 7.55	4.70	12.25	11.75	..	11.75
151—300	.. 15.59	2.85	18.44	13.83	..	13.83
301—500	.. 26.87	..	26.87	20.72	..	20.72
501—1,000	.. 34.93	30.00	64.93	19.62	..	19.62
1,001 and above	.. ..	..	..	21.69	..	21.69
All Expenditure Groups	16.14	3.94	10.07	9.99	..	9.99

TABLE V

Monthly consumption on amusement, toilet and sundry goods per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by Expenditure Groups.

		Rural			Urban		
		Cash	Non-cash	Total	Cash	Non-cash	Total
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	..	0.72	0.04	0.76	1.63	..	1.63
51—100	..	1.51	0.31	1.82	3.14	..	3.14
101—150	..	3.77	0.19	3.96	5.81	..	5.81
151—300	..	7.36	0.36	7.72	12.82	..	12.82
301—500	..	27.28	..	27.28	19.04	..	19.04
501—1,000	..	41.62	..	41.62	36.13	..	36.13
1,001 and above	..	..	..	..	31.00	..	31.00
All Expenditure Groups		3.43	0.22	3.65	7.13	..	7.13

TABLE VI

Monthly consumption of clothing, etc., per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by all Expenditure Groups.

		Rural			Urban		
		Cash	Non-cash	Total	Cash	Non-cash	Total
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	..	1.79	0.31	2.10	2.93	..	2.93
51—100	..	5.07	0.17	5.24	5.06	..	5.06
101—150	..	6.15	0.43	6.58	8.91	..	8.91
151—300	..	12.62	0.79	13.41	11.55	..	11.55
301—500	..	27.87	..	27.87	33.76	..	33.76
501—1,000	..	77.25	..	77.25	42.91	..	42.91
1,001 and above	..	..	..	..	145.75	..	145.75
All Expenditure Groups		6.57	0.32	6.89	10.83	..	10.83

TABLE VII

Monthly consumption of miscellaneous goods and services per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by all Expenditure Groups.

		Rural			Urban		
		Cash	Non-cash	Total	Cash	Non-cash	Total
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	..	0.94	0.15	1.09	1.38	1.38	1.38
51—100	..	3.21	0.61	3.82	13.71	..	3.71
101—150	..	6.91	0.87	7.78	10.44	..	10.44
151—300	..	15.02	4.60	19.62	18.02	..	18.02
301—500	..	35.30	2.83	38.13	27.72	..	27.72
501—1,000	..	87.25	10.42	97.67	71.40	..	71.40
1,001 and above	..	..	..	..	..	..	..
All Expenditure Groups	..	6.29	1.13	7.42	13.94	..	13.94

TABLE VIII

Monthly consumption of durable and semi-durable goods per household in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by all Expenditure Groups.

		Rural			Urban		
		Cash	Non-cash	Total	Cash	Non-cash	Total
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1—50	..	0.56	0.04	0.60	0.50	..	0.50
51—100	..	2.40	0.14	2.54	2.07	..	2.07
101—150	..	3.23	..	3.23	10.22	..	10.22
151—300	..	2.90	0.65	3.55	22.73	..	22.73
301—500	..	6.36	..	6.36	69.93	..	69.93
501—1,000	..	38.67	..	48.67	125.45	..	125.45
1,001 and above	..	..	..	..	367.92	..	567.92
All Expenditure Groups	..	3.20	0.06	3.26	28.03	..	28.03

TABLE IX

Consumers expenditure per household per month in Rural/Urban areas of Sundargarh, Mayurbhanj, and Keonjhar districts classified by Expenditure Groups.

		Rural			Urban		
		Cash	Non-cash	Total	Cash	Non-cash	Total
		Rs. P	Rs. P	Rs. P	Rs. P	Rs. P	Rs. P
1—50	..	24.89	13.12	38.01	40.27	0.85	41.12
51—100	..	45.42	26.65	72.07	69.10	1.89	70.99
101—150	..	59.56	59.51	118.97	127.02	..	127.02
151—300	..	100.96	95.96	196.92	187.01	..	187.01
301—500	..	250.22	151.11	401.33	370.13	..	370.13
501—1,000	..	465.84	504.41	970.25	516.47	..	516.47
1,001 and above	..	..	..	..	1,325.60	..	1,325.60

APPENDIX III

General particulars about the Community Development Blocks of the district.

Name of the Community Development Blocks	Headquarters	Number of villages in the Blocks	Number of Grama Panchayats	Block area (Hectares)
Tangarpali	.. Ujalpur	73	6	2,966
Lefripara	.. Lefripara	92	8	6,022
Hemgir	.. Hemgir	142	9	93,238
Kutra	.. Kutra	50	8	31,385
Gurundia	.. Gurundia	128	9	40,238
Bargaon	.. Bargaon	70	9	35,949
Sabdega	.. Sabdega	56	9	32,428
Nuagaon	.. Nuagaon	121	10	38,889
Balisankra	.. Balisankra	84	10	45,065
Sundargarh	.. Sundargarh	87	8	35,988
Bonaigarh	.. Bonaigarh	110	7	25,435
Bisra	.. Bisra	51	6	22,560
Rajgangpur	.. Rajgangpur	68	8	34,478
Lathikata	.. Lathikata	103	9	44,440
Kuarmunda	.. Kuarmunda	120	8	57,672
Lahunipara	.. Lahunipara	213	8	77,568
Koira	.. Koira	107	7	83,720
Total	..	1,675	139	7,88,087

CHAPTER X

GENERAL ADMINISTRATION

HISTORICAL
BACKGROUND

Gangpur

Patterns of administration prevalent during the Durbar regime are available only in a sketchy form from the Annual Administration Reports of both the ex-States of Gangpur and Bonai now forming the district of Sundargarh. As it appears from the Administration Report (1938-39) of Gangpur, the Regent Rani Sahiba was running the administration with a handful of counsels consisting of one Dewan, one Chief Judge, two Subdivisional Officers, one Superintendent of Police, one Forest Officer, one Chief Medical Officer, one Tahsildar and one Naib-Tahsildar. The strength of the staff as indicated above shows that the administration was simple in nature. Consequent on the expansion of the various activities of the State, the administrative machinery also experienced a gradual increase in the work-load. As a result, during the last year of the Durbar Rule (1946-47) the strength of the staff went up to 21 principal officers consisting of three ministers, one District Magistrate-cum Sub-Judge-cum Deputy Registrar, and two Subdivisional Officers. The Subdivisional Officer, Sundargarh, was also working in the capacity of Sundargarh Control Officer and Publicity Officer in addition to his own duties. One Superintendent of Police, one Magistrate, Second Class; one Income tax Officer-cum-Mining Officer, one Revenue Officer and Tahsildar-cum-Magistrate, First Class; one Assistant Revenue Officer, one Headquarters Magistrate, one Chief Medical Officer and Superintendent of Jail, one Chief Forest Officer, one Veterinary Assistant Surgeon, one Superintendent of Excise, one Deputy Inspector of Schools, one State Engineer, one Manager, Nagra and Hatibari Wards Estates and one Assistant Control Officer were there incharge of various other departments.

Bonai

Similarly, the ruler of Bonai was at the apex of the administration of his State. He was assisted by a handful of officers, but there was a marked expansion in the cadre of officers year by year. Just before merger, the ex-State had 22 officers of whom mention may be made of the Dewan-cum-Collector, Assistant Dewan-cum-District Magistrate, Sub-Judge, Chief Medical Officer-cum-Superintendent of Jail, Development Officer-cum-Magistrate, 1st Class; Forest Officer, two Subdivisional Officers one each for Bonai and Koira subdivisions, two Tahsildars and one Assistant Engineer.

The gradual trend of elaboration in the various branches of administrative machinery was perhaps due to the inclusion of the States in the Eastern States Agency headed by the British Paramountcy. Even then

from the duty charts of the officers it appears that one officer was in charge of various departments and was also working in different capacities. This shows that though the administrative machinery was elaborate in nature, still it was in rudimentary stage.

Consequent upon the integration of the States on the 1st January, 1948, with Orissa, the district of Sundargarh was formed comprising the two ex-States of Gangpur and Bonai. The ex-State of Gangpur was divided into two subdivisions, i. e., Sundargarh and Panpesh while Bonai was retained as the third subdivision.

In the new set up, the Collector and the District Magistrate is in overall charge of the general, revenue, and development administration of the district and he is assisted by an Additional District Magistrate and other district level officers. He occupies the pivotal position in the district administration. He is the guardian of law and order, and the promoter, helper and adviser of the Panchayat Raj institutions. He also supplies adequate technical support and facilities to the district level officers. He being the co-ordinating and guiding functionary at the district level, co-ordinates and guides the activities of different departments in the district.

The primary function of the Collector as indicated by his very designation, is to collect the land revenue and other dues of the Government. He as the District Magistrate is also responsible for the maintenance of law and order in the district. Besides, a lot of other miscellaneous business relating to almost every sphere of administration keeps him constantly pre-occupied. Immediately after Independence and during the first two plan periods (1951-1961), he was responsible for almost all development works implemented in the district. The "Captain" of the development team, as he was called, he had to co-ordinate and supervise all development and welfare works in the district. But with the introduction of the Zilla Parishad Act, 1960*, the role of the Collector

*. With the abolition of the Zilla Parishad with effect from the 1st April 1967, a District Advisory Council was constituted which was named as "Zilla Paramarsadata Samiti" in Oriya. The functions of the District Advisory Council as defined in Resolution No. 2694, dated the 1st July, 1968, of the Community Development and Panchayat Raj (C.D.) Department, Government of Orissa, were as follows:

- (a) To advise the Government regarding developmental and other activities referred to it by Government from time to time and,
- (b) to consider and advise Government as to how best the developmental activities can be expeditiously and efficiently executed and suggest ways and means to remove the bottlenecks in execution of the developmental works.

A new set-up called District Development Advisory Board has replaced the Council since the 14th November, 1970.

changed to supervision and guidance as the guardian of government interest.

He is also assisted by an Additional District Magistrate stationed at Rourkela for maintaining law and order in Rourkela City.

Besides the above, the Collector is assisted by officers of various other departments like the Superintendent of Excise, Civil Supplies officer, District Public Relation Officers, District Panchayat Officer, and District Welfare Officer.

The Collector is under the Revenue Divisional Commissioner, Northern Division, whose office is located at Sambalpur. The Commissioner is the immediate supervisor of the Collector who has powers to revise certain actions of the Collector and to give him general direction.

After the separation of the judiciary from the executive, the District Magistrate no longer tries criminal cases. Separate judicial magistrates have been posted to the district and they are functioning under the supervision of the District and Sessions Judge, Sambalpur-Sundargarh judgeship.

As mentioned earlier, the district has been divided into three subdivisions, namely, Sundargarh, Bonai, and Panposh. Each subdivision is in charge of a Subdivisional Officer. He is mainly responsible for general and revenue administration and for the maintenance of law and order in his area. The Executive Magistrates posted under him administer only the preventive sections of the Code of Criminal Procedure and maintain law and order. Trial of criminal cases are left to the Judicial Magistrates of the subdivisions.

The district has 5 Tahsils, each in charge of a gazetted Tahsildar. A Tahsil is further divided into Revenue Inspector Circles which are the lowest land revenue units for collection and are in charge of Revenue Inspectors. Staffing pattern of each subdivision is as follows:

Each Subdivisional Officer has sections like (1) General and Miscellaneous, (2) Development, (3) Revenue, (4) Establishment, (5) Nizarat, (6) Record Room, (7) Election, (8) Judicial, (9) Welfare, (10) Grama Panchayat, (11) Civil Supplies, (12) Public Relations, etc. These sections are manned by gazetted officers subject to the overall control of the Subdivisional Officer. In the subdivision of Sundargarh, the Subdivisional Officer is assisted by officers like Revenue Officer, Nizarat Officer, Subdivisional Panchayat Officer and Assistant District Welfare Officer. The first two officers belong to the State Administrative Service whereas the other two are the officers ex-cadre. In the subdivision

of Panposh, he is being assisted by many subordinate officers like officers in-charge, Criminal Court; Revenue Officer, Development Officer, Executive Magistrate, Subdivisional Panchayat Officer, Assistant District Welfare Officer, and Special Certificate Officer to run the general administration of the subdivision. Similarly in Bonai subdivision, the Subdivisional Officer is assisted by officers like Revenue Officer, Nizarat Officer, etc.

The Subdivisional Officer, Sundargarh, obtains the help of the three Tahsildars posted in Rajgangpur, Sundargarh, and Hemgir Tahsils of his subdivision for running the revenue administration. In Bonai and Panposh subdivisions, since the subdivisions are co-terminous with the Tahsils, the Tahsildars assist the Subdivisional Officers in the revenue administration of the subdivisions. Here it may be mentioned that the Tahsildar of Panposh is having his headquarters at Kuarmunda which was previously the headquarters of the Nagra Zamindari.

Except Sundargarh each subdivision has a Sub-Treasury which is in charge of a junior officer of the State Finance Service. They are designated as Sub-Treasury Officers*. Sundargarh being the headquarters of the district has got a Treasury which is manned by a senior officer of the Finance Service who is designated as Treasury Officer.

To implement the Community Development Programme the district has been divided into 17 Blocks each in charge of a Block Development Officer. The Blocks are located at Lefripara, Hemgir, Rajgangpur, Kutra, Sundargarh, Bargaon, Sabdega, Balisankra, and Tangarpali (in Sundargarh subdivision), Kuarmunda, Nuagaon, Bisra, and Lathikata (in Panposh subdivision), and Lahunipara, Koira, Bonaigarh, and Gurundia (in Bonai subdivision).

List of various sections in the district office is shown in Appendix-1. These sections are in subordinate charge of many district level officers subject to overall control of the Collector.

Other State Government Offices and offices of the Government of India located in the district are shown in Appendix II.

*. Government have sanctioned to open a Sub-Treasury at Rajgangpur which is yet to function.

APPENDIX I

SECTIONS OF SUNDARGARH COLLECTORATE

1. Revenue
2. Touzi
3. General and Miscellaneous
4. Judicial
5. Establishment
6. Land Records
7. Forest Settlement
8. Emergency
9. Land Acquisition
10. Compensation
11. Development
12. Election
13. Nizarat
14. Record Room
15. Mines
16. Public Relation
17. Civil Supplies
18. Panchayat
19. Regional Transport Office
20. Excise
21. License
22. Treasury
23. Census
24. Library
25. Certificate
26. Loans
27. Flood
28. Bill and Budget
29. Forms and Stationery

APPENDIX II

OFFICES OF THE STATE GOVERNMENT

1. District Veterinary Officer, Sundargarh
2. District Statistical Officer, Sundargarh
3. District National Savings Organiser, Sundargarh
4. District Welfare Officer, Sundargarh
5. Chief District Medical Officer, Sundargarh
6. Superintendent of Police, Sundargarh
7. Superintendent of Police, Rourkela
8. Deputy Inspector-General of Police, Rourkela
9. Assistant Director, Fisheries, Sundargarh
10. Assistant Soil Conservation Officer, Sundargarh
11. Executive Engineer, Rural Engineering Organisation, Sundargarh
12. Executive Engineer, Rural Engineering Organisation, Rourkela
13. Executive Engineer, Roads and Buildings, Sundargarh
14. Executive Engineer, Roads and Buildings, Rourkela
15. Executive Engineer, Electrical, Rourkela
16. Executive Engineer, Public Health Department, Rourkela
17. Divisional Forest Officer, Sundargarh
18. Divisional Forest Officer, Bonaigarh
19. Assistant Registrar, Co-operative Societies, Sundargarh
20. Principal, Sundargarh College, Sundargarh
21. Principal, Rourkela Science College, Rourkela
22. District Employment Exchange Officer, Rourkela
23. District Industries Officer, Rourkela
24. District Labour Officer, Rourkela
25. Assistant Labour Commissioner, Rourkela
26. Divisional Transport Manager, Rourkela
27. Commercial Tax Officer, Rourkela
28. Mining Officer, Rourkela
29. Inspector of Schools, Sundargarh Circle, Sundargarh
30. District Inspector of Schools, Sundargarh
31. District Inspector of Schools, Rourkela
32. District Agricultural Officer, Sundargarh
33. District Industries Officer, Sundargarh

OFFICES OF THE GOVERNMENT OF INDIA

1. Income tax Officer, Rourkela.
2. Superintendent, Central Excise, Rourkela
3. Central Excise Factory Officer, Rourkela
4. Assistant Labour Commissioner, Rourkela
5. Superintendent of Post Offices, Sundargarh

CHAPTER XI

REVENUE ADMINISTRATION

HISTORY OF
REVENUE
SYSTEM

The present Sundargarh district comprises the ex-State of Gangpur and Bonai. So far as the history of their revenue system is concerned these ex-States have been treated separately. This narrative relates to the period ending 1948 when these ex-States lost their identity after their merger with Orissa.

GANGPUR

Gangpur was once under the suzerainty of Sambalpur, which formed a part of the dominions of the Maratha Rajas of Nagpur. It was ceded in 1803 to the British Government by the Treaty of Deogaon by Raghuji Bhonsla, Raja of Nagpur, but was restored to the Maratha Raja in 1805. It reverted under the provisional engagement with Madhuji Bhonsla (Appa Sahib) in 1818 and was finally ceded to the British in 1826. In 1821, the feudal supremacy of Sambalpur over Gangpur was cancelled by the British Government and a fresh *Sanad* was granted to the Chief. In 1827, after the permanent cession, another *Sanad* was granted for a period of five years, but this was allowed to run till 1875 before it was renewed. The next *Sanad* was granted to the Chief in 1899 and the relations of the Chief with the British Government were regulated by this *Sanad*. The ex-State of Gangpur was transferred from Chota Nagpur to Orissa Division in 1905 and in the same year the *Sanad* was re-issued to the Chief with a verbal change due to the transfer of the ex-State to Orissa and the appointment of a Political Agent to advise and assist the Chief. The *Sanad* was renewed again in 1936.

The previous history of the ex-State is interesting, for though it adjoins the Chota Nagpur plateau and much of its original population seem to have come from that area in comparatively recent years, the system of village and revenue management including the terms like *gaontia*, etc., bear strong resemblance to the Sambalpur and Central Provinces systems. In this connection, Sir W. Hunter in his statistical account of the Chota Nagpur States writes: "Villages in Gangpur are held either on feudal tenure or on farming leases. The feudal tenures date back to the early times, when the vassals of the Chief received grants of land, in consideration of rendering military service and making certain payments in kind. The payments were gradually commuted to a quit-rent in money, but the service conditions were rigidly enforced. When the Raja went on a journey, his military-fief-holders were obliged to accompany him with their *naiks* or lieutenants in charge of

villages and *paiks* or foot soldiery. A few of them are armed with matchlocks, but the majority have only axes and bows and arrows. As the purchasing power of money decreased, the *malguzari* or rent paid by the fief-holders and the heads of villages under them proved insufficient to meet the growing expenses of the Chief. Thus, demands for extra contributions arose. Neither fief-holder nor village head nor foot soldier, however, admit that there has been any enhancement of rent. This they claim to pay at the old rates and take a separate receipt for, as *malguzari*, while the extra contribution is paid as *pancha*, *mangan* or cess, and the two are never consolidated. The *paiks* or foot soldiers pay rent to *naiks* or village headmen at fixed rates, which average about half of those paid by tenants, who owe no service; the *paiks* of Gangpur belong to the Bhuiya tribe.

"All the other villages, whether belonging to the Chief's demesne lands (*khalsa*) or not, are held by small farmers called *gaontias* under a simple lease-hold tenure for a term of from three to five years, which shows no signs of becoming hereditary, and is not usually held by any of the indigenous tribes. The *gaontia* pays a stated annual rent, and is remunerated by the surplus collections from the tenants on account of new lands brought into cultivation and by certain *bhogra* or service lands held rent-free. The yearly rent is very seldom changed; but whenever the lease is renewed, the *gaontia* pays a bonus, which is supposed to represent the enhancement of value due to improvements or extension of cultivation within the currency of the lease. Under this system there has been little or no interference with the individual cultivators: they assist the *gaontia* in the cultivation of his *bhogra* (service) lands. The land measure, however, is based, as in Chota Nagpur proper, not on a specific superficial area, but on the amount of seed sown. On the occurrence of births, marriages, or deaths in the Raja's family, the villagers are called on for extra contributions¹".

By the beginning of the present century, employment of *paiks* as a State militia ceased. But though the *paiks* were no more officially recognised and the service conditions were no longer enforced, the distinction between rent (*malguzari*) and cesses (*panchas*) was still recognised in the villages formerly granted as feudal tenures.

"In the *gaonti* villages besides the priest of the aboriginal deity, who ranks next to the village headman, the only other recognised official is the *gorait* or *chaukidar* (village watchman). *Gaontias* are ex-officio police officers; and the *gorait*, besides being the village messenger, is also the assistant of the *gaontia* in all matters connected with police or the detection of crime. Villages in the State are classified as *kut* and *akut*

¹. Feudatory States of Orissa by L. E. B. Cobden-Ramsay, P 184

villages. The *kut* villages are those where a rough estimate by the eye has been made of the cultivated lands, and are practically entirely held by *gaontias*: the *akut* villages are those in which no eye measurement has been made and the head of these villages is usually known as a *ganjhu*: he is usually the original clearer of the soil or a direct descendant. The superiority of the position of a *ganjhu* over a *gaontia* is shown by the fact that the former pays nothing in case of inheritance during the currency of his lease, whereas the latter has to pay regular fees for mutation. The foundation of administration rests very strongly in Gangpur on the village headman. In this State these headmen have acquired by prosperity a very strong position and are fully capable of maintaining their rights against the Chief or feudal tenure-holder under whom they hold: this is especially marked in the Nagra zamindari where many of the *ganjhus* have actually asserted claims to the forest in their villages and tried for years to style themselves *shikmi* (under) zamindars. The custom in the neighbouring States of the Sambalpur district is that a *gaontia* should not hold more than 20 per cent of the total cultivated land as *bhogra*, village service lands; in Gangpur, however, the village headmen, in many instances, owing to weak administration in the past, possess far more than this and are in consequence very wealthy and influential personages in the villages¹."

The earliest record available of the past revenue administration consists of a *Jamabandi* prepared in 1865. The revenue is shown there as Rs. 5,200 plus a number of *abwabs*. This *Jamabandi* merely indicates the rent, cesses and *abwabs*, payable by each village and there are no details to show how these rent-totals were arrived at, or how the rent payable was distributed amongst the raiyats. It was only ascertained, villages were held by headmen with whom the settlement was made. In what manner these headmen recovered rents from the raiyats, what amount they had to pay, and whether they recovered rent, largely in excess of what they had to pay or not, there is nothing to show. The arrangement with the headmen appears to have been made after a rough estimate of the land in the village or by mutual agreement and the headmen in their turn distributed this amount or more than it among their raiyats, the State not coming into direct contact with the latter at all. In addition to these headmen of single villages, there were also some, who, evidently holding a stronger position, had groups of villages under them. In these cases, the settlement appears to have been made with the headman of the group, who in turn, leased his villages out to other headmen who apportioned the amount payable among the raiyats. It is obvious that this system of settlement was capable

1. Feudatory States of Orissa, by L. E. B. Cobden-Ramsay, P 185.

of abuse and there is very little doubt that advantage was taken of it by the headmen to enrich themselves at the cost of the raiyat. It is not quite clear, how these headmen came to get their positions, but there is little doubt that they were men of superior intellect and qualifications. They were dealing with raiyats who, in the main, were extremely ignorant and as a result there could have been little or no difficulty in collecting from the raiyats, sums far in excess of what they had to pay.

This state of affair appears to have continued up to 1874, when ^{Kut Settlement} the Ruling Chief made a *nazar-kut* or survey by eye estimation. It was done purely on guess-work and in a limited number of villages. *Khalsa* was excluded. A uniform rate was applied to all lands, the area being given in terms of seed capacity. Part of the revenue was payable in kind. The areas not covered by *nazar-kut* were subjected to a percentage enhancement.

The system of assessment consisted of sending out an Amin to a village to prepare a *Jamabandi* showing the extent of each raiyats holding in *khandikhunties*. It was undoubtedly a great advance, but it left out of consideration of the classes of land and was unfortunately rendered very unreliable for want of supervision, with the result that the size of *khandikhunti* depended entirely on the Amin's discretion. As a result of this settlement, a rent of Rs. 2 per *khandikhunti* was fixed in all *kutted* villages. All miscellaneous *panchas* or cesses, such as, *Dashara*, *Rahas* etc. which had hitherto been in force, were abolished, only *karchowl* and *biripatti* being retained. The villages in which no *kut* was made apparently continued as before paying the rents and *panchas*, as they did in 1865. The financial result of this settlement was to raise the revenue to Rs. 15,000 in cash, plus 3780 maunds of rice and 360 maunds of Biri.

As a next step, there was another settlement in 1900. The rent of each village was settled by agreement between the then Ruling Chief and the headmen. The Chief levied an allround increase of 25 per cent on *kutted* villages and of 50 per cent on non-*kutted* villages. This raised the cash rent per *khandikhunti* in *kutted* villages to Rs. 3 ^{Settlement of 1900} and 2 annas (or Rs. 3.12), the rent of non-*kutted* villages being made double the amount they were paying in 1865. As a result of this increase, the land revenue became Rs. 29,327 inclusive of cesses and *karchowl*, and Biri to the value of Rs. 13,578. This brought the revenue to Rs. 47,700 including cesses and all *abwabs*.

The first regular survey and settlement of Gangpur commenced in 1907 and was completed in 1911 under the supervision of Mr. Connolly. ^{Settlement 1907-11} was a ten years settlement and its term was to expire in 1920-21. The

total revenue of *Khalsa* and *Gaontiahi* villages was brought to Rs. 76,904, that of Hemgir zamindari to Rs. 8,444, Nagra zamindari to Rs. 21,233, Sargipali zamindari to Rs. 3,585, Sarapgarh zamindari to Rs. 1,854 and Hatibari to Rs. 5,375. A traverse survey was done by means of plane table and sighting instruments, but not with theodolite. A cadastral survey was also done of the villages surveyed by traverse. The uplands were not assessed to rent. Only the wet lands and sugar-cane fields were settled. The classification of land was made according to the local system and according to the levels of various kinds of rice land. Upon the levels depended the moisture retaining power of the soil as well as the accumulation of fertile matter. The Settlement Officer considered that little was to be gained by making a further classification and in view of the facts that the local classification was well understood by the raiyats and rice was the dominant crop, this view seems to be quite sensible. The settlement resulted in nearly 100 per cent enhancement. A record of rights was for the first time prepared and this document in the latter years, governed the revenue administration of the State.

An important feature of the revenue system of Gangpur, as stated earlier, was the existence of zamindaris or the 'feudal-tenures', which will be discussed in details later. The headmen of the tribal villages in the zamindaris were known as *ganjhus* and the groups of *ganjhu* villages were under a head *ganjhu*. In the tribal zamindari areas, the *ganjhus* were probably the descendants of the original clearers of the soil. Originally, it is likely that wherever a village was founded by clearing the jungle, the person who took the initiative in the matter became the headman of the village and it was with him that the Ruling Chief came to an agreement regarding the revenue of the village. The system of leasing out villages to farmers was a latter development and was introduced mostly when the tribal settlements of Gonds and others were intruded upon by a more sophisticated class of people who found the primitive headmen easy to put aside. L. E. B. Cobden-Ramsay in his gazetteer records "the gaontias are usually Aryans, either Brahmans, Goalas, Telis or Agharias". The Settlement Officer found during the 1907-11 settlement that many villages in the Nagra and Hatibari zamindaris were of comparatively recent origin, that is, 20 or 30 years past. In view of the backwardness of the zamindaris, the system of farming out villages by ousting tribal headmen had apparently not taken place to any appreciable extent. The *ganjhus* were thus different from the *gaontias*. The succession to the post was by inheritance. The *ganjhus*, paid nothing in case of inheritance during the currency of a lease. It is also necessary to mention that at the 1907-11 settlement, it was found that a number of

inhabitants of the zamindaris were recorded as having been born in Ranchi district at the 1911 Census. At the 1901 Census, 19,000 Mundas were recorded in Gangpur. These facts are mentioned here to show that at the first settlement, when the development of the tribal areas where Mundas are in appreciable number was comparatively recent, no such rights as *khuntkatti* rights or villages of *khunt kattidars* were found to exist and the Settlement Officer did not record any such rights. An agitation for *khuntkatti* rights (mentioned in the Chota Nagpur Tenancy Act) had been set up among the Mundas, but as far as the previous history of the tract goes, there was no reason whatsoever for conceding such rights to the Mundas; and certainly such rights could not be given to them with due justice to the tribal raiyats and others who had probably been in the tract far longer than the Mundas and were as much the original clearers of the soil. If such rights were to be conceded the only reason for it would be that Mundas in another part of the country enjoyed such rights. It must be pointed out that they got these rights because they were already enjoying them and not because they were Mundas. The head *ganjhus* seem to correspond to the *pargana* or *dandapat* officials of other areas with a number of villages under them. The head *ganjhus* usually held a village direct within the group and the land revenue of the group was paid through the head *ganjhus* who probably engaged for the revenue of the entire group distributed the burden over *ganjhus* below him.

At the 1907-11 settlement, for the first time, the rights of gaontias and raiyats were recorded in the record-of-rights. It was recognised that a raiyat could not be ejected except by the order of the court and then only for non-payment of rent. Rent could not be enhanced during settlement except on the ground of increase in area. Transfer by mortgages, sale etc. was not recognised and the Settlement Officer records that this was a salutary prohibition. Sub-leases with the consent of the headmen were permitted but could not remain after the end of the current settlement. A portion of the holding could not be relinquished without the headman's consent except at the end of the settlement. Uplands could be converted at pleasure into rice lands but new lands could not be broken without the consent of the Ruling Chief or Zamindar which had to be obtained through the headman. New rice lands were rent-free for the first three years. Raiyats could enjoy the fruits and leaves of all self-grown trees within their villages but the right to timber of all trees, whether planted or self-sown, was with the Ruling Chief or the Zamindar; and raiyats could cut no trees without his permission. Wood and fuel from reserved area could be taken only with licences issued by the Forest Department. But fuel etc. could be taken for

personal consumption from the unreserved forests. The propagation of lac and silk-worms was subject to such terms as were agreed upon between the raiyats and the Ruling Chief or the zamindar.

The *gaontia* was responsible for the revenue and the cesses. He had to pay a *salami* to the Ruling Chief or the zamindar equivalent to one year's rent of his village once during the current settlement after 5 years from the date of the *patta*, and thereafter a *salami* for every fresh period of settlement. He had no right to partition the village or the home farm-lands or to lease out his village. With the consent of the Ruling Chief or the zamindar, he could let out waste lands. In the case of *ganjhus*, no *salami* during the period of a settlement was required and he was required to pay only a succession fee equivalent to one year's rent on being appointed to headmanship. He had the right to appoint *sub-ganjhus* with the permission of the Ruling Chief or the zamindar. He could not be ejected on the expiry of each settlement like the *gaontia* and was exempted from payment of rent in all *bhogra* land held by him; if the land was less than the equivalent of one-fourth of the village rental, he was entitled to a draw-back up to that limit. He could let out waste lands without consulting the Zamindar or the Ruling Chief.

Nayabadi
Settlement of
1923-24

The 1907-11 settlement was made for a period of 10 years but on expiry of the period, a revision was not taken up as the economic condition of the raiyats was quite unsatisfactory. Besides this, the Ruling Chief in 1916 imposed a *pancha* (special cess) of 12 annas (75 paise) for every rupee of rent on the occasion of a *Brata* or thread investiture and another of two annas (12 paise) per rupee of rent to defray a portion of expenditure of a wedding. A *nayabadi* settlement or settlement of newly cultivated lands was therefore made in 1923-24 and revision settlement was postponed.

Settlement of
1928-36

The operations of revision settlement commenced in October 1928 and were completed in 1936. In this settlement the soil unit system was applied. Villages were divided into 5 classes and the lands which were originally placed in three classes (Bahal, Berna and Mal) were now classified in six, namely, (1) Pani Bahal, (2) Bahal, (3) Pani Berna, (4) Berna, (5) Pani Mal, and (6) Mal. The only reason for this classification was that it was desired to divide the main class into a superior and inferior class. The superior class was distinguished by the prefix 'Pani' for example, Pani Bahal. In addition to this the *gora* or upland which had not been assessed at the previous settlements, and various other lands, like homestead lands, *baris*, sugar-cane lands, land in the bed of rivers, were subjected to assessment. The classification of villages was also an innovation and probably was responsible for some of the

troubles which arose after the settlement. The main feature of the settlement was that the whole State was surveyed and all lands assessed. The result of assessing lands which were formerly held free of assessment, was a steep rise in the total assessment payable by the tribal classes particularly, as in the backward villages they held large areas of *gora* lands which they cultivated irregularly. This effect of the settlement was probably overlooked by the Settlement Officer and the assessment as a whole was accepted by the great majority of cultivators. On account of the agitation which broke out in the Munda territory, the assessment as well as the cesses had to be reduced by a considerable amount.

It is necessary to mention here certain points about the assessment of the *gora* or uplands as there was a suggestion that these lands were not assessed in view of *bethi* and *begar* which was being levied on the raiyats. In reporting the *nayabadi* settlement, the Dewan wrote that there was a mistaken belief that *gora* lands were held free of rent for rendering *bethi* and *begar* and were not predial to the cultivation of paddy. He pointed out that throughout Chota Nagpur till recent years *gora* lands were considered valueless and in fact were so. The ground was stony and was of little value except for a rapidly maturing catch crop as even a few days break in rains spelt total loss. When, therefore, the rent of paddy lands was a few annas an acre, it was impracticable and not worthwhile assessing rent on *gora*, added to which is the fact that paddy lands were limited in extent and in demand, whereas *gora* was unlimited and in small demand. So the raiyat was permitted to cultivate any extent of *gora* he wished free of rent.

The term of settlement was proposed to be ten years. The main reason given for this by the Dewan was that the minor Ruling Chief would soon attain majority and it was not desirable to tie his hands down for a long period. The Settlement Officer who was asked to give an opinion did not, as it appears, from the wording of his letter, give an opinion of his own but rather agreed to the period of ten years proposed by the Dewan pointing out that the margin of profit to the agriculturists as reckoned by him was large. Not only was the calculation questionable but in giving the figure as if it must be correct to the last digit, the Settlement Officer showed that lack of understanding of the vicissitudes of agriculture and problems of the agriculturist which was a fairly common feature of settlements in the States and to some extent elsewhere. It is interesting to note that the same Dewan who proposed a period of ten years which he himself recognised as short, wrote only a few years before in reporting the *nayabadi* settlement, 'As I have said the immense majority of our ryots pinched by the most

galling poverty, and just living from hand to mouth, have remained in a state of stupid debasement, broken by incessant misfortune, and generally abjectly submissive before their superiors”.

The settlement records prepared in Gangpur was the *khatian* which contained also the rent roll or *ekpadia* and the *khewat*. No settlement records were maintained in the villages except the *ekpadia*. The copy of the *khatian* originally prepared at the settlement was not used but another copy was prepared for use in the mutation branch. In addition to this copy of the *khatian* a general register of mutation was maintained. From this register separate registers in the same form were prepared for each village. Additions to the village mutation register were entered in this copy of the *khatian* kept in the mutation office. The *khatian* together with the village mutation register showed the existing position. Before the last settlement the original *khatian* itself used to be corrected, but since the completion of the last settlement this new system of keeping a village mutation register had been introduced. The *gaontia's ekpadia* was also corrected where a mutation was effected. If a part of the plot was transferred, the correction was made on the village map. The *gaontia's* copy of *ekpadia* was also corrected at the time of settlement and entries in it were checked by the Tahsildars. Mortgages were not recorded in the mutation register. There were no mutation rules, but mutation fees were prescribed by a standing order. *Gaontia's* succession cases were treated as mutation cases and a succession fee was charged. In such cases, the entry in mutation register showed the change in respect of *b'ogra* land. The existing *patta* of the *gaontia* was corrected and a new *patta* was issued.

Cases of reclamation were not brought on to the mutation register. A separate register was maintained for this. This was because the State did not get any income from the newly reclaimed land until the next settlement and the *gaontia* appropriated the whole of the income from such new land. The *ekapadia* of the *gaontia* only was corrected.

In the case of abandonment of holding, the *gaontia* settled a raiyat on the land and this was usually approved by the court. In the case of re-allotment of abandoned holdings as well as on the allotment of new land the *gaontia* in many cases levied a *salami*. Though the existing record-of-rights did not authorise this, there was no specific prohibition of *salami* or a penalty for its recovery in the record-of-rights.

Land tenure

As stated in 1929-36 Settlement Report, there were ten tenures in Gangpur, viz., (i) Zamindari, (ii) Kharposh, (iii) Parganadar, (iv) Debottar, (v) Brahmottar, (iv) Noukaran (service tenures), (vii) Head Ganjhuani, (viii) Ganjhuari, (ix) Gaontiahi and (x) Sikmi Gaontiahi.

¹. Report on Land Tenures and the Revenue System of the Orissa and Chhatisgarh States, vol. III.

Zamindari
Tenure

There were four zamindaris, viz., Nagra (524 sq. miles or 1357.16 sq. km.), Hemgir (392 sq. miles or 1015.28 sq. km.), Sargipali (48 sq. miles or 124.32 sq. km.), and Sarapgarh (44 sq. miles or 113.96 sq. km.). The Zamindars stood half-way between the feudatory chief and the ordinary proprietors of villages. The Zamindar was the proprietor of his estate which was impartible and non-transferable save to the nearest heir. The first son inherited the tenure, while the other sons got *Kharposh*.

Later, as we find in Mr. Ramadhyani's report, the village Kupsinga was declared to be a zamindari, though somewhat indirectly, being mentioned in an order of the Commissioner relating to the forest rights of Deogaon village in the following terms : "I would add that there is no question as to plaintiff's right to hold Kopsingha village as zamindar or *ilaqadar* in permanency at a fixed rent of Rs. 25-8-0 (Rs. 25.50). There is no forest there and the Raja has no claim to any forest right in that village”*.

No *sanad* had been issued by the State to the zamindars and thus there was no clear definition of their rights. It would appear that the four zamindaris first mentioned were of very long standing and the zamindars at one time must have exercised, what were for all practical purposes, sovereign powers. Subsequently the rights were to some extent whittled down. The zamindars had been unwilling to accept a *sanad* as this would mean definition of rights and a possible curtailment. The question of forest rights arose acutely in connection with the agreement entered into by the Ruling Chief with the Bengal Nagpur Railway in 1891. It was ruled that the Zamindars of Nagra and Hemgir had permanent rights in their zamindaris and the Ruling Chief had no right to the forests or to levy a royalty on forest produce. In respect of forests as well as minerals which were the two important matters apart from land, disputes between the State and the zamindaris had rested in the decision that they were entitled to all rights over forests in their zamindaris and had rights over minerals also in the proportion of 6 annas: 10 annas (37½ % and 62½ %). The latter amount went to the State. A certain amount of control was exercised by the State over the management of zamindari forests and though they had full rights, they were expected to manage the forest in accordance with the existing rules. The working plans and rules in respect of these forests were expected to be the same as the State rules. The zamindars had no control of allotment and exploitation, and were only entitled to six annas (37½) per rupee of the

*Reports on Land Tenure and the Revenue System of the Orissa and Chhatisgarh States, Vol. III by R. K. Ramadhyani.

income. The *takoli* which they paid was a nominal amount and seemed to have been fixed many years ago. The decisions in respect of *takoli* which of course the zamindars contended to have been fixed in perpetuity, were held that the *takoli* should amount to five per cent of the total income of the zamindari till the expiry of Connolly Settlement after which it was expected to be enhanced to 10 per cent, but no such enhancement took place. The Zamindar of Nagra formerly used to pay Rs. 200 as *Raja Bije* to the Ruling Chief when the latter used to visit the Zamindari and Rs. 500 as *takoli*. The visit was frequent and it was settled that the *takoli* should be fixed at Rs. 700. The Zamindar was given an undertaking in 1879 that the *takoli* would not be enhanced during the Ruling Chief's life-time, but there was no enhancement even later. The Zamindar held the estate at a fixed *takoli* for a considerable time. The previous history, however, shows that there was no definite undertaking that the *takoli* would not be revised.

At the time of succession, a zamindar had to pay a *salami* to the Ruling Chief equal to one year's *takoli*. This *salami* was a private *salami* and did not enter into State accounts.

The allotment of waste land was said to be governed by a State rule that one-third of the village area should be left as waste. In many villages in the zamindaris as well as in the State there was not much waste land left. The allotment was subject to the zamindar's and *gaontia's* consent and consent money was said to be taken by both. In Nagra zamindari, it was reported, royalty was charged only on the reserved species of trees. There was no specific authorisation for the levy of *salami* nor was there any specific prohibition. In the *Khalsa* area no *salami* was said to be charged by the State. Cases of resettlement of abandoned land were dealt with by the State courts, the transfer fee went to the zamindars but not mutation fees.

The appointment of *gaontias* in the zamindaris was made with the approval of the State. At the time of succession, a fee was levied and in the zamindaris this fee went to the zamindars. Succession fees were charged up to a maximum of Rs. 5 and it is not unlikely that there was a private *salami* as well. In the event of the death of a *gaontia*, and in the absence of a heir, or in the case of ejection of a *gaontia*, the post as in the case of *khalsa* villages, was sold by auction the proceeds being appropriated by the zamindar.

Nistar cess in the zamindaris was appropriated by the zamindars. School and dispensary cesses in the Nagra zamindari were collected and spent by the Zamindar. There was an old order, according to

which the State had full control over education and dispensaries in the zamindaris. The *Nistar* cess was levied at the rate of 16 pies ($8\frac{1}{2}$ paise) per rupee of land revenue, though it was 2 annas (12 paise) per rupee of revenue in Nagra zamindari.

The *takoli* was paid by instalments which coincided with ordinary *gaontia* instalments.

There were *Kharposh* or maintenance grants such as, those held by the minor Chief for his pocket expenses or by the Regent Rani-sahiba as *sindurtika* etc. The younger branches of the Chief's family got *kharposh* and paid nothing in the first generation. The next successor paid 25 per cent, the 3rd generation paid 50 per cent, and the 4th generation paid 75 per cent. These grants were for life and afterwards they become *khamar* villages. There had been many changes in the *khamar* estate since the settlement made by Mr. Connolly. Two villages which were held by *kharposhdars*, and one *gaontia* village, became *khamar*. The tenure of *kharposhdar* of Hatibari was hereditary. He used to pay Rs. 468-8-3 (Rs. 468.52) to the State as rent.

Kharposh
Tenure

There were three *parganadars* viz., (i) Raiboga, (ii) Erga, and (iii) Daldali. The *parganadar* of Raiboga got 15 villages under him, the *parganadar* of Erga got 29 villages and the *parganadar* of Daldali got 3 villages.

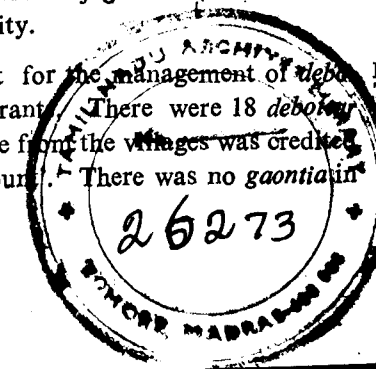
Parganadar
Tenure

The *parganadar* of Raiboga got 50 per cent of the rental of his *khamar* villages and 50 per cent of the land revenue of his *gaontiahi* villages. He enjoyed absolute forest rights like the zamindars. The other two *parganadars* got certain fixed cash remuneration irrespective of village assets. All these *parganadars* enjoyed home-farm (*nijchas*) lands rent-free. The villages under the *parganadar* of Erga paid their rents direct to the treasury and the *parganadar* used to get Rs. 821 as his fixed remuneration and enjoyed his *nijchas* lands free of rent. The *parganadar* of Daldali used to realise rent direct from the *gaontias* under him and paid to the ex-State the entire amount after deducting his remuneration of Rs. 183-1-0 (Rs. 183.06). He enjoyed *nijchas* lands free of rent.

There were the usual *debottar* and *brahmottar* grants, and *kharposh* grants as well as the common service *jagirs*. The *brahmottar* grants, of course, were given in perpetuity.

There was a separate establishment for the management of *debottar* grants which were not individual grants. There were 18 *debottar* villages under the Durbar and the income from the villages was credited to a separate 'Personal Deposit Account'. There was no *gaontia* in

Debottar
Tenure



these villages and the *bhogra* lands were cultivated by share croppers every year. The raiyati tenure in these villages was the same as in other raiyati villages. Apart from these villages there were lands in 53 villages held by grantees subject to absolutely no control of any description; even if the grant was not made use of for the purpose for which it was meant, it is reported, nothing was being done. In *debottar* villages no forest rights were recognised, but *salamis* for reclamation, resettlement of abandoned land were realised. There were *debottar* as well as *brahmottar* grants in the zamindaris. There were 5 *debottar* villages in Nagra zamindari, and 3 *debottar* villages in Hemgir. The *chowkidars* of *debottar* villages were appointed by the State.

Fourteen entire villages were held for rendering certain services to the ruler. The services comprised performing *puja*, giving a sacred thread in gold when the Chief was installed, for shaving the Chief, for worshipping the Chief's family deity, praying for the prosperity of the Chief, and supplying a bamboo from a particular bamboo clump when a Chief was installed.

Brahmottar
Tenure.

There were 2 *brahmottar* villages in the *khalsa* area, 7 in Nagra zamindari and 2 in Hatibari *kharposh*. In *brahmottar* villages, the *brahmottardars* actually cultivated their fields and transfer of land except to a person who was a member of the same family as the holder, was not permissible. If such a transfer was made ejectment might take place. In these villages there were few *sikmi* raiyats (under-tenants). They were paying rent and cesses to the *brahmottardars* from whom they had acquired the lands. They enjoyed, in other respects, rights similar to those of State raiyats but in lieu of *nistor* cess, they got no return. The *brahmottardars* appropriated school cesses as well. They paid neither rent nor cesses to the State. *Sukhbasis* (labourers) paid rent to *brahmottardars* on their homestead lands. The *brahmottardars* enjoyed free rights in the village forest of their village. Waste land in a *brahmottar* village could be reclaimed without permission. The village *chowkidar* was appointed by the State but other village servants were appointed by the *brahmottardars*. The *brahmottardars* claimed the right to minerals in the village.

Ganjhu aai
Tenure.

Village headmen in the Munda area of Gangpur were called *Ganjhus*. Their place was next in importance to *parganadars*. The *ganjhus* were divided into two classes namely, the *khuntkatti ganjhus* and *thikka ganjhus*. The *khuntkatti ganjhus* were the original clearer of villages while the *thikka ganjhus* were not. The *khuntkatti ganjhus* who somewhat corresponded to the *patels* in the Maratha

country were acting more like an intermediary between the tenants and the zamindar than a lessee. He collected rents and paid them to the treasury and by way of remuneration was allowed to enjoy the whole *bhogra*, whatever might be its area, free of rent. If the valuation of *bhogra* in possession of a *ganjhu* was less than one-fourth of the total assessment of the village, he was allowed a draw back up to one-fourth of the total village rental. The head *ganjhu* got 45 per cent of his collection and handed over 55 per cent to the zamindar and enjoyed the *bhogra* land of his *khamar* village free. The *bhogra* land of *ganjhus* was not held in raiyati rights and if a *ganjhu* was evicted, the *bhogra* lands passed too to the next holder of the post. The *ganjhus* were allowed to make private arrangements and create co-sharers in their *bhogra* lands though this was not recognised by the State. The *bhogra* land was declared to be non-transferable and impartible, and the right of a *ganjhu* could not be sold or otherwise transferred. They were of course responsible for the payment of the revenue of their villages. The *ganjhus* had the special privilege of protected status, that is, they could not be evicted on the expiry of settlement and, in addition, if they had held more than 25 per cent of the cultivated land as *bhogra* and they were allowed to hold it rent-free and the remuneration was correspondingly greater. *Ganjhus* under the record-of-rights had been given the right to appoint *sikmi-gaontias* (sub-lessees). The *ganjhus* could not make this appointment of their own accord but had to approach the State. The head *ganjhu* had no duties to perform like the ordinary *ganjhu* and usually he only acted as a channel for the land revenue of the *ganjhu* of any village to pass through. It is said that he was expected to help the police and revenue officers in the discharge of their duties as *ganjhus* were expected to do. Formerly *ganjhus* used to be appointed by the head *ganjhus*, but later the head *ganjhu* got only a *salami* from his nominee who was appointed by the State. *Ganjhus* had the power to allot waste land with the approval of the State which was usually accorded, and to appropriate the revenue of the newly cultivated lands till the next settlement.

Mr. Connolly writes in his Settlement Report (1907-11) about the *ganjhus* in the following terms.

"They may broadly be divided into two groups: the *ganjhus* who have groups of villages and who have sub-*ganjhus* under them, and the *ganjhus* of individual villages. This latter class again consists of *khuntkatti ganjhus* and *thikka ganjhus*. There are eight *Ganjhus* of the first class, viz., (1) Ahirabandha, (2) Katepur, (3) Bisra, (4) Jaraikela, (5) Teterkela, (6) Balani, (7) Simorta and (8) Bagdega. Their origin is obscure. But it seems fairly certain that they were

relatives of the old Bhuiyan Chiefs or the Zamindar (they are all Bhuyans) and their grants were probably in the nature of feudal tenures given at a time when the country was unsettled and when their services were requisitioned to protect the territories of the Chief from invasion. Each of these men has under him a number of *ganjhus*, who collect rents from the royts and after deducting a certain portion hand the remainder over to him. Taking into consideration their peculiar circumstances and the fact that they have a recognised status undoubtedly superior to the other *ganjhus*, it was decided that they should be allowed to retain 45 per cent of the revenue they receive and would have to hand the remainder over to the Zamindar¹.

Gaontiahi
Tenure

The village headman in the *khalsa* area of Gangpur was known as *gaontia*. He took a village already reclaimed or brought under certain state of development by original tenants, as a cultivator or as a means of livelihood. At first, he was a temporary leaseholder. He was required to renew his lease at every 5th year before 1900 A. D. He used to enjoy one-fourth of the rental of the whole village including *bhogra*. But at each renewal of his lease, he used to pay a lump sum to the Chief. This was known as *nazarana*. Their payments were competitive. The Agarias and Telis of Sambalpur district were bidders. The Chief betook himself to excessive enhancement of the *nazarana* and instead of renewing leases on a fair payment, ousted tribal lessees freely in favour of rich bidders from 1895 onward. Those tribal *gaontias* who were thus ousted raised the standard of rebellion under the leadership of Madri Kalo in 1898, but the rising was tactfully put down with the help of the British Government.

In the neighbouring Sambalpur district there was no *ganjhu*. *Gaontia* was treated there as a village headman. He collected tenants' payment. The proprietary right conferred on him was limited to his home-farm-land (*nijchas*) and as a remuneration for his services he was allowed to hold revenue-free *bhogra* up to a revenue value equivalent to one-fourth of raiyati rental of the village. But in Gangpur ex-State (like Bonai) the *gaontia* used to get as his remuneration for his services, one-fourth of the rayati rental as well as one-fourth of the assessment of *bhogra* land of his village. But the *gaontia* of Gangpur could not partition his village nor transfer it like the *gaontia* of Sambalpur. It was doubtful, if he could bring waste land under his own cultivation or lease it out to others on receipt of premium. It was also doubtful whether he could accept surrender of raiyati land and sanction transfer of such land among tenants taking the consent money to himself. During the progress

¹. Para 94 of his report

of 1929-36 settlement, about 10,000 unauthorised sales were detected. Most of them paid consent money to the *gaontias* which they had no right to accept. The ex-State authority levied penalty on them at the following rates and recognised the transfer.

In first class villages

Bahal	..	Rs. 12-8-0	(Rs. 12.50)
Berna	..	Rs. 8-0-0	
Mal	..	Rs. 4-12-0	(Rs. 4.75)
Gora	..	Rs. 1-0-0	
Barchha	..	Rs. 12-8-0	(Rs. 12.50)
Bari	..	Rs. 8-0-0	

In second class villages, the rates were half of those of the 1st class villages. For the purpose of realising transfer fees, the villages were divided into two classes only. At the rates stated above, the total demand of the unauthorised transfer fee or penalty amounted to Rs. 32,981-4-9 (Rs. 32,981.30 paise).

Sikmi gaontias (sub-lessees) were found under the *ganjhus* and *kharposhdars* only. They got remuneration according to the contract between the interested parties which was approved by the State authority. This arrangement did not affect the right of the third party. The *sikmi gaontias* of Suamal, Kheriakani, Anlajori, and Laikera under the *kharposdars* were allowed remunerations like the ordinary *gaontias* according to the existing practice.

Sikmi
Gaontiahi
Tenure

There were no absolute occupancy raiyats (tenants) with the meaning of the Central Provinces Tenancy Act in Gangpur ex-State. All the tenants were occupancy tenants and their status had been recorded in the *khatian* "Raiyati". Occupancy rights could not accrue in *bhogra* and *nijchas* land of the *gaontia* and the zamindar. If a tenant was allowed to till *bhogra* or *nijchas* land, he was a tenant at will and not an ordinary tenant of the Central Provinces Tenancy Act.

Raiyats
(Tenants)

Mr. R. K. Ramadhyani who enquired during 1941-42 into the land tenures and revenue systems prevalent in the feudatory States writes on the raiyati tenure as follows :

"The rights of ryots in land are at present in a somewhat confused position. The right of occupancy, which meant that so long as rent was paid the ryot was entitled to remain in possession, was recognised at settlement, but no right of transfer of any kind was conceded. At present, transfer with the permission of the State on payment of *salami* of 12½ per cent of the consideration money is permitted. On *nazul* lands, (i. e. town lands in residential area) the fee was Re. 1 per every Rs. 10 up to Rs. 50, and at reduced rates for larger

amounts, that is the *salami* is a higher percentage of the consideration money for agricultural lands than for townlands which are more valuable. In the case of agricultural lands, however, no stamp duty or registration fee is shown as charged and registration is not compulsory. No mutation fee is charged in either case. Mutation fee (minimum Re. 1, maximum Rs. 5) is charged on gift or exchange but not *salami*. Succession fee for inheritance has been abolished recently. Leases and mortgages also seem to be permitted. There are no definite rules but occasional orders have been issued by the Dewan regarding rights of transfer. Aborigines may transfer, according to these orders, to only aborigines and no persons outside the State can acquire land without permission of the State. Land is not permitted to be sold either for arrears of revenue or for private debts and only eviction can take place. This is an anomalous position considering that sale of land is permitted. The *ganjhus* or *gaontias* usually apply for eviction in the event of arrears. It appears that very few evictions have actually been effected. For the execution of civil court decrees, land is not sold but instalments are granted and recovered by attachment of moveable property, standing crops, etc.

Other rights in land seem to extend to improvement by digging of a well, but for the excavation of a tank permission is necessary. In trees on holdings there are no rights except that fruits and leaves may be appropriated. A small area of land (.20) is allowed free as homestead and the rest is included in the assessed lands of a ryot. *Bethi* and *begar* do not seem to be levied these days. There is no distinction between resident and non-resident ryots.

The acquisition of land is not governed by any laws or rules. The only case I could see was not treated as a revenue case. The compensation levied and paid depends upon whether the lands are in a tenure village or in a *khalsa* village. If it is in a tenure village 15 times the rent plus 15 per cent extra is taken as the capitalised value payable to the tenure-holder; of this three-fourth goes to the tenure-holder and one-fourth to the *gaontia* or *ganjhu*. The cultivators get 10 times the rent plus 15 per cent. Analogous procedure is probably followed if a head *ganjhu* is involved but no case seems to have occurred. There is no rule for the disposal of the land formed by alluvion and the rent is not increased for the additional area till the next settlement. If there is diluvion or deterioration of land, reduction may be given if the case justifies it.¹

¹ Report on Land Tenures and the Revenue system of the Orissa and Chhatisgarh States—Vol. III by R. K. Ramadhyani—pp 88-89.

Tenants holding land of others are called *Sikmi* raiyats or under-tenants. They were few in number. Generally they were tenants at will. Up to 0.20 acre *gharbari* plot of tenants had not been assessed to rent. But a tenant holding over 0.20 acre had been assessed at *gharbari* rate to the full. They were recorded as *sikmi* raiyats and given *Parchas* at the 1907-11 settlement in view of their long possession of the land. They continued as such at the 1929-36 settlement also. The rent paid by these *sikmi* raiyats had been recorded at settlements and was the same as the assessment of ordinary raiyats.

There was another class of tenants who were described as village service tenants. They included all kinds of village servants such as *Chowkidar*, *Kalo*, *Nariha*, *Bhandari* and others. There were mentions of *Chowkidar Jagir*, *Kalo Jagir*, *Nariha Jagir*, etc. Their holdings were free from rent.

The *Sukhbasis* enjoyed *gharbari* up to 0.20 acre free of rent. If the area was over 0.20 acre, they were assessed to the full like any other tenants. They did not pay school and dispensary cesses. But they had to pay the *Rojagari* cess which had not been noted in their *parchas* as they were revised every year. The *Rojagari* cess is noted below against each class of *Rojagari* men:

Washerman	.. Re.0-12-0	(Re. 0.75)
Potter	.. Re.0-8-0	(Re. 0.50)
Keut	.. Re.0-4-0	(Re. 0.25)
Blacksmith (for repairing)	.. Re.1-4-0	(Re. 1.25)
Blacksmith (for melting iron)	.. Rs.2-8-0	(Rs. 2.50)
Goldsmith	.. Re.1-4-0	(Re. 1.25)
Brazier	.. Re.1-4-0	(Re. 1.25)
Confectioner	.. Rs.3-0-0	
Thuria (mahajan)	.. Rs.1-0-0	
Sukhbasi (daily labourer)	.. Re.0-2-0	(Re. 0.12)
Chamar	.. Re.0-3-0	(Re. 0.19)

There were few *Chandana* tenants. These had been assessed at Rs.6-4-0 (Rs.6.25) per acre or 1 anna (Re.0.06) per decimal. They got no concession of rent for *gharbari* land like other tenants up to 0.20 acre and below. In assessing rent upon them the Settlement Officer at the 1929-36 settlement followed the instructions contained in the Survey and Settlement Manual of the Board of Revenue, Bihar and Orissa, which are quoted below:

“Fair and equitable rents cannot be settled under the Bengal Tenancy Act for homestead lands, house-sites or shops, when the occupier is not recognised by the Tenancy Act (Section 4 of the Act). In such cases if

Chandana
Tenants

if the occupier holds directly under the Government the rent is liable to enhancement and it is decided that the rent settlement should be done by the Settlement Department, an offer of resettlement at a fair rent should be made and if it is accepted *kabuliyats* and leases should be exchanged. If it is not accepted and the lessee is liable to ejection, the Collector should be moved to issue a notice on the tenant to vacate the premises or remove his house etc, as the case may be and if the notice is not obeyed, necessary action should be taken through the Civil Court. Ordinarily, however, this work is left to the Collector. When an intermediate landlord occurs between Government and the lessee a fair and equitable rent may be assumed for the purpose of the calculation of assets, leaving it to the parties to come to terms regarding a new rent, if they have not already done so¹.

Chandana lands are generally *gora* lands on which the house of shop-keepers had been built with an orchard attached to it.

Rent
Settlement

The ex-State was divided into three groups for purposes of assessment, viz., (i) Hatibari, (ii) Nagra, and (iii) Khalsa, Hemgir, Sargipali, and Sarapgarh forming one group. These groups were again sub-divided into five classes of villages. The villages of each class were fairly homogenous in respect of their geographical position, trade facilities, soil, rainfall and condition of tenants. At the 1929—36 settlement, rents were assessed at a uniform rate throughout the ex-State except Nagra Zamindari and Hatibari *kharposh*. The rates of each group are given below:

Kind of soil	Rate in khalsa, Hemgir, Sargipali, Sarapgarh Rs.	Rate in Nagra Rs.	Rate in Hatibari Rs.
Bahal ..	1-4-0 or 1-25	1-2-0 or 1-12	0-15-8 0-97
Berna ..	1-0-0	0-14-0 or 0-87	0-11-8 0-72
Mal ..	0-12-0 or 0-75	0-9-0 or 0-56	0-7-8 0-47
Barchha ..	1-0-0	0-14-0 or 0-87	0-11-8 0-72

Land
Revenue

The ex-State and zamindars did not receive all the rent paid by raiyats, a proportion being retained by the *gaontias* or other subordinate tenure-holders as their commission. There were a few villages dedicated to temples or deities (*Debottar*), gifted to Brahmins (*Brahmottar*).

¹ Para 392

given for the maintenance of the members of the Raj-family (*Kharposh*), and in service tenure (*Naukarn*). The holders appropriated the entire rent. In *khama* villages held direct, the ex-State or the landlords received the entire rent paid by the raiyats.

Land revenue was recovered in two instalments on the 15th December and the 15th February every year. The land revenue fixed at the 1929—36 Settlement was as follows:

(i) In Khalsa	1,10,257—15—7
Land revenue demand previously	or 1,10,257-97 paise
Land revenue demand at the 1929—36 settlement	1,49,861—8—3 or 1,49,861. 52 paise

(ii) In Zamindaris
(excluding *takoli* paid by the zamindars not revised)

Name of Zamindari	Land revenue demand previously (Rs.)	Land revenue demand at 1929—36 settlement (Rs.)
Hemgir ..	11,371	18,786—5—6 or 18,786-34
Sargipali ..	4,691	6,962—2—6 or 6,962-16
Sarapgarh ..	1,855	2,583—7—6 or 2,583-47
Nagra ..	27,116	38,538—15—9 or 38,538-98
H a t i b a r i (<i>Kharposh</i>).	5,889	8,956—2—0 or 8,956-12

The cause of increase was attributed to (i) assessment of *gora*, *kuda* and *gharbari* lands hitherto unassessed, (ii) assessment of wet land since *nayabadi* settlement and (iii) increase in rates of rent of old wet land which were between 12 to 16 per cent.

Regarding recovery of land revenue Mr. R. K. Ramadhyani reports “No interest seems to be levied by the *ganjhus* or *gaontias* from the defaulters. Formerly interest used to be charged.

For recovery of arrears the State proceeds first against the *gaontia*. His moveable property is attached; I saw a case in which his house had been attached; the *ryoti* lands are not attached. If recovery is not effected by a attachment of moveables, the *gaontia* is ultimately evicted and the vacancy put to auction. Out of the auction proceeds, the arrears are first credited and the rest is credited as *salami*. Similar action is taken against head *ganjhus*.

Zamindars can proceed against *gaontias* by civil suit for realisation of arrears or apply to the Revenue court for eviction. *Gaontias* similarly can either proceed against ryots in the civil court for recovery of the arrears or for eviction; the holding is not saleable. About 200

cases are started against the headmen on an average. The number of cases started by headmen against ryots shows a sharp increase after the settlement in 1936-37. Collection is on the whole not quite satisfactory in spite of the *goantia* system and arrears in several years during the decade have been heavy¹.

In addition to the rent, tenants had to pay school, dispensary and *nistar* cesses. The *nistar* cess was really a forest commutation rent. The school and dispensary cesses were levied at 2 annas (12 paise) per rupee of rent. *Nistar* cess in the zamindaris was appropriated by the zamindars. School and dispensary cesses in the Nagra zamindari were collected and spent by the Zamindar. There was an old order also according to which the State had full control over the education and the dispensaries in the zamindaris. The *nistar* cess was levied at the same rate all over the ex-State namely, 16 pies (8½ paise) per rupee of land revenue though it was 2 annas (12 paise) per rupee in the Nagra zamindari. School and dispensary cesses also were levied at a uniform rate of 2 annas (12 paise) per rupee of revenue.

At 1929-36 settlement, total demand of cesses was as follows:

School Cess	..	Rs. 40,902—2—0
Dispensary Cess	..	Rs. 24,536—4—9
Nistar Cess	..	Rs. 30,170—6—3
Total	..	Rs. 95,608—13—0 or 95,108·81

After the introduction of the Orissa Cess Act, 1962 all types of cesses (except *nistar* cess) have been consolidated and levied yearly at the rate of 25 per centum of the annual value of the land. But the *nistar* cess is being collected as usual.

Bonai was ceded to the British Government in 1803 by the treaty of Deogaon by Raghuji Bhonsla, to whom it was restored by a special engagement in 1806. It reverted to the British Government under the provisional agreement concluded with Madhuji Bhonsla (Appa Sahib) in 1818, and was finally ceded by the treaty of 1826. The State was ordinarily administered, subject to certain restrictions by the Raja who was required to pay a yearly tribute of Rs. 500 and a *nazarana* on succession and to render military service in time of war. Till 1905, it was under the control of the Commissioner of Chota Nagpur and then it was included in the group of Orissa Feudatory States.

¹. Report on Land Tenures and the Revenue system of the Orissa and Chhatisgarh States. Vol. III by R. K. Ramadhyani.

The earliest authenticated record pertaining to the condition of the State was a report to Government from Colonel Onseley who visited it in 1840. He found the area in a very backward condition and over-run by marauding bands of Thakurs from the neighbouring States of Bamra and Gangpur. After the cessation of these incursions, there arose internal feuds between the Chiefs of Bonai and their fief-holders, the Sawant (the only Zamindar in the State) and the two Gond *Jagirdars*: Dandapat and Mahapatra. While touring in the State in 1864, Colonel Dalton found 83 deserted villages and the remaining villages were hamlets. Three years later, he again came to the State to prevent plunder and bloodshed that were due to a quarrel between partisans of the Chief and the Gonds. Another lengthy feud between the Chief and the Sawant, which began in 1871 and was responsible for depopulation of most of the villages of the latter, was brought to a satisfactory end by Mr. Hewitt, in 1879. Both parties frequently took resort to harsh measures and in spite of arbitration and stringent orders of the Commissioner, they did not come to terms till 1889. Raja Dayanidhi Indra Deo, who ascended the *gadi* in early seventies, was mainly responsible for the decline of the influence of the Sawant and the Gond *Jagirdars*; and it was owing to his enterprise that a large portion of cultivated areas was in the hands of immigrants from Ranchi and Singhbhum districts. The Chief encouraged them to come into his State and occupy jungle areas on extremely easy terms. Rents were very low and even then the Chiefs were forced to make concessions to keep their people attached to land and to prevent their emigration to Bamra and Gangpur.

The State was for the most part hilly and densely wooded, and the population was scanty. Considerable portions of land were occupied by the tribes, among whom Bhuiyans, Gonds, Mundas and Hos were prominent. The Bhuiyans for the most part did not practise settled cultivation and were addicted to shifting cultivation. There were neither extensive cultivation in the past nor even a large number of settled villages. Mr. Cobden-Ramsay in his Gazetteer records: "Land is plentiful and whole village communities frequently abandon their holdings for new sites and in consequence the individual is careless of his rights in the land. The advent of railway through Gangpur is however changing this state of affairs, and under the security of administration there has been a noticeable improvement and development of the larger villages, especially in the valley of the Barhmani".

The land revenue demand in 1907-08 was Rs. 9,534. The assessment was very light and the demand regularly and easily collected.

Settlement
of 1880

A summary settlement undertaken under the orders of the Commissioner, Mr. Hewitt, is supposed to have been completed in 1880. This settlement, apart from being summary was extremely restricted in scope and only a small area of wet lands was assessed. Zamindaris were not surveyed. Mr. Hewitt made an assessment of Rs. 11,860 including the value of payments in kind. Measurements at this settlement seemed to have been done partly by eye-estimation and partly by means of a pole of 7½ inches in length. No reliable records appear to have been prepared. At this settlement, there is a note (dated 6th January, 1880) by the Commissioner, Mr. Hewitt, about the uplands and garden lands: "It is admitted that by local custom no rent was paid for uplands or garden lands***". This was not linked up with the custom of *bethi-begari*, and apparently rent does not appear to have been linked formerly with *bethi-begari*. It appears that this link was first established by Mr. Hewitt following the Singhbhum practice, for he writes: "There still remained the question of *bethi-begari* to be settled and this was postponed till the matter had been discussed between the Raja and the *gaontias*. They accordingly came to me again this afternoon in a body and asked me to determine what reduction in rents should be allowed for the retention of *bethi-begari*. As in Singhbhum it is customary to commute *bethi-begari* at the rate of 8 per cent, I consider that Rs. 8 in hundred should be allowed as a reduction in the land revenue from the full rates now charged and accordingly it was laid down that in consideration of a reduction of that amount the *Gaontias* and royts should give the customary *bethi-begari* for the repair and maintenance of the Raja's house and for all work required to be done in Bonai***". That this conception was new is shown by the fact that at first the *gaontias* continued to levy full rates from the raiyats. In 1883, however, the raiyats of six villages applied to Mr. Hewitt complaining that though a reduction was made in the *gaontia's* rent on account of *bethi-begari*, it had not been passed on to the raiyats. On this petition, orders were passed that a reduction in the raiyati should be made.

Settlement
of 1910-13

The first regular survey and settlement was taken up in 1910 and completed in 1913, but the settlement excluded areas occupied by the Bhuiyans, these being not subjected to survey. Only the villages in the valleys of the Brahmani (i. e., the wet lands) were surveyed by traverse and cadastral survey but the traverse was a plane table and sight vane survey was similar to one adopted in most of the Orissa States. Only 272 villages were cadastrally surveyed and the remaining 157 villages were summarily settled. The waste lands do not appear to have been properly surveyed even in the valley of the Brahmani.

*Report on Land Tenures and the Revenue System of the Orissa and Chhatis-garh States, Vol. III.

**Ibid

In the hill country regular survey was attempted in a few villages which showed sufficient development and some of them were summarily settled. This settlement was for a period of 10 years. The Bhuiyan areas seem to have been assessed to a plough tax of Re. 1 per plough in former years and this apparently was continued in the villages which were not subjected to regular survey and settlement but was abolished where settlement was done. At the time of 1910-13 settlement, a number of payments in kind were commuted to cash rental. At this settlement there was an enhancement of 102 per cent of rent and the net rental of Rs. 24,000 in round figures was fixed. The term of this settlement expired in 1923 but the period was extended by another 10 years. It is extremely important to note here that at this settlement there was no suggestion of any reduction in the rent on account of *bethi-begari*. The Settlement Officer, Mr. W. G. Kelly, here assumed that the uplands and homesteads were held free of rent in lieu of *bethi-begari* (which is dealt with separately). The reduction of rent ordered by Mr. Hewitt does not appear to have been given effect at all for it was found that the raiyats were paying at Mr. Hewitt's original rates (Rs. 2 for *Bahal*, Re. 1-8-0 or Re. 1-50 paise for *Berna*, Re. 1-0-0 for *Mal*) for their old lands. At the 1910-13 settlement, it was indeed found necessary to reduce the rate and apply new rates apparently on account of defective measurement and under-estimation of area at the previous settlement, but there was no suggestion that the rate was either low or was reduced on account of *bethi-begari*. In fact, the Settlement Officer points out that except in the valley of the Brahmani no enhancement could be expected after 10 years and in that valley he had suggested that fair enhancement could be made only after taking all factors into consideration.

As stated in the 1910-13 Settlement Report, land tenures were few and the law governing them was simple. They were of three classes: (i) Tenures with limited proprietary rights; the zamindari, Gond Jagirs and revenue-free holdings, (ii) Tenures appertaining to office, the Gaontiahi or tenure of village headman, and holdings of village and other servants, (iii) Tenures with rights of occupancy; the raiyati holdings.

Land
Tenures

The Sawant (or Saont), the recognised head of the Bhuiyans, was the only zamindar. He had a small zamindari in the south of the State on the east bank of the Brahmani consisting of 27 villages which he held on a hereditary feudal tenure. He paid a nominal tribute of Rs. 40 to the Chief (as fixed at the settlement). Over and above the tribute, he was liable with his Bhuiyans to render military aid when required. Half the proceeds from the sale of timber in his forests was also payable to the Chief. Excise was under State control. Owing

Zamindari
Tenure

to frequent disturbances, the zamindari was in a backward condition and assessment at the 1910-13 settlement had to be made at very low rates. From land revenue and fuel tax, the income of the Sawant was Rs. 1500 per annum. The school cess levied in the zamindari amounting to Rs. 97 was to be paid to the State by the Sawant who used to collect it from his tenants. The Sawant appointed the headmen in his villages. The headmen could be removed only by the State, but the State usually did not proceed against them except at the instance of the Zamindar. The recognised village headman could require an agent under him if he was not capable of discharging his duties himself and the State appointed the agent on the nomination of the *gaontia*, but the *gaontia* had no right to remove the agent on his own initiative. In the event of appointment of an agent, the *bhogra* land was divided equally between the *gaontia* and the *mukadam*. Eighty per cent of the rent was taken as *salami* on the appointment of a new *gaontia* who was not the heir of the previous *gaontia*. The *salami* seemed to go entirely to the zamindar. In case of appointment on account of inheritance, the *salami* fixed by the State was said to be handed over to the zamindar. The State levied a mutation fee amounting to Rs. 5 for issue of a *patta*.

The royalty on trees on waste lands was divided equally between the zamindar and the State and for the reclamation of waste land the zamindar's consent as well as permission of the State was necessary. The *gaontia* also seemed to allot land for reclamation independently of the zamindar and the State, and used to get *salami* without the knowledge of the zamindar. The zamindar is said to recognise the reclamation and it is possible that recognition might be withheld until a *salami* was paid. Newly reclaimed lands were assessed after 3 years and the assessment seemed to be made by the *gaontia* by agreement with the tenant and probably in consultation with a few people of the village. The rights and the liabilities of the cultivators in the zamindari seemed to be the same as in the *khalsa* area.

The forests in the zamindari were subject to the ordinary rules regarding State forest, and the zamindar had no reserved forests of his own.

Bethi was taken for cultivation of zamindari land (only food was given), free *bethi* was taken for zamindari roads and for the State roads on payment of Rs. 2 per mile (1.60 km.). It was obligatory for the *gaontia* to give free *rasad* to officers-on-tour and luggage was to be carried free. Paddy for State elephants (*hati-dhan*) was sold at concessional rate. The zamindar seemed to levy a *dashara tika* of a goat given either free or for a nominal price.

Besides the Sawant, there were two Gond *Jagirdars* (military-fief-holders), namely Dandapat and Mahapatra, each holding thirteen villages. These people were Gonds and first entered the State with their followers, it is said, as wrestlers and sword-players and were given the *jagirs* when installed as a police force. In addition to rendering police service, half of the net land revenue of their village was to be paid to the Chief. Owing to their refusing to supply the necessary police force, a tax at three annas (0.19) in each rupee of the land revenue was imposed upon them and their raiyats. At the 1910-13 settlement, this tax had been abolished and the *jagirdars* held the fiefs on the following terms.

(i) To render military aid to the Chief when required and to accompany him on journeys when ordered to do so.

(ii) To pay half the net land revenue and the entire school cess imposed in the *jagirs*.

(iii) To pay half of the proceeds from the sale of timber in their forests, taxes on artisans, and grazing dues.

The *jagirs* were hereditary and in addition to retaining half of the land revenue of their areas, each *jagirdar* held a certain amount of land rent-free in accordance with a compromise effected between them and the Chief by the Commissioner Mr. Grimley in 1889. These lands assessed at the rates of the rent sanctioned for the *jagir* were valued at Rs. 97 in the case of the Dandapat and Rs. 70 in case of the Mahapatra. No fuel tax was imposed in these areas and the raiyats paid at lower rates of rent than those fixed for the neighbouring *khalsa* villages (That is, the villages under direct control of the Chief). *Jagirdars* kept portions of forests in the *jagirs* reserved.

In the *jagirs* also the *jagirdars* had the right to nominate the *gaontia* who was appointed by the State. The State levied mutation fees and issued the *patta*. The *jagirdar* did not appear to levy any *salami*. The *jagirdar* could report about a *gaontia* to the State for removal. When a *gaontia* defaulted, the *jagirdar* usually issued a notice of demand on him and he could file a civil suit for arrears. If a *gaontia* made default for 3 years continuously, he was usually removed. The *jagirdar* had no power to attach the property of any *gaontia* or villager. All the *jagir* villages did not have *gaontias* and in some villages recovery was effected direct by the *jagirdar*, but in those villages for which there was no separate *gaontia*, no *patta* was issued in the name of the *jagirdar* as *gaontia*. The *jagirdar* had the power to allot land for reclamation. Assessment of reclaimed land was made

after 3 years according to the seed capacity. In the *jagir* villages of the Dandapat, there were no grazing fees. School cess was paid in fac to the State.

Revenue-free Holdings.

The revenue-free holdings included maintenance (*Kharposh*) grants, *Brahmottar*, *Debottar* and *Anugrahi* grants as well as various kinds of *jagirs*. There were some whole villages held as *debottar* grants. There was a committee of officials and non-officials to look after the management of some of these grants. There was no *Debottar* Department. There were *Brahmottar* grants which also comprised some of the whole villages and individual holdings. The Brahmins were not liable to *bethi* and other impositions. The *jagir* grants seemed to be similar to those in other States and were held subject to the condition of service. There were a number of *paik* holdings, *jagirs* assessed to a concessional rent; and they were excepted to attend at the palace for various kinds of menial services and guard duties as well as carriage of dak. Only one *paik* had entirely rent-free lands. A total area of nearly 10,000 acres with a revenue of about Rs. 10,000 was held rent-free apart from zamindari. and village service grants. No rules existed for governing these grants. The Chief personally held certain lands as *khamarchas*. There were five villages without *gaontias* (probably removed) which the Chief had made in to 'Tikait Fund' villages. The revenue of these villages had been struck off from the land revenue demand register and payment was made direct to the Chief. This seemed nothing more than appropriation of the revenue of the villages by the Chief without the sum being shown in the budget. At the 1913 settlement, a school and fuel cess had been imposed on all the lands included in these tenures.

Gaontiahi Tenure

The *Gaontiahi* tenure appertaining to the office of the village headman was next to that of the raiyats, the most important in the State. *Gaontias* were appointed by the persons under whom they held the tenure and were responsible to them for the punctual annual payment of rents and cesses in two instalments. They were also morally responsible for the development of their villages and for the general welfare and conduct of the raiyats. They were allowed 12½ per cent of the gross rental as collection charges. To ensure their taking an interest in the extension of cultivation they were permitted, during the period of settlement, to assess newly prepared rice lands after the third year of their existence with rents at half the village rates and to collect and retain such rents till a fresh settlement was made by the State.

With the office of *gaontia*, go the *bhogra* or home farm lands of the village. These were assessed to rent and if such rental was below the 12½ per cent allowed for collections, the *gaontia* was given a rebate

in cash. If it was in excess he had to pay the difference but such payment did not give him any right of occupancy over the *bhogra* lands or any portion of them.

The *gaontias* were appointed for the period of settlement after which their appointment was open to revision and there were no hereditary rights of succession to the office. But in practice, a *gaontia* who had during the period of a settlement observed the terms of the lease he held, was reappointed for the ensuing period of settlement. The son of a *gaontia*, if fit and agreeable to take over the village, was usually appointed to succeed his father and if a minor, he was eligible under suitable guardianship.

Co-sharers with headmen, unless appointed jointly with them, were not recognised by the State as having any right to the office. Private partitions of the *bhogra* lands among the members of a family were permitted, and in such cases the co-sharers could enforce in State courts their right to a share in home-farm lands. But in the event of the appointment of a new *gaontia* the *bhogra* lands were made over to him free of all encumbrances.

During *Dasahara* they had to offer goats to the ruler who used to return the carcasses retaining the head only. On *Paus purnima* they had to supply a goat for 8 annas (Re. 0.50). They were also required to sell fowls for a nominal price.

In Bonai State the distinction between *Thani* and *Pahi* did not seem to be known. Raiyats held directly from the proprietor of the village and not under the *gaontia* though the *gaontia* had the power to dispose of abandoned holdings and wastelands with certain restrictions. All raiyati holdings were of one class (namely, occupancy holdings) and no fixed period of possession was necessary to give them this status. In the case of abandoned holdings, permission from the *gaontia* to enter upon and pay the first instalment of rent; and in case of waste lands, sanction from the same source to break up, give the raiyat rights of occupancy. He was only liable to be ejected on non-payment of the settled rents or in the event of his alienating by sale, gift, or mortgage, the whole or any portion of his holdings, but an ejectment could not be effected except by order of the State courts.

Mr. R. K. Ramadhyani after conducting an enquiry into the system of revenue and land tenures in the feudatory States reported the position then prevalent in Bonai according to which land was allotted to a cultivator free of any consent money (this was not certain though and had little value in most parts of the State) and after

Raiyati Tenure

5 years (3 years in zamindari) he became liable to pay rent. It was not unlikely that the *gaontia* himself allotted waste land in the village for new cultivation. In such cases, the *gaontia* used to take a *salami* and fix the rent. The rents fixed were often quite arbitrary. The rent of the cultivator was not enhanced during the currency of the settlement.

The sale of holdings was permitted with the sanction of the State. A *salami*, as such, was not levied on that occasion, but four times the annual rent or 25 per cent of consideration money whichever was higher was levied as mutation fee and if the vendee was a resident outside the State, the fee was six times the rent. The *gaontia* seemed to have a say in the matter. A person belonging to a scheduled caste had to sell only to a person of a scheduled caste except with the permission of the Ruler. The cultivator could lease his land and mortgage it, but there was no definite rule about this. The only document which cites the rights of a cultivator is the Settlement Report of 1913 which, however, says (as stated earlier) that a raiyat may be ejected "in the event of alienating his land by sale, gift or mortgage". Permission was necessary for a mortgage, but no case came up which presumably means that the rule was not observed.

Homestead lands as well as *baris* were not subject to any assessment, but in lieu of *bethi* assessment of these lands was made. The raiyats seemed to have a right to enjoy fruits of trees on waste lands. They had no rights over trees of reserved species even on their own holdings.

Bethi (Free labour)

Under *bethi*, a system of free labour, the raiyat was bound to assist in cultivating the lands in actual possession of his proprietor and the *bhogra* lands of the *gaontia*, to help in the construction and repairs of the village roads and the buildings of his landlord, and to carry the luggages of the Chief or officers on tour. In lieu of full wages for this, he used to occupy uplands and homestead land free of rent and was given his food or its value in cash. In a place like Boani where professional labourers were scarce *bethi* was deemed essential and there was little apprehension that the proprietors and *gaontias* would abuse their power, for the raiyat was much too necessary a person in the State to be bullied into doing more work than what was customary. In practice, only the lesser proprietors and *gaontias* of more advanced villages demanded agricultural labour and this was fixed at one plough and one sickle per raiyat to be supplied during the season, to each of these persons for the spell of half a day. Labour for transport, except along the main road to Parposh, was seldom demanded and as far as the State was concerned, it got little compensation for the revenue loss from extensive areas under upland crops.

Bethi continued till the State was merged with Orissa. As Mr. Ramadhyani put it, "*Bethi* has actually been decreed recently to the Rajguru by the civil court. Cultivation of zamindars' lands on *bethi* continues, but food is said to be given. All the *bethi* is not free and in the case of roads and forest small payments seem to be made.¹"

Hatidhan (paddy for State elephants) was being recovered at concessional rates. Straw and firewood were also supplied at concessional rates to the palace.

The Naikali and the Paikali holdings were assessed at lower rates of rent on condition that tenants would keep watch for a fixed number of nights over the residence of the Chief and his outlying granaries. Naikali and Paikali holdings

Village servants in Bonai comprised the *chowkidar* or *jhankar*, *kalo* (priest), *nariha* (waterman), *kumbhar* (potter) and the *kamar* (blacksmith). All of them enjoyed small holdings free of rent for their obligatory services. For a *chowkidar*, the average size of the holding was three acres and for others it varied from 1½ to 2 acres. These servants were under the general control of the headman, but sanction of the State was necessary for a new appointment. The *chowkidar* throughout the State was appointed by the State but in the *jagir* and other villages the nominee of the *jagirdar* or zamindar was appointed. The *kalo* and others did not seem to render any useful service except menial service to officers and others on tour. In most villages the villagers by custom seemed to make a payment to the *chowkidar* in kind in addition to his *jagir*. Village Servants

There were no under-raiyats or sub-lessees who had been recognised as having permanent rights. For the period of settlement, the *gaontias*, the raiyats and the village servants were permitted by 1913 settlement to sub-let portions of their holdings, but the sub-lessees had no legal tenure and could only sue for a money decree in the event of their being unfairly treated. Sub-leases

In all, there were 123 persons holding an area valued at Rs.630 as *Noukran* or service tenures on practically the same terms as the village servants. The average holding was small but the work of the various posts was merely nominal. Servants of the Chief

The 1910-13 settlement was made for a term of 10 years, but subsequently extended for another 10 years, that is, a revisional settlement fell due in 1933. So a revisional settlement was started in 1930 in order to complete the same in 1933. But the work was suddenly stopped on account of general slump and trade depression causing a financial deadlock, when the operation had progressed as far as kistwar of 244 villages and *khanapuri* of 268 villages. In 1934, it was decided to resume the operation and complete the work of the whole State in 1939. But before Nayabadi Settlement

¹ Report on Land Tenures and the Revenue System of the Orissa and Chhatisgarh States—Vol III.

resuming the settlement operations, it was found expedient to run the *nayabadi* settlement of the entire State as there was a substantial increase of *nayabadi* lands during a period of 22 years, so that the State would be in a position to realise rent on all new wet lands so long appropriated by the *gaontias*. Thus the *nayabadi* settlement was taken up in December 1934 with the aim of creating a record of land rights without enhancing the existing rates of rents, giving to the State a share in the profit arising from the enormous amount of new cultivation that had been made within the last 22 years. The *nayabadi* settlement, done by Mr. Nimay Charan Patnaik brought an additional revenue of Rs. 15,909/8/ (Rs 15,909.50) to the State. He khanapuried the *nayabadi* areas cadastrally surveyed in 1930 and assessed them with rent along with *nayabadi* plots of the few villages already khanapuried. In 1938, assessment of the plots which were not checked up by Mr. Nimay Charan Patnaik in 1935, was made. When the work was in progress in 1938-39, the tenants of 167 villages filed petitions to exempt them from *bethi* (free labour) in lieu of an enhanced rate of rent. Accordingly there was a settlement again but no final publication was made nor reliable records were maintained.

So in 1940-41, a regular settlement was made for 167 *bethi*-commuted villages and by the end of 1941-42, final publication was made with regard to 129 villages. For the remaining 38 villages work had to be stopped at the attestation stage under orders of the Political Agent who advised to start a regular settlement of the entire State in March 1942. In January 1943, he passed orders to assess all unassessed areas and to await Mr. R. K. Ramadhyani's report. He advised that the assessment must be low, there must be no cesses, and no permanent rights given to *gaontias*. This work was started under the supervision of the Dewan and was taken up in 319 villages where *bethi*-commutation had been done. The operation took full one year and it cost Rs. 10,000 to the State. The total assessment was Rs. 12,000. A total area of 32,533 acres of land was assessed.

Recovery of Land Revenue

The rent was payable under two equal instalments in December and February. For recovery of land revenue, the *gaontia* was first proceeded against, a notice of demand and warrant of attachment of movable being issued simultaneously. A single case might be used to be registered against all the defaulting *gaontias* of a pargana. Immoveable property did not appear to be attached for recovery and if recovery was not effected the *gaontia* was to be evicted. Interest at one anna (Rs.0.6) per rupee was recovered from the defaulting *gaontia*. The *gaontias* had to file rent suits against the defaulting raiyats for recovery. He was also permitted to file a list of defaulters in the Revenue Court on which the

Revenue peons used to go out and effect recovery. Interest at one anna (Re. 0. 6) per rupee was also charged from raiyats who had defaulted for more than 21 days. Arrest and imprisonment did not appear to be resorted to for the purpose of recovery. The zamindar and the other tenure holders were allowed to file civil suit, for recovery of rent but the State was also granting certificate proceedings on application by them. Since the introduction of the Orissa Public Demand Recovery Act, 1962, all government dues including land revenue are being recovered now under the procedure laid down in the said Act.

There were only two classes of forests, viz., Reserved forests and Forest Khesra forests. Khesra or village forests included all waste lands. Reserved forests were demarcated and boundary lines were required to be kept cleared in the *bethi* areas by the villagers on payment of Rs. 3 per mile, while in 'non-*bethi*' villages, wages were paid at 0-2-6 to 0-3-0 (Re. 0.15 to Re. 0.19) per day. R. K. Ramadhyani's report reveals that there were 8 reserved species of trees. The reservation applied to all areas including cultivated holdings and reserved species could not be cut without permission and payment of royalty.

The present Sundargarh district, comprising the ex-States of Gangpur and Bonai, was formed in 1948. Following this, certain administrative changes occurred in the district. Besides, formation of this new district ushered in important changes in the sphere of revenue administration.

Four of the zamindaris viz., Sargipali, Kupsinga, Nagra, and Sawanta; and three *praganadaris* viz., Erga, Daldali, and Raiboga of the district were abolished under different notifications issued by the Government of Orissa on the 27th November, 1952. The other two zamindaris, viz., Hemgir and Sarpagarh were abolished on the 15th June, 1957.

The *Khamar*, *Kharposh*, *Bramhottar*, *Dan*, *Anugrahi*, and *Debottar* tenures were abolished under the Government of Orissa notification No. 57652-R. dated the 28th August, 1965.

In different Government Press Notes published in between 1952 and 1969, 42 rent-free *jagirs* granted for rendering services to the village communities were also abolished and it was ordered that *jagir* lands would be settled on fair and equitable rent in favour of the holder of such *jagir* and others in actual possession.

The rent-free *jagirs* granted for rendering personal services to the ex-zamindars were abolished and settled in favour of the *jagirdars* on raiyati right as per section 8 (3) of the Orissa Estates Abolition Act. The rent-free *jagirs* rendering personal services to the ex-Ruler or his family were

abolished and settled on occupancy right under section 7 (g) of the Orissa Merged State (Laws) Act, 1950, and those which were not settled under the above provision of the said Act were deemed to be rayoti from 1-10-1965 under Section 4 (i) (g) of the Orissa Land Reforms Act, 1960.

A list of zamindaris, *praganadaris* and *jagirs* with number and date of Government notifications abolishing them has been included in Appendix-I.

In the Press Note No. 89, dated the 13th April, 1961, issued by the State Government in the Home (Public Relation) Department, *gaontia* system of the district was abolished. But after the introduction of the Orissa Merged Territories (Village Offices Abolition) Act, 1963, the other village offices along with *gaontias* of Gangpur and Bonai ex-States were abolished. These are :

Gangpur :—Gaontia, Sikmi Gaontia, Head Ganjhu, Ganjhu, Sub-Ganjhu, Khuntkati Ganjhu and Thika Ganjhu.

Bonai—Gaontia.

The Orissa Offices of Village Police (Abolition) Act, 1964 came into force in the district with effect from 1-7-1965, as per the Home Department notification No. 12418, dated 5-5-1965. From this date all *jagir* lands enjoyed by *Chowkidars*, *Jhankars* and *Kalo* stood resumed and vested absolutely in the State Government. Only *Kalo* or *Jhankars* performing the duties of the village priest are allowed to hold 50 per cent of the *jagir* lands for so long as they continue to discharge the said duty. The *jagir* lands resumed are settled with rights of occupancy therein on determination of fair and equitable rent with the *jagirdar* or with others, who may be in actual possession of the holding or part thereof separately as his co-sharers or as tenants subject to the reservation of a certain fraction thereof in favour of Grama Sasan within whose limits the land is situated.

THE PRESENT SETTLEMENT OPERATION

The present survey operation of Sundargarh has been taken up in plane table method, dividing the district into three blocks, i.e., 'A', 'B' and 'C'. In Rourkela, theodolite survey was adopted in order to achieve greater accuracy because of the extreme congestion of the area.

Block 'A' covers 589 villages of Bonai subdivision, Block 'B'—399 villages of Panposh subdivision excluding 52 units of Rourkela town¹, Block 'C'—727 villages of Sundargarh subdivision including 5 villages constituting Sundargarh town and 2 villages constituting Rajgangpur town. Block 'A' of Bonai subdivision extends to 825.96 sq. miles

¹ These 52 units will be converted into 52 villages after finalisation of boundary change proceedings. These 52 units cover 35 sabik revenue villages.

(2135.64 sq. km.) and survey and settlement operations were taken up in November, 1961, in pursuance of the Government notification No. 43536—S-51/61-R., dated 27-9-1961 under sections 11, 18 and 36 of the Orissa Survey and Settlement Act, 1958. Block 'B' of Panposh subdivision extends to 524.65 sq. miles (1,358.82 sq. km) and the order to take up survey and settlement operation under section 36 (i) of the Orissa Survey and Settlement Act, 1958 was published in the notification No. S/379/62-52599-R., dated 10-9-1963. The Block 'C' extends to 1,286.36 sq. miles (3331.57 sq. km.) and the survey and settlement operations for Rajgangpur, Talsara, Bargaon, and Hemgir police stations in this area under the same section of the above Act were taken up in pursuance of the Government notification No. 75346-R., dated 19-11-1964. In Thanas of Lefripara, Bhasma, and Sundargarh, the survey and settlement operations were taken up in accordance with the Government notification No. 72612-R. dated 8.12.1965. Attestation of the entire district is already completed excluding 11 villages of Bonai subdivision, 52 units of Rourkela town and 25 villages of Panposh subdivision and 187 villages of Sundargarh subdivision.

Final publication of the entire district is likely to be completed by 1976. In preparing the record-of-rights during the currency of the settlement operations, the provisions of the following laws and regulations passed and enacted from time to time since the merger of the States are taken into consideration. They are mainly :

The Orissa Merged States (Laws) Act, 1950; The Orissa Estate Abolition Act, 1951; The Orissa Private Lands of Rulers—Assessment of Rent Act, 1958; The Scheduled Areas Transfer of Immovable Property (by Scheduled Tribe) Regulation, 1956; The Bhoodan Yagna Act, 1953; The Orissa Land Reforms Act, 1960; The Orissa Offices of Village Police (Abolition) Act, 1964; The Orissa Merged Territories (Village Office's Abolition) Act, 1963.

Classification of village is made under the Orissa Survey and Settlement Act, 1958 by taking into consideration the following factors, viz., (i) situation of the village, (ii) communication and marketing facilities, (iii) depredation by wild animals and (iv) liability to vicissitudes of season.

After the villages are grouped under different categories, the classification of land is made according to crop or crops grown on the land, nature of the soil, situation of land in village, and source of irrigation.

Then assessment of fair and equitable rent is done under the same Act.

Zamindari and *Gaontiahi* system which was found previously as collecting agency was replaced by the Tahsil pattern of administration which was introduced in the district in pursuance of the Revenue Department notification No. 52751/R., dated the 9th November, 1962, from October 1963. Consequent upon the introduction of the Tahsil system, four Tahsils, i. e., Panposh, Bonai, Rajgangpur, and Sundargarh were carved out at first. Subsequently for a smoother revenue administration another Tahsil named Hemgir came into being with effect from the 1st December, 1965. Under the new system the responsibility of revenue collection devolved upon the Tahsildar. To ensure better revenue administration, a Tahsil is divided into a number of Revenue Circles and for each Revenue Circle, the staff consists of one Revenue Inspector, one Collection Mohorir and a Peon. There is also a Revenue Supervisor in each Tahsil for the supervision of Revenue Inspector's work.

RELATION
BETWEEN
LANDLORD
AND
TENANT

There were 907 *gaontias* and *ganjhus* in the ex-State of Gangpur. The Bhuiyans and Agarias held about 34 per cent of the *gaontiahi* and *ganjhuani* villages. The Agaria *gaontias* were few in the zamindari areas. They were generally well off. The Bhuiyan and Munda *gaontias* were poor. The Settlement Report (1929—36) stated that their relation with tenants was, on the whole, satisfactory. They used to help the *gaontias* willingly in cultivating their home-farm lands. It was really difficult to cultivate rice lands in large areas unless ample labour was forthcoming at critical seasons. The *gaontias* and landlords largely depended on the free labour provided by tenants who were also not large in number. So the landlord would not ordinarily take recourse to any coercive measures for he was aware that this would lead to desertion which means absolute failure of agriculture.

This was also true in respect of Bonai ex-State. In this connection, the Bonai Settlement Report (1910—13) states; "This relationship between landlord and tenant is very satisfactory. This is obviously due to the scanty population, the low value at which lands were formerly appraised, and the very solid help rendered by the raiyat in the cultivation of proprietor's home-farm and *bhogra* lands".

AGRARIAN
AGITATION

There was, in 1898, a rebellion of tribal *gaontias* of Gangpur under the leadership of Madri Kalo. It has been narrated earlier under 'Gaontiahi Tenure'.

A Munda rising shook Gangpur in the late thirties. They were said to have got inspiration from the freedom struggle that the Indian National Congress launched all over the country. The Munda

Adibasis of Raiboga declined to pay the land revenue demand enhanced in the revision settlement which concluded in 1936. A no-rent campaign was started. This took such a serious form at Simko in 1939 that the police had to open fire to quell the disturbance and there was bloodshed. Thirty-two persons were killed. In 1942, a commission of enquiry was appointed with Mr. Woodhouse and in accordance to its recommendation the enhanced demand was reduced in respect of different classes of land.

It was after the merger of the ex-States with Orissa, the Central Government issued an order called the Orissa States (Application of Laws) Order, 1948, applying a number of enactments to the ex-States on the subjects included in the Central list. Besides, the Orissa Government also issued an order called the Administration of Orissa States Order, 1948, extending a number of State Acts for carrying out the administration of these areas in respect of the remaining subjects. In this order substantial and far reaching tenancy reforms were enacted giving free rights of transfer, full rights over trees standing on the tenants holding, protection against increase of rent and against ejectment of occupancy tenants and *Sukhabasis*, notwithstanding anything contained in the tenancy laws of the ex-States. Besides, some rights were conferred on *jagir* holders and cultivators of *Khamar* lands. This modification of existing tenancy right by the Administration of Orissa States Order, 1948, which was repeated in the Merged States (Laws) Act, 1950, was an event of far reaching consequence.

The first phase of land reforms affording protection to tenants thus started from 1948 with the enforcement of the above orders. The Orissa Tenants Protection Act, 1948, also made provisions for protection of tenants' rights. Subsequently the Orissa Tenants Relief Act, 1948, was enacted repealing the Orissa Tenants Protection Act, 1948. According to the Orissa Tenants Relief Act 1955, no tenants in lawful cultivation of land on the 1st July, 1954 or at any time thereafter was liable to be evicted from such land by the landlord.

The enactment of the Orissa Estates Abolition Act, 1951 introduced further land reforms by eliminating intermediary interests. The primary purpose of the Act was to abolish all intermediaries existing between the estates and the raiyats and after eliminating all the intermediary interests to bring the raiyats or the actual occupants of land in direct contact with the government. The Act further provided for release of the service tenure holders from the obligation of rendering service and conferring occupancy status on them in respect of the land under their occupation.

LAND
REFORMS

After these initial steps, came the Orissa Land Reforms Act, 1960, the objectives of which are :

(a) Conferment of rights of ownership on the tiller, (b) security of tenure and fixity of reasonable rent so that the right of ownership becomes effective, (c) fixation of ceiling on holdings in order to avoid concentration of land in the hands of a few cultivators. But since certain provisions of the Act needed amendment, the Act was subsequently amended by the Orissa Land Reforms (Amendment) Acts, 1965 and 1974.

Under the amended Acts, no person shall hold land as landholder or raiyat under personal cultivation in excess of the ceiling area equivalent to 10 standard acres. A standard acre means the unit of measurement of land equivalent to one acre of class I land or one and one-half acres of class II land or three acres of class III land or four and one-half acres of class IV land. Thus according to law a person (which includes a company or association or other body of individuals, whether incorporated or not; and any institution capable of owning or holding property; or a family) can hold 10 acres of class I lands, 15 acres of class II lands, 30 acres of class III lands and 45 acres of class IV lands. If the number of constituent members of the family exceeds 5, the law permits an additional area to be included in the ceiling at the rate of two standard acres for each additional member in excess of 5, subject to a maximum of 18 standard acres.

Seventy per centum of the surplus lands which vest in Government as a result of the enforcement of the ceiling provision are required to be settled with persons belonging to the Scheduled Tribes or the Scheduled Castes in proportion to their respective populations in the villages in which the lands are situated and the remaining lands with other persons. If, however, sufficient number of persons belonging to the Scheduled Castes or Tribes are not available in the villages, or, being available, they are not willing to accept the settlement of land, so much of the land reserved for them may be settled with other persons. For the purpose of settlement, the order of priority is prescribed as follows:

- (a) Co-operative farming societies formed by landless agricultural labourers.
- (b) Landless agricultural labourers of the village in which the land is situated or of any neighbouring village.
- (c) Ex-service men or members of the Armed Forces of the Union if they belong to the village in which the land is situated.
- (d) Raiyats who personally cultivate not more than one standard acre of contiguous land.

- (e) In the absence of persons belonging to any of the foregoing categories, any other person.

Subletting is entirely prohibited except in cases of disabled persons including those serving in armed forces, minors, widow etc. Under section 6 (3) of the Act, privileged raiyats may also sublet their lands. The above class of persons except serving in armed forces will be required to produce certificates from the village Panchayats for subletting their lands, where such Grama Panchayats have not been constituted the Revenue Officer has been authorised to issue such certificates.

For the implementation of the Land Reforms Act, Chapter V of the Act provides for the administrative machinery according to which the Land Commission has been set up. The first Land Commission was set up on the 13th September, 1966. The tenure of the Commission expired after 3 years i. e. on the 12th September, 1969. The second Land Commission was constituted and continued up to the 10th February, 1973 when the Third Land Commission was formed with seven members of whom three are officials and four non-officials. The official members are the Member, Board of Revenue, Orissa, Chairman; the Land Reforms Commissioner, Orissa, Member-Secretary; and the Commissioner-cum-Secretary to Government, Revenue and Excise Department, Orissa, member.

The functions of the Land Commission is to review the progress of land reforms in the State from time to time, publish report at least once a year and advise Government in all matters relating to land reforms.

Under Section 55 of the Orissa Land Reforms Act, 1960, the District Executive Committee has been formed in the district with the Collector as Chairman and two nominated non-official members. The Committee which normally holds office for three years, reviews the progress of Land Reforms.

The statute, however, does not make any provision for the constitution of any committee at Tahsil level. In view of the growing importance of the land reforms measures and their likely impact in the field, the Government in its Resolution No. 60267-R., dated the 15th September, 1973, authorised the Board of Revenue, Orissa, to frame Tahsil Advisory Committee in each Tahsil consisting of four members with Subdivisional Officer as Chairman, the Tahsildar as Member-Secretary, and two non-official members. Accordingly committees have been framed in all the Tahsils of the district. These committees hold office normally for a period of three years and meet thrice a year. The committees advise in the matter of distribution

of ceiling surplus lands and the implementation of land reforms measures in the field. In addition, these committees may also advise in the matter of distribution of government waste lands and settlement of un-objectionable encroachments with the landless persons in accordance with the laws and rules in force in the State.

ABOLITION OF
LAND REVE-
NUE

Along with the change in the concept of land and tenancy, the concept of land revenue too underwent modifications. When the system of payment of land revenue in cash was introduced, it was hailed by its authors as an improvement over the traditional system of payment in kind.

In the year 1946, the Government of Orissa appointed the Land Revenue and Land Tenure Committee which recommended, among other things, legislative and other measures for reforming the different systems of land revenue in the State in order to make the incidence of land revenue or rent, as the case may be, as far as possible uniform, equitable and elastic.

The Sub-Committee appointed by the National Planning Committee under the Chairmanship of late Jawaharlal Nehru recommended in 1948 as follows :

"During the transition period no tax, rent or land revenue demand should be made in respect of any piece of land, which is so small or the gross out-turn of which is so slight that the whole of it, if left to the cultivator for his own use, would not suffice to give him a decent human existence according to a predetermined standard".

The government, however, decided to abolish the land revenue with effect from the 1st April, 1967.

This historic decision of the Government to abolish land revenue which had been on the soil of the country from the time immemorial, symbolises a further step in alienation of the right on land in favour of the tenantry.

As a preliminary step in this direction executive instructions were issued to all concerned not to collect land revenue payable to government on land with effect from the 1st April, 1967, pending finalisation of the scheme.

After careful consideration of the pros and cons of the land revenue abolition scheme, the government introduced a bill known as the Land Revenue (Abolition) Bill, 1970 in the State Legislature on the 3rd April, 1970 to abolish the land revenue and the same was enacted on the 26th October, 1970. The law of land revenue abolition provides that no raiyat or tenant shall be liable to pay land revenue in respect of any land held

by him directly under the government provided such land is used for the purposes of agriculture, horticulture, or pisciculture or for the purpose of any small-scale industry outside the limits of a municipality or Notified Area. If any sum was paid by a raiyat, or paid on behalf of any raiyat or a tenant towards the land revenue after the 1st April, 1967, such amount if it can not be adjusted against arrears, shall be refunded to him on application made on that behalf.

Bhoodan movement started in the district in 1954. Till the end of March 1971, against 1,462.85 acres, being the total amount of land donated in form of individual gift to the Orissa Bhoodan Yagna Samiti, the acreage distributed among the landless people is 262.60 acres only. It is in respect of 262.60 acres, declaration with the distribution have been filed before the respective Revenue Officers. As yet only 262.60 acres of land have been confirmed by the Revenue Officers under section 10 of the Orissa Bhoodan Yagna Samiti Act, 1953.

Also till this date 56 villages covering a total area of 14,009.11 acres have been donated by way of Gramdan to Orissa Bhoodan Yagna Samiti. Out of this, 4,149.98 acres have been distributed in 16 villages. In respect of 4,149.98 acres, declaration with the distribution list have been submitted to the respective Revenue Officers. As yet 63.36 acres in 4 villages have been confirmed by the Revenue Officers under section 10 of the said Act. Remaining lands measuring 3,562.26 acres have been rejected.

In the rural areas of the district, most of the labourers are unskilled who depend on agriculture for their livelihood. They are either paid in cash or in kind. The skilled labourers like carpenters, blacksmiths, masons etc. are less in number. They earn more than unskilled labourers. A male labourer gets more than a female labourer.

RURAL
WAGES AND
CONDITION
OF
AGRICUL-
TURAL
LABOUR

A detailed discussion in the matter has been made in chapter IX, Economic Trends.

Some of the sources from which the Central Government collect revenue are from Income tax, Central Excise, and Central Sales Tax. So also the State Government realise taxes on excisable commodities, sales of goods and collect stamp revenue.

ADMINISTRA-
TION OF
OTHER
SOURCES OF
REVENUE

Prior to the creation of a separate Income tax Circle at Rourkela in February 1963, the district was under the control of the Income tax Officer, Jharsuguda, for the purpose of assessment, collection etc. of income tax. At present, there are four Income tax Officers posted in the Rourkela Circle to look to the assessment, collection etc. of the above tax in the district. They are controlled by the Inspecting Assistant Commissioner, Income tax, Sambalpur Range, Sambalpur. In the beginning of 1973, the district had 6,933 assesseees.

CENTRAL
Income tax

The statement given below includes the demands, arrears, collections and remissions of income tax in the district for the last four years ending 1971-72.

	1968-69	1969-70	1970-71	1971-72
	(Figures in thousand of rupees)			
1. Arrear demand as at the beginning of the year	13,526	16,967	15,435	13,825
2. Demand created during the year	16,945	8,986	5,225	6,098
3. Remission etc. ..	4,643	4,312	3,124	9,226
4. Collection ..	8,861	6,296	3,621	1,700

Central
Excise

Prior to 1st November, 1965, the Superintendent of Central Excise, Sambalpur Circle, was holding jurisdiction over the district through the three Range Officers, two of whom were at Rajgangpur (one for Rajgangpur Range, the other for the Orissa Cement Limited), and the third one for the Hindustan Steel Limited. On the 1st November, 1965, the office of the Superintendent, Central Excise, Rourkela, was created comprising the district of Sundargarh and Champua subdivision of Keonjhar district. The jurisdiction has since been slightly modified by transferring the subdivision of Sundargarh to the charge of the Superintendent, Central Excise, Sambalpur for the convenience of the trade in Sundargarh town. Since July 1969, the work of Rourkela office has been distributed among the two Superintendents in the following manner :

The Superintendent, Central Excise Inspection Unit, looks to the assessment and inspection of M/s. Hindustan Steel Limited, Rourkela ; Fertiliser Plant, Rourkela; M/s. Orissa Cement Limited, Rajgangpur; M/s. Kalinga Iron Works, Barbil (Keonjhar district) and other small factories in the Industrial Estate of Rourkela.

The Superintendent, Central Excise, Rourkela Range is connected with the assessment work of unmanufactured tobacco, cement (Orissa Cement Limited), pig iron (Kalinga Iron Works, Barbil), sodium silicate, electrical batteries and parts thereof, and the supervision of exempted categories of manufacture of steel furniture, nuts, bolts etc. He is also responsible for preventive works, customs work, and gold control work in his jurisdiction.

In the subdivision of Sundargarh which is controlled by the Superintendent of Central Excise, Sambalpur, there are three private bonded ware houses situated in the town of Sundargarh which receive chewing tobacco locally named 'Maghi Bhang' from Bihar under bond for local consumption. The revenue collected from these three ware houses comes to about Rs. 10,000 annually.

Ten years before, Central excise revenue collected in this district was about rupees two and a half crores, but now the revenue has increased to the tune of Rs. 20 crores annually out of which the Steel Plant at Rourkela alone yields Rs. 17 crores.

The Commercial Tax Department of the State Government assesses Central sales tax and collects Central sales tax under the Central Sales Tax Act, 1956, on behalf of the Central Government.

The table below shows the collection of this tax for the last five years ending 1971-72.

Year	(In lakhs of rupees)
1967-68	.. 241.38
1968-69	.. 277.10
1969-70	.. 322.78
1970-71	.. 408.37
1971-72	.. 362.06

The Excise Department of this district is functioning since Durbar regime. At present the Superintendent of Excise posted in the district headquarters is in charge of the Excise administration. He is subordinate to the District Collector and is subject to the general control of the Excise Commissioner, Orissa, Cuttack. Under him, there are three Inspectors, 15 Sub Inspectors, 9 Assistant Sub-Inspectors and 63 Excise Constables. All these staff posted in different places of the district assist the Superintendent in collection of excise revenue and preventive works of excise crimes.

STATE
Excise

The statement given below indicates the total excise revenue collected for the last five years ending 1970-71.

Year	Total revenue received
	Rs.
1966-67	.. 47,90,880'00
1967-68	.. 51,50,370'00
1968-69	.. 52,83,719'00
1969-70	.. 56,74,418'00
1970-71	.. 61,22,700'00

The function of the Commercial Tax Department in the district is to assess and collect sales tax, Agricultural Income tax, Motor Spirit (on sale) tax, and Entertainment tax, all for the State and the sales tax

Commercial
Taxes

for the Central Government. This Department for the district has its office at Rourkela which is headed by one Commercial Tax Officer. There are two Additional Commercial Tax Officers and five Assistant Commercial Tax Officers posted at Rourkela to assist him. Besides, there is a Railway Receipts Unit at Rourkela, one unified check-gate Unit at Birmitrapur and an Assessment Unit at Rajgangpur. Each of the Units is in charge of an Assistant Commercial Tax Officer. The Commercial Tax Officer, Rourkela, controls these three units.

The table below shows the collection figures (in lakhs of rupees) of different taxes for the district by the Commercial Tax Department (excluding Central Sales Taxes) from 1967-68 to 1971-72.

Year		Orissa Sales Tax	Motor Spirit Tax	Agri- cultural Income Tax	Orissa Enter- tainment Tax
1967-68	..	83.46	11.10	0.09	4.78
1968-69	..	72.24	10.80	0.06	7.53
1969-70	..	73.40	10.77	0.10	7.93
1970-71	..	85.24	11.46	0.08	8.44
1971-72	..	104.87	13.77	0.11	10.37

Stamps

The State also earns from the sale of different kinds or stamps.

The statement below indicates the sale proceeds of stamps in the district from 1967-68 to 1971-72.

Year		Non-Judicial (Rs.)	Judicial (Rs.)
1967-68	..	5,26,687.45	2,27,169.85
1968-69	..	3,91,840.00	2,14,260.65
1969-70	..	5,83,884.56	2,91,150.39
1970-71	..	4,35,235.80	1,94,616.10
1971-72	..	7,78,448.82	1,71,001.65

APPENDIX I

Abolition of Estates and Enfranchisement of Jagirs in the District

Abolition

Name of the Estates	No. and date of notification
<i>Zamindaris</i>	
Hemgir	} No. 7687/R., dated 15-6-1957
Sarpgarh	
Sargipali	.. No. 6967/R., dated 27-11-1952
Kopsinga	.. No. 6971/R., dated 27-11-1952
Nagra	.. No. 6969/R., dated 27-11-1962
Sawant	.. No. 6972/R., dated 27-11-1952
<i>Parganadaris</i>	
Erga	.. No. 6976/R., dated 27-11-1952
Daldali	.. No. 6977-R., dated 27-11-1952
Raiboga	.. No. 6975/R., dated 27-11-1952
<i>Jagirdari</i>	
Dandapat	.. No. 6973/R., dated 27-11-1952
Mahapatra	.. No. 6974/R., dated 27-11-1952
Bartengra	.. No. 64282/R., dated 11-11-1967
Enfranchised Jagirs	.. Government Order No. and Press Note
<i>Naukaran</i>	} No. 59816/R., dated 15-12-1962 and Press Note issued in Revenue Department Memo. No. 6708/R., dated 30-1-1963.
Kamar	
Bhitiria	
Kumbhar	
Yeli (Teli)	
Negi	
Napita	
Bajabala	
Mahata	
Bohidar	

Maufi Khairat
 Maufi Chakran
 Chhatra Chakran

 Naukaran Mahali
 Bhitiria Namikaran
 Paikali
 Naikali
 Chowkidar Fagaganda
 Chowkidar Tanti
 Katual
 Nijchas
 Nijdakhal
 Kalsi
 Nijchas Khamar
 Maufi
 Kali
 Entidhara
 Dhandi
 Dakbuha
 Nisharan
 Bhagari
 Kalti
 Nariha

 Bhandari

 Sukapal maufi
 Lohara
 Naukaran
 Ghasi
 Dhoba

No. 59816-R., dated 15-12-1962 and
 Press Note issued in Revenue Depart-
 ment Memo. No. 6708/R., dated
 30-1-1963.

.. Press note issued in Revenue Depart-
 ment Memo. No. 6708/R., dated
 30-1-1963 and No. 64286/R., dated
 11-11-1967 and No. 55990/R., dated
 8-9-1969.

.. Press Note issued in Revenue Depart-
 ment Memo. No. 6708/R., dated
 30-1-1963 and No. 64286/R., dated
 11-11-1967.

Ditto

Press note issued in Revenue Depart-
 ment Memo No. 64286/R., dated
 11-11-1967.

APPENDIX II

STATEMENT SHOWING THE DEMAND COLLECTION AND BALANCE FIGURES FOR THE LAND REVENUE, CESS, NISTAR CESS & MISC. REVENUE IN THE DISTRICT FROM 1967-68 to 1971-72

Year	Demand			Collection			Balance		
	Land revenue	Cess	N. Cess	Land revenue	Cess	N. Cess	Land revenue	Cess	N. Cess
1967-68	4,73,785.77	1,19,913.68	24,772.52	3,17,246.61	36,335.12	77,561.89	23,070.18	1,85,307.77	4,37,450.65
1968-69	1,01,561.37	1,40,059.67	41,624.33	7,32,664.03	36,842.52	93,769.19	28,567.94	5,69,465.97	64,718.85
1969-70	96,815.23	1,41,958.12	41,158.88	4,39,067.77	70,127.75	1,10,158.05	32,279.53	2,69,215.30	26,687.48
1970-71	83,086.30	2,40,648.12	43,162.96	1,56,751.41	45,815.63	1,91,913.36	33,112.80	54,971.97	37,270.67
1971-72	58,033.73	2,47,620.05	40,644.45	2,97,626.57	4,825.31	18,270.11	3,232.06	46,005.93	53,208.42
									2,29,348.94
									37,412.39
									2,51,620.64

CHAPTER XII

LAW AND ORDER, AND JUSTICE

INCIDENCE
OF CRIME

During the first decade of this century, crimes both in the ex-States of Gangpur and Bonai mainly related to ordinary thefts and burglaries. Dacoity and robbery were taking place occasionally. In the wilds of Bamra (now in Sambalpur district) and Bonai, the Kols in gangs were committing dacoity from time to time. In 1907-08, the number of crimes reported to the police of Gangpur ex-State was 579.

The nature of crimes committed in the ex-State of Gangpur during the thirty years after 1907-08 had nothing special to be mentioned. In 1937-38, the total number of criminal cases reported to the police in this ex-State was 498.

In early 1939 there was an agitation by Lutheran Mundas of the ex-State against the increase of land revenue. The agitation reached its climax on the 25th April, 1939, when a party of police that went to the village site to arrest the leader was confronted by a crowd of 500 Mundas. The trouble was over when the mob was fired at by the troops. The firing took 32 lives.

During the period 1938-39 to 1946-47, the annual crime figures varied between 378 to 720. Most of the crimes reported were burglaries and thefts. Murders and culpable homicides were not very frequent. Dacoity, robbery, abductions and rape were rare or nil.

The number of cognizable cases reported to the police during 1914-15 in the ex-State of Bonai was 143. It varied between 143 to 455 during the ten years ending 1924-25, the largest being in 1919-20. Increase in crime in this period was due to serious out-breaks of dacoity which could not be controlled by the ex-State police. Specially, from 1918 to 1920, there was a formidable recrudescence of dacoity in Bonai with which a demoralised police force was quite unable to cope. An armed police force had to be drafted in from Ranchi, Angul and the neighbouring ex-States, and the gangs were gradually broken up. Finally, principal leaders and most of their associates were arrested. In the following five years on an average 212 crimes were reported in the ex-State.

Crime figures of the ex-State varied between 236 to 425 between 1941-42 to 1945-46. Like the ex-State of Gangpur, here also most of the crimes committed were either burglaries or thefts. Except 9 cases

of murder and culpable homicide in 1942-43, these types of heinous crimes reported in other years were within five. There were few cases of dacoity, robbery, kidnapping and cheating.

During 1955 and 1956 there was a general failure of crops and so it cast a shadow on the general economic condition of the people as well as the crime position. The construction of the steel plant which started at Rourkela under Raghunathpali police station demanded a large flow of labourers, both skilled and unskilled, who came from all over India and along with them also came absconders and out-of-view criminals who remained in the guise of labourers and committed crime during night. So, there was upward trend in the crime in 1955-56 and 1956-57 in Raghunathpali and nearby police station areas. There was also increase in accident cases due to motor vehicles as there was sudden increase in the number of such vehicles required in connection with the construction of the steel plant.

Except 1960, there was a trend of year-wise increase in the figures relating to the number of cognizable cases reported to the police of the district from 1955 to 1960. In between 1961-65 on an average 35 cases of murder, 9 cases of dacoity, 18 cases of robbery, 396 cases of burglary and 683 cases of theft were reported to the police.

Poverty, land dispute and industrialisation are some of the important causes for the increase in cognizable offences in the district.

A detailed statement showing the number of cases like murder, dacoity, robbery, burglary and theft reported to the police since 1966 to 1970 is given below :

Year	Murder	Dacoity	Robbery	Burglary	Theft	Total crimes
1966 ..	21	20	15	382	1,030	2,300
1967 ..	31	10	21	491	988	2,551
1968 ..	50	7	20	503	1,017	2,466
1969 ..	45	9	17	435	982	2,182
1970 ..	36	14	17	406	993	2,545
1971 ..	33	16	22	465	956	2,659

Available figures for the cases of smuggling, suicide, sex crime and juvenile delinquency reported to the police from 1971 to 1973 are given below :

Year	Smuggling	Suicide	Sex crime	Juvenile delinquency
1971 ..	16	26	6	13
1972 ..	15	36	6	3
1973 ..	67	32	4	3

POLICE

History of
police
organisation

By 1907-08, the police administration of the ex-State of Gangpur was organised on the lines of the police then in British India and the rules and procedures in Bengal Police Code were closely followed. The force was under the general control of the *Dewan* with the eldest son of the Ruler as the Superintendent of Police. The advent of the railway and the opening up of the country rendered a properly trained police force essential.

There were then eleven police stations and outposts, and the force consisted of one Inspector, 10 Sub-Inspectors, 12 Head Constables and 120 Constables maintained at a cost of Rs. 18,000 per annum. There was in addition a *Chowkidar* (village watchman) in each village, who was remunerated by grant of land.

By 1938-39, the police force of this ex-State increased to 210 which included one Superintendent of Police, one Assistant Superintendent of Police, two Circle Inspectors, 12 Sub-Inspectors, 18 Head Constables, 162 Constables and 14 others. There was one police man to every 12 square miles of area of the ex-State and to every 1,731 of its population.

There was a slight decrease in the sanctioned strength of the force in 1946-47, which was 195. The force consisted of one Superintendent of Police, 4 Inspectors, 15 Sub-Inspectors, 17 Assistant Sub-Inspectors, 17 Writer Constables, 3 Havildars, 9 Naiks and 129 Constables. Besides this, there was a C. I. D. staff consisting of one Sub-Inspector and one Constable. There was one police man for 12.8 square miles and 2,047.6 persons. The ex-State was divided into 9 police stations and 4 outposts.

In 1907-08, the ex-State of Bonai had a regular police force consisting of one Sub-Inspector, five Head Constables and 29 Constables. Besides the reserved police force of 9 men and one Sub-Inspector, there were also 108 village *Chowkidars* or *Goraitis*.

The sanctioned strength of the police force of Bonai ex-State in 1942-43 consisted of 19 officers including one Inspector at the head and 80 Constables. Thirteen of them were armed. The proportion of the police force to the area and the population of the ex-State, according to the Census of 1941, was 1 to 13 square miles and 1,934.8 persons respectively. The strength was reduced by 17 Constables towards the close of the year to keep it in proportion with crimes in the ex-State. There were eight police stations viz., Sadar (Bonaigarh), Koira, Banki, Gurundia, Kamarposh Balang, Sarsara Balang, Mahulpada, and Sulgura. Just before merger, the force of the ex-State consisted of 82 personnel which included one Inspector, 6 Sub-Inspectors, 11 Assistant Sub-Inspectors, 1 Havildar, 10 Writer Constables and 53 Constables. The proportion of the force to area and population according to the Census of 1941 was 1 to 15.9 square miles and 1,108 persons respectively.

After the formation of the district in January 1948, a Superintendent of Police was posted at the district headquarters. He was assisted by a force consisting of one Sergeant-Major, 4 Inspectors, one Sergeant, 33 Sub-Inspectors, 33 Assistant Sub-Inspectors, 15 Havildars and 331 Constables.

Organisation
of the Police
Force after
Merger

The force included three Inspectors, 22 Sub-Inspectors, 31 Assistant Sub-Inspectors, 4 Havildars and 219 Constables of the ex-States service.

Till the 31st May, 1962, the entire district was under the control of the Superintendent of Police stationed at Sundargarh. On the 1st June, 1962, for the purpose of police administration the district was divided into Sundargarh and Rourkela police districts, each under the control of a Superintendent of Police.

The present strength of Sundargarh Police district is one Superintendent of Police, two Deputy Superintendents of Police, seven Inspectors, 2 Sergeants, 48 Sub-Inspectors, 42 Assistant Sub-Inspectors, one Havildar-Major, 57 Havildars, 22 Naiks, 20 Lance Naiks, 20 Writer Constables and 589 Constables. The Rourkela police force consists of one Superintendent of Police, one Additional Superintendent of Police, one Deputy Superintendent of Police, 7 Inspectors, 43 Sub-Inspectors, 22 Assistant Sub-Inspectors, 2 Havildar-Majors, 75 Havildars, 5 Writer Constables and 631 Constables.

Both the police establishments are placed under the Deputy Inspector-General, Western Circle, Rourkela.

Civil Police

(a) Sundargarh police district—At present the district has four police circles, 18 police stations (as in the margin) and a number of

1. Sundargarh Circle—
Sundargarh, Talsara,
Hemgir, Lefripara,
Bhasma. out-posts. The circles are managed by the
Inspectors and the police stations by the
Sub-Inspectors. They are assisted by a
number of Assistant Sub-Inspectors and
Constables.
2. Rajgangpur Circle—
Rajgangpur, Bargaon
Kalunga.

3. Birmitrapur Circle—
Birmitrapur, Bisra,
Raiboga.

4. Bonai Circle—
Bonaigarh. Banki,
Kamarposh Balan g,
Koira, Gurundia,
Tikayatpali,
Mahulpada. The ordinary reserve of the district which
mainly provides staff to the civil police
consists of 6 Inspectors, 42 Sub-Inspectors,
42 Assistant Sub Inspectors, 2 Havildars,
22 Writer Constables and 270 Constables.

(b) Rourkela police district—This police district has the only police circle at Rourkela with 4 police stations, viz., Township, Plant site, Tangarpali, and Raghunathpali with a number of town outposts.

The ordinary reserve of Rourkela police district includes 5 Inspectors, 35 Sub-Inspectors, 20 Assistant Sub-Inspectors, 19 Havildars, 5 Writer Constables and 298 Constables.

Armed Police

To meet emergencies and to tackle the law and order problem, contingents of armed police are stationed at Sundargarh and Rourkela. The striking force at Sundargarh consists of one Reserve Inspector, two Sergeants, six Drill Sub-Inspectors, two Havildar-Majors, fifty-five Havildars, twenty-two Naiks, twenty Lance Naiks and 319 Constables.

On the other hand the armed police stationed at Rourkela consists of one Reserve Inspector, four Sergeants, three Drill Sub-Inspectors, two Havildar-Majors, 51 Havildars, 11 Naiks, 9 Lance Naiks and 305 Constables.

Prosecution Staff

To prosecute police cases, police staffs have been posted in different subdivisional courts of the district. The courts of Sundargarh and Bonaigarh come under Sundargarh Police district. The court staff of Sundargarh include one Inspector, three Sub-Inspectors, two Assistant Sub-Inspectors and 8 Constables, whereas one Sub-Inspector, one Assistant Sub-Inspector and 8 Constables constitute the staff for Bonaigarh Court.

The court staff of Uditnagar which include one Prosecuting Inspector, 5 Court Sub-Inspectors, 2 Assistant Sub-Inspectors and 11 Constables are provided by the Rourkela police administration.

The Home Guard organisation has been set up in the district since 1962 with the object to have trained personnel, besides military and police, for utilisation during emergency. At present the sanctioned strength of the organisation is 1,162 out of which 800 are rural home guards and the rest are urban home guards. The members of this organisation are provided with free uniform and paid at rates as sanctioned by the Government from time to time when they are called for duty, parade, training, range practice, rally, etc. The home guards are actively participating in the maintenance of law and order and are helping the people in distress during natural calamities like epidemic, fire, and flood.

The services of the traffic police are utilised only in Rourkela city of the district. The present sanctioned strength (1974) of the traffic police is one Sub-Inspector, two Havildars and 20 Constables. The traffic posts are located at different central places of the city.

The only railway police station in the district is at Rourkela with a jurisdiction which extends from Jareikela Railway Station to Sonakhan Railway Station of Howrah-Bombay line of South-Eastern Railway and to all the branch lines in the district. The staff of this railway police station consists of 2 Sub-Inspectors, 2 Assistant Sub-Inspectors, one Havildar, one Writer Constable and 30 Constables. Generally minor thefts and occasionally cases like murder, dacoity and robbery are reported to the railway police here. In between 1957-67, the railway police handled yearly on an average 137 cases in the district. In 1968, 1969, 1970 and 1971 number of cases reported to them were 126, 114, 146 and 126 respectively.

This district with one Vigilance Sub-Inspector and one Constable was under the control of an Inspector posted at Sambalpur till December 1959, when it was separated and formed a separate zone with one Inspector, one Sub-Inspector, one Assistant Sub-Inspector and three Constables with headquarters at Sundargarh. Consequently on the expansion and reorganisation of Vigilance, this district has been divided on the 1st November, 1961 into two zones with 2 squads placed one each at Sundargarh and Rourkela. The squad at Sundargarh has a staff consisting of one Inspector, and 3 Constables whereas the Rourkela squad is manned by one Inspector, one Sub-Inspector and four Constables.

The statement below indicates the number of vigilance cases handled by each squad for the last five years ending 1970:

Year	Sundargarh Squad		Rourkela Squad	
	Criminal Cases	Files	Criminal Cases	Files
1966	.. 4	19	2	25
1967	.. 4	18	5	65
1968	.. 1	11	1	30
1969	.. 1	6	3	14
1970	.. 5	24	1	11

Wireless

Wireless stations have been established at Sundargarh, Rajgangpur, Birmitrapur, Tensa, Bonaigarh, and Rourkela. Two Sub-Inspectors, sixteen Assistant Sub-Inspectors and seven Constables are functioning in these stations.

Fire Station

The only fire station of the district is located at Rourkela.* This 'A' class fire station was established in September 1965. The staff of this station consists of one Station Officer, one Assistant Station Officer, 4 Leading Firemen, five Driver Havildars and 32 Firemen.

During 1971, the staff of the fire station attended 19 fire calls and saved property worth Rs. 9,775. Property damaged this year was worth Rs. 23,247.

The statement given below shows the number of fire calls, the number of houses destroyed, and the amount of property damaged and saved from September 1965 to the end of 1970.

Year	Fire Calls			No. of houses destroyed	Amount of property damaged	Amount of property saved
	Total	Major	Ordinary			
					Rs.	Rs.
1965	3	1	2	2	200	15,000
1966	36	4	32	133	51,115	5,67,430
1967	34	8	26	89	20,30,800	12,33,600
1968	31	2	29	36	20,455	3,52,300
1969	31	5	26	147	2,45,870	3,37,100
1970	35	7	28	30	2,12,902	6,73,960

* Since June 1972, a 'C' class fire station at Sundargarh has started functioning.

Uptil 30th June, 1965 each village in the district was looked after by a *Chowkidar* and a *Jhankar* who was also the village priest. They were remunerated with some *jagir* lands or pay sanctioned by the Government. But from 1st July of that year it was decided to replace them by the appointment of Beat Constables.

Village Police

According to the law which abolished the villages police, the *Jhankar* should have half of his *jagir* land left with him for worshipping the village deity. This means that the entire *jagir* land of his has to be surveyed and valued. Then alone it can be decided which half would be left for the village deity. This work was started several years ago but it has not yet been completed.

Beat system did not work well. So the system was abolished on 1st March, 1967. Now Grama Rakhis have been appointed in their place to look after the villages. The sanctioned strength of the Grama Rakhis in the district during 1972-73 was 338.

Generally the Constables are recruited at the district level through the Employment Exchanges. Out of the total vacancies, 40 per cent are reserved for the Scheduled Castes and the Scheduled Tribes. The newly appointed Constables undergo a prescribed course of training for a period of nine months either at the Police Training College, Angul or at the Police Training School, Nayagarh. Besides, in the district level they also undergo a 30 days refreshers course.

Recruitment, training and amenities provided for the Police personnel

The police personnel of the district enjoy rent-free accommodation and get free clothings. Common mess and canteen are functioning to cater to their needs. They are provided with books, newspapers and periodicals and the facilities of various indoor and outdoor games.

In 1907-08, the ex-State of Gangpur had one well-built Jail at Sundargarh and one Sub-Jail at Raghunathpali (Panposh). The Sundargarh Jail had accommodation for 114 prisoners. At Raghunathpali Sub-Jail, prisoners sentenced by the Magistrate to a period not exceeding three months were confined.

Jails

In the year mentioned above, there was also a Jail at the headquarters of Bonai ex-State. The Jail was affording accommodation to 31 prisoners.

In 1943-44, Sundargarh Jail, Raghunathpali (Panposh) Sub-Jail and Bonaigarh Jail had daily average population of 113, 7 and 49.45 respectively.

The convicts of Sundargarh and Bonaigarh Jails were engaged in carpentry, weaving of cloth, *newar* making and oil-pressing, wheat grinding, tank-digging, rope-making, preparing articles from bamboo and gardening.

There were hospitals for the above two Jails and the patient-prisoners of Raghunathpali Sub-Jail were also afforded medical treatment.

Since 1st January, 1948, all the three Jails were taken over by the State Government.

After government take over, the Sundargarh Jail, at first continued to function as a class III district jail and since 1959, due to increase of the prison population, the status has been raised to that of class II district jail. It has 10 wards and 12 cells. It can accommodate 226 male and 10 female prisoners. From the date of merger up to the 8th May, 1954, the Jail at Bonaigarh functioned as a Special Sub-Jail. The status of this Special Sub-Jail was reduced to that of a Sub-Jail on the 9th May, 1954. But since 25th February, 1958, the jail, with an accommodation facility for 62 male and 5 female prisoners, has again been given the status of a Special Sub-Jail.

In 1959, another Special Sub-Jail started functioning at Rourkela. Due to the increase in prison population, the status of this Special Sub-Jail was raised to that of a Special Jail on the 1st March, 1965 with 18 wards and accommodation facilities for 295 male and 16 female prisoners. The Sub-Jail at Raghunathpali was closed on the 19th April, 1962.

The average daily population of the three jails from 1966 to 1971 is given in the following statement:

	1966	1967	1968	1969	1970	1971
District Jail, Sundargarh.	180.05	190.89	182.07	182.31	226.37	227.44
Special Sub-Jail, Bonaigarh.	44.79	51.73	76.49	66.40	67.10	89.80
Special Jail, Rourkela.	227.23	241.22	213.82	264.76	241.42	240.15

The Chief District Medical Officer is the part-time Superintendent of the District Jail. He is being assisted by one Jailor, one Assistant Jailor and a number of other subordinates.

Rourkela Special Jail has been placed under the charge of the Revenue officer of Panposh subdivision. He is assisted by one Jailor, one Assistant Jailor and a number of other subordinates. The Assistant Surgeon in charge of the subdivisional hospital, Bonaigarh, is the

part-time Superintendent of Bonaigarh Special Sub-Jail. One Assistant Jailor and a number of subordinates assist him in the management of the Special Sub-Jail.

There is one two-bedded hospital attached to the District Jail, Sundargarh, under the charge of the Chief District Medical officer who acts also as the part-time Medical Officer in addition to his part-time superintending. There is one Assistant Surgeon and one Pharmacist who assist him in the treatment of ailing prisoners. Necessary equipments, medicines and special diets for the ailing prisoners are provided from the jail budget.

There is a hospital ward in the Rourkela Special Jail. One whole-time Assistant Surgeon and a Pharmacist are available for providing medical facilities to the prisoners.

There is no hospital attached to the Special Sub-Jail at Bonaigarh. But a six-bedded ward of the jail has been kept separate for the treatment of the sick prisoners. The Superintendent, who is also the Medical Officer of the Jail, and a Pharmacist look after the patients. The required medicines are either brought from the local hospital or purchased by the jail authorities.

To raise the standard of literacy among the prisoners there are schools with trained teachers in the District Jail, Sundargarh; and Special Jail, Rourkela. But there is no school at Bonaigarh Special Sub-Jail.

To improve the morals of the prisoners, there are part-time religious instructors for the three jails of the district who come on Sundays and other holidays, to impart religious instructions. The prisoners are allowed to read newspapers and periodicals. Books from the jail libraries are issued to them.

Prisoners are encouraged to participate in outdoor and indoor games inside the jail compounds. Musical instruments are also provided for the recreation of the prisoners.

Different categories of prisoners such as under-trials and convicts are kept segregated as far as practicable within the jail walls. During Durbar regime, the jail administration was mainly based on deterrent whereas after Independence various reformatory measures are being gradually adopted for the improvement of the prisoners. After the admission of a prisoner he is sympathetically given a hearing of his difficulties and necessary endeavour is made to study his aptitude. He is allowed to write letters to his relatives and friends, make petition to higher authorities regarding his case affairs and after

Medical, Educational and Recreational facilities

Nature of treatment offered to different classes of prisoners

conviction, to file appeal to the next appellate court. To look to the welfare of the prisoners, one Welfare Officer has been appointed in the District Jail.

Panchayat system has been introduced in the jails of the district. The prisoners nominate some of the inmates from whom five are selected by the Superintendent to constitute the Panchayat. From among the selected members one acts as the *Sardar* and supervises the work of others. The other four are given different charges like cooking, looking to the sanitation and gardening, and to promote a healthy atmosphere in the prison.

Board of
Visitors

There is a Board of Visitors for the District Jail with 5 official and 5 non-official members. The District Magistrate acts as the *ex-officio* Chairman of the Board. The Special Jail, Rourkela, and the Special Sub-Jail, Bonaigarh, have five and three non-official visitors respectively.

The Board of Visitors meets once in three months. The members go round the jail to look to the grievances of the prisoners, inspect the quality of the food served to the prisoners and examine the punishment register. The Board also recommends premature release of life-convicts to the Government.

The statement given below shows the number of various types of convicts released on expiry of term, on appeal and on remission of sentences from the District Jail, Bonaigarh Special Sub Jail and Rourkela Special Jail from 1966 to 1970.

Name of the jail	Year	On expiry	On appeal	On remission
District Jail, Sundargarh	1966	135	10	38
	1967	203	5	51
	1968	73	3	41
	1969	86	13	23
	1970	117	5	39
	1971	126	13	26
Special Sub-Jail, Bonaigarh	1966	51	..	9
	1967	76	3	13
	1968	63	5	24
	1969	86	2	16
	1970	114	1	11
	1971	123	3	13

Name of the jail	Year	On expiry	On appeal	On remission
Special Jail, Rourkela	1966	1,102	..	37
	1967	1,074	2	22
	1968	820	4	40
	1969	791	7	58
	1970	500	..	25
	1971	335	..	45

Since February 1961, one District After-care Shelter at Sundargarh has been opened to facilitate social and vocational rehabilitation of the ex-convicts. The shelter provides food, clothes, and lodging to 25 inmates admitted after being released from the jails. The inmates are allowed to stay for a period of three months. Since February 1961 till the end of 1970, 158 ex-convicts were admitted and 149 were discharged.

After-Care
Shelter

A Probation Officer has been posted at the headquarters of the district. He mainly supervises the probationers and other persons placed under his supervision, and where necessary, endeavours to find them suitable employment. He also enquires, in accordance with any direction of a court, into the circumstances or home surroundings of any person accused of an offence with a view to assist the court in determining the most suitable method of dealing with him.

Probation
Officer

During the Durbar administration, the ex-States of Gangpur and Bonai had different systems of judiciary. Before the forties of this century, the judiciary of the ex-State of Gangpur constituted of a Chief Judge, one Sessions Judge, and five to seven Magistrates with first, second, or third class powers.

JUSTICE

A Bench was formed for the purpose of High Court work in the ex-State with the sanction of the Political Agent conveyed in his letter No. F. J-1-1/38(W), dated the 5th April, 1938. The Bench consisted of the Regent Rani Sahiba and her *Dewan*. All the subordinate courts of the ex-State were made responsible in respect of all judicial matters to the Bench.

Besides the Bench, in early forties, the judiciary consisted of one District and Sessions Judge, two Subdivisional Magistrates of 1st class powers and some other magistrates with 1st or 2nd class powers.

The Bench continued to exercise its powers in all criminal matters till the 3rd July, 1945, when a common High Court for Orissa and the Chhatisgarh ex-States was formed.

Before 1943-44, about seven to eight courts of the ex-State were exercising civil powers. The District Judge was first appellate and there was provision for second appeal to the Bench. There were Sub-Judges and Munsifs to hear original suits in their respective territories. But at the end of September 1943, the system of territorial jurisdiction of civil courts was abolished and the number of courts with civil powers was reduced. This was done to maintain a higher standard in administration of civil justice.

Up to the date of merger, this ex-State had only two courts exercising civil powers. These were the court of the Sub-Judge at the headquarters, and the Court of the Subdivisional-Officer-cum-Munsif in Nagra. The Munsif of Nagra was empowered to try civil suits up to the value of Rs. 200.

During 1940-45, the criminal department of the ex-State of Bonai was under the charge of the Assistant *Dewan* who was also the District Magistrate. The *Dewan* of the ex-State was empowered to hear all appeals against 1st class Magistrates, and take up cases triable by the Court of Sessions. The Political Agent, Orissa ex-States, was exercising powers of a High Court in all criminal matters. Besides, there were a number of subordinate Magistrates with 1st, 2nd or 3rd class powers to deal with all criminal cases.

The entire fabric of the administration of civil justice in the ex-State consisted of (a) Court of Subdivisional Officers vested with powers to try civil suits up to a value of Rs. 250, (b) Court of Assistant *Dewan* vested with powers to try civil suits upto a value of Rs. 1,000 and (c) Court of the Subordinate Judge with unlimited pecuniary jurisdiction and small cause court powers up to Rs. 50. The *Dewan* as the Civil Judge was exercising appellate jurisdiction on civil and rent suits. He was also exercising special jurisdiction in guardianship, succession, certificate and intestate cases.

The Court of Political Agent, Orissa ex-States, was exercising the final appellate jurisdiction on all civil appeals arising from the ex-State.

The powers of a District and Sessions Judge which were hitherto being exercised by the *Dewan* of the ex-State were, with the appointment of a Common States Civil and Sessions Judge for the ex-States of Keonjhar, Saraikela, Kharsuan, Bonai, and Pal-Lahara vested in the latter with effect from the 15th June, 1945.

So also the Political Agent, Orissa ex-States, continued to exercise the powers of a High Court in all civil and criminal matters till the

3rd July, 1945 when with the constitution of a common High Court for the Orissa and Chhatisgarh ex-States, the latter functioned as the High Court for Bonai ex-State.

Since 1948, the District and Sessions Judge, Sambalpur-Sundargarh with his headquarters at Sambalpur is functioning as the District and Sessions Judge for the district. He has powers to dispose sessions cases, criminal appeals and criminal revisions of the district. Criminal Courts

The Court of Additional District and Sessions Judge was created at Sundargarh on the 24th November, 1969, and since then it is continuing. The Additional District and Sessions Judge has got concurrent jurisdiction with the Sessions Judge to try sessions cases on transfer and to hear criminal appeals and revision cases and criminal miscellaneous cases arising in the district.

One Special Judge in the status of a District Judge has been posted since October 1971 at Sambalpur to hear mainly corruption cases referred by the Vigilance organisation in the districts of Sundargarh, Sambalpur, Keonjhar, Dhenkanal, Balangir, Kalahandi, and Koraput.

From the date of merger the court of the Sub-Judge, Sundargarh, was functioning till the 9th December, 1948, when due to insufficient work it was abolished. Again this court was created on the 3rd April, 1963, and is continuing. From the 10th September, 1971 another Sub-Judge's Court has been opened at Rourkela. The Sub-Judges have been vested with powers of an Assistant Sessions Judge.

Before the separation of the Judiciary from the Executive, the District Magistrate was in charge of the criminal department of the district. All the Subdivisional Officers and a number of other subordinate Magistrates were vested with 1st, 2nd or 3rd class powers to deal with criminal cases.

The statement below includes the number of subordinate Magistrates empowered to deal with criminal cases, cases instituted with and disposed of by them during 1948-52 in the district.

Year	No. of Magistrates	Institution	Disposal
1948	17	1,528	1,121
1949	18	1,441	1,268
1950	23	1,893	1,677
1951	20	2,084	1,934
1952	22	2,471	2,263

Up to October 1961, there was not any remarkable change in the judiciary system of the district. There were 20 Magistrates in each of the years of 1958 and 1959. In 1960 and 1961, the number of

Magistrates were 18 and 22 respectively. 664 cases were pending before the Magistrates at the beginning of 1959 and 2,808 cases were brought to trial during this year against 3,268 cases of the previous year.

In 1960, and 1961, the cases brought for trial before the Magistrates were 3,528 and 4,939 respectively, and they disposed of 2,875 cases in 1960, and 3,631 cases in 1961.

Separation of
the Judiciary
from
the Executive

The Judiciary in the district was separated from the Executive from the 25th October, 1961. At the beginning there was one Subdivisional Magistrate posted in each of the three subdivisions of the district. Besides, one 1st class Magistrate for Sundargarh, and one 1st class and one 2nd class Magistrate for Panposh subdivision were also appointed.

There were six Magistrates working in the district during 1962. They included three Subdivisional Magistrates, two 1st class Magistrates and one 2nd class Magistrate. There is no change in the number of Magistrates since then. During 1970, besides the Subdivisional Magistrates (Judiciary) posted in each of the subdivisions, there were two Magistrates at Panposh and one at Sundargarh with first or second class powers. At present the Munsifs of Panposh and Bonaigarh are the *ex-officio* Subdivisional Magistrates (Judiciary) in their respective subdivisions. For administrative and other purposes, the judiciary of the district has been placed under the supervision of the Additional District Magistrate (Judiciary), Sambalpur-Sundargarh with headquarters at Sambalpur who in turn is made subordinate to the District and Sessions Judge, Sambalpur-Sundargarh. The head of the judiciary in the State is the High Court.

Statement showing number of criminal cases, criminal appeals criminal revisions, etc. in different courts of the district from 1966 to 1970 are given in Appendix I.

Civil Courts

As stated earlier, a Subordinate Judge's Court was functioning in Sundargarh district after the merger. But as there was no sufficient civil work, it was abolished with effect from the 9th December, 1948. This Court was again established in April 1963. A Munsif's Court was also established in 1948 and he was invested with powers to try cases up to a limit of Rs. 4,000. Another Munsif's court, established at Bonaigarh after the merger was abolished within a short period due to want of sufficient civil work and the Subdivisional Officer, Bonai was allowed to function as *ex-officio* Munsif for the area to try un-contested civil suits. But for contested civil suits, the subdivision of Bonai was tagged to the court of Deogarh Munsif.

The District Judge continues to be the head of the civil courts of the district. He hears civil appeals upto Rs. 5,000 in valuation and tries suits and cases under special acts. The Additional District Judge posted at Sundargarh has concurrent jurisdiction with the District Judge to try suits under special acts and hear appeals. The Sub-Judges stationed at Sundargarh and Rourkela try suits and cases relating to their respective areas of unlimited pecuniary jurisdiction. They also hear and dispose of cases under the Insolvency Act and Indian Succession Act. They are vested with powers to hear cases under the Land Acquisition Act, as Tribunal under the Estate Abolition Act, and Hindu Marriage Act. Besides, there are Munsifs posted in each of the three subdivisional headquarters of the district. They have power to hear civil suits and cases upto a pecuniary limit of Rs. 4,000 in their respective areas.

A detailed statement indicating the number of different types of civil suits instituted and disposed of and appeals heard by different courts of the district from 1966 to 1970 is given in Appendix II.

There were lawyers in the ex-State of Gangpur since 1910. A regular Bar Association was formed at Sundargarh in 1948. The Association at present consists of 30 Advocates as members. The Association has been provided with a room by the State Government.

BAR ASSOCIATIONS

Bar Association, Sundargarh

A Bar Association was formed with three members i. e., one pleader and two Mukhtars practising in Panposh subdivisional courts in the last quarter of 1952. At present the Association has 35 members. The Bar has its own library. The State Government have provided one room for the Association.

Bar Association, Rourkela

Established in the year 1949, the Bar Association at Bonaigarh consists of 9 members. The government have allotted a tin shed for the Association. There is a small library.

Bar Association, Bonai-garh

APPENDIX I (A)

Statement showing the institution and disposal of Sessions Cases, Criminal Appeals, Criminal Revisions, in the district year-wise from 1966 to 1970.

Year	Institution	Disposal
<i>Sessions Cases</i>		
1966	.. 40	50
1967	.. 41	35
1968	.. 48	26
1969	.. 51	45
1970	.. 50	74
1971	52	55
<i>Criminal Appeals</i>		
1966	.. 104	94
1967	.. 62	57
1968	.. 80	82
1969	.. 101	89
1970	.. 101	157
1971	.. 101	92
<i>Criminal Revisions</i>		
1966	.. 7	1
1967	.. 7	..
1968	.. 2	3
1969	.. 7	2
1970	.. 5	9
1971	4	2

APPENDIX I (B)

Statement showing the Criminal Cases tried, Criminal Appeals heard, and persons involved, acquitted and convicted by each Court for five years (year-wise) ending 1971.

Year	Particulars of Court	Types of cases or appeals	Tried or heard	Persons	
				Acquit- ted	Con- victed
1966	Sessions Judge, Sambalpur—Sundargarh; Sambalpur.	Sessions Cases Criminal Appeals	50 94	87 58	49 146
<i>Sundargarh Subdivision</i>					
	Sub-divisional Magistrate, and Magistrate, First Class.	Criminal Cases	4,474	2,369	1,146
<i>Panposh Subdivision</i>					
	Subdivisional Magistrate, and Magistrate, First Class.	Criminal Cases	2,873	766	3,027
<i>Bonai Subdivision</i>					
	Subdivisional Magistrate.	Criminal Cases	554	149	411
1967	Sessions Judge, Sambalpur-Sundargarh; Sambalpur.	Sessions Cases Criminal Cases	76 57	65 65	36 37
<i>Sundargarh Subdivision</i>					
	Subdivisional Magistrate, and Magistrate, First Class.	Criminal Cases	4,146	2,529	3,990
<i>Panposh Subdivision</i>					
	Subdivisional Magistrate; Magistrate, First Class; and Magistrate, Second Class.	Criminal Cases	2,512	988	2,467

Year	Particulars of Court	Types of cases or appeals	Tried or heard	Persons	
				Acquit- ted	Con- victed
<i>Bonai Subdivision</i>					
	Subdivisional Magi- strate.	Criminal Cases	581	138	474
1968	Sessions J u d g e, Sambalpur—Sun- dargarh; Sambal- pur.	Sessions Cases	26	23	45
		C r i m i n a l Appeals.	82	141	115
<i>Sundargarh Subdivision</i>					
	Subdivisional Magi- strate, Magistrate, First Class; and M a g i s t r a t e, Second Class.	Criminal Cases	4518	2998	5819
<i>Panposh Subdivision</i>					
	Subdivisional Magi- strate, Magistrate, First Class; and M a g i s t r a t e, Second Class.	Criminal Cases	2840	1383	2475
<i>Boni Subdivision</i>					
	Subdivisional Magi- strate.	Criminal Cases	606	304	418
1969	Sessions Judge, Sam- balpur-Sundargarh, Sambalpur; and Additional District and Sessions Judge, Sundargarh.	Sessions Cases	45	50	40
		C r i m i n a l Appeals.	89	49	100
<i>Sundargarh Subdivision</i>					
	Subdivisional Magi- strate, Sub Judge, and Magistrate, First Class; and M a g i s t r a t e, Second Class.	Criminal Cases	4354	2921	3443

Year	Particulars of Court	Types of cases or appeals	Tried or heard	Persons	
				Acquit- ted	Con- victed
<i>Panposh Subdivision</i>					
	Subdivisional Magistrate, and Magistrate, First Class.	Criminal Cases	2704	1624	2063
<i>Bonai Subdivision</i>					
	Subdivisional Magistrate.	Criminal Cases	791	309	696
1970	Sessions Judge, Sambalpur—Sundargarh, Sambalpur; Additional District and Sessions Judge, Sundargarh; and Assistant Sessions Judge, Sundargarh.	Sessions Cases Criminal Appeals	74 167	37 103	97 180
<i>Sundargarh Subdivision</i>					
	Subdivisional Magistrate, Sub Judge, and Magistrate, First Class; and Magistrate, Second Class.	Criminal Cases	7592	3322	2970
<i>Panposh Subdivision</i>					
	Subdivisional Magistrate, Magistrate, First Class; and Magistrate, Second Class.	Criminal Cases	1869	1412	1183
<i>Bonai Subdivision</i>					
	Subdivisional Magistrate.	Criminal Cases	686	453	706

Year	Particulars of Court	Types of cases or appeals	Tried or heard	Person	
				Acquit- ted	Con- victed
1971	District and Sessions Judge, Sambalpur-Sundargarh; Additional Sessions Judge, Sundargarh; and Special Judge, Sambalpur.	Sessions Cases Criminal Appeals.	55 92	77 50*	58 79
	<i>Sundargarh Subdivision</i>				
	Sub Judge, Sub-divisional Magistrate, and Magistrate First Class.	Criminal Cases	3841	1073	820
	<i>Panposh Subdivision</i>				
	Subdivisional Magistrate, Magistrate First Class, and Magistrate Second Class.	Criminal Cases	8657	1260	1049
	<i>Bonai Subdivision</i>				
	Subdivisional Magistrate.	Criminal Cases	758	216	258

*10 persons were sent back for fresh trial.

APPENDIX II

Statement indicating the number of different types of Civil Suits instituted and disposed of and appeals heard by different courts (Court-wise) for the district for 6 years ending 1971

Particulars of Appeals and Cases	1966		1967		1968		1969		1970		1971	
	In-stituted	Dis-posed of	In-stituted	Dis-posed of	In-stituted	Dis-posed of	In-stituted	Dis-posed of	In-stituted	Dis-posed of	In-stituted	Dis-posed of
Court of the District Judge, Sambalpur												
Title Suits	..	6	1	2	2	1	..	4	2	..	1	..
Title Appeals	..	16	7	..	1	1	5	..	..	..	1	..
Money Appeals	..	5	..	12	..	2	..	..	..	..	1	..
Miscellaneous Appeals	..	13	8	11	8	7	4	11	10	..	..	..
Miscellaneous Cases	..	12	8	..	3	9	2	7	3	..	..	..
Execution Cases	..	..	..	..	..	..	..	..	..	..	..	..
Court of the Additional District Judge, Sundargarh												
Title Appeals	..	..	..	..	..	32	2	23	14	14	27	..
Money Appeals	..	..	..	..	..	6	..	4	3	2	5	..
Miscellaneous Appeals	..	..	..	..	..	11	..	9	14	11	12	..
Miscellaneous Cases	..	..	..	..	..	..	..	1	..	3	1	..

31 Title Appeals, 6 Money Appeals, 11 Miscellaneous Appeals received on transfer during the year 1969; and 13 Title Appeals, 3 Money Appeals and 4 Miscellaneous Appeals received on transfer during the year 1970.

CHAPTER XIII

OTHER DEPARTMENTS

PUBLIC
WORKS
DEPART-
MENTS

Before merger in 1948 there was an Agency Engineer posted at Sambalpur who was answerable to the Political Agent to the Orissa Feudatory States who was also at Sambalpur. The Agency Engineer was in overall charge of the Public Works in all the 26 Feudatory States. Under him there were engineering establishments in different States. In Gangpur there was a State Engineer with his office and subordinates. In Bonai there was an engineering Overseer with his office and subordinates. After the merger of these two ex-States, the district was put under the charge of an Executive Engineer.

Roads and
Buildings

The Chief Engineer (Roads and Buildings) is the head of the department at State level. For the convenience of the work the department has been divided into three Circles, viz., Central, Western and Northern, each under the charge of a Superintending Engineer.

Sundargarh Division, which comprises the whole of the district, functions under the Superintending Engineer, Northern Circle, stationed at Sambalpur. The Executive Engineer is the divisional officer who is responsible for the efficient management and execution of the road and building works. The headquarters of the Executive Engineer is located at Sundargarh town. The Division has been divided into three Subdivisions, namely, Gangpur, Rourkela and Bonai, each in charge of an Assistant Engineer. Further, the Subdivisions are divided into a number of Sections each in charge of a Sub-Assistant Engineer. Gangpur Subdivision has five Sections, located at Sundargarh (Sundargarh No. I and II), Rajgangpur, and Jharsuguda (Jharsuguda No. I and II) which is in Sambalpur district. Rourkela Subdivision has four Sections located at Panposh, Koira, Darjing, and Kalunga. Bonai Subdivision has three Sections located at Bonaigarh (Bonai No. I and II) and Kuchinda in Sambalpur district.

Electricity

The general function of the Electricity Department is the erection and maintenance of the transmission lines and the supply of electricity to domestic, commercial and industrial consumers. The Rourkela Division is in charge of the erection of synchronous condensers. Two synchronous condensers of capacity 25 Megavolt-amperes Reactive imported from Hungary are being installed in Rourkela Sub-station. The requirement of Reactive Power by the Hindustan Steel Ltd., and other large industries in the area would be generated locally by these condensers

after they are installed, thus reducing losses in transmitting the Reactive Power all the way from the Generating Stations at Hirakud and Talcher to Rourkela. The Active Power would, however, continue to be supplied from Hirakud, and Talcher.

The synchronous condensers would also help in reducing the voltage fluctuations of the entire State caused by one or more transmission lines rendered out of service because of faults such as lightning, etc.

The Chief Engineer, Orissa State Electricity Board, with headquarters at Bhubaneswar is the controlling officer of the department.

This organisation has been divided into nine electrical Circles, each under the charge of a Superintending Engineer. The Executive Engineer, Rourkela Electrical Division, Rourkela, and the Executive Engineer, Sundargarh Electrical Division, Rajgangpur, come under the jurisdiction of the Superintending Engineer, Rourkela Electrical Circle.

The Sundargarh Electrical Division with headquarters at Rajgangpur comprises Sundargarh subdivision and Jharsuguda Tahsil in Sambalpur district. This Division is divided into four electrical Subdivisions, namely, Electrical Subdivision, Rajgangpur; Jharsuguda Electrical Subdivision, Sarsamal; Electrical Subdivision, Sundargarh; and Construction Subdivision Rajgangpur; each under the charge of an Assistant Engineer.

The Electrical Subdivision, Rajgangpur, is divided into three Sections, each under the charge of a Sub-Assistant Engineer with headquarters at Rajgangpur, Kalunga, and Birmitrapur. The Electrical Subdivision, Sundargarh, and the Construction Subdivision, Rajgangpur, have five Sections and one Section respectively, each under the charge of a Sub-Assistant Engineer. The Jharsuguda Electrical Subdivision which is in Sambalpur district has five Sections.

The jurisdiction of Rourkela Electrical Division is Panposh, and Bonai subdivisions. The headquarters is located at Rourkela. This Division has been divided into five Subdivisions, namely, Grid Substation, Construction Subdivision No. I and No. II, Civil Works Subdivision, and General Electrical Subdivision with their headquarters at Rourkela. The Construction Subdivision No. I and No. II construct synchronous condensers. The Subdivisions are divided into eleven Sections of which ten are located at Rourkela and one at Bonaigarh, each under the charge of a Sub-Assistant Engineer

The Sundargarh Irrigation Division was opened on the 1st June, 1958, with headquarters at Burla in Sambalpur district. This Division is in charge of execution of the Pitamahal Irrigation Project and the survey and investigation of major and medium irrigation projects. The Executive Engineer, with headquarters at Burla is in charge of this Division, who functions under the administrative control of the Superintending Engineer, Hirakud Dam Circle and the Chief Engineer, Hirakud Dam Project, Sambalpur. This Division is divided into four Subdivisions, of which three are in this district. The Subdivisions are under the control of Assistant Engineers.

The Pitamahal Irrigation Subdivision No. I with headquarters at Kalunga, is in charge of the execution of the Pitamahal Irrigation Project. The Subdivision No. II with headquarters at Kalunga is in charge of the canal works of the Project. The Sundargarh Irrigation Subdivision with headquarters at Kalunga, is in charge of survey and investigation work of all the major and medium irrigation projects of the district.

The Rural Engineering Organisation is undertaking the construction and maintenance work of rural roads, buildings, and minor irrigation projects. It advises and helps the Panchayati Raj organisations in the execution of engineering works. During drought period it has constructed wells and tanks in the rural areas for the supply of drinking water.

There is one Chief Engineer at State headquarters at the head of the organisation. The State is divided into two Circles, each under the control of a Superintending Engineer. The Executive Engineer, Rural Engineering Organisation, Sundargarh, functions under the Superintending Engineer, Northern Range, Sambalpur.

The Division has been divided into eight Subdivisions each in charge of an Assistant Engineer. The Subdivisions are split into Sections, each in charge of a Sub-Assistant Engineer. The Subdivision at Bonaigarh has four Sections, out of which three are located at Bonaigarh and the other at Gurundia. The Subdivision at Lahunipara has three Sections located at Lahunipara, Koira, and Kuliposh. The Subdivision at Rourkela has four Sections out of which two are at Rourkela and one each at Kuarmunda, and Bisra. The Subdivisions at Rajgangpur, Sundargarh, and Hemgir have three Sections each. Besides, there are two Investigation and Maintenance Subdivisions at Lahunipara, and Sundargarh. These Subdivisions have three Sections each.

This organisation provides water supply, and sewerage and drainage facilities to rural and urban areas. It also executes water supply and sanitary installations to all government buildings of the district.

The Chief Engineer, Public Health (Engineering), is the head of the organisation at State level. For administrative purpose it has been divided into two Circles, each under the charge of a Superintending Engineer. The Executive Engineer of Sundargarh Division with headquarters at Panposh is under the control of the Superintending Engineer, Public Health (Engineering) Department, Sambalpur Circle, Sambalpur.

Under this Division, there are three Subdivisions and fourteen Sections for this district each under the control of an Assistant Engineer and a Sub-Assistant Engineer respectively.

In the ex-State of Gangpur the administrative control of the Veterinary Department from its inception in 1915 was vested with the Dewan. It continued under him for about ten years, when it was kept in charge of a Civil Surgeon. In the ex-State of Bonai the Chief Medical Officer was in charge of this department. After 1948 the administration of the department was placed under the control of the District Animal Husbandry and Veterinary Officer.

VETERINARY
DEPARTMENT

The Director of Veterinary and Animal Husbandry is the head of this organisation. For administrative convenience it has been divided into three Ranges, such as, Central, Northern and Southern, under the control of Deputy Directors. The District Animal Husbandry and Veterinary Officer, Sundargarh, is under the administrative control of the Deputy Director, Northern Range, Sambalpur.

The District Veterinary Officer is responsible for the general supervision of the veterinary hospitals, dispensaries, stockman centres, poultry units and dairy farms. He is to advise, direct, and inspect the technical aspects of the operation of animal husbandry programmes in the Community Development Block areas. He is assisted by an Animal Husbandry and Veterinary Inspector, a number of Veterinary Assistant Surgeons and Stockman.

There are twenty veterinary dispensaries, each under the charge of a Veterinary Assistant Surgeon. Two more Veterinary Assistant Surgeons are put under the charge of Rinderpest Eradication Programme. Under the Key Village Programme, there is a Veterinary Assistant Surgeon at Rourkela. He maintains improved varieties of bull for artificial insemination to cows. Besides, there are two Poultry Supervisors, one Poultry Farm Manager, one Assistant Poultry Development Officer, one Assistant Project Officer and two Superintendents for rural dairy farms at Sundargarh, and Kuarmunda.

There are 90 Stockman Centres in the district, which include 64 Veterinary Stockman Centres, 11 Key Village Stockman Centres

13 Rinderpest Eradication Stockman Centres, 1 Poultry Development Stockman Centre and 1 Feed Mixing Stockman Centre, located at different places.

AGRICUL-
TURE DE-
PARTMENT

There was an Agriculture Department in the ex-State of Gangpur under the management of a qualified Agriculture Officer. In the ex-State of Bonai, an Agriculture Inspector was holding the charge. After the merger of the ex-States, a District Agriculture Officer was posted at Sundargarh in charge of this organisation.

The District Agriculture Officer ensures the supply of inputs like seeds, fertilisers and pesticides to the cultivators through Community Development Blocks. High-yielding and improved types of seeds are procured from departmental farms and nurseries and the Seed Corporation of India. Different types of fertilisers, pesticides and fungicides required by the cultivators are supplied through co-operative societies and private dealers. To encourage the cultivators prizes are awarded to the highest two to three yielders of paddy, wheat and other crops. Demonstrations and training are imparted to the cultivators to teach them the improved methods of cultivation and the operation of improved agricultural implements.

The Director of Agriculture and Food Production, Orissa, is the head of this organisation. The State has been divided into six Ranges each under the control of a Deputy Director of Agriculture.

The District Agriculture Officer, Sundargarh, is under the administrative control of the Deputy Director of Agriculture, Northern Range, Burla. To assist him there are four Agriculture Supervisors posted in the agricultural farms at Sundargarh, Bargaon, Rajgangpur, and Kendudihi for the production of the improved seeds. One progeny orchard has been developed at Sundargarh to supply different grafts to the cultivators. One large farm with a fruit nursery has been established at Kuliposh under the control of a Farm Superintendent. Two transit nurseries have also been opened at Sundargarh, and Rourkela to keep all types of grafts for sale. Out of seventeen Community Development Blocks two, namely, Koira, and Lahuni para are High-yielding Variety Programme Blocks. Lahuni para is also an Intensive Area Agricultural Programme Block. Special staff, such as two Agriculture Extension Officers, have been provided for these two Blocks. In addition to this, each Block has been provided with an Agricultural Extension Officer to render technical guidance to the cultivators. Besides, there are ten Agriculture Overseers, two Agriculture Sub-Overseers, and forty three Fieldman Demonstrators to carry out the agricultural programmes.

The general function of the Forest Department is to protect, manage, and conserve the forests and to collect timber, bamboo and other minor forest produce for sale. It satisfies the rights of cess-paying tenants particularly as regards timber and grazing. It maintains the forest vegetation in the catchment areas of the streams in order to conserve the water supply and check flood. This is a Quasi-Commercial organisation. It gets a good revenue from forest products.

The Chief Conservator of Forests is the head of this department at State level with headquarters at Cuttack. For administrative convenience the State has been divided into four Circles, located at Sambalpur, Angul, Berhampur, and Koraput under the control of the Conservator of Forests. The Circles are divided into Divisions, each under the charge of a Divisional Forest Officer.

This district Sundargarh comprises two Forest Divisions, viz., Sundargarh Forest Division and Bonai. The administrative set up of each of these Divisions is given below.

There was a Chief Forest Officer in charge of the department in the ex-State of Gangpur. He was assisted by two Forest Officers placed at Nagra and Hemgir Zamindaris and a Ranger for Saragarh Zamindari.

The Sundargarh Forest Division forms a part of the Sambalpur Forest Circle and is controlled by a Divisional Forest Officer with headquarters at Sundargarh. He is assisted by three Assistant Conservators of Forests, stationed at Kuarmunda, Sundargarh, and Hemgir.

The Division consists of seven Ranges comprising a total forest area of 3,342.79 square kilometres. The charges of the Ranges are held by a Forest Ranger or a Deputy Forest Ranger. The headquarters of the Ranges are at Kanika, Gopalpur, Ujalpur, Sundargarh, Rajgangpur, Kuarmunda, and Bisra. Each Range is further divided into Sections and are put under the charge of a Forester. There are fifty-nine Foresters in this Division. The Section is further divided into Beats under the charge of a Forest Guard. There are 210 Forest Guards in this Division.

The administration of the forests of the ex-State of Bonai was in charge of a senior Forest Ranger designated as Forest Officer. He was assisted by four Deputy Rangers, twelve Foresters, fifty-two Forest Guards and eight Depot Moharirs.

The Bonai Forest Division forms a part of the Sambalpur Forest Circle. The office of the Divisional Forest Officer is located at Bonai-garh. This Division consists of seven Ranges comprising a total forest

FOREST
DEPARTMENT

Sundargarh
Forest
Division

Bonai Forest
Division

area of 2,193.89 square kilometres. Out of these five Ranges three Ranges are held in charge of Forest Rangers with headquarters at Bonai-garh, Koira, and Jarda. The other two Ranges are in charge of Deputy Rangers with headquarters at Banki, and Tamra. There is one Deputy Ranger at Barsuan to look after the forest mining work of the Hindustan Steel, and the railways. Besides, there is one Ranger with headquarters at Bonaigarh, who is in charge of Podu Prevention Scheme. The Forest Ranges are further divided into 38 Sections, held in charge of Foresters. There are 118 Forest Guards placed in charge of Forest Beats.

CO-OPERATION DEPARTMENT

The Registrar of Co-operative Societies is the administrative head of this department. To assist him, the State is divided into six Divisions each under the charge of a Deputy Registrar. The Assistant Registrar, Sundargarh, is under the control of the Deputy Registrar, Keonjhar Division.

Sundargarh district was a sub-circle under the Sambalpur Co-operative Circle and in 1954 was separated and converted into an independent Circle. The Assistant Registrar, Co-operative Societies, with headquarters at Sundargarh is the controlling officer of the department in the district. The Audit Section is under the control of the Audit Officer, Co-operative Societies, Dhenkanal.

The Assistant Registrar is responsible for the organisation, inspection, and supervision of various Co-operative Societies, viz., agricultural credit, non-agricultural credit, Land Development Banks, Regional Marketing Co-operative Societies, Consumer and other multi-purpose stores, etc. At Panchayat Samiti level there are Co-operative Extension Officers attached to the Block Development Officers. They look after the management of the Primary Co-operative Societies within their jurisdiction.

In this Circle, there are six Sub-Assistant Registrars, seventeen Co-operative Extension Officers, seven Senior Inspectors and nine Junior Inspectors working as the executive staff to assist the Assistant Registrar of the Co-operative Societies.

INDUSTRIES DEPARTMENT

The District Industries Office started functioning since July 1957 with headquarters at Sundargarh. The District Industries Officer looks to the establishment of small-scale industries, industrial potential survey, financial assistance of Government to industries and technical aspects of various industries. According to the decision of the Government, Sundargarh and Bonai subdivisions come under the jurisdiction of the District Industries Officer, Sundar-

garh. The industries under Panposh subdivision falls under the jurisdiction of the Additional District Industries Officer, Rourkela. The District Magistrate and Collector, Sundargarh, is the developmental head relating to the development works of the department.

The District Industries Officer is under the administrative control and supervision of the Director of Industries. He is assisted by an Industrial Supervisor and one Technical Supervisor to look after the various schemes of the department. Besides, there are four Panchayat Industries Officers, and four Block Level Extension Officers posted at different places of the district.

The Mining Department undertakes the investigation of minerals in the mineral bearing areas of the State. MINING DEPARTMENT

The Director of Mines is the administrative head of the department. Under him there is one Chief Mining Officer who is in charge of the operation of mining projects. The State is divided into nine Circles out of which two are in charge of Senior Mining Officers, and the other seven are in charge of Mining Officers.

The Mining Circle, Rourkela, is under the charge of one senior Mining Officer with headquarters at Rourkela. He is the Controlling Officer for the whole of the district as regards the mineral concessions. He is assisted by one Mining Officer with headquarters at Rourkela. There are five Surveyors at the headquarters who undertake survey and demarcation of mining areas granted under mineral concessions. Besides, there are five Inspectors, stationed at Sundargarh, Rourkela, Birmitrapur, Koira, and Bonaigarh for checking mining accounts and operations.

CHAPTER XIV

LOCAL SELF-GOVERNMENT

HISTORY OF
LOCAL SELF-
GOVERNMENT

As far the early history of local self-government in the district is concerned, towards the last part of the Durbar administration, the ex-State of Gangpur had Sanitation Committees for the towns of Sundargarh, Rajgangpur, Raghunathpali, Bisra, Hatibari, and Hemgir. The Committees which were representative in composition mainly looked after sanitation of the towns. After merger, these committees were allowed to function for some time and then were abolished. During this period Panchayats were also formed at Sundargarh and Raghunathpali of the ex-State.

In the ex-State of Bonai, the Panchayats were constituted in 1943-44 under the Bonai State Village Panchayat Order, 1943. There were 103 Panchayat Unions in 443 villages of the ex-State. These Panchayats were entrusted with simple administrative powers of an elementary nature so as to lay the foundation of a real local self-government. These Panchayats were looking to the improvement of irrigation facilities, supervising primary education, preventing black marketing and disposing of petty civil and criminal cases in their respective villages. At the headquarters of the ex-State, there was a welfare committee.

At present the district has three municipalities constituted at Sundargarh, Rajgangapur, and Birmitrapur, and two Notified Area Councils at Rourkela, one for the civil town and the other for the steel town. The other local self-governing bodies are the Grama Panchayats, the Panchayat Samitis and the District Development Advisory Board.

MUNICIPALITIES AND
NOTIFIED
AREA COUNCILS

The Municipality of Sundargarh covering an area of 23.83 square km. and comprising 10 wards was established on the 1st November, 1951. The municipal area is bounded by the river Ib on the north and west, while the villages Semna and Bhawanipur are located in the south and villages Subalaya and Badapatrapali in the east. It has a population of 17,244 according to 1971 Census. Out of 10 wards, three are double-seated and one of the councillors in each of the double-seated wards belongs either to the scheduled caste or the scheduled tribe.

Sundargarh
Municipality

The last general election of the Municipality was held in 1968 when thirteen members were elected.

The chief sources of income of this Municipality are taxes on holdings and latrines, taxes on carriages and cars, and fees realised in issuing licences for offensive and dangerous trades. The other sources of income are from pounds, ferry ghats, markets, slaughter houses, lease of municipal land, sale of compost and manures, and fisheries.

The income and expenditure of the Municipality in 1953-54 were Rs. 33,028.86 and Rs. 28,821.86 respectively which increased to Rs. 5,03,616.67 and Rs. 4,20,125.46 in 1970-71.

The statement given below indicates the income and expenditure of the local body from 1967-68 to 1969-70.

Year	Income			Expenditure
	Taxes and fees	Government grants	Total	
	Rs.	Rs.	Rs.	Rs.
1967-68	1,44,918.70	1,03,537.14	2,53,455.85	1,66,230.94
1968-69	1,01,189.91	91,206.61	1,92,396.52	2,42,552.70
1969-70	1,04,729.69	82,517.00	1,87,246.69	1,93,652.71

The Municipality maintains 37 km. of roads and looks after three parks. It provides 170 street lights. Its conservancy staff numbering 39 look to the works of latrine clearance, street sweeping, removal of filth, etc. Besides, general sanitation of the town, disinfection of water sources, inoculation and vaccination, taking preventive measures against food adulteration, and control of meat stalls are being attended by the Public Health staff of the State Government under the supervision of the Municipality.

Protected water is being supplied in the municipal area through pipe lines after treatment with the prescribed chemicals by the Public Health Department. The maintenance charges are paid by the Municipality. The local body has provided 82 water supply stand posts in different places of the town. The staff strength of this municipality is 73. One Sanitary Inspector, two Vaccinators and one Disinfectant constitute the Public Health staff.

Started as a Notified Area Council, in October 1957 with 10 nominated councillors, the urban local body at Rajgangpur converted to a Municipality in 1969. This Municipality has an area of 26.16 sq. km. and a population of 21,876 according to the Census of 1971. The last election was held in 1969 to elect 15 councillors from 12 wards of the Municipality. One seat each in three wards were reserved either for the Scheduled Caste or the Scheduled Tribe candidates.

Rajgangpur
Municipality

The local body charges taxes on holdings, latrines, carriages and realises octroi duty and fees from different shops, saloons, cinemas, factories and laundries. Auction sale proceeds of slaughter houses and the license fees for cycles, and dangerous and offensive trades under Sec. 290 of the Orissa Municipal Act are the other sources of income of the Municipality. Besides, government help in the form of annual grants and loans is available to the local body. During 1957-58, the income of this local body including government grants was Rs. 9,019.75 and the expenditure was Rs. 6,795.77. After a decade ending 1966-67 its income increased by more than thirty times and its expenditure by about fifty times. In this year, the income including government grants was Rs. 3,55,466.35 and the expenditure was Rs. 3,20,399.66.

The annual income and expenditure of the Municipality from 1967-68 to 1969-70 are given below :

Year	Income excluding opening balance and go- vernment grants and loans	Govern- ment grants	Total	Expendi- ture
	Rs.	Rs.	Rs.	Rs.
1967-68 ..	1,17,758.89	80,416.28	1,98,175.17	3,25,717.95
1968-69 ..	2,37,692.61	79,017.18	3,16,709.79	2,02,467.24
1969-70 ..	2,58,302.65	2,49,044.57	5,07,347.52	4,37,467.24

The Municipal staff consists of 72 members which include 42 appointed for conservancy. Till 1970-71, this Municipality constructed and maintained 10 km. of drains and 88 km. of roads. It has also provided 217 street lights.

Funds amounting to Rs. 70,800 have been provided during 1968-69 to 1970-71 to the primary schools, high schools and the only college situated in the area of the local body for the extension of their buildings. A sum of Rs. 4,000 has been given as grant-in-aid to the local hospital by this Municipality during 1968-69 to 1970-71. Water supply scheme has been implemented since the 13th March, 1971. After the installation of a pumping station at Amghat and laying of 20,000 feet of pipe line, raw water is being supplied to the town.

One Sanitary Inspector and one Vaccinator have been posted under this local body to look to the public health of the town.

At first a Notified Area Council was constituted at Birmiritrapur in 1960. It was converted to a municipality on the 30th December, 1969. This local body with an area of 35.22 sq. km. and 28,063 population (1971 Census) consists of 10 wards. Election is held every five years to elect councillors from 13 seats of which three are reserved for the Scheduled Castes and the Scheduled Tribes. Total staff employed by this Municipality is 96.

It levies holding tax, latrine tax, tax on carts and carriages and octroi duty. Besides, it also realises auction sale proceeds of markets and pounds, and receives fees for issuing licenses for dangerous and offensive trades under section 290 of the Orissa Municipal Act.

In 1961-62, the income including government grants and the expenditure of this local body were Rs. 35,617.13 and Rs. 20,241.52 respectively. During the five years ending 1966-67 the income increased by more than thirteen times. In that year, the income of the Municipality including the government grants was Rs. 2,66,164.24 and the expenditure was Rs. 2,63,332.58.

Statement given below shows the income and the expenditure of the local body from 1967-68 to 1970-71.

Year	Income excluding government grants	Government grants	Total	Expenditure
	Rs.	Rs.	Rs.	Rs.
1967-68 ..	1,69,419.02	70,961.13	2,40,380.15	2,56,089.23
1968-69 ..	1,91,839.80	65,999.66	2,57,839.46	2,32,311.28
1969-70 ..	1,98,156.07	1,06,140.20	3,04,296.27	2,94,749.03
1970-71 ..	1,82,968.98	96,761.85	2,79,730.83	3,27,743.65

Street lights numbering 174, and 72 public water pipe stand-posts have been provided in the municipal area. 29 km. of roads and 2 km. of pucca drains are being maintained by this local body. As regards sanitary arrangements, road sweeping, clearance of debris and clearing of private latrines are being carried out regularly by a staff consisting of 40 members.

The Public Health staff under this local body consists of one Sanitary Inspector, two Vaccinators and one Disinfectant.

Piped water is being supplied in all parts of the Municipality except ward no. 1 and parts of ward no. 8, 9 and 10 where wells have been provided. But the position of piped water supply is generally not satisfactory since August 1967 due to breaches in Brahmanamara water reservoir. However, attempts are being made to reconstruct the reservoir.

Rourkela
Notified
Area Council
(Civil Town)

The Rourkela Notified Area Council was constituted on the 1st August, 1955, with both civil and steel towns. On the 17th June, 1963, a separate Notified Area Council was formed for the steel town.

The local body (Civil Town) has a council consisting of 11 nominated members out of whom 7 are non-officials and others are Government representatives. The Chairman of the council is from non-official members.

This Notified Area Council has an area of 7.2 square miles (18.57 sq. km.) and a population of 47,076 according to the 1971 Census.

Besides government grants and loans, this local body gets money from levy of taxes on holdings, latrines, water, light and carriages and grant of licenses for offensive and dangerous trades under section 290 of the Orissa Municipal Act. The other sources of income include rent from allotted land to shop-keepers, auction sale proceeds of markets, slaughter houses and pounds.

The income and expenditure of the local body in 1955-56 were Rs. 21,444.65 including government grants of Rs. 9,322.00 and Rs. 2,606.09 respectively. Within ten years the income increased more than ten times. In 1965-66, this Notified Area Council earned Rs. 2,86,691.04 including Rs. 1,29,924.93 as government grants and spent Rs. 2,14,160.03. The income and expenditure have increased year by year. In 1970-71, its income was Rs. 3,54,179.32 including Rs. 1,32,298.00 received as government grants and expenditure was Rs. 5,00,351.67.

Statement given below shows the year-wise income and expenditure of the Notified Area Council from 1967-68 to 1969-70.

Year	Income			Expenditure
	Income from taxes, fees rents etc.	Government grants and loans received	Total	
	Rs.	Rs.	Rs.	Rs.
1967-68	2,26,284.47	1,86,719.56	4,13,004.03	3,73,810.25
1968-69	3,00,615.68	1,00,795.23	4,10,410.91	3,64,533.92
1969-70	2,82,648.24	3,03,991.23	5,91,639.47	4,94,314.65

This Notified Area Council is assisting the State Public Health Department in arranging water supply to the old town. It has provided 85 public water taps in different places of the civil town area. Apart from this, the local body has provided street lights in the main roads of the town up to the Industrial Estate area and in Uditnagar colony. It has constructed pucca drains of the town. It maintains a children's park at Uditnagar and looks after 14.22 km. of roads of the town. The Notified Area Council maintains a conservancy staff consisting of 90 members. Vaccination and inoculation is regularly done by a staff consisting of a Health Officer, four Sanitary Inspectors, four Vaccinators and four Disinfectors. Public latrines have been provided in a few selected places.

The Notified Area Council has constructed 12 quarters for sweepers out of the funds received from the Tribal and Rural Welfare Department. It has constructed 10 quarters for the staff and has received Rs. 49,500 as loan for the construction of tenements under slum clearance scheme. The Notified Area Council provides funds for the construction and repair of primary school buildings when necessary and also contributed Rs. 25,000 for the Sundargarh College, Sundargarh, and Rs. 12,500 for the construction of a women's hostel there.

Before 1962-63, the Notified Area Council was maintaining a Homeopathic Doctor on a monthly salary of Rs. 50. That year it had its own dispensary with a qualified allopathic physician. Now only one family planning clinic is maintained by the Notified Area Council.

In 1963, the steel township of Rourkela was placed under a Notified Area Council. At present the area of the local body is 38 square miles (98 sq. km.) and its population according to the Census of 1971 is 1,25,426. The council consists of 12 nominated members of which three are officials.

Notified Area
Council,
Rourkela
(Steel Town-
ship)

The income of the local body, besides government grants and loans, includes licence fees from carriages, animals, shops, markets, slaughter houses, cattle pounds and school fees. The Hindustan Steel Ltd., has given some buildings on token rent for office, schools and dispensary purposes.

The income of this council in 1965-66 was Rs. 1,08,969.15 including Rs. 60,532.05 received as government grant and the expenditure was Rs. 29,896.03. Its income within six years ending 1971-72 has increased by four times and the expenditure by about six times. In this year, the income including government grants was Rs. 4,41,127.07 and the expenditure was Rs. 1,68,420.90.

The statement below shows the income and the expenditure of this local body from 1967-68 to 1970-71.

Year	Income			Expenditure
	Taxes & fees	Government grants	Total	
	Rs.	Rs.	Rs.	Rs.
1967-68 ..	49,549.66	54,606.74	1,03,156.40	52,201.72
1968-69 ..	49,369.57	73,285.44	1,22,955.01	53,347.61
1969-70 ..	66,971.84	2,45,124.55	3,12,658.89	62,181.66
1970-71 ..	73,810.85	2,128.00	76,976.22	91,281.58

The roads, street lights and water pipes of the steel township are maintained by the Hindustan Steel Ltd. This local body maintains three Lower Primary schools, four Upper Primary schools, one Middle English school, one High English school and one dispensary. It has undertaken nutrition feeding programme for 5,000 beneficiaries. It maintains a few markets, one slaughter house and one animal market. Out of 76 persons employed by this local body, 11 constitute the conservancy staff. Two Health Inspectors, four Vaccinators and two Disinfectors are engaged to look after the public health of the town.

As mentioned earlier, the councillors of the three municipalities are elected in each five years, but the two Notified Area Councils had nominated body of members. The election of councillors to the Municipalities and the Notified Area Councils were suspended as per the provisions laid down in the Orissa Local Body (Suspension of Election) Act, 1962. In the beginning of 1963, the said Act was repealed and Government in Health (Local Self-Government) Department letter No. 5012 (13)LSG, dated the 8th May, 1968 decided to hold the pending election of the Municipalities and the Notified Area Councils. Accordingly, elections were held for three municipalities of the district in September-October 1963. Then after five years election for Sundargarh Municipality was held in December 1968, and for other two municipalities in January 1969.

The Chairman and the Vice-Chairman of the municipalities were elected by the councillors from among themselves. But the Chairman of the two Notified Area Councils were nominated members. The councils discharge the duties as provided under the Orissa Municipal Act, 1950, with regard to finance, public health, public works, education and any other special subject relating to the purposes of the Act. There are Executive Officers appointed by the State Government in these local bodies to carry out day to day administration.

The Chairman and the Executive Officers carry out various functions as per the provisions contained in different chapters of the Orissa Municipal Act and Rules.

The Octroi Bye-laws framed by each of the three municipalities of the district have been approved by the government. Both the Notified Area Councils of Rourkela have framed Rickshaw Bye-laws. Besides, the Notified Area Council, Rourkela (Civil Township) has also framed five resolutions on traffic, hotels, milk trade, dogs and burial grounds. All these Bye-laws and resolutions are yet to receive government approval.

To develop the old existing towns in the district, Master Plans for Rourkela, Sundargarh, Rajgangpur, and Birmittapur have been prepared by the Town Planning Organisation, Orissa.

The Orissa Town Planning and Improvement Trust Act, 1956, has been enforced all over the areas of the four towns mentioned above to control the use of land. Also special planning authorities have been constituted to implement the Master Plans and to check haphazard growth of the towns by granting permission for the construction of various types of buildings and to prepare new schemes.

With the Zilla Parishad Act, 1959, as ammended in 1960 and 1961, coming into force the Zilla Parishad for Sundargarh was constituted from the 6th February, 1961. This organisation was an advisory body at the district level to advise the Government on all developmental matters relating to the district. It was entrusted with the task of approving the programme and the budget of the Panchayat Samitis in the district and distributing amongst them funds received from the government for expenditure on various developmental works. The institution which was also supervising the activities of the Samitis at Block level served as the apex of the three-tier system of democratic decentralisation.

The Zilla Parishad consisted of both official and non-official members. In this institution, all the district level officers connected with the developmental works of the district were included as official members. The non-official members consisted of the Chairman of each Panchayat Samiti, the Chairman of the Municipalities and the Notified Area Councils with a population of more than twenty thousand, and the President of the Central Co-operative Bank. Besides, there was a woman member elected by the non-official members. The members of the State Legislative Assembly and the House of the People were entitled to participate in the meetings of the Parishad.

General
Election

Zilla Parishad,
District
Advisory
Council,
District
Development
Advisory
Board

The working of the Zilla Parishads all over the State did not satisfy the Government. So this organisation was replaced by the District Advisory Council from the 1st November, 1968.

The District Advisory Council consisted of the following members :

- | | | |
|--|----|-----------------|
| 1. Collector | .. | Member-Convener |
| 2. M. L. As. & M. Ps. (Loksabha) whose jurisdiction comes under the district, and the M. Ps (Rajya Sabha) whose place of residence is in the district. | | Member |
| 3. Chairman of all the Panchayat Samitis within the district. | | Member |
| 4. Chairman of all the Municipal Councils of the district. | | Member |
| 5. President of the Central Co-operative Bank | | Member |
| 6. President of the District Land Mortgage Bank | | Member |
| 7. Any officer notified by the Government from time to time. | | Member |

The functions of the Advisory Council were to advise the government regarding developmental and other activities referred to it by the government from time to time and also to consider and advise the government as to how best the developmental activities could be expeditiously and efficiently executed and to suggest ways and means to remove bottlenecks in the execution of developmental works.

Again the State Government in the Planning & Co-ordination Department resolution No. 16636, dated the 14th November, 1970 superseded the District Advisory Council and constituted the District Development Advisory Boards. Besides all the members of the superseded Council, the members of the District Development Committee and any representative of the public declared as member by the government from time to time are included in the present Board. This apart, all Ministers, Deputy Ministers, Speaker and Deputy Speaker are entitled to nominate any person from their constituencies to represent them in the Board. The Collector as before continued to be the Member-Convener.

All the functions of the previous Council are entrusted to the present Board. In addition, the Board is to help the district authorities in enlisting the participation of the people for the implementation of the

schemes like growing of high-yielding varieties of crops, multicropping, fertilizer use, water resources management, etc., where such co-operation and participation is essential for the smooth working of the scheme. The Board is yet in its infancy.

The Panchayat Samitis, the second-tire in democratic decentralisation, were established throughout the State in accordance with the provisions of the Orissa Panchayat Samitis Act, 1959. In the district of Sundargarh, at first sixteen Samitis were constituted from the 26th January 1961. Subsequently one more Panchayat Samiti has been added. Each Panchayat Samiti which includes within it six to ten Grama Panchayats, is co-terminous in regard to its area with the Block Administration created by the Government in the Community Development Department.

Each Panchayat Samiti consists of both official and non-official members. The official members are the Block Development Officer and the officers of various departments of the State Government ordinarily stationed at Block level. The non-official members include the Sarpanchas of the Grama Panchayats. Women, Scheduled Castes and Scheduled Tribes are given due representation in the Samiti. The Chairman is elected directly by the Panchayat members and the Sarpanchas. The non-official members who hold office for three years elect the Vice-Chairman from among themselves. By-monthly meetings are held regularly. Official members can take part in the discussion of the Panchayat Samiti meetings alongwith non-official members, but are not entitled to vote.

The planning, execution and supervision of all the development programmes in the Block area are done by the respective Panchayat Samitis. It looks after the spread of primary education, management of trust and endowments which the Government may entrust, and registration of births and deaths. It supervises the work of the Grama Panchayats within its jurisdiction. The Block Development Officer is the Executive Officer of the Samiti. He is also its drawing and disbursing officer. The main sources of income of the Samiti are the government grants and loans. It also receives aids from all-India bodies and institutions.

The Community Development Department of the State Government is the principal agency for providing funds to the Panchayat Samitis. The allotment of this Department in 1970-71 and 1971-72 to the Samitis of the district amounted to Rs. 31,62,559 and Rs. 31,40,541 respectively. In addition, the Grama Panchayat Section of this Department also provided funds of Rs. 10,49,702 in 1970-71 and Rs. 6,84,534 in 1971-72 as Kendu leaf grants to different Grama Panchayats and Panchayat

Panchayat
Samitis

Samitis of the district for various developmental works. Out of the above mentioned grants, the Grama Panchayats got Rs. 8,31,770 in 1970-71 and Rs. 5,47,619 in 1971-72.

A list of the Panchayat Samitis of the district with their respective headquarters has been given in the Appendix.

Grama Panchayats

The Grama Panchayat is the primary unit in the democratic decentralisation. This system was introduced in 1950-51 as per the rules laid down in the Orissa Grama Panchayat Act, 1948. In the district, each Grama Panchayat comprising one or more than one village has been divided into a number of wards. In every three years one member from each ward is elected to the Grama Panchayat on the basis of adult franchise. The Sarpancha is also directly elected by the voters. But the Naibpancha of a Grama Panchayat is elected from amongst the ward members. The Sarpancha is the head of the Panchayat and is assisted by the Naibpancha.

There were 40 Grama Panchayats in the district in 1951-52. Their number increased to 80 in 1956-57. By 1970-71 there were 139 Grama Panchayats in the district which included 75 in Sundargarh subdivision, 33 in Panposh subdivision and 31 in Bonai subdivision. These Panchayats with 3,20,231 voters were divided into 2,118 wards. The last election for the Panchayats was held in 1970-71, in which along with others, 1068 Adivasis, 160 Harijans and 8 women members were declared elected. In Ekma Grama Panchayat of Bargaon Panchayat Samiti and Laikera Grama Panchayat of Hemgir Panchayat Samiti in Sundargarh subdivision, women candidates were elected as Sarpanchas.

The Grama Panchayats continue to function as the main agency for the implementation of all development works and for mobilising man-power in rural areas. The development activities of different departments of the Government, which are co-ordinated at the Block level also continue to be executed through the agency of the Panchayats.

The functions of the Grama Panchayat include looking to village sanitation, giving aid to schools, supplying drinking water, maintenance of roads, ferry ghats and cattle pounds; providing street lights and implementing different agricultural schemes. Pisciculture is one of the most lucrative schemes in developing internal resources of the Panchayats of the district. These Panchayats were also maintaining village police.

Besides government grants and loans, the other sources of income of the Panchayats are the Panchayat and other taxes, fees received for issuing licence for dangerous trades and vehicles, rent from markets and market sheds, cattle pounds, irrigation pumps, and ferry ghats. They also earn from orchards and pisciculture.

The expenditure incurred by the Grama Panchayats include mainly the money spent on the construction and maintenance of roads and buildings, education, village sanitation, pisciculture and other remunerative schemes and for pay of staff and contingencies.

In 1953-54, the income and expenditure of Grama Panchayats of the district were Rs. 2,95,135 and Rs. 65,691 respectively. The amount increased up to Rs. 6,34,929 and Rs. 6,11,830 respectively during 1959-60. The table below indicates the income and expenditure of these local bodies of the district from 1967-68 to 1970-71.

Year	Income		
	From internal sources	From external sources	Expenditure
	Rs.	Rs.	Rs.
1967-68	1,86,359.69	4,78,588.69	3,61,906.50
1968-69	4,04,878.97	9,40,760.00	8,29,894.78
1969-70	3,71,040.01	14,92,301.61	7,14,367.99
1970-71	3,86,209.85	10,63,154.39	9,48,055.77

Since most of the Grama Panchayats are small self-governing units with very little back-ground of experience and leadership, the achievements in different works of developmental activities were not of the desired standard.

APPENDIX

Name of Panchayat Samitis	Headquarters
1. Sundargarh	.. Sundargarh
2. Rajgangpur	.. Rajgangpur
3. Bisra	.. Bisra
4. Lathikata	.. Lathikata
5. Kuarmunda	.. Kuarmunda
6. Bonaigarh	.. Bonaigarh
7. Lahunipara	.. Lahunipara
8. Koira	.. Koira
9. Lefripara	.. Lefripara
10. Hemgir	.. Hemgir
11. Tangarpali	.. Bansibat
12. Balisankra	.. Balisankra
13. Sabdega	.. Sabdega
14. Bargaon	.. Bargaon
15. Nuagaon	.. Nuagaon
16. Kutra	.. Kutra
17. Gurundia	.. Gurundia

CHAPTER XV

EDUCATION AND CULTURE

Reliable information about centres of learning in ancient and medieval periods in the district are not available. The tradition regarding the birth of Vyasadeva and his composition of the famous epic, the 'Mahabharat' at the confluence of the Sankha and the Koel seems to have no more veracity than a popular legend. But the place now known as Vedavyasa was very likely a centre of learning during medieval times. The town of Bonaigarh which was the headquarters of Bonai Mandal in the ninth-tenth century A. D., was a flourishing place under the kings of Mayur ruling family, who were patrons of learning. During pre-British period elementary schools called '*pathasalas*' were existing in the important villages through private enterprise. These schools were imparting education in the three R's i. e., reading, writing and arithmetic, and Oriya and Sanskrit were the main subjects of study. It may be pointed out that attainment of literacy was thus confined to the wealthy and the upper class people, while the bulk of the population including the Adivasis were deprived of the privilege.

HISTORICAL
BACK-
GROUND

During the rule of Maharaja Raghunath Sekhar Deo, western education was introduced in the ex-State of Gangpur in the early part of the present century.

BEGINNING
OF WESTERN
EDUCATION

In 1907-08, the ex-State of Gangpur was maintaining 3 Upper Primary and 66 Lower Primary schools. The number of pupils on the roll was 1,547 and expenditure on education amounted to Rs. 1,434'00.

Towards the end of the first decade of the present century, one Middle English school at Sundargarh was established. The institution was without a qualified teacher till 1912-13 when Shri Bairagi Misra, an Intermediate in Arts, joined there. In 1914, the Middle English school at Sundargarh presented for the first time candidates at the Middle English School Examination. In the first year of the second half of the second decade, the number of different types of schools in the ex-State increased to 52, and the number of pupils increased to 3,456 of which 449 were girls. The expenditure on education amounted to Rs. 20,167. Next year, the status of the Middle English school at Sundargarh was raised to that of a High English school by opening of class VIII there. The first batch of students of this school appeared at the Matriculation Examination in 1924. Then the two top classes of the school were aboli-

shed as a measure of economy due to the financial stringency of the ex-State Government. In 1925-26, besides the High English school with first two classes, there were 196 other educational institutions of which 5 were Middle Vernacular, 22 Upper Primary (including one for girls), 168 Lower Primary schools (including 10 for girls) and one institution for *Guru* training. The number of students attending these institutions during the year were 7,607 including 1,080 girls, and the expenditure was Rs. 36,728. The top two classes of the High English school at Sundargarh were again opened and the school continued to present candidates for the examination regularly from 1932. Towards the end of the thirties the number of schools managed by the ex-State stood at 113 which included one High English school, 2 Middle English schools, 4 Middle Vernacular schools, 30 Upper Primary schools (including one for girls), 74 Lower Primary schools (including one for girls), one Elementary Training school and one Sanskrit *tol*. The total number of students on the roll in the ex-State managed schools by the end of the 31st March, 1940 was 7,310, including 6,270 boys and the rest girls.

Besides, there were about 200 schools managed by the missionaries and 27 aided Pathasalas in the ex-State. The expenditure on education by the ex-State in 1939-40 was Rs. 57,000.

Before merger, in addition to the mission schools and aided *pathasalas*, there were 137 ex-State managed schools which included one High English school, 2 Elementary Training schools, one Industrial school,* 14 M. E. schools (2 for girls), 32 Upper Primary schools (2 for girls), 85 Lower Primary schools (five for girls), one Sanskrit *tol* and 2 Urdu *mukhtabs*. The number of teaching staff including 5 officers for inspection and twelve mistresses stood at 331. The number of students on the roll in schools managed by the ex-State on the 31st March, 1947 was 8,469 including 1,331 girls. About 14.13 per cent of the children of school-going age were receiving education in the ex-State. The expenditure on education by the ex-State in 1946-47 was Rs. 1,72,185.

In the early part of the twentieth century education in the ex-State of Bonai was not very advanced. The first Upper Primary school of the ex-State was started in the year 1902 in the Durbar hall at Bonaigarh. In 1907-08, there were 13 Lower Primary schools and one Upper Primary school, and the number of students attending them was 492. The Middle English school at Bonaigarh started functioning in 1919.

* The industrial school at Bargaon was abolished in February, 1965

Shri Bharat Chandra Naik in his autobiography* has given a pitiable account of the condition of education in the ex-State in mid-twenties. According to him, the only Middle English school of the ex-State was functioning in a small house with insufficient number of students. There were only 3 Upper Primary schools located at Bonaigarh, Banki, and Bangada, and the number of Lower Primary school was equally poor. The number of students attending these institutions was about 300. The people were poor, backward and not interested in education. The large part of the Bhuiyan inhabited region of the ex-State had, in fact, no school. Shri Naik, as the *Dewan* of Bonai (1924-27) took some bold steps for the spread of education there. A new spacious building was constructed for the Middle English school. Some Lower Primary schools were upgraded to Upper Primary standard and more Lower Primary schools were opened. Parents were persuaded to send their children to the schools. Money was provided for the free distribution of reading and writing materials, and for award of scholarships to the deserving students. The outcome was encouraging.

Yet, the progress of education in this ex-State was slow. At the time of merger, this ex-State had only one incomplete High English school, one Middle English school, 5 mixed Upper Primary schools, 48 Lower Primary schools (exclusively one for girls and one for boys), one *mukhtab*, and 8 grant-in-aid *pathasalas*. The total number of pupils on the roll in all these institutions was 3,459 of which 2,977 were boys and the rest were girls.

In 1947-48, before merger, the ex-State of Gangpur and Bonai together had two High English schools, 17 Middle English schools and 181 Primary schools.

The ex-States of Gangpur and Bonai which constitute the district, were very backward in literacy during princely rule. Even after three years of the merger of these ex-States, in the Census of 1951 out of the total population of 5,52,203, only 56,686 (48,712 males and 7,974 females) were enumerated as literates. So far the percentage of literacy is concerned, Sundargarh in this Census was placed eighth among the districts of the State. It was described as a mediocre district¹ having a percentage of 10.3 (8.8 males and 1.5 females) literates which was less than the State average of 15.8.

But the percentage of literacy in the district during the decade ending 1961 rose abruptly.

* Mo Purba Smruti Katha (ମୋ ପୂର୍ବ ସ୍ମୃତି କଥା) pp. 145-147

¹. Census of India—1951-Vol. XI, Orissa, Part-I-Report-p. 400

LITERACY
AND
EDUCATIONAL
STANDARD

Growth of
literacy

"The total number of literates returned for the district during 1961 Census", as revealed in the Census Hand Book (1961) of Sundargarh, "is 149,546, of whom 120,487 are males and 29,059 females". The percentage of literacy thus works out to 19.7 comprising 15.9 males and 3.8 females against the State average of 17.4 and 4.3 respectively. In 1951 Census, the percentage of literacy was 10.3. Thus there has been an increase in the percentage of literacy by 9.4 during the decade. Among the males, the percentage of literacy works out to 30.4, whereas among the females the said percentage is 8.0. The corresponding figures of 1951 for males and females are 17.8 and 2.9 respectively. Of the total literates, 116,483 do not have any educational qualification, 21,658 have read up to primary or junior basic standard, and the rest are either matriculates or have higher qualification.

Persons aged 4 years or less, generally do not have any chance of acquiring literacy. If such persons are excluded from the total population, the percentage of literacy for the district becomes slightly higher. The following table compares the percentages worked out on this basis for the two Censuses of 1961 and 1951.

Census		Percentage of literacy		
		Persons	Males	Females
1961	..	23.0	18.5	4.5
1951	..	11.8	10.1	1.7

Thus in the Census of 1961, an improvement is noticed to the extent of 11.2 per cent in the total population above the age-group 0-4 years.

The rise of literacy in the district was mainly due to the development of several industrial towns like Rourkela and Rajgangpur.

Panposh subdivision recorded the highest rate of literacy in the district according to the Census of 1961, next came Sundargarh, the rate of literacy in Bonai subdivision being the lowest. Among the police stations, Rourkela town police station topped the list.

According to the 1971 Census, 2,72,801 persons of whom 1,94,684 are males and 78,117 females have been recorded as literates in the district. The percentage of literacy to the total population stands at 26.5 which is slightly higher than the State average of 26.2.

Number of
literate

Discussions have already been made about the number of literates recorded in 1951, 1961 and 1971 Censuses. Majority of the literates were either without any educational attainment or had just completed

the primary standard. According to 1961 Census, 91,996 males and 24,487 females of the district were recorded as literates without any educational attainment; 18,189 males and 3,469 females had completed primary education, and 10,302 males and 1,103 females had matriculation or higher qualifications.

During this Census the number of literates residing in rural areas of the district was 95,592 which included 62,564 males and 15,780 females having no educational standard, 13,137 males and 2,006 females with primary or junior basic standard, and 1,972 males and 133 females with matriculation or above qualifications. The table below shows the division of literates by educational standards in urban areas of the district according to the Census of 1961.

Educational standards	Male	Female
1. Primary or Junior Basic ..	5,052	1,463
2. Matriculation or Higher Secondary ..	5,541	744
3. Technical diploma not equal to degree ..	418	3
4. Non-technical diploma not equal to degree	58	3
5. Degree or post-graduate degree other than technical degree.	1,392	177
6. Technical degree or diploma equal to degree or post-graduate degree.		
(a) Engineering ..	835	..
(b) Medicine ..	47	19
(c) Veterinary and dairying ..	13	..
(d) Technology ..	1	..
(e) Teaching ..	24	24
(f) Others ..	1	..
7. Literates without any educational standard	29,432	8,707

During pre-merger period, very few women were able to read and write. The reasons are many. The poor illiterate Adibasis who constituted the majority of the population of the ex-State of Gangpur and Bonai were callous towards education. Even the well-to-do inhabitants were not inclined to send their girls to co-educational institutions. The ex-States administration also did nothing remarkable for the spread of education among women. For example, though the first primary school for girls was opened at Sundargarh in the ex-State of Gangpur in the early part of the second decade of this century, only another six were added to it in course of next thirty-five years. So also about the number

Spread of
Education
among
women

of students. In 1915-16, there were about 450 girls reading in different schools of the ex-State and during next thirty years, their number rose to another nine hundred only.

In the ex-State of Bonai, 121 girls were reading in the primary schools during 1915-16. Their number rose to 480 by 1945-46. One Lower Primary school for girls was opened at Bonaigarh in 1927-28. Till merger, besides the arrangement of co-education in some schools, that was the only institution exclusively meant for educating the girls.

Since Independence the picture is fast changing. The establishment of various industries and opening of mines in different parts of the district have changed the outlook of the local inhabitants and have made them more advanced. The Government is also taking keen interest in spreading education among women. In middle fifties, the first high school for girls was established at Sundargarh by the Roman Catholic Mission. By 1961-62, apart from the provision of co-education in 18 high schools, 78 Middle English schools (including 6 Ashrams), 957 primary schools (including 87 sevashrams and 4 junior basic schools), there were 2 High English schools, 6 Middle English schools (including one Kanyashram), 7 Primary schools and 12 Adult Literacy Centres in the district meant exclusively for girls. The number of girl students reaping in these schools was 18,286.

The first women's college of the district was established at Rourkela in July 1967. During this period also a polytechnic for women, the only institutions of its kind in Orissa was established in the Steel Town, Rourkela.

By 1972-73, there were 619 women students continuing their studies in the colleges of the district. This year, apart from the facilities of co-education available in 60 High English schools, 193 Middle English schools, 1,331 Primary schools, the district had 14 High English schools, 3 Middle English schools and 5 Primary schools exclusively for girls. The number of girl students on the roll in these institutions was 36,181.

During pre-merger period, except the opening of schools here and there in the tribal areas of both the ex-States by the Missionaries, the Government did nothing to educate the people belonging to the Scheduled Castes and Scheduled Tribes.

After Independence, special type of institutions like the Ashrams and the Sevashrams were opened in different parts of the district where the Scheduled Tribes and the Scheduled Castes pupils were not only given free education and training in different crafts but also the students were supplied with free reading and writing materials. Even for education outside their localities, stipends and lump grants were given to them.

During 1961 Census, the Scheduled Castes and the Scheduled Tribes comprised 9.6 per cent and 58.1 per cent of the total population of the district respectively. The statement below shows the total number and percentage of literates amongst them according to 1961 Census.

Caste/Tribe	Total Scheduled Castes/Tribes population	Total literates amongst the Scheduled Castes/Tribes	Percentage of literacy
Scheduled Castes	73,134	8,476	11.6
Scheduled Tribes	4,40,910	45,008	10.2

However, the rate of literacy among the Scheduled Tribes was not quite unsatisfactory compared to other tribal districts of the State.

At present the district has 6 tribal High schools of which two are for girls, 4 Ashram Schools of Middle English standard including one for girls, 2 Sevashrams of Upper Primary standard and 89 Sevashrams of Lower Primary standard in which students mostly belonging to the Scheduled Castes and the Scheduled Tribes study. The High English schools and the Ashram schools are residential institutions where with general education, training is given in different crafts like agriculture, tailoring, spinning, weaving, carpentry, etc. During four years ending 1970-71, on an average 972 and 285 students were reading in different high schools and Ashram schools maintained by the Tribal & Rural Welfare Department respectively.

The Sevashrams opened in backward areas of the district impart training in elementary education and different crafts like agriculture etc. mainly to tribal students. During four years ending 1970-71 on an average 5,000 students were studying in these institutions, 3,900 of them being either from the Scheduled Tribes or the Scheduled Castes. All except two of these Sevashrams were meant for day-scholars.

The number of the Scheduled Castes and the Scheduled Tribes students reading in different schools of the district in 1972-73 is given in the statement below :

Castes/Tribes	Number of students reading					
	High English Schools		Middle English Schools		Primary Schools	
	Boys	Girls	Boys	Girls	Boys	Girls
Scheduled Castes.	795	118	313	52	5,014	2,001
Scheduled Tribes.	5,829	1,369	2,801	1,167	32,901	15,537

Some details about the spread of education among the tribal people of the district have been given in Chapter XVII—Other Social Services.

GENERAL EDUCATION

Framing of schemes, allotment of funds and supervision of the spread of education are mainly the affairs of the State Government. Almost all the primary schools and most of the institutions imparting education above the primary standard in the district are either managed fully or aided by the Government.

Schools

In 1947-48, before the merger, there were 181 primary schools in the two ex-States. In 1950-51, the number of such institutions were increased to 251. The district made much headway in the matter of the spread of Primary education during the next two decades ending 1970-71 due to effective steps taken in the matter like enrolment drive, provision of mid-day meals and grant of various scholarships. In 1960-61, the district had 832 primary schools including 6 schools specially meant for the education of girls. Two years after, the number of such schools increased to 984 with 50,361 students and 1,773 teachers. By July 1972, there were 1,374 primary schools in the district which had 82,748 students on roll and 3,081 teaching staff. At present all the payments by the Government to these institutions are made through the Panchayat Samitis.

The picture of secondary education has also changed remarkably with that of primary education in the district during last twenty years. The number of High and Middle English schools increased from 3 and 19 in 1950-51 to 15 and 66 in 1960-61, and 89 and 211 in 1972-73. The number of students reading in Middle English schools and High English schools in the district were 7,902 and 18,594 respectively during 1972-73. In this year, there were 1,974 teachers employed for secondary education of which 1,009 were teaching in Middle English schools. The medium of instruction of most of these institutions is Oriya. The Board of Secondary Education, Orissa, conducts the High English School Certificate Examination of the district. There is no basic or multipurpose school in the district at present.

Cambridge and Convent Schools

There are five such institutions in the district. Four of them located at Rourkela impart education up to secondary standard. But the institution established at Sundargarh provides education up to standard III. The medium of instruction of these institutions is English. During 1972-73, these institutions had 2,124 students (including 797 girls) and 26 teachers.

The district is divided into two educational districts viz., Sundargarh and Rourkela, where two District Inspectors of Schools have been posted. These two educational districts are controlled by the Inspector of Schools, Sundargarh Circle, posted at the headquarters of the district.

Till mid-1955, there was no college in the district. A private managed college at the district headquarters of Sundargarh was opened on the 16th July of that year. This institution was taken over by the Government on the 1st July, 1962. Now the college, which is affiliated to the Sambalpur University, provides teaching up to degree standard in both Arts and Science. The subjects taught are English, Oriya, Economics, History, Logic, Sanskrit, Physics, Chemistry, Mathematics, Biology, Geology up to 1st year degree stage; and English, Oriya, History, Economics, Philosophy, Sanskrit, Physics, Chemistry, Mathematics (with Hons.), Botany, Zoology, Geography up to 3rd year degree class. The college with 714 students and 34 teachers (1970-71), has its own building, library and laboratory. There are two hostels attached to the college with provision for 135 boarders of which one is reserved for 35 women students.

Colleges,
Sundargarh
College

The second college of the district, i. e., the Rourkela Science College was also established by a private body on the 16th August, 1961, at the steel town of Rourkela. Subsequently on July 1st, 1963, the State Government took over the management of the college. During 1970-71, this institution imparted teaching in English, Oriya, Hindi, History, Economics, Logic, Political Science, General Knowledge, Mathematics, Physics, Chemistry, Biology up to 1st year degree classes and Physics, Chemistry, Mathematics, Botany and Zoology up to 3rd year degree in Science. This year the college had 544 students on the roll and 26 teachers. There is no hostel facility available in this institution. The college is affiliated to the Sambalpur University.

Rourkela
Science
College

The Rourkela Evening College which imparts education up to the degree standard in Arts mainly to the local employees came into being on the 14th July, 1966 by the initiative of some workers of the Hindustan Steel Limited. This is an aided college affiliated to the Sambalpur University. Subjects taught in this institution are English, Oriya, Hindi, Economics, Political Science, History, Philosophy and Logic. During 1970-71, there were 474 students and 11 teachers in this college. This institution has no hostel.

Rourkela
Evening
College

Started in July 1967 by Dr. Ajudhia Nath Khosla, the then Governor of Orissa, to preserve the memory of his wife, the Sushilavati Khosla Dayananda Anglo-vedic College for Women, Rourkela, is the only institution of the district exclusively meant for higher studies for women. The college provides education up to degree standard both in Arts and Science

Sushilavati
Khosla
Dayananda
Anglovedic
College for
Women,
Rourkela

with English, Oriya, Hindi, Sanskrit, Political Science, Home Science, Economics, Physics, Chemistry, Botany, Zoology and Mathematics. In 1970-71, this institution had 254 students, 16 teachers and 4 Laboratory Assistants. There is a seventy-two seated hostel for the college, of which the ground floor with provision for 35 boarders is reserved for Adivasi students. The college, affiliated to the Sambalpur University, is managed by the Dayanand Anglo-Vedic College and Trust Society, New Delhi.

The institution is running a farm in its campus with the aim of providing training to young and ambitious farmers of the neighbourhood to produce important and high yielding crops on modern lines.

Rajgangpur
College

With the initiative of the local people and with Government approval, a college providing education up to 1st year degree in Arts and Commerce was opened at Rajgangpur in August 1970. The institution, affiliated to the Sambalpur University, imparts teaching in English, Oriya, Hindi, History, Mathematics, Political Science, Economics, Logic and Business Methods. During 1970-71, this college had 64 students of whom about two-third were either from the Scheduled Tribes or the Scheduled Castes and 8 teachers. There are two hostels one for men and the other for women students. This is a privately managed college.

Bonaigarh
College

Opened on the 15th September, 1971, the Bonaigarh College provides education up to 1st year degree (Arts) class in English, Oriya, Logic, Political Science, History and Economics. The college had 69 students during 1972-73 of whom 13 per cent were either from Scheduled Castes or Scheduled Tribes. There is a hostel with 10 boarders attached to this privately managed institution.

PROFESSIONAL
AND
TECHNICAL
SCHOOLS AND
COLLEGES

Elementary
Training
School

There was one Elementary Training school at Kuarmunda to train primary school teachers with 50 teacher-trainees, of whom one was a girl; and 2 teachers (1972). The school was founded in 1957. The trainees in this school received monthly stipend of Rs. 45 each. This institution was abolished after the completion of the educational session of 1972-73 as the Government fixed up matriculation with certificate in teachership as the minimum qualification for primary school teachers.

Secondary
Training
School

There are two secondary training schools in the district of which one is located at Kundukela and the other at Bhalulata. Students with matriculation or intermediate qualification are admitted in these institutions and are awarded certificates in teachership after the completion of two years course. The school at Kundukela, managed by the State Education Department, has 119 boy and 10 girl students and 7 teachers. This

institution was established in 1958. A monthly stipend of Rs. 50 is awarded to each of the 100 students of the institution. One hundred boarders have been accommodated in the school hostel at present.

The Bhalulata Secondary Training school is managed by the Tribal & Rural Welfare Department of the State Government. This institution which was established in 1964 trains teachers for the primary and secondary schools managed by the Tribal & Rural Welfare Department. The school has 60 students and 7 teachers. Accommodation for 60 students is available in the hostel attached to the institution.

Started in 1957 by the State Government, the Industrial Training Institute, Rourkela, imparts training to Electricians, Fitters, Machinists, Turners, Welders, Wiremen, Stenographers, Draftsmen and Mechanics in motor, tractor, refrigerator and radio mechanism. The period of training is from one to two years varying from subject to subject. More than one-third of the trainees are awarded monthly stipends in between Rs. 35 and Rs. 50. There is a hostel which accommodates 180 students. During 1972-73, this institution had 584 trainees and 48 teachers. The Director General, Employment and Training, New Delhi, conducts the examination after the completion of training.

Industrial
Training
Institute,
Rourkela

Started in 1963, the State Technological Institute, Rourkela, provides training in engineering. The period of training is six months. The institution is affiliated to the State Council of Technical Education and Training, Orissa. In 1972-73, there were 278 students and 28 teachers in this institution. Of the students, 130 are getting stipends at the rate of Rs. 50 each per month. The hostel of the institution has a capacity for 180 boarders.

State Tech-
nological
Institute,
Rourkela

With the object of providing trained field workers for the execution of anti-erosion measures, the Soil Conservation Demonstration Centre was established by the Agriculture Department in January 1956 at Jharbera. By 1970, under the training programme, 401 Junior Soil Conservation Assistants were trained in soil and water conservation measures. Training in refresher's course was imparted to 121 grade IV employees. Besides, 169 persons in the categories of Block Development officer, Group Level Officer and Village Level Worker were also given short course training in soil and water conservation. In 1970, this training centre was shifted to Bhubaneswar.

Soil
Conservation
Demonst r a-
tion Centre,
Jharbera

The Model Foot Wear Unit was started by the State Government at Rajangapur in 1958, but was then shifted to Rourkela in July 1964. This Training-cum-Production Centre provides training to local cobblers

Model Foot
Wear Unit,
Rourkela

and others interested in production of leather goods. There is neither any period of training nor any examination and award of certificates to the students. However, the trainees are given hostel accommodation, but no stipend.

Craft School,
Bargaon

Started in 1968, the Craft school, Bargaon, has at present 20 students of whom most are girls, and two teachers. The students are trained in making of golden grass articles like runners, *pedis* (boxes), curtains, table covers, flower baskets, vanity bags, etc.

Sushilavati
Khosla
Dayanand
Anglovedic
Polytechnic
for Women,
Rourkela

The Sushilavati Khosla Dayananda Anglo-vedic-Polytechnic for Women, Rourkela, the only institution of its kind in the State, was opened on the 6th September, 1968. It imparts training in three different subjects viz. library science, commercial practice, and tele-communication with courses of 2 years, 2 years and 4 years duration respectively. The intake capacity in these three branches is 75. Most of the students of tele-communication and one-fourth of the students of the other two branches receive monthly stipend of Rs. 50 each. The institution affiliated to the State Council of Technical Education and Training, Orissa, at present (1972-73) has 143 students and 19 teachers. The Polytechnic has its own hostel.

Regional
Engineering
College,
Rourkela

The Regional Engineering Colleges, Rourkela, formally inaugurated on the 15th August, 1961 was started as a State College in the pattern of a regional engineering college. At first it enrolled 130 students in the first year of civil, electrical and mechanical engineering. On the 25th October, 1962, the Government of India took over the management of this institution and declared it to be a Regional Engineering College. This institution provides teaching in (a) Five Years integrated course leading to Bachelor of Science (Engineering) Degree of Sambalpur University in Civil, Electrical, Mechanical, Metallurgical and Chemical Engineering, (b) two years M. Tech. (Industry Oriented) course in Mechanical and Metallurgical Engineering, (c) two years M. Tech. course in Electrical and Civil Engineering, (d) two years M. Sc. course in Civil, Electrical, Mechanical, Metallurgical, and Chemical engineering, and (e) 2 years Master of Science degree in Physics, Chemistry and Mathematics. During 1970-71, there were 1,013 students (including 8 women) and 120 teachers in this college. This institution has 6 hostels including one for women.

The college is a joint undertaking of the State and the Central Governments and is autonomous in character.

Besides, the big industrial concerns in the district like the Hindustan Steel Ltd., Rourkela; the Orissa Cement Ltd., Rajgangpur; have their own institutes for the training of the apprentices of their factories.

Privately managed, the Sangeet Kalaparishad was opened in the industrial township of Rajgangpur with the aim of developing active interest among its members in fine arts, dance, music, (vocal and instrumental) and dramatic performances. In 1972 the institution had 30 students who were taught Odissi, Kathak and folk dances, and dance dramas.

MUSIC AND
DANCING,
SCHOOLS:
Sangeet Kala
Parisad,
Rajgangpur

Opened in February, 1967, and affiliated to the Orissa Sangeet Natak Akademi, the Bhanja Kala Kendra, Rourkela, imparts teaching in dance (Odissi) and music (vocal and instrumental). Besides, the institution has also taken up research in *Karma*, *Dalkhai*, and *Puchee* dances of Orissa at present (1972). In 1972 this privately managed institution had 101 students and 4 teachers.

Bhanja Kala
Kendra,
Rourkela

The Life and Rhythm, Roarkela, was started in 1960 as a school of music and dance. In 1972 it had 15 students who were taught Odissi and Kathak dances by two teachers of the institution. The organisation is managed privately.

Life and
Rhythm,
Rourkela.

There are two Sanskrit Tols in the district viz., Ramji Sanskrit Tol, Sundargarh; and Gurukul Vedavyasa Sanskrit Tol, Vedavyasa, with a total number of 20 students and 4 teachers (1971). The students of these institutions are imparted teaching up to *Prathama* standard. The Ramji Sanskrit Tol is managed by the State Government whereas the Gurukul Vedavyasa Sanskrit Tol is an aided institution.

ORIENTAL
SCHOOLS:
(Sanskrit
Tols)

In 1962, there were 79 adult literacy centres functioning in the district. Since the Government is giving more importance to the development of the outlook of the illiterate people through exhibition of films and posters and plying of records of educative values, the number of adult-literacy centres is being gradually reduced year by year. In 1970-71 there were 34 such centres in the district which made 525 males and 87 females literate.

Adult
Literacy
Centres

Rourkela Natya Sangha is a voluntary non-profit organisation. Started in October 1967 with the object of helping the development of the theatre movement in India, this institution works as a regional branch of the Bharatiya Natya Sangha at Rourkela. This sangha organises music demonstrations and study circles in dance, drama and music, and takes part in drama competitions.

CULTURAL &
LITERARY
SOCIETIES

Rourkela
Natya
Sangha

This Cultural Academy, Rourkela, was formed in 1960 by some young Oriya writers employed at Rourkela with a view to developing literacy and artistic faculties among the people. One literary magazine named '*Nabapatra*' is being published by the organisation.

Cultural
Academy,
Rourkela

The purpose was to have a reading room, library and a recreation centre for the public. Generally meetings organised by the Government departments, the Rajgangpur Municipality and the cultural and educational institutions are held here. Public festivals like Ganesh Puja, Saraswati Puja and Durga Puga are usually held in its campus. Dramas are also staged in the pandal of the community centre. At present the centre has a library and reading room and provides indoor games facilities to the public. The Municipality is in charge of the management. A committee is formed to look after the administration of the community centre. The expenditure of the centre is being borne by the Municipality.

District
Athletic
Association,
Sundargarh

The District Athletic Association was first formed on the 18th November, 1950 under the presidentship of the District Collector. Prior to it, sports activities were managed by a similar body under the direct patronage of the former ruler of Gangpur.

The District Athletic Association is affiliated to the Orissa Olympic Association and various other State level associations where its competitors participate. This association is recognised both by the Orissa Sports Council and the Cultural Affairs Department, Government of Orissa. At present 8 clubs in Sundargarh subdivision, 6 clubs in Panposh subdivision and one club in Bonai subdivision of the district have been affiliated to this Association.

The Orissa Olympic Association and the Orissa Council of Sports give financial assistance to keep the activities of this Association alive.

The Association is credited with marvellous performances both at the national and the State levels in different branches of games and sports. This District Athletic Association has been conducting the district archery competition since 1965. This sport, besides hockey, is a favourite pastime among the Adivasis. This association has also taken keen interest in arranging rural hockey tournaments.

Cultural,
Literary and
Scientific
Periodicals

Two Oriya literary and cultural magazines viz., the '*Nabapatra*' (quarterly) and the '*Abhimukhya*' (monthly) were published from Rourkela in 1962 and 1969 respectively. The '*Abhimukhya*' is no longer in existence. The '*Nabapatra*', now published irregularly, produces in addition to the contribution from Oriya writers and poets, the translation of selected stories and poems from other Indian languages.

Besides, the colleges at Sundargarh and Rourkela and some schools of the district also publish their own magazines to promote creative thinking among the students and the staff. Publications of these periodicals are either yearly or half-yearly.

More about the publication of the periodicals in the district find mention in Chapter XVII—Public Life and Voluntary Social Service Organisations.

The district had, in ancient and medieval periods, no poets and writers worth mentioning. Among the modern poets and writers mention may be made of late Dibyasingha Gauntia, late Chudamani Naik; Shri Bhaga Babaji, Shri Harihara Patel, Shri Binode Chandra Naik, Shrimati Kasturi Devi and Shri Bairagi Misra. Shri Binode Chandra Naik has been awarded by the Central Sahitya Akademi for his poetical work "*Sarisrupa*".

WRITERS AND
POETS

As mentioned earlier, most of the cultural associations have their own libraries and reading rooms. This apart, following are some of the important libraries of the district.

LIBRARIES

Early in 1957, the Ispat Central Library was founded in a cosy cell of the then Ispat Club at Rourkela. To meet the requirements of the Steel township, the library was expanded and officially inaugurated in November 1961. It consists of a free reading room, lending library, reference section and a children's wing. It has a collection of 18,000 books (1969) on different subjects in English, and eleven other languages including Oriya. It also subscribes standard periodicals in various languages. It holds occasionally book exhibitions and literary meetings. The 1,500 members of the library are mostly the employees of the Hindustan Steel Ltd. The average daily attendance is about 200.

Ispat Central
Library,
Rourkela

The Hindustan Steel Ltd. manages the library. The average budget provision per annum is Rs. 12,000.

The Adarsha Pathagar, Rourkela, came into existence in 1958. At present, it has 337 members and 9,000 books in Oriya, English, Hindi and Bengali languages. The organisers of the library maintain a nursery school, stage various cultural programmes and hold weekly seminars on literature. There is a full-fledged reading room attached to the library.

Adarsha
Pathagar,
Rourkela

A big project viz., the construction of the '*Bhanja Bhaban*' has been taken up by this organisation, the work of which is in the preliminary stage.

Started in 1948-49 by the State Government as library-cum-reading room, the Information Centre, Sundargarh, has at present 3,207 books in Oriya, English, Hindi and Bengali. The daily average attendance is between 50 to 70.

Information
Centre,
Sundargarh

Information
Centre,
Rourkela

The Information Centre, Rourkela, was opened in 1955 by the State Government. This is also a library-cum-reading room with 1,519 books in Oriya, Hindi and English. There are 85 members in the library.

Besides, in the District Census Hand-book (1961) of Sundargarh there is the mention of 13 other libraries located at Birbira, Lankahura, Kundukela, Baihamb, Rajgangpur, Bandabahal, Gopalpur, Kallarkela, Sole, Nialipali, and Mahulpali. These libraries were started in between 1952 and 1960 and consisted of books which varied from 1,377 to 2,000.

APPENDIX 1

SCHOOLS

Development of Educational Institutions in the district in Five Year Plan period

Subdivision	Name of the Block	High English School					Total
		Pre-plan period	1st five year plan	2nd five year plan	3rd five year plan	4th five year plan (up to 1972)	
Sundargarh ..	1. Hemgir ..	..	1	1	..	2	4
	2. Lefripara ..	..	..	2	3	2	7
	3. Tangarpali ..	1	..	..	3	1	5
	4. Sadar (Sundargarh).	..	1	3	2	..	6
	5. Sabdega ..	..	1	..	1	..	2
	6. Balisankra ..	..	..	3	2	3	8
	7. Bargaon ..	..	1	1	3	..	5
	8. Kutra ..	..	..	1	2	..	3
	9. Rajgangpur..	..	..	..	2	..	2
	10. Sundargarh Municipality.	1	1	1	..	1	4
	11. Rajgangpur Municipality.	1	..	1	1	..	3
Total ..		3	5	13	19	9	49
Panposh ..	12. Panposh, Birmitrapur.	1	..	2	11	2	16
	13. Kuarmunda	1	2	..	..	..	3
	14. Bisra ..	..	1	..	..	2	3
	15. Nuagaon ..	..	..	1	2	..	3
	16. Lathikata ..	..	..	1	1	1	3
	Total ..	2	3	4	14	5	28
Bonai ..	17. Bonaigarh ..	1	..	1	2	..	4
	18. Lahunipara..	..	..	1	1	2	4
	19. Gurundia ..	..	..	..	..	2	2
	20. Koira ..	..	1	..	1	..	2
	Total ..	1	1	2	4	4	12
Grand Total ..		6	9	19	37	18	89

APPENDIX I—contd.

Subdivision	Name of the Block	[Middle English School]					Total
		Pre-plan period	1st five year plan	2nd five year plan	3rd five year plan	4th five year plan (up to 1972)	
Sundargarh ..	1. Hemgir ..	1	1	4	..	2	8
	2. Lefripa ..	2	..	3	5	4	14
	3. Tangarpali ..	..	3	4	..	1	8
	4. S a d a r (Sundargarh).	2	..	3	3	3	11
	5. Sabdega ..	2	..	4	5	2	13
	6. Balisankra ..	1	3	2	6	7	19
	7. Bargaon ..	1	1	3	6	1	12
	8. Kutra ..	1	2	2	5	2	12
	9. Rajgangpur ..	2	..	3	6	1	12
	10. Sundarg a r h Municipality.	..	..	1	1	1	3
	11. Rajgangp u r Municipality.	2	..	..	..	1	3
Total ..		14	10	29	37	25	115
Panposh ..	12. P a n p o s s h, Birmitrapur.	..	..	10	11	..	21
	13. Kuarmunda..	1	..	3	5	1	10
	14. Bisra ..	1	1	1	2	2	7
	15. Nuagaon ..	1	..	3	4	..	8
	16. Lathikata ..	..	2	2	4	1	9
	Total ..	3	3	19	26	4	55
Bonai ..	17. Bonaigarh ..	1	1	2	6	2	12
	18. Lahunipara ..	1	..	1	5	3	10
	19. Gurundia ..	..	..	2	8	3	13
	20. Koira ..	..	1	1	3	1	6
	Total ..	2	2	6	22	9	41
Grand Total ..		19	15	54	85	38	211

APPENDIX I (contd.)

Subdivision	Name of the Block	Primary School					Total
		Pre-plan period	1st five year plan	2nd five year plan	3rd five year plan	4th five year plan up to 1972	
Sundargarh ..	1. Hemgir ..	16	20	30	16	8	90
	2. Lefripa ..	20	26	29	8	2	85
	3. Tangarpali ..	17	23	17	7	5	69
	4. Sadar (Sundargarh).	17	27	15	5	4	68
	5. Sabdega ..	17	9	19	10	12	67
	6. Balisankra ..	27	21	28	17	16	109
	7. Bargaon ..	21	23	18	12	3	77
	8. Kutra ..	18	15	18	2	2	55
	9. Rajgangpur ..	15	25	29	6	3	78
	10. S u n d a r g a r h Municipality.	4	8	..	1	1	14
	11. Rajgangpur Municipality.	3	1	4	..	5	13
Total ..		175	198	207	84	61	725
Panposh ..	12. P a n p o s s h Birmitrapur.	9	5	22	3	9	48
	13. Kuarmunda..	27	19	27	16	2	91
	14. Bisra ..	11	16	17	6	..	50
	15. Nuagaon ..	28	24	36	4	4	96
	16. Lathikata ..	18	19	18	5	4	64
	Total ..	93	83	120	34	19	349
Bonai ..	17. Bonaigarh ..	29	13	6	3	3	54
	18. Lahunipara ..	32	7	26	12	10	87
	19. Gurundia ..	37	25	6	17	4	89
	20. Koira ..	28	8	25	7	2	70
	Total ..	126	53	63	39	19	300
Grand Total ..		394	334	390	157	99	1374

APPENDIX II

No. of schools in the district by type and management

		No. of High English Schools											
		Central Government		State Government		T & R. W. Department		Private aided		Private unaided		Total	
		B	G	B	G	B	G	B	G	B	G	B	G
Sundargarh Education District.													
1. Hemgir	..	..	..	..	1	..	3	..	..	..	4	..	1
2. Lefripara	..	..	..	..	..	..	6	1	..	..	6	..	1
3. Tangarpali	..	..	..	..	..	..	3	1	..	..	4	..	1
4. Sadar (Sundargarh)	..	..	1	..	..	..	4	1	..	..	5	..	1
5. Sabdega	..	..	..	..	..	..	2	..	..	..	2	..	..
6. Balisankra	}	..	..	..	..	1	6	1	..	..	6	2	..
7. Kijirkela		..	..	..	..	..	..	..	..	..	..	..	..
8. Bargaon		..	..	1	..	1	1	2	..	..	..	4	1
9. Kutra	..	..	..	..	..	..	3	..	..	..	3	..	..
10. Rajgangpur	}	..	..	..	..	..	2	..	..	..	2	..	..
11. Kansbahal		..	..	1	1	..	..	1	1	..	..	2	2
12. Sundargarh Municipality.		..	..	1	..	..	..	1	1	..	..	2	1
13. Rajgangpur Municipality.	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	5	1	2	2	33	6	..	..	40	9	..
Rourkela Education District.													
1. Panposh-Birmatrapur N. A. C.	1	..	2	1	..	..	7	2	3	..	13	3	..
2. Kuarmunda	..	..	1	..	1	..	1	..	..	..	3	..	..
3. Bisra	..	..	..	..	..	..	1	..	1	..	3	..	..
4. Hatibari	}	..	..	..	..	..	2	..	1	..	3	..	..
5. Nuagaon		..	..	..	..	..	..	..	..	..	..	..	..
6. Lathikata		..	..	1	1	..	..	3	..	..	..	3	..
7. Bonaigarh	..	..	..	..	..	..	2	..	..	..	3	1	..
8. Khuntgaon	}	..	..	1	1	..	2	..	..	..	3	..	..
9. Lahunipara		..	..	..	..	..	..	..	..	..	..	..	..
10. Banki		..	..	..	..	..	..	..	..	..	..	..	..
11. Gurundia	..	..	..	..	..	..	2	..	..	..	2	..	..
12. Koira	..	..	..	..	1	..	..	1	..	..	2	..	..
Total	..	1	6	3	2	..	20	2	6	..	35	5	..
Grand Total	..	1	11	4	4	2	53	8	6	..	75	14	..

B---Boys
G---Girls

APPENDIX II (contd.)

No. of Middle English Schools

	Central Government		State Government		T & R. W. Department		Private aided		Private unaided		Total		
	B	G	B	G	B	G	B	G	B	G	B	G	
Sundargarh Education District.													
1. Hemgir	..	..	..	2	..	..	..	6	..	..	..	8	..
2. Lefripara	..	..	..	2	..	..	..	12	..	..	..	14	..
3. Tangarpali	..	..	..	..	..	..	..	8	..	..	..	8	..
4. Sundargarh	..	..	..	2	..	..	..	9	..	..	..	11	..
5. Sabdega	..	..	..	2	..	..	..	11	..	..	..	13	..
6. Balisankra	}	..	..	4	..	..	..	15	..	..	..	19	..
7. Kinjirkela		..	..	..	..	..	..	..	..	..	..	..	..
8. Bargaon	..	..	..	2	..	..	..	10	..	..	..	12	..
9. Kutra	..	..	..	..	..	..	..	12	..	..	..	12	..
10. Rajgangpur	}	..	..	..	..	..	..	11	..	1	..	12	..
11. Kansbahal		..	..	..	..	..	..	..	..	..	..	..	..
12. Sundargarh Municipality	..	..	..	1	..	..	..	2	..	..	..	3	..
13. Rajgangpur Municipality	..	..	..	1	..	..	..	2	..	..	..	3	..
Total	..	..	..	16	..	..	..	98	..	1	..	115	..
Rourkela Education District.													
1. Panposh-Birmitrapur N. A. C.	..	..	..	..	..	..	..	11	..	10	..	21	..
2. Kuarmunda	..	..	..	..	..	..	1	7	1	1	..	8	2
3. Bisra	..	..	..	2	..	1	..	4	..	..	..	7	..
4. Hatibari	}	..	..	2	..	..	..	5	..	1	..	8	..
5. Nuagaon		..	..	..	..	..	..	..	..	..	..	..	..
6. Lathikata	..	..	..	1	..	..	..	7	1	..	..	8	1
7. Bonaigarh	..	..	..	2	..	..	..	10	..	..	..	12	..
8. Khuntgaon	}	..	..	1	..	..	..	8	..	1	..	10	..
9. Lahunipara		..	..	..	..	..	..	..	..	..	..	..	..
10. Banki	}	..	..	2	..	..	..	11	..	..	..	13	..
11. Gurundia		..	..	..	..	..	..	..	..	..	..	..	..
12. Koira	..	..	..	1	..	1	..	3	..	1	..	6	..
Total	..	..	..	11	..	2	1	66	2	14	..	93	3
Grand Total	..	..	..	27	..	2	1	164	2	15	..	208	3

404

SUNDARGARH

APPENDIX II—(Contd.)

		No. of Primary Schools											
		Central Government		Local Body		T.&R. W. Department		Private aided		Private unaided		Total	
		B	G	B	G	B	G	B	G	B	G	B	G
Sundargarh Education District.													
1. Hemgir	..	..	..	85	..	5	..	..	..	..	..	90	..
2. Lefripara	..	..	..	73	..	4	..	8	..	..	..	85	..
3. Tangarpali	..	..	..	56	1	10	..	2	..	..	..	68	1
4. Sadar (Sundargarh).	..	..	..	65	..	..	..	3	..	..	..	68	..
5. Sabdega	..	..	..	57	1	..	..	9	..	..	..	66	1
6. Balisankra	}	..	..	90	..	6	..	13	..	..	..	109	..
7. Kinjirkela		..	..	..	..	..	..	..	..	..	..	..	..
8. Bargaon	..	..	..	65	1	1	..	10	..	..	..	76	1
9. Kutra	..	..	..	35	..	7	..	13	..	..	..	55	..
10. Rajgangpur	}	..	..	58	..	1	..	18	1	..	..	77	1
11. Kansbahal		..	..	..	..	..	..	..	..	..	..	..	..
12. Sundargarh Municipality.	..	..	..	13	1	..	..	..	..	..	..	13	1
13. Rajgangpur Municipality.	..	..	..	11	..	..	..	2	..	..	..	13	..
Total	..	..	..	608	4	34	..	78	1	..	..	720	5
Rourkela Education District.													
1. Panposh Birmitrapur N. A. C.	..	6	..	33	..	..	..	4	..	5	..	48	..
2. Kuarmunda	..	..	..	67	..	6	..	18	..	..	..	91	..
3. Bisra	..	..	..	43	..	4	..	3	..	..	..	50	..
4. Hatibari	}	..	..	69	..	7	..	17	..	3	..	96	..
5. Nuagaon		..	..	..	..	..	..	..	..	..	..	..	..
6. Lathikata	..	..	..	53	..	2	..	9	..	..	..	64	..
7. Bonaigarh	..	..	..	49	..	5	..	..	..	..	..	54	..
8. Khuntgaon	}	1	..	74	..	12	..	..	..	..	..	87	..
9. Lahunipara		..	..	..	..	..	..	..	..	..	..	..	..
10. Banki	..	..	..	71	..	6	..	12	..	..	..	89	..
11. Gurundia	..	..	..	..	..	..	..	..	..	..	..	..	..
12. Koira	..	..	..	52	..	17	..	1	..	..	..	70	..
Total	..	7	..	511	..	59	..	64	..	8	..	649	..
Grand Total	..	7	..	1,119	4	93	..	142	1	8	..	1,369	5

B—Boys
G—Girls

APPENDIX II—(Contd.)

No. of Schools

		Grand Total		
		B	G	Total
Sundargarh Education District				
1. Hemgir	..	102	..	102
2. Lefripara	..	105	1	106
3. Tangarpali	..	80	2	82
4. Sadar (Sundargarh)	..	84	1	85
5. Sabdega	..	81	1	82
6. Balisankra	}	134	2	136
7. Kinjirkela		92	2	94
8. Bargaon	..	70	..	70
9. Kutra	..	91	1	92
10. Rajgangpur	}	18	3	21
11. Kansbahal		18	1	19
12. Sundargarh Municipality	..	..	..	..
13. Rajgangpur Municipality	..	..	..	..
Total	..	875	14	889
Rourkela Education District				
1. Panposh-Birmitrapur N. A. C.	..	82	3	85
2. Kuarmunda	..	102	2	104
3. Bisra	..	60	..	60
4. Hatibari	}	107	..	107
5. Nuagaon		75	1	76
6. Lathikata	..	69	1	70
7. Bonaigarh	..	100	1	101
8. Khuntgaon	}	104	..	104
9. Lahunipara		78	..	78
10. Banki	..	..	..	..
11. Gurundia	..	77	8	785
12. Koira	..	1,652	22	1,674
Total	..	..	..	..
Grand Total	..	..	..	..

B—Boys
G—Girls

APPENDIX III

Particulars of High English Schools in the district in 1972

Name of the Education district	Subdivision	Block	Name of the School	Roll Strength		Teacher			
				Boys	Girls	Trained		Un-trained	
						Men	Women	Men	Women
Sundargarh	Sundargarh..	Hengir	1. Gopalpur High School.	139	4	143	11	2	13
			2. Hengir High School.	87	11	98	2	6	8
			3. Tumia High School.	44	6	50	..	3	3
			4. Luabahal High School.	42	..	42	..	5	5
Sundargarh	Lefripura ..	Hengir	1. Raic'ini High School.	62	13	75	4	6	10
			2. Dumabahal High School.	25	1	26	..	3	3
			3. Sargipali Boys High School.	162	..	162	6	5	11
			4. Darlipali High School.	103	24	127	4	1	11
			5. Gun'ia'ih' High School.	36	3	39	..	5	5
			6. Sargipali Girls High School.	..	71	71	1	3	4
			7. Jayaram High School, Lefripura.	288	27	315	4	6	10

SUNDARGARH

EDUCATION AND CULTURE									
Tangarpali ..	Sundargarh	1. Ujalpur High School.	385	..	385	17	..	1	18
		2. Ujalpur Girls' High School.	..	78	78	..	2	2	5
		3. Nialipali High School.	155	29	184	3	..	5	8
		4. B a n d h a p a l i Panchayat Samiti High School.	155	29	184	4	..	6	10
		5. Mangaspur High School.	54	11	65	..	..	3	3
Sundargarh	Sundargarh	1. Birbira High School.	102	3	105	2	..	7	10
		2. Bhedabahal Boys' High School.	169	..	169	6	..	4	10
		3. Kundukela High School.	189	20	209	8	1	..	9
		4. Bhedabahal Girls' High School.	..	70	70	3	1	5	9
		5. Kinjirma High School.	71	10	81	5	..	6	11
		6. Lankahada High School.	210	31	241	6	..	9	15
Sundargarh	Sundargarh	1. Gaibira High School.	481	..	481	10	..	13	23
		2. Karamdih High School.	140	10	150	4	..	4	8
Bargaon ..	Bargaon	1. Bargaon High School.	184	32	216	4	..	6	10
		2. Sahajbahal High School.	71	17	88	..	..	4	4

407

APPENDIX III—(contd.)

Name of the Education district	Subdivision	Block	Name of the School	Roll Strength		Teacher			
				Boys	Girls	Trained Men	Trained Women	Untrained Men	Untrained Women
Sundargarh	Sundargarh	Bargaon	3. Deokanpur Ashram High School.	184	8	14	..	2	..
			4. Barangakachhar High School.	59	4	..	..	6	..
			5. Tudalaga Girls' High School.	..	136	..	6	..	3
			1. Kinjirkela High School.	181	22	8	..	3	..
			2. Bandhabahal Boys' High School.	82	..	..	..	7	..
Sundargarh	Sundargarh	Bargaon	3. Kantabahal High School.	129	11	2	..	6	..
			4. Sikajor High School.	25	2	1	..	2	..
			5. Talsara High School.	55	11	..	..	4	..
			6. Balisankra Boys' High School.	282	33	6	..	9	..
			7. Balisankra Girls' School.	..	106	..	8	..	6
			8. Bandhabahal Girls High School.	..	79	2	2	..	4
			1. Kinjirkela High School.	181	22	8	..	3	..
			2. Bandhabahal Boys' High School.	82	..	..	..	7	..
Sundargarh	Sundargarh	Bargaon	3. Kantabahal High School.	129	11	2	..	6	..
			4. Sikajor High School.	25	2	1	..	2	..
			5. Talsara High School.	55	11	..	..	4	..
			6. Balisankra Boys' High School.	282	33	6	..	9	..
			7. Balisankra Girls' School.	..	106	..	8	..	6
			8. Bandhabahal Girls High School.	..	79	2	2	..	4
			1. Kinjirkela High School.	181	22	8	..	3	..
			2. Bandhabahal Boys' High School.	82	..	..	..	7	..

EDUCATION AND CULTURE									
Kutra	..	1. Kutra High School.	129	14	143	4	..	6	10
			78	7	85	2	..	5	7
			261	..	261	3	2	5	11
Rajgangpur	..	1. Kansabahal High School.	30	7	37	..	..	4	4
			219	..	219	3	2	4	9
			148	57	205	2	..	5	9
Rajgangpur Municipality	..	3. Rajgangpur Boys' High School.	..	465	465	..	11	1	5
			583	27	610	10	..	9	19
			862	..	862	24	..	7	31
Sundargarh Municipality	..	1. B.S. High School.	16	..	16	1	..	3	4
			..	335	335	..	17	..	1
			..	545	545	..	12	1	6
Rourkela	Panposh	1. Uditnagar High School.	582	98	680	20	..	4	24
			..	114	114	..	6	2	3
			..	..	..	..	..	..	..

APPENDIX III (contd.)

Name of the Education district	Subdivision	Block	Name of the School	Roll Strength			Teacher			
				Boys	Girls	Total	Trained		Untrained	
							Men	Women	Men	Women
Rourkela	..	Panposh	..	Panposh	..	Panposh	..	..	..	..
										410
			3. Birmultrapur High School.	294	71	365	8	..	4	12
			4. R. E. C. Campus High School.	17	14	31	1	..	..	1
			5. Urdu High School.	36	16	52	2	..	4	6
			6. Hanirpur Boys' High School.	463	..	463	7	..	9	16
			7. D. A. V. High School.	48	37	85	2	..	2	5
			8. Rastriya Vidyalaya.	76	12	88	3	..	3	7
			9. Ispat High School, Sect. 14.	675	215	890	25	6	5	37
			10. G. N. Khalsa High School.	62	29	91	1	1	6	8
			11. Fertiliser High School.	214	51	265	8	2	1	13
			12. N. A. C. High School, Sect. 20.	219	30	249	2	1	4	7
			13. St. Joseph Girls' High School, Hanirpur.	..	150	150	..	6	..	10

SUNDARGARH

EDUCATION AND CULTURE

14. Sushila bati Khosla Girls' High School.	..	311	311	..	7	..	9	16
15. Isapt Vidyalay, Sect. 18.	907	467	1,372	32	12	2	2	48
16. Bandamunda Mixed High School.	530	331	861	21	1	4	..	26
Kuarmunda	1. Harihar High School, Kuarmunda.	349	43	392	11	..	5	16
	2. Jhummur High School.	202	..	202	4	3	2	12
	3. Dalki High School.	191	3	194	10	..	6	16
Bisra	1. Jhirpani High School.	67	16	83	1	..	3	4
	2. Bisra High School.	152	10	162	4	..	4	9
	3. Jareikela High School.	14	2	16	..	..	4	4
Nuagaon	1. Nuagaon High School.	192	34	226	3	..	7	11
	2. Hatibari High School.	285	39	324	2	..	12	14
	3. Ispat High School, Purnapani.	132	36	168	9	..	..	9

APPENDIX III—(contd.)

Name of the Education District	Subdivision	Block	Name of the School	Roll Strength		Teacher					
				Boys	Girls	Trained		Un-Trained		Total	
						Men	Women	Men	Women		
Rourkela	Panposh	Lathikata	1. Kalunga High School.	261	44	305	4	348	7	1	12
			2. Jadakudar High School.	144	15	159	3	348	6	348	9
			3. Jalda High School.	33	4	37	..	348	3	348	3
			1. R. D. D. High School, Bonaigarh.	449	248	449	15	348	4	348	19
Bonai	..	Bonaigarh	2. Janata High School, Ruguda.	87	17	104	2	..	5	348	7
			3. Government Girls' High School Bonaigarh.	..	128	128	..	6	348	3	9
			4. Panchayat High School, Kenabeta	85	..	85	1	348	6	348	7
			1. Lahunipara Boys' High School.	156	4	160	3	348	4	348	7
Lahunipara	..	Lahunipara	2. Kuntgaon Government High School.	131	4	135	7	..	3	348	10
			3. Janamata High School, Kundaidehi.	14	..	14	..	..	1	348	1
			4. Lahunipara Girls' High School.	..	29	29	..	1	..	1	2

Gurundia	1. Jarata High School, Banki Bazar.	53	7	60	..	4	..	4
	2. Panchayat Samiti High School, Gurundia.	46	2	48	..	4	..	4
Koirā	1. Dengula High School.	133	4	137	10	..	5	15
	2. Tensa High School.	203	103	306	10	3	..	13

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

SURVEY OF
PUBLIC
HEALTH AND
MEDICAL
FACILITIES IN
EARLY TIMES

The origin of the district is of recent times. Any account of the early days, therefore, dates back to a period when the Princely States constituting the district were under the ex-Rulers and zamindars. No systematic and recorded data relating to the period are available.

The aboriginal tribes who formed a considerable portion of the population had, naturally, little knowledge regarding maintenance of health, diagnosis of disease and combating the disease on scientific basis. Whatever knowledge they possessed had been inextricably linked up with their religious faith and belief. The cause of illness or disease or for that matter any natural calamity and unnatural death were attributed to the wrath of God, the village deities, the dead ancestors, or sorcery. Various religious methods sanctioned for propitiating the offended deities like animal sacrifices, etc., were adopted to eradicate the malady. In almost all such occasions the village priest who was specially drafted from the aboriginal races played the most important role in indicating the source of trouble and appeasing the powers of evil and sylvan deities. In the ex-States of Gangpur and Bonai, which constitute the present district, the belief in witchcraft was also ingrained among all classes of people, the aborigines as well as the Hindus of the highest castes. They were all under the influence of these superstitions. Colonel Dalton in his *Ethnology of Bengal* and Cobden-Ramsay in his *Feudatory States of Orissa* have given elaborate and interesting accounts regarding the belief in witchcraft prevalent in the district.

The Unani method of healing was unknown. It may be largely attributed to the scanty Muslim population and the lack of due patronage from the ruling chiefs.

The Ayurvedic system of medicine was not unpopular. Among the Vaidyas and Kavirajas mention may be made of Braja Sundar Purohit, a renowned vaidya of Sundargarh. A charitable Ayurvedic Dispensary is said to have been maintained by him. Apart from the private practitioners, there were perhaps no public Ayurvedic institutions to cater to the popular needs in either of the ex-States of Bonai and

Gangpur in early days. The Ayurvedic dispensary which was established in 1943-44 at Sarsara Balang by the ex-Ruler of Bonai seems to be the first of its kind.

Towards the early part of the present century a great change came over in the attitude of the people to the use of Allopathic medicines and submission to the surgical operations. With a view to popularising the western medical system, one hospital and a dispensary with in-door and out-door facilities were started at Sundargarh and Bonaigarh by the ex-Rulers of Gangpur and Bonai respectively. Subsequently two more dispensaries, one at Koirra, and the other at Panposh in the Nagra Zamindary were also opened. The Sundargarh hospital was in charge of a medical officer in the rank of an Assistant Surgeon. But all the other dispensaries were in charge of qualified Civil Hospital Assistants. These institutions were well provided with medicines and surgical equipments. The dispensaries in the ex-State of Gangpur and the equipment they were provided with were excellent. To popularise vaccination special efforts were made. There were paid vaccinators and vaccination was free of charge. The Sanitary Department used to conduct and supervise the vaccination work.

The district is well drained and the climate is fairly extreme. The humidity throughout the year remains low. The people appear healthy and epidemics are rare among them. Malaria which was endemic and was creating havoc in the past has almost been controlled if not completely eradicated. Fever and spleen disorder appear to be the chief complaints. The people who are moderately immune show no sign of suffering to any serious extent from malarial fever. The climate on the whole may be termed as healthy.

Births and deaths were not being registered in the pre-merger period. The ex-Rulers of Gangpur and Bonai had been collecting the information through the police department since the year 1924-25: the village Chowkidar being the primary reporting agency. The Bengal Births and Deaths Registration Act, 1873, was enforced in the rural areas of the district in the year 1952, four years after its formation.¹

VITAL
STATISTICS

¹. Census of India, 1961, Vol. XII—Orissa, Part-I—B

Under the provisions of the Chowkidari Amendment Act, 1892, and the Orissa Police Manual the primary responsibility for collection of vital statistics statutorily devolved on the village Chowkidar. He collected information relating to his area in a prescribed form called *hata chitha* and on the parade days produced it at the police station for entry in the daily register of births and deaths maintained there. But in urban areas the health staff under the Municipality and the Notified Area Council were in charge of the collection. The Thana Officer and the Executive Officer of the Municipality compiled and reported their monthly figures to the District Health Officer who transmitted them to the Director of Health Services, Orissa.

The Orissa Grama Panchayat Act, 1948, which provided registration of births and deaths as one of the obligatory functions of the Grama Panchayats proved inoperative due to certain inherent defects in it. For instance, no penalty against the defaulting reporters was provided in the Act and the services of the village Chowkidar who continued to be responsible for the collection of vital statistics were placed under the diarchical control of the police and the Grama Panchayat authorities. Consequent on the abolition of the Chowkidari system in 1965, a new system of collection and registration of vital statistics was evolved with the enforcement of the Orissa Grama Panchayat Act, 1964. But this system did not yield satisfactory results. The Grama Rakhi Ordinance, 1967, was then promulgated according to which the responsibility again fell on the Thana Officer, and the Grama Rakhi served as the primary reporting agency. But hardly did the system operate in full swing, the Orissa Registration of Births and Deaths Rules, 1970 made under the Registration of Births and Deaths Act, 1969 (Act No. 18 of 1969) succeeded it on July 1, 1970. Under this new system the Health Officer and the Thana Officer are declared as the Registrars for the urban and the rural areas respectively. The Chief District Medical Officer acts as the District Registrar, while the Director of Health and Family Planning Services, Orissa, acts as the Chief Registrar. The responsibility to make reports about the vital occurrences within a stipulated time chiefly devolves on the head of the house or household. Nominal penal provisions have also been made in the Rules to deal with the defaulting reporters. Separate staff at each level are also entertained for the smooth and efficient working of the system. Although this seems to be a fairly sound system its workability is yet to be proved.

The following table shows the vital statistics of the district from 1961 to 1970.¹

Year		Birth	Death	No. of infant death	Ratio of death	Ratio of birth	Infant mortality rate
1961							
T	..	14,600	7,655	1,270	9.99	27.70	..
R	..	13,547	7,533	1,253	11.73	26.30	..
U	..	1,053	122	17	0.98	32.20	..
1962							
T	..	13,793	5,820	1,237	7.40	17.55	89.68
R	..	11,935	5,552	1,191	8.57	18.42	94.15
U	..	1,858	268	46	1.94	13.46	84.83
1963							
T	..	15,543	5,885	1,204	7.29	19.26	77.46
R	..	12,510	5,360	1,037	8.26	19.27	83.04
U	..	3,033	525	167	3.32	19.20	71.67
1964							
U	..	3,535	612	162	4.25	24.55	45.83
1965							
U	..	3,784	543	133	3.69	25.06	35.15
1966							
U	..	4,672	691	208	3.70	24.98	44.52
1967							
U	..	5,679	836	256	4.90	33.21	45.08
1968							
U	..	6,012	657	201	4.24	38.79	33.43
1969							
U	..	5,955	736	186	4.69	37.93	31.23
1970							
T	..	9,178	2,189	387	5.17	21.70	42.17
R	..	3,351	1,383	171	5.26	12.74	51.03
U	..	5,827	806	216	5.04	36.42	37.07

T—Total
R—Rural
U—Urban

¹. Directorate of Health and Family Planning Services, Orissa.

The figures, relating to the rural areas, are not available for the years 1964—69 due to the abolition of the Chowkidari system. Besides, the rural figures for the year 1970 are also not comprehensive. On a yearwise study, the above figures appear to be incongruous which may be due to the defective reporting by the primary agency.

But a comparison of the computed and registered figures for the decennial 1951—60 shows that the latter fall short of the former by 1,42,806 persons, a deficiency of 69 per cent, which again indicates to the ineffective working of the registration machinery. The details of the figures and the variation are furnished below:

Census 1951	Census 1961	Variation Col. 2 Col. 1	Births 1951—60 (estimates)	Deaths 1951—60 (estimates)	Excess of birth over death	Difference between Col. 3 & 6	Col. 7 in percentage to Col. 3
1	2	3	4	5	6	7	8
5,52,203	7,58,617	2,06,414	1,54,607	90,999	63,608	1,42,806	69

The birth and death rates of the district during the above decennial calculated on these estimated figures, come to 23.3 and 13.7 respectively which are relatively below the State rates of 25.8 and 16.2. Similarly the percentage of infant mortality to total deaths being 18.1 is also lower than the State figure of 23.2. Both the birth and death rates declined from 28.8 and 18.2 (1952) respectively to 19.6 and 9.8 (1960), so also the infant death dropped from 126.7 (1952) to 97.1 (1960).

The following table shows the number of deaths due to principal causes during the years 1961 to 1963*.

Year	Cholera	Smallpox	Fever	Dysentery	Respiratory disease	Injury	Other causes	All causes
1961								
T ..	..	12	4,682	683	361	203	1,714	7,655
R ..	..	11	4,608	678	357	199	1,680	7,533
U ..	..	1	74	5	4	4	34	122
1962								
T ..	..	2	3,873	342	274	137	1,192	5,820
R ..	..	2	3,753	325	255	132	1,085	5,552
U ..	..	..	120	17	19	5	107	268
1963								
T ..	3	53	3,773	301	260	160	1,335	5,885
R ..	3	45	3,601	270	238	139	1,064	5,360
U ..	..	8	172	31	22	21	271	525

* Director of Health and Family Planning Services, Orissa.
T*—Total, R—Rural, U—Urban

No other agency was virtually at work after the abolition of the Chowkidari system through which these statistics used to be collected. Hence figures for the years 1964—70 could not be furnished in the statement. As no trend can be prognosticated from the above incomplete data a comparative statement of deaths with their causes for the State and the district, for the previous decade 1951—60, is furnished below.¹

State/ District	Cholera	Smallpox	Fever	Dysentery and diarrhoea	Respiratory disease	Wounds and accidents	Other causes	Total
Orissa ..	34,440	62,978	1,312,573	1,34,096	72,409	33,547	633,498	2,283,541
Sundargarh	427	1,084	54,106	5,188	3,265	1,661	16,168	81,89

The percentage of death to total deaths in the district due to cholera, smallpox and fever is 0.52, 1.52 and 66.07 respectively. While the percentage of deaths from cholera and smallpox is lower than the State average of 1.51 and 2.76, the same on account of fever is higher than the State average of 57.48. The percentage of death from fever in the district stands the highest.

In the past, people suffered chiefly from malaria and abdominal troubles, but of late the former is almost under control. The other diseases are enteric fever, dysentery and diarrhoea, and venereal disease. Leprosy is prevalent in a large number of villages. Tubercular cases are not uncommon. Yaws, which was once moderately high among the tribal people, is seldom found. Among the epidemics, smallpox is a regular visitant though its incidence is low and cholera makes comparatively rare appearance.

The number of patients suffering from different diseases and deaths due to them in the hospitals and dispensaries during the period 1962—70 is given in Appendix I.

¹. Census of India 1961, Vol. XII Orissa, Part I—B.

- Fever** It is a common head under which several diseases are included. It generally means rise of normal bodily temperature. Broadly, it may include malaria, typhoid, influenza and black-water fever.
- Malaria** In the past, the ex-States of Gangpur and Bonai were malarious. Its impact in Gangpur reduced to some extent owing to the extensive opening of the land to cultivation consequent on the advent of the railway. The foreigners suffered severely from it while the jungle tribes who formed the bulk of the population were moderately immune. It appears just after the rains and continues till February. The police stations of Hemgir, Lefripara, Talsara and Sundargarh were the worst affected areas. Proper steps were taken by the ex-Rulers to combat the disease. Its incidence is considerably reduced at present owing to the operation of National Malaria Eradication Programme of which details will be found in the section Sanitation. The number of malaria patients treated in the district in 1970 was only 3,938 which is too insignificant compared to 33,160 in Gangpur (1946-47) and 7,759 in Bonai (1945-46).
- Influenza** Influenza occurs but seldom. A virulent type of influenza broke out in 1918-19 which set-back the vaccination operation considerably. Since then its violence has not been felt so severely.
- Typhoid** Typhoid occurs almost throughout the district during the whole year. Its incidence rather tends to increase gradually.
- Dysentery and Diarrhoea** Lack of drinking water facility leads the people, mostly of the aboriginal tribes, to use polluted water of the tanks and pools which exposes them to this disease. Before the commencement of the rainy season its incidence is, therefore, usually high. The data of patients given in Appendix I indicate that the disease is gradually tending to rise among the people.
- Yaws** This is a disease which bears a close outward resemblance to syphilis. Yaws is distinguished from syphilis by the facts that the primary lesion is never venereal, the central nervous system is never affected, the disease is not hereditary and it fails to yield to mercury treatment. It responds readily, however, to injection of arsenicals. It was very common among the more backward of the hill tribes who especially live under insanitary conditions. In both the ex-States special facilities were provided for its treatment. The staff were specially trained. There was a clinic at Sundargarh. Bonaigarh hospital had a separate ward of 4 beds allotted to the yaws patients. The Sundargarh doctor had been doing peripatetic work. But at present its occurrence is too rare to call for any specific provision for treatment. The maximum and minimum numbers of yaws cases treated in a single year during 1962-70 are 62 (1969)

and 6 (1970) which are relatively too insignificant compared to the total number of cases of 633 and 321 treated in Gangpur (1946-47) and Bonai (1945-46) respectively. With a view to controlling the disease an Anti-Yaws Campaign was started in 1948 and provision for its treatment was also made in various hospitals and dispensaries.

Special provision did not perhaps exist in the ex-States for the treatment of T. B. In recent days it shows a tendency to rise gradually. The cause may perhaps be attributed to the unrestricted journey by public buses and trains. An account relating to the facilities available for its treatment and prevention is given in a later section of this chapter.

Incidence of leprosy was very low in the past. In the ex-State of Gangpur there was only one clinic at Sundargarh for the treatment of leprosy patients. In 1940-41 two more clinics were opened at Bhasma and Lefripara but they seem to have continued only until 1943-44. They were under the locally trained leprosy injectors. The leprosy and yaws doctor was also doing peripatetic work during his tour to interior villages. There being no leprosy clinic at Bonai the patients were sent to Cuttack at the cost of Bonai ex-State. The Rourkela Steel township has attracted a flow of beggars including lepers from different parts of India. Groups of leper families have congregated at Rourkela since 1958.

The anti-leprosy campaign based on detection, treatment and health education is carried on in the district by the State Government and the Hindu Kustha Nivaran Sangha, a voluntary organisation. A Leprosy Control Unit at Kuarmunda, and four Survey, Education and Treatment Centres, two at Rourkela under the State sector and the rest two located at Panposh and Rajgangpur under the Central sector, are functioning under the direct control of the Assistant District Medical Officer (Public Health). The Chief District Medical Officer supervises all the leprosy establishments. The population coverage of each of the Control Units is about three lakhs while that of the Survey, Education and Treatment Centre is about twenty five thousand. By the district branch of Hindu Kustha Nivaran Sangha four clinics are at work at Sundargarh, Sabdega, Bargaon and Bisra. So far, in the district 377 leprosy cases have been detected through mass survey and of them 281 cases are under treatment.

Elephantiasis is seldom seen in the district.

Elephantiasis

Venereal disease is not uncommon. Separate clinics exist in the hospitals and dispensaries for the treatment of these patients.

Veneral disease

Filaria is not a fatal disease and is not commonly found in the district. If preventive measures are taken at an early stage, it can well be kept under control. The high figures of patients registered in 1964, 1969 and 1970 may be probably due either to the statistical error or to other causes.

Filaria

Cholera

Occurrence of cholera is almost rare in the district. The worst of the recent outbreaks was in the year 1958 which claimed 350 lives.

Smallpox

Smallpox is common and has its periodical exacerbation. Classical type of variola major, with high fatality rate, had been recorded in the past. The highest number of deaths attributed to this disease in the recent past was 531 and 234 in 1958 and 1959 respectively. Preventive measures adopted at present for its extermination is described in a later section of this chapter.

PUBLIC
HOSPITALS
AND DISPEN-
SARIES

Prior to 1948 the Chief Medical Officers of Bonai and Gangpur were in charge of the few hospitals and dispensaries that existed in their respective states. They were also superintendents of vaccination. After the creation of the district, the organisational pattern had to conform to the set-up then prevailing in the regular districts. The Civil Surgeon was kept in charge of the medical administration while the public health and sanitation were under the District Health Officer. At present the Civil Surgeon, redesignated as Chief District Medical Officer, is vested with additional powers and jurisdictions. Subordinate to him are three Assistant District Medical Officers separately in charge of Medical, Public Health, and Family Planning branches.

At the time of merger, Gangpur had seven hospitals located at Sundargarh, Bargaon, Raghunathpali, Kuarmunda, Bisra, Hemgir and Rajgangpur and a dispensary at Hatibari. These institutions, excepting Sundargarh which was in charge of an Assistant Surgeon, were under qualified Civil Hospital Assistants. Attached to the Sundargarh hospital were a bacteriological department, a maternity ward, provision for the treatment of anti-rabic cases, and a clinic for the treatment of leprosy and yaws. The Roman Catholic Mission maintained three small hospitals and the B.S.L.Co., had one hospital and a small dispensary in their mining area at Birmitrapur. In Bonai ex-State there were one hospital at Bonaigarh, two dispensaries at Koira and Banki, and an Ayurvedic dispensary at Sarsara Balang which was opened in 1943-44. The bed strength of Bonaigarh hospital was 24.

After 1948, steps were taken for establishing new institutions to cater to the growing needs of the people. In the district, the number of hospitals at present is 15. Of these, 8 are meant for the general public and the remaining ones for the departmental people. The hospitals at Balisankra and Surda are managed by the Tribal & Rural Welfare Department and the rest by the Health Department. The last named hospital has no provision for indoor patients. The total number of beds in all the hospitals is 276, and the staff consists of 33 doctors, 27 nurses and pharmacists apart from other staff.

The following table gives the name, location and other details of each of the hospitals separately.

Name and location	Year of establishment	No. of Bed			Staff sanctioned	
		Male	Female	Total	Doctor	Pharmacist/Nurse
Sundargarh Headquarters Hospital, Sundargarh.	1942	52	38	90	11	4
Balisankra Tribal & Rural Welfare Hospital, Balisankra.	1962	4	2	6	1	1
Bargaon Hospital, Bargaon	1912	4	4	8	1	1
Bilaimunda Hospital, Bilaimunda.	1967	4	2	6	1	1
Bonaigarh Subdivisional Hospital, Bonaigarh.	1913	15	3	18	3	3
Raghunathpali Hospital, Panposh.	1915	14	10	24	3	1
Rajgangpur Hospital, Rajgangpur	1915	15	10	25	2	1
Surda T. & R. W. Hospital, Surda.	1963	..	..	..	1	1
Rourkela Police Hospital, Rourkela.	..	20	..	20	1	1
Orissa Military Police Hospital, Rourkela.	..	50	..	50	1	1
Sundargarh Police Hospital, Sundargarh.	..	..	..	..	1	1
Bandamunda Railway Hospital, Bandamunda.	..	15	10	25	4	8
Kansbahal Utkal Machinery State Insurance Hospital, Kansbahal.	..	..	..	..	1	1
Rajgangpur Employees State Insurance Hospital, Rajgangpur.	..	..	..	..	1	1
Sundargarh Jail Hospital, Sundargarh.	..	4	..	..	1	1

Head-
quarters
Hospital,
Sundargarh

A dispensary, to trace the history of the Headquarters Hospital, Sundargarh, was opened at Sundargarh, then known as Suadihi, in the year 1895 consequent upon the introduction of western medical system in the ex-State of Gangpur. It was then called the Gangpur Raj Dispensary. As late as 1902 this dispensary was lodged in a small Kucha hut consisting of two rooms. The Raja of Gangpur cherished the desire of naming the hospital after the late queen Victoria and by the year 1913 it was renamed the Victoria Memorial Hospital. This hospital was shifted to its new building in 1942 which was then under the control of the Ministry Department. It came under the civil control and management in 1945-46 and was called Bhabani Shankar Shekhar Memorial Hospital, after the name of the late Raja of Gangpur.

At present the hospital is housed in a nice building and well equipped with modern medical apparatus including an X-ray plant. All cases for X-ray examination are referred to this hospital. Attached to it are an Auxiliary Nurse Midwife Training Centre and the only Blood Bank of the district. Facilities for the treatment of T. B., venereal, and infectious diseases are available here.

The Headquarters Hospital, and the Subdivisional Hospital at Bonaigarh provide for the treatment of anti-rabic cases.

Primary
Health
Centres

With a view to provide medical aid, preventive as well as curative, to the interior populace 16 Primary Health Centres have been established during the period from 1956 to 1968. The staff of each of these centres mainly consists of a doctor and a pharmacist. Save the centres at Birkera, Ekma, and Tangarpali the rest have six beds each (male—4, female—2). The location and the year of establishment of the primary health centres are given below.

Name and location	Year of establishment	Name and location	Year of establishment
Birkera	1958	Kuarmunda	1959
Bisra	1968	Kutra	1960
Ekma	1968	Lahunipara	1959
Gurundia	1957	Laing	1965
Hatibari	1965	Majhapada	1956
Hemgir	1964	Sargipali	1956
Kinjirkela	1966	Sabdega	1966
Koira	1964	Tangarpa	1966

The district has 10 dispensaries : their location and year of establishment are given in the table below. A doctor and a pharmacist constitute the main staff of the dispensary. An emergency bed is attached to each of these dispensaries.

Name and location	Year of establishment	Name and location	Year of establishment
Bankibazar Dispensary, Bankibazar	1959	Mangaspur Dispensary, Mangaspur	1954
Bandega Dispensary, Bandega	1952	Raiboga Dispensary, Raiboga	1953
Bhatkidihi Dispensary, Bhatkidihi	1968	Uditnagar Dispensary, Uditnagar	1960
Jarda Dispensary, Jarda	1965	Kamarposh Balang Dispensary, Kamarposh Balang	1970
Lefripara dispensary, Lefripara	1962	Nuagaon Dispensary, Nuagaon	1970

Attached to the hospitals, primary health centres, and dispensaries of the district are 31 Maternity and Child Welfare Centres run by the Health Department. Moreover, two sub-centres located at Balisankra and Bargaon are managed by the Tribal & Rural Welfare Department. These centres provide domiciliary service in the towns and adjoining rural areas. Milk and drugs are distributed free of cost from these centres to expectant mothers, and babies. Besides, there is a Mobile Health Unit at Gundiadihi, and two Maternity After-Care Centres at Raidihi and Rourkela. The last centre is managed by the Dayananda Anglo Vedic Society, a philanthropic organisation. Its staff constitutes a doctor and a nurse.

The following hospitals and dispensaries are established and managed by the non-government institutions. The total number of beds in them is 541 (male-336, female-205) and the total staff consists of 139 doctors and 171 pharmacists and nurses. These institutions, except the one managed by the Notified Area Council, Rourkela, and those managed

Dispensaries

Maternity
and Child
Welfare
Centre

Private
Institutions

by the missionaries, are chiefly meant for the employees of the respective firms establishing them.

Birmitrapur TISCO Hospital
 Birmitrapur H. S. L. Hospital
 Gaibira Mission Hospital
 Hatibari TISCO Hospital
 Rourkela Ispat General Hospital
 Kalunga Mission Hospital
 Lanjiberna Orissa Cement Ltd., Dispensary
 Gumardihi Dolomite Quarry Hospital
 Hamirpur Mission Dispensary
 Kesramal Mission Dispensary
 Panposh TISCO Quarry Dispensary
 Rourkela Notified Area Council Dispensary
 Rajgangpur Orissa Cement Ltd., Dispensary

Ispat
 General
 Hospital,
 Rourkela

The I. G. H. is a modern, well equipped hospital located in the Hindustan Steel Limited township and provides most up-to-date medical facilities to the employees and their dependants free of charge. The bed strength of the hospital is 470 (male 300, female 170) and the main staff consists of 123 doctors and specialists, and 136 pharmacists and nurses. It possesses a most efficient surgical department which provides surgical facilities in almost all the major diseases of orthopaedics, heart, chest, brain, ear, nose, throat, ophthalmic, and dental, including plastic surgery. Obstetrics and gynaecology constitute a separate department. The department of medicine includes general medicine, cardiology (heart disease), paediatric medicine, chest medicine, dermatology, social and preventive medicine. A Child and Maternity Welfare and Family Planning Unit, a Pathological and a Bio-chemistry laboratory, a diagnostic X-ray department, a Nurses' Institute, and a Blood Bank are attached to the hospital. A Public Health Service and a rehabilitation block with a hydrotherapeutic pool to restore the patients to full health are also maintained by the hospital.

In each of the sectors V, VII, XVII and XX of the township is located a Health Centre with the provision for 12 indoor patients.

The Steel Plant also maintains a thirty-five bed hospital in Barsuan Ore Mines, a ten-bed hospital in Purnapani Lime Stone quarries and a fifteen-bed hospital in the Labour Colony. These institutions are adequately staffed and manned by the efficient doctors. The Plant spends over 30 lakhs annually over all these institutions.

Ayurvedic
 and Homoeo-
 pathic
 dispensary

The Ayurvedic and Homoeopathic systems are also sponsored by the State Government along with the Allopathic system of healing. These institutions are controlled by the Directorate of Ayurvedic and

Homoeopathic medicines, Orissa. The district has 9 Ayurvedic and 4 Homoeopathic dispensaries : the former are located at Nandapara, Sarsara Balang, Sol, Baladmal, Sikajore, Chungimati, Rauldega, Khatkurbahal and Khuntgaon : the last named village also contains a homoeopathic dispensary. The other three homoeopathic dispensaries are at Bandubahal, Darlipali and Sankobahal. These dispensaries are managed by qualified physicians.

Family Planning started in the district in 1962-63. The shortcomings of an unwieldy family and the need for birth control are being propagated. FAMILY PLANNING

The District Family Planning Bureau located at Sundargarh is placed directly under the Assistant District Medical Officer (Family Planning). Under him are a mass education and information officer, a statistical investigator, a computer, and an administrative officer. The mass education and information officer who is solely responsible for motivating the attitude of the people towards a planned family has under him a female and a male district extension educator. Altogether there are sixteen F. W. P. Cs. in the rural areas attached to the Primary Health Centres. The urban centres are located at Sundargarh, Rajgangpur, Birmitrapur, Uditnagar and Rourkela. The centre at Uditnagar is managed by the Rourkela Notified Area Council and the centre at Rourkela by the Ispat General Hospital. No static sterilisation unit exists in the district. The mobile sterilisation and IUCD units with headquarters at Sundargarh operate throughout the district. An Assistant Surgeon is in charge of the former while a Lady Assistant Surgeon is in charge of the latter unit.

The following table indicates the year-wise activities of the Family Planning Organisation in the district since its inception.

Year	Sterilisation operation conducted			I. U. C. D.	No. of users of conventional contraceptives.
	Total	Male	Female		
1962-63	2	2	..	..	..
1963-64	167	161	6	..	..
1964-65	1,081	1,045	36	..	..
1965-66	6,071	6,015	56	602	437
1966-67	7,135	7,043	92	706	324
1967-68	5,234	5,132	102	1,524	892
1968-69	1,991	1,938	53	1,054	1,653
1969-70	4,815	4,708	107	1,807	3,149
1970-71	4,380	4,250	130	2,843	3,856
1971-72	2,192	..	..	1,993	3,944

The figures indicate how family planning is gradually gaining popularity in the district. Altogether 33,068 cases of sterilisation and 10,529 cases of I. U. C. D. insertion have been conducted during the decade 1962-63 to 1971-72. Use of contraceptives such as condom, diaphragm, jelly and foam tablets seems to be more popular. Besides the free supply of contraceptives by the Government, they are also available cheaply in the market. In the year 1970-71, the Family Welfare Planning Centres distributed 2,23,184 condoms, 15 diaphragms, 4,441 tubes of jelly and 8,195 foam tablets in the district.

Facilities are also provided for sterilisation and I. U. C. D. insertions in all the hospitals, dispensaries, and primary health centres besides the family welfare planning centres. With a view to compensating the loss on account of the wages a person might have to sustain for undertaking such operations cash payments in the following rates are made to the person concerned and also to the accompanying motivator.

		Rs.
Sterilisation	Male	14'00
	Female	17'00
	Motivator	3'00
I. U. C. D. insertion	Female	5'00
	Motivator	1'00

Sanitation

In the ex-State of Bonai, a small conservancy department under the charge of the Chief Medical Officer looked to the sanitation of Bonai town; and the rural areas were left to the care of the *gaontias* and the village panchayats. The system in the ex-State of Gangpur was different: there were sanitation committees in six important towns, viz., Sundargarh, Rajgangpur, Raghunathpali, Bisra, Hatibari and Hemgir. These committees were formed on electoral basis and their chief functions were providing of street lights and maintenance of cleanliness of the towns. The sanitation of the villages was not probably given due importance.

The Assistant District Medical Officer (Public Health), previously known as the District Health Officer is, under the present dispensation, directly in charge of the Public Health Organisation. The district is divided into seventeen blocks, each being provided with a Primary Health Centre. The normal staff of the Primary Health Centre are augmented by one sanitary inspector, three vaccinators and one disinfectant. The Block implementing the N. S. E. P., details of which are mentioned later on, is provided with an additional staff of one sanitary inspector and one vaccinator.

The Health Officer posted by the State Government and the Public Health staff are responsible for the maintenance of sanitation in the municipal towns of Sundargarh, Rajgangpur, and Birmittapur and Rourkela Notified Area. The vaccination staff under the Health Officer, whose main function consists in taking adequate preventive measures against the outbreak of epidemics, constitute a sanitary inspector, a vaccinator and a disinfectant. But the sanitation of Rourkela Steel Plant area is maintained by the Hindustan Steel Limited authority through their own staff.

The medical officer of the primary health centre looks to the proper maintenance of the rural sanitation and prevention of epidemics and supervises the work of vaccination. He also ensures speedy and timely detection of cases, and submission of reports by the subordinates for immediate remedial measures.

Both in the urban and the rural areas drainage seldom poses a major problem due to the undulating nature of the district. Water logging is rarely seen. Construction of soakage pits wherever necessary and installation of smokeless Chullahs are undertaken through the community development blocks.

In summer, drinking water scarcity is often marked in rural areas. To overcome this difficulty separate schemes are being executed through the Grama Panchayats and the Community Development Blocks. Huge sums are spent annually in constructing new wells and tanks and renovating the old ones through these agencies. Sundargarh, Rajgangpur, and Rourkela are the only towns where protected water-supply is provided; the analyst checks the water periodically by collecting samples from different taps through his staff.

Vaccination probably started in both the ex-States in the early part of the 20th century. It was free of charge and to popularise it special efforts were made by the ex-rulers. The performance in 1907-08 was—1,882 primary, and 582 cases of revaccination in Bonai, and 8,686 primary and 12,788 revaccination cases in Gangpur.

The strength of vaccination staff in Gangpur (1946-47) and Bonai (1945-46) was as follows:—

	Gangpur	Bonai
Inspector ..	1	..
Vaccinator—Male ..	2	..
(Permanent)	..	..
Temporary	12	7
Female ..	2	1
(Temporary)	..	..

Activities of
Health and
Sanitary
Organisation

Drainage

Water Supply

Vaccination

The staff were working under the Chief Medical Officer. Figures of vaccination and revaccination made during certain selected years prior to 1948 are given below :

Year		Primary	Revacci- nation	Total
1915-16	.. Bonai ..	5,309	2,903	8,212
	Gangpur	10,305	33,938	44,243
1925-26	.. Bonai ..	2,382	784	3,166
	Gangpur	13,575	26,705	40,280
1945-46	.. Bonai ..	2,716	17,767	20,483
	Gangpur	10,530	23,932	34,462

As stated earlier the vaccination staff in the Primary Health Centres and the municipalities respectively cover the rural and the urban areas at present. The supply of F.D. vaccine is made by the Directorate of Health. The old practice of obtaining vaccine lymph from Namkum is stopped. The technique of the operation has also undergone a great change. Now bifurcated needles are in use. Effective and timely measures are being taken to stamp out the epidemic and to prevent its spreading by general vaccination of the people in the areas where it appears.

A statement showing the figures of primary vaccination and revaccination and inoculation against cholera during the period 1962-71 is given below :

Year	Inoculation	Vaccination		
		P. V.	R. V.	Total
1962	.. 73,751	118	1,043	1,161
1963	.. 75,755	20,479	87,590	1,08,069
1964	.. Not available	25,314	95,912	1,21,226
1965	.. 85,078	38,453	1,49,539	1,87,992
1966	.. 4,76,998	46,873	1,89,894	2,36,676
1967	.. 1,30,428	59,398	2,12,822	2,72,220
1968	.. 1,33,899	87,944	1,77,630	2,65,574
1969	.. 1,23,335	64,479	1,62,342	2,26,821
1970	.. 1,47,789	49,676	1,67,566	2,17,242
1971	.. 46,418	58,001	2,75,437	3,33,438

With a view to combating smallpox menace effectively in the district a crash programme called the National Smallpox Eradication Programme is in operation under the overall charge of the Chief District Medical Officer which covers 14 out of the 17 blocks mentioned earlier. The staff of each block consists of a sanitary inspector and a vaccinator. The para-medical assistant in charge of the two zones into which the blocks are divided serves as a liaison between the Assistant District Medical Officer (Public Health) and the medical officers of the Primary Health Centres. In addition, a mobile unit consisting of 5 vaccinators also operates in the remote areas.

The National Malaria Eradication Programme is in operation in the district since long. Five out of the 8 centres of the Sundargarh unit covering the entire district are located at Rajgangpur, Hemgir Kalunga, Birmitrapur, and Lahunipara.

Before the introduction of surveillance in 1960, spraying of two to three rounds of insecticide was given in each centre annually. During 1971 two rounds of spraying were given from 8th May 1971 to 24th September 1971 and from 2nd September 1971 to 18th November 1971. The details are as follows:

	1st round	2nd round
Number of Villages sprayed ..	2,819	1,175
Number of Hamlets sprayed ..	3,152	1,353
Number of Holdings covered ..	2,36,224	1,24,822
Number of Population covered ..	13,16,298	6,43,917
Total insecticides consumed ..	55,290Kg.	28,430Kg.

The table below indicates the surveillance activities performed in the district from 1966 to 1971. The relatively low figures in 1970 and 1971 shown under Cols. 3 and 4 are due to the reduction in staff.

Year	Popu- lation as per N.M.E.P. census	Fever cases detected and blood slides collected	Blood slides Exa- mined	Result Malaria Positive	Radical treat- ment done
1966	.. 1,300,025	1,72,865	1,63,739	3,050	3,050
1967	.. 1,378,683	1,60,996	1,40,188	5,478	5,478
1968	.. 1,442,023	1,52,585	1,36,684	7,904	7,904
1969	.. 1,319,575	1,16,972	1,16,972	5,103	5,103
1970	.. 1,376,298	79,565	37,407	221	221
1971	.. 1,376,298	87,670	59,704	1,011	1,011

Smallpox
Eradication
Programme

Anti-Malaria
Measures

Tuberculosis
Prevention
and Treat-
ment

Under the administrative control of the Chief District Medical Officer a small 6-bed T. B. clinic is attached to the headquarters hospital. But for an X-ray plant, for which it depends on the headquarters hospital, it is a self contained unit with a well equipped laboratory. The UNICEF is likely to supply an X-ray plant shortly to this clinic.

It also functions as the District T. B. control centre. The staff consists of the District T. B. Officer, Health Visitor, laboratory Technician, X-ray Technician, Statistical Assistant, and a B. C. G. team. The staff are specially trained. The B. C. G. team which primarily aims at prevention of the disease operates throughout the district. The T. B. centre was fortified with this unit on the 4th June, 1971. During the remaining part of the year 4,715 persons were vaccinated and Montoux test was conducted on 304 persons. A total number of 1,677 persons attended the clinic for sputum examination in 1971, of them 149 cases were found to be positive and 257 were pulmonary T. B. cases.

APPENDIX I

The number of patients suffering from different diseases, treated, and death due to them in the hospitals and dispensaries during the period 1962—70.

(34 Rev.—28)

Diseases	1962		1963		1964		1965	
	Treated	Death	Treated	Death	Treated	Death	Treated	Death
1. Typhoid	479	3	751	10	886	15	1,202	11
2. Tuberculosis	1,249	2	114	5	2,919	1	345	1
3. Venereal disease	1,715	1	2,155	..	4,191	..	3,914	..
4. Cancer	9,357	..	333	..	1,333	..	15,521	1
5. Dysentery	10,871	11	26,278	13	46,050	20	57,392	26
6. Malaria	10,183	16	9,247	..	5,181	1	5,111	2
7. Filaria	136	..	277	..	2,140	..	484	..
8. Diphtheria	16	..	10	..	10	1	11	1
9. Whooping Cough	392	..	707	..	1,421	..	1,293	..
10. Tetanus	36	..	24	3	51	5	41	3
11. Poliomyelitis	2	..	6	1	7	..	13	..
12. Infective hepatitis	828	1	439	2	597	2	470	3
13. Influenza	5,927	..	10,846	..	18,776	..	14,182	..
14. Heart disease	985	..	533	1	829	6	606	..
15. Others	1,48,679	92	1,76,102	113	2,32,133	133	1,64,498	77

APPENDIX I—Continued.

Diseases	1966		1967		1968		1969		1970	
	Treated	Death	Treated	Death	Treated	Death	Treated	Death	Treated	Death
1. Typhoid	3,802	23	1,128	11	1,525	6	3,413	10	2,373	8
2. Tuberculosis	558	2	864	9	1,267	5	7,496	26	3,259	42
3. Venereal disease	3,096	1	3,612	4	2,561	..	4,626	..	6,057	1
4. Cancer	444	..	78	3	236	..	1,115	8	6,047	15
5. Dysentery	83,171	22	63,608	27	53,324	25	36,296	9	94,451	23
6. Malaria	5,768	..	4,343	2	3,667	..	4,801	..	3,938	3
7. Filaria	752	..	778	..	571	..	6,697	..	6,694	..
8. Diphtheria	18	1	27	1	43	1	1,673	14	3,047	13
9. Whooping Cough	2,616	..	2,134	..	1,780	1	5,035	..	5,473	10
10. Tetanus	64	2	73	5	97	11	174	29	101	21
11. Poliomyelitis	9	..	2	..	22	..	522	..	543	1
12. Infective hepatitis	1,717	5	735	5	400	2	1,116	8	1,051	3
13. Influenza	12,078	..	2,601	..	8,476	..	18,632	..	34,230	..
14. Heart disease	1,377	4	1,067	12	1,256	9	5,463	25	6,576	21
15. Others	1,77,387	51	2,59,874	130	2,69,940	152	5,79,777	408	5,72,360	575

CHAPTER XVII

OTHER SOCIAL SERVICES

The landless population finds employment in agricultural fields as well as in industrial and mining areas. According to 1971 Census 54,297 persons were agricultural labourers, out of which 46,281 were males and 8,016 females. The recent installation of the Rourkela Steel Plant and a number of large and small-scale industries in the neighbourhood have brought some prosperity to the local Adibasis. Other big centres of employment are the Cement Factory at Rajgangpur; the quarries at Birmitrapur, Hatibari, Panposh, Koira, Lanjiberna, Purnapani, Barsuan, etc. The number of industrial workers is nearly the same as that of the agricultural labourers. The Hindustan Steel alone employed 34,000 labourers during 1971.

LABOUR
WELFARE

The increased employment in the factories and quarries has reduced the migration of the local labourers to other neighbouring districts and also outside the State. The Kendu leaf (Bidi) industry engages a large number of women labourers for about 6 months a year for plucking as well as binding the leaves. Construction of roads, buildings and irrigation projects provide employment to a certain extent as most of the agricultural labourers face unemployment during December and May when they find no work after the paddy is harvested.

Prior to 1948, the Gangpur ex-State had its own rules for controlling emigration of labour to Assam Tea Gardens. Licenses to the Forwarding Agents were being granted on the recommendations of the Political Department and a fee of Rs. 20/- was charged in each case. A sum of Rs. 5/- was being realised for each person recruited. In the ex-State of Bonai there was no such rule till June, 1947, and the rules then introduced were similar to those in Gangpur. During the Second World War period about 3,000 labourers were being recruited annually from this district. The Tea District Emigrants Labour Act, 1932, was extended to this district in 1948 and Sundargarh became a controlled emigration area. The District Magistrate was authorised in 1951 to issue licences to the Forwarding Agents under Section 17 of the Act.

The State Government have established a labour Office to deal with various labour problems of the district.

A Deputy Labour Commissioner has been kept in charge of the office with his headquarters at Rourkela. His subordinate staff consist of an Assistant Labour Commissioner, an Inspector of Factories, an Inspector of Boilers, a District Labour Officer and four Assistant Labour Officers. The main function of the labour office is to implement the labour laws in force in the district and to look after various labour welfare measures. Besides, it remains alert over the labour situation and takes timely action for the prevention of strikes and labour unrest, and for the settlement of industrial disputes.

Generally all the major industrial establishments have provided amenities for their workers in the form of recreational facilities other than statutory welfare measures. Most of the industrial workers of the district have formed trade unions to safeguard their interest (A list of trade unions as on the 31st December 1971 is given as Appendix I). Among them the skilled workers who get higher wages than the unskilled labourers are economically and culturally better off. The general condition of the unskilled workers is poor. The wages they get is not sufficient to cope with the rising cost of living.

The following table gives an account of the industrial disputes and complaints admitted for conciliation, which were either concluded by drawing up a memorandum of settlement or failure reports were sent to the Government (during 1967 to 1971).

Year	DISPUTES				
	No. of Disputes admitted			No of Disputes disposed of	
	Pending at the beginning of the year	Received during the year	Ended in failure	Settled through conciliation	Withdrawn
1967	20	40	15	5	Nil
1968	45	61	70	17	3
1969	16	46	38	9	4
1970	11	69	31	29	1
1971	19	63	28	27	1

COMPLAINTS

Year	Total No. of complaints		
	Pending at the beginning of the Year	Received during the year	No. of complaints disposed of
1967	128	732	277
1968	583	646	611
1969	618	608	650
1970	576	451	447
1971	580	418	626

Besides, 140 cases under Workmen Compensation Act were disposed of during the first half of 1972 directing payment of Rs. 1,84,947 to the workers.

There are two multipurpose labour welfare centres in the district for the benefit of workers run by the State Government. They are located at Rourkela and Rajgangpur. Welfare Centres

Each of the centres has been provided with a library and reading room. Education in sewing and knitting is also imparted in these centres. Besides, staff have been provided to teach music.

The State Government have constructed 216 tenements at Rourkela and 132 tenements at Rajgangpur to provide accommodation for the workers of the local factories. House rent at the rate of Rs. 16.50 in respect of each tenement (two roomed) is charged from them at present. Industrial Housing

A regular Excise Department was functioning in the ex-State of Gangpur since the beginning of the present century. In the ex-State of Bonai there was no separate office to deal with excise matters. It was kept in charge of the Police Department. PROHIBITION

Prohibition of drinking liquor has not been enforced in this district. Most of the population, being Adibasis, use liquor not only for habitual drinks, but also for customary and religious rites. At the beginning of the present century there were as many as 220 out-stills in the ex-State of Gangpur, but the number was reduced to 60 in 1907-08. This indicates a remarkable decrease in drunkenness.

The outstill system was in vogue till 1949-50 and there were as many as 90 outstill shops. In 1950-51 when distillery was introduced 40 outstills were converted into country spirit shops. This changed system of supply was not welcomed by the people. The local Adibasis did not relish distilled liquor as they were accustomed to cheap outstill liquor and home brewed pachwai. They have been allowed to brew and possess pachwai (Handia/Kushna) up to a limit of 7 litres undiluted and 18 litres diluted for their domestic consumption. Limit has also been fixed for the sale of other excisable goods in the district to check their unrestricted use. Accordingly an individual can get 1½ litres of outstill and foreign liquor, 3 litres of beer, 25 grams of *ganja* and 120 grams of *bhang*. Consumption of *ganja* has become more than double during the last 10 years.

The number of excise shops and the consumption of liquor, *ganja* and *bhang* in the district during 1967-68 to 1971-72 is given in Appendix II.

About 10 maunds (3.73 quintals) of opium was being consumed in the district during the forties. Even mothers were habitually administering opium to their little children which adversely affected the health of the society in the long run. The Gangpur Durbar had promulgated Gangpur State Opium Smoking Act, 1946, which came into force since 20th November 1947, and further contemplated to introduce card system for the supply of opium to discourage people from smoking and eating more of the drug.

As an all-India measure for complete prohibition of opium, the sale of opium for the oral consumption of the addicts through licenced agencies was discontinued with effect from the 1st April, 1959. It caused hardship and physical suffering to old, infirm and long opium-addicted persons. These persons were allowed to purchase medicinal preparation of opium of a quantity issued to them prior to 1st April 1959. The addicts were to produce medical certificate-cum-permit-cards issued by the medical officer of the locality. Medicinal opium was being sold through sale centres of the excise department. But it was detected that widespread smuggling and sale of spurious opium at a cheaper rate continued throughout the State. The Board of Revenue conducted a sample survey at Puri, and Jagatsinghpur in Cuttack district to find out the effect of complete prohibition. The Survey revealed that all the old addicts who had not registered themselves as such, had not given up the habit and were getting spurious opium from the black-market. It was therefore decided to take up a fresh survey and registration of the addicts with effect from the 15th October, 1960. The price of medicinal opium was also reduced from Rs. 10/- to Rs. 6/- per tola (11.66 grams.).

At present there are only 218 registered opium addicts in this district and their monthly quota is 2,352 grams of medicinal opium. The drug is being sold through 9 departmental opium sale centres and the selling price is Re. 1/- per gram.

No further registration of addicts is being made without valid recommendations from medical officers. Number of addicts is gradually falling. During the last 30 years the average annual consumption of opium has come down from 10 maunds (373 kg.) to 28 kg.

The Bihar and Orissa Excise Act, 1915 and the Opium Act, 1878 were in force in the ex-States of Gangpur and Bonai and are continuing in the present district of Sundargarh. Other acts like the Dangerous Drugs Act, 1930; the Orissa Opium Smoking Act, 1947; the Medicinal and Toilet Preparation Duties Act, 1956; Opium Laws Amendment, 1957; and Molasses Control Order, 1961 are also in force. The main activities of the excise department are to guard against the leakage of excise revenue and to check irregularities committed in contravention of the provisions of these Acts.

Unrestricted manufacture and sale of Pachwai, illegal transport and possession of liquor, smuggling of opium, *ganja* and *bhang* are the principal crimes. About 500 excise cases are reported from the district every year.

The total population of the district is 1,030,758 (1971 Census). The percentage of the Scheduled Tribes to the total population is 53.40 and that of the Scheduled Castes is 8.02. Sundargarh has been declared a Scheduled district. Although the backward communities form the majority of the population, no systematic attention was given for their welfare prior to Independence.

The State Government have created a separate department at the State level as well as at the district level to deal with the problems of the backward classes in respect of educational, cultural and economic development.

The economic condition of the Adibasis and the backward classes is poor. They are primarily agriculturists. According to 1961 Census about 80 per cent of the total tribal working population were dependent on land. The Adibasis of this district have taken up settled cultivation. Shifting cultivation is hardly prevalent among them. Basket-making, rope-making, pottery and hand-pounding of rice are also done by them to supplement their income. A large number of them are engaged in collecting *Kendu* leaf and cutting of bamboos for paper mills. Large industries and mines have provided gainful employment to a number of Adibasi people.

Excise
CrimesADVANCE-
MENT OF
BACKWARD
CLASSES AND
TRIBESEconomic
Schemes for
the uplift
of Backward
Classes and
Tribes

These tribals are mostly illiterate and ignorant. Very often they are exploited by unscrupulous local traders and money-lenders. Generally they barter agricultural and forest products for articles of daily consumption. Weekly markets are the important channels of local trade but lack of proper communication facilities stand in the way of agricultural marketing at remunerative prices.

Their income is insufficient even to provide them with the bare subsistence of life. Much of their income is spent on festivals, social ceremonies and on drinks. They practically have no savings. Indebtedness is a common feature with them. Grain *gollas* have been established in the tribal areas so that these people will avail loans easily without any formality. Subsidy is also given to purchase agricultural implements and seeds. The State Government have started a scheme known as the Purchase, Sale, and Fair Price Shop Scheme which is functioning at Lahunipara since 1969 to ensure a fair price to their agricultural products and to grant loan to the backward people for festivals and other occasions. The Scheduled Areas Relief Regulations, 1967, and the Scheduled Area Money Lenders Regulation, 1967, are in force in the district in order to protect the tribals from paying higher rate of interest to the money-lenders.

Fair price shops have been started at interior places from where the tribal population get their requirements at reasonable prices. There is also facility to sell minor forest products and other commodities.

Sundargarh being a scheduled district, the Scheduled Tribes and the Scheduled Castes get preference in the settlement of land encroachment cases. In case of unobjectionable encroachments committed prior to the 13th September 1961, the land is settled in favour of the encroacher on payment of prescribed government dues. If that encroachment is committed prior to the 26th January 1950 no *salami* is realised, but back rent from the 10th January 1950 till the date of settlement is realised. In deserving cases the *salami* is also waived by the Collector. No *salami* is charged for the first 10 decimals of homestead land.

In case of unobjectionable encroachments committed prior to the 13th September, 1961, no limits have been fixed by the Government for the settlement of land encroachment. But in case of unobjectionable case applications and encroachments committed after the 13th September, 1961, lands up to an extent of 5 acres (about 2 hectares) can be settled where the encroachers or the lease applicants are landless.

Two Adibasi colonies have been established in this district during 1956-57 and 1957-58, and 160 families have been re-settled with land in

these colonies. These steps were taken to dissuade the Adibasis from adopting shifting or Podu cultivation, and to induce them to settle in the plains and to take to regular cultivation.

To improve the percentage of literacy among the tribal people a number of educational institutions have been started in the district by the Tribal & Rural Welfare Department. At present there are 6 High English schools (4 for boys and 2 for girls), 3 Ashrams and one Kanyashram, 91 Sevashrams (including 2 residential Sevashrams) and 6 Chatasalis. Reading and writing materials are supplied free of cost to the students studying up to Class V. Stipends are awarded to the students studying in Class VI to XI. During the last 5 years (1967-68 to 1971-72) a sum of Rs. 57,86,906 was spent for awarding stipends to the students of the district. 39,939 students belonging to the Scheduled Tribes, 3,926 belonging to the Scheduled Castes, and 717 belonging to other backward classes have been benefitted by this scheme. During the same period reading and writing materials costing Rs. 80,878 were distributed to the primary school students.

In Ashram and Sevashram schools, the pupils are also imparted technical training in different crafts like agriculture, carpentry, tailoring, weaving etc., along with general education. Besides, candidates belonging to the Scheduled Tribes and the Scheduled Castes get scope for training in different crafts in the Handicraft Training Centre at Bargaoon and at the Model Foot-Wear Unit, Rourkela.

For the employment of the Scheduled Tribes and the Scheduled Castes in different services 40 per cent (24 per cent for Scheduled Tribes and 16 per cent for Scheduled Castes) of the total vacancy has been reserved and the Government policy in this regard has been communicated to various appointing authorities. The District Employment Committee under the Chairmanship of the Collector reviews the employment position from time to time.

Apart from the general medical facilities available in the district the Tribal & Rural Welfare Department have provided some medical institutions for the benefit of the tribal people of the locality. One six-bedded hospital has been established each at Balisankara and Sorda. A dispensary at Jarda, and an Ayurvedic dispensary at Chungimati have been opened. Besides, a mobile health unit is being maintained at Gundiadihi to serve the remote villages of the area. The Tribal & Rural Welfare Department also provides funds every year for rural water-supply, improvement of village roads and construction of houses for the backward people.

Education
and
Employment

Health and
Sanitation

CHARITABLE
ENDOWMENTSKoira Dis-
pensary
Fund

The Koira Dispensary Fund was created in July, 1955, with a corpus of Rs. 2,600. The Collector, and the Civil Surgeon, Sundargarh, are the joint administrators of the Fund. The income is to be utilised for the improvement of the dispensary building at Koira.

The Treasurer, Charitable Endowments, Orissa, holds properties and securities of the endowment and the income derived from it is periodically disbursed to the persons nominated for administering the funds according to the scheme settled by the Government based on the wishes of the donor.

APPENDIX I

Trade Unions in Sundargarh district

Sl. No.	Name and address of the Union	Member-ship	Affiliation	Name of the Establishment	Date of Registration
1	Barsuan Iron Mine Mazdoor Union, Tensa.	1,465	A. I. T. U. C.	Barsuan Mines of Hindustan Steel Ltd.	26-10-196
2	Cinema Employees Association, Rourkela.	51	..	Cinema Houses of Rourkela.	15-9-1970
3	Gangpur Labour Union, Birmitrapur.	6,361	I. N. T. U. C. and I. N. M. W. F.	Bisra Limestone Quarry, Birmitrapur.	11-9-1948
4	Gomardih Dolomite Mazdoor Union, Jharbeda.	24	..	..	25-6-1969
5	Hindustan Steel Mines Workers Union, Rourkela.	190	U. T. U. C.	Mines owned by Hindustan Steel Ltd., Rourkela.	9-7-1964
6	Hatibari Mazdoor Union, Hatibari.	620	I. N. T. U. C. and I. N. M. F.	Hatibari Limestone Quarry.	30-8-1951
7	Hindustan Steel Workers Association, Rourkela.	12,119	I. N. T. U. C.	Hindustan Steel Limited and Other Industries, Rourkela.	10-9-1959
8	Ispat Sramik Sangha, Rourkela.	5,005	..	Hindustan Steel Limited, Rourkela.	28-10-1970
9	Kansbahal Mazdoor Union, Kansbahal.	837	A. I. T. U. C.	Utkal Machinery Ltd., Kansbahal.	9-8-1966
10	Kalinga Auto Sramik Sangha, Kalinga.	99	..	Kalinga Auto Private Ltd.,	1-8-1969
11	Kansbahal Sramik Sangha, Kansbahal.	523	..	Utkal Machinery Ltd., Kansbahal.	26-3-1970
12	Lanjiberna Sramik Sangha, Lanjiberna.	1,743	I. N. T. U. C.	Lanjiberna Limestone Quarry, Lanjiberna.	11-4-1957
13	Lathikata Refractories Workers Union, Lathikata.	190	..	Orissa Industries Ltd., Lathikata.	12-2-1963
14	North Orissa Workers Union, Rourkela.	2,777	..	Iron Mines of Hindustan Steel Ltd.	28-3-1955
15	Orissa State Electricity Board Employees Union, Rajgangpur.	550	..	Orissa State Electricity Board.	20-1-1971

APPENDIX I—continued

Sl. No.	Name and address of the Union	Member-ship	Affiliation	Name of the Establishment	Date of Registration
16	Orissa Cement Mazdoor Sangha, Rajgangpur.	1,195	H. M. S.	Orissa Cement Ltd., Rajgangpur.	12-6-1952
17	Orissa Cement Workers Union, Rajgangpur.	1,163	..	Orissa Cement Ltd., Rajgangpur.	12-9-1970
18	Panposh Mazdoor Union, Panposh.	565	I. N. T. U. C. and I. N. M. F.	Dolomite Quarry, Panposh.	6-11-1954
19	Rourkela Mazdoor Sabha, Rourkela.	4,693	M. M. S.	Hindustan Steel Ltd., Rourkela.	16-12-1955
20	Rourkela Workers Union, Rourkela.	1,863	U. T. U. C.	Ditto ..	23-5-1957
21	Rourkela Steel Mazdoor Union, Rourkela.	2,166	A. I. T. U. C.	Ditto ..	3-11-1958
22	Refractory Employe e s' Association.	247	..	Orissa Industries Ltd., Lathikata.	30-7-1963
23	Rajgangpur Sramik Sangha, Rajgangpur.	228	..	Orissa Cement Ltd., Rajgangpur.	20-8-1965
24	Rourkela Ispat Karakhana Karmachari Sangha.	1,265	..	Hindustan Steel Ltd., Rourkela.	6-1-1971
25	Rourkela Sramika Congress, Rourkela.	2,756	..	Hindustan Steel Ltd., Rourkela.	23-7-1971
26	Sundargarh Mining Workers Union, Purnapani.	81	..	Mines of Purnapani Area.	17-6-1963
27	Steel Employees Trade Union, Rourkela.	2,000	..	Ditto ..	1-9-1971

APPENDIX II

Excise shops and consumption of Liquor, Ganja and Bhang

Year	Country Outstill Liquor		Foreign Liquor		Ganja		Bhang		Tari
	No. of Shops	Consumption (in L. P. Litres)	No. of Shops	Consumption (in L. P. Litres)	No. of Shops	Consumption (in kg.)	No. of Shops	Consumption (in kg.)	
1967-68	..	8,75,940	13	13,135 (Spirit) 91,260 (Beer)	22	521	12	20	31
1968-69	..	9,61,203	13	16,140 (Spirit) 1,05,253 (Beer)	25	675	14	17	..
1969-70	..	9,60,305	18	16,084 (Spirit) 1,01,986 (Beer)	24	652	13	21	..
1970-71	..	9,69,328	18	16,787 (Spirit) 88,493 (Beer)	24	582	13	7	..
1971-72	..	11,11,879	21	18,886 (Spirit) 73,716 (Beer)	24	567	13	15	..

Source—Office of the Superintendent of Excise, Sundargarh

CHAPTER XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

REPRESENTATION OF THE DISTRICT IN THE STATE AND THE UNION LEGISLATURES

The Sundargarh district had one single-member Parliamentary constituency in the General Elections of 1952, 1957, 1962, 1967 and 1972.

As regards the State Legislature the district had one double-member and three single-member constituencies in 1952 and 1957. At the time of the Mid-term Elections of 1961, the Sundargarh double-member constituency was bifurcated into single-member constituencies, viz., Sundargarh and Talsara, as a result of which the number of single-member constituencies increased from three to five. A separate constituency for Rourkela was created in 1967. At present the district has six representatives in the Vidhan Sabha (State Legislative Assembly) and one in the Lok Sabha (Union Parliament).

Delimitation of Parliamentary and Assembly Constituencies

The details of the territorial extent of the Parliamentary and Assembly constituencies are given below*:

Serial No.	Name of the Constituency	Extent in terms of Parliamentary/Assembly Constituencies
Parliamentary Constituency		
1	Sundargarh	.. Laikera, Sundargarh, Talsara, Rajgangpur, Bisra, Rourkela and Bonai.
Assembly Constituencies		
1	Laikera**	.. Laikera police station (excluding Kirmira, Arda and Parmanpur Gram Panchayats) in Sadar subdivision; Govindpur and Mahulpali police stations, and Satkama and Paruavadi Grama Panchayat in Kuchinda police station in Kuchinda subdivision.
2	Sundargarh	.. Hemgir police station, Lefripara police station (excluding Gundiadihi and Dumbahal Grama Panchayats), Bhasma police station (excluding Birbira Gram Panchayat) and Sundargarh police station [excluding

*The Orissa Gazette, Extraordinary, No. 1503, Cuttack, Monday, September 27, 1965, p. 3 & pp. 13-14.

**Laikera Assembly constituency is in Sambalpur district. But for Parliamentary election this constituency is included in Sundargarh Parliamentary constituency.

Serial No. Name of the Constituency

Extent in terms of Parliamentary/Assembly Constituencies

		.. Rajpur, Karamdihi, Patrapalli (san) and part of Kinjirkela Grama Panchayats in Sundargarh subdivision.
3	Talsara	.. Talsara police station, Gundiadihi and Dumbahal Grama Panchayats in Lefripara police station, Rajpur, Karamdihi, Patrapalli (san) and part of Kinjirkela Grama Panchayats in Sundargarh police station, Birbira Grama Panchayat in Bhasma police station and Bargaon police station (excluding Panchra and Biringtoli Grama Panchayats) in Sundargarh subdivision.
4	Rajgangpur	.. Rajgangpur police station, and Panchra and Biringtoli Grama Panchayats in Bargaon police station in Sundargarh sub-division; Raiboga police station and Kalunga Grama Panchayat in Raghunathpali police station in Panposh subdivision.
5	Bisra	.. Bisra and Birmitrapur police stations in Panposh subdivision.
6	Rourkela	.. Raghunathpali police station (excluding Kalunga Grama Panchayat) and Rourkela and Plant Site police stations in Panposh subdivision; and Banki police station in Bonai subdivision.
7	Bonai	.. Bonai subdivision (excluding Banki police station).

The Congress, the Ganatantra Parishad (merged with the Swatantra Party in 1967) and the Jharkhanda are the major political parties in Sundargarh district. Analysis of the election results of 1952, 1957, 1961, 1962, 1967 and 1971 shows the relative hold of the political parties in the district.

POLITICAL PARTIES AND ORGANISATIONS

First General
Election,
1952

After two hundred years of foreign rule India achieved her Independence on the 15th August, 1947, and the new constitution came into force on January 26, 1950. Under the provisions of article 326 and 325 of the constitution every adult Indian citizen is entitled to take part in the election. The citizens of Orissa have exercised their franchise in the past five General Elections, both for the Lok Sabha and the Vidhan Sabha, since our constitution came into force. In Orissa first General Election was held from the 3rd to the 25th January, 1952.

Vidhan
Sabha
(Legislative
Assembly)

The district was divided into 4 constituencies for the first General Election to the Vidhan Sabha. Of these Sundargarh was a double-member constituency and the other three, namely, Rajgangpur, Bisra and Bonai were single-member constituencies. In Sundargarh double member constituency one seat was general and the other was reserved for the Scheduled Tribes. Rajgangpur, Bisra, and Bonai were reserved constituencies for the Scheduled Tribes.

In 1952 General Elections, besides independent candidates, three political parties, viz., the Congress, the Socialist Party and the Ganatantra Parishad contested the election. Of these the Congress and the Socialist Party were affiliated to their respective all-India bodies whereas the Ganatantra Parishad was of local origin.

The number of candidates set up, the number of seats won and the number of valid votes polled by the candidates set up by different parties in the district were as follows :

Name of parties	No. of candidates set up	No. of seats won	No. of valid votes polled
Congress ..	5	3	81,361
Socialist Party ..	3	Nil	5,431
Ganatantra Parishad ..	4	2	54,337
Independent ..	9	Nil	50,574
Total ..	21	5	1,91,703

Out of 1,91,703 valid votes polled more than 40 per cent went in favour of the Congress, indicating the stronghold of the Congress in the district.

The following table indicates at a glance the picture of the General Election held in the district in the year 1952.*

Name of Constituencies	No. of seats	No. of persons con- tested	No. of elec- tors	Total No. of votes	Total No. of valid votes polled	Percen- tage of col. 6 to col. 5	Successful party
1	2	3	4	5	6	7	8
Sundargarh ..	2	10	1,23,170	2,46,340	1,03,795	42.13	Congress & Ganatantra Parishad
Rajgangpur ..	1	4	49,794	49,794	29,555	59.35	Congress
Bisra ..	1	4	58,473	58,473	39,877	68.19	Congress
Bonai ..	1	3	55,347	55,347	18,478	33.38	Ganatantra Parishad
Total ..	5	21	2,86,784	4,09,954	1,91,705	46.76	

In the first General Elections, 1952, there was one single-member Lok Sabha Parliamentary constituency in Sundargarh district. The political parties which contested for that seat were the Congress and the Ganatantra Parishad. (Parliament)

The number of votes polled by the candidates set up by different parties for the Lok Sabha was as follows :—

Name of parties	Total number of votes polled
Congress ..	74,062
Ganatantra Parishad ..	68,724
Independents ..	36,948

In the contest, the Congress won the election by securing 74,062 votes, that is, 41 per cent of the total valid votes polled in the Sundargarh Parliamentary Constituency.

The total number of electors in the Parliamentary Constituency during the first General Elections was 3,89,204 and the total number of valid votes polled was 1,79,734. The percentage of voting for the Parliamentary seat was 46.17.

This election was held between the period from the 24th February to the 14th March, 1957.

Second
General
Elections,
1957

*Report on the First General Elections in India 1951-52, Vol. II (Statistical), pp. 414-415 and pp. 60-61.

Vidhan
Sabha
(Legislative
Assembly)

For the purpose of the Second General Elections, the district was divided into 4 Assembly Constituencies, namely, Sundargarh, Rajgangpur, Bisra and Bonai. Of these Sundargarh was a double-member constituency and the rest three were single-member constituencies. One of the seats in the double-member constituency and all single-member constituencies of the district were reserved seat constituencies for Scheduled Tribes.

In 1957 General Elections, three political parties contested the elections besides Independent candidates. The parties were the Congress, the Praja Socialist Party and the Ganatantra Parishad.

The number of candidates set up, number of seats won and number of valid votes polled by the candidates set up by different parties in the district were as follows :—

Name of parties	No. of candidates set up	No. of seats won	No. of valid votes polled
Congress ..	5	Nil	53,575
Praja Socialist Party ..	2	Nil	4,216
Ganatantra Parishad ..	5	3	1,07,752
Independents ..	7	2	48,057
Total ..	19	5	2,13,600

The figures of valid votes polled show the popularity of the Ganatantra Parishad in the district.

The following table gives further details of the General Elections held in the district in 1957.*

General Elections, 1957	Name of Constituency	No. of seats	No. of persons contested	No. of electors	Total No. of votes	Total No. of valid votes polled	Percentage of column 6 to col. 5	Successful party
	1	2	3	4	5	6	7	8
	Sundargarh ..	2	6	1,25,759	2,51,518	1,37,075	54.48	Ganatantra Parishad won both the seats.
	Rajgangpur ..	1	5	54,079	54,079	25,031	46.28	Independent
	Bisra ..	1	4	62,706	62,706	32,546	51.90	Independent
	Bonai ..	1	4	56,534	56,534	18,948	33.51	Ganatantra Parishad
	Total ..	5	19	2,99,078	4,24,837	2,13,600	50.27	

*Report on the Second General Elections in India, 1957, Vol. II (Statistical), pp. 170-171 and pp. 78-879.

The strength of the electorate for the elections was 2,99,078 and the total number of valid votes polled was 2,13,600. The percentage of votes polled was 50.27, thus registering an increase of 3.51 per cent over the elections of 1952.

In 1957, there was one single-member Parliamentary Constituency in the district. The seat was reserved for a member of the Scheduled Tribes. Two organised political parties, viz., the Congress and the Ganatantra Parishad and non-party or Independent candidates contested the elections.

The number of votes polled was as follows :—

Name of parties	Total number of votes polled
Congress ..	51,204
Ganatantra Parishad ..	87,759
Independents ..	47,600

In a triangular contest, the Ganatantra Parishad won the election by capturing 87,759 votes, that is, 47.05 per cent of the total valid votes polled in this Parliamentary Constituency. This time the Congress lost Sundargarh Parliamentary seat won in 1952, to Ganatantra Parishad.

The number of electors for the elections was 4,11,340 and the total number of valid votes polled was 1,86,563. The percentage of voting for the Parliamentary seat was 45.35.

The Second General Elections were over by the end of March, 1957. The Third General Election, in normal course, would have been held in February-March, 1962. But in consequence of the promulgation of the President's rule the State Legislative Assembly was dissolved with effect from the 25th February, 1961, and Mid-term Election was held from the 2nd to the 8th June 1961.

In 1952 and 1957 General Elections, Sundargarh was a double-member constituency but in the elections of 1961 the double-member constituencies were abolished and the concerned constituencies were bifurcated. Thus in the Mid-term Election the number of Assembly constituencies in the district was increased from four to five, each constituency returning one candidate. Out of five constituencies, Talsara, Rajgangpur, Bisra and Bonai were reserved constituencies for the Scheduled Tribes and Sundargarh became a general seat constituency. The political parties which participated in the mid-term elections were the Congress, the Praja Socialist Party and the Ganatantra Parishad. Non-party or Independent candidates also contested.

Lok Sabha
(Parliament)

Mid-term
Elections,
1961.
Vidhan
Sabha
(Legislative
Assembly)

The number of candidates set up, number of seats won and number of valid votes polled by the candidates set up by different parties for the State Legislative Assembly were as follows :—

Name of parties	No. of candidates set up	No. of seats won	No. of valid votes polled
Congress ..	5	1	28,254
Praja Socialist Party ..	2	Nil	2,134
Ganatantra Parishad ..	5	4	51,077
Independents ..	12	Nil	31,006
Total ..	24	5	1,12,471

The Ganatantra Parishad continued to be the major political party although it did not have the same amount of success as in the General Elections of 1957.

Mid-Term
General
Elections,
1961

The following table gives further details of the Mid-term Elections held in 1961.*

Name of Constituency	No. of seats	No. of persons contested	No. of electors	Total votes polled	Percentage of col. 5 to col. 4	Total valid votes polled	Percentage of col. 7 to col. 4	Party won
1	2	3	4	5	6	7	8	9
Sundargarh	1	5	66,799	27,485	37.48	25,034	37.47	Ganatantra Parishad.
Talsara	1	4	67,491	27,260	35.83	24,183	35.83	Ditto
Rajgangpur	1	7	54,526	21,801	39.98	20,262	37.16	Congress
Bisra	1	5	67,777	27,471	40.53	25,154	37.11	Ganatantra Parishad
Bonai	1	3	58,707	19,249	32.79	17,838	30.38	Ditto
Total	5	24	315,300	123,266	39.09	112,471	35.67	

The strength of the electorate was 3,15,300 of whom 1,12,471 or 35.67 per cent voters exercised their franchise. The voting percentage was considerably less than in the previous elections.

Lok Sabha
(Parliament)
Elections,
1962

The district had one Parliamentary single-member constituency in the Lok Sabha Elections of 1962. The seat was reserved for the Scheduled Tribes. Two political parties and two non-party Independent candidates contested the elections.

*Government of Orissa, Home (Elections) Department.

The number of votes polled by the candidates set up by different parties for the Parliamentary seat was as follows :—

Name of parties	Total number of votes polled
Congress ..	44,784
Ganatantra Parishad ..	50,859
Independents ..	19,741

The Parliamentary seat was retained by the Ganatantra Parishad. The party captured 50,859 votes, that is, 44.07 per cent of the total valid votes polled in the Parliamentary Constituency.

The total number of electors was 4,76,109 and the total number of valid votes polled in this General Elections was 1,15,384 which was 24.23 per cent of the total number of electorate. The percentage of voting was much lower than the 1952 and 1957 elections.

In the General Elections of 1967, the poll was completed in one day, that is, on the 21st February, 1967.

General
Elections,
1967

For the purpose of this Fourth General Elections, this district was divided into six Assembly Constituencies, that is, Sundargarh, Talsara, Rajgangpur, Bisra, Rourkela and Bonai. Of these Talsara, Rajgangpur, Bisra and Bonai were reserved seat constituencies for Scheduled Tribes. The other constituencies, namely, Sundargarh and Rourkela were general seat constituencies.

Vidhan
Sabha
(Legislative
Assembly)

In the General Elections of 1967 as many as seven political parties contested the elections besides 13 Independent candidates. The parties were the Congress, the Communist, the Janasangha, the Jharkhanda, the Praja Socialist, the Swatantra, and the Socialist Unity Centre of India.

The number of candidates set up, number of seats won and number of valid votes polled by the candidates set up by different parties in the district were as follows :—

Name of parties	No. of candidates set up	No. of seats won	No. of valid votes polled
Congress ..	6	Nil	44,931
Communist ..	1	Nil	897
Jana Sangha ..	3	Nil	5,840
Jharkhanda ..	4	Nil	5,482
Praja Socialist ..	2	1	16,751
S. U. C. I. ..	1	Nil	3,141
Swatantra ..	6	5	70,036
Independents ..	13	Nil	27,007
Total ..	36	6	1,74,085

In all, 36 candidates contested for six Assembly seats. In the contests, the Swatantra Party captured five seats and one went to the Praja Socialist Party. Out of 1,74,085 valid votes polled the Swatantra Party secured 70,036 or 40.23 per cent of the total valid votes, indicating a considerable hold of this party in Sundargarh district.

General
Elections
1967

The following table gives further information concerning the Fourth General Elections held in 1967*.

Name of Constituencies	No. of seats	No. of persons contested	No. of electors	Total votes polled	Percentage of col. 5 to col. 4	Total valid votes polled	Percentage of col. 7 to col. 4	Party won
1	2	3	4	5	6	7	8	9
Sundargarh	1	7	70,552	35,232	49.93	31,542	44.70	Swatantra
Talsara	1	4	70,168	35,002	49.88	31,351	44.67	Do.
Rajgangpur	1	7	62,146	29,364	47.25	26,589	42.78	Do.
Bisra	1	6	58,075	28,539	49.14	25,677	44.21	Do.
Rourkela	1	9	86,254	41,587	48.21	39,263	45.52	Praja Socialist Party
Bonai	1	3	63,617	20,541	33.86	19,663	30.90	Swatantra
	6	36	410,812	191,265	46.55	174,085	42.37	

The total strength of the electorate was 4,10,812 of whom 1,74,085 voters exercised their franchise, the percentage of voting being 42.37, appreciably higher than the previous one.

Lok Sabha
(Parliament)

In the Fourth General Election, 1967, there was one Parliamentary Constituency in Sundargarh district, i.e., Sundargarh Parliamentary constituency. This constituency included Laikera Assembly constituency of Sambalpur district and six Assembly constituencies of Sundargarh district. The seat was reserved for Scheduled Tribes. The parties which contested for the seat were the Congress and the Swatantra.

The number of votes polled by the candidates set up by different parties for Parliamentary seat was as follows:—

Name of parties	Total number of votes polled
Congress	60,454
Swatantra	1,05,272
Independent	36,371

In the contest, the Swatantra Party won the election by capturing 1,05,272 votes, that is, 52.08 per cent of the total valid votes polled in the Sundargarh Parliamentary Constituency.

* One day Poll in Orissa, 1967, p. 134.

The number of electors for the election was 4,78,738 and the number of valid votes polled was 2,02,097 which works out to be 42.21 per cent of the total electorate of the Parliamentary constituency. This percentage shows a definite improvement over the corresponding percentage relating to 1962 Lok Sabha election.

For the second time, the State of Orissa faced mid-term election on the 5th March, 1971. The Vidhan Sabha and Lok Sabha elections were held on that day.

Mid-term
Elections
1971

Like the Fourth General Election, the district was divided into six Assembly Constituencies which included Talsara, Rajgangpur, Bisra and Bonai reserved seat constituencies for Scheduled Tribes. The other constituencies, namely, Sundargarh and Rourkela, were general seat constituencies.

Vidhan
Sabha
(Legislative
Assembly)

In the mid-term elections of 1971, 12 political parties contested the election with non-party Independent candidates. The political parties which participated in the election were the Congress (led by Jagjivan Ram), the Congress (led by Nijalingappa), the Swatantra, Jharkhanda, Praja Socialist Party, Bharatiya Janasangha, Socialist Unit Centre of India (S. U. C. I.), Communist Party, Communist Party (Marxist), Samyukta Socialist Party, Jana Congress and Utkal Congress. Excepting the last two, all other political parties had their affiliations with the all-India bodies.

The number of candidates set up, number of seats won and number of valid votes polled by the candidates set up by different parties in the district were as follows:—

Name of parties	No. of Candidates	No. of seats won	No. of valid votes polled
Congress	6	2	52,014
Congress (N)	1	Nil	3,606
Communist	1	Nil	1,601
Communist (M)	1	Nil	1,446
Jana Sangha	3	Nil	4,930
Jharkhand	5	2	35,082
Praja Socialist Party	3	Nil	7,144
Samyukta Socialist Party	2	Nil	430
Swatantra	6	2	39,275
S. U. C. I.	1	Nil	2,093
Jana Congress	1	Nil	448
Utkal Congress	6	Nil	15,262
Independents	8	Nil	6,915
Total	44	6	1,70,246

In all, 44 candidates contested for six Assembly seats. In the multi-cornered contest, the Congress (J.), the Swatantra, and the Jharkhand captured two seats each. The growing strength of the opposition parties will be evident from the statistics.

The following table gives a detailed account in respect of the mid-term elections held in 1971*.

Name of Constituencies	No. of seats	No. of persons contested	No. of electors	Total votes polled	Percentage of col. 5 to col. 4	Total valid votes Polled	Percentage of col. 7 to col. 4	Party won
1	2	3	4	5	6	7	8	9
Sundargarh	1	6	74,306	34,259	46.10	31,627	42.56	Congress (J)
Talsara	1	5	72,762	31,855	43.77	29,901	41.09	Swatantra
Rajgangpur	1	7	67,639	30,023	44.38	27,485	40.63	Jharkhand
Bisra	1	8	62,845	24,684	39.28	22,919	36.46	Jharkhand
Rourkela	1	13	1,05,764	44,240	41.82	40,788	38.56	Congress (J)
Bonai	1	5	67,787	18,914	27.90	17,526	28.85	Swatantra
Total	6	44	451,103	183,975	40.78	170,246	37.73	

The strength of voters was 4,51,103 of whom 1,70,246 or 37.73 per cent of the voters went to the polls. This time the voting was 4.64 per cent less than 1967 General Elections.

Lok Sabha
(Parliament)

In 1971, there was one Parliamentary single-member constituency in this district, that is, Sundargarh Parliamentary Constituency. It included Laikera Assembly constituency of Sambalpur district and six Assembly constituencies of Sundargarh district. This Parliamentary constituency was reserved for the Scheduled Tribes.

In the mid-term election of 1971, five political parties, viz., the Congress (J), the Praja Socialist Party, the Utkal Congress, the Swatantra, and the Jharkhand entered the field and contested the election.

* Government of Orissa, Home (Elections) Department.

The number of votes polled by the candidates set up by different parties for Parliamentary seat was as follows:—

Name of parties	Total number of votes polled
Congress (J)	68,285
Praja Socialist Party	11,438
Utkal Congress	26,510
Swatantra	50,306
Jharkhand	38,375

In the multi-cornered contest, Congress led by Jagajivan Ram won the election by securing 68,285 votes or 35.03 per cent of the total valid votes polled in the Parliamentary Constituency. The total electorate in the Parliamentary Constituency of Sundargarh was 5,22,648. The total number of valid votes polled was 1,94,914. The percentage of voting for Parliamentary seat was 37.29.

In the mid-term General Elections of 1971, the candidate of the Indian National Congress led by Shri Jagajivan Ram was declared elected to the Assembly from Rourkela Assembly constituency, and the same candidate was also simultaneously elected to Parliament from Balasore Parliamentary constituency. As the candidate resigned from the Rourkela Assembly Constituency in preference to the Balasore Parliamentary constituency, a by-election was held at Rourkela on September 29, 1971, for the State Legislative Assembly.

By-Elections,
1971

Unlike other elections, in this by-election there was a straight fight between the Congress led by D. Sanjivaya and the Independent candidates as there was no other party contesting the election. In all, 7 candidates, of which 6 were Independents, contested the election. The election was won by an Independent candidate who defeated his nearest rival the Congress candidate by a margin of 1,852 votes.

The strength of the electorate was 1,00,639. The number of persons who voted at the by-election was 52,826 (35,278 males and 17,548 females) which was 52.49 per cent of the total number of voters in the constituency.

There were in all 70 polling stations in the district during the first general elections held in 1952. The number of polling stations was increased in subsequent elections with a view to affording more facilities to the voters to cast their votes. As against 370 polling stations set up during 1967, 518 polling stations were set up for 1971 mid-term election. The number of voters compared to 1967 election had also gone up by over 35 thousand.

Polling
Stations

The following table indicates the number of polling stations located in each of the Assembly constituencies in the district for the General Elections of 1952, General Elections of 1957, Mid-term Elections of 1961, General Elections of 1967 and Mid-term Elections of 1971*.

Name of Assembly Constituencies	Number of Polling stations				
	1952 General Elections	1957 General Elections	1961 Mid- term Elections	1967 General Elections	1971 Mid- term Elections
1	2	3	4	5	6
Sundargarh ..	36	104	67	62	88
Talsara ..	..	..	68	63	87
Rajgangpur ..	16	45	54	56	76
Bisra ..	18**	46	66	53	71
Bonai ..		52	57	61	85
Rourkela ..	..	..	..	75	111
Total Polling Stations	70	247	312	370	518

There were five Assembly Constituencies in Sundargarh district during 1961 mid-term elections. Rourkela Assembly Constituency was created according to the delimitation order No. 12 of 1966.

NEWSPAPERS AND PERIODICALS

At present no daily newspaper is being published in Sundargarh district.

Of the English newspapers circulating in this district, the *Statesman*, the *Amrita Bazar Patrika*, and the *Hindusthan Standard of Calcutta* and the *Times of India* of Delhi are popular among the English knowing readers. Among the English periodicals, the *Blitz*, the *Current*, and the *Illustrated Weekly* of Bombay and the *Shanker's Weekly* of Delhi are in circulation in the district and influence public opinion. Owing to the industrialisation of the district and the cosmopolitan nature of its population, the circulation of English newspapers and periodicals has been increasing since 1956.

Among the papers in Hindi, the *Nav Bharat Times* and the *Dharma-yug* are widely read by the Hindi knowing population.

* Government of Orissa, Home (Elections) Department, Bhubaneswar.

** Separate figures for Bisra and Bonai Constituencies were not available.

The Bengali daily newspapers, namely, the *Ananda Bazar Patrika* and the *Yugantar* have a good circulation in this district. The Bengali Weekly *Desh* is also popular among the Bengali speaking people.

The Urdu reading public largely depends for its daily news on *Pratap* of Delhi, *Sangam* and *Sathi* of Patna, and *Azad Hind* of Calcutta.

Some Punjabi and South Indian Language papers are also seen in this district.

Scientific periodicals, namely, *Science Reporter*, published by the Council of Scientific and Industrial Research, New Delhi, and *Science Today*, a Times of India publication, are popular among the people interested in Science.

Besides the above mentioned papers and periodicals, film magazines published in Calcutta, Bombay and Madras continue to be popular in all the urban areas of the district.

Among the Oriya dailies, the *Samaja*, the *Prajananta*, the *Matrubhumi*, the *Kalinga* (the publication has now been stopped) all published from Cuttack and the *Swarajya*, published from Bhubaneswar, are widely read.

The *Eastern Times*, an English Weekly published by the Prajananta Prachara Samity, Cuttack, and edited by Dr. H. K. Mahatab has a fair circulation in the district.

The Hindustan Steel Limited, Rourkela, has published three house magazines, namely, *Rourkela Samachar* (Oriya monthly), *Rourkela News* (English monthly), and *Sahayoga* (fortnightly in Oriya, Hindi and English). Of the three periodicals, the *Rourkela News* started publication in 1961 and has a circulation of about 3,000 copies. The *Rourkela Samachara*, started in 1964, claims to have a circulation of 2,500 copies. The object of these two periodicals is to project the image of the company and the achievements of the employees in different directions. From September, 1970, the Hindustan Steel Limited started the publication of *Sahayoga*, a fortnightly house magazine, both in English and Oriya. The Hindi edition of the *Sahayoga* appeared in July, 1971, and has a circulation of about 5,000 copies. But the English and the Oriya edition of this magazine claim to have a joint circulation of 15,000 copies. The object of the magazine is to establish a two-way communication between the management and the employees. It also helps in keeping the employees informed of the company policies, practices, management objectives, plans, problems, achievements and failures of the company and about the rules and regulations.

All the three house magazines published by Hindustan Steel Limited are printed in the Ispat Press of the Hindustan Steel Limited and are freely distributed among the employees of the company.

The Utkal Machinery Limited, Kansbahal, is publishing a house magazine called *Kansbahal Khabar* on the first of each month. This house magazine is circulated among all the employees of the said company free of cost. It is published both in English and Oriya.

On October, 1971, an English weekly called the *Steel Express* started being published from Janata Press, Rourkela. At present the paper has limited circulation in the district. The paper publishes mainly news and views of the district. Among the Oriya news weeklies the *Abhas* started publication in 1967 and is continuing. It publishes news and current affairs. The other weekly, *Ispat*, which made its debut in 1969 did not last long. The *Rourkela Dak*, an Oriya fortnightly, appeared in 1959 but has now ceased publication. A literary and cultural monthly in Oriya called the *Abhimukhya* was started from Rourkela in 1969, but was short lived. In 1959, the *Rourkela Review*, an English monthly, started publication from Rourkela, but it could not continue for long. From Rourkela, an Oriya literary quarterly, called the *Nabapatra* came out in the year 1962.

Besides the above newspapers and periodicals, most of the educational institutions in the district bring out their own magazines to promote creative thinking among the Students and the Staff.

Voluntary Social Service Organisations There are a number of voluntary social service organisations in Sundargarh district. A brief account of some of these organisations are given below.

Lions Club In Sundargarh district, there are two Lions Clubs, one at Rajgangpur and the other at Rourkela. The Lions Club of Rajgangpur was inaugurated by the International delegate Lion Rusi B. Gimi on the 10th October 1961. The Club which has been affiliated to the Lions International, was given its charter by the District Governor Lion Major G. S. Grewal on the 10th August 1962.

The main purpose of the club is to promote international understanding and to render selfless service to the underprivileged, handicapped and the unfortunate, not as charity, but as a social and moral responsibility.

The Lions Clubs of India, Burma, Ceylon, and Nepal are governed by a Multiple District Council which consists of 10 District Governors as its members, duly elected by the various Lions Clubs in the area every

year. There is a South-Western Asian Secretariat at Bombay for administering the various Lions Clubs in this region.

The Lions Clubs at various places operate as individual units even though they are affiliated to the Lions International. This Club at Rajgangpur is managed by a President, 3 Vice-Presidents, a Secretary, a Treasurer, 4 Directors, a Tamer, and a Tail-twister. There were 47 members in the Rajgangpur Lions Club in 1971. A nominal monthly subscription which is raised from the members is utilised for administrative purpose. For service projects, normally the Lion members raise funds from the general public by organising charity shows which are exclusively utilised for the service of the poorer section of the community.

Among the major activities sponsored by the Lions Club of Rajgangpur, mention may be made of the following:

1. Free Eye Relief camp at Rajgangpur and at other places of Sundargarh district.
2. Adult education at Ranibandha.
3. Agricultural Project at Lanjiberna.
4. Embroidery School at Rajgangpur.
5. Construction of Passenger's shelter at the local bus stand.
6. Under rural development programme this club has provided (a) drinking water wells (b) irrigation wells for vegetable cultivators (c) medical benefits and (d) educational facilities.
7. Addition of Jersey and Hariyana cows to the dairy farm of Rajgangpur.
8. Opening of Bee-rearing Project at Rajgangpur.
9. Staging of dramas to popularise family planning.
10. Organising lectures on Yoga Ashan.
11. Arranging anti-polio treatment for children.

There is a branch of the Indian Red Cross Society at Sundargarh. The district branch of the society which has been constituted under provisions of the Indian Red Cross Society Act XV of 1920, is functioning with effect from the date of the merger of the ex-States, i. e., 1st January 1948.

Prevention of disease, improvement of health, and mitigation of human sufferings caused by flood, famine, cyclone, fire, etc., are the aims and objects of the society.

The district branch of the Indian Red Cross Society is managed by two committees—the General Body Committee and the Executive Committee. All the members of the Indian Red Cross Society who have been duly

Indian Red
Cross
Society

enrolled on payment of membership fees, constitute the General Body. The General Body elects members to the Executive Committee. The Executive Committee of the society manages the affairs of the district branch. The existing committee comprises :

- | | |
|--------------------------------------|---|
| (a) Chairman | District Magistrate (Ex-Officio) |
| (b) Vice-Chairman | Chief District Medical Officer (Ex-Officio). |
| (c) Honorary Secretary and Treasurer | Subdivisional Officer, Sadar Sub-division, Sundargarh. |
| (d) Members | Seven members duly elected by the General Body including two M. L. As and the District Health Officers. |
| (e) Co-opted Members | District Public Relations Officer. |

For financial resources, the District Branch of the Indian Red Cross Society mainly depends on :

- (a) Membership subscription,
- (b) Donations and contributions,
- (c) Interest on investments, and
- (d) Grants-in-aid received from the State Branch, and other sources.

Funds raised by the Society are spent for :

- (a) Maternity and child welfare services,
- (b) Management of Blood Banks,
- (c) Promoting the activities of Junior Red Cross,
- (d) Nursing and ambulance association work,
- (e) Relief in natural calamities, and
- (f) Such other cognate objects as approved by the Executive Committee of the District Branch.

This society has also established a Blood Bank at Sundargarh out of the resources of the District Branch on December 8, 1969. The Blood Bank is managed under the supervision of the Director, Red Cross Central Blood Bank, Cuttack. The blood which is collected at this Blood Bank meets the needs of the hospitals in the district and the surplus is sent to Cuttack for disposal at the Central Blood Bank of the State Red Cross Society. One six bedded ward at Bilimunda dispensary is under construction with the donations of the public through the Indian Red Cross Society District Branch.

The Rotary Club of Rourkela was formed in 1957. Like all other Rotary Clubs in the world, this club is also affiliated with the "Rotary International", a truly international service organisation, with headquarters at Evanston, Illinois, USA. Rotary Club

The Rotary Clubs of Orissa, Bihar and a part of Madhya Pradesh are attached to International district number 326 and are placed under the supervision and guidance of a District Governor. The District Governor is elected annually by the votes of the Clubs under his jurisdiction, while the office-bearers of a club are elected every year by the votes of the members of that club.

The Rotary Club of Rourkela has the following office-bearers, all of whom are honorary : a President, a Vice-President, four Directors, a Secretary and a Treasurer. They form a Board of Directors and the Board is responsible for the management of the club.

The entire financial resources are raised by the members themselves by their admission fees and annual subscriptions, which amount annually to about Rs. 180 per member in this club. These rates of admission and annual fees vary from club to club and in bigger cities like Bombay or Calcutta the rates are higher. There are about 40 members in the Rotary Club of Rourkela in 1972.

The purpose of this club, like all other Rotary Clubs, is to translate the objectives of the club into action. The objectives of Rotary Club are to foster (i) the development of acquaintance as an opportunity for service; (ii) high ethical standards in business and professions; (iii) the application of the ideal to each Rotarian's personal, business and community life, and (iv) the advancement of international good will and peace through a world fellowship of business and professional men united in the ideal of service.

About community service, which this club has already done or is doing, it may be mentioned that the club—

- (1) established a village hospital and dispensary at Katapali, 45 miles away from Rourkela, in an undeveloped area ;
- (2) established an adult education centre at Kharaberia, 4 miles from Rourkela ;
- (3) sent a student to Germany for higher education with the help of funds placed at the disposal of the club for this purpose by a German firm ;
- (4) donated a push-trolley to the Ispat General Hospital at Rourkela for transporting dead bodies of poor patients to the burning ghat; paid Rs. 500 to the Poor Fund of this Hospital and also donated a Radio for the patients ;

- (5) donated Rs. 1,000 for flood relief in Orissa in 1960,
- (6) donated Rs. 1,001 for the Prime Minister's Defence Fund in 1962 ;
- (7) Rotarians personally collected Rs. 3,000 for the construction of a College at Sundargarh ;
- (8) presented a collection of birds to the local Indira Gandhi Park for the benefit of visiting children ;
- (9) dug a deep well at a neighbouring village which needed it badly ;
- (10) built a bus stand in old Rourkela for the bus passengers ;
- (11) sent a poor blind boy to West Germany in 1970 for an eye operation, the expenses being borne entirely by the Club ;
- (12) is bearing examination fees for a few poor but brilliant students ;
- (13) is running a Book Bank for the poor but meritorious students of a local school ;
- (14) contributing for some years jointly with the Shanti Sena Organisation to the maintenance of a children's school at Rourkela called Binobha Bhawe Sishu Vidyalaya;
- (15) has been making arrangements for several years for free Triple Antigen injections for the children of neighbouring areas.

CARE

CARE stands for co-operative for American Relief Everywhere. It started providing food stuff in Sundargarh district from September 1965 under Nutrition Programme. At present the school programme covering primary school children between the age group 6—12 in I to V standards is functioning in 1,064 primary schools with 40,000 children. Besides, a special Nutrition Programme financed by the Government of India and administered by the Government of Orissa is also functioning in 327 Mahila Samities with 34,000 beneficiaries in all the 17 blocks of the district. The beneficiaries under this programme are pre-school children between the age group 0—5, and pregnant and nursing mothers. At the request of the State Government, small Nutrition Programmes have also been functioning in 6 Mahila Samities and 2 Maternity and Child Health Centres with a total number of 260 beneficiaries. For all these programmes, CARE supplies the required amount of food stuffs.

UNICEF

The word UNICEF stands for United Nations International Children's Emergency Fund. The headquarters of this organisation is at Newyork, U. S. A. UNICEF assistance to Sundargarh district was first furnished in 1958 to Majhapara Primary Health Centre. This Orga-

nisation has provided equipment, instruments, medicine, nutritional diet, utensils, vehicles and books to the Primary Health Centres at Majhapara, Gurundia, Kuarmunda, Sargipali, Bisra, Kutra, Lahunipara, Hemgir, Laing and Koira ; the Subdivisional Hospital, Bonai ; and the District T. B. Centre, Sundargarh. A number of nurses and auxiliary nurse-midwives were trained in the District Headquarters Hospital, Sundargarh, and the Ispat General Hospital, Rourkela, during the year 1971 with UNICEF assistance. For the development of science education this Organisation has aided the Secondary Training school at Kundukela.

In Sundargarh district this international organisation has 8 Applied Nutrition Programme Blocks, namely, (1) Bonai, (2) Panposh, (3) Rajgangpur, (4) Sundargarh (5) Kutra, (6) Bargaon, (7) Sabdega and (8) Lathikata. Training was given to the people under the Applied Nutrition Programme at the Elementary schools for women situated at Bargaon and Sundargarh. Further, under this programme, UNICEF has provided assistance to the Regional Poultry Farm, Sundargarh.

The Indo-German Club was handed over to a Board of Directors in February, 1967, by the German Social Centre which dissolved at the same period. The club has 160 Indian and 15 foreign members. Membership fee per month is Rs. 20, but the wife of a member is charged at the concessional rate of Rs. 5. This club is managed by the Board of Directors consisting of six members and comprises :

Indo-German Club

- (a) The General Manager, M/s. Hindustan Steel Ltd., Rourkela, as President.
- (b) The Vice-President.
- (c) The Secretary.
- (d) The Treasurer.
- (e) Two other Directors.

The club gets financial aid from no other source except the membership fees. The objectives of the club are the maintenance and promotion of its establishments meant for the service of the members and their guests, and fostering of Indo-German relations. For the achievement of the objectives the club maintains a restaurant, a swimming pool, a bowling alley, a minigolf and sports field.

The Roman Catholic Mission has 19 centres in Sundargarh district. The centre at Kesramal was started first. It was started in the year 1908. The present headquarters of the Mission is at Rourkela. It runs 6 Boys' H. E. schools, 4 Girls' H. E. schools, 30 Middle English schools, 151 Primary schools and 6 Technical schools in the district. It provides accommodation to 1,156 students in 13 hostels for boys, and 1,157 students in hostels for girls. The Mission also runs 4 hospitals and 11 dispensaries.

Roman Catholic Mission

Gossner
Evangelical
Lutheran
Mission

The Missionaries began their activities first at Ghoghar in Raiboga police station in the year 1870. At present this Mission has 11 centres of activity, viz., Karimati, Nuagaon, Birmitrapur, Ghoghar, Runga, Nimdih, Rajgangpur, Jharakudar, Jorabandh, Rourkela and Sundargarh. Out of these, Rajgangpur is the headquarters of this Mission in this district. It runs one High English school at Rajgangpur and one Upper Primary school at Karimati. This Mission also runs one dispensary at Purnapani.

Bharat
Scouts and
Guides

The Sundargarh District Bharat Scouts and Guides was formed on October 28, 1962, at Sundargarh. The aims and objects of the Organisation are to engender reverence for God/Dharma and to render selfless service to the country and humanity. This Organisation is functioning at Sundargarh, Rourkela, Rajgangpur, Kenaveta, Bargaon, Kundukela, Darlipali, Patwadihi and Kinjirma. In 1971-72 there were 134 registered Scouts, 27 registered Clubs and 112 registered Guides in the Sundargarh District Association. It arranges Scouts Rally and Camp every year.

Anglican
Church
Mission

The Anglican Church Mission commenced work at Pradhanpali (Rourkela) and Hatibari in 1914. The main centres of activity of the Mission are at Rourkela, Hatibari, Rajgangpur, Paramdihi, Raksi and their surrounding villages. The work of the Mission is mainly connected with the spread of education, providing of medical facilities to the poor, and the spread of Christianity mostly among the tribals.

Sarba
Samanwaya
Sangha

In 1969, the depressed class people of Rourkela formed an association called Sarba Samanwaya Sangha for their Socio-economic and cultural prosperity. The association is fighting against untouchability since its inception. It has also planned to utilise the leisure hours of the people belonging to the depressed classes in useful ways. The association has established two Kindergarten schools : one at sector-15 and the other at sector-16, by raising funds from the members of the Sangha. Owing to accommodation and financial difficulties both the schools ceased functioning in 1970. It is also imparting education in dance, drama and music to the children of the depressed classes.

Vanavasi
Vidya Sabha

The Vanavasi Vidya Sabha was founded by Swami Brahmananda Saraswati in 1960. The head office of the Sabha is at Gurukula Vaidika Ashrama, Vedavyasa. The objectives of the institution are :

- (1) to run the Gurukula Vidyalaya in the Vedic way,
- (2) to teach the ideals of Brahmacharya, and
- (3) to propagate the Vanavasi (Adivasi) culture.

The Vanavasi Vidya Sabha is running a Sanskrit Vidyalaya since 1967. At present there are 32 students in this school. The vidyalaya is not exclusively meant for tribal students. Persons of different religious faiths are eligible to get admission into the school but they should follow the principles of Vedic Ashram. The Sanskrit Vidyalaya is affiliated to the Orissa Association of Sanskrit Learning and Culture, Puri. Sanskrit, Hindi, and Oriya are taught in the Vidyalaya. The duration of the course is 12 years including one year general training. The institution gets financial aid from the Government of Orissa and donations from the public. The staff of the Vidyalaya includes 3 teaching and 3 non-teaching personnel.

In respect of social activities, the Gurukula Vaidika Ashram has been working for the uplift of the aboriginals and the depressed and backward classes by initiating them to temperance and clean habits, and by discouraging untouchability and cow-killing. Periodical memorial lectures and learned meetings are arranged under the auspices of this institution. The library at the premises is made use of by the students. The institution has been publishing the *Ashram Jyoti*, an Oriya monthly, and the *Vanavasi Sandesh*, a Hindi montly, from 1967 and 1968 respectively.

This is a registered institution and is managed by a Governing Body of its own.

Neelachakra, a socio-cultural organisation, was established at Neelachakra Cuttack in the year 1970 and got recognition by the State Government on July 27, 1971. It has 49 recognised branch offices in and outside the State of Orissa. In Sundargarh district, this Organisation has got branch offices at Rourkela, Tensa, Bandamunda and Rajgangpur.

The main objectives of this organisation are : the promotion and expansion of the "Jagannath Culture" in different parts, particularly in the Adivasi and the outlying Oriya tracts ; to look after the social welfare of the State and to present the legitimate demands of the public before the Union and the State Governments ; to render all possible help to the poor and suffering people, and to work for a social and cultural renaissance of the people of Orissa.

Rourkela, Tensa, and Bandamunda Neelchakra branch offices have also taken initiative in providing employment opportunities to the unemployde youths both in the public and the private sectors. In a resolution they have also requested different public and private sector employers to provide 90 per cent of employment opportunity to local candidates.

CHAPTER XIX

PLACES OF INTEREST

BIRMITRAPUR

Birmitrapur is an industrial town situated in 22°23' N. and 84° 44' E. It is in the north of Panposh subdivision. A branch railway line connects this place with Rourkela. By road it is 40 km. (25 miles) from Rourkela. The town has grown because of the extensive occurrence of limestone deposits around the place which is the largest in Asia. The open-cut limestone quarry here is said to be the largest in India. The town is named after Birmitra Pratap Sekhar Deo, a former Ruler of Gangpur. The old name of the place was Raipura¹.

The Bisra Stone and Lime Company Ltd., which owns limestone and dolomite quarries at Birmitrapur² provides educational, medical and recreational facilities to its employees and workers. The employees are provided with quarters on easy terms. The company has their headquarters office here. The town is a market place for nearby population. Except for the colony of the Stone and Lime Company the town has grown in a clumsy manner and is bifurcated by the railway line. The civic affairs are managed by a Notified Area Council. The town contains four churches, a mosque, and the temples of Jagannath, Guptesvar Siva, Ranisati and Samaleswari. There is a police station, a hospital, a veterinary dispensary, a H. E. school, a cinema house, and an Inspection Bungalow. Population in 1971 was 28,063.

BISRA

Bisra, a village and railway station on the Howrah-Bombay section of the South-Eastern Railway, is situated in 22° 15' N. and 84° 59' E. It is 18 km. (11 miles) from Rourkela by road. Formerly it was an important business and industrial centre.

Though the first mention of the occurrence of limestone and dolomite in the ex-Gangpur State (present Sundargarh and Panposh subdivisions) was made by the eminent geologist V. Ball in 1877, large-scale quarrying for limestone and dolomite commenced from about 1910 near Bisra railway station. The Bisra Stone and Lime Co., Ltd., with their headquarters at Bisra, had constructed large lime kilns here and the lime manufactured by them became well known in Calcutta market as *Bisra Lime*. About 1922, the company closed down their operations

¹. The Explorer, August, 1965—p. 19.

². Bisra Stone & Lime Co. started quarrying for limestone at Birmitrapur about the year 1917. The managing agents of this firm are M/s Bird & Co., Private Ltd., Calcutta. Ibid.p. 20.

here and shifted their activities to Raipura (subsequently known as Birmitrapur) where limestone and dolomite were found in enormous quantities¹. The busiest part of the village called Bisra town has grown at a distance from old Bisra village. Headquarters of a police station and a Community Development Block, the place has a hospital, a High English school, an Inspection Bungalow and some small industrial units.

Near Bisra (at Khuramanjan Nala), Abhoy Singh, who had joined hands with Surendra Sai against the British was murdered in 1856 by the Zamindar of Nagra with the help of the Bhuiyan headman while he was at prayer. Abhoya Singh was the younger brother of Maharaja Arjun Singh of Porahat².

In 1971, the population of the place was 1,178.

Situated in 21° 49' N. and 84° 57' E., Bonaigarh is the headquarters of Bonaigarh Bonai subdivision and is on the river Brahmani, 72 km. (45 miles) south of Rourkela. It was also the capital of Bonai ex-State. Bonai derives its name from its forests, i.e., *Bon* or *Bana* (ବନ) as they are called in Oriya³. The river surrounds it on the north and the east. It is no more than a populous village. For the want of a bridge across the Brahmani, Bonaigarh is not easily communicable during the rains. A ferry is of course maintained.

The ex-Ruler's palace stands at the end of a wide road with rows of houses on either side. Important temples of the place are that of Radhakrushna, Baneswara, Kumari, Hanuman and Jagannath. Kumari (Durga) is the family deity of the ex-Ruler. Bonaigarh's memorable festival is the Chaita Parva in which, despite its tribal origin, all castes, high and low, participate. The festival takes place in April. Chhau dance is a special feature of the occasion.

Bonaigarh contains a hospital, a sub-jail, Circuit House, a police station, usual subdivisional courts and office buildings, Tahsil Office, a college, a Boys' H. E. school, a Girl's H. E. school, an Elementary Training school, Subdivisional Office of Rural Engineering Organisation, Divisional Forest Office, and Block Development Office.

Population of the place in 1971 was 3,692.

Gangpurgarh, a village in Sundargarh police station, is situated in 20° 13' N. and 84° 5' E. It is on the right bank of the river Ib and is about 16 km. (10 miles) to the north of Sundargarh. It was at one

¹. The Explorer, August 1965, p. 19.

². District Census Hand-book, Sundargarh (1961), p. 52.

³. W. G. Kelly—Final Report on the Land Revenue Settlement of the Bonai State (Orissa), 1913, p. 3.

GANGPUR-
GARH

time the seat of the ruler of the ex-State of Gangpur. From Masabira, the first capital of Gangpur, the seat of administration was removed to Gangpurgarh by Raja Gangadhar Sekhar Deo, where "he founded a new capital on the bank of the river Ib which was named after him as Gangadharpur, later on as Gangpurgarh. His kingdom was known as Gangpur after the headquarters town"¹. Again, early in the 19th century Raja Indra Sekhar Deo shifted his headquarters from Gangpurgarh to Raibogagarh. Gangpurgarh contains some relics indicative of its former importance. Population in 1971 was 1,152.

GHOGHAR

Ghoghar, a gorge on river Ib, is situated in 20° 19' N., and 84° 0' E. It is about 43 km. to the north of Sundargarh town. After rainy season when the water level of Ib comes down the river passes through a narrow stone bed extending over five kilometres. The beautiful gorge with its sylvan background is a popular picnic spot and attracts many visitors. There is a naturally formed *Siva Linga* of black granite at the site where a festival is observed on Sivaratri.

HATIBARI

Hatibari, a village in Bisra police station, is situated in 22° 24' N. and 84° 51' E. It is near the northern border of Panposh subdivision. It is 19 km. (about 12 miles) north-east of Kuarmunda and 33 km. (20 miles) from Rourkela, connected by road. It contains a police out-post, High English School and a Dispensary (Primary Health Centre). Tata Iron and Steel Co., have their limestone quarry and staff colony here. They have been quarrying limestone since 1946 and despatching it to their steel plant at Jamshedpur². The Hindustan Steel Ltd., have their limestone quarry at Purnapani, 3.2 km., east of Hatibari. Population was 1,070 in 1971.

HEMGIR

Hemgir, a large village with a police station, is situated in 21° 56' N. and 83° 42' E. It is also spelt as Himgiri, Himgir, and Hemagiri. An important village in the western part of the district, it was the seat of a Zamindar. Nine kilometres to its south-east there is a railway station on the Howrah-Bombay line named after it. The village has a few large tanks to its south and west. The ex-Zamindari of Hemgir has extensive deposits of coal. The village is the headquarters of a Block Development Office and contains a Rest House, Subdivisional Office of Rural Health Organisation, Tahsil Office, a dispensary (Primary Health Centre), Police Station, Post Office, a Veterinary Hospital, a High English school and a Middle English school, and a Micro-wave Wireless Station belonging to the Government of India.

¹. District Census Hand-book, Sundargarh (1961), p. 7.

². The Explorer, August 1965, p. 23.

Junagarh and Manikmunda, which are places of historical importance, lie at a distance of about 3 km. to the north of Hemgir. They contain some ancient monuments, which have been discussed in Chapter II.

Jagatgarh, a small village in Sundargarh Police station, is situated in 22° 9' N., and 84° 5' E. It is on the left bank of the river Ib and is about 8 km. (5 miles) to the north-east of Sundargarh. During the 19th century it was a *Garh* (fort) under the Gangpur ex-State. Remnants of the old fort are still to be seen here. Raja Jagadev Sekhar Deo removed the capital from Nabarangpur, also called Laing (near Rajgangpur), to this place which was called after him as Jagatgarh¹. For sometime in the fourth and fifth decades of the 19th century it was the capital of Gangpur. From Jagatgarh, the capital was removed to Suadih by Raja Janardan Sekhar Deo probably towards the middle of the 19th century². The name *Suadih* was later changed to Sundargarh sometime during 1908—1910. The village has a temple dedicated to Samalai, the popular goddess of western Orissa. Population was 254 in 1971.

Kalunga, situated in 22° 12' N. and 84° 44' E., is a small village and railway station in Raghunathpali police station. The village is about 16 km. (10 miles) to the west of Rourkela beside the road leading to Rajgangpur. In 1928, Kalunga was made the headquarters of Nagra Zamindari which became a full-fledged subdivision under Gangpur ex-State. In 1944, the subdivisional headquarters shifted to Panposh from Kalunga. Bonaigarh is approached from here by a fair-weather road running on the west of the Brahmani. The village has a church and is a centre of the Roman Catholic Mission. The Mission, under the charge of a Bishop, runs a hospital, a milk distribution centre and a few educational institutions. There is a Rest House. Population in 1971 was 1,904.

The Utkal Machinery Ltd. is located at Kansbahal, which is also a railway station. Situated in 22° 12' N. and 84° 40' E., in Rajgangpur police station, it is on the Sundargarh-Rourkela road and is 14 km. east of Rajgangpur and about 24 km. west of Rourkela. The Utkal Machinery Ltd. is an Indo-German enterprise and it manufactures machine parts. It started production in October, 1962, with an

¹. District Census Hand-book, Sundargarh (1961)—p. 8.

². Indrabilas Mukherji—Final Report on the Land Revenue Settlement of the Gangpur State, 1929—1936, pp. 4-5.

employment potential of 1,400 persons¹. The company provides residential quarters for its employees inside the colony. For details about this factory, see Chapter V. Population in 1971 was 2,420.

KHANDA-DHAR WATERFALL

A perennial rivulet, called Korapani Nala, creates a remarkable waterfall known by the name Khandadhar², within a few kilometres of its origin. The fall lies in 21°45'N. and 85°7' E., in village Nandapani under Bonaigarh police station. It is 19 km. (12 miles) to the south-east of Bonaigarh and can be reached by a fair-weather road, the last 1.6 km. is, however, negotiable by foot. It is a pleasant spot amidst thick jungles and mountains ideal for lovers of nature. On reaching it, the weary visitor would soon forget the strain of the arduous journey. It is a hidden treasure of nature. The scene created by the glittering waters that trickle down the magnificent waterfall can best be enjoyed from the mountain-top. The 800 feet³ (244 metres) high waterfall is said to be the highest in Orissa. As the volume of water discharged is far too little, there is no prospect of its being harnessed for power. Goddess Kanta is a known deity of the tribals of the locality⁴. Nearby, there is a Rest House.

Population of Nandapani in 1971 was 143.

KUARMUNDA

Kuarmunda, the headquarters of Panposh Tahsil situated in 22°16'N and 84°46'E, is an important village in Birmitrapur police station. It is also a railway station on Rourkela Birmitrapur branch line and is 14 km., from Rourkela on Rourkela-Birmitrapur road. Situated close to Vedavyasa, the place stands on an elevated land with a moat-like shallow (partly cultivated and partly with standing water) encircling it. The village was the seat of a former Zamindar under the Gangpur ex-State. The village is also the headquarters of a Block Development Office and contains a dispensary (Primary Health Centre), a H. E. school, an Elementary Training school, an Inspection Bungalow, Tahsil Office, Forest Range Office, a Veterinary Dispensary, a Dairy Farm, and a Cold Storage Plant. There are a few temples including one dedicated to Radhakrushna.

Population in 1971 was 2,973.

LATHIKATA

Lathikata, a village and railway station in Raghunathpali police station of Panposh subdivision, is about 14 km. (9 miles) from Rourkela on the Rourkela-Bonai road. The place is known for the Refractory

¹. Directory of Industries in Orissa, 1967—pp. 2-3.

². Khandadhar (ଖଣ୍ଡାଦହାର) means sword, Dhar (ଧାର) means edge.

³. This height is given in the Topo (Map) Sheets of Sundargarh published in 1954 by the Survey of India. The height of the hill as given in the District Census Hand-book, Sundargarh 1961, p. 51 is nearly 1500 feet.

⁴. District Statistical Hand-book, Sundargarh, 1968—p. 6.

Plant. It is connected with Rourkela by road and by rail. The Orissa Industries Ltd¹, have a Refractory Plant here. The Plant was started in 1963. It manufactures fire-bricks and the monthly production is about 3,000 tonnes. It provides employment to about 700 persons. There is a small colony for the employees which contains a population of about 500. A Grama Panchayat, a Panchayat Samiti (Community Development Block) Office, and a Veterinary Dispensary are located here. There is a recreation club called *Orinds Recreation Club* and a Siva temple—both constructed by the Plant. The population of the place, as reported by the Plant in 1972, was about 4,000. But at 1971 Census, it had a population of 981.

Lefripara, a village and headquarters of a police station (in LEFRIPARA Sundargarh subdivision) is situated in 22°6'N. and 83°48'E., on the bank of a rivulet named Ichha, a tributary of the Ib. It is 27 km. (16 miles) west of Sundargarh and is connected by a fair-weather road. The village is also the headquarters of a Community Development Block. Lefripara area is reported to contain large deposits of dolomite². Population was 1,561 in 1971.

In a reserved forest about 20 km. from this place there is a rock shelter measuring 15.24 metres or 50 ft. called *Ushakothi* which contains primitive paintings. For details, see Chapter II.

Situated in 22°18' N. and 84°38' E., Mandira is known for the MANDIRA Dam across river Sankh constructed for the supply of water to Rourkela and other industrial units in the vicinity. It is called Mandira Dam Project and is about 32 km. (20 miles) from Rourkela, connected by road. The Dam has been built at a point where the river enters a gorge flanked by hills and presents a picturesque sight. The construction started in 1957 and was completed in 1959³. The length of the Dam is 445.008 metres (1460 ft.) and its depth is 19.8120 metres (65 ft.)⁴. Two Guest Houses have been built there for tourists and guests. The reservation authority is the Manager, Water Supply Plant, Hindustan Steel Ltd., Rourkela. A circular road connects the Guest Houses located at a considerable height with the main entrance where an officer issues

¹. The Orissa Industries Ltd., have their Registered. Office at Barang (Cuttack District).

². The Explorer, August 1965, p. 25.

³. District Census Hand-book, Sundargarh, 1961, p. 52.

⁴. Orissa Review, September 1970. But, according to 1961 Census, the length of the Dam is 1935 ft., height 90 ft., and the gross storage capacity is 264,000 acre feet (vide, District Census Hand-book, Sundargarh, 1961, p. 52).

permits for visitors to enter the Dam area. As a visitor stands on the terrace of the Guest House or moves about in the lovely garden nearby, he sees around a continuous chain of hills at a distance varying from 15 km. to 30 km. The cement factory at Rajgangpur is clearly visible on the left-hand horizon, as one stands facing the lake. The whole environment is highly refreshing. It is a nice place for holidaying. Taxicabs ply from Rourkela to the Dam area. Boating facilities in the lake may be available with prior arrangement with the Dam authorities.

PANPOSH

Situated in 22°13' N. and 84°48'E., Panposh is also locally called Uditnagar, named after Uditpratap Sekhar Deo, the late ruler of Gangpur ex-State. It lies on the road between Sundargarh and Rourkela and is also easily reached by railways. Being the headquarters of Panposh subdivision the State Government offices, viz., Subdivisional Office, Police Office, Courts, Sub-Jail, Commercial Tax Office, Employment Exchange, Regional Transport Office, Office of the District Inspector of Schools, etc. are situated here. The town has grown in importance on account of the Rourkela steel plant being set up in its vicinity. The confluence of the two rivers, Sankh and Koel, at nearby Vedavyasa is one of the beautiful spots in the district.

Population of the place in 1971 was 705. Now it forms a part of greater Rourkela agglomeration.

RAJGANGPUR

Rajgangpur is an industrial town and trading centre in Sundargarh subdivision. Situated in 22°11'N. and 84°35'E., it is on the Howrah-Bombay Section of the South-Eastern Railway and on the Sundargarh-Rourkela road. It is 64 km. (40 miles) from Sundargarh and 43 km. (28 miles) from Rourkela.

Rajgangpur was first classified as a town in 1961 Census. The 26.16 sq. km. area now comprising the town contains the villages of Ranibandh, Liploi, Kumarkela, Bhatollo, Rajgangpur, and Jarmal. Kumarkela is the old section of the town. The railway station of Kumarkela was named Rajgangpur and the town is known by that name. The town is full of narrow lanes except for the colony of the Orissa Cement Ltd. The Orissa Cement Ltd., a Dalmia Enterprise, has a cement factory and a Refractory here. The civic affairs of the town are managed by a Notified Area Council. It is also the headquarters of a Community Development Block (Panchayat Samiti) and it contains a police station, an Inspection Bungalow, a H. E. school, a College, a good hospital, a cinema house, and a telephone exchange.

Rajgangpur is a centre of the Christian Missionaries. Here the German Evangelical Mission has been at work since 1899¹ and has its settlement. This is said to be the oldest mission functioning in the district. There is a good church at Ranibandh, which is the headquarters S. P. G., Christian Mission. Population of the town in 1971 was 21,876.

Rourkela, the modern steel town situated in 22°12'N., and 84°53'E., Rourkela is on the Howrah-Bombay Section of the South-Eastern Railway and is 413 km. (257 miles) from Howrah. It is well connected on all sides by well laid roads. It is 107 km. (67 miles) east of Sundargarh, the district headquarters town.

Prior to the opening of the railways, Rourkela was an obscure village. It assumed some importance when Birmitrapur branch line was laid from here. But its glory came with its selection as the site for the establishment (in 1955) of the first of the three² steel plants in public sector. The construction work started in October 1956³. Soon after the market and the township grew up. Area of the present town of Rourkela covers 95.31 sq. km. (36.80 sq. miles) and it is the biggest town in Orissa. Of this, the area of the steel township alone is 45.20 sq. km.

Rourkela has a good natural setting. Girdled by verdant hills and encircled by three rivers, the modern steel township at Rourkela exudes an air of friendliness and tranquillity. The hill range separates the township from the Plant providing a natural screen to cut off the smoke and din of the plant. Spread over an area of 45.20 square kilometres the township is divided into 20 sectors on both the sides of the beautiful two-way Ring Road. Facilities for education, marketing, recreation and medical care are amply provided. Out of the 20 Sectors 16 are completed and contain 18,000 residential quarters constructed for the employees of the Rourkela steel plant. The town has about 162 km. (100.5 miles) of black-topped and 29.78 km. (18.5 miles) of morrum roads. Area of the plant site is 33.38 sq. km.

The Rourkela steel plant has the distinction of being the first of the three Public Sector steel plants set up in India to meet the growing demands of steel and to set up a strong industrial base for our economy. With the adoption of the then newly developed L. D. (Linz Donawitz) Process at Rourkela, India joined the first few countries in the world to embark upon the commercial scale production of steel by the L. D. Process. Rourkela steel plant is the only Plant in the country operating on this process. It is the only steel plant which has a fertilizer

¹. L. E. B. Cobden-Ramsay—Feudatory States of Orissa p. 178.

². That is, Rourkela, Durgapur and Bhilai

³. Rourkela—a brochure of HSL.

complex attached to it to utilise nitrogen from its Oxygen Plant, hydrogen from the Coke Oven gas and limestone fines from its quarries to produce Calcium Ammonium Nitrate. It is one of the most modern steel plants incorporating latest technological developments. It has one of the world's most modern Hot Rolling Mill and Cold Rolling Mill complex. The present production capacity of the Plant per year is 1.8 million tonnes ingot steel¹. For more details about this Plant, see Chapter V.

The beautifully landscaped Indira Gandhi Park, which has a lovely lake, provides relaxation. The observation tower in the Park, animals at its Zoo, and the children's train around the lake are sources of enjoyment to children.

The city contains a stadium, called Ispat Stadium; the 480 bedded Ispat General Hospital; 4 Colleges, viz., the Regional Engineering College, the Science College, the Evening College, and the D. A. V. College for Women; the Sushilavati Khosla D. A. V. Polytechnic for Women; 8 H. E. schools (including 2 for girls); a number of clubs and cultural institutions; (see Chapters XV and XVIII), 4 cinema houses; an aerodrome; and 19 market squares. For the accommodation of visitors, there are some guest houses and inspection bungalows, viz., the Rourkela House, the Ispat Guest House, Guest House (Sector 20), Guest House (Sector 4), the Hirakud Guest House at Uditnagar, Inspection Bungalow in Sector 3, Circuit House at Panposh, and Rest Shed at Uditnagar. There are also a few hotels. The State Government Offices are situated in Uditnagar area. Rourkela is the headquarters of the 4th Battalion of Orissa Military Police. The following Banks have opened their branches here—the Bank of Baroda, the Bank of India, the Central Bank of India, the Co-operative Urban Bank, the Punjab National Bank, the State Bank of India, the Union Bank of India, the United Bank of India and the United Commercial Bank. In the Industrial Estate set up by the Orissa Government there are 48 ancillary industrial units.

Population of Rourkela in 1971 was, 172,502.

SARAPGARH

Sarapgarh, a village in Lefripara police station, situated in 20°10'N. and 83°44'E., is 35 km. (22 miles) west of Sundargarh town. The place is sometimes identified by scholars with Sarabhapura, the headquarters of the ancient Sarabhapurias ruling family (c. 6th century A. D.). The first of the Sarabhapurias was one Sarabharaja after whom the dynasty and the capital were named. The association of this place with Sarabhapurias family is yet to be corroborated by archaeological finds.

¹. *Rourkela*, a brochure of HSL.

Local people also call the village Sarapagarh (Sanskritised from Sarpagarh, i. e., the Snake-fort. According to Cobden-Ramsay, Sarapgarh "derives its name from a cave, said to be occupied by a snake family, which the rural population have for ages worshipped¹". Sarapgarh was a Bhuiyan feudatory (Zamindari) of Gangpur ex-State.

Population in 1971 was 714.

Situated in Lefripara Community Development Block in Hemgir SARGIPALI Tahsil, Sargipali is 30 km. from Sundargarh town and is an important rural centre with a prosperous agricultural hinterland. The nearest railway station Jharsuguda (in Sambalpur district) is 54 km. from the place.

The Geological Survey of India have recently unearthed a vast deposit of lead, copper and zinc near the place. The State Government is proposing to develop these mines and a mining township is likely to grow up soon. The foundation stone of the Sargipali Lead Project was laid on the 21st November, 1972 in which the Union State Minister for Mines presided.

There are two H. E. schools and one Public Health Centre at the place, but no electricity.

Population in 1971 was 1,399.

Sundargarh is the headquarters town of the district, situated in SUNDARGARH 22°7' N. and 84°2' E., on the left bank of the river Ib. It is 35 km. (22 miles) north of Jharsuguda, which is the nearest rail-head on the Howrah-Bombay section of the South-Eastern Railway. The Sambalpur-Rourkela road also passes through Sundargarh.

About the middle of the 19th century, a village called Suadih was selected to be the capital of Gangpur ex-State for better communication facilities, and the old capital Jagatgarh was abandoned. Suadih was renamed as Sundargarh sometime during 1908-1910². After the merger of the States in 1948 it was selected as the headquarters of the newly formed district.

The town extends around a large tank with a hillock nearby but in its busy part it has a clumsy growth. Its expanding market is fairly busy. The ex-Ruler's palace is an imposing building on an extensive

¹. L. E. B. Cobden-Ramsay, *Orissa Feudatory States*, p. 179.

². This date is worked out on the basis of some contemporary literatures vis-a-vis their dates of publication. In the *Imperial Gazetteer of India*, vol. XXIII (p. 113), published in 1908, the place is known as *Suadi*. But in L. E. B. Cobden-Ramsay's *Gazetteer of Orissa Feudatory States*, published in or about 1910, we find the place mentioned as *Sundargarh* which is the changed name of *Suadi* or *Suadih*. So it is very likely that the name has undergone the change sometime between 1908 and 1910.

area with a surrounding wall. Near the palace is the Durbar Hall built in 1917. The Collectorate and many other offices and courts are housed in a fine looking spacious red building called 'Katcheri'. This building, meant to accommodate the departments of the State, was opened in 1914 by the then Governor of Bihar and Orissa. The building when built was the largest of its kind in the Eastern States. Near about the 'Katcheri' are many other office buildings and official quarters. The town has a college and several schools. It contains a number of temples of which important are those dedicated to the deities Jagannath (below the hillock), Jagannath (inside palace compound), Vishnu, Radhakrishna and Samalei. Samalei is a very old deity who was probably offered human sacrifice during pre-British days¹. Affairs of all these temples are managed by the Commissioner of Religious Endowments. The town has a Circuit House, an Inspection Bungalow, and a Dharmasala (estd. in 1933).

Civic affairs of the town are managed by a Municipality. The town contains the usual District Offices of different Departments, and the District Headquarters Hospital.

Population of the town in 1971 was 17,244.

TENSA
TOWNSHIP,
TENSA

Tensa, situated in 21°51' N. and 85°9' E., is 96 km. from Rourkela on the south-east side. It is a hill resort with a township constructed by the Hindustan Steel, Ltd.

Population in 1971 was 3,465.

VEDAVYASA

Situated in 22°14' N. and 84°48' E., at the confluence of the rivers Sankh and Koel, Vedavyasa is one of the beauty spots of the district. Vedavyas is the name of a small hill on which there are three temples, two dedicated to Siva and one to Rama. In the temple of Rama, there are the images of Jagannath, Balabhadra and Subhadra, besides the usual trio : Rama, Lakshman and Sita. The rivers Sankh and Koel meet here and the united stream flows south under the name of *Brahmani*. The place is about 5 km. from Panposh and about 13km. (8 miles) from Rourkela, communicable by road. The place with its natural charm and relative calmness is an ideal picnic spot. The place stands as an attraction for tourists, pilgrims, poets and sight-seers.

Vedavyasa is a *Tirtha* (a place of religious sanctity) and a dip in the holy water at the confluence of the two rivers is believed to wash away sins. The premier festival of the place is Sivaratri (held in

¹. L. E. B. Cobden—Ramsay writes, "It was admitted to Colonel Dalton that before the States came under British rule, a human sacrifice was offered every third year before the shrine of Kali at Sundargarh where the present Chief resides" (*Vide, Feudatory States of Orissa*—p. 178).

February–March) which is popularly called *Vedavyas mela*. A week-long concourse takes place on that occasion at the foot of the hill. During the fair, about 50,000 persons from far and near visit the place, the largest gathering is, of course, on Sivaratri day itself. As elsewhere, devotees of lord Siva keep themselves awake throughout the night. Sitting near the temple with earthen lamps they meditate till dawn when the priest of the temple signals the end of the night by raising a light (Maha Deepa) on the spire of the temple.

Devotees also flock to the two Siva temples (of Chandrasekhar and Balunkeswar) atop the hill on Mondays, for Monday is propitious for the worship of Siva.

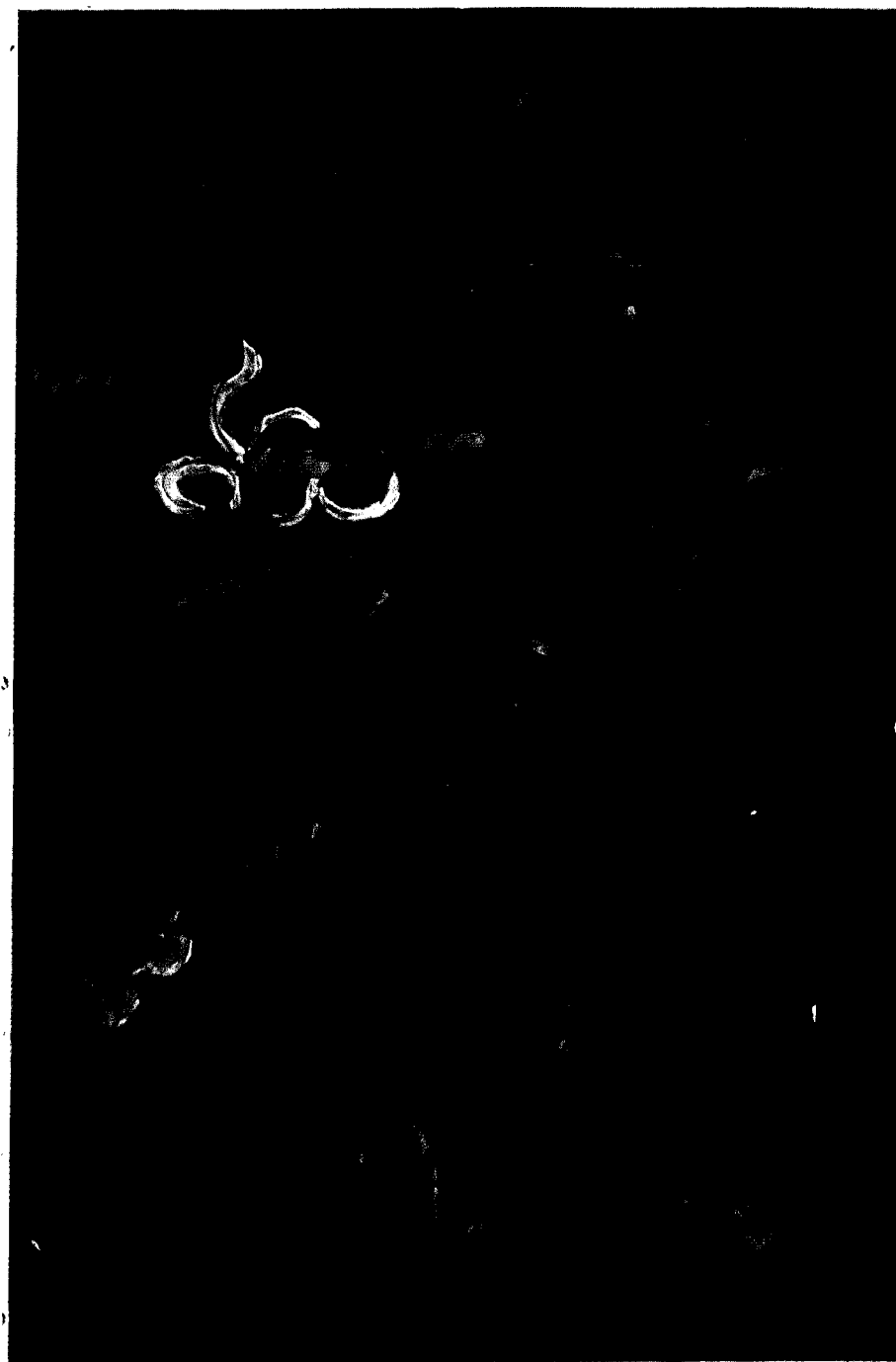
Tradition associates river Brahmani with the scene of the amour of sage Parasara with the fisherman's daughter Matsyagandha, the offspring of which was the reputed Vyasadeva whose name the place bears. The ruins of a cave are pointed out by local people as the place where Vedavyasa lived and composed the great epic Mahabharata. The tradition has inspired many poets of Orissa to write beautiful poems about the sanctity and beauty of the place of which mention may be made of the poem 'Vedavyas' by poet Gangadhar Meher which gives a charming account of the natural beauty and the legends associated with the place.

The Vedic Ashram, established under the aegis of the Arya Samaj since 1957, is maintaining here one Ayurvedic Dispensary, and a school on the lines of Gurukula Ashram. There is an Inspection Bungalow at Vedavyasa.

BIBLIOGRAPHY

(Chapter XIX. Sundargarh)

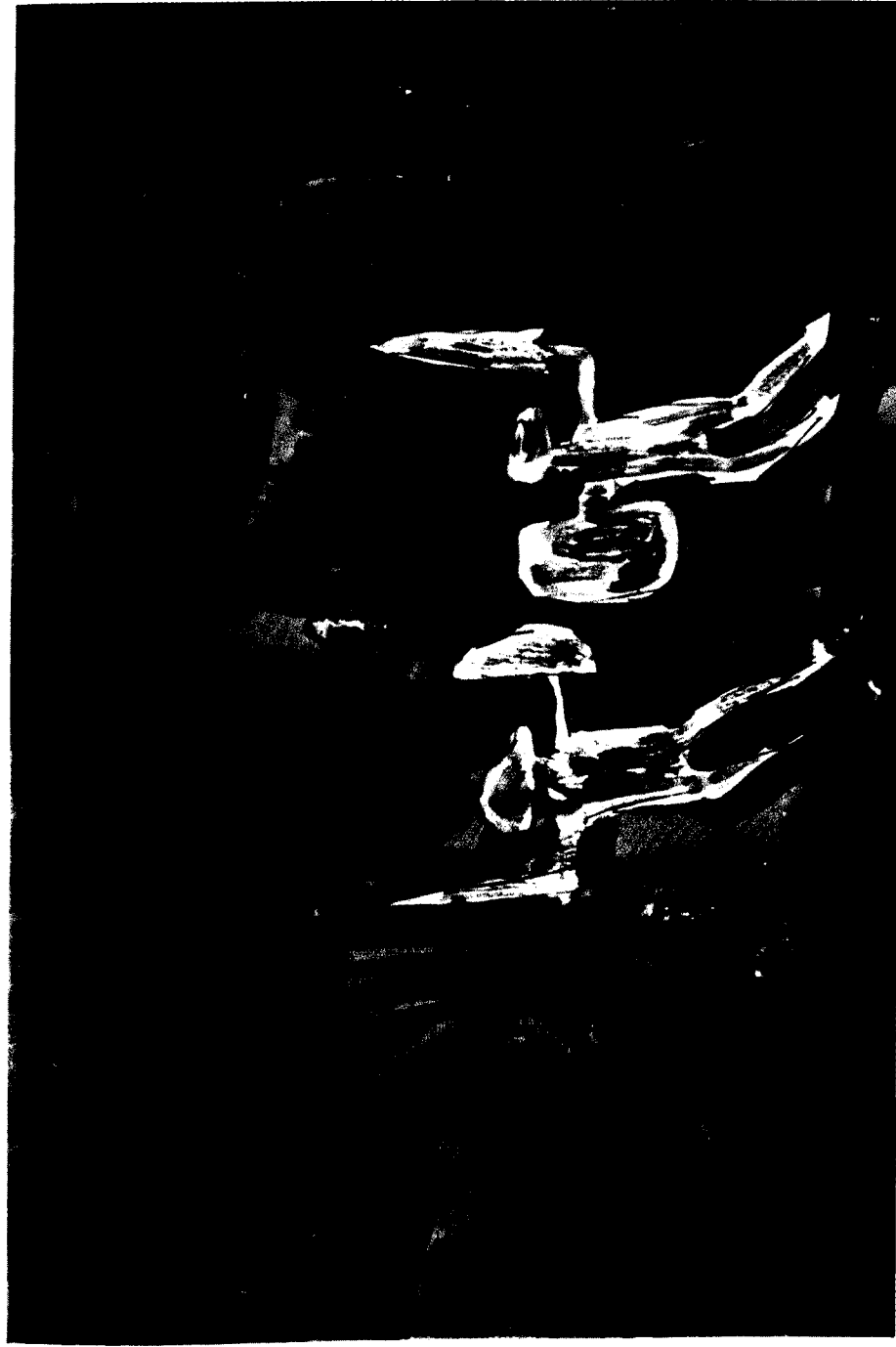
1. District Census Hand-book, Sundargarh (1961).
2. Feudatory States of Orissa, L. E. B. Cobden-Ramsay.
3. District Statistical Hand-book, Sundargarh, 1968.
4. Rourkela (a brochure)—Public Relation Department, Hindustan Steel Plant.
5. Orissa Review, September, 1970—Home (P. R.) Department, Orissa.
6. Imperial Gazetteer of India, Vol. XXIII (1908).
7. Final Report on Land Revenue Settlement of the Gangpur State, 1929—1936—Indrabilas Mukherji.
8. The Explorer, August, 1965, and February, 1968 (A half-yearly magazine published by the Director of Mines, Orissa.)
9. Directory of Industries in Orissa, 1967 (Director of Industries).
10. List of Circuit Houses, Inspection Bungalows, and Rest Houses under the control of different departments in the State of Orissa (1960)—Revenue Department.



Facsimile of the Rock Painting at Manikmunda

Courtesy—Orissa State Museum

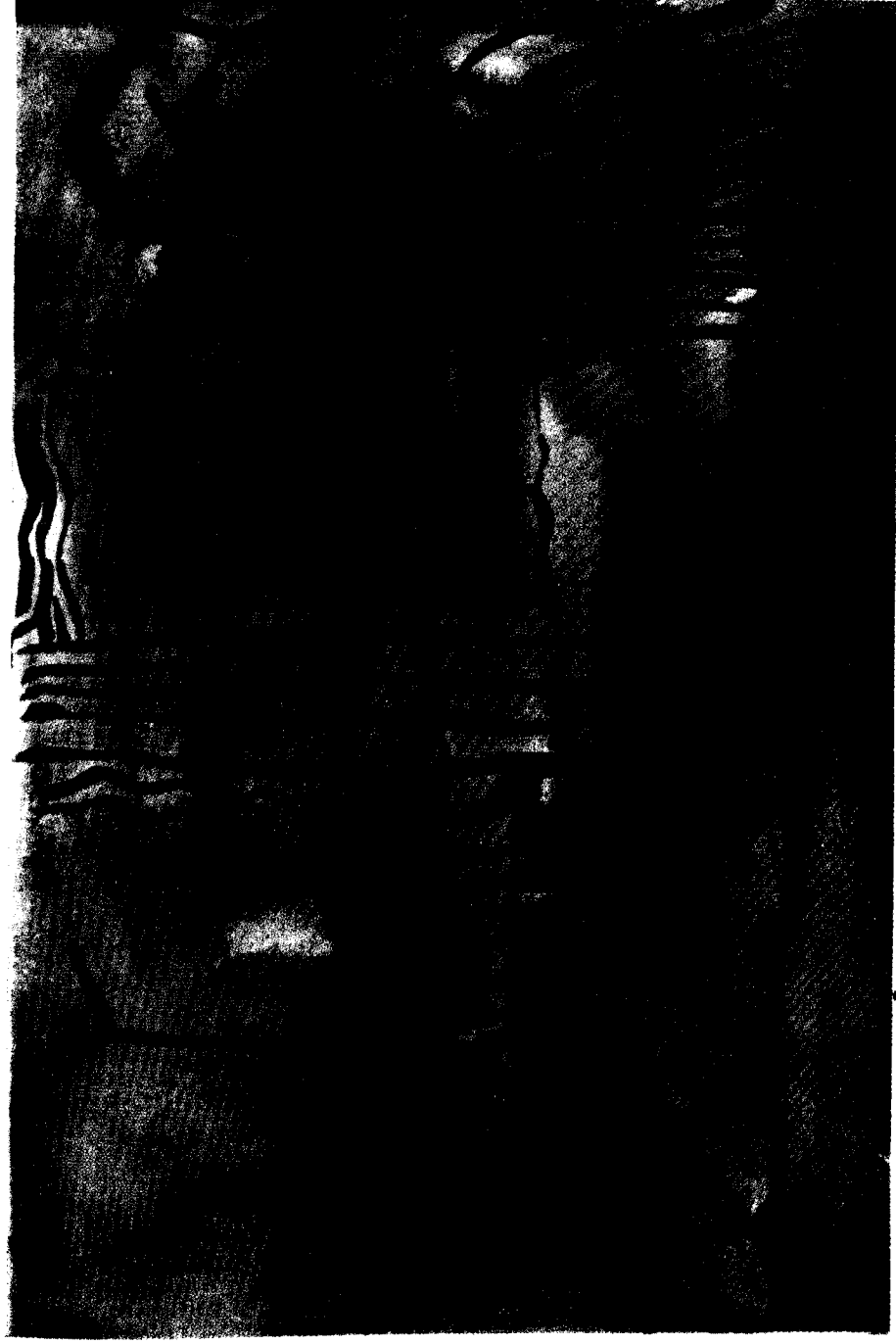
by Shri Dinanath Pathi



Facsimile of the Rock Painting at Manikmunda

Courtesy—Orissa State Museum

by Shri Dinanath Pathi



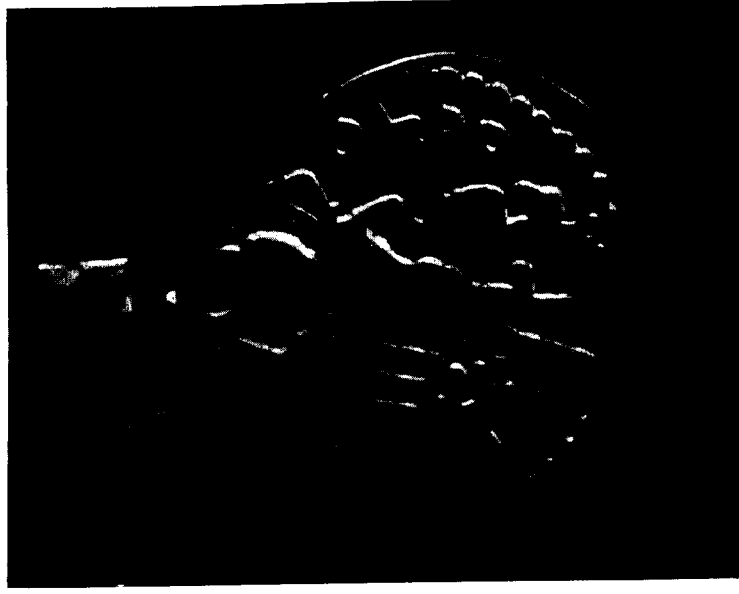
Facsimile of the Rock Painting at Ushakothi

Courtesy—Orissa State Museum

by Shri Dinanath Pathi



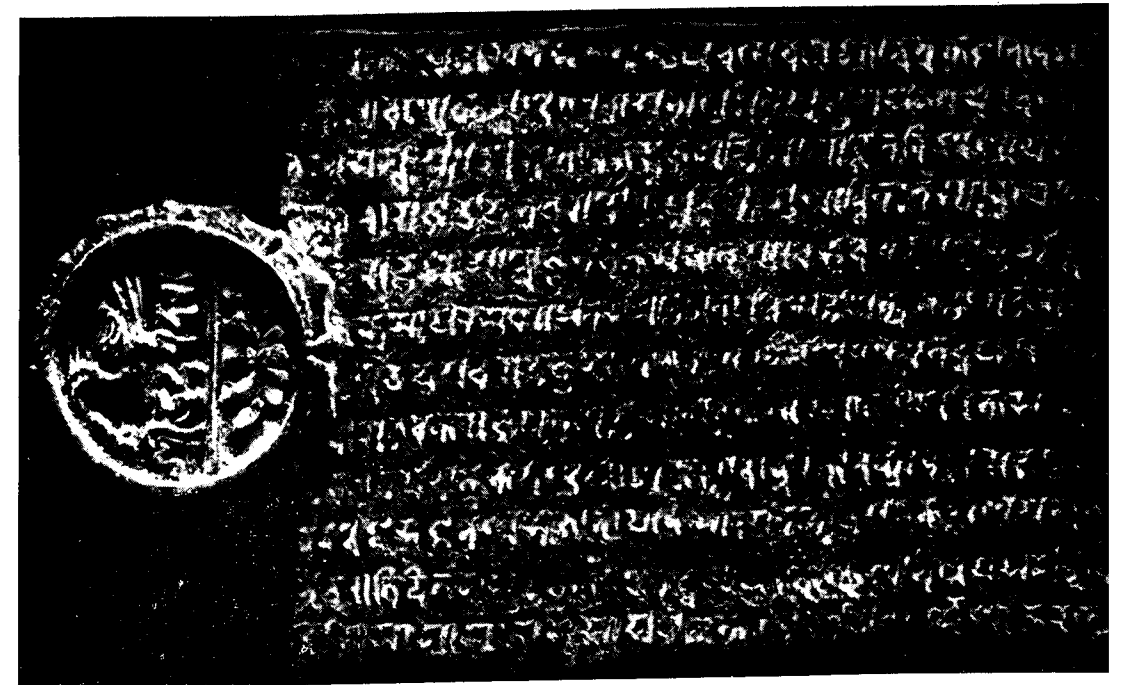
Obverse



Reverse

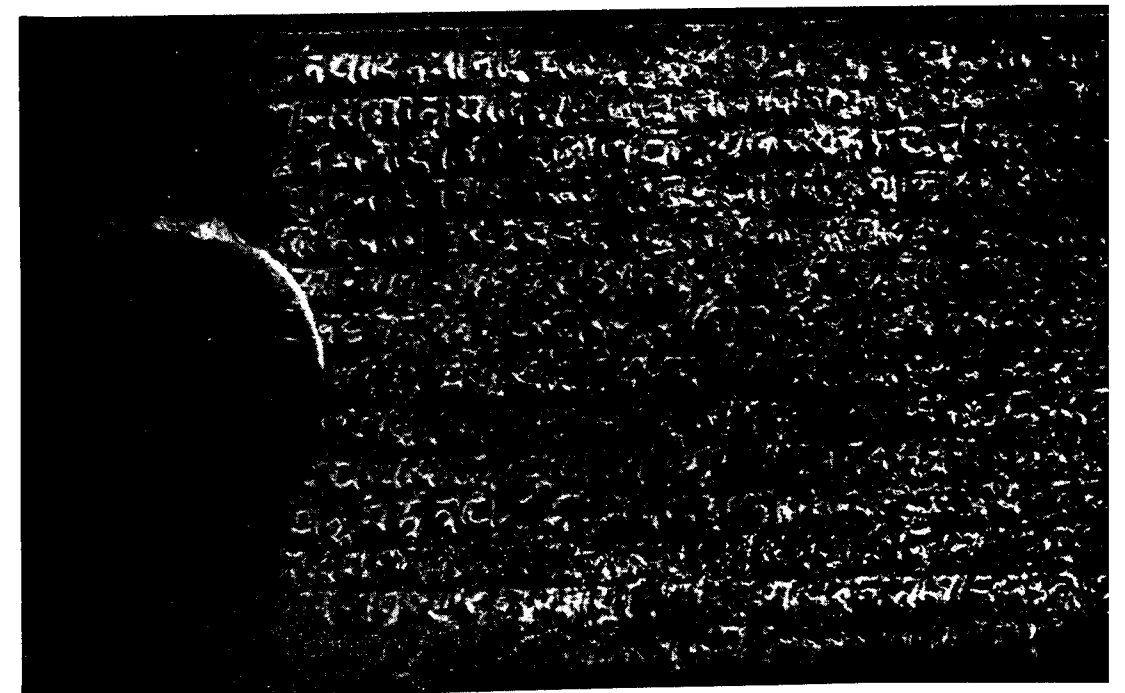
Kushana Gold Coin of Huvishka found in Bonai

Courtesy—Home (P. R.) Department



Bonai copper plate Grant of Udaya Varaha (Obverse)

Courtesy—Home (P. P.) Department



Bonai copper plate Grant of Udaya Varaha (Reverse)

Courtesy—Home (P. R.) Department



Khandadhar Waterfall (top); Vedavyasa (below) Courtesy—Home (P. R.) Department



Agaria belle of Sundargarh
Courtesy—Home (P. R.) Department



Kisan girls preparing the field for wheat cultivation
Courtesy—Tribal & Harijan Research-cum-Training Institute



Munda girls

Courtesy—Tribal & Harijan Research-cum-Training Institute



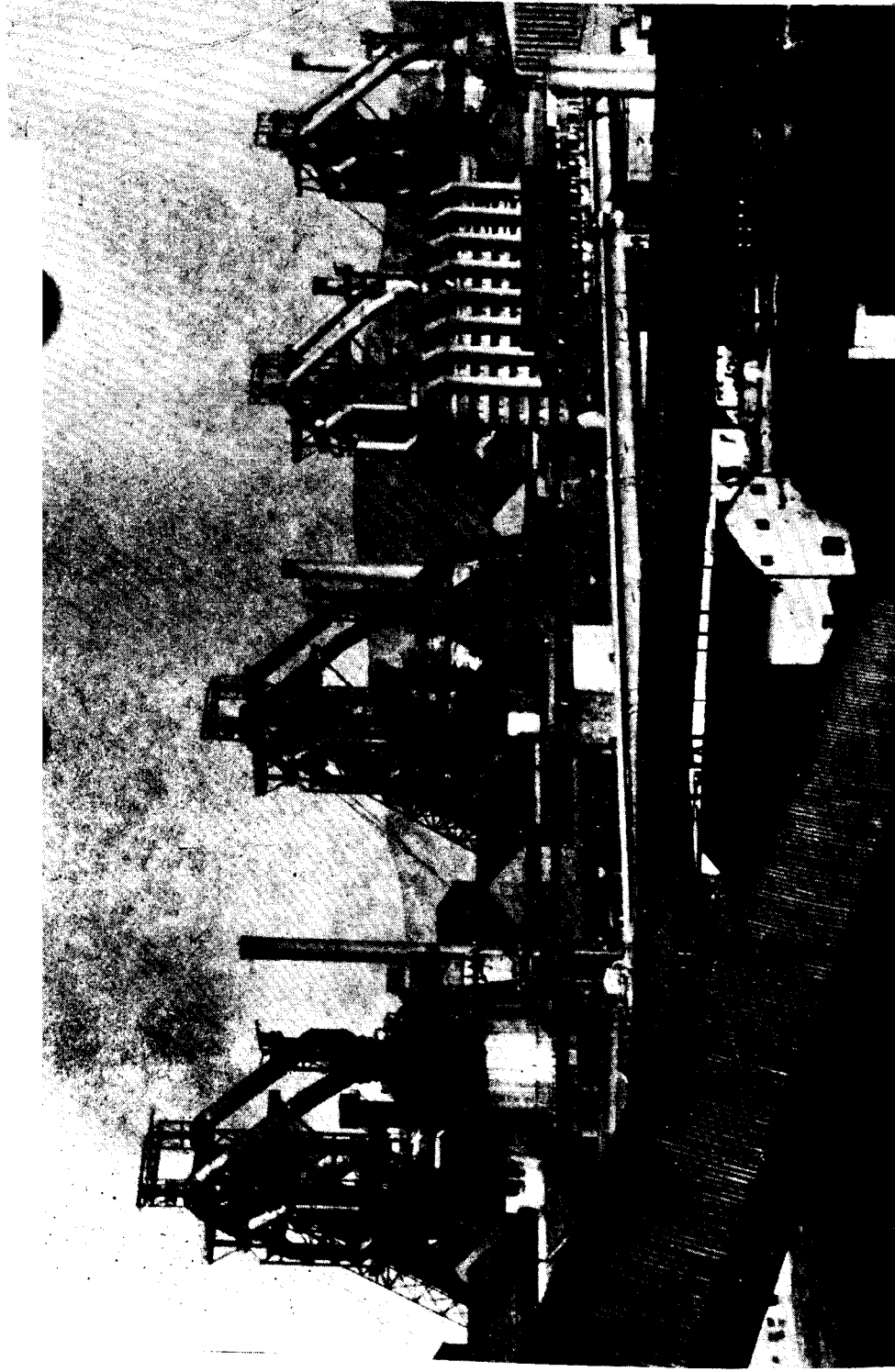
Munda old man with fishing implements

Courtesy—Tribal & Harijan Research-cum-Training Institute



A Bhuiyan mother with child

Courtesy—Tribal & Harijan Research-cum-Training Institute



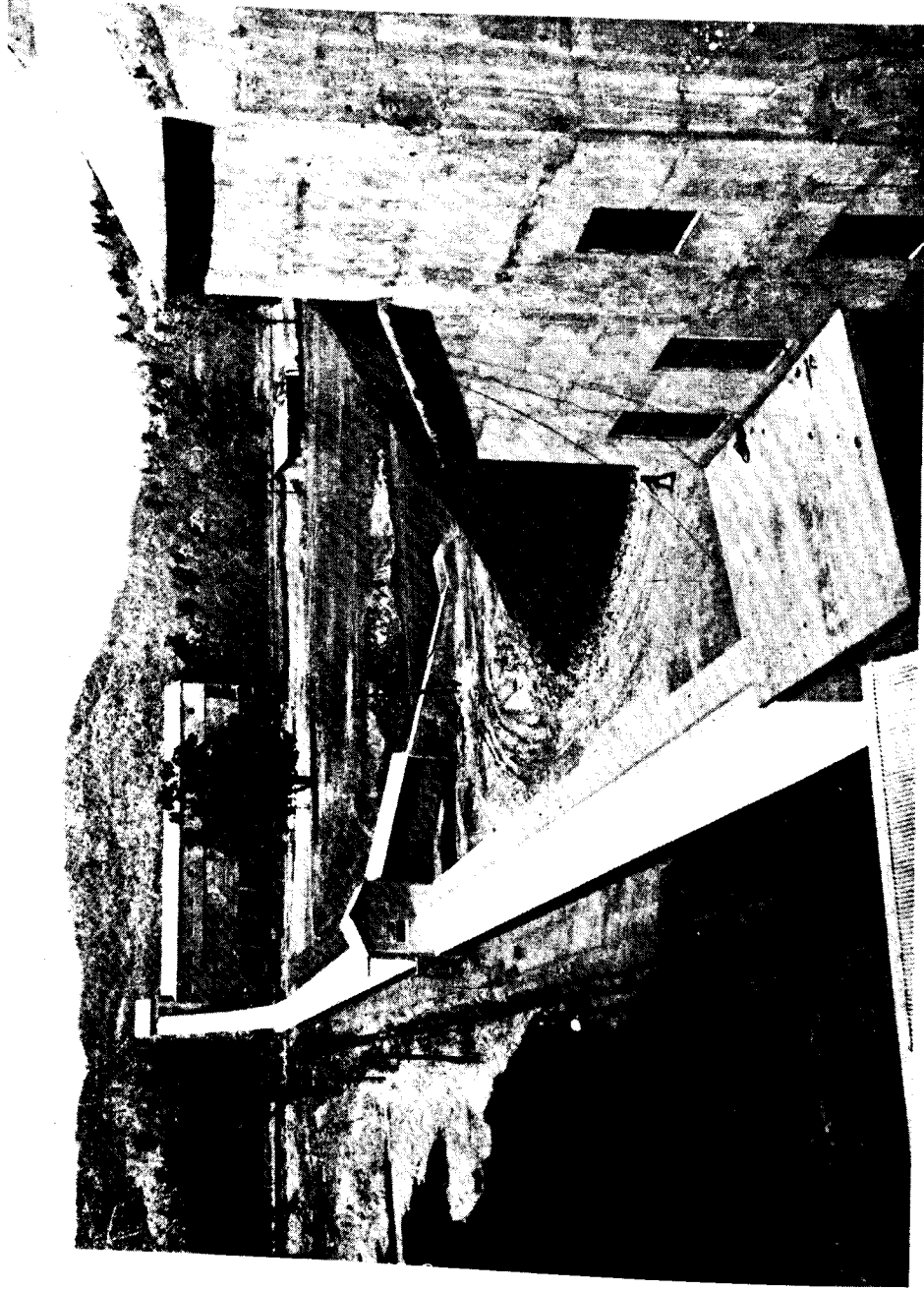
Blast Furnaces of Rourkela Steel Plant

Courtesy—Hindustan Steel Limited



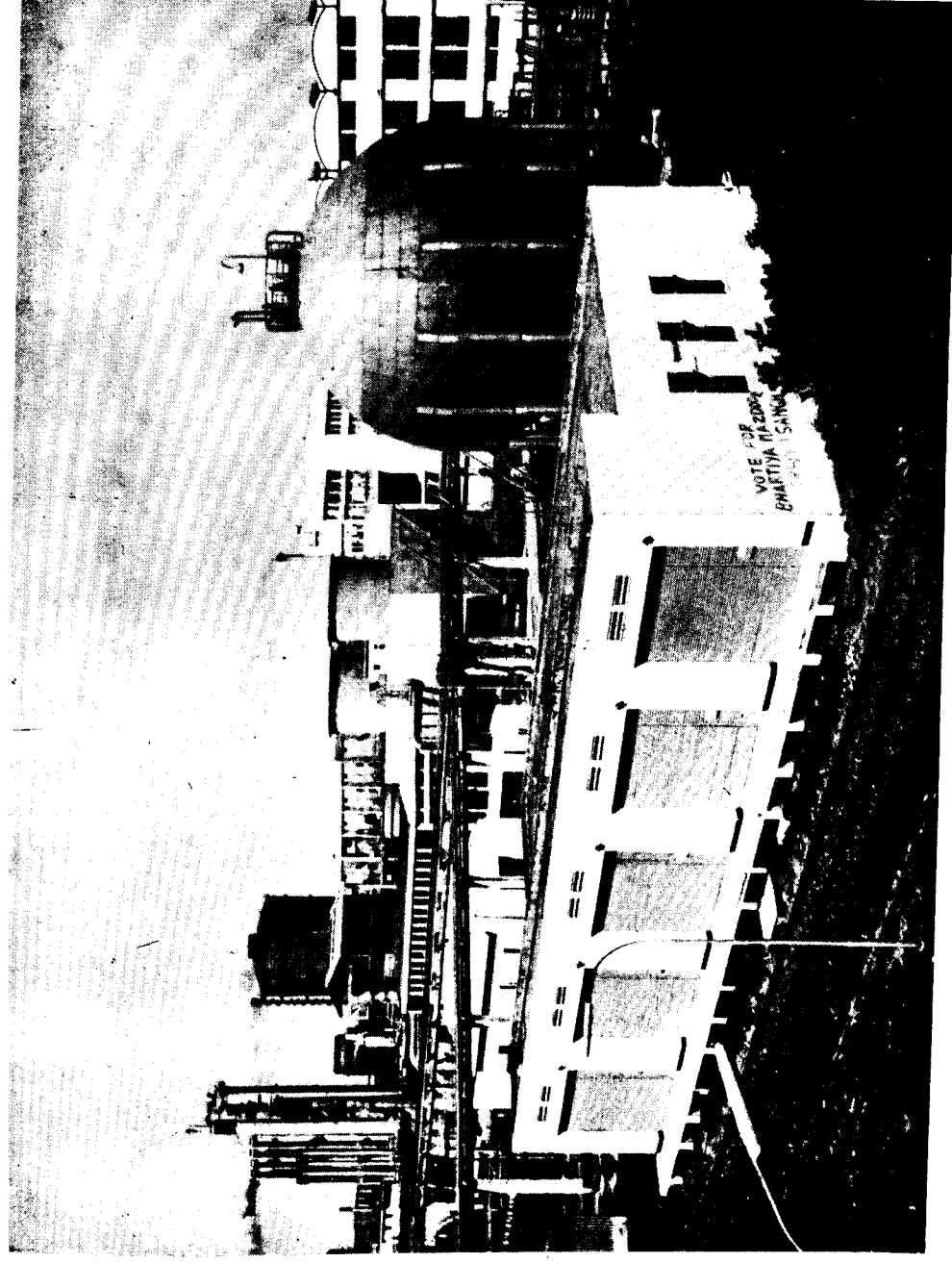
An L. D. converter being charged at the Rourkela Steel Plant

Courtesy—Hindustan Steel Limited



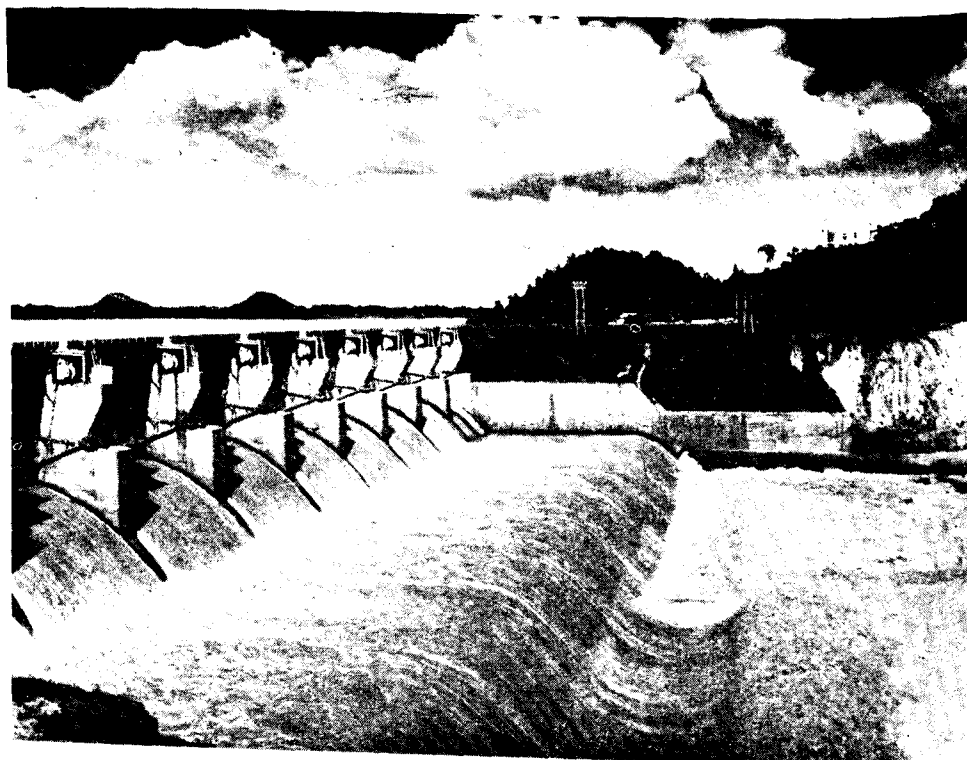
Barsuan iron ore mines

Courtesy—Home (P. R.) Department



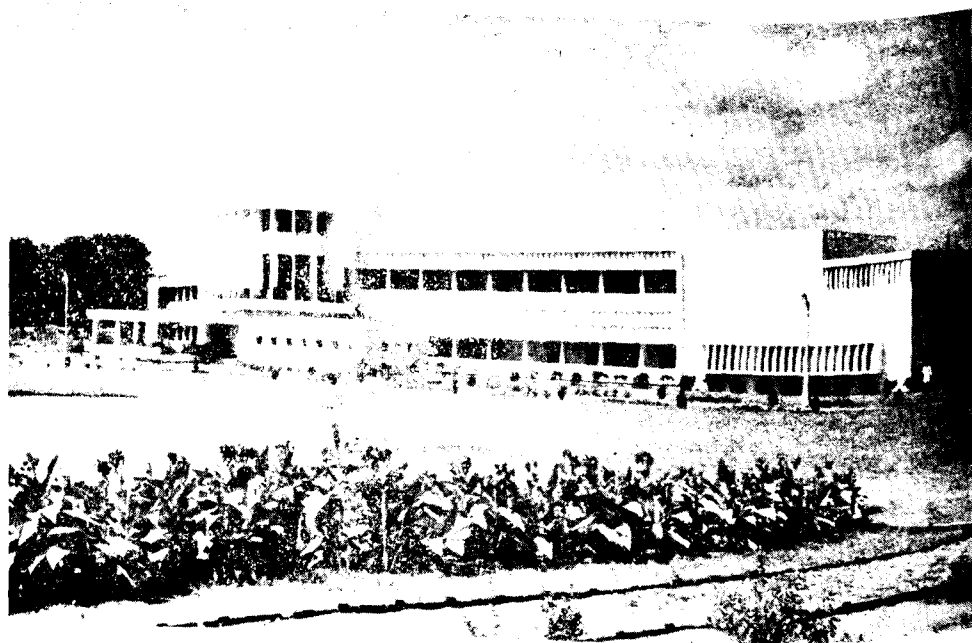
Fertiliser Plant (HSL), Rourkela

Courtesy—Home (P. R.) Department



Mandira Dam

Courtesy—Home (P. R.) Department



Rourkela House

Courtesy—Home (P. R.) Department

GLOSSARY

481

(Diacritical notations : आ=ā; ई=ī; ऊ=ū; ऋ=ṛ; औ=ō; ढ=ḍ; ट=t; ठ=ṭh; ड=d; ढ=ḍh; ण=n; श=s; ष=ṣ; अनुस्वार=m)

- Ābwāb-ଆବୱାବ .. Miscellaneous cesses levied by the ex-rulers and ex-zamindars.
- Akūt village-ଅକୁଟ .. A village in which no eye-measurement has been made of the cultivable lands.
- Amīn, ameen-ଅମିନ .. A subordinate surveyor.
- Anūgrahī grant-ଅନୁଗ୍ରହୀ .. A grant of favour.
- Āshram school-ଆଶ୍ରମ ବିଦ୍ୟାଳୟ .. A type of secondary school meant for tribal areas.
- Āyurveda-ଆୟୁର୍ବେଦ .. Hindu science of medicine.
- Bāhāl land-ବାହାଲ .. A low-lying land.
- Banamahotsava-ବନମହୋତ୍ସବ .. A celebration held every year during rains to encourage plantation of trees.
- Bārī-ବାରୀ .. Land lying to the back of a house.
- Bernā land-ବେର୍ନା .. Land occuring towards bottom of depression.
- Bethī-Begār-ବେଠି-ବେଗାର .. Forced labour.
- Bīḍī-ବିଡ଼ି .. An indigenous smoke, tobacco rolled in kendu leaf.
- Bīrī-ବିରି .. Black-gram.
- īrīpattī-ବିରିପତି .. A kind of cess.
- Bhānga-ଭଙ୍ଗ, ପତି, ସିଦ୍ଧି .. Leaves of the intoxicating Indian hashish (*cannabis indica*).
- Bhogrā land-ଭୋଗରା ଜମି .. The land cultivated by a landlord or Gaontia himself.
- Bhoodān-ଭୂଦାନ .. Literally means a land gift ; it refers to the Bhoodan movement started by Acharya Binōva Bhawe for collection of land for the landless.
- Brahmottar-ବ୍ରହ୍ମୋତ୍ତର .. Land given free of rent to a Brahmin.
- Chātasālī-ଚାଟଶାଳି .. An old type of village school.

Chaupadī-ଚଉପଦୀ	.. A song or poem ordinarily consisting of four couplets.
Chhānda-ଛାନ୍ଦ	.. Poem composed of a particular metre.
Chowkidār-ଚୌକିଦାର	.. A watchman ; village police.
Dasaharā-ଦଶହରା	.. A Hindu festival observed on the 10th day of the waxing moon in the month of Aswin ^a (September-October).
Dasaharāṭīkā-ଦଶହରା ଟିକା	.. Payment in cash or in kind to the ruler or zamindar on the occasion of Dasahara.
Debottar-ଦେବୋତ୍ତର	.. Land given free of rent for the service of a deity.
Dewān-ଦେଘ୍ୟାନ୍	.. The chief executive officer next to the ruler in an ex-Feudatory State.
Durbār-ଦରବାର	.. A royal court ; Government of an ex-ruling chief.
Ekpadīā-ଏକପଦିଆ	.. An official record containing the tenants area of holding and amount of assessment.
Gādi-ଗାଦି	.. Throne.
Ganjā-ଗଞ୍ଜ	.. The intoxicating Indian hemp (<i>cannabis sativa</i>).
Ganjhū-ଗଞ୍ଜୁ	.. The head-man of a village.
Gaontīā-ଗୌଡିଆ	.. The revenue collector of a village ; the village head-man.
Gharbāri-ଘରବାରୀ	.. Homestead land.
Gorā (Goda)-ଗୋଡ଼ା	.. High land.
Grāmdān-ଗ୍ରାମଦାନ	.. Gift of a village, refers to the Gramdan Movement started by Binova Bhawe, the Sarvodaya leader.
Grāma Panchāyat-ଗ୍ରାମପଞ୍ଚାୟତ	.. An elected body of local self-Government at village level.
Grām Rakhī-ଗ୍ରାମରକ୍ଷୀ	.. Village police.
Gūljī-ଗୁଲ୍‌ଜି	.. A kind of foodgrain.
Gūr-ଗୁଡ଼	.. Un-refined sugar.
Halīā-ହାଲିଆ	.. A labourer engaged for ploughing.

Hāta chīṭhā-ହାତଚିଠା	.. Literally means a hand written slip ; a prescribed form for collection of vital statistics.
Jāgīr-ଜାଗୀର	.. Land or village given on service tenure.
Jāgīrdār-ଜାଗୀରଦାର	.. Holder of a service tenure.
Jamā-ଜମା	.. Gross receipt, annual rent or revenue.
Jamābandī-ଜମାବନ୍ଦି	.. Rent roll.
Jhānkar-ଝାଙ୍କର	.. A village functionary in Western Orissa belonging to the non-Ariyan Caste who was both a village watchman and the priest of the village deity.
Kabūliyat-କବୁଲିୟତ୍	.. A counter lease or agreement to pay rent executed by the tenant in return for the lease granted to him by the landlord.
Kanyāśrama-କନ୍ୟାଶ୍ରମ	.. A type of girl school meant for tribal areas.
Kar-chowl-କର-ଚଉଲ	.. A kind of cess.
Katā-କଟା	.. A reservoir for storing rain water coming down the hills.
Kāṭhā-କଠା	.. A local measure for corn.
Kavīrāj-କବିରାଜ	.. A physician practising the Hindu system of medicine ; an Ayurvedic practitioner.
Khālsā-ଖାଲସା	.. Land or village in the immediate possession of a landlord or a ruler.
Khamārchās-ଖମାର୍ଚ୍ଚାସ	.. Land under personal cultivation of the ex-rulers and zamindars.
Khamār village-ଖମାର ଗ୍ରାମ	.. Village directly held by the ruler or the landlord.
Khānāpurī-ଖାନାପୁରୀ	.. Literally means record writing ; a stage in settlement operations.
Kharīf-ଖରିଫ୍	.. A crop season (Summer-Autumn).
Khandī-ଖଣ୍ଡି	.. A standard measure for paddy.
Kharpoṣ-ଖରପୋଷ, ଖୋରକପୋଷାକ	Maintenance grant.

Khatīān-ଖତିଆନ	.. A register in which the rights of the tenants are recorded.
Khewāt-ଖେଉଟ	.. A paper prepared during a revenue-settlement showing the interest and shares of the various classes of proprietors in an estate.
Khūt-Kātī-ଖୁଟକାଟି	.. Lands reclaimed by the original settlers of the village or their descendants in the male line.
Kīstīwālā-କିଷ୍ଟିଓଲା	.. A money-lender who lends money and realises the principal along with interest in instalments.
Kūda-କୁଡ଼ା	.. A mound of earth.
Kūmbha-କୁମ୍ଭା	.. A small water jar ; an earthen pitcher.
Kūt village-କୁଟ	.. A village where rough estimate by the eye has been made of the cultivable lands.
Mahājana-ମହାଜନ	.. A village money-lender.
Māgan-ମାଗଣ	.. A kind of cess, a forced contribution.
Māl land-ମାଲ	.. Up-land.
Mālguzārī-ମାଲଗୁଜାରି	.. The rent realised by the ex-Gaontia or ex-Zamindar in order to pay to the Government.
Mandala-ମଣ୍ଡଳ	.. Tract of a country, a collection or group of villages.
Mauṇi-ମାଊଣି	.. Land brought for a consideration from an ex-ruler or Zamindar free of assessment.
Melā-ମେଳା	.. Fair.
Mīthūna-ମିଥୁନ	.. A couple; a male and a female.
Mukhiā-ମୁଖିଆ	.. Headman.
Nāib-Sarpanch-ନାଏବ-ସରପଞ୍ଚ	.. Vice-President of a village Panchayat.
Nayābādī Settlement-ନୟାବାଦୀ-ସେଟ୍ଲମେଣ୍ଟ	.. Settlement of newly reclaimed lands.
Nazar-kūt-ନଜର-କୁଟ	.. Survey by eye estimation.
Nazrāpā-ନଜରାପା	.. A tribute paid to the ex-ruler or Zamindar.

Nijchāṣ-ନିଜଚାଷ	.. Land under one's own cultivation.
Nistār cess-ନିଷ୍ଟାର	.. Forest cess.
Nūākhīā-ନୁଆଖିଆ	.. The ceremony of eating new rice of the year.
Nullāh (Nala)-ନଳା	.. A rivulet ; a water-course.
Odīssī-ଓଡ଼ିଶୀ	.. A classical dance of Orissa.
Padīkā-ପଦିକା	.. A land measuring rod of certain length.
Pagree-ପାଗଡ଼ି	.. Turban.
Pāhī-ପାହି	.. Holding, held by a non-resident raiyat.
Pāika-ପାଲକ	.. A landed militia of Orissa.
Paīla-ପାଇଲା	.. A measure for corn.
Pancha-ପଞ୍ଚ	.. A kind of cess.
Pārchā-ପାର୍ଚା	.. Slip of paper given to a raiyat showing the particulars of holding during survey in the Settlement operations.
Parganādār-ପରଗଣାଦାର	.. The holder of a Pargana (a fiscal division).
Pāṭhaśālā-ପାଠଶାଳା	.. A village school.
Pattā-ପଟା	.. A lease given to a raiyat showing his lands and his rents and the period for which it was fixed.
Prajāmandal-ପ୍ରଜାମଣ୍ଡଳ	.. A political organisation of the ex-State people.
Pūchee-ପୁଚି	.. A kind of play amongst Oriya girls consisting of frisking dance.
Rabī-ରବି	.. A crop season (Autumn-Spring).
Rāsa-ରାସ	.. A festival in the month of Kartika (October-November) in which Lord Krishna is worshipped.
Raiyat-ରାୟତ	.. A tenant.
Rojagārī Cess-ରୋଜଗାରୀ	.. A cess on earning.
Sāhukār-ସାହୁକାର	.. A money-lender.
Salāmī-ସଲାମି	.. Present given to a landlord or a ruler.

(Abbreviations used : (A) for animal, (B) for bird, (H) for hill, (R) for river, (Rep) for reptile and (T) for tree and plant.)

A

Abwab, 293
Acts

- Agriculturaist Loans Act, 206
- Bengal Births and Deaths Registration Act, 1873, 415
- Bihar and Orissa Excise Act, 1915, 439
- Central Provinces Tenancy Act, 305
- Central Sales Tax Act, 1956, 331
- Dangerous Drugs Act, 1930, 439
- Hindu Marriage Act, 351
- Hindu Succession Act, 1956, 123
- Insolvency Act, 351
- Land Acquisition Act, 351
- Land Improvement Loan Act, 147
- Medicinal and Toilet Preparation Duties Act, 1956, 439
- Opium Act of 1878, 439
- Orissa Opium Smoking Act, 1947, 439
- Orissa Cess Act of 1962, 310
- Orissa Estates Abolition Act, 1951, 321, 323, 325
- Orissa Forest Act, 1972, 30
- Orissa Grama Panchayat Act, 1948, 378, 416
- Orissa Grama Panchayat Act, 1964, 416
- Orissa Land Reforms Act, 1960, 323, 326
- Orissa Land Reform (Amendment) Act, 1965 & 1974, 326
- Orissa Local Body (Suspension of Election) Act, 1962, 374
- Orissa Merged States (Laws) Act, 1950, 322, 323, 325
- Orissa Merged Territory (Village Office's Abolition) Act, 1963, 322, 323

- Orissa Money Lenders Act, 1939, 202
- Orissa Offices of Village Police (Abolition) Act, 1964, 322
- Orissa Panchayat Samitis Act, 1959, 377
- Orissa Private Lands of Rulers-Assessment of Rent Act, 1958, 323
- Orissa Public Demand Recovery Act, 1962, 321
- Orissa Survey and Settlement Act, 1958, 323
- Orissa Tenants Protection Act, 1948, 325
- Orissa Tenants Relief Act, 1948, 325
- Orissa Town Planning and Improvement Trust Act, 1956, 375
- Special Marriage Act, 1954, 125
- State Aid to Industries Act, 177 207
- Village Panchayat Act, 75
- Wild Birds and Animals Protection Act, 1912, 30
- Workmen Compensation Act, 1912, 437
- Zilla Parishad Act, 1960, 285, 375

Adibhanja Royal Family, 50
Adivasi, ଅଦିବାସୀ, 125, 396, 437, 439
Adult Literacy Centre, 176, 393
Advocates, 254, 351
Agricultural Refinance Corporation, 138
Air port, 232
Ajanta Inscriptions, 47
Akhand Parbat (H) ଅକ୍ଷୟ ପର୍ବତ, 41
Akut ଅକୃତ, 291, 292
Allahabad Pillar Inscriptions, 46
Amin ଅମୀନ, 293

Sanad-ସନାଦ

- .. Firman, a grant, a written order signed and sealed by a King or Government.

Sannyāsī-ସନ୍ନାସୀ

- .. A man who has renounced the world.

Sarbarākār-ସର୍ବବରକାର

- .. A rent collecting officer who used to collect rent from the government estate. In many cases the Sarbarakars had become proprietary tenure holders.

Sarpancha-ସରପଞ୍ଚ

- .. Elected president of a village Panchayat.

Satyāgraha-ସତ୍ୟାଗ୍ରହ

- .. Literally means love for truth ; the doctrine of passive resistance preached by Mahatma Gandhi.

Sevāśrama (Sevasrama) ସେବାଶ୍ରମ

- A type of primary school meant for tribal areas.

Sīkmī Raiyat-ସିକ୍ମି-ରାୟତ

- .. Sub-tenant.

Sīndūrtikā-ସିନ୍ଦୂରତିକା

- .. A grant for the cosmetic expenses of the queen.

Śrādha (Shradha)-ଶ୍ରାଦ୍ଧ

- .. Paying oblation to ancestors.

Subāh-ସୁବା

- .. A province in Mughal or Maratha period.

Sukhbāsī-ସୁଖବାସୀ

- .. Labourer.

Saccāvi Loan-ସକାବି ଲୋନ

- .. Loan given as a relief measure for carrying on agricultural operation.

Tākoli-ଟାକୋଲି

- .. A tribute.

Tāmbī-ତାମ୍ବି

- .. A wooden or metal measure for grains and liquids.

Tassar (Tusser)-ଟସର

- .. A kind of silk obtained from a species of silk-worm (*Antheoea paphia*).

Tikaīt-ଟିକାୟତ

- .. The eldest prince; the heir-apparent to the throne.

Thānī-ଥାନୀ

- .. A raiyat cultivating land of the same village of which he is a permanent resident.

Vaīdya-ବୈଦ୍ୟ

- .. A physician practising the Hindu system of indigenous medicine.

Amrudi Nala ଅମୃତ ନାଳା, 8
Ancillary Industry Advisory Committee, 178
Andhra Association, 395
Andiabira (H), 8
Anglican Church Mission, 466
Antelope (A), 34
Anti-yaws campaign, 421
Aonla (T) ଅଞ୍ଜଳି, 30
Archaeology, 42
Arts and Crafts School, 253
Aryans, 294
Asanpat Inscription, 44
Ashram Schools, 253, 386
Asurkol Pahar (H) ଅସୁରକୋଲ ପାହାଡ଼, 16
Auxiliary Midwives and Nurse Training Centre, 424
Ayurvedic Dispensary, 424, 426, 441

B

Badamgarh (H) ବାଦାମଗଡ଼, 7
Baghbindhra (H) ବାଗବିନ୍ଧ୍ରା, 7
Bahal ବାହାଲ, 140, 313
Baisakhi ବୈଶାଖୀ, 395
Baisundar Nala ବୈସୁନ୍ଦର ନାଳା, 17, 27
Balabhadra (god) ବଳଭଦ୍ର, 478
Balial (H) ବାଲିଆ, 7
Banda (R) ବନ୍ଦା, 9
Bandamunda-Dumarao Railway Line, 158
Bandhan (T) ବନ୍ଧନ, 30
Banamahotsava ବନମହୋତ୍ସବ, 143
Baneswara (god) ବାଣେଶ୍ଵର, 45, 469
Barabati Fort, 58
Bar Association, 351
Barking Deer (A), 34
Barpali Copper Plate, 43, 70
Barytes, 16
Basundhar (R) ବସୁନ୍ଧର, 9
Bauxite, 16, 170
Belaghat Plates, 46
Bendra (R), 9
Bendrichuan (H) ବେନ୍ଦ୍ରିଚୁଆନ, 7
Bengal Nagpur Railway, 72, 155, 263
Berna ବେର୍ନା, 140, 313

Bethi-Begari ବେଠି-ବେଗାରୀ, 312, 313
Bhaisamunda Pahar (H) ବୈଷାମୁଣ୍ଡା ପାହାଡ଼, 5, 8
Bhang ଭଙ୍ଗ, 438, 439
Bhanja ଭଞ୍ଜ, 45, 50, 57
Bhanja Bhaban, 397
Bhanja Kala Kendra, 393
Bharat Aluminium Company, 173
Bharatiya Natya Sangha, 393
Bharat Scouts and Guides, 466
Bhavani Shankar High School, 73
Bhima (R) ଭୀମା, 43
Bhogra ଭୋଗ୍ରା, 291, 292, 296, 303, 304, 316, 317
Bhonsla Government, 59
Bhoodan ଭୂଦାନ, 323, 329
Bichakhani (H) ବିଚାଖାନୀ, 7, 260
Bidi ବିଡି, 128
Bilingualism, 99
Bilpahari (H) ବିଲପାହାଡ଼ୀ, 8
Birds, 35
Biringa ବିରିଙ୍ଗା, 6
Bison (A), 31
Bisra Limestone Company (Stone Lime Company), 169, 208, 269, 468
Black Cotton Soil, 5, 6
Black Partridge (B), 35
Blood Bank, 424, 426
Board of Revenue, 438
Board of Secondary Education, 388
Bombay-Calcutta Trunk Road, 268
Bonai Copper Plate, 42, 43
Bonai State Panchayat Orders of 1943, 67
Botanical Survey of India, 28
Botryoidal, 26
Brahmanamara Water Reservoir, 372
Brahmani (R) ବ୍ରାହ୍ମଣୀ, 4, 5, 6, 8, 10, 18, 41, 44, 137, 148, 167, 207, 227, 232, 249, 264, 270, 471, 478
Brahmesvar Temple Inscription, 51
Brahmottar ବ୍ରହ୍ମୋତ୍ତର, 301, 302, 321
British, 58, 59, 70, 272, 284, 290, 304, 310

Brass, 176, 249
Bronze, 249
Bursuonjhor (R), 9
Butea Seleichera, 28

C

Calcutta Museum, 33
CARE, 464
Carpenter, 268
Cassia, 28
Castes, 102
—Agaria (Agharia) ଅଗରିଆ, 103, 139, 143, 271, 324
—Badhei ବଡ଼େଇ, 103
—Bhandari ଭଣ୍ଡାରୀ, 103
—Bania ବଣିଆ, 104
—Brahmin ବ୍ରାହ୍ମଣ, 104
—Gauda ଗାଡ଼ା, 105
—Guria ଗୁରିଆ, 105
—Hansi ହାନ୍ସୀ, 105, 175, 249
—Jhora ଜୋରା, 105, 167, 249
—Kaltuya କାଲତୁୟା, 106
—Kamar କମାର, 106, 176, 249, 319
—Kansari କଂସାରୀ, 107, 176, 249
—Karan କରଣ, 107
—Keuta କେଉଟା, 107
—Khyatriyas କ୍ଷତ୍ରିୟ, 107
—Kosta କୋଷ୍ଟା, 108
—Kumbhar କୁମ୍ଭାର, 108, 319
—Mali ମାଲି, 108
—Routia ରାଉଟିଆ, 109
—Sundhi ସୁନ୍ଦି, 109
—Teli ତେଲି, 109
Cattle fair, 154, 208
Cement, 22, 167, 170, 171, 392
Central Excise, 329, 330
Cereals, 142
Chaitra Parva ଚୈତ୍ରପର୍ବ, 131, 469
Champajharan Pass, 226
Chandra Sekhar Temple, 45
Chauhan Dynasty, 54, 57
Charitable Endowments, 442
Chatesvara Inscription, 53

Chhelia Toka (H), 7, 232, 260
Chhelia Toka Range, 6, 7, 10
Chhindaka Naga King, 53
Chota Nagpur Plateau, 5, 6
Chikitsa Manjari ଚିକିତ୍ସାମଞ୍ଜରୀ, 57
Children's Park, 373
Chirobeda Nala ଚିରୋବେଡା ନାଳା, 8
Chodadia (R), 9
Chowkidar ଚୌକିଦାର, 261, 302, 338
Christianity, 102
Cinema, 133, 468
Circuit House, 233
Civet Cat (A), 32
Climate, 36
Coal, 17
Colleges, 389
—Bonaigarh College, 390
—Rajgangpur College, 390
—Regional Engineering College, 392
—Rourkela Evening College, 389
—Rourkela Science College, 389
—Sundargarh College, 389
—Susilavati Khosla Dayananda Anglo-Vedic College for Women, 389
Commercial Banks, 203
Commercial Tax Department, 331, 332
Connolly Settlement, 300
Copper Plates, 43, 48, 51
Co-operative Societies, 201, 366
Cottage Industries, 175
Country liquor, 128
Crafts, 387
Crash Programme, 431
Crash Scheme, 274
Crime, 336
Crocodile (Ref.), 35
Crop Loan System, 202
Crops, 141
Cultural Academy, 393
Cultural Association, 395

D

Dairy Farm, 151, 363
 Dalkhai ଭାଲଗାଓ, 393
 Dance, 129, 130, 131, 132
 Dandapat ଦଣ୍ଡପାଟ, 315, 316
 Debottar ଦେବତାଓ, 298, 316, 321
 Democratic Decentralisation, 377
 Density, 93
 Deo (R) ଦୌ, 5, 20, 21
 Devaputra ଦେବପୁତ୍ର, 44
 Dewan ଦେଓାନ, 74, 284, 297, 306, 320, 338, 347, 348, 363
 Dhabeleswara ଧବେଲେଶ୍ଵର, 45
 Dhanjori Group, 11, 14
 Dharmasala ଧର୍ମଶାଳା, 233
 Dhhina (R) ଧୁନା, 9
 Diamond, 9
 Didra (H), ଦିଦ୍ରା, 5, 7
 Director of Mines, 7, 20, 22, 24, 27
 Displaced Persons, 95
 Distillery, 438
 Dolerite, 15
 Dolomite, 12, 13, 20, 168, 169
 Doctors, 254, 424
 Deodaria Nala (R) ଦେଓଡ଼ାରିଆ ନାଳା, 17
 Dress, 126
 Drought, 148, 149
 Durbar ଦରବାର, 69, 70, 74, 284
 Durga (goddess) ଦୁର୍ଗା, 45
 Dwellings, 125

E

Early Stone Age, 41
 East India Company, 58, 63, 70
 Eastern States Agency, 74, 284
 Economic depression, 272
 Economic Survey, 269
 Economic Sample Survey, 250
 Education Department, 390
 Education District, 389
 Elections, 446
 —General, 448, 449, 451, 450, 458
 —Mid-term, 446, 451, 452, 455, 458

Electrical Division, 361
 Electirical Power House, 168
 Electricity, 168, 360
 Electrolytic Manganese, 171
 Elementary education, 387
 Elementary Training School, 254, 382, 390
 Elephant (A), 31
 Elephantiasis, 421
 Employment Exchange, 273
 Entertainment Tax, 331
 Epidemics, 419, 422
 Epidiorites, 16
 Epigraphic evidence, 49
 Eran Inscription, 47
 Excise
 —Commissioner, 331
 —Department, 331, 438, 439
 —Superintendent, 284, 286
 Executive Engineer, 360
 Executive Magistrate, 286
 Executive Officer, 374, 375
 Export, 209

F

Fairs, 129
 Fair Price Shops, 210, 440
 Family
 —Budget Enquiry, 273
 —Planning, 275, 373, 426, 427
 Famine, 148, 149
 Fauna, 31
 Felspar, 18
 Ferry-Ghat, 232
 Fertiliser
 —Complex, 475, 476
 —Plant, 172
 Festivals, 129
 Feudatory
 —States, 310, 317, 360
 —Tenure, 313, 316
 Fief-holder, 311

Fire-clay, 170
 Fire Service, 342
 First Land Revenue Settlement, 65
 First World War, 73
 Fish, 35
 Fishery Department, 154
 Five Year Plans, 147, 267, 272
 Flood, 148
 Flora, 28
 Flying Squirrel (A), 33
 Food and drink, 128
 Forest, 29, 155, 321
 Forest Department, 156, 227, 233
 Fort, 45
 Fox (A), 31, 32
 Free Labour, 268
 Freedom Struggle, 75
 Fruits, 143
 Furniture and decoration, 126

G

Gabbro, 15
 Giant Squirrel (A), 32
 Gadi ଗାଡ଼ି, 62, 65, 68, 71, 311
 Gajapati ଗଜପତି, 103
 Galena, 20
 Gambhari (T) ଗମ୍ଭାରି, 30
 Gandhian Movement, 76
 Ganesa (god) ଗଣେଶ, 45
 Gangas ଗଙ୍ଗା, 52, 53, 55
 Gangetic Plain, 28
 Ganjhu ଗଞ୍ଜୁ, 294, 295, 302, 303
 Gangpur Raj family, 68, 69
 Ganja ଗଞ୍ଜା, 438, 439
 Gaontia ଗାଓନ୍ତିଆ, 67, 75, 200, 261, 271, 291, 292, 298, 303, 306, 310, 311, 314, 318, 320, 322, 428
 Garjanjore (H) ଗରଜନଜୋରା, 7
 Geological Survey of India, 19, 22, 260
 Geology, 11
 Ghaira (R) ଗୋରା, 9
 Godavari (R), 53
 Gokhara (Rep.) ଗୋଖରା, 35

Gold, 18
 —Coins, 43
 —Washing, 249
 Gopabandhu Parishad, 394
 Gondwans, 11
 Gora lands ଗୋରା, 296, 297
 Gorait, 291, 338
 Gossner Evangelical Lutheran Missson, 466.
 Graingollas, 44
 Grama Rakhi ଗ୍ରାମରାକ୍ଷୀ, 343, 416
 Gramdan ଗ୍ରାମଦାନ, 329
 Grama Panchayat ଗ୍ରାମପଞ୍ଚାୟତ, 146, 209, 227, 276, 327, 368, 377, 429
 Granites, 13, 14, 15
 Green manuring, 146
 Grey Mongoose (A), 32
 Greywackes, 14
 Grow More Food Scheme, 139
 Gneisses, 13
 Gupteswar Siva ଗୁପ୍ତେଶ୍ଵର ଶିବ, 68
 Gurabasa Reserve Forest, 7
 Gurukula Vedic Ashrama, 466
 Guru training, 382

H

Havildar, 253, 338
 Halias ହାଲିଆ, 67, 268
 Handia (rice beer) ହାନ୍ଦିଆ, 270
 Hanuman (A), 34
 Hannuman (god) ହନୁମାନ, 469
 Hardwickia (T), 28
 Hare (A), 32
 Harssinghar (T), 30
 Hatibari Quarry, 21
 Hatidhan ହାତିଧାନ, 319
 Hazaribagh Training College, 74
 Health Centre, 426
 Hematite, 7
 Hematite Jasper, 18
 Hemgir Plateau, 4, 7
 Hills, 6
 Hilsa, 35
 Hindi, 71, 98
 Hinduism, 101

Hindustan Steel Limited (H. S. L.), 11, 21, 169, 209, 232, 330, 360, 376, 392, 397
 Hindustan General Insurance, 207
 Hirakud Dam, 20
 Hirakud Hydro Electricity Project, 168
 Himalayan Slopes, 28
 High
 —Court, 284, 348
 —Yielding crop, 262
 —Yielding Variety Programme, 364
 Homoeopathic Dispensary, 254, 426
 Home (Public Relations) Department, 322
 Hornbill (B), 35
 Horticulture, 329
 Hospital, 422, 423, 424, 425
 Hotel, 233
 Household industry, 175
 Humidity, 37

I

Ib (R), 7, 8, 9, 10, 13, 17, 71, 137, 138, 149, 207, 226, 260
 Ice Factory, 255,
 Ichha (R), 9, 18
 Ikshvaku Prince, 46
 Imperial Gangas, 53
 Import, 209
 Indian Boar (A), 34
 Indian Mouse deer (A), 34
 Indian Sloth Bear, 33
 Indian National Congress, 324
 Indian Redcross Society, 461
 Indira Gandhi Park, 464, 476
 Indo-German Club, 465
 Indo-German Cultural Centre, 394
 Industrial Development Corporation of India, 177
 Industrial Estate, 175, 177
 Industrial School, 382
 Inoculation, 372, 430
 Inspectors, 338, 366

Inspection Bungalow, 233
 Intensive Agricultural Area programme, 145, 262, 364
 Inter-Caste relations, 122
 Iron ore, 11, 15, 18
 Iron Oxide, 18, 26
 Iron and Steel Plant, 20
 Iron melting, 249
 Irrigation, 138
 Islam, 102
 Ispat, 460
 —Club, 397
 —General Hospital, 465
 —Guest House, 234

J

Jagannath(God) ଭଗବାନ, 469, 478, 44
 Jackle (A), 32
 Jagirଦାସ, 301, 313, 343
 Jail, 284, 344, 345
 Jain, 100
 Jama of Bonai, 64
 Jama of Gangpur, 70
 Jana Congress, 455
 Jana Sangha କଂଗ୍ରେସ, 453, 455
 Jhadeswar temple, 45
 Jhankar ଶାଳ, 319
 Jharkhanda ଶାଳଗ୍ରାମ, 453
 Jharkhanda Movement, 77
 Jhujia Nala ଶୁକ୍ଳନଳା, 17
 Jagijogan (H) ଜଗଜିଗନାଶ, 7
 Judiciary, 347
 Junior Basic Schools, 253, 276

K

Kadam Bansିକନ୍ଦୁବଣୀ, 62
 Kadam Gatha, କଦମ୍ବ ଗୀତା 63
 Kadam Rulers, 57
 Kadhia loan, 67
 Kalachuri କାଳଚୁରୀ, 51, 53
 Kali (goddess) କାଳୀ, 107
 Kalo, 307, 319
 Kanta (goddess) କାନ୍ତା 472

Kantamunda (H) କାନ୍ତାମୁଣ୍ଡା, 7
 Kauvatal plates, 47
 Kanyashram କନ୍ୟାଶ୍ରମ, 441
 Kaolin, 16
 Karama କରାମା, 129, 393
 Karampada Range, 7
 Karaspani (H) କରାସପାନୀ, 7
 Karchowl, 293
 Karada (T) 30
 Karo (R), 18
 Katha କଥା, 214
 Kathak କଥକ, 393
 Kavirajas କବିରାଜ, 254, 414
 Kalga Plates, 52
 Kendu (Tendu) (T), 30
 Kendu leaves, 157, 158, 210
 Kesari Dynasty, 54, 69
 Kesari Kings, 45
 Key Village Programme, 363
 Khaira (T), ଖଇରା, 30
 Khalsa, 293, 300, 302
 Khamar ଖମାର 301, 316, 321, 325
 Khameswari Temple Inscription, 53
 Khandapara Plate, 52
 Khandadhar (H) ଖଣ୍ଡାଧାର, 7
 Khandadhar waterfalls, 7, 10, 232, 472
 Khandi ଖଣ୍ଡି, 214
 Khandikhunti ଖଣ୍ଡିଖୁଣ୍ଟି, 293
 Kharga Prasad Copper Plate, 49
 Kharif ଖରୀଫ, 137, 139, 142, 145, 147
 Kharod Stone Inscription, 53
 Kharposh ଖରପୋଷ, 299, 301, 309, 316, 321
 Khatian ଖଟିଆନ, 298
 Khorung (R) ଖୋରୁଙ୍ଗ, 9
 Khudia Plateau, 9
 Khuntkattidar ଖୁଣ୍ଟକାଟ୍ଟିଦାର, 295
 Kichimiri (H) କିଚିମିରୀ, 8
 Kistiwala, 200
 Kol Insurrection of 1831, 60
 Koel (R) କୋଏଲ, 8, 9, 18, 24, 129, 137, 232, 381, 474, 478
 Koira Valley, 26, 27
 Kolhan Age, 15

Konark Sanskritika Parishad, 394
 Kopeswara temple, 45
 Korapani Nala କୋରାପାନୀ ନଳା, 8
 Kosalendra କୋଶଳେନ୍ଦ୍ର, 51
 Kuchedega (R) କୁଚେଡେଗା, 9
 Kumari (goddess) କୁମାରୀ, 469
 Kumritar (H) କୁମ୍ବିଟାର, 7
 Kur (R) କୁର, 9
 Kuradhi Irrigation Project, 138, 139
 Kurdu (T), 30
 Kurhadi (R) କୁରହାଡି, 8
 Kusa କୁସା, 46
 Kusana କୁଶାନ, 43, 44
 Kusum (T) କୁସୁମ, 30
 Kut କୁଟ, 292, 293
 Kutra (R) କୁଟ୍ରା, 9

L

Labour Department, 178
 Labour Welfare, 435
 Lac ଲକ୍ଷ, 157
 Lakshman (god) ଲକ୍ଷ୍ମଣ, 478
 Land Reforms, 322, 323
 Land Revenue, 155, 293, 308, 325
 Land Tenure, 313, 328
 Last Ruler of Gangpur, 75
 Laterite, 6, 25
 Lava, 14
 Leopard (A), 32
 Leprosy, 421
 Library, 394, 397, 398
 Life Insurance Corporation of India, 203, 206
 Lilari (R) ଲିଲାରୀ, 9
 Limestone, 13, 16, 20, 21, 22, 24, 25, 168, 169, 170
 Limonite, 25
 Lingaraj temple, 52
 Linz Donawitz Process (L. D. Process), 183, 475
 Lions Club, 460
 Literacy, 384
 Live Stock Population, 150

Local Body, 369,372
 Local Self-Government, 368
 Lok Sabha, 446,449,451,456
 Lunar Dynasty, 62
 Lurgi Nala, 9
 Lutheran Munda, 336

M

Maghi Bhang ମାଘିଭାଙ୍ଗ, 330
 Magnesia, 21,25
 Mahabharat ମହାଭାରତ, 8,129,232,479
 Mahabir Range, 5
 Mahadeva temple, 45
 Mahanadi (R) ମହାନଦୀ, 9,10,137
 Maharajadhiraja ମହାରାଜାଦିରାଜା, 43,51
 Maharaja Ranaka ମହାରାଜା ରାମଚନ୍ଦ୍ର, 43,49
 Mahila Samiti, 276
 Mahula (T) ମହୁଳା, 30
 Mahua ମହୁଆ, 111,112,128,157
 Major Bridge, 232
 Major District Roads, 227
 Mal ମାଳ, 140,296
 Malaria, 415,431
 Malguzari ମାଲଗୁଜାରୀ, 291
 Malhar Plates, 47
 Mammals, 31
 Man (H) ମାନ, 7
 Manamatra, 47
 Mandala ମଣ୍ଡଳ, 48
 Mandira Dam, 138,473
 Manganese, 12,16,25,26,168,169,171, 264
 Mankarancha (H) ମାଙ୍କଡ଼ଚଞ୍ଚୁ, 7,26
 Monsoon Season, 36
 Maratha, 54,60,290,302
 Marriage & Morals, 124
 Marwari, 208
 Master Plan, 375
 Maternity Centre, 254,425
 Maxmuller Bhavan, 394
 Mayur Dynasty, 42
 Maurya family, 50

Metric System, 215
 Meteorological Observatories, 36
 Mica-Schists, 11,14,15,26
 Microliths, 41
 Middle Stone Age, 41
 Migration, 96
 Milani, 395
 Military Architecture, 45
 Milk Supply Co-operative Society, 210
 Minerals, 16,170
 Minor Irrigation Project, 139
 Mission Schools, 74
 Mitra Sangha, 395
 Mobile Health Unit, 254,425
 Model Village, 276
 Mohammedan Period, 68
 Money lender, 200,272
 Montoux Test, 432
 Mukadam, 314
 Multipurpose Co-operative Society, 209
 Municipality, 227,329,416
 —Birmitrapur, 368, 371
 —Rajgangpur, 368, 369
 —Sundargarh, 232, 368, 374
 Munsifs, 255,350,351
 Muslims, 100
 Mutation fee, 306
 Myrobalans, 249

N

Naik ନାୟକ, 338
 Nandi hill, 42
 National Bird of India, 35
 National High way, 276
 National Planning Committee, 328
 Naukaran (Service tenure) ନୌକରାନ, 309
 Nayabadi Settlement, 206,309,320
 Nazarkut ନାଜରକୂଟ, 72, 293
 Nazrana ନାଜରାନା, 61,304
 Nazul lands, 305
 Neolithic Age, 41

New India Insurance, 207
 New Gangpur Mining Syndicate, 169
 New Religious Movement, 123
 Newspapers, 458
 Night School, 394
 Nila Chhakra ନିଳଚକ୍ର, 467
 Nilagai (A), 34
 Nistar cess, 300,310
 Non-Agricultural classes, 250
 Non-Co-operation Movement of 1921,76
 Notified Area Council, 227,368,416,425, 427
 —Rourkela (C.T), 206,368,372
 —Rourkela (S.T), 373
 Nuapatna Copper Plates, 52
 Nuakhia ନୁଆଖିଆ, 129
 Nutrition Programme, 374,464

O

Octroi, 370,375
 Odissi ଓଡ଼ିଶୀ, 393
 Oil Seeds, 142
 Opium, 438,439
 Orchidaceae, 28
 Orissan Art & Culture, 394
 Orissa Industries Limited, 170,473
 Orissa Khadi & village Industries Board, 176
 Orissa Sangeet Natak Akademi, 393
 Orissa State Archives, 70
 Orissa State Financial Coporation, 203
 Oriya, 98
 Ornament, 127
 Other District Road, 227
 Otter (A), 35

P

Pack Bullocks, 226
 Pachwai (Handia), 438,439
 Padika ପଦିକା, 65
 Paddy, 141,268
 Pagrees ପାଗ୍ରୀ, 67
 Pahan, 118

Paik ପାଈକ, 291,316
 Paila ପାଇଲା, 214
 Paintings, 41
 Palletisation Agglomeration plant, 171
 Palm Civet (A), 32
 Pancha ପଞ୍ଚ, 291,293
 Panchayat ପଞ୍ଚାୟତ, 176,277,285,362,368, 375,377,378
 Pangolin (A), 33
 Punjabi, 98
 Panther (A), 31
 Parchas ପାର୍ଚ୍ଛା, 307
 Parganadar ପରଗନାଦାର, 301
 Parmara clan, 68
 Paramara Sekhar Dynasty of Gangur, 42
 Parliamentary Constituency, 446,449, 451,452,457
 Pasture Centre, 151
 Patta ପଟ୍ଟା, 296,298,314
 Pathasala ପାଠଶାଳା, 381,382
 Patel ପଟେଲ, 302
 Patna kingdom, 56
 Paus Purnima ପୋଷ ପୂର୍ଣ୍ଣିମା, 317
 Peacock, 62
 Peacock Emblem, 50
 Peafowl (B), 35,260
 Pegmatite, 12,18
 Personal Deposit Account, 301
 Periodicals, 397
 Peridotites, 15
 Pharmacist, 254,345,422
 Phyllites, 11,12,13,15,26
 Piasal (T) ପିଆସାଲ, 29
 Pig Iron, 330
 Pigeons lofts, 236
 Pipardula & kurud grants, 47
 Pisciculture, 154,329
 Pitamahal Irrigation Project, 362
 Plane table method, 322
 Planning & Co-ordination Department, 376
 Podu Cultivation, 441

Podu Prevention Scheme, 366
 Political Agent, 61,347,348,360
 Political Department, 435
 Polytechnic School, 254
 Porcupine (A), 33
 Pos ଗାଁ, 214
 Posts & Telegraphs, 253
 Postal Time Deposits, 204
 Potash Felspar, 18
 Potters, 249
 Poultry, 150,152
 Praja Mandala, 77
 Praja Socialist Party, 450,455,456
 Pragati Utkal Sangha, 394
 Precambrian Age, 11
 Pre-historic man, 41
 Price Control Committee, 267
 Primary Consumers' Co-operative Store, 209
 Primary Health Centre, 254,424
 Prisoner, 345
 Prohibition, 437
 Proto-history, 42
 Provincial Autonomy, 61
 Puchee ପୁଚ୍ଛ, 393
 Public Health Department, 369,373
 Pulses, 142
 Public Works Department, 227,232, 272,276
 Pyrolusite, 26
 Pyrotite, 20
 Pyrite, 20
 Pyroxenites, 14

Q

Quartz, 26,27
 Quartzites, 11,12,14,41
 Quartz-schists, 14
 Quit India Movement of 1942, 76

R

Rabi ଋଷ, 137,139,142,145,263
 Radhakrishna (deities), 469,472
 Radhakrishna Cult, 45
 Radio Sets, 236
 Raghu Vamsa ରଘୁବଂଶ, 46
 Rainfall, 36
 Raipiri (H), 7
 Railway, 5,230,253,468
 Raiyat ରାୟତ, 266,293,295,297,312,317, 319
 Raiyati Tenure, 302
 Raja Bije ରାଜା ବିଜେ, 300
 Raja of
 —Bamara, 66
 —Raigarh, 60,69
 —Sambalpur, 59
 Rajguru ରାଜଗୁରୁ, 319
 Rajput Kshatriya ରାଜପୁତ କ୍ଷତ୍ରିୟ, 68
 Ram (god) ରାମ, 478
 Ramayana ରାମାୟଣ, 62
 Rangan Nala ରଙ୍ଗନଳା, 8
 Range officer, 330
 Rani Sahiba ରାଣିସାହିବା, 74, 347
 Rani of Sambalpur, 59
 Ranunculaceae, 28
 Ratel (A), 34
 Rati Maya Devi (goddess), 114
 Rathor Rajputs, 62
 Red Ochre, 27, 41
 Refractory Plant, 170,472
 Regent of Gangpur, 68
 Regional Marketing Co-operative Societies, 366
 Regional Poultry Farm, 153

Regional Transport Authority, 228
 Registrar of Co-operative Societies, 366
 Regular Settlement, 320
 Religion, 100, 115
 Rengalbera (H) ରେଂଗାଲବେରା, 7
 Rent Settlement, 308
 Reserved Forest, 321
 Rest Sheds, 233
 Revenue Court, 320
 Revenue Department, 156, 233, 324
 Revenue Divisional Commissioner, 286
 Rhodomite, 26
 Right of occupancy, 317
 Rip Van Winkle, 261
 Robbery, 336
 Rock Formations, 11
 Rock shelter, 41
 Rohi ରୋହି, 35
 Rojagari cess, 307
 Roman Catholic Mission, 386, 422, 465, 471
 Rontha plateau, 7
 Rotary Club, 463
 r... ex, 262
 Rourkela Chamber of Commerce, 214
 Rourkela House, 234
 Rourkela Natya Sangha, 393
 Rourkela Steel Plant, 7, 170, 260, 429, 435
 Rukura Nala ରୁକୁରାନଳା, 8
 Ruling Chief, 293, 294
 Rural Engineering Organisation, 139, 227, 276, 362
 Rural Radio Forum, 276

S

Sabai grass, 249
 Sahaj (T) ସହଜ, 29
 Sahukars ସାହୁକାର, 67
 Sailodbhava king, 50
 Saivism, 45
 Sal (T) ଶାଳ, 5, 28, 29
 Salami ସଲାମୀ, 296, 298, 300, 309, 314, 315, 318, 440
 Salary Savings Scheme, 206
 Salt Satyagraha, 76
 Sambar (A) ସମ୍ବର, 34
 Sambalpur Co-operative Circle, 366
 Sambalpur Durbar, 56
 Sambalpur University, 389, 390
 Samalai (Samalei, Samaleswari) (goddess) ସମଲାଇ, 107, 471
 Samjukt Socialist Party, 455
 Sanad ସନାଦ, 290, 299
 Sandgrouse (B), 35
 Sand Stone, 26
 Sandilya Gotra ସାଣ୍ଡିଲ୍ୟ ଗୋତ୍ର, 42
 Sangita Kala Parishad, 393
 Sanitation Committee, 368, 428
 Sanitary Inspector, 369, 371
 Sankha (R) ଶଙ୍କା, 5, 7, 8, 9, 18, 137, 149, 232, 233
 Sanskrit Tol, 382
 —Ramji, 381
 —Gurukula, 381
 Sapai (R) ସପାଇ, 9, 24, 137, 226
 Sarbarakar ସରବରାକାର, 71
 Sarabhapuriya King, 48, 50
 Saranda Forest, 8
 Sarabharaja ସରବରାଜ, 47
 Sarbhapur Ruling Family, 476
 Sarvadhikaradhikrita ସର୍ବାଧିକାରାଧିକୃତ, 50
 Sarkunda Nala ସରକଣ୍ଡା ନଳା, 8
 Sarapancha ସରପଞ୍ଚ, 377, 378
 Sarsagati, 9
 Sarisrupa ସରସ୍ବତୀ, 397
 Swatantra (Party), 453, 454, 455, 456
 Satparlia (H), ସାତପରିଆ, 7
 Savings Bank, 235
 Savings Deposits, 205
 Sawant ସାଂଘ, 64, 65, 311, 314
 Scheduled Area Money Lender's Regulation, 1967, 440

- Scheduled Areas Relief Regulation, 1967, 440
- Scheduled Castes, 109, 202, 273, 276, 387, 439, 440, 441
- Badaik ଚଢ଼ାଇ, 110
 - Chamara ଚମାର, 110
 - Dhanwar ପାଦପଲ, 111
 - Dhoba ଘୋଡ଼ା, 111
 - Ganda, ଗଣ୍ଡ, 112, 175
 - Ghasi, Ghasia ଘାସି, 113
 - Pana, Pano ପାନା, 113
 - Panatanti ପାନାତାନ୍ତି, 113
 - Pab, Pap ପାପ, 114
 - Turi ତୁରି, 114, 176, 249
- Scheduled District, 439, 440,
- Scheduled Tribes, 114, 202, 273, 276, 286, 390, 439, 440, 441, 450, 451, 452, 454, 455.
- Oraon ଓରାଓ, 116, 271
 - Munda ମୁଣ୍ଡା, 117, 264, 271, 324, 336
 - Kharia ଖରିଆ, 118
 - Kisan କିସାନ, 119
 - Bhuiya, Bhuiyan ଭୂୟା, 5, 120, 311
 - Binjhia, 120
 - Gond ଗଣ୍ଡ, 121, 311, 315
 - Khond କନ୍ଦ, 121, 176, 249
- Sculpture, 45
- Secondary Education, 386
- Secondary Training School, 391
- Second World War, 264, 267
- Secretary of States, 61
- Semecarpus, 28
- Sessions Judge, 347
- Settlement, 293, 294, 295, 297, 305, 307, 309, 312, 313.
- Seula ଶୂଳ, 35
- Sevashram ସେବାଶ୍ରମ, 387, 441
- Sevashram School, 253, 387
- Shale, 25
- Shifting cultivation, 261, 439
- Shisham (Sisu) (T), 30
- Shivarati ଶିବରାତ୍ରି, 470, 478
- Shrubs, 30
- Sight vane Survey, 312
- Sikhism, 102
- Sikmi Gaontiahi Tenure, 305
- Sindur Tika ସିନ୍ଦୂର ଟିକା, 301
- Singhbhum-Keonjhar-Bonai Belt, 25
- Simko Firing of 1939, 77
- Silica, 18, 24, 25
- Sillimanite, 19
- Sintering Plant, 186
- Sepoy Mutiny of 1857, 75
- Sisal Plantation, 138
- Sita (goddess) ସୀତା, 478
- Siva (god) ଶିବ, 41, 44, 45, 129 470, 478,
- Skilled labour, 269, 270
- Slaughter House, 372
- Smallpox, 264, 431
- Small Scale Industries, 173
- Smokeless chullahs, 429
- Snake, 35
- Soakage Pit, 429
- Soap stones, 27, 176, 249
- Socialist, 448
- Socialist Unit Centre of India, 453, 455
- Soil, 140, 391
- Synchronous-condenser, 360, 361
- Solar Eclipse, 43
- Somavansi ସୋମବଂଶୀ, 50, 51, 52
- Soymida, 28
- Soysmida Febrifusa, 28
- Speaker, 376
- Special Judge, 349
- Spessantite, 26
- Spotted Deer (Chital) (A), 34
- Spring, 11
- Spur Fowl (B), 35
- Squirrel (A), 32
- Sri Ramji, 45
- Stainless Steel, 184
- State of Anarchy, 69
- State Courts, 300, 317

- States Council of Technical Education and Training, Orissa, 391, 392
- State Engineer, 284
- State Exchequer, 260
- State Highway, 227, 276
- State Legislature, 328, 446
- State Legislative Assembly, 375, 451
- State Rules, 299
- State Transport Service, 228, 229
- Steel Melting Shop, 187, 188
- Steel Plant, 20, 158, 252, 260, 261, 265 337, 426
- Still-Well Road in Burma, 264
- Stone Celts, 41
- Stone Inscription, 43
- Stone Tools, 41
- Suvarnarekha (R) ସୁବର୍ଣ୍ଣରେଖା, 58
- Subdivisional Magistrate, 255, 350
- Subdivisional Officer, 255, 284
- Sub-Ganjhus, 296
- Sub-Judge, 349, 284
- Sub-Post Office, 234
- Sub Treasury Officer, 287
- Suka (R) ସୁକା, 9
- Sukhbasi ସୁଖବାସୀ, 302, 307, 325
- Summer Paddy, 262
- Sun Temple, 180
- Sunari (T), ସୁନାରି 30
- Superannuation Scheme, 206
- Superintending Engineer, 360, 361
- Superintendent of Orissa State Museum, 43
- Superintendent of Police, 284
- Superintendent of Tributary Mahals, 60
- Subhadra (goddess), 478
- Sergeant Major, 339
- Surveillance, 431
- T**
- Taccavi Loan, 67, 206
- T. B. Clinics, 432
- Tahasildar, 202, 255, 286, 287
- Takoli ତାକୋଲି, 300
- Talda (R) ଡାଲ୍ଡା, 9
- Talc schist, 27
- Ta-la-li, 43
- Talcher Plate, 49
- Talcher Thermal Station, 168
- Tamil, 98
- Tanks, 138
- Tata Iron and Steel Company (TISCO), 21, 23, 169, 470
- Taxes on Artisans, 315
- Telia (Rept) ଡେଲିଆ, 35
- Telephone Exchanges, 235
- Telegraph Office, 234
- Telgu Chodas ଡେଲ୍ଗୁ ଚୋଡ଼ା, 53
- Tenancy Laws, 325
- Terminalia, 28
- Thakurs, 64, 311
- Thakurdiya Plate, 48
- Theatre Movement in India, 393
- Thermal Power Station, 168
- Theodolite Survey, 322
- Third Land Commission, 327
- Three-tier System, 375
- Tiger (A), 31, 260
- Tikait ଟିକାଏଡ଼, 65
- Tikait Fund, 316
- Tika Panch ଟିକାପଞ୍ଚ, 67
- Tockus birostris, 35

Trade and Commerce, 251,252
 Trade Depression, 319
 Transmission Line, 360
 Traverse Survey, 294,312
 Tremolite Crystal, 23
 Treasury Officer, 287
 Treaty of 1826, 60
 Treaty of Deogaon, 58,59,310
 Tribal District, 387
 Tribunal, 351
 Tribal & Rural Welfare Department,
 373,425,441
 Tubercular, 419
 Tuffs, 14
 Tambi, 214
 Tunga Dynasty, 42
 Tusser, 249

U

Umbelliferae, 28
 Undertrial, 345
 UNICEF, 432, 464
 Unskilled Labour, 269
 Uplands, 295, 312
 Urdu, 98, 459
 Urticales, 28
 Utkal Congress ଉତ୍କଳ କଂଗ୍ରେସ, 456
 Utkal Gomangal Samiti, 152
 Utkal Machinery Limited, 167,
 171, 253, 460, 471

V

Vaccinators, 369, 373
 Vaccination, 373, 422, 429
 Vanavasi Vidyasabha, 467
 Vamsavali, ବଂଶାବଳୀ, 63

Varaha ବରାହ, 50
 Vaidyas ବୈଦ୍ୟ, 414
 Vedas ବେଦ, 8
 Vedic Ashrama, 467
 Vedavyasa Mela, 479
 Venereal Diseases, 421
 Veterinary and Animal Husbandry
 Department, 152, 153
 Veterinary
 —Assistant Surgeon, 284, 363
 —Centres, 151
 —Department, 363
 —Dispensary, 468
 —Hospital, 154, 275
 Vein-Quartz, 14, 19
 Vidhan Sabha, 446, 448
 Vigilance, 341, 342
 Vigilance Organisation, 349
 Vikramkhola Inscription, 42
 Village headman, 291, 313
 Vital Statistics, 416
 Vocational Guidance, 273
 VOEST, 183
 Volcanics, 14

W

Weaving, 175
 Welfare Committee, 368
 Welfare Officer, 286
 Western Education, 381
 Waste lands, 296, 302, 314
 Wheat, 141
 Wholesale Co-operative Store, 209
 Wild Buffalo (A), 31
 Wild Dog (A), 31, 33
 Wireless Station, 342
 Witchcraft, 414
 Wolf (A), 33
 Women's College, 386

Writer Constable, 338, 339, 340

X

X-ray, 189, 424, 426, 432
 Xenolithic Patches, 15

Y

Yaws, 419, 420
 Yubak Sangha, 276

Z

Zamindar ଜମିଦାର, 60, 63, 261, 313, 321

Zamindari

—of Hemgir, 69
 —of Kupsinga, 321
 —of Sargipali, 69, 70, 294,
 299, 321
 —of Sarapgarh, 69, 299, 321
 —of Nagra, 294, 299
 —of Hatibari, 294

Zillaparishad ଜିଲ୍ଲାପରିଷଦ, 375, 376

Zinc, 260

Zizyphus, 28

A

Abhimanyu ଅଭିମନ୍ୟୁ, 52
 Abhoya Singh ଅଭୟ ସିଂହ, 469
 Ajudhia Nath Khosla (Dr.) ଡକ୍ଟର
 ଅଯୋଧ୍ୟା ନାଥ ଖୋସଲା, 389
 Aliwardi Khan ଅଲିବର୍ଦି ଖାଁ, 58
 Anangabhimha Deva ଅନଙ୍ଗଭୀମ ଦେବ, 53
 Ananta Singh ଅନନ୍ତ ସିଂହ, 56
 Ananta Varman Chodaganga Dev
 ଅନନ୍ତ ବର୍ମନ ଚୋଡ଼ଗଙ୍ଗ ଦେବ, 53
 Anirudha Singh ଅନିରୁଦ୍ଧ ସିଂହ, 56
 Arjun Singh, (Maharaja) ମହାରାଜା
 ଅର୍ଜୁନ ସିଂହ, 469
 Asha Kumari ଅଶାକୁମାରୀ, 71

B

Bajal Deva ବୈଜଲ ଦେବ, 55
 Bairagi Misra ବୈରାଗୀ ମିଶ୍ର, 381, 397
 Bajra Hiradhara Dev ବଜ୍ରହରାଧର ଦେବ, 56
 Balabhadra Deva ବଳଭଦ୍ର ଦେବ, 56
 Balabhadra Tanti ବଳଭଦ୍ର ତନ୍ତି, 76
 Balarama Dev ବଳରାମ ଦେବ, 56
 Balarjuna ବାଲର୍ଜୁନ, 51
 Baliar Singh ବଳୀଅର ସିଂହ, 56, 57
 Ball, V. (Geologist), 469
 Banshi Gopal ବଞ୍ଶୀ ଗୋପାଳ, 56
 Barton E. G., 168
 Basu B. N. ବି. ଏନ୍. ବସୁ, 169
 Basudev Sudhal Dev (K. C. I. E.)
 ବାସୁଦେବ ସୁଧାଳ ଦେବ, କେ. ସି. ଆଇ. ଇ, 66
 Bhaga Babaji ଭଗ ବାବାଜି, 397
 Bhanudeva ଭାନୁଦେବ, 53
 Bhanugupta ଭାନୁଗୁପ୍ତ, 47
 Bharat Chandra Naik ଭାରତ ଚନ୍ଦ୍ର
 ନାୟକ, 383
 Bharathi Majhi ଭାରଥି ମାଝି, 69
 Bhattacharya G. ଗ. ଭଟ୍ଟାଚାର୍ଯ୍ୟ, 48
 Bhawani Sankar Sekhar Deo ଭବାନୀ
 ଶଙ୍କର ଶେଖର ଦେବ, 73, 74, 76
 Bhimaratha Mahabhavagupta ଭୀମରଥ
 ମହାଭବ ଗୁପ୍ତ, 51, 52

Bhojaraja Deva ଭୋଜରାଜ ଦେବ, 55
 Bhujavala ଭୁଜବଳ, 53
 Binod Chandra Nayak ବିନୋଦ ଚନ୍ଦ୍ର
 ନାୟକ, 397
 Bir Mitra Pratap Sekhar Deo ବିରମିତ୍ର
 ପ୍ରତାପ ଶେଖର ଦେବ, 74
 Bir Surendra Sai ବିର ସୁରେନ୍ଦ୍ର ସାଏ, 75, 468
 Bira Udit Pratap Sekhar Deo ବିର
 ଉଦିତ ପ୍ରତାପ ଶେଖର ଦେବ, 74, 75, 468
 Boda ବୋଡା, 51
 Brahmananda Saraswati (Swami) ବ୍ରାହ୍ମ
 ନନ୍ଦ ସରସ୍ୱତୀ, 466
 Braja Sundar Purohit ବ୍ରଜ ସୁନ୍ଦର
 ପୁରୋହିତ, 254, 414
 Brinda Keot ବୃନ୍ଦାକୋଟ, 66
 Broughton (Major), 58

C

Chandihara ଚଣ୍ଡିହାର, 52
 Chandrabhanu Sekhar Deo ଚନ୍ଦ୍ରଭାନୁ
 ଶେଖର ଦେବ, 71
 Chandra Deo (Raja) ରାଜା ଚନ୍ଦ୍ରଦେବ, 64,
 Chandragupta ଚନ୍ଦ୍ରଗୁପ୍ତ, 51
 Chhala Tanti ଛଲାତନ୍ତି, 77
 Chodaganga Deva ଚୋଡ଼ଗଙ୍ଗ ଦେବ, 52, 53
 Chudamani Naik ଚୁଡ଼ାମଣି ନାୟକ, 397,
 Cobden-Ramsay, 10, 28, 31, 33, 55, 116
 167, 236, 294, 311, 414, 477
 Connolly, C. W. E., 54, 72, 293, 301,
 303
 Craven, J. A. 73

D

Dalton, T. E., 54, 62, 64, 101, 103, 311
 414
 Danardan Sekhar Deo ଦାନାର୍ଦ୍ଦନ ଶେଖର
 ଦେବ, 71
 Das, Siba Prasad ଦିବସ୍ୱସାଦ ଦାସ, 57
 Dayanidhi Indra Deo (Raja Bahadur)
 ରାଜା ଦାୟାନିଧି ଦୟାନିଧି ଇନ୍ଦ୍ର ଦେବ, 64, 65,
 311
 Dharamraja ପରମରାଜ, 50
 Dharmaratha Mahasivagupta ପର୍ମରଥ
 ମହାସିବ ଗୁପ୍ତ, 52

Dharani Dhar Deo ପରୀଧର ଦେବ, 66
 Dharanidhar Indra Deo ପରୀଧର ଇନ୍ଦ୍ର
 ଦେବ, 66, 67, 68
 Dibyasingha Gauntia ଦିବ୍ୟସିଂହ ଗୌଣ୍ଡିଆ, 397
 D. Sanjivaya ଡ. ସଜିବାୟା, 457
 Dulha Deva ଦୁଲ୍ହାଦେବ, 63
 Durgaraja (Manamatra) ଦୁର୍ଗାରାଜା
 (ମନମାତ୍ର), 47, 48
 Dwarikanath Kusum ଦ୍ୱାରିକାନାଥ କୁସୁମ, 76

G

Gait, E. A., 66, 72, 75
 Gajraj Sekhar Deo ଗଜରାଜ ଶେଖର ଦେବ,
 71, 72
 Gangadhar Mehra ଗଙ୍ଗାଧର ମେହେର, 394
 Gangadhar Sekhar Deo ଗଙ୍ଗାଧର ଶେଖର
 ଦେବ, 68, 69, 470
 Gayada Tunga ଗୟାଡ଼ା ତୁଙ୍ଗ, 49
 Ghasiram Tanti ଘାସିରାମ ତନ୍ତି, 76
 Gimi, B., 460
 Goparaja ଗୋପରାଜ, 47
 Gopinath Harichandan (Raja) ରାଜା
 ଗୋପୀନାଥ ହରିଚନ୍ଦନ, 63
 Grewal G. S., 460
 Grimley, W. H., 65, 315
 Grunning, J. F., 73

H

Hambhir Dev (Deo) ହମ୍ବିର ଦେବ, 43, 70
 Hanghton (Col.), 18
 Harihar Patel ହରିହର ପଟେଲ, 77, 397
 Harsanala, 43
 Harsha Gupta ହର୍ଷଗୁପ୍ତ, 51
 Henry Wheeler, Sir, 74
 Hewitt, J. E. K., 65, 311, 312, 313
 Hita Bajradhar Deo ହିତା ବଜ୍ରାଧର ଦେବ, 68
 Hrudayanarayan Deva ହୃଦୟନାରାୟଣ
 ଦେବ, 56
 Hunter, 54, 62, 65, 71
 Huvishka ହୁଭିଷ୍କା, 43

Impey, H. B. (Major), 55, 57
 Indrabala ଇନ୍ଦ୍ରବଳ, 50
 Indra Deva ଇନ୍ଦ୍ରଦେବ, 57, 63, 64

Indrajit Sekhar Deo ଇନ୍ଦ୍ରଜିତ ଶେଖର ଦେବ,
 70, 470
 Isaac Shrager, 169

J

Jagan Tanti ଜଗନ୍ନାଥ ତନ୍ତି, 76
 Jagdev Sekhar Deo (Raja)
 ରାଜା ଜଗଦେବ ଶେଖର ଦେବ, 70, 71, 471
 Jagjivan Ram ଜଗଜୀବନ ରାମ, 455
 Jaipal Singh ଜୟପାଳ ସିଂହ, 77
 Jajalladeva ଜଜାଲ ଦେବ, 53
 Janaki Rathnaya Ammerjee
 ଜାନକୀ ରଥନାୟା ଅମରଜୀ, 68, 74
 Janardan Sekhar Deo ଜନାର୍ଦ୍ଦନ ଶେଖର
 ଦେବ, 471
 Janamejaya I Mahabhaba-
 Gupta ଜନମେଜୟ I ମହାଭବାଗୁପ୍ତ, 51
 Janamejaya II ଜନମେଜୟ II, 52
 Jawaharlal Nehru ଜବାହରଲାଲ ନେହେରୁ, 328
 Jayanta Singh, ଜୟନ୍ତ ସିଂହ, 58
 Jayraja ଜୟରାଜ, 47

K

Kadamba Kesari Deo କଦମ୍ବ କେଶରୀ ଦେବ,
 68
 Kalichandra Indra Deb କାଳିଚନ୍ଦ୍ର
 ଇନ୍ଦ୍ରଦେବ, 63
 Kalidasa (Poet) କାଳିଦାସ, 49
 Kamal Kumari କମଳ କୁମାରୀ, 56
 Kanishka କନିଷ୍କ, 44
 Kamarnavadeva କମରନାବଦେବ, 537
 Karnadeva କର୍ଣ୍ଣଦେବ, 52
 Kasturi Devi କସ୍ତୁରୀ ଦେବୀ, 397
 Kelly, W. G., 67, 313
 Kendu Tanti କେନ୍ଦୁତନ୍ତି, 77
 Khadga Tunga ଖଡ୍ଗ ତୁଙ୍ଗ, 42, 48
 King, Dr., 17
 Krishnan M. S. (Dr.) ଡକ୍ଟର ଏମ୍. ଏସ୍.
 କ୍ରିଷ୍ଣନ୍, 18, 19
 Kumara Somesvara କୁମାର ସୋମେଶ୍ୱର, 52
 Kunjamani Kumari କୁଞ୍ଜମଣି କୁମାରୀ, 71
 Kunta କୁନ୍ତ, 51
 Kusavati କୁସବତୀ, 46

M

- Madan Gopal ମଦନ ଗୋପାଳ, 56
 Madan Mohan Sekhar Deo ମଦନ ମୋହନ ଶେଖର ଦେବ, 71
 Madan Mohan Singh ମଦନ ମୋହନ ସିଂହ, 69
 Madan Pradhan ମଦନ ପ୍ରଧାନ, 54, 69
 Madhava ମାଧବ, 50
 Madhab Keot ମାଧବ କୋଟ, 66
 Madhuji Bhonsala (Appa Sahib) ମଧୁଜୀ ଭୋନ୍ସଲା ଆପ୍ପାସାହେବ, 2, 60, 63, 1, 290, 310
 Madhukara Deba ମଧୁକର ଦେବ, 56
 Madhulal Deogar ମଧୁଲଲ ଦେଓର, 169
 Madri Kalo ମାଦ୍ରି କାଲେ, 75, 304, 324
 Mahasivagupta Yayati I ମହାଶିବଗୁପ୍ତ ଯାଯତି, 51
 Mahasiva Gupta Tivaradeva ମହାଶିବଗୁପ୍ତ ତିବରାଦେବ, 50
 Mahatab H. K. ଏଚ. କେ. ମହତାବ, 459
 Mahasudevaraja ମହାସୁଦେବରାଜ, 48
 Mahatma Gandhi ମହାତ୍ମା ଗାନ୍ଧୀ, 75, 122
 Mahendra ମହେନ୍ଦ୍ର, 46
 Makaradhwaja Govinda Deo ମକରଧ୍ୱଜ ଗୋବିନ୍ଦ ଦେବ, 63
 Matsya Gandha ମତ୍ସ୍ୟଗନ୍ଧା, 8
 Max Muller, 397
 Maxim Gorky, 395
 Meek, A. S. (Lt. Colonel), 47
 Mirashi, V. V. (Dr.) ଡକ୍ଟର ଭି. ଭି. ମିରାଶି, 47
 Misra, Bamdeb ବାମଦେବ ମିଶ୍ର, 67
 Misra, Binayak (Pandit) ପଣ୍ଡିତ ବିନାୟକ ମିଶ୍ର, 50
 Misra, Gangadhar (Pandit) ପଣ୍ଡିତ ଗଙ୍ଗାଧର ମିଶ୍ର, 55
 Mishra, Gopinath (Pandit) ପଣ୍ଡିତ ଗୋପିନାଥ ମିଶ୍ର, 63
 Misra, Madanmohan ମଦନ ମୋହନ ମିଶ୍ର, 63
 Misra, S. N. ଏସ୍. ଏନ୍. ମିଶ୍ର, 43, 44
 Mitro Bhanu ମିତ୍ର ଭାନୁ, 75
 Mittal, A. C. 41
 Moony, H. F., 155

- Muada, W. 66
 Mukherjee, Indra Bilas ଇନ୍ଦ୍ର ବିଲାସ ମୁଖାର୍ଜୀ, 67

N

- Naghusha (Nahusha) ନାଗୁଶା, 52
 Nana II ନାନା ୨ୟ, 51
 Nannadeva ନନ୍ନଦେବ, 48, 50
 Nanda Naik ନନ୍ଦ ନାୟକ, 64
 Narayan Bisi (Rajaguru) ରାଜଗୁରୁ ନାରାୟଣ ବିଶି, 43
 Narendra (Maharaja) ମହାରାଜା ନରେନ୍ଦ୍ର, 47.
 Narasimha Deva ନରସିଂହ ଦେବ, 56
 Natabar Patel ନଟବର ପଟେଲ, 77
 Nilambar Chandra Deo (Raja) ରାଜା ନିଲାମ୍ବର ଚନ୍ଦ୍ର ଦେବ, 65, 66
 Nirmal Munda ନିର୍ମଳ ମୁଣ୍ଡା, 77
 Nirod Goswami ନିରୋଦ ଗୋସ୍ୱାମୀ, 77

O

- Ouseley, J. R. (Major), 64, 70

P

- Pandey, L. P. ଏଲ୍. ପି. ପାଣ୍ଡେ, 47
 Parama Saugata ପରମ ସାଉଗତା, 49
 Parasara ପରାସରା, 8
 Parasuram Sekhar Deo ପରୁରାମ ଶେଖର ଦେବ, 70
 Pargiter, 46
 Patnaik Nimay Oharan ନମାଇଁ ଚରଣ ପଟ୍ଟନାୟକ, 320
 Pattnaik, N. C. ଏନ୍. ସି. ପଟ୍ଟନାୟକ, 67
 Pitambar Sekhar Deo ପିତାମ୍ବର ଶେଖର ଦେବ, 71
 Prahalad Gartia ପ୍ରହଲ୍ଲାଦ ଗରୁଡ଼ିଆ, 69
 Pravara ପ୍ରବରା, 47
 Pravara Raja II ପ୍ରବରରାଜ ୨ୟ, 50
 Prasannamatra ପ୍ରସନ୍ନମାତ୍ରୀ, 47
 Pratap Bhanu Deo ପ୍ରତାପ ଭାନୁ ଦେବ, 63
 Pratap Majhi ପ୍ରତାପ ମାଝୀ, 70
 Prataparudra Deva I ପ୍ରତାପରୁଦ୍ର ଦେବ ୧ମ, 56

- Prithvisimha Deva ପ୍ରଥ୍ୱିସିଂହ ଦେବ, 55
 Prithvimahadevi ପ୍ରଥ୍ୱିମହାଦେବୀ, 51
 Puranjaya ପୁରଞ୍ଜୟ, 52

R

- Raghuji Bhonsla ରାଘୁଜୀ ଭୋନ୍ସଲା, 58, 290, 310
 Raghuji Bhonsla III ରାଘୁଜୀ ଭୋନ୍ସଲା ୩ୟ, 64.
 Raghunath Sekhar Deo ରାଘୁନାଥ ଶେଖର ଦେବ, 1, 61, 69, 70, 71, 72, 73, 75, 38
 Raja Deo Kesari ରାଜା ଦେବ କେଶରୀ, 54
 Rajendra Chola ରାଜେନ୍ଦ୍ର ଚୋଳ, 52
 Rama ରାମ, 62
 Ramachandra Deva ରାମଚନ୍ଦ୍ର ଦେବ, 56
 Ramadhyani R. K., 299, 305
 309, 317, 319, 320, 321
 Ramai Deva ରମାୟ ଦେବ, 55
 Ranabhanja ରଣଭଞ୍ଜ, 51
 Ranaka Punja ରଣକ ପୁଞ୍ଜା, 51
 Ratnadeva ରତ୍ନଦେବ, 53
 Ratna Naik ରତ୍ନ ନାୟକ, 64
 Roughsedge (Captain) 60
 Roy Chunilal, (Raibahadur) ରାୟଚରାଣୀରାୟ ଚୁନିଲଲ ରାୟ, 43
 Roy Sarat Chandra, (Raibahadur) ରାୟଚରାଣୀରାୟ ଶରତଚନ୍ଦ୍ର ରାୟ, 42

S

- Sahu, N. K. (Dr.) ଡା. ଏନ୍. କେ. ସାହୁ, 49, 51
 Samudragupta ସମୁଦ୍ରଗୁପ୍ତ, 46
 Sarabharaja ସରାବରାଜ, 47
 Sarangi Gopinath ସୋରଣିନାଥ ଶରଙ୍ଗୀ, 57
 Sarbanga Sundari ସର୍ବାଙ୍ଗ ସୁନ୍ଦରୀ, 71
 Satrubhanja ଶତ୍ରୁଭଞ୍ଜ, 44, 46
 Sahastri Haraprasad (Mahamohopadhyaya) ମହାମହୋପାଧ୍ୟାୟ ହରିପ୍ରସାଦ ଶାସ୍ତ୍ରୀ, 42
 Sircar D. C. (Dr.) ଡା. ଡି. ସରକାର, 46, 48

- Shanahan, G. M., 66
 Somesvara I ସୋମେଶ୍ୱର ୧ମ, 53
 Somesvara II ସୋମେଶ୍ୱର ୨ୟ, 53
 Somesvara III ସୋମେଶ୍ୱର ୩ୟ, 53
 Sudevaraja ସୁଦେବରାଜ, 48
 Sundarmani Patel ସୁନ୍ଦରମଣି ପଟେଲ, 77
 Surendranath Mazumdar ସୁରେନ୍ଦ୍ରନାଥ ମଜୁମଦାର, 72

T

- Tantia Pharnavis ତାନ୍ତିଆ ଫର୍ନାଭିସ, 58
 Tejo Varaha ଡେବ ଚରାଣ, 49
 Tivaradeva ତିବରାଦେବ, 48
 Thompson, 28
 Todd, H. J., 74

U

- Udayana ଉଦୟନ, 50
 Udaya Varaha ଉଦୟ ଚରାଣ, 43, 49
 Udit Narayan Singh Deo ଉଦିତ ନାରାୟଣ ସିଂହଦେବ, 65, 474
 Udit Varaha ଉଦିତ ଚରାଣ, 49
 Udyotakesari Maha bhavagupta ଉଦ୍ୟୋତକେଶ୍ୱରୀ ମହାଭବଗୁପ୍ତ, 52

V

- Vaijal Dev I ବୈଜଳ ଦେବ ୧ମ, 55
 Vaijal Dev II ବୈଜଳ ଦେବ ୨ୟ, 56
 Vatsaraja Deva (Pirthee Singh Deo) ବସ୍ତାରାଜ ଦେବ (ପୃଥ୍ୱୀସିଂହ ଦେବ), 55
 Vikramaditya ବିକ୍ରମାଦିତ୍ୟ, 68
 Vikramaditya Deva I ବିକ୍ରମାଦିତ୍ୟ ଦେବ, 56
 Vinita Tungā ବନିତା ତୁଙ୍ଗା, 42
 Vinita Tungā I ବନିତା ତୁଙ୍ଗା ୧ମ, 42, 48, 49
 Vinita Tungā II ବନିତା ତୁଙ୍ଗା ୨ୟ, 48, 49

Vishnu ଚତୁର୍ଥ, 56

Vyaghra ବ୍ୟାଘ୍ର, 47

Vyasa deva (Maharsi) ମହର୍ଷି ବ୍ୟାସଦେବ,
129,232,381,479

W

Wellesley, 59,60

Whiffin, F. D., 33

Mr. Woodhouse, 325

Y

Yasoraja I ଯଶୋରାଜ ୧ମ, 53

Yasoraja II ଯଶୋରାଜ ୨ୟ, 53

Yasoraja III ଯଶୋରାଜ ୩ୟ, 53

Yayati II Mahasivagupta ଯଯାତି ମହାଶିବଗୁପ୍ତ,
ମହାଶିବଗୁପ୍ତ, 52Yuvaraja Dharmaratha ଯୁବରାଜ ଧର୍ମରଥ,
52

PLACE NAMES

A

Ayodhya ଅୟୋଧ୍ୟା, 46

Akhsarsila ଅକ୍ଷରଶିଳା, 43,44

Amasdegi ଅମଶଦେଗି, 27

Amatpani ଅମତପାନୀ,
16,27,42

Anlajori ଅନାଜୋରି, 305

Arang ଅରଙ୍ଗ, 48

Asanpat ଅସନପାଟ, 46

Ashirgarh ଅଶିରଗଡ଼, 75 *

B

Bagdihi ବାଗଡ଼ିହି, 231

Baiham ବାୟହାମ୍, 396

Balangir ବାଲଙ୍ଗିର, 349

Balasore ବାଲେଶ୍ଵର, 44,59

Balisankra ବାଲିଶଙ୍କରା, 287

Bamanda Patti ବାମନ୍ଦାପଟ୍ଟି, 51

Bamanghati ବାମଙ୍ଗହାଟି, 63

Bamra (Bamanda)
ବାମରା, 13,27,52,63,311

Bandamunda ବଣାମୁଣ୍ଡା, 230,231

Bandhabahal ବନ୍ଦବାହାଲ, 169

Bangurkela ବାଙ୍ଗୁରକେଲା, 231

Banki ବାଙ୍କି, 3, 7, 226, 339, 383

Bankibahal ବାଙ୍କିବାହାଲ, 17

Bankipur ବାଙ୍କିପୁର, 3

Baraibera ବରାୟବେଡ଼ା, 16

Bargaon ବଡ଼ଗାଁ, 7, 12, 15,
27 44, 138, 147, 176, 287, 323, 378

Barmula ବରମୁଳା, 10

Barun ବରୁଣ, 9

Barapali ବରପାଲି, 43

Barsuan ବରସୁଆଁ, 158,231

Bastar ବସ୍ତର, 55

Baudh ବୌଦ୍ଧ, 55, 56

Beladamal ବେଲଦାମାଲ, 254

Belpahar ବେଲପାହାଡ଼, 25, 231

Belsaragarh ବେଲସାରାଗଡ଼, 41, 45, 54

Bhaludungri ଭଲଦୁଙ୍ଗ୍ରି, 27, 45

Bhalulata ଭଲଲତା, 230, 390

Bhanjgarh ଭଞ୍ଜଗଡ଼, 41,45

Bhasma ଭସ୍ମା, 208,421

Bhilai ଭିଲାଇ, 172

Bhubaneswar ଭୁବନେଶ୍ଵର, 52, 137, 361
391, 459

Bimalgarh ବିମଲଗଡ଼, 231

Birmtrapur ବୀରମିତ୍ରପୁର, 121, 261,
263, 269, 271, 332, 342, 375, 468

Birbira ବିରବିରା, 24, 27, 398

Birtola ବିରତୋଲା, 18, 176

Bishalbury ବିଶାଳବୁର, 41

Bispur ବିସପୁର, 231

Bisra ବିଶ୍ରା, 5, 41, 45,167, 208, 230, 233,
249, 271, 287, 368, 447,
448,450,451,453,468Bonai ବଣାଇ, 1, 2, 8, 10, 13, 15, 25, 26,
44, 45, 49, 54, 59, 140,
141, 149, 154, 167, 176,
177, 226, 339, 343, 347,
360, 446, 448, 450, 453,
469Bonaigarh ବଣାଇଗଡ଼, 6, 29, 41, 65,
66, 67, 105, 154,
233, 287, 340, 342,
344, 345, 350, 383,
386, 469, 471

Bonaikela ବଣାଇକେଲା, 15,27

Bonai Mandala ବଣାଇ ମଣ୍ଡଳ, 43, 50, 381

Brajrajnagar ବ୍ରଜରାଜନଗର, 9,231

Budelkani ବୁଦେଲକାନି, 148

Burla ବୁର୍ଲା, 362

C

Calcutta କଲକତା, 43, 158, 175, 394,468

Central India, 28

Central Provinces, 60,290

Chandiposh ଚନ୍ଦ୍ରପୋଷ, 174,231

Champua ଚମ୍ପୁଆ, 330

Champa jharan ଚମ୍ପାଜରାନ, 231

Chirobeda ଚିରୋବେଡ଼ା, 5

Chhatisgarh ଛତିଶଗଡ଼, 58,108

Chota Nagpur ଛୋଟାନାଗପୁର, 2, 263, 290
291, 297

Chitrakuta ବେଲୁକ, 43,49
 Chitorgarh ଶେରାବତୀ, 49
 Chuanbahal ଚୁଆବାହାଲ, 4
 Chutia Nagpur (Chota Nagpur)
 ଚୁଟିଆନାଗପୁର, 60
 Cuttack କଟକ, 58, 152, 178, 251, 331,
 421, 469
 Cuttack Province, 58

D

Daghora ଦାଗୋରା, 231
 Dakhina Kosala ଦକ୍ଷିଣକୋଶଳ, 46,50
 Danardhanpur ଦନାର୍ଦ୍ଧନପୁର, 9
 Dandijamira ଦାଣ୍ଡିଜାମିରା, 27
 Dandpara ଦଣ୍ଡପରା, 27
 Darjin ଦାର୍ଜିନ, 14,15
 Darlipali, ଦଲିପାଲି, 18, 254
 Dasalla ଦଶପଲ୍ଲୀ, 10
 Delhi ଦିଲ୍ଲୀ, 469
 Deogaon ଦେଓଗାଁ, 45,299
 Deogarh ଦେଓଗଡ଼, 66, 229, 350
 Dharanagar ଧରାନଗର, 68
 Dharuadihi ଧରୁଆଦିହି, 12, 16, 169, 231
 Dhaurara ଧୂରାରା, 22
 Dhenkanal ଦେହନାଳ, 49, 168
 Dhutra ଧୂତ୍ରା, 231
 Dublabera ଦୁବଲବେରା, 13,21,22
 Dulunga ଦୁଲଙ୍ଗା, 17
 Dumaro ଦୁମାରୋ, 260
 Dumerta ଦୁମର୍ତ୍ତା, 231
 Durgapur ଦୁର୍ଗାପୁର, 172

E

Eastern States Agency, 61
 Ekma ଏକମା, 378

G

Gangadharpur ଗଙ୍ଗାଧରପୁର, 470
 Gangpur ଗଙ୍ଗପୁର, 1, 11, 20, 24, 25,
 26, 54, 249, 261,
 336, 360

Gangpurgarh ଗଙ୍ଗପୁର ଗଡ଼, 69, 70, 469
 Ganjam ଗଞ୍ଜାମ, 44
 Garjhor ଗରଜୋର, 7
 Gatitnagar ଗତିତନଗର, 12, 20
 Ghariajorଦଶିଆପୋର, 19,169
 Ghogar (Ghoghar) ଘୋଗର, 466, 470
 Ghogarpali ଘୋଗରପାଲି, 17
 Giringkela ଗିରିଙ୍ଗକେଲ, 20
 Gobira ଗୋବିରା, 27
 Gombharidihî ଗମ୍ଭାରିଦିହି, 22
 Gopalpur ଗୋପାଳପୁର, 17, 27, 126, 398
 Gorposh ଗଡ଼ପୋଷ, 22, 23, 231
 Gudahandi ଗୁଡ଼ାହାଣ୍ଡି, 41
 Gurundia ଗୁରୁଣ୍ଡିଆ, 7, 287, 339

H

Hatibari ହାତିବାରୀ, 20,29,153,368,470
 Hazaribag ହଜାରିବାଗ, 74
 Hemgir ହେମଗିରି, 3, 17, 27, 41, 45, 156,
 170, 287, 294, 323, 324, 470
 Hemgiri Road ହେମଗିରି ରୋଡ଼, 208
 Hirakud ହିରାକୁଡ଼, 138, 168, 360
 Hotpos ହଟପୋଷ, 16

I

Illinois, 463
 Indrapur ଇନ୍ଦ୍ରପୁର, 45

J

Jagannathposh ଜଗନ୍ନାଥପୋଷ, 41
 Jagatgarh ଜଗତଗଡ଼, 70, 107, 471
 Jagatsinghpur ଜଗତସିଂହପୁର, 438
 Jakati ଜାକତି, 51
 Jalda ଜାଲ୍ଦା, 153
 Jamshedpur ଜାମଶେଦପୁର, 158, 208, 271,
 470
 Jamunadhipa ଜମୁନାଦିପ, 9
 Jangra ଜାଙ୍ଗରା, 41
 Jara ଯରା, 27
 Jareikela ଜାରେଇକେଲ, 9, 12, 13, 18, 20,
 24, 230
 Jaria ଯାରିଆ, 158
 Jarmal ଯରମାଳ, 27
 Jashpur ଯଶପୁର, 5, 9, 226

Jharvera ଜାରବେରା, 27, 137, 391
 Jharsuguda ଜାରସୁଗୁଡ଼ା, 208, 226, 360
 Jhirdapali ଜିରଡ଼ାପାଲି, 45
 Jhirpani ଜିରପାନୀ, 41, 153, 168
 Jhulenbar ଜୁଲେନବାର, 7
 Joraldi ଜୋରାଲିଡ଼ି, 15
 Junagarh ଜୁନାଗଡ଼, 45, 54, 471

K

Kaduapara କାଦୁଆପରା, 23
 Kaintara କାୟତାରା, 9
 Kahchua କାହଚୁଆ, 19
 Kalahandi କାଳାହାଣ୍ଡି, 10
 Kalaiposh କଲାଇପୋଷ, 45
 Kallarkela କଲାରକେଲ, 398
 Kalunga କଲଙ୍ଗା, 153, 174, 177, 230,
 249, 265, 471
 Kamarposh Balang କମାରପୋଷ ବଲଙ୍ଗ, 339
 Kangodamandala କଙ୍ଗୋଦାମଣ୍ଡଳ, 50
 Kansbahal କାନ୍ସବାହାଲ, 167, 173, 231,
 253, 261, 468
 Kantapali କଣ୍ଟାପାଲି, 14
 Kantasara କଣ୍ଟାସାରା, 63
 Karamdihî କରମଡ଼ିହି, 44
 Katang କଟାଙ୍ଗ, 23
 Katepur କାଟେପୁର, 27
 Kauvatala କାଉବାଟାଲ, 48
 Kendudihî କେନ୍ଦୁଡ଼ିହି, 147
 Keonjhar କେଞ୍ଜର, 1, 7, 10, 43, 44,
 49, 57, 63, 64, 170, 330, 348, 349
 Kesramal କେଶରାମାଳ, 465
 Khadiakudar ଖଡ଼ିଆକୁଡ଼ର, 45
 Khandadhar ଖଣ୍ଡାଧାର, 472
 Khatangtola ଖଟାଙ୍ଗଟୋଲ, 16
 Kharsuan ଖରସୁଆଁ, 348
 Khatkurbahal ଖଟକୁରବାହାଲ, 23, 254
 Kheriakani ଖେରିଆକାନି, 305
 Khijjinga Mandala ଖିଜିଙ୍ଗାମଣ୍ଡଳ, 50
 Khimindi ଖିମିଣ୍ଡି, 55
 Khinda ଖିଣ୍ଡା, 75
 Khuntagaon ଖୁଣ୍ଟଗାଁ, 41, 176, 254
 Khunti jharî ଖୁଣ୍ଟିଜରିଆ, 170
 Kinjirma କିଞ୍ଜିରମା, 12, 20, 24

Kiringsera କିରିଙ୍ଗସେରା, 20
 Kirmadand କିରମଦାଣ୍ଡ, 69
 Koira କୋରା, 6, 7, 16, 138, 139, 145,
 262, 287, 339, 442
 Kokrama କୋକରାମା, 21
 Konjari କଞ୍ଜାରି, 43
 Koraput କୋରାପୁଟ, 349
 Kosala କୋଶଳ, 53
 Kuarmunda କୁଆରମୁଣ୍ଡା, 3, 16, 21, 29,
 151, 152, 153, 231, 287, 390, 470, 472
 Kuchinda କୁଚିଣ୍ଡା, 6, 27
 Kudopali କୁଡ଼ୋପାଲି, 51
 Kuhupani କୁହୁପାନୀ, 27
 Kukarbhuka କୁକରଭୁକା, 20, 22
 Kukuda କୁକୁଡ଼ା, 148
 Kuljhari କୁଲ୍‌ଜାରି, 15, 16, 18
 Kulipos କୁଲିପୋଷ, 143, 147, 362
 Kumarkela କୁମାରକେଲ, 44
 Kumbahal କୁମ୍ଭାହାଲ, 7
 Kumbakera କୁମ୍ଭକେରା, 19
 Kundukela କୁଣ୍ଡୁକେଲ, 390, 398
 Kupsinga କୋପସିଂଗା, 44, 70, 299
 Kurdrigatu କୁରୁଡ୍ରିଗାଟୁ, 16
 Kurhadi କୁରହାଡ଼ି, 41
 Kurumunda କୁରୁମୁଣ୍ଡା, 19
 Kutra କୁଟ୍ରା, 287

L

Lahunipara ଲହୁଣିପରା, 138, 145, 287,
 262
 Laikera (Loakra) ଲାଇକେରା, 68, 226,
 305, 378, 454, 456
 Lanjiberna ଲଞ୍ଜିବେର୍ନା, 13, 20, 22, 172
 Lankahuda ଲଙ୍କାହୁଡ଼ା, 396
 Lardga, 17
 Lathikata ଲାଡ଼ିକଟା, 171, 231, 261,
 287, 472
 Lefripara ଲେଫ୍ରିପରା, 12, 13, 20, 25,
 45, 208, 287, 323, 421, 473.

M

Madhya Pradesh ମଧ୍ୟ ପ୍ରଦେଶ, 1, 7, 9,
 207, 208
 Mahabir Chhatam ମହାବୀର ଛତାମ, 6
 Mahulpada ମହୁଲପଡ଼ା, 7, 16, 339

Mahulpali ମହୁଲପାଲି, 398
 Manbhoom ମାନ୍ଭୁମ, 68
 Mandira ମନ୍ଦିରା, 11, 473
 Manikmunda ମାଣିକମୁଣ୍ଡା, 41, 471
 Masabira ମଶାବିରା, 68, 470
 Masabiragarh ମଶାବିରା ଗଡ଼, 45, 54
 Mayurbhanj ମୟୂରଭଞ୍ଜ, 10, 44, 50
 Meghdega ମେଘଦେଗା, 9
 Menjapara ମେଞ୍ଜାପରା, 16
 Mitihurda ମିତିହୁରଡ଼ା, 16
 Musabani ମୁସାବନୀ, 158

N

Nabarangpur ନବରଙ୍ଗପୁର, 70, 471
 Nagpur ନାଗପୁର, 58, 59, 76, 290
 Nagra ନାଗ୍ରା, 29, 214, 226, 287, 292, 294
 Namkum ନାମକୁମ, 430
 Nandapara ନନ୍ଦପାରା, 254
 Nandapani ନନ୍ଦପାନୀ, 472
 Nandapuri ନନ୍ଦପୁରୀ, 55
 Nayagarh ନୟାଗଡ଼, 170
 New Delhi ନ୍ୟୁଦିଲ୍ଲୀ, 390
 Nialipali ନିଆଲିପାଲି, 389
 Nuagaon ନୁଆଗାଁ, 231, 287

O

Odra ଓଡ଼୍ରା, 51
 Orissa Division 61

P

Pallahara ପାଲହରା, 49
 Panchet-Kasipur ପଞ୍ଚେଟ କାଶିପୁର, 68
 Panchara ପାଞ୍ଚରା, 7, 9, 27
 Pandrisila ପାଣ୍ଡିରିଲା, 27

Panposh ପାନ୍‌ପୋଶ, 3, 8, 9, 12, 140, 149, 151, 230, 271, 285, 286, 318, 322, 474
 Paschima Kalinga ପଶ୍ଚିମ କଳିଙ୍ଗ, 52
 Patna ପାଟ୍ନା, 459
 Patnagarh ପାଟ୍ନାଗଡ଼, 54
 Patasahi ପାଟସାହି, 231
 Peruabhadri ପେରୁଅଭଡ଼ି, 7
 Porahat ପୋରାହାଟ, 469
 Puri ପୁରୀ, 44, 438, 467
 Purkapali ପୁରକାପାଲି, 23
 Purnapani ପୁରୁଣା ପାନୀ, 21, 231, 252, 470

R

Raghunathapali ରାଘୁନାଥପାଲି, 11, 337, 343, 368, 471
 Raiboga ରାଏବୋଗା, 20, 29, 44, 208, 321
 Raibogagarh ରାଏବୋଗା ଗଡ଼, 70, 470
 Raidihi ରାୟିହି, 177
 Raigarh ରାୟଗଡ଼, 7, 17, 56, 108
 Raipur ରାୟପୁର, 46, 48, 74
 Raipura ରାୟପୁରା, 468, 469
 Rairakhola ରୈରାଖୋଲା, 63
 Rajbahal ରାଜବାହାଲ, 42
 Rajgangpur ରାଜଗଙ୍ଗପୁର, 7, 24, 147, 167, 171, 172, 174, 177, 201, 208, 231, 233, 252, 261, 263, 287, 322, 323, 324, 330, 332, 340, 368, 375, 390, 391, 447, 448, 450, 451, 453, 460, 471, 474
 Renjra ରେଞ୍ଜ୍ରା, 16
 Ranchi ରାଞ୍ଚି, 1, 9, 64, 71, 208, 229, 295, 311
 Ranibandh ରାଣିବନ୍ଧ, 474
 Ratakhand ରାଟାକହଣ୍ଡ, 17
 Ratansara ରାଟନସାରା, 17
 Rengalbera ରେଙ୍ଗାଲବେରା, 15
 Rohitasi (Rohitasgarh) ରୋହିତାସୀ, 42, 49

Rokela Vishaya (Rourkela) ରୋକେଲା ବିଷୟ, 49
 Rouldega ରାଉଲଦେଗା, 254
 Rourkela ରାଉରକେଲା, 11, 92, 151, 152, 153, 154, 158, 167, 170, 171, 172, 173, 174, 177, 201, 203, 205, 206, 208, 209, 227, 228, 231, 232, 233, 249, 251, 252, 253, 255, 261, 263, 286, 322, 329, 330, 337, 339, 341, 344, 346, 362, 375, 388, 382, 391, 396, 421, 446, 453, 455, 474, 475
 Runga ରୁଙ୍ଗା, 7
 Rupidihi ରୁପିଡିହି, 44

S

Sabdega ସବଦେଗା, 45, 283, 287
 Sahabad ସାହାବାଦ, 49
 Sahajbahal ସହଜବାହାଲ, 9
 Sakti ଶକ୍ତି, 56
 Sakuldip (Ceylon), 62
 Sankibahal, 254
 Sambalpur ସମ୍ବଲପୁର, 1, 6, 8, 9, 53, 56, 59, 226, 227, 228, 232, 286, 304, 329, 341, 349, 360, 361
 Sambar (A), 34
 Sareikela ସରୈକେଲା, 65, 348
 Sarabhapura ସରାଭପୁର, 47, 48
 Sargipali ସରଗିପାଲି, 18, 19, 29, 68, 171, 178, 233, 260, 294, 477
 Sarmohan ସରମୋହନ, 22
 Sarapgarh ସରାପଗଡ଼, 29, 47, 156, 294, 476
 Sarsara Balang ସରସରା ବାଲଙ୍ଗ, 6, 254, 339
 Satkuta ସାତକୁଟ, 41
 Sialijor ସିଆଲିଜୋର, 19, 22
 Siarkundar ସିଆରକୁନ୍ଦର, 18, 254
 Sikajore ସିକାଜୋର, 254
 Sikharbhum ସିଖରଭୂମ, 68
 Singhanpur ସିଂହନପୁର, 41

Singhbhum ସିଂହଭୂମ, 1, 7, 9, 64, 116, 311, 312
 Simko ସିମକୋ, 325
 Siria ସିରିଆ, 16
 Sirpur ସିରପୁର, 51
 Sisso (T), 30
 Sole ସୋଲ, 254, 398
 Sonakhan ସୋନାଖାନ, 22, 231
 Sonepue ସୋନେପୁର, 51, 52
 South Kosala ଦକ୍ଷିଣ କୋଶଳ, 42
 Shripura ଶ୍ରିପୁରା, 48
 Suadih (Suadi) ଶୁଆଡିହ, 56, 71, 471
 Suamal ଶୁଆମାଲ, 305
 Suimba ସୁଇମ୍ବା, 27
 Sukhabandha ଶୁଖାବନ୍ଧା, 41, 45
 Sundargarh ସୁନ୍ଦରଗଡ଼, 1, 8, 10, 12, 29, 47, 49, 137, 143, 147, 149, 152, 153, 205, 226, 227, 233, 251, 254, 260, 275, 285, 287, 322, 323, 341, 343, 347, 360, 368, 375, 382, 389, 422, 447, 449, 451, 453, 477
 Surguda ସୁରଗୁଡ଼ା, 25
 Suruguja ସୁରୁଗୁଜା, 56, 68
 Suvarnapur ସୁବର୍ଣ୍ଣପୁର, 53

T

Talai Mandala ତାଲାଇ ମଣ୍ଡଳ, 43
 Talcher ତାଲଚେର, 157, 232, 361
 Talpatia ତାଲପତିଆ, 44
 Talsara ତାଲସରା, 16, 208, 323, 446, 451, 453
 Tamra ତାମ୍ରା, 15
 Tangarpali ଟାଙ୍ଗରପାଲି, 287
 Targa ତାର୍ଗା, 27
 Tensa ଟେନ୍ସା, 342, 478
 Tiklipada ଟିକ୍ଲିପଡ଼ା, 27
 Tildega ଟିଲ୍‌ଦେଗା, 45

Tilijore ଚିଲିକୋର, 9
Tillaimalti ଲେଉମାଲି, 24

Timadihi ଶିମାଡ଼ି, 148

Tiriposhi ଚିରପୋଶି, 9

Topkurlu ଚୋପକୂର୍ଲୁ, 6

Tudaloga ବୁଡ଼ାଲୋଗା, 154

Tumkelaghat ଭୂମକେଲଗାଟ, 41,232

Tummana ଭୂମନା, 53

Tikayatpali ଟିକାୟାତପାଲି, 4,92, 340

U

Uditnagar ଭୁଦିତନଗର, 3,254

Ulapgarh ଭୁଲପଗର, 41

Ushakothi ଉଷାକୋଠି, 41,42,473

Uttara Kosala ଉତ୍ତର କୋସଳ, 46

V

Vedavyasa ବେଦବ୍ୟାସ, 8,11,129,208,227
232,381,466,472,478

Vendunga (Balanga) ବେନ୍ଦୁଙ୍ଗା, 49

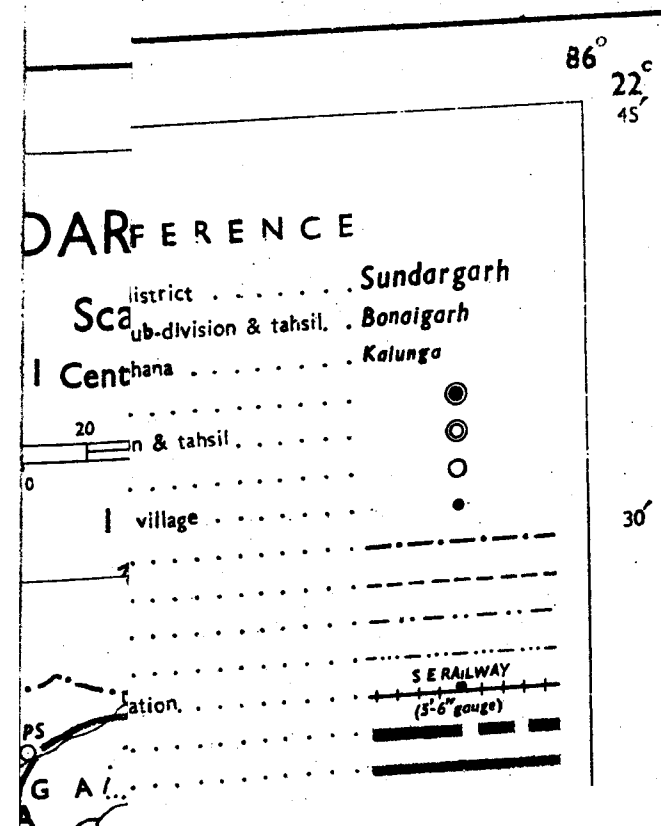
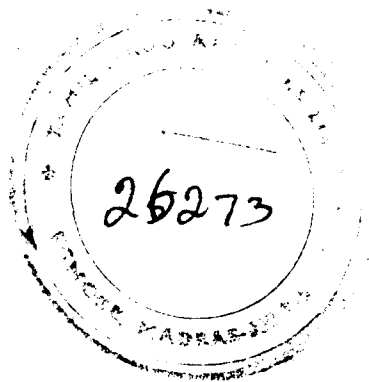
Y

Yamagartta Mandala ଯମଗର୍ତ୍ତାମଣ୍ଡଳ, 42,
49,57

Yamatangi ଯମାଟାଙ୍ଗି, 57

Yayatinagar ଯାୟାତିନଗର, 51

୨
V25427
N75



୨
V25427
N75

