

CENSUS OF INDIA, 1951

VOLUME XI ORISSA

PART I-REPCR'

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M. AHMED, M.A. Superintende t of Census Operations Orissa

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Part I—Report

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PART I-REPORT

M. AHMED, M.A. Superintendent of Census Operations Orissa

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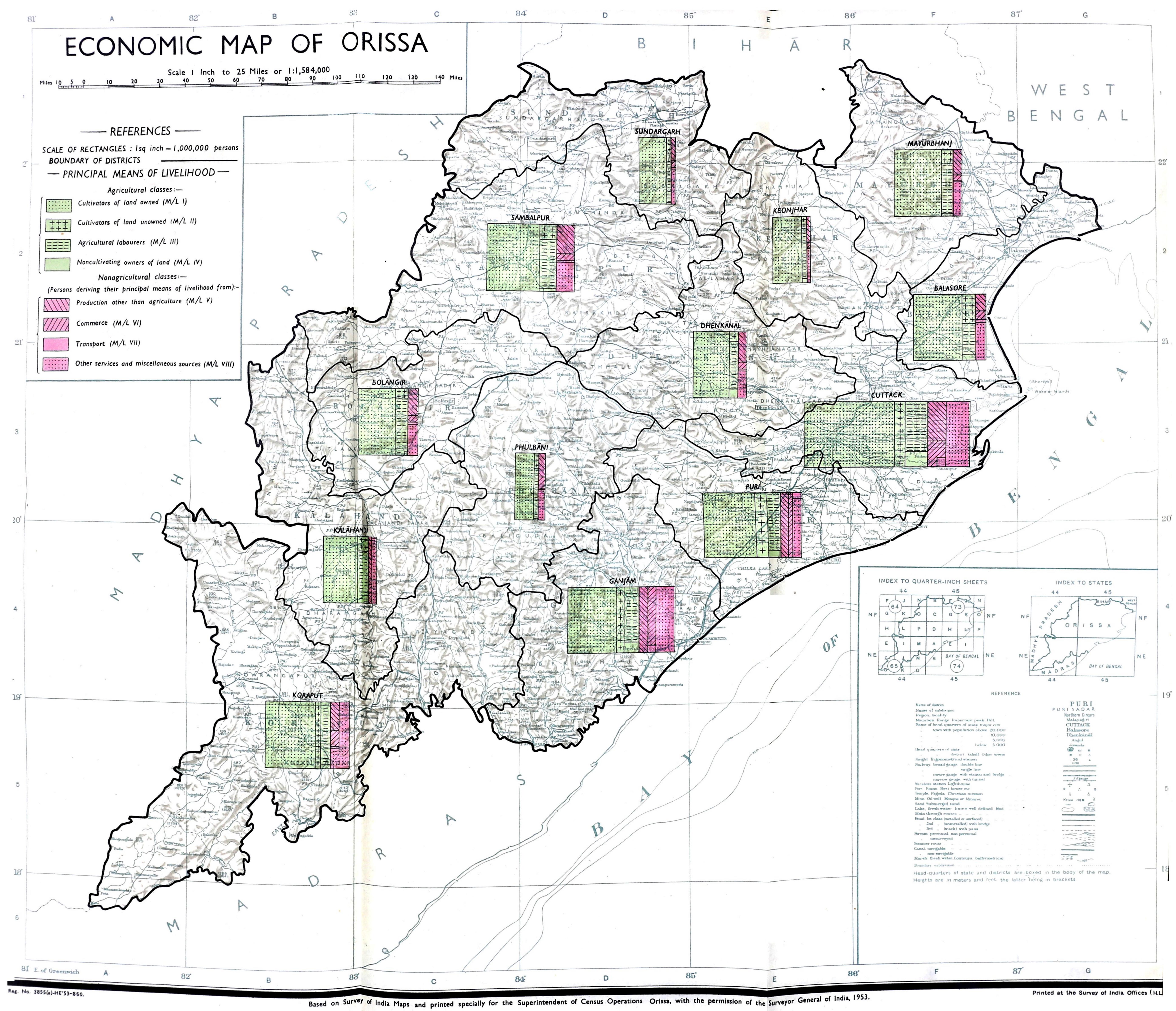


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447	12	Table 7.6	(Ganjam Plai	ns) 1	17

The Census of 1951 is the ninth Indian Census taken since 1872. This census has high importance for Orissa as it is the first census taken after amalgamation of the major portion of Oriya-speaking tracts into one single political and administrative unit. As a result of integration of the ex-state areas of Orissa with older districts, a new sense of unity and homogeneity developed among the population of both the tracts who were counted as members of a single territorial unit in one single operation for the first time in the history of the Oriya-speaking people. The result of such an important operation has been embodied in this Report. Orissa had no Census Report of its own, for although she was constituted into a Province of India in 1936, and a population census followed in the year 1941, there was no writing of the Report that year due to war conditions. This is thus the first comprehensive review of demographic facts and problems relating to Orissa as one political unit.

2. The actual operation of counting began on the 9th February 1951 and continued for 20 days ending at the sunrise of the 1st of March. A vast number of 35,000 enumerators were employed to do this work all over Orissa who were assisted by another large number of 5,000 officers charged with supervision, direction and control of the operation. This large army of workers visited about three million houses scattered over 48 thousand villages and towns of Orissa, and prepared a record of every individual living therein. This record relates principally to the name, nationality, religion and age of the individual, as well as to many other details, such as marital status, mother tongue and other linguistic details, literacy and education, economic status particularly relating to dependency and employment, means of livelihood both principal and secondary, area of land owned and cultivated and so on. This fact-finding mission kept the enumerator engaged till the 28th February 1951. That night he was required to make a special hunt for 'houseless' or 'floating' population, which he finished counting by the next sunrise, the sunrise of the 1st of March. For a final check-up and bringing the enumeration up-to-date with reference to subsequent births and deaths prior to the sunrise of the 1st of March, three days were allowed, namely 1st to 3rd March 1951.

3. System of enumeration—The practice of counting the population in course of a single night was abandoned after the Census of 1931. This system was based on the principle of *de facto* enumeration and aimed at recording, as in England, the actual or *de facto* population of the country in a particular night. Wherever a person happened to be between the hours of 6 P. M. and mid-night on the 26th February 1931, there was he brought to account in the population of that place. No person was asked to mention his ordinary place of residence. This procedure involved enormous administrative difficulties and was perhaps not fully conducive to accurate enumeration. The system introduced first in 1941 was based on modified *de jure* principle, the *de facto* principle being resorted to under certain restrictions. The system adopted in 1951 is the same as in 1941, with some refinements. Under this scheme, a person was enumerated in his normal residence, if (i) he was ordinarily residing there between 9th February and 1st March or (ii) he left such

residence on or after 9th February, irrespective of his date of return or (*iii*) he returned to the residence before the sunrise of 1st March 1951, irrespective of the period of his absence from the normal place of residence. But if such a person left the house before 9th February and remained absent beyond the sunrise of 1st March, he was not required to be enumerated at his normal residence, but at the place he was actually found during the period. The principle of enumeration adopted in 1951 is thus a compromise between *de facto* and *de jure* principles. A full account of the procedure adopted for the enumeration of population and the compilation of results has been given in the Administration Report published separately.

4. Reliability of Statistics—Facts and figures appearing in this Report have been drawn chiefly from two sources, census and non-census. Statistics embodied in Parts II-A and II-B of this Report are purely of census origin, but the subsidiary tables displayed at the end of each Chapter of this volume are partly based on census figures and partly on the reports, statements and information made available by various departments of the Government. All statistics of census origin are distinguished by a high degree of reliability. but the same cannot be said in respect of all statistics of non-census origin, as will appear from the comments in the Chapters that follow. There are good reasons why it is now possible to accept the comparative accuracy of census figures. In the past no attempt was made to verify the degree of error, if any, that existed in the enumeration figures. But on the present occasion, a verification of the 1951 Census count was undertaken for the first time through the independent agency of local magistrates of senior rank. The results of this magisterial verification has been summarised in the Administration Report for Orissa as follows:

"The results of the sample verification of the 1951 Census count has been very useful for dispelling the notions of the critic that the census enumeration has been vitiated considerably by under enumertaion. The net shortage of 0.54 per cent may be considered to be an error of no considerable magnitude, particularly when it relates to a country-wide administrative operation such as the census."

5. It is, however, not pretended that inaccuracies or other types of blemishes contained in this Report are limited to the small and negligible extent of under enumeration as found out by magisterial investigation, or to the incomplete and erroneous character of departmental figures of noncensus origin. There are various stages in which there is the lurking dangre of errors being introduced by inadvertence or ignorance. The sorting and tabulation operations constitute one such stage, because a band of 600 inexperienced youngmen, mostly fresh from schools and colleges, temporarily employed for three or four months on unattractive remuneration and having no immediate prospect for the future, by no means create ideal conditions for patient, accurate and reliable statistical work. The remedy was, however, provided by adoption of a system of checks and counter-checks not only in local offices but also in the headquarters. Finally thanks to the innovation and foresight of the Registrar General, a central tabulation office at New Delhi remained ever vigilant in scrutinising and rectifying defects, if any, in the mass of statistical tables turned out by local offices. The inaccuracies in the final result as now published have thus been reduced to the minimum.

6. Outstanding Features—The Census of 1951 is distinguished by number of new features, some of which are described below :—

(i) Economic Classification—In the past, population was classified on the basis of religion but now this has been done on economic basis. This is one of the most important changes made at this census. The present population has been divided broadly into two categories, namely, agricultural and non-agricultural. The agricultural population has again been divided into four classes according to difference in the status of ownership and in cultivating activities. Similarly the non-agricultural population has been divided into four classes according to the nature of employment or profession. The statistics gathered on the basis of such classification give a useful economic picture of the society.

(ii) National Register of Citizens—An important gift of the present census is a complete record of all individuals living in Orissa on the 1st March 1951. The names of citizens have been arranged by households, villages, police-stations, taluks (if any) and subdivisions in each district and information relating to their sex, age, education, economic status, means of livelihood, land owned and cultivated, etc., have been recorded therein. The register is useful for various administrative purposes, such as revision of electoral rolls as well as for socio-economic surveys which may be taken up from time to time.

(iii) District Census Handbooks—Compilation of District Census Handbooks for all districts of the State is a formidable task which was taken up for the first time in Orissa and completed successfully. These Handbooks contain a complete set of population and household statistics for each village in the district and statistics relating to small-scale industries and displaced persons. They also contain General Population Tables and Economic Tables relating to the district. As mentioned elsewhere in this Report, it is regrettable that the Handbooks were not printed by the State Government, so that they could be available to the public on sale. A limited number of sets were cyclostyled at the cost of Government of India and distributed.

(iv) Census of small-scale Industries—Shortly before the population census was taken, a census of small-scale industries was organised and conducted for the first time in this State. Industrial estalishments engaging less than 20 persons working without the aid of power (electric, gas, etc.) or those engaging less than 10 persons working with the aid of such power have been classed as small-scale industries. The result have been embodied in the District Census Handbooks and have been very briefly referred to in an appropriate place in this Report.

(v) Caste Tabulation discontinued—Yet another significant change made at this census is the abandonment of the collection and tabulation of data for different castes and communities. The only exception made is with regard to the backward classes and the Anglo-Indians.

(vi) Verification of the Census Count—The population census, like all other administrative operations of comparable magnitude, is liable to error. In the past, no attempt was made to verify the extent of error that existed in the enumeration figures. But as increasing importance is attached to population data, it was considered desirable that the degree of error in the census count should be ascertained in order to facilitate correct study and interpretation of the available data. The verification work was entrusted to non-census agencies, namely to magistrates mostly of senior rank under the employment of the State Government. The results of such verification have been discussed in the Administration Report.

7. Scope of the Report—Reports of the Indian Census of the past were distinguished as works of great scholarship and erudition, written with a view to lead and guide all thinking men of India in the matter of outstanding problems. But now with the growth of specialized knowledge in different fields of human activities, it was realised that the scope should be limited to collection and presentation of statistical data and to do as little as possible of writing and to leave the figures to speak for themselves. Transition in the object and purpose of report-writing was first noticed in 1941, when Mr. Yeatts, the Census Commissioner of India held the view that the old styled omnibus report was out of date, and proposed to cut down the scope of the Census Report to such materials as were necessary to interpret and understand the tables.

8. The scope of the present Report has been defined in a memorandum of Shri R. A. Gopalaswami, Registrar General, India, limiting the comments to the "numbers, life and livelihood of the people". It has been laid down that apart from an Introduction and (if necessary) some Appendices, the subject matter of the 1951 Census Report will be arranged in six Chapters as below:—

Chapter I	••	General Population
Chapter Π	••	Rural Population
Chapter III	••	Urban Population
Chapter IV	••	Agricultural Classes
Chapter V	••	Non-agricultural Classes
Chapter VI	••	Families, Sexes and
-		Principal Age Groups

9. This limitation implied that the Report will exclude detailed treatment of the data relating to a number of subjects, such as literacy and education, language, religion, backward classes, displaced persons, etc. Special permission was, however, secured to include brief narratives of these special topics at the end of prescribed Chapters, which now find place in this Report in the closing Chapter VII. The directions issued by the Registrar General, India also discouraged the display of maps and diagrams except one population map. In practice, however, the limitation had to be relaxed to an extent so that the present volume contains a few diagrams and maps, which though by far smaller in number than those that filled the pages of old series of Census Reports of India, are considered adequate for the present purpose. Lastly, in writing this Report, the ultimate object according to the official instructions was to present such matters as " will be of value mainly as the starting point of more detailed studies (to be undertaken subsequently) of the inter-relationship of population changes and economic changes in the country as a whole as well as in the different States and natural divisions of the country". In this connection, it is considered necessary to mention that the statements made and conclusions drawn in this Report are wholly the responsibility of the author alone in his personal capacity and do not necessarily represent the views of the Government.

10. Acknowledgments-It remains to convey my acknowledgments to those who by their co-operation and assistance made the taking of the present census possible. A census may be as good or as bad as the moral attitude of the people towards it. To begin with, therefore, I must pay tribute to the people of Orissa whose good sense of citizenship was behind the smooth and orderly manner in which the operations were conducted. Conditions prevailing in 1951 were more favourable to the taking of a good and reliable census than ever before in the history of census of the country, for no such difficulty was encountered as the highly disturbed vital occurrences preceding the Census of 1921, or the Civil Disobedience Movement during the Census of 1931, or the uncertain war conditions and embittered communal relations at the time of the Census of 1941. In 1951, however, the material condition of the people was far from satisfactory and if the people in general displayed a sense of civic responsibility and co-operation in a country-wide administrative operation such as the Census, their correct attitude cannot but be admired. Side by side, I must also place on record my gratitude to that great body of nearly 35,000 honorary enumerators who at the cost of their convenience and profits took the trouble of visiting over three million houses to prepare at the spot a record of every individual living therein. Acknowledgments are likewise due to other men and officers included in the census hierarchy, viz., Supervisors, Charge Superintendents, District Census Officers and District Magistrates, connected with the execution, supervision and control of the operation at different levels. Without their active interest and close cooperation, the degree of success achieved in the conduct of the operation would have been impossible.

11. I am also grateful to my Tabulation staff, a large body of about 600 paid workers, who turned out immense mass of figures, sitting crosslegged on floor before small pigeon-holes in sombre serious atmosphere from morning to evening day after day. Many of these workers showed admirable zeal and outstanding merit in their work and won the President of India's medals, like so many brilliant workers engaged in the enumeration operations. Their names have been mentioned in the Administration Report. I should, however, like to make special mention of two of my officers, namely, Shri Padmanabha Misra, B.Sc., of the Orissa Administrative Service who as Deputy Superintendent of my office gave me ungrudging help in the preparation of the District Census Handbooks and Shri K. Sriramamurti of the Orissa Subordinate Administrative Service who apart from being useful in his capacity as Assistant Superintendent of the Tabulation Office, was placed in charge of the final stages of the operation at the headquarters.

12. I wish to express my obligation to all those persons, institutions and Government departments to whom I am indebted for assistance and information received on various occasions. To the Director of Industries, of Health and of Agriculture of the Government of Orissa, I am obliged for furnishing facts and figures relating to their departments and to the Surveyor-General of India for preparing the maps and a few diagrams exhibited in this Report. I am under a debt of thanks to Shri S. H. Khan, Superintendent of the Orissa Government Press and his Deputy and Assistant Superintendents for the unbounded patience and the technical resources with which they undertook and completed the printing of all the Parts of the present Report against heavy odds. The printing of the statistical tables is burdened with extremely meticulous instructions and if a congested, over-busy and inadequately equipped Press is able to complete printing neatly and expeditiously, it is a matter of skill and labour not commonly seen.

-13. I cannot acknowledge too fully the valuable guidance and instructions received by me from Shri R. A. Gopalaswami, Registrar General, India in course of different stages of the operation from preliminary organisation of enumeration work to the writing of the Report. If his imagination and initiative were behind the several new lines of investigation for which the Census of 1951 has earned distinction, his ready appreciation of individual difficulties and his effective and practical method of tackling complicated problems acted as a source of inspiration and strength so much necessary for bringing a stupendous country-wide operation to a satisfactory conclusion. I must also express my keen sense of gratitude to Shri D. Natarajan, Assistant Census Commissioner for his sympathetic and prompt action in all technical and administrative matters and to Shri P. N. Kaul, Central Tabulation Officer, for his ever vigilant eye on the mass of statistics on which the present Report is based, which were checked and verified by him not only thoroughly but also most expeditiously.

14. I cannot conclude without paying grateful tribute to the late Mr. Asaf Ali who as the Governor of Orissa when the Census of 1951 was conducted, took keen interest in the result of the operations and more than once called for compiled figures and descriptive report which were mostly in manuscript form at that time. He perused with scholarly zeal whatever material was available till then and was pleased to record a note of appreciation which appears in the following page.

CUTTACK : The 30th April 1953

M. AHMED

Superintendent of Census Operations Orissa

GOVERNMENT HOUSE, PURI The 26th April, 1952

Modern census operations and the comprehensive preparation of a mass of statistical data for the interpretation of experts in sociology, anthropology and economics in relation to a sub-continent of India's dimensions involve an organised effort of immense magnitude. One has only to look at the bulk of several district handbooks containing facts and figures connected with the Province of Orissa which have emerged from these labours to realise how much of intelligent and mechanical work goes into their presentation. The census of 1951 in India was undertaken with several new lines of investigation, because some of the basic facts and figures concerning the living conditions, economic structure, and the assets and hiabilities of the State were not available. Without precise or at least highly approximate data no clear picture of the ascending or descending trends of national life can be formed and no plans for the correction of deficiencies or the pursuit of progressive development can be effectually laid down. If the effort made during the census operations of 1951 has been successful throughout the country, the data made available will be of immense value to statesmen and to all others concerned. 1. A () . . .

of maps prepared by the staff of the Census Officer of Orissa (the final report is still in the course of elaboration) and I feel bound to place on record my unstinted appreciation of the work done. In spite of the formidable array of statistical material these volumes are attractive enough by their neat and methodical presentation, even for laymen.

Ever since I have been in charge of Orissa I have been emphasising the surgency of revising the District Gazetteers which in a sense are the Bible of the District Officers and which have long been out of date. Further, since the integration of the 24 Eastern States with Orissa and the reorganisation of the old and new districts, all the maps have become partially obsolete. I am, therefore, particularly pleased to find that up-to-date maps of districts and thana-wise distribution of population, etc.; have been prepared and included in the Census Handbooks. The data supplied in these books with these maps will greatly facilitate the preparation of a supplementary volume of the revised contents of District Gazetteers.

Orissa is almost the richest Province potentially for its size: for it covers 60,000 square miles of territory with 23,000 square miles of forests, nearly 300 miles of sea-board, immense water and 'hydro-electric power, vast mineral deposits including coal, iron and manganese ores, bauxite, chromite and some 30 other occurrences of industrial value, and immense possibilities of pisci-culture, eri and ceri-culture, poultry farming and cattle breeding, in addition to its existing land produce; which is already enough to permit of an exportable 'surplus of over 1,00,000 tons of rice, etc. It is the paradise of enterprising industrialists and experienced farmers: But when we look at the existing conditions of life in its 48,000 villages and some five towns of modest size and another 34 of a smaller size, and study the facts and figures of its industrial and commercial output, and further scrutinies the charts of 'its citizens' health, education and average income, we cannot fail to recognise its heartrending poverty in almost every direction, except the passionate desire of its far-seeing and well-informed citizens for rapid improvement.

The facts and figures supplied in this Report will greatly help to pick out the directions in which improvement is demanded in the highest order of priority.

I congratulate the Census Officer, Mr. M. Ahmed and his colleagues, staff, and casual helpers on their achievement, and commend the Census Report of Orissa to the notice of all who are interested in the welfare of the State.

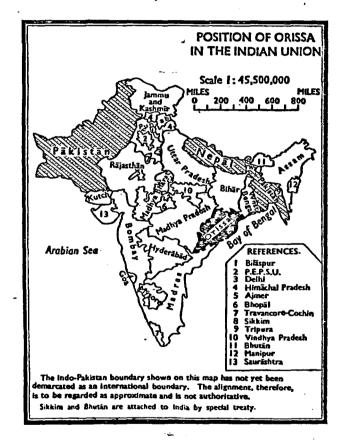
M. ASAF ALI GOVERNOR OF ORISSA

INTRODUCTION

I. General Description of the State

GEOGRAPHICAL SETTING

1. The State of Orissa situated on the east coast of India is bounded by Bihar on the north, Madras on the south, West Bengal on the east, Madhya Pradesh on the west and faces the Bay of Bengal on the south-east. It lies between 17°50' and 22°34' north latitude and between 81°27' and 87°29'



east longitude. The whole area of the State lies in the tropical zone, its most northerly point being about 1° below the Tropic of Cancer. Physiographically, the territory of the State of Orissa may be divided into four welldefined tracts, each having its own distinguishing characteristics, namely, the Northern Plateau, the Eastern Ghats, the Central Tract and the Coastal Plains.

PHYSICAL CONFIGURATION

2. The Northern Plateau covers the districts of Mayurbhanj, Keonjhar, Sundargarh and the Pal-Lahara subdivision of Dhenkanal district. It is an undulating upland tract with general slope from north to south. It is much broken by ragged ranges of hills and is traversed by drainage channels leading

from hill ranges to rivers, viz., the the Subarnarekha, the Burabalang, Baitarani and the Salandi. the Brahmani. Isolated hills rising abruptly from the plains are common. Further towards north and east. occurrence of ranges of hills becomes frequent, finally ascending into table lands and peaks. Maximum height is attained by the peaks Mankadanacha (3.639 feet) and Badamgarh (3,525 feet) of Bonai subdivision in Sundargarh district, Malyagiri (3,895 feet) in Pal-Lahara subdivision of Dhenkanal district and Meghasani (3,824 feet) in the Similipal hills of Mayurbhanj district. These hills are the outer fringes of the Central India mountain ranges. Their slopes are buried in thickly grown large tropical forests. On their foot are frequently seen extensive plains and valleys with cultivation varying from fine cultivated paddy to occasional hill crops.

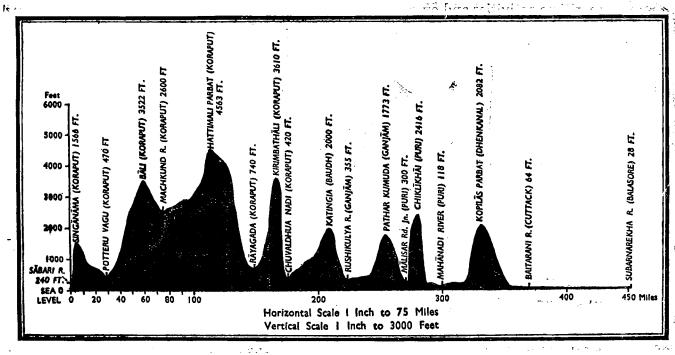
3. The Eastern Ghats region has upland plateaus, hills and peaks which are the highest in Orissa. The plateaus have wide expanse of open country fringed by forests and hills. The Deomali hills (5,486 feet) whose twin peaks can be clearly seen from Koraput town when the sky is clear, has the highest altitude in Orissa. The Turiakonda (5,244 feet) and the Polamokani Parbat (5,201 feet) of Koraput district and the Bankasamo (4,182 feet) and the Karlapat (3,981 feet) of Kalahandi district are among the highest hills of the Eastern Ghats section in Orissa. While the summits of these hills reach sub-temporate altitude, their slopes are covered with thick forest growth. The Eastern Ghats region extends over the districts of Koraput, Kalahandi, Ganjam Agency and extends along the right bank of the Mahanadi from district Phulbani onwards.

4. The Central Tract lies in between the Northern Plateau and the Eastern Ghats region and mainly covers the districts of Bolangir, Sambalpur and Dhenkanal. Isolated hills rising abruptly from the plains are commonly seen in this tract. This tract contains some of the fertile parts of the State, such as the Bargarh plains. It is drained by the river Mahanadi and its tributaries and is nowhere bare of vegetation and the villages are deeply embowered with palm and mango groves.

5. The Coastal Plains are principally a maritime tract along the Bay of Bengal and lie between the borders of West Bengal and Madras. The greater part of the region is the outcome of alluvial deltaic formation of the river system of Orissa. It is the most fertile and densely populated region in the State, containing rich mango, cocoanut and palm groves and very extensive rice fields well watered by a network of rivers and irrigation canals. The belt of land nearby the sea coast is marshy and abounds in swamps intersected by innumerable winding creeks and sluggish rivers. Tracts of blown sand are also noticeable along the coast in the shape of sand dunes or ridges. The central portion of the delta, approximately 3,000 square miles in area is subject to damage by floods almost every year.

RIVERS

6. The principal rivers are the Mahanadi, the Brahmani and the Baitarani, all running almost parallel from northwest to south-east. There are also some smaller rivers, namely, the Salandi, the Burabalang and the Subarnarekha, flowing over the northern part of the State and the Rushikulya, the Vansadhara, the Nagavali, the Indravati, the Kolab and the Machkund draining the districts of Ganjam and Koraput in the south. The Mahanadi is the largest among them with a total length of 533 miles, about half of which lies in Madhya Pradesh. It drains a basin of 51,000 square miles and discharges during highest floods 1.6 million cusecs, or nearly as much as the Ganges. Rising in Raipur district, it passes through Bilaspur before entering into Orissa in district Sambalpur where its tributaries, the Ib, the Ong and the Tel and numerous minor streams make it a river of the first magnitude with a width of more than a mile. It then passes through some rapids and deep gorges of the Eastern Ghats and ultimately reaches the deltaic region at Naraj, about seven miles west of Cuttack. It traverses Cuttack district from west to east throwing off numerous branches and falls into the Bay of Bengal through several channels near the False Point. The deltaic region has a net-work of branches and channels due to the inter-mingling of the three principal rivers of Orissa.



CROSS-SECTION OF ORISSA

7. The above diagram, drawn to scale, represents the cross-section* of Orissa. It gives a picture how Orissa will look like if cut along a line running north-east from the Sabari river in Koraput district (Latitude 18°05' and Longitude 81°30') to the mouth of the Subarnarekha river in Balasore district (Latitude 21° 33' and Longitude 87°24').

It shows the great irregularity of contour having steep elevations and abrupt falls all through. There are, however, distinguishing features, one end being the low level flat belt of the deltaic plains next to the sea coast and the other end being a tableland of notable elevation beyond the plains of Rayaghada. It will be seen that over this tableland runs the Machkund river at a height of 2,600 ft. above the sea level leading to

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^{*} Strictly speaking this is not the cross-section running along a straight line between two points. Such a geometrical method will miss salient physical features of the country. Slight deviations are made with a view to pass over typical elevations and depressions, so as to secure a panoramic view of the hills and dales against the sky-line coinciding with the section line.

the advantage of the great hydro-electric power station at a suitable spot in the course of the river at Duduma, which is now under construction. In between the deltaic plains and the tablelands beyond Rayaghada, lies a tract of uncertain surface of great heights alternating with low valleys, between the Kapilas Parbat in Dhenkanal district and the Kirimbathali Peak in Koraput district. The general relief of the country offers scope for interesting study.

II. Brief History of the Land and the People

8. Emerging from pre-historic times with references in the Vedic and Epic literatures, the people of ancient Kalinga distinguished themselves as pioneers in maritime activities and overseas colonisation in early days and took to empiremaking under the Jain king Kharavela before the Christian era. He became the over-lord of the south and the west India and then spread his conquests towards the north. After Kharavela, Kalinga had periods of subjugation by foreigners, viz., by the Kushans and the Guptas, but mostly had dynasties of its own ruling over the land and spreading their sway over neighbouring countries. These dynasties had powerful kings credited not only for military prowess but also for cultural activities of abiding glory. The most noted kings are Lalatendu Kesari, the builder of the Bhubaneswar temple about the middle of the 9th century, Anangabhima Deva II, the builder of the Jagannath temple at Puri towards the close of the 12th century, Narasimha Deva, the builder of the Konarka temple about the middle cs the 13th century and Mukunda Deva, the builder of the Barabati Fort in the second half of the 16th century. At the height of their powers, the kings of the mighty kingdom of Kalinga ruled over the territory extending from the banks of the Godavari on the south to the Ganges on the north.

9. Orissa came under the Pathan Sultans of Bengal and later under the Mughal Emperors of Delhi from 1568 to 1751 when it was ceded to the Marhattas by Alivardi Khan, Nawab of Bengal. It continued to be under the sway of the Marhattas for about half a century till 1803 and was then conquered by the British in India.

10. Orissa was then attached to the province of Bengal and in 1804 a Board of two Commissioners was appointed to administer the territory. It was constituted into the district of Cuttack in 1805, but in 1823 it was first split up into three regulation districts of Cuttack; Balasore and Puri and 17 non-regulation tributary Mahals administered by native chiefs under the responsibility of a Commissioner. Khondmals was ceded in the year 1835 by the tributary chief of Baudh state while Angul was annexed in the year 1847. Ultimately, Sambalpur district was transferred from the Central Provinces to Orissa in 1905. Five tribuof Patna, Kalahandi. tary states Sonepur, Bamra and Rairakhol were also transferred from the Central Provinces to Orissa and in the same year the two states of Gangpur and Bonai were transferred from Chotanagpur Division.

continued to be Orissa 11. anoutlying Commissioner's Division of Bengal till 1912 when it was transferred to Bihar. Ultimately it was constituted into a separate province on the 1st of April 1936 by the Government of India (Constitution of Orissa) Order, 1936, when some portions of the Central Provinces and Madras, namely, Nawasubdivision and Ganjam and para Koraput districts were added to the bounds of Orissa. This was the result of prolonged and intensive movement for amalgamation of all Oriya-speaking tracts which gradually gathered so much

force that ultimately in January 1936 an Order in Council was promulgated by the British Government creating Orissa as a separate province.

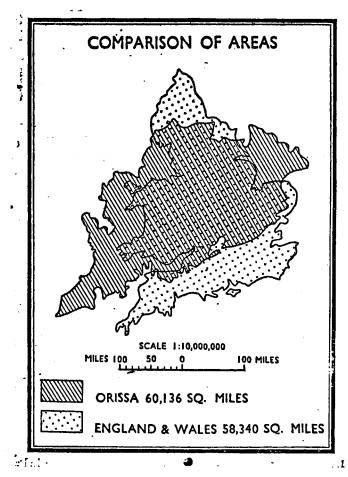
12. The province of Orissa as thus constituted comprised the six districts of Cuttack, Balasore, Puri, Sambalpur, Ganjam and Koraput. Oriya-speaking feudatory states, numbering twenty-four were placed under the Political Agent in charge of the Eastern Zone stationed, at Sambalpur. One of the first tasks of the Government of the newly constituted province was to reconcile different systems of administration obtaining in the old districts of Orissa, in the ex-Madras areas now constituted into two districts, and in the portion of the Central Provinces which was added to the district of Sambalpur. The systems were in many respects entirely different in detail and sometimes in underlying principles.

13. The province was in its infancy when signs could be read of a forthcoming change arising from conditions created by the World War in which India was engaged and ultimately culminated in the termination of the British rule in India in the year 1947. The withdrawal of the British resulted in the lapsing of the British sovereignty over the Indian States. Side by side with the rising tide of nationalism in the British India territory, there was a rapid growth of peoples' movement in the state areas. Anticipating troubles, the rulers of Orissa states attempted to form the Eastern States Union in 1947. The idea of creation of a separate province was also an alternative suggestion occurring to many who were opposed to the creation of the Eastern States Union. But ultimately it was the development of events in the small state of Nilgiri which was the basis of an eventful decision. In the month of November 1947, the Adibasi problem became so acute in the state of Nilgiri that the ruler could not himself control it and the infuriated Adibasis rising up with bows and arrows began to occupy the lands of other people. The situation was out of control and the Government of Orissa apprehended that the repercussions may extend to the neighbouring district. The matter was placed before the National Government of India, with whose permission; the Government of Orissa took charge of the administration of Nilgiri.

14. Within a month of taking over of the administration of Nilgiri, the situation in other states of Orissa called for intervention on the part of the Government of India. This ultimately resulted in the merger of 23 states with Orissa with effect from the 1st January 1948. Conditions existing in another state, namely, Mayurbhanj were somewhat different as the ruler had vested extensive administrative powers on a local body. It, however, took one full year for events to reach a parallel state in Mayurbhani, which on the 1st January 1949 finally merged with the State of Orissa.

15. The State of Orissa with 6 districts existing since the year 1936 and with 23 ex-state areas merged in 1948 and another in the year 1949, acquired its final territorial shape as it now stands. There was then the reconstitution and delimitation of districts. Some of the ex-states were attached to the adjoining old districts, while others particularly with a reasonable size were given the status of a district of the State. In this way, Orissa ame to have the present number of 13 districts. The State has now an area of 60,136 square miles and a population of 14,645,946. One of the late Governors is of the view that "In respect of its resources in land forests, rivers, waterfalls, mines and maritime potentialities put together.

Orissa is next to none of the major Provinces of India". In territorial extent, Orissa is bigger than England and Wales and is over four times as large as Egypt. It has 23,000 square miles of forests and 300 miles of sea-board, enormous prospect of hydro-electric power, vast mineral deposits, namely, coal, iron, manganese ore, bauxite, chromite, mica, limestone and 30 other occurrences of industrial value and immense possibilities of development of



capital and cottage industries. Even if a part of the immense resources in land, water, minerals and man-power can be explored, Orissa will rise to unprecedented height of prosperity and power. The mineral wealth of the State is lying unexplored and unexploited, the manpower which is admittedly intelligent and industrious is being wasted for want of opportunity. Thus, in spite of tremendous wealth in various forms, it is still in a state of backwardness. Characteristically, the people of Orissa are simple, goodnatured and contented.

They are generally not excitable and they accept the vagaries of nature with philosophic calm, seeing the hand of God in draught, rainfall, flood and pestilence. They are hospitable and so inherently conservative in rural areas that they have deeprooted distrust of any idea which is new. But those that have modern education, have effectively discarded this conventional character and are progressive, ambitious and dynamic.

16. Such is the land of Orissa.

17. The changes in the area of Orissa since the year 1872 are shown in the statement below: —

	Area in square miles						
Year	Orissa proper	Orissa states	Total				
(1)	(2)	(3)	(4)				
1872	7,717	16,184	23,901				
1881	9.053	15,187	24,240				
1891	9,853	14,387	24,240				
1901	9.841	14,387	24,228				
1911	13.743	28,046	41,789				
1921	13,736	28,046	41,782				
1931	13,706	28,046	41,752				
1941	32.198	25,194	57,392				
1951	60,136	••	60,136				

18. As shown above, the area of the province of Orissa in 1941 was 32,198 square miles. The Province was constituted at that time of six districts only, viz., Cuttack, Balasore, Puri, Sambalpur, Ganjam and Koraput. So far as census operations of 1941 were concerned, there was a common authority for these six districts as well as for 23 feudatory states comprising Mayurbhanj, Patna, Kalahandi and all the states in the Orissa States Agency except Gangpur, Kharswan and Saraikela. The area of these 23 feudatory states was 25,194 square miles, so that the total area of the province of Orissa together with the 23 states was 57,392 square miles as shown in the Census Report of 1941.

19. The present area of the State as furnished by the Surveyor General, India is 60,135.9 square miles. This area is, however, different from that obtained from local sources which comes to 60,127 square miles. Generally the latter figure has been adopted for purpose of discussion of census statistics, as the Surveyor General, India does not keep a record of areas of administrative units below district level. The areas of smaller units had therefore to be ascertained from local sources, which give a slightly different total.

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20. The increase in the area of the State from 32,198 square miles in 1941 to 60,136 square miles in 1951 is primarily due to the integration of the ex-state areas with the old area of the province. On the 1st August 1949, 24 ex-states were completely merged with the province under the States Merger (Governor's Provinces) Order, 1949, increasing the area of the State to what it is now. The ex-states which thus merged are Athgarh, Tigiria, Baramba, Narsingpur, Nilgiri, Nayagarh, Daspalla, Khandpara, Ranpur, Bamra, Rairakhol, Dhenkanal, Talcher, Pal-Lahara, Athmalik, Hindol, Keonjhar, Baudh, Patna, Sonepur, Gangpur, Bonai, Kalahandi and Mayurbhanj.

IV. Population Zones and Natural Divisions

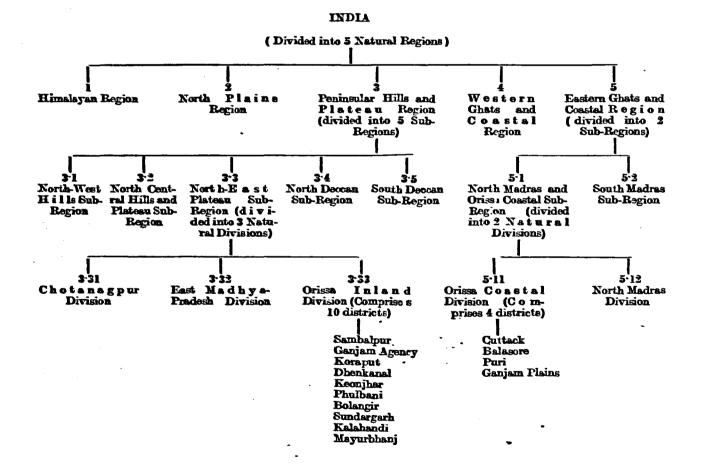
21. For a comprehensive study of the population data, it is necessary to proceed by suitable divisions of the country on the basis of administrative set up or physical features. This practice was in vogue in past censuses but it fell into disuse after 1911 in respect of all-India Report. On the present occasion, however, it was considered necessary to revive the practice and, accordingly, India has been divided into 6 Union Population Zones on the basis primarily of contiguity and convenience for purpose of review. Out of these six Zones, namely—(i) North India, (ii) East India, (iii) South India, (iv) West India, (v) Central India and (vi) North-West India Zones, Orissa along with some other States of Eastern India, namely, Bihar, West Bengal, Assam, Manipur, Tripura and Sikkim comes under Zone No. (ii) namely, East India.

22. Administrative or political divisions of a country are not wholly

convenient for discussing the results of the census in all its aspects. Therefore a further division of the country becomes indispensable. Such a division of India has been made on the basis of physical features, independent of political or administrative considera-Accordingly, India has been tions. divided into five 'Natural Regions', based solely on physical features and without reference to the material differences in soil and rainfall conditions. These five Natural Regions have been sub-divided into 15 Natural Sub-Regions

on the basis of substantial difference within each Natural Region in respect primarily of soil or rainfall conditions, and also taking into account differences in the cropping pattern. The 15 Natural Sub-Regions, in turn, have been divided into 52 Natural Divisions on the basis primarily of intersection of Sub-Regions with existing political divisions.

23. The scheme of Natural Divisions, particularly relating to the State of Orissa is shown below :---



24. In accordance with the above scheme, Orissa has two Natural Divisions, namely, Orissa Inland Division (Code No. 3.33) and Orissa Coastal Division (Code No. 5.11).

25. The Orissa Inland Division is formed of an extensive hinterland extending over the three well-defined tracts of Orissa, namely, the Northern Plateau, the Eastern Ghats and the Central Tract. This natural division comprises the administrative districts of Sambalpur, Ganjam Agency, Koraput, Dhenkanal, Keonjhar, Phulbani, Bolangir, Sundargarh, Kalahandi and Mayurbhanj and has an area of 46,052 square miles. The Orissa Coastal Division comprises the administrative districts of Cuttack, Balasore, Puri and Ganjam Plains only with an area of 14,075 square miles. The description of physical features of these areas has been given in earlier paragraphs.

V. Geology and Minerals

GEOLOGICAL OUTLINE

26. The territory covered by the State of Orissa is geologically one of the least known regions of India. There was no regular geological survey, but there were occasional traverses and some amount of mapping made in selected areas during the last 80 years. An attempt to make a systematic geological survey of all reported mineral occurrences was made in the year 1939. The progress of work has been slow indeed, but steady and a preliminary account of the known deposits visited by officers of the Geological Survey of India is now available.

27. In earlier geological times, the portion of Orissa now occupied by the Eastern Ghats was low in level and the main streams, the Mahanadi and the Brahmani which were then in existence flowed eastwards. The whole surface. sloping eastwards, was flat to moderately undulating with occasional hills rising here and there. In the next phase, there was the deposition of Gondwana beds, which led to the uplift of a belt extending from Chotanagpur, through Keonjhar south to Phulbani, Ganjam and Koraput and finally into Madras. This uplift took place in a series of geological events. The first uplift was of the order of about 1,000 feet, creating plateaus and uplands which became covered with extensive capping of laterite as represented by the high hills of the Eastern Ghats and the Koraput plateau. A prolonged erosion of the surface ensued reducing the altitude of the western part. Then came the second uplift elevating the southern portion to a level of 3,000 feet and the much-eroded western portion to 2,000 feet. The western portion was again subjected to erosion but the plateau from Khariar to Jeypore was spared to a considerable extent.

28. East of the uplifted region is a zone of irregular and interspersed hills which can be followed up to a few miles parallel from the coast line. This zone also has attained its final elevation by a succession of uplifts. Lastly, comes the coastal strip, gradually sloping into the Bay of Bengal. Even this low-lying region is the result not merely of deltaic activity of rivers but of uplift movements, for around the Chilka lake certain deposits of shells of estuarine type occur at a height of 20 to 30 feet above the present high water level indicating recent uplift.

MINING: EARLY HISTORY

29. The use of metals is older than the recorded history of mankind. In the past, iron, copper and other metals seem to have been worked extensively in India, as is evident from archaeological finds. The fame of ancient Indian Steel, *Wootz*, a very high grade of steel exported. to Europe even before the Christian era for manufacture of swords and weapons, testifies to the mining and metallurgical skill of Indians. Indian metals also appear to have reached the south-east Asia in those early days. It is conceivable that Orissa must have played a prominent part in the extraction of iron and other metals, not only for export to foreign countries, but also for military and domestic requirements of the homeland, for of all localities in India, iron is available in enormous quantity and high quality within bounds of Orissa and the adjoining areas of Chotanagpur and Madhya Pradesh. But this is ancient history. Later on, the iron workers of Orissa were content with smelting of low grade iron that could be available by simple quarrying of superficial deposits, lying scattered from Koraput to Mayurbhanj.

30. Notions of modern mining did not originate in India. Since the 18th century when James Watt of England invented the steam engine and Abraham Darby first used coke for smelting iron, the use of minerals has been increasingly associated with day-to-day life. The Industrial Revolution emphasised the value of coal and iron as the most coveted minerals of a country. Since then, the rise of industrial nations in the world has been largely dependent upon their possession or exploitation of adequate quantities of these two valuable minerals. The rapid development in the use of iron and steel led to an everincreasing demand for other metals and Under minerals. these conditions. search for different minerals received great impetus and the Geological Survey started investigations in Indian soil in the last century. Private enterprises gradually appeared in the field of extraction of minerals.

SLOW UNMETHODICAL DEVELOPMENT

31. Orissa received rather cursory attention in the past from the Geological Survey of India. This is because, till late nobody knew that a colossal wealth of economic minerals is hidden in her bowels. A survey was made as late as 1939 and even this is not to be regarded as a comprehensive work. Under the circumstances there was no incentive

for mining activity in Orissa. Of course, the discovery of coal in Talcher and Sambalpur is nearly one century old. but these were stray cases, hardly attracting the attention they deserved. Slow, occasional and unmethodical extraction of minerals was started in the present century. At present, the ore-bodies are worked, not for the extraction of metals contained in them, but for the purpose of exporting them in raw condition. The absence of metallurgical enterprise in Orissa has led to the total neglect of mineral deposits except in case of those whose export in raw condition is paying. Even this activity is being done in a restricted manner on account of shipping difficulties, as Orissa has no port of its own worth the name. This is a serious drawback in the exploitation and development of mineral resources of Orissa. Moreover, the haphazard manner and the crude methods which characterise the present day mining in Orissa amount to serious loss of national resources. The ores which are rich in mineral contents are taken out while those containing lesser percentage of minerals are left to waste. It should not be forgotten that unlike forest or agricultural products, minerals once extracted mean decrease in the total quantity of that particular wealth. Therefore, as far as possible, even the poorer grade of ores should be utilised to the full. This requires technical knowledge, in which field our mine-owners are so deplorably ignorant. Unless more enlightened types of lessees come in future, there will be justification in considering the controversial issue of nationalization, of at least a few key minerals which are assets of the nation.

MINERAL RESOURCES

32. The description of mineral resources of the State may be given, first, on the basis of two Natural Divisions of Orissa separately.*

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^{*} Based on information collected from the Geological Survey of India.

ORISSA INLAND DIVISION

33. This Natural Division is a part of the Natural Sub-Region 3.3-North-East Plateau, consisting of Chotanagpur division, east Madhya Pradesh division and Orissa Inland division. This Sub-Region is the most highly mineralised region in the whole of the Indian subcontinent and carries large reserves of iron ore, manganese ore, copper, bauxite, coal, limestone and mica, in addition to the other less important minerals like kyanite, chromite, wolfram, tantalite, vanadiferous magnetite, pitchblende, asbestos, graphite, clays, etc. The greater portion of the region is occupied by crystalline schists, gneisses and granites of Archaean age in which occur patches and large basins of sedimentary rocks of Purana group as well as coal-bearing Gondwanas. The Sub-Region is important for the large reserves of lower Gondwana coals estimated at about 4,500 million tons within a depth of 2,000 feet, of which nearly 2,000 million tons are good quality coking coal.

34. The whole of Gangpur, Bonai, Keonjhar, Mayurbhanj and adjoining areas are made up of phyllites schists, limestones, dolomites and other crystalline rocks. The hill masses in Bonai, Keonjhar and parts of Mayurbhanj contain banded hematite quartzites and iron ores. A large region in east Keonjhar and Mayurbhanj extending upto south Singhbhum is composed of intrusive granites called the Singhbhum granites which are traversed by a network of dolerite dykes. The rocks of the iron ore series in South Singhbhum, Bonai, Keonjhar and Mayurbhanj carry large reserves of workable iron ore estimated at 8,000 million tons, and amounting to nearly 60 per cent of the total Indian reserves. The deposits at Badampahar, Gorumahisani and Sulaipat in the district of Mayurbhanj are being worked by Tata Iron and Steel Company

and those at Barabil in Keonjhar by Bird and Company. The total quantity of iron ore produced from these areas is of the order of over 21 million tons per annum. In addition to the iron ore, there are large deposits of manganese ore in the iron ore series rocks in South Singhbhum, Bonai and Keonjhar. The annual output of manganese ore from this area has increased in recent years from about 60,000 tons in 1946 to nearly 1,00,000 tons in 1949.

35. Other important minerals from the above mentioned areas are chromite, vanadiferous magnetite, kvanite. steatite, limestone, dolomite, china-clay, asbestos and apatite. The annual production of chromite from Singhbhum and Keonjhar now is about ten to thirteen thousand tons. The kyanite deposits of Kharswan, Seraikela and Mayurbhanj are the largest in the world with an annual output of 12,000 to 14,000 tons. The reserves of kvanite at Kharswan has been estimated to be over 2 million tons. The production of steatite from Seraikela, Singhbhum. Keonjhar and Mayurbhanj is about 1,000 tons annually. The reserves of limestone and dolomite in Sundargarh district are very large and these supply the entire demands of flux-grade limestone and furance-grade dolomite to the iron and steel factories of eastern India. The annual production is of the order of 8,00,000 tons of limestone and 70,000 tons of dolomite. There are also deposits of china-clay in Singhbhum, and Keonjhar which Mayurbhanj produce 20,000 to 30,000 tons per annum.

36. There is a stretch of coal bearing sand-stones and shales of lower Gondwana age along the valley of the Ib in Sundargarh and the adjoining areas of Madhya Pradesh. There are several small coal fields like Rampur and Hemgiri in this area.

37. The Eastern Ghats south of the Mahanadi in Patna, Kalahandi, Khondmals, Koraput and Ganjam are composed of rock groups called the khondalites and charnockites, and carry untapped reserves of manganese ore, graphite, bauxite, etc., but owing to inaccessibility these areas remain still undeveloped. Numerous small deposits of bauxite estimated to contain over 3,50,000 tons occur in the Karlapat hills in the Kalahandi district and also in the Khariar highlands. The graphite deposits of Athmalik, Patna, Řairakhol, Šambalpur and Koraput are known to be the largest in India, the annual production of the mineral varying from about 500 tons to 1,500 tons. Deposits of manganese ore have recently been located in Kalahandi and adjoining areas and a production of a few thousand tons has been recorded from Koraput. Other important minerals are limestone, marble, clays A small glass-sands, steatite, etc. patch of coal-bearing sandstones covering an area of 200 square miles occurs in Talcher. Two workable seams of coal are known to occur, but though the field is worked, it has not yet been prospected in detail for proving the reserves. The present production of coal from the field is about 3,00,000 tons annually.

ORISSA COASTAL DIVISION

38. This division along with the North Madras Natural Division forms the Eastern Ghats and Coastal Sub-Region extending along the sea coast from Balasore in the north to Madras City in the south. Balasore, Cuttack and Puri districts are underlain by recent deposits of sands, silts and clays with large patches of laterite extending for a width of 30 to 40 miles from the coast beyond which occur Khondalites and charnockites. In Ganjam district, the gneissic rocks approach the coast with only a fringe of recent deposits along the shore and river valleys. The Eastern Ghats of Ganjam and Visakhapatnam extending southwest into the East and the West Godavari districts are made up of charnockites, Khondalites and associated bands of quartzites and marbles.

39. Except for small deposits of steatite, litho-marge, iron ore, fire-clay and pottery clay in the Cuttack district and numerous small occurrences of mica, some china-clay and manganese ore in the Ganjam district, the Orissa Coastal Division is poor in mineral resources.

ECONOMIC MINEBALS

40. The above review of mineral resources of Orissa has been a little too technical and an attempt is made below to give a simple outline of the economic minerals found in the State. With regard to the industries connected with mining and metals, reference may be made to Sections V and VII of Chapter V of this Report.

Iron

41. This mineral is the backbone of modern civilization. It is most fortunate for Orissa that there are immense deposits of high grade iron within its bounds. Iron ores probably not inferior to the best quality in the world are found in Mayurbhanj, Bonai and Keonjhar where the total deposits may exceed 2,000 million tons. In other words, if exploitation is made at the rate of 2 million tons of ore a year, the deposits in Orissa will be sufficient to last 1,000 years. This gives some idea of the colossal quantity of deposits in the State. Another special feature about this mineral in Orissa is that it is capable of being cheaply mined being located in comparatively less inaccessible tracts. Besides there are huge quantities of low grade iron ores spreading over different areas of Orissa from Koraput to

Mayurbhanj. Sambalpur district has several small occurrences of low grade iron estimated at nearly 50 million tons scattered over different localities. In the district of Koraput there are several smaller deposits lying scattered here and there. High grade iron ores have been located at the Hirapur hills, in Umerkote police-station in Koraput district, which though small, being estimated at 10 million tons, have high iron content ranging upto 63 per cent. A small deposit of iron ore, the total quantity of which has not yet been estimated, has been found in Sukinda in Cuttack district. Its iron content is supposed to be very high, namely, 66 per cent to 69 per cent. This may be compared to iron ores of America which contain about 55 per cent of iron and of Lorraine which are smelt and worked in France and Germany containing 35 to 40 per cent of iron. The ores found in England have a still lower iron content. The richness and high commercial value of the iron ores of Orissa are thus evident. At present the annual production of iron ores in Orissa is nearly one and a half million tons, mostly utilized by the Tata Iron and Steel Factory.

COAL

42. Coal is the most important of mineral products in Orissa. Knowledge of occurrence of coal in Orissa dates back to 1837, when a small deposit was noticed in Talcher. In 1854 another deposit of coal was discovered in Sambalpur. But active development on modern lines was not commenced in Sambalpur till 1909 and in Talcher till 1919. At present five areas are known to have major coal-bearing rocks, namely, the Talcher Coal Fields, the Rampur Coal Fields in Sambalpur, the Himgir Coal Fields in Sundargarh, the Athgarh basin in Cuttack and the Khondmals basin. The Talcher Coal Fields yielded about 5 thousand tons of coal in 1923, developing to over three and a half lakh tons

in 1933. In the Rampur Coal Fields production began in 1910 with about 100 tons, rising to 61,000 tons in 1914. Since then the production has been fluctuating from year to year between 20 and 30 thousand tons. The Himgir Coal Fields in Sundargarh district yield a good quality of coal though the quantity of production is small. Coal is also reported to occur near the Sidheswar hills, about 7 miles west of Cuttack but this has not been properly investigated. The Athgarh and Khondmals basins however do not hold out much prospect of success in a commercial sense. The total production of coal in Orissa exceeds 4 lakh tons per year at present.

MANGANESE

43. India is one of the largest producers of manganese ores in the world, being second only to Russia. Most of such ores in India is being mined in Madhya Pradesh. Orissa may also be able to produce this mineral in large quantity as there is field for extensive extraction. Large deposits of high grade manganese have been recently found at Kutingi nearby the Rayaghada railway station. The present production is between 80 and 90 thousand tons per year. It is estimated that about 4 lakh tons of manganese are available in the Kutingi deposits. Manganese mines are also being worked at present in Keonjhar district.

BAUXITE

44. Bauxite which yields the valuable industrial metal aluminium is available in the laterite hill tops of the Eastern Ghats in the northern portion of Koraput district, particularly in the Girliguma hills. High grade aluminiac laterite is to be seen in several hills of the Khariar tableland and in Karlapat hills in Kalahandi district. These deposits are believed to be the best in quality in India. As electricity plays a vital part in aluminium metallurgy, there is good prospect of development of this industry in Kalahandi and Koraput districts, when cheap electric power from the Machkund Hydro-Electric Project will be available.

CHROMITE

45. This is an important industrial mineral which is being mined in the district of Keonjhar. The production ranges between 5 to 6 thousand tons per year at present.

LIMESTONE

46. Extensive deposits of limestone and dolomite, suitable for lime burning and cement making as well as for fluxing the iron and steel industry occur in Sundargarh, Sambalpur and Koraput districts. The extent and magnitude of deposits have not been surveyed but it appears that hundreds of million tons of this mineral will be available in these districts. Limestone deposits also occur along the Kolab and the Sabari rivers in Malkangiri in Koraput district. These limestones are of high quality, free from impurities and containing nearly 96 per cent of calcium carbonate and are suitable not only for cement making but also for chemical preparations. In the district of Sambalpur, extensive deposits have been located at Sulai, Padampur, Lakshmanpur, Dungri and in the neighbouring areas. Sundargarh district has very high quality of limestone and dolomite, extensively scattered throughout the district, making possible the establishment of a modern cement factory at Rajgangpur and several lime manufacturing concerns in the country nearabout.

MICA

47. India is the largest producer of mica in the world, most of which comes from Bihar. It is also available within Orissa, though in a much smaller extent. A small occurrence was found in village Baghudi about 4 miles from Soro railway station in Balasore district. Occurrence in some villages of Cuttack, such as, Baideswar and Chhatia and in some localities in Ganjam, Koraput and Sambalpur districts have been reported. Some of these deposits are being surreptitiously exploited.

GLASS-SAND

48. Pure quartz-sand, free from all iron impurities and possessing a uniform grain and texture, is of economic value in the manufacture of glass. Such materials are rare. Gondwana sand-stones, however, found near Naraj in Cuttack district as well as in the adjacent village Talgarh on the Mahanadi are sufficiently fine-grained and friable and are used for manufacture of glassware at the glass factory at Barang. Such sand-stones are also available near Dalapur in Koraput.

VANADIUM

49. Orissa is the only State in India where vanadium which is an important mineral has been located. This mineral occurs in the district of Mayurbhanj but its production has not been high and has been subjected to fluctuation on account of unsatisfactory management.

OTHER MINERALS

50. Orissa abounds in many other ecomonic minerals of lesser importance, scattered over different districts. To mention a few out of them, are abrasives, such as, garnets available in abundance in village Banapur in Koraput district and Mudepala in Nawapara subdivision of Kalahandi district; gondwanas suitable for mill-stones, hones, or grindstones available in Khandagiri and Nayapali in Khurda subdivision of Puri district; white clay available at Naraj in Cuttack district; refractories, such as, Kyanite, sillimanite and fire-clay available over different parts of the country, and building stones, such as, Khondalites, quartzites, garnetiferous granitic gneisses and

charnockites meant for walls and floors of houses, roof-making, bridge-building and even for works of arts, sculpture and carving, which are available extensively throughout the State.

VI. The Soil

51. There has been no systematic survey of different types of soil of Orissa. Such a survey will eventually be necessary, primarily for development of forestry and agriculture, both of which play an important part in the economy of the State.

CONSTITUENTS

52. The soil derives almost the whole of its constituents from the rocks underlying it, although some organic acids and carbon, being the product of environment get into its formation independently. The classification of the types of soil of Orissa has to be mainly based on the relative silica-clay composition. The other soil constituents, such as. potash, phosphates, manganese, iron, etc., which are born of the rocks below, provide a scope for examination but the present knowledge about them is so scanty that the matter is left out of consideration. Even in respect of calcium which is regarded as the most important constituent of Orissa's soil next to silica and clay adequate knowledge is wanting, except that it is found in the shape of limestones or kankar scattered over or buried in surface soil in all districts of Orissa.

THE NORTHERN PLATEAU

53. This tract has a type of soil which is known as red earth. The granite which is so widespread in this region, gives rise to a rather coarse sandy soil with just sufficient clay to hold it together. The soil is comparatively open in texture. Moreover, there are extensive iron ore deposits in this area and the climate is humid. This results in accumulation of plenty of iron hydroxide on the surface, which causes the uppermost crust of the soil to set as hard as cement in the dry season. The soil is poor in organic matter and plant nutrients and is therefore not particularly fertile and suitable for agricultural operations. These characteristics are most marked in Bamanghaty subdivision of Mayurbhanj district, Bonai subdivision of Sundargarh district and in the basin of Sundargarh subdivision.

THE EASTERN GHATS REGION

54. It has mostly lateritic soil, but as the region has varying levels of elevation and abounds in slopes and is subjected to difference in normal rainfall on the lee-ward and wind-ward sides of the Ghats, the natural environment and the action of weather find maximum scope for formation of the soil. The rains wash down the silica and kaolin contents of the soil and bring them to lower beds leaving a preponderance of aluminium and ferric oxides higher on the slope. The existence of higher percentage of iron oxide is the principal characteristic of laterite soil.

55. The covering of laterite soil is generally superficial, being limited to a few inches of thickness, though at times, it may be several feet, particularly at higher level. Laterites may be classified as high level or low level laterites on the basis of elevation at which they are found, resulting in difference in appearand properties. High level ance laterites are found in the uplands of Ganjam and Koraput and may be divided into sub-classes according to constituents. In consequence of its high iron content, the laterite soil is useless for agricultural purposes and does not permit dense and thickly

developed jungle growth. The hill tribes practice shifting cultivation on this soil.

56. The soil of lower altitudes of the Eastern Ghats has greater silica rather than iron content and is more appropriately called the red earth. Valuable bases which are drained down by water from higher levels, enrich the soil of the lower tracts, but even in the lower tracts, the bases generally remain separate in depressed or hollow spots in the form of solutions ultimately drying into grey earth while sand is left behind to form high crests of red earth.

THE CENTRAL TRACT

57. This tract has a variety of soils, such as those that are formed out of the parent rock below and those that are transported from a distance and are redistributed. The black cotton soil is found on either side of river Mahanadi, spreading from Angul and Athmalik subdivisions on the left bank to Baudh subdivision on the right, extending far into the districts of Bolangir and Kalahandi along the northern banks of the rivers Suktel and Tel. The black soil is also found in the north-eastern part of district Ganjam. In Angul and Athmalik, the soil has a light black colour and is well-suited for bamboo plantation but elsewhere it is grey in colour, good for scrub jungle. The black soil has a higher content of a clay mineral called montmorillonite, remarkable for swelling properties on wetting. It has usually an admixture of kankar and is therefore limey. The soil cracks during the summer and becomes sticky during the rains. It is not ideal for building purposes but is more productive than red soil. Application of nitrogenous manure renders the soil suitable for growing foodcrops.

58. The soil to the east of the river Ib in Sambalpur district and extending upto Rairakhol subdivision is known as yellow soil. The colour is the outcome of iron oxide and silicic acid salts which occur in the soil. It is sticky and is poor in fertility for cultivated crop.

59. Over the rest of the area comprised in the central tract, the soil is of distributed type. The innumerable streams of this tract drain granitic and gneissic rocks, so that the sediments are mainly sandy, but proportion of clay increases downstream in consequence of sorting. But at places, there are clay sediments followed in the lower courses by sand. - This is possible because where the streams traverse clayey rocks, the sediments contain more of clay and where they pass over siliceous rocks, there will be greater proportion of sand. In the mica-schist area of Sambalpur district, the soil is of the type of potter's clay, while the Gondwana beds lower down in Dhenkanal district contain heavy loam in the soil. Laterite caping is also present to some extent in this tract. On the whole, the central tract is more covered with redistributed widely surface soils than any other natural tract in Orissa.

THE COASTAL DIVISION

60. It contains deltaic alluvial soil. It has larger content of clay, but the soil in various parts of the delta may be differentiated according to the claysilica composition. In the northernmost section which lies in district of Balasore and which has been formed by the rivers Subarnarekha, Burabalang and Salandi, the soil is sandy loam, while in the delta of the Baitarani and Brahmani stretching over Bhadrak and Jajpur subdivisions, the soil varies from clay loam to stiff clay. The delta of the Mahanadi which covers portions of Cuttack and Puri districts has a liberal proportion of clay and silt but further south, the Rushikulya delta of Ganjam

is remarkably sandy. There is a narrow stretch of saline soil along the sea board and also marshy and swampy patches of land here and there. Sand dunes are noticeable along the surfbeaten coast.

Soil Erosion

61. As in the case of soil distribution, there has been no survey of soil erosion in Orissa. No information is available regarding the extent of scouring of the soil, the extent of erosion by action of wind, the loss of tonnage of soil per acre of cultivated area, the acreage of ravine lands formed due to erosion and so on. Even in the absence of such information. there is no difficulty in coming to the conclusion that soil erosion has been going on on account of such reasons as formation of fissures or nallahs, over-grazing and extension of cultivation. The extraction of stumps and roots and the destruction of forests and scrub jungle done in the interest of Intensive Cultivation Scheme or Grow More Food Campaign expose the bare land to the quick work of water and wind with the result that the top soil, which is generally fertile, is lost. Nothing has been done to

prevent or retard the pace of this loss by blocking the fissures, strengthening embankments and bunds, planting of suitable trees, grass or fodder crops or by stopping indiscriminate grazing and destruction of jungle growth. The consequences are felt in the tragedy of loss in the yield of crops, silting of anicuts and dams and rising up of the beds of rivers, particularly in the coastal division, which in turn, has been causing devastating floods in the country at frequent intervals.

62. In the coastal division, soil erosion does not appear to have become a serious problem. Some extent of erosion. caused by over-grazing and opening of land for cultivation purposes in this division is mostly counter-balanced by the slow but steady deltaic activity of its rivers. The problem, however, is the inland different in division. particularly in the Eastern Ghats Region, where the steeply inclined hill slopes and the undulating surface soils are subjected to rapid erosion due to heavy rainfall and stream activity. This again is aggravated by deforestation. The problem calls for early preventive measures.

VII. Climate and Rainfall

63. As characteristic of maritime tropical countries, Orissa may be roughly said to have three seasons, the cold weather, the hot weather and the rains. The cold weather lasts from February. November to The hot weather commences in March and terminates with the setting in of the rains in June. Thereafter the rains continue till the month of October. The climatological particulars of the two natural divisions are mentioned below separately.

ORISSA INLAND DIVISION

64. This division consists of mountains, peaks, low hills, valleys and plains,

interspersed among one another and varying in altitude upto nearly 4,000 feet. In an area of such varying orography and physical features, the climatic conditions are expected to vary considerably.

65. December is the coldest month of the year when the mean maximum temperature is 80°F at Sambalpur (500 feet above sea level) and 77°F at Koraput (3,000 feet above sea level). . The mean minimum is 54°F and 48°F respectively. The lowest minimum temperature recorded is 40°F at Sambalpur and 37°F at Koraput. December is the driest month of the year, when little or no rain is recorded. In January and February, however, some rain amounting to half an inch or one inch occurs, generally as thundershowers.

66. The weather starts getting hot by March and continues so up to the onset of the monsoon in June. In May, the hottest month of the year, the mean maximum temperature is 107°F at Sambalpur, but very much lower, 94°F at Koraput. In the hilly areas, the temperature is expected to be appreciably lower than in the valleys or plains. Sambalpur has recorded the highest maximum temperature of 117°F in May and 116°F in June, whreas at Koraput it has been only 104°F. Thunderstorms are fairly frequent during the hot season and some of them are accompanied by showers and squalls.

67. The onset of the monsoon which takes place by about the 10th or 15th of June is preceded by the pre-monsoon thunderstorms which are very frequent. Even during the monsoon season, there is very pronounced thunderstorm activity. The period June to September is the rainiest part of the year and July and August are the wettest months. Nearly 60 per cent of the annual rainfall is recorded during these two months. The division lies in the path of the cyclonic storms or depressions which pass accross north India from the Bay of Bengal and in association with their formation and movement very heavy rain is sometimes experienced. Sambalpur has thus recorded in a single day 10 inches of rain in June, 15.8 inches in July, 10.5 inches in August and 6.8 inches in September and October. The rainfall in this division is mainly control'ed by the formation and move-- ment of these monsoon depressions. In those years when these are few or are not of sufficient intensity, rainfall is much below normal and in other years when monsoon depressions form one

after another in succession, there is an abundance of rainfall sometimes leading to floods. Thus, Sambalpur, which receives on an average 20.56 inches of rain in July had 41.96 inches of rain in that month in 1892, but on y 7.43 inches in 1911. Similarly in August, when the average rainfall is 19.04 inches, a quantity of 35.83 inches of rain was recorded in 1907 but only 4.75 inches in 1892. The rainfall in the wettest year at Sambalpur was 91 inches and that during the driest year 37 inches compared to an average annual of 66 inches. The monsoon generally withdraws from the division by about the 15th October. The weather starts cooling by November.

ORISSA COASTAL DIVISION

68. This division is directly in the track of storms which frequently cross inland from the Bay of Bengal during the south-west monsoon. Rainfall is more in the northern districts than in the southern. On an average, about 60 inches of rain falls in the northern districts while in the southern districts, it is about 50 inches. In the rainiest year the northern districts have received as much as 100 inches while in the southern districts the maximum was about 80 inches. Another important feature of the division is that the rainfall has never fallen below 50 per cent of the normal. In the plains, the south-west monsoon lains are heavier inland than on the coast while the north-east monsoon gives more rain on the coast than in the interior. Data of over 50 rain recording station, and of the observatories at Ba'asore, Cuttack, Puri and Gopalpur illustrate the climatic features.

69. December to February has a fine weather except occas onally when the weather is slightly disturbed and light rainfall for about one or two days each month occur near the coast. Two to five days of thunder each month have been recorded near the hills. The early mornings are cool and misty. For about five to ten days in December and January, thick mist persists till about 10 A.M. in the Mahanadi delta. The early morning temperature is of the order of 60°F and the afternoon temperature ranges between 83°F to 88°F. The lowest temperature of 44°F has been recorded at Balasore and 46°F at Cuttack. Winds are mainly N-NW. In the afternoons, winds near the coast become easterly in December changing to southerly in February.

70. March to May is the hottest season with the average maximum temperature in the northern districts of Balasore and Cuttack about 100°F and in the southern districts about 90°F. In May, a temperature of 116°F has been recorded at Balasore and Cuttack. Gopalpur has once recorded 110°F in May, Puri having never recorded more than 103°F. Skies get more clouded with the advance of the season and together with it. rainfall associated with thundershowers occur. On the average, about 5-6 inches of rain falls, the northern districts getting more than the southern ones. The frequency of thunderstorms increases from 6 days in March to 12 days in May. Winds are south-westerly but change to southerly in the evenings.

71. June to September is the main rainy season when the south-west monsoon contributes nearly threequarters of the annual rainfall. Monsoon advances in the first week of June usually ushered in by depressions which form at the head of the Bay of Bengal. A series of such depressions which move west or nor h-west cross the Orissa coast

in July and August giving widespread and heavy rain. Associated with cyclonic storms, Balasore and Cuttack have recorded rainfalls of 13.67 inches and 12.63 inchs respectively in a day. The atmosphere becomes hazy and visibility is reduced to less than 2 miles on many days. Winds are SW-S. The monsoon generally withdraws in the last week of September or first week of October. But in October, a few storms which form in the Bay of Bengal recurve near Madras coast and move north or north-east affecting weather over the Orissa coast. They cause very heavy rain near the coast. On one single day in October, a rainfall of 12.48 inches and 10.09 inches have been recorded at Puri and Gopalpur respectively. On the average, about 11-12 inches of rain falls in the southern districts and about 7-8 inches in the northern districts during the months of October and November.

RAINFALL STATISTICS

72. The monthly rainfall during the year 1950 in the districts of Orissa is given in the following page together with the annual normal rainfall for each district. * The annual normal is the arithmatical mean computed by the usual method of dividing the sums of the appropriate rainfall amounts for the district by the number of years to which the date relates. The period on the basis of which the normals are calculated for any station or district is not fixed, nor is it the ame for all stations or districts. As much of the available data as possible are utilised for computing the normals for each locality. Normals are, however, not worked out with less than five years data.

* Figures obtained from Deputy Director-General of Observatories, Poona.

INTRODUCTION

District		Januarý	Febru- ary	March	April	May	June	July	August	Septem- ber	Octo- ber	Novem- ber	Decem- ber	Annual normal rainfall
Cuttack	••	0	0.60	2· 50	0.97	2.39	8.91	1 3·19	14.24	12.93	2•49	8;40	0	58.51
Balasore	• •	0	0.22	2.92	0.45	3.79	8·6 8	12.35	8.32	11.83	3.22	7.47	0	59.41
Puri	••	0	0.38	3.83	1.02	2· 31	10.46	12.59	9.59	7•75	2.66	9.31	0	57.38
Sambalpur	••	0	1.27	2.62	0	0.06	8.08	15.09	21 - 23	7.42	0.38	1.09	0	60.56
Ganjam	••	0	1.01	3·14	0·4 5	1.21	6.61	10 ·25	7·33 ´	5.92	3.03	6.31	0	51.93
Koraput	••	0	0.73	1.16	0.39	1.92	7.46	1 1 ·45	13.03	6.22	2.97	4 ·71	Û.,	59.58
Dhenkanal	••	0	1.33	2.90	0.08	1.40	5.52	8 ·82	13.96	7.00	1.46	3.49	0	55.91
Kconjhar		. 0	0.63	2.90	0-27	6.07	7 •59	15.32	11.25	9.90	0.78	4.98	0	62·13
Phulbani		0	1.37	4.91	0.13	1.60	12·66	13·00	15.77	8.32	Ô∙77	5.86	0	63.62
Bolangir	8.C.	0	1.09	3.21	0	0	9·81	13.69	13.52	7.55	1.42	1.26	0	58-16
Sundargarh	••	0	1.42	3.13	0	••	10.36	20.21	14.69	6•85	••	1.25	0	65.65
Kalahandi	••	0	1.27	2.11	0	••	••	10.32	10.82	9.46	0.24	2.43	0	54·76
Mayurbhanj	••	0.	0.98	3.36	0.51	1.31	••	••	••	••	3·44	3.26	0	63·46

Monthly Rainfall (in inches) in Orissa in 1950

73. The following statement shows the annual rainfall of all districts from 1931 to 1950.

Annual Rainfall (in inches) of Districts of Orissa (1931-1950)

Name of the					Annua	l rainfall	for the	year		•	
district	•	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Cuttack	••	- 59.01	56-35	75.89	57.80	48 •86	81.14	60.53	51.38	47.81	65.01
Balasore	••	67.09	58.05	83.50	58·36	47.47	75·55	63.69	56.54	51.29	73.36
Puri	••	54.23	58.78	65-57	52.58	48·04	82.04	59.62	60.62	48·51	67.43
Sambalpur	•• •	60-61	54.29	74.64	61.84	51.48	74.48	71·0 1	56-80	75.51	62.23
Ganjam		49.79	50·99	· 72·00	44·70	35.23	61.65	47,99	50.35	46.32	62.59
Koraput	••	65.87	53.26	66·30	64.81	48·92	73.20	57·84	65.70	58.97	60.46
Dhenkanal	••	58.45	58·1 4	73.75	54·18	44·49	70.09	56.65	47 .65	65.16	60.66
Keonjhar	••	66.02	63.21	63.24	59.05	49.82	66.06	71.51	58.40	62.93	81.46
Phulbani	••	51.21	61 •96	91 ·98	65·5 3	53·64	88.68	69.31	53.89	80.46	69-90
Bolangir		50.57	66.72	80.82	57-29	39.34	74·18	64·16	45.57	69.68	65.08
Sundargarh	••	61.08	51.77	63.99	74.20	56.46	82.39	67.50	57·04	72.26	60·80
Kalahandi		38.34	59.05	67.92	59.39	42.77	71.35	63.76	57.69	58·41	58.70
Mayurbhanj		64·62	60.92	78.63	51.90	56.92	65.93	70.45	52.18	74-58	83.97
					Annue	al rainfal	l for the ;	year			
Name of the district		1941	1942	1943	1944	1945	1946	1947	1948	´ 1949	1950
Cuttack	••	60.39	53.92	57-21	67.97	51.13	66.39	64.73	58.64	46.21	66.62
Balasore	,	70.32	54.33	60.28	59.62	63.35	77.28	51.03	56.66	61.91	59.58
Puri	••	49.23	49.20	68.41	70·6 9	57.04	67.31	56·42	57.63	52·04	59.88
Sambalpur	••	64.81	57.25	76.88	67.71	60.86	67.79	52·61	48 ·91	62.88	57.24
Ganjam	••	44 ·12	41.74	••	58.46	47.91	54.32	51.53	45·45	50.62	45.26
Koraput	••	51.79	47.57	57.51	63.59	39.07	72.17	63.58	55.15	101-24	50.34
Dhenkanal	••	54-66	49.07	65.65	68·51	51.09	64.93	47.96	50·94	••	45.96
Keonjhar	••	72.91	58.33	63.97	62·17	61.90	77.18	57.03	57.51	•• '	59.75
Phulbani	••	59 ·93	56.13	77.50	74.75	64.57	57.68	63.66	41.53	59·72	64.42
Bolangir	••	46.37	58·92	61 ·61	60.34	52.77	45.40	48 ·18	52·07	52.92	51.85
Sundargarh	••	70.37	63·34	83.29	59.89	62.01	74.91	49.38	63.97	••	••
Kalahandi	••	38.49	49.40	70.51	68.82	59.11	48.93	58.83		••	••
Mayurbhan	j	74.75	70.33	83-22	69-29	64.62	81.40	56·62	69·10	52.83	••

74. Orissa has extensive and rich forests. The total area under forests is approximately 23,000 square miles, comprising—

- (i) Demarcated forests 10,256 square miles out of which 8,524 square miles are reserved and the rest protected forests.
- (*ii*) Undemarcated forests 6,534 square miles containing protected forests and Khasra forests.
- (iii) Privately owned forests exceeding 6,000 square miles, which may completely come under the Government after abolition of Zamindaries.

75. The demarcated and undemarcated forests, with a total area of 16,790 square miles as mentioned above, are under the direct control of the State Forest Department. Besides, a small extent of privately owned forests has also been taken under departmental control with a view to put an end to the indiscriminate and excessive exploitation of such forests for personal ends.

CLASSIFICATION

76. The control and management of the forests hitherto do not appear to be the result of a vigorous constructive policy. Forests have been classified under the Forest Act on the basis of the degree of departmental control exercisable over them. Such a classification does not help to focus attention on the object of management from the point of view of national well-being. As early as 1894* the Government of India enunciated the general policy of management of forests by recommending classification of forests on functional basis, which 34 years later was reiterated by the Royal Commission on Agriculture in India. It appears that the policy enunciated was not put into execution till 1952, when the needs of reconstruction schemes and development of industries and communications heavily demanding all categories of forest produce led to the re-orientation of the forest policy afresh.† Accordingly, forests are to be classified on functional basis as follows :—

- (i) Protection forests, i.e., those forests which might be preserved or created for physical and climatic considerations;
- (ii) National forests, i.e., those which have to be maintained and managed to meet the needs of defence, communications, industry and other general purposes of public importance;
- (iii) Village forests, i.e., those which have to be maintained to provide firewood to release cowdung for manure, and to yield small timber for agricultural implements and other forest produce for local requirements and to provide grazing for cattle;
 - (iv) Tree-lands, i.e., those areas which though outside the scope of the ordinary forest management are essential for the amelioration of the physical conditions of the country.

77. The functional classification, rather than the classification based on the degree of departmental control, will

† Resolution No. 13-1/52-F., dated the 12th May 1952 of the Ministry of Food and Agriculture, Government of India.

^{*}Resolution No. 22-F., dated the 19th October 1894 of the Government of India in the Department of Revenue and Agriculture.

help to indicate if the utility of a particular forest is of local, commercial or national significance. The area of Orissa's forests classified on functional basis is not available and so the study of the part which the forests will play in the economy of the State will be restricted. There can hardly be any doubt, however, that the forests of Orissa, if properly developed, will be a source of wealth and strength for the country.

DISTRICTWISE DISTRIBUTION

78. The distribution of the demarcated and undemarcated forests in different districts is shown below :---

State and district	Total area of demarcated, undemarcated forests	Demar- cated forests	Undemar- cated forests
ORISSA	16,790	10,256	6,534
Orissa Inland Division.	14,364	8,499	5,865
Orissa Coastal Division	2,426	1,757	669
Cuttack	252	200	52
Balasore	375	75	300
Puri	1,076	759	317
Sambalpur	1,990	1,530	460
Ganjam	870	870	
Agency	147	. 147	
Plains	723	723	
Koraput			_
Dhenkanal	2,029	- 1,2 8 8 '	741
Keonjhar	1,500	700	800
Phulbani	1,316	1.016	300
	•	• -	
Bolangir	732	463	269
Sundargarh	2,423	1,513	910
Kalahandi	1,991	691	1,300
Mayurbhanj	2,236	1,151	1,085

79. In addition to the demarcated and undemarcated forests, the Anual Administration Report of the Forest Department for 1949-50 approximately shows the area of privately owned forests as 6,000 square miles as follows :--

. 400 square miles
500 square miles
250 square miles
•• 750 square miles
., 4,100 square miles

EXTENT

80. The Director of Forests, Orissa agrees that the figures shown above may be much less than the correct extent of Zamindary forests. In fact, the above total of 6,000 square miles does not include any Zamindary forests in many districts, namely, Sambalpur, Puri. Balasore, etc., although these districts are known to have some extent of Zamindary forests. It is also likely that the area of Zamindary forests in the districts named in the Annual Administration Report may be less than the correct figure. Under the circumstances, it may be reasonable to hold that the total extent of Zamindary forests exceeds 6,000 square miles. Accordingly, Orissa may be shown to possess 23,000 square miles of forest area in round figure, of which an extent of 16,790 square miles constitute Government Controlled forests and the rest privately owned forests. These private forests will be soon forming part of the State forests when abolition of Zamindari is achieved. As the State has an area of 60,136 square miles, the extent of forests works out to 38.2 per cent of the area of the State. According to the present National Forest Policy, India aims to maintain one-third of its total land area under forests. Orissa has thus more than this proportion. Correct information regarding the extent of forests in other States is not available, but it is likely that Assam and Madhya Pradesh of all States in India may have a larger proportion of forest areas than Orissa while other States have a lower percentage.

INCOME AND FOREST PRODUCE

81. The gross income from forest revenue exceeded Rs. 86 lakhs in the year 1949-50. When the undemarcated forests are demarcated, and the privately owned forests are brought under control, the revenue will improve considerably.

FORESTS

82. Among the forest produce, the most important items are timber and fuel which yielded an income of about Rs. 41 lakhs and Rs. 13 lakhs respectively in the year 1949-50. Bamboo is under extensive exploitation in Angul, Athmalik, Hindol, Daspalla, Narsingpur, Sambalpur, Rairakhol and Bamra for manufacture of paper pulp. Short term leases of three years are given in respect of minor forest products, such as, Sabaigrass, Mohua flower, lac, cane, catechu, honey, charcoal, hide, tamarind and broom grass. Kendu leaves are generally leased out for a term of five years, yielding more than 14 lakhs as revenue per year.

APPENDIX I

No. 3482-P.H.

FROM

То

LT.-COL. P. PAPATLA, B.A., M.B., B.S. (Madras), F.B.C.S. (Edin.), D.O.M.S., D.L.O., D.P.H. (Lond.), DIRECTOR OF HEALTH AND INSPECTOR-GENERAL OF PRISONS, ORISSA.

THE SUPERINTENDENT OF CENSUS OPERATIONS, ORISSA, CUTTACK.

Dated Bhubaneswar, the 29th May 1952

SUBJECT-Collection and Registration of Vital Statistics

SIR,

In continuation of this office letter No. 244-P.H., dated the 10th January 1952 on the subject indicated above, I forward herewith a note giving details of the system of collection and registration of vital occurrences in the State of Orissa as discussed in my office on the 12th May 1952.

Yours faithfully

P. PAPATLA

Director of Health and Inspector-General of Prisons, Orissa

Collection and Registration of Vital Statistics in the State of Orissa

Vital occurrences are collected according to the Madras and Bengal Births and Deaths Registration Acts in South and North Orissa districts respectively.

South Orissa—The Madras Births and Deaths Registration Act (Act III of 1899) is extended to the rural and urban areas of the districts of Ganjam and Koraput, vide Government of Madras Orders No. 912-P.H., dated the 29th June 1922 and No. 2448-P.H., dated the 1st December 1925 respectively.

It is compulsory in municipal towns of Berhampur, Parlakimedi, Panchayat Boards and villages having a population of 2,000 and over in Ganjam Plains.

It is extended to the entire Ganjam Plains, 3,634 villages in Ganjam Agency and Union Board areas of Jeypore, Koraput, Nawrangpur, Gunupur, Rayaghada, Kotpad and Gudari in the district of Koraput.

In municipal areas, the figures are collected by the municipal staff and a monthly statement of vital statistics is submitted to the office of the Director of Health and Inspector-General of Prisons by the Chairman.

As regards the rural areas, the figures are collected by village Headmen and a monthly return is sent to the Taluk Officers every month. The Taluk Officers submit them to the office of the Director of Health and Inspector-General of Prisons where they are consolidated into taluk and district figures.

In the Union Board areas of Koraput district vital occurrences are collected by the staff of the Board and a monthly return is submitted to the Health Directorate by the President of the Board.

North Orissa—The Bengal Births and Deaths Registration Act (Act IV of 1873) is extended to North Orissa Districts (ex-Bihar and Orissa and ex-C. P. area).

It is compulsory in 6 municipalities of Cuttack, Kendrapara and Jajpur in Cuttack district; Balasore, Puri and Sambalpur. It is extended to the rural areas of the districts of Cuttack, Balasorc, Puri, Sambalpur including Nawapara subdivision now transferred to Kalahandi district, Angul and Khondmals subdivisions now merged in Dhenkanal and Phulbani districts respectively.

According to rule 127 of the Orissa Police Manual, Vol. I, collection of vital occurrences in municipalities has been transferred from Police Department to the municipal authorities who collect the figures by their staff and furnish a monthly statement to the Civil Surgeon concerned for inclusion of the same in the monthly district figures compiled in his office.

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APPENDIX I

According to rule 126 of the Orissa Police Manual, Vol. I, the vital statistics of rural areas are collected by the village chawkidars and reported to the Thana Officers concerned who, after registering the same furnish a consolidated monthly report to the office of the Civil Surgeons for compilation of district return.

The work of compiling district vital statistical figures has since been transferred to the District Health Officer from the Civil Surgeon. Monthly returns received from the village Headmen through Taluk Officers; Chairmen, Municipalities; and Presidents of Union Boards in respect of South Orissa districts are consolidated in district figures in the Health Directorate.

The district figures received from the offices of the Civil Surgeons in respect of old North Orissa districts are consolidated into Provincial figures in the office of the Director of Health and Inspector-General of Prisons, Orissa.

The provincial area of the State is divided into 9 rural and 14 urban units for the purpose of reporting of vital statistics as detailed below :---

Urban Unit (Town) Rural Unit (District) 6. Khondmals 1. Cuttack 8. Bargarh 1. Cuttack 7. Ganjam Plains 2. Kendrapara 9. Angul 2. Balasore 8. Ganjam Agency 3. Jajpur 10. Phulbani 3. Puri 4. Bhadrak 11. Balasore 4. Sambalpur 9. Koraput 5. Angul 5. Puri 12. Berhampur 6. Khurda 13. Parlakimedi 7. Sambalpur 14. Jeypore

An advance manuscript copy of the monthly vital statistical return compiled in the Health Directorate is sent to the Director-General of Health Services, India, New Delhi as first hand information and another copy to Government Press for publication in the State Gazette. Printed copies are also supplied to the Director-General of Health Services, New Delhi, Secretary to Government of Orissa, Health Department, Senior Statistician of the Cabinet Department of Government.

Annual statistical datas required for the Public Health Report of the State are collected from the registers of vital statistics maintained in the Directorate. 21,894 square miles having a population of 7,588,473 according to the Census, 1941, are brought under registration.

The population of non-registered area is not taken for the purpose of the report. The figures are also not available.

Although the above system of collecting vital statistics is in vogue in most of the States of the Indian Union, it is very defective with regard to correct classification of causes of deaths as the Chawkidars and village Headmen are mostly uneducated and entirely depend on the reports of the villagers. In the circumstances the classification of deaths based on such diagnosis is not all accurate. Sometimes omissions occur and as the collecting agencies don't feel for its importance, they don't take pains to account for such omissions.

Ceded areas—Prior to the integration there was no arrangement for collection of vital statistics in ceded areas. Pending introduction of the registration of births and deaths according to the Bengal Births and Deaths Registration Act, arrangement was made for the collection of weekly figures of attacks and deaths from cholera and smallpox with effect from July 1948—for taking preventive measures. Arrangement has been made for the collection and registration of vital statistics in ceded areas with effect from the 1st January 1952, under the Bengal Births and Deaths Registration Act, 1873. A proposal for bringing uniformity and accuracy in collecting vital occurrences throughout the State of Orissa is under the consideration of the State Government.

Besides this weekly vital occurrences in towns having a population of 30,000 and over and weekly epidemic report in respect of all districts and towns showing attacks and deaths from smallpox and cholera are issued every week from this Directorate.

Infant mortality is limited to one year of age for the purpose of statistical report.

The area of the 7 Union Boards of Koraput district which are under the registration of vital statistics has been taken to be 117 square miles in total area according to the Census of 1941.

If during Census Operations of 1951, it is revealed that the area of these Union Boards including Machkund has been 20 square miles the actual area of the Union Boards brougut under the registration of vital statistics may be corrected accordingly and an intimation to the effect is given to this office.

APPENDIX II

SHEI D. MISRA. B.Ag. (Nag), UIF.-IN-AGEI. (Cantab.), DIRECTOR OF AGRICULTURE AND FOOD PRODUCTION, ORISSA.

OFFICE OF THE DIRECTOR OF AGRICUL-TURE AND FOOD PRODUCTION, ORISSA

D. O. No. 6460/Agri.-98-118-52.

Dated Cuttack, the 13th May 1952

DEAR MR. AHMED,

Will you kindly refer to your D. O. No. 752-Cen., dated the 8th May 1952. The figures so far available in this office have been furnished in the prescribed tables along with the explanatory notes.

Yours Sincerely

D. MISRA

To

M. AHMED, ESQB.

Superintendent, Census Operations, Orissa.

EXPLANATORY NOTE

Table No. IV (7)—Figures for average net area as per column A(1), A(2), A(3) and A(4) for different decades in all the districts of present Orissa have been adopted from the following sources :—

For Cuttack, Balasore, Puri and Sambalpur districts

For decades 1921 and 1931 have been taken from the Season and Crop Report, Bihar and Orissa. For decades 1941 and 1951—from the Season and Crop Report of Orissa.

Ganjam Agency and Plains

For decades 1921 and 1931—Figures have been taken from Statistical Atlas of Madras.

For decades 1941 and 1951—Separate figures for Agency and Plains are not available. So only one figure for the entire district has been furnished from Season and Crop Report of Orissa.

Orissa States

Figures for 1941 have been taken from the report of Agricultural Statistics of Eastern States Agency compiled by Agricultural Adviser, Eastern States Agency. The same figures are adopted for the decades 1921, and 1931 as there was no other source for which figures of the above decades could be compiled.

For 1951 decade the figures have been taken from the report of District Officers and compiled by the Statistics Section of Agricultural Department. As regards Mayurbhanj state the figures for 1931, have been collected from the Directory of villages compiled by Census Officer of the said state. Figures for 1921 and 1941 are not available from any authentic source.

Table No. IV (8)-This table will be compiled by the Census Department utilising the figures of IV(7).

Table No. IV (9)—Figures from 2 to 7 will be compiled by the Census Department. Yield figures are not available for state districts. The average yield figure of the Eastern States as a whole have been furnished. Dependable data regarding the size of holdings are not available except in the case of Ganjam district where the average holding recorded 3.77 acres.

Production Capacity 4.9

	Outte	ok E	alasore	Puri	Sambalpur	Ganjam	Koraput	Mayurbhanj	Dhenkanal	Keonjhar	Kalahandi	Eastern States
1921	10·5 P	Mde Br a ore	9. 11·5).	10.3	8•5	••	••	••	-	•••	-	***
1931	7•1	Do.	8.4	12.9	8.1	••	•••	••	••	•.•		681 lbs.
1941	6•8	•	7.1	6.3	7•4	5.6	7.8	••	•.•	818	9•5	443 lbs.
1951	6.0		6.6	5.6	5•9	4•4	7· 5	6•9	7.3	••	10.2	N 🗰 🛛

		~	1951	<u>1941</u>	1931	1921	1951	A 1941	1931	1001
			1991	1941						1921
	(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OR	188A		12,126,542	11,805,190	12,366,909	12,974,005	1,065,259	679,473	613,433	716,378
	3 Orissa Inland Di		8,213,202	7,958,462	8,307,755	8,372,004	194,369	129,444	120,311	193,838
5.	1 Orissa Coastal D	ivision	3,913,340	3,846,728	4,059,154	4,602,001	870,890	550,029	493,122	522,540
C	uttack		1,115,858	1,268,321	1,223,600	1,888,430	550,872	195,830	182,244	230,041
	alasore	••	1.019,834	970.321	993,189	1,031,189	9,199	2,332	10,100	9,500
	'uri	••	1,063,534	817,003	854,398	1,101,798	167,681	218,330	179,792	119,592
8	ambalpur		1,365,240	1,240,461	1,191,266	1,173,566	76,098	29,570	15,816	82,601
	aniam	••	770.865	839.435	1,068,437	1,169,154	178,923	136,971	120,986	163,407
-	Ganjam Agency		56.751	48,352	80,470	88,570	35,785	3.434	••	
	Ganjam Plains	••	714,114	791,083	987,967	1,080,584	143,138	133,537	120,986	163,407
R	oraput	·	1,419,370	1,416,261	1,460,501	1,511,549	2,694	2,694	10,222	17,749
	eonjhar	••	592,768	508,625	508,625	508,625	7,000	11,720	11 720	11,720
	henkanal		702,371	764,430	764,430	792,230	14,496	34,300	34,300	\$4,100
в	olangir	••	1,171,056	1,209,111	1,209,111	1,209,111	38,378	38,378	38,378	38,378
S	indargarh	••	751,669	734,849	734,849	734,849	11,717	••	••	
P	hulbani ·	••	481,425	363,821	452,110	447,111	1,136 (Baudh)	9,348	9,875	9,290
K	alahandi	••	874,712	874,712	874,712	874,712	Not available	••	••	
M	ayurbh an j	••	797,840		1,031,681		7,065	Not	av ailable	••

Name	_	Average	100 4104 111	igated (A3) in ac			irrigated more t	A) conto main	
		1951	1941	1931	1921	1951	1941	1931	1921
. (1)		(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ORISSA 3.33 Orissa Inland Div 5.11 Orissa Coastal Di		1,889,320 981,646 907,674	1,553,337 674,950 878,387	1,607,922 663,600 944,322	2,405,640 1,366,115 1,039,525	7,131 5,024 2,107	115,238 115,238	1,343 1,343	78,280 552 77,728
Cuttack Balasore Puri	••	819,244 6,084 257,993	274,627 12,882 216,903	348,805 14,450 367,074	408,000 - 73,635 366,884	J_640 . 	111,603 470	•••	74,489
Sambalpur Ganjam Ganjam Agency	• • • •	295,330 324,353	48,490 373,975	319,223 213,993	397,977 191,006	5,024 467	3,165	1,343	3,239
Ganjam Plains	••	324,353	373,975	213,993	191,006	467	3,165	1,343	3,239
Korapu) Keonjhar Dhenkanal Bolangir	•••	473,366 Figures Figures Figures	471,655 not not not	236,140 available available available	1,055 34,100 781,482	Figures Figures Figures	s not	-	552 available available available
Sundarg erh Phulbani Kalahandi Mayurbhanj	••	Figures 116,595 52,219 44,136	not 95,630 59,175	a √ ailable 47,632 60,605	12,950 22,001	Figures	s not	••	available
									·· —

APPENDIX II

APPEN

District Indices of

								- 10		
Group Code	Occupation		ORISS	A	Orissa I	3.33 nland D	ivision	Orissa C	5·11 Coastal D	ivision
Number	· • •	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	ALL INDUSTRIES AND SERVICES	918,249	716,458	201,791	416,458	336,147	80,311	501,791	380,311	121,480
Divn, 0.	Primary Industries not elsewhere specified	66,803	55,640	11,163	27,014	23,231	3,783	39,789	32,409	7,380
0.1	Stock Raising	29, 70 4	23,769		13,488	11,473	2,015	16,216	12,296	3,92
0.11	Herdsmen and shepherds	20,720	16,298		6,908	5,905		13,812	10,393	
0.12	Breeders and keepers of cattle and buffaloes		7,470		6,579	5,567		2,404	1,903	501
0.10	Breeders and keepers of other large animals including transport animals.	. 1	1	L	1	. 1	••	••	••	••
0.2	Rearing of small animals and insects	516	426	4 92	393	305	88	123	119	• 4
0.21	Poultry farmers	315	25]	l 64	204	144		111	107	. 4
0.22	Beekeepers	105	8	916	98	82	16	7	7	••
0.23	Silkworm rearers	34			29	29		5	5	•• `
0.24	Cultivators of lac	. 62	5			50				
0.3	Plantation Industries	944				440		392	354	
0.31	Tea plantation	193				122			36	
0.30	All other plantations but not including the		63	6 115	395	318	8 77	356	318	38
	oultivation of special crops in conjuction with ordinary cultivation of field crops.									
0.4	Forestry and woodcutting	11,505	7,96	7 3,538	5,475	4,290	5 1,179	6.030	3,671	2,359
0.40	Planting, replanting and conservation									
• 1•	of forests (including forest officers,		-,		-,		-			
	rangers, and guards).	,)								
0.41	Charcoal burners	204	13	7 67						
0.43	Collectors of forest produce and lac	2,044								
0.43	Woodcutters	7,864				1,897		5,248	3,160	
0.5	Hunting (including trapping and game propagation).		-	-	4 4 3					
0.6	Fishing	24,073				6,678	385			
0.60	Fishing in sea and inland waters including the operation of fish farms and fish hatcheries.		\$ 22,40	0 1,443	3 7,054	6,66	9 385	•	-	. 1,000
	Gatherers of chanks and pearls	, 1		1.		•		. 1		1 ·; :
0.62	Gatherers of sea weeds, sea shells, sponger and other water products.	3 221	22	8 . 1	L 9	•	9	. 220) 21	9 I ·
Division	1. Mining and quarrying	11,216	8,80	3 2,413	8,726	6,39	5 2,331	2,490	2,40	8 / 82
1.0	Non-metallic mining and guarrying no	t		6 10	5 11		9 2	2 101	18	7 14
· ,	otherwise classified—including mining and quarrying of such materials as precious and semi-precious stones asbestos, gypsum, sulphur, asphalt bitumen.	3								
1.1	Coal mining—Mines primarily engaged i the extraction of anthracite and of so coals such as bitumenous, sub-bitumen	t	3,73	0 819) 4, 287	3,4 8	4 803	262	24	6 16
	ous a d legnite.						N 4 00		9	5 O
1.2		. 3,404		2 1,2 1						58 8
1.3		92		0				, . 8		8
1.32	Dfam you and	. 50								
1.33		410	-		· •		j	409		
1.20	Stone-quarrying, clay and sand pits. Ex								1,220	6 41
	traction from the earth of stone, cla sand and other materials used		_,				· •	,		
1.7	building or manufacture of cement. Salt, salipetre and saline substances	. 436	43	1 8	5 17	, 1	5 2	4 19) 41	6 3
Division	2. Processing and manufacture—Foodstuff textiles, leather and products thereof.	5, 130,614	87,96	5 42,649	70,114	53,928	8 16,186	60,500		
2.0	Food Industries otherwise unclassified .	. 2,782	2,12	3 659) 1,401	1,25				
	Canning and preservation of fruits an vegetables.					96) 104			-
2.03	Slaughter, preparation and preservation of meat.						;			
2.00	OAL and face 1 in June 1.	. 238	: 19	6 4	2 147	10	7 40) 91	. 8	9. 2

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DIX III Non-agricultural Occupations

Cutt	ack	Ва	lasore	I	Puri	Samb	alpur	Gar	Group	
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Code Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
149,301	50,055	37,734	12,602	86,384	18,618	80,416	22,867	113,638	42,293	• •
7,580	2,300	3,315	433	9,916	1,817	5,996	938	11,939	2,908	Divn. 0
3,660	1,101	209	135 73	3,407	1,238	<i>1,856</i> 1 788	<i>201</i> 201	5,145 4,453	1,482	0.1
3,250 410	975 126	107 102	62	2,708 699	1,235 3	67	201	4,403	1,172 310	0·11 0·12
••	••	••	••	. • •	. ••	1	* •	••	••	0.10
52	•	14	••	80	•••	59	31	24	4	0.2
47	•••	10 · 4	••	20	••	59	31	20 4	4	0·21 0·22
5		••	••	••	••	••			••	i 0∙23
74	80	14	••	**	i	118	26	280	יקר ז	0·24 0·3
25		••	••	••		••		22	•	0.31
49	30	14	••		1	118	. 26	258	.7	0.30
1,029	502	50	23	770	461	785	532	1,908	1,415	ô·4
42	••	8	• •	63	••	154		112	* * .	0.40
. 21	. 4		_	4	. 3	2	11			0.41
150	263	5	••	42	1	259	129	54'	7	0.41
816	235	37	23	661 9	457	370 1	392	1,732 <i>9</i>	1,408	0·43 0·5
2,765	667	3,028	275	5.700	117	3,177	148	4,573	le en en	0.6
2,762		3,027	275	5,484	117	3,177	148	4,573	••	0.60
•				· •	·					1
3	ï		••	216	••	••	••	••		0·61 0·62
• ••	•	· · ·	•	••	•			, ·		
1,079	43	13	3	938	1	75	149	390	36	Divn, 1
25		••	••	5 2	••	4	••	11	1	1.0
•				• .				• •	•	
240	16	••				· 60	147	6	••	1.1
		• •					•	· ·	с. с. н	5 5 .1
	8		N					6	•	
420			••	••	••	2	2	••	••	1·2 1·3
17		8	••	••		2		••	••	1.32
403	6		3	624		·		••		1.33 1.30
394	6	4	3	624	. •	••	••	210	33	, 1.5
								,		
••	••	1	••	362	1	••		157	2	1.7
16,156	11,737	3,809	4,922	0,202	5,965	18,290	6,628	8,103	3,930	Divn. 2
381	487	195	9	114	5	243	50	180	14	2.0
193	- 481	96	. 7	85	5	225	50	159	14	2.01
178	6	20	••	- 29	••	18	••	21	••	2.03
10	••	79	2	••	••	••	••	. ••	••	2.00
1		•		د	••	۰.		•		

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APPEN

District Indices of

Group	0.0000-041-00	Age	ncy	P	lains	Korap	at	Dhen	kanal
Code Number	Occupation -	Males	Females	Males	Females	Males	Females	Males	Females
(1)	. (2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
*	ALL INDUSTRIES AND SERVICES	6,746	2,088	106,892	40,205	53,385	6,422	35,804	6,365
Divn. 0.	Primary Industries not elsewhere specified	341	78	11,598	2,830	2,925	480	4,430	274
0.1	Stock Raising	125	36	5,020	1,4 4 6	2,277	360	2,655	
0.11		125	36	4,328	1,136	185	30	1,286	80
0.12		••	••	692	310	2,092		1,369	
0.10	Breeders and keepers of other large animals including transport animals.	••	••	••	••	••	••	••	••
0.2	Rearing of small animals and insects	1		23	4	24	17	47	6
0.21	Poultry farmers	••	••	20	4	24			
0.22	Beekeepers	1	••	8		••	••	41	6
0.23	Silkworm rearers	••	••	• •	••	••	·••	•:	••
0.24	Cultivators of lac		••				••	6 34	
0·3 0·31	Plantation Industries Tea plantation	<i>14</i> 11	••	266 11			••	1	
0.30	All other plantations but not including the	3	••	255	7	2	••	33	
0.00	cultivation of special crops in conjuction with ordinary cultivation of field crops.	Ū	••		-	-		-	
0.4	Forestry and woodcutting	86	42	1,822	1,373	485	103	730	- 53
0.40	Planting, replanting and conservation	••	••	112	••	87	••	201	••
o 43	of forests (including forest officers, rangers, and guards).							89	18
0.41	Charcoal burners	••		 54	••	39	47	354	
	Woodcutters	86	35	1.646	1,373	859	56	136	ĩ
0.5	Hunting (including trapping and game propagation).		••	9			••	8	••
0.6	Fishing	115	••	4,4 58	••	137	••	956	
0.60	Fishing in sea and inland waters including the operation of fish farms and fish hatcheries.	115	••	4,458	••	137	••	986	101
0.61	Gatherers of chanks and pearls	••	••	••	••	••	••	••	••
0.62	Gatherers of sea weeds, sea shells, sponges and other water products.	••	••	••	••	••	••	••	••
Division	1. Mining and quarrying	12	1	378	35	2	••	3,334	646
1·0 N	Jon-metallic mining and quarrying not otherwise classified—including mining and quarrying of such meterials as precious and semi-precious stones, asbestos, gypsum, sulphur, asphalt,	1		10	1		••	••	••
	bitumen.								
1.1	Coal mining—Mines primarily engaged in the extraction of anthracite and of soft coals such as bitumenous, sub-bitumen- ous legnite.	••	••	6	••	••	••	3, 31 4	644
1.2	Iron ore mining	1		5	••	••	••	••	
1.3	Metal mining except iron ore mining	••	••	••	••	••	••	8	••
	Lead, silver and zinc	••	••	••	••	••	••		••
1.33 1.30	Manganese	••	••	• •	••	••	• •	4	••
1.30	Stone-quarrying, clay and sand pits. Ex- traction from the earth of stone, clay, sand and other materials used in build- ing or manufacture of cement.	6	1	204	32	••	••	18	
1.7	Salt, saltpetre and saline substances	4		153	2	2	••	••	••
	2. Processing and manufacture—Foodstuffs.	233	91	7,870	3,839	3,061	793	3,814	1,441
2.0	textiles, leather and products thereof. Food Industries otherwise unclassified	233 4	_	176	14	471	19	17	
	Canning and preservation of fruits and vegetables.	4	••	155	14	447	19	2	3
2.03	Slaughter, preparation and preservation of meat.	••	••	21	••	2 4	•••	••	••
	Other food industries						••	15	1

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DIX III

N on-agricultural Occupations

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	Gro Coc	bhanj	Mayur	lahandi	Ka	argarh	Sund	ngir	Bola	ani	Phult	ijhar	Keor
		Females	Males	Females	Males	Females	Males	Females	Malès	Females	Males	Females	Males
(1)	((41)	(40)	(39)	(38)	(37)	(36)	(35)	(34)	(33)	(32)	(31)	(80)
		9,977	30,533	9,166	30,242	4,237.	19,630	9,946	38,689	5,728	24,547	3,515	18,155
vn. I	Div	243	1,200	313	1,098	130	1,106	190	2,103	740	2,824	397	1,208
	0•1	79	851		546	41	477	52	358	629	2,086	367	742
		55	272		104 442	41	470 7	3 49	180 178	521	1,495	367	
	A 1	26	79		4444	•••		**		108	ð91 	307	742
	~ ~	••	45		51 4	··· 1	· <i>11</i> 10	••	<i>31</i> 23	11 11	<i>21</i>	••	15
	~ ~	••	2 11		24	· · · 1	10	••	23 5		21	••	1
	~ ~	· ••	20				i		3			••	5
24	0.2	· ••	12	12	. 23	••••		••	••			••	9
	< <	. 6	1		53	. 2	. 23	35	175	2	17	13	3
		6	. 1		53	2	23	1 34	53 122	2	17	13	3
90	0.9		•,	••	••		20	01		4	••	••	••
4	0.4	155	703	. 9 4	278	. 47	319	38	502	98	112	17	301
			344	8	117	•••	20	••	102	••	32	••	93
41	3 · 0·4	18	43		12	. 8	9		7		••		
			135		81	12	60		9i	17	 19		99
			181	3 33	. 62	27	230	31	302	81	61	10	109
5	0.2	• • •	••	′ <u>4</u>	2	• ••	10	••	· 13	••	••	••	••
6	8 0.6	а	100	8 29	168	39	266	65	1,024	•••	5 88	••	147
			91	3 29	168	39	266	65	1,024	••	588	••	147
		•		· · .			•						
·61 ·62			9	1 ² 414 1 744	•	••	••	••	••	••	••	••	
vn. 1			1,850		÷.	295	580	4	7	••	90	168	445
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		3	Ġ			9	95						
l·1	. 1.	Ű	Ŭ	• ••		, . · ·		••				••	••
. 0	,	1 0 00	1,751	_					2	••		167	433
·2 ·3	1 ·2 1 ·2	1,037	1,751 93	• ••	•	180	113	ï	ĩ	••	85		· 100
			••		•			•:		••	••	••	•;
.33	1.3	••	93	• ••	•	180	113	1	1	••	85	••	4 5
·30		28	••	• ••	•	106	369	••	••	· ··		••	2
.0	. 1.6	20	••	•••	•								
.7	1.1			• ••	•	• ••	3	1		••	5	1	1
	2 Div		4,204				2,288	2,392	9,714	1,184	3,607	506	2,108
				•		82	72	20	859	••	7		15
• <i>0</i> •01			56 40	3 18		••	••	14	239			••	
	•		7	0	1	••	13		100	••	3		15
							59	6	20		4	_	•
.00	. 2 ∙€		ç	• ••	•	32	98	U	40			••	

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APPENDIX III

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Group Code	Occupation	ORISSA				3-33 Inland I	Division	5·11 Orissa Coastal Division		
No.	· · · ·	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	. (7)	(8)	(9)	(10)	(11)
2.1 2.11	Grains and pulses Hand pounders of rice and other persons engaged in manual dehusking and flour grinding.	43,790 20,650.	<i>14,585</i> 1,916	3 18,734	<i>15,093</i> 5,887	6,846 1,201		28,697 14,763	7,739 715	
2·12 2·13	Millers of cereals and pulses	2,352 20,788	1,583 11,086	9,702	502 8,704	420 5,225	3,479	1,850 12,084	1,163 5,861	6,223
2 ·2 2·21	Vegetable and dairy products Vegetable oil pressers and refiners	5,500 4,321	4, 613 4,064		<i>3,040</i> 2,403	2,550 2,254		<i>2,460</i> 1,918	<i>2,063</i> 1,810	
2.22	Manufacturers of hydrogenated oils	22	21		2,303	2,202	. 115	22	21	
2 ·23	Makers of butter, cheese, ghee and other dairy products.	1,157	528	629	637	296	341	520	232	
2.3	Sugar Industries	751	692		271	231		480	461	
2·31 2·30	Gur manufacture	577 174	549 143			159 72		394 86	390 71	
2.4	Beverages	935	894			715		187	179	
2.41	Brewers and distillers	257	242		226	211 487		31 91	31 91	
2·42 2·43	Toddy drawers	596 29	578 25		505 15	487		14	10	
2.40	Manufacture of aerated and mineral waters and other beverages.	53	49			2	••	51	47	4
2.5	Tobacco	6,853	4,803		4,630	2,973		2,223	1,830	
2.51 2.50	Manufacture of bidis Manufacture of tobacco products (other than bidis) such as cigarettes, oigars, cheroots and snuff. Stemming, redrying and other operations connected with preparing raw leaf tobacco for manu- facturing are also included.	6,411 442	4,521 282		4,530 100	2,874 99		1,881 342	1,647	159
. 2.6 .	Cotton textiles	37,879	32,020		26,793	22,642 707		<i>11,086</i> 417	9,378 326	
2·61 2·62	Cotton ginning, cleaning and pressing Cotton spinning, sizing and weaving	1,251 36,186	1,033 30,606		834 25,618	21,630		10,568	8,976	
	Cotton dyeing, bleaching, printing, pre- paration and sponging.	442	30,000		341	305	36	101	76	25
2.7	Wearing apparel (except footwear) and made-up textile goods.	11,517	10,631		6,518	6,280		4,999	4,351	
	Tailors, milliners, dress makers and darners Manufacturers of hosiery, embroiderers, makers of crepe, lace and fringes.	5,2 08 195	4,798 126	69	1,608 118	1,565 87	31	3,600 77	3,233 39	38
	Fur dressers and dyers	570	544		529	522		41 47	22 9	
- • •	Hat-makers and makers of other articles of wear from textiles.	2,101	2,028		2,054	2,019 1,845		47 547	9 377	
2.75	Manufacture of house furnishing of textiles Makers of other made-up textile goods	2,466 977	2,222 913		1,919 290	242		687	671	16
2.70	including umbrellas.	811								
2·8 2·81	Textile Industries otherwise unclassified Jute pressing, baling, spinning and	17,405 4,272	14,729 3,640		9,607 2,461	8,589 2,237		7,798 1,811	6,140 1,403	
2.83	weaving. Silk reeling, spinning, twisting and weaving	2,191	1,913	278	1,201	966	235	990	947	. 43
	Hemp and flax spinning and weaving	394	1,913		157	101		237	62	175
	Manufacture of rope, twine, string and other related goods from cocosnut,	10,535	9,000		5,787	5,284		4,748	3,716	1,032
2.80	aloes, straw, linseed and hair. All other (including insufficiently des- cribed) textile industries, including	13	13		1	1	••	12	12	••
2.9	artificial leather and cloth. Leather, leather products and footwear	3,202	2,875	327	2,013	1,845	168	1,189	1,030	159
2.91	Tanners and all other workers in leather	159	121		107	73	34	52	48	4
	Cobblers and all other makers and repairers of boots, shoes, sandles and clogs.	2,912	2,628	284	1,865	1,736	129	1,047	892	155
2.90	Makers and repairers of all other leather products.	131	126	5	41	36	5	90 	90 •	、 ・・

DISTRICT INDICES OF NON-AGEL. OCCUPATIONS

Cutt	ack	Bal	BSOTO	• :	Puri	Samb	alpur	Gan	jam	Group
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Code No.
(12)	(13)	(14)	(15)	(16)	(17)	, (18)	(19)	(20)	(21)	(1)
4, 352 205	8,839 5,81 3	958 223	4,461 3,307	1,573 130	4,623 2,572	<i>2,731</i> 174	<i>3,302</i> 1,984	876 171	3,110 2,427	8-1 2-11
521 3,626	35 2,991	543 192	652 502	14 1,429	2,051	17 2,540	1,318	85 620	683	2·12 2·13
483 475	109	109 23	<i>1</i> 	<i>511</i> 478	220 63	<i>1,073</i> 1,049	<i>163</i>	980 854 21	69 46 1	2.2 2.21
8	109	86	ï	33	157	24	163	105	1 22	2·22 2·23
171 105 66	17 2 15	8 6 2	2 2 	<i>188</i> 188 	· · · · · · · · · · · · · · · · · · ·	••	•• •• ••	98 95 3	••	2·3 2·31 2·30
110 9 53 10 38	8 4 4	14 5 9	•••	32 10 22	• • • • • •	402 104 293 5	13 13 	25 14 11 	• • •	2·4 2·41 2·42 2·43 2·43
777 652 125	<i>184</i> 64 120	397 397	63 63 ••	40 40	••	2,337 2,333 4	1,626 1,626	636 578 58	<i>150</i> 111 39	2·5 2·51 2·50
							· ·			
3,393 306 3,023 64	625 91 517 17	717 712 5	<i>191</i> 183 8	<i>1,526</i> 1,526	<i>359</i> 359	<i>5,912</i> 9 5,783 120	<i>1,262</i> 1,242 20	3 ,87 <u>4</u> 20 3,847 7	541 541	2·61 2·61 2·62 2·63
2,124	361	515	87	1,231	200	4,670	20 36	495		2-03
1,701 9	315 9	453 .30	51 29	609	1	31 <u>4</u> 39		484	••	2·71 2·72
22 4	19 18	••	••	5	20	522 1,949	7 17	••	••	2·73 2·74
388	••	32	7	377 240	、163 16	1,841 5	9	ii	•••	2.75 2.70
<i>4,061</i> 1,139	956 377	822 67	101 9	7 <i>32</i> 123	558 16	234 41	8 4 29	533 74	4 5 6	2·8 2·81
41 2,881	164 415	552 21 170	34 11 47	51 558	9 9 533	51 19 123	27 28	344 115	39	2·83 2·84 2·86
••		12	••	••	•••	••	••	••	••	2.80
<i>304</i> 28 276	<i>151</i> 151	74 20 54	7 4 3	255 255	•••	688 688	<i>92</i>	<i>406</i> 316	1	g·9 2·91 2·92
••	••	••		••	•••	••	••	90	••	2.92

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APPENDIX III

Group Code	Occupation	Ager	ic y	Pla	ins	Korapu	t	Dhenka	inal
No.		Males	Females	Males	Females	Males	Females		Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
2·1 2·11	Grains and pulses Hand pounders of rice and other persons engaged in manual dehusking and flour grinding.	20 14	75 71	856 157	<i>3,035</i> 2,356	<i>518</i> 21	280 165	<i>500</i> 196	1,140 970
2·12 2·13	Millers of cereals and pulses Grain parchers and makers of blended and prepared flour and other cereal and pulse preparations.	6	 4	85 614	679	64 433	8 112	304	170
2.2	Vegetable and dairy products	20	2	960	67	102	17	292	23
2·21 2·22	Manufacturers of hydrogenated oils	20	1	834 21	45	102	9	245	1
2.23	Makers of butter, cheese, ghee and other dairy products.	••	ʻi	105	21	••		47	22
2.3	Sugar Industries	4	••	94	••	10		120	2
2·31 2·30	Gur manufacture Other manufactures and refining of raw sugar, syrup and granulated or clarified sugar from sugarcane or from sugar beets.	••	•••	91 3	••	10. 	••	86 34	2
2.4	Beverages	2	••	23	••	1	••	100	7
2.41	Brewers and distillers	2	••	12	••	1	••	26	
2.42	Toddy drawers	••	••	11	••	••	••	73	7
2·43 2·40	Ice-manufacturers Manufacture of aerated and mineral waters and other beverages.	••	••	••	••	••	••	1	••
2.5	Tobacco ·· ··	20	4	616	146 .	44	8	225	1
9·51 2·50	Manufacture of bidis Manufacture of tobacco products (other than bidis) such as cigarettes, cigars, cheroots and snuff. Stemming, redrying and other operations connected with preparing raw leaf tobacco for manu- facturing are also included.	20	. 4	558 58	107 89	44 ••	8	225 	1
2.6	Cotton textiles	132	8	5,742	533	1,011	469	1,471	169
2·61	Cotton ginning, cleaning and pressing Cotton spinning, sizing and weaving	132	•••	20	533	10	480	1 471	160
2·62 2·63	Cotton spinning, sizing and weaving Cotton dyeing, bleaching, printing, pre- paration and sponging.		8	3,715 7	, 009	997 4	469	1,471	169
2 •7	Wearing apparel (except footwear) and made-up textile goods.	14	••	481	••	267	••	321	11
2·71 2·72	Tailors, milliners, dress makers and darners Manufacturers of hosiery, embroiderers, makers of crepe, lace and fringes.	14	• • • •	4 70	••	262	••	143	10
2·73 2·74	Fur dressers and dyers Hat-makers and makers of other articles	••.	•••	••	••	••	••		ï
- 17 -	of wear from textiles.	••	••	••	• ••	••	••	U	-
2.75	Manufacture of house furnishing of textiles	÷.		· • •	••	••	••		••
2 ·70	Makers of other made-up textile goods including umbrellas.	••	••	11	••	5	••	175	••
2·8 2·81	Textile Industries otherwise unclassified Jute pressing, baling, spinning and	8	*	525 74	- <u>4</u> 8 6	459	• •	698 59 4	70 4
2·81	weaving. Silk reeling, spinning, twisting and weaving	••	••	344	••	••		61	. · 1
2.84		••.	•••	•	••	49		38	56
2.86	Manufacture of rope, twine, string and other related goods from cocoanut, aloes, straw, linseed and hair.	8	2	107	87	410	••	10	. 9
2.80	All other (including insufficiently des- oribed) textile industries, including artificial leather and cloth.	••	••	••	• •	••	••	••	••
2.9	Leather, leather products and footwear	9	••	897	1	178	••	70	13
2.91	Tanners and all other workers in leather	••	••		••		• •	16	7
2 .92	of boots, shoes, sandles and clogs.	9	•••	307	1	178	. 	54	6
2.90	Makers and repairers of all other leather products.		••	90	••	••	••	••	ł ••

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Gro	bhanj	Mayurl	handi	Kala	rgarh	Sunda	angir	Bole	ani	Phull	har	Keonj
Coc N	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males
1	(41)	(40)	(39)	(38)	(37)	(36)	(35)	(34)	(33)	(82)	(31)	(30)
2	<i>400</i> 198	170 45	679 224	709 184	441 257	443 82	<i>1,243</i> 484	1,412 420	<i>668</i> 289	163 	119 44	180 65
2 2	5 197	40 85	74 381	295 230	184	361	759	4 988	279	168	75	115
8 2	15 4	66 46	<i>61</i> 20	147 83	13	<i>55</i> 40	<i>151</i> 105	4 77 393	38 \ 5	<i>191</i> 177	7 4	1 27 99
2 2	ii	20	41	64	13	15	46	84	\$3	ii		28
2 2 2	• • • •	11 11 	••	••	2 2	••	19 5 14	7 <i>2</i> 34 38	••	10 10 	17 17	4
2 2 2 2 2 2	1 	5 3 2	8 	21 17 2 2	2	73 24 49	2 	08 28 37 3	•••	9 9	•••	84 26 6 2
2 2 2	••	70 70 	3 3	22 22	<i>12</i> 12	35 35 • •	8 2 1	58 3 3 25	••	55 55 ••	••	107 37 70
•			•	•	•							
2 2 2 2	604 588 16	2,373 2,232 141	<i>118</i> 19 94	<i>1,807</i> 891 914 2	<i>134</i> 134	1,306 59 1,224 23	892 17 875	6,779 43 6,786	. <i>825</i> 84 239	1, <i>670</i> 170 1,385 15	177 7 170	781 25 756
2	26	243	83	92	14	108	7	187	20	245	41	135
2 2	6	199 1	2	77	••	4 8 ••	.1	150 37	20 ••	239	5 21	119 10
2- 2-	••	••	••	3	ii	58	••	••	••	••	3	
2 2	20	43	53 28	4 8	••	••	••	••	••	 6	12	••
2	193	1,146	219 44	<i>4,254</i> 1,328	34 16	29 ••	36 16	71 45	235 85	1,888 97	. <i>145</i> 80	<i>857</i> 132
2	193	747	••	••		••	••		14	107	••	••
2 2	••	398	175	2,926	i 8	29	20	26	186	1,129	65	325
2	. ••	1	••	••		••	••	• ••	••	••	••	••
2	13	64	26	- 44	5	169	19	281	••	24	••	808
2	13	5 59	9 14	21 8	5	169	5 12	29 181	••	22	••	868
2	••	-	3	-15	••	. ••	. 2		••	••	` * •	••

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Group) Openmention	_	ORISSA	L	Orissa	3.83 Inland I	Division	Oriss	5.11 a Coasta	l Division
Code No.	Occupation	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Dn. 3.	Processing and Manufacture—Metals, Chemicals and Products_thereof	21,420	19,257	2,163	13,799	12,242	1,557	7,621	7,015	606
3.0	Manufacture of metal products, otherwiss unclassified.	15,976	14,349	1,627	10,614	9,404	1,210	5,362	4,9 45	417
3.01	Blacksmiths and other workers in iron and makers of implements,	11,369	10,250	1,119	7,655	6,833	822	3,714	3,417	297
3.02 3.03	Workers in copper, brass and bell metal Workers in other metals	4,5 52 55	4, 070 29	482 26	2,910 49	2,548 23	362 26	1,642 6	1,522 6	120
3.1	Iron and steel (Basic manufacture) Manufacture of iron and steel, includin all processes such as smelting and	2,450 g	2,114	336	2,095	1,778	317	355	336	19
	refining ; rolling and drawing ; and alloying and the manufacture of castings, forgings and other basic forms of ferrous metals.	•				• • • •				
3.2	Non-ferrous metals (Basic manufacture), Smelting and refining, rolling, drawing and alloying and the manufacture of		839	6	8 23	218	5	122	121	1
:	castings, forgings, and other basic forms of non ferrous metals.	•				• •			•	•
3.3	Transport equipment	1,460	1,310	150	562	542	20	898	768	130
3.31	Building and repairing of ships and boats		110	·· 131	71	63	8	170	47	123
3.32	Manufacture, assembly and repair of	928	921	7	311	311	••	617	610	7
· · · ·	railway equipment, motor vehicles and bicycles. (Railway fitters are included in this					•		-	•	•
3.34	group). Coach builders and makers of carriages,		279	12	180	168	12	111	. 111	••
3.4	palki, rickshaw, etc. and wheel wright Electrical machinery, apparatus, appli- ances and supplies.		4 89	22	131	126	5	380	808	17
3.43	Manufacture of electric wire and cable	68	68	••	88	58	••	10	10	••
3.40	Manufacture of electrical generating transmission and distribution appara- tus; electrical household appliances other than lights and fans; electrical equipment for motor vehicles, aircraft	443	421	22	73	68	5	870	353	17
· •	and railway locomotives and cars communication equipment and related				•					
•	products, including radios, phono graphs, electric batteries, X-Ray and	•			•	•				· .
	therapeutic apparatus ; electronic tubes, etc.	3				•			·	,
3.5	including Engineering Workshops Engineering Workshops engaged in producing machine and equipment	5 1	- 221	. 8	63	03	3	166	158	8. S
3.6	parts. Mechanics unspecified. Basic industrial chemicals, fertiliser and power alchohol.	116	113	3	32	32	••	· 84	81	3
3.6		116	115	3 3	32	32	3	84	81	3
3.7 3.8	Medical and pharmaceutical preparations Manufacture of chemical products other	. 44	44	٤	18	11	3	32 222	32 211	
3.8	wise unclassified. I Manufacture of perfumes, cosmetic and other toilet preparations.	L 9) 4	B 1	••		••	ą	. 8	3' 1
3.8	2 Soaps and other washing and cleaning compounds							96	86	3 10
3.8	polishes.				12	•		 12	· · ·	•
3·8 3·8	A Condia	60			7			88		
U 0	o Candle									
3.8	7 Starch 0 Other chemical products	. 29	29)	12	12	2	17	17	

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DISTRICT INDICES OF NON-AGEL. OCCUPATIONS

200			ATIONS		UN-ACKEL	, U . II	OF INDICES			
Grou	ijam	Gar	alpur	Samb	uri	Р	lasore	Bε	tack	Cut
Code No.	Females	Males	Females	Males	Females	Males	Females .	Males	Females	Males
(1)	(21)	. , (20)	(19)	´(18)	(17)	(16)	(15)	(14)	(13)	(12)
Dn.	. 4	2,392	311	2;640	2	1,788	33	605	568	2,292
3.0	4	2,011	. 291	2,144	2	1,518	24 ·	415	<i>388</i> .	1,060
3.0	3	1,443	45	1,247		1,112	18	179	277	742
3-0 3-0	1	568	246	897	. 2	400 .	6	236	111	318
3	-	29	17	5		6 1.	. •.• . 8	42	11	265
				•						
				۰.						
: . •	•••.	12	· · · ·	135	-		1	34	• •	4
			1997 - 1998 1998 - 1999 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1							
3.3 3.3		262	- <i>2</i> 1	314		46		<i>59</i>	130	401
3.3	••	262	••	39 188	, же , е е	38		46	123 7	47 264
			,	. T						
3-3	••	-	1	87	••	8 .		13	••	90
3.4	6:#	8.	1	6		84.	•••	· 5	17	271
3·4 3·4	••	3	ï	6	, t P , tse	5 79	••	5 ***	17	271
			i	-						
							-			
8-5	· -	51	-	13		23		8	8	78
			1							
3.6	-	13		10	-	11	ana	6	8	51
3.62	 .	13	828	10		11.		6 10 -	3	51 <i>12</i>
3-7 3-8	610 6.19	10 1	0.0 810	13	61.9 514	105		26	ii j	79
3-81	618	-	01 0	هره	9:0	eas		2	1	6
3.82		. 1		10	#10	419		12	10	73
3.83	— .	.	-	-	-	-	.	-	.	
3-85	4.00 × 1			. 3	920	88	0.20 1.20	12	••	
3-86 3-87	••	••		434	**	17	• •	••	4.4	-
3∙80	3(••		· • • •	**	• •	. .	+: +	***	*10

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Group		Agen	ncy	Plai	ins 	Kora	put	Dh	enkanal
Code No.	Occupation	Males	Females	Males	Females	Males	Females	Males	Females
. (1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
)n. 3.	Processing and Manufacture—Metals, Chemicals and Products thereof.	62	1	2,330	3	1,875	••	1,329	105
3.0	Manufacture of metal products, otherwise unclassified.	·59	1	1,952	8	1,400	••	1,103	100
	Blacksmiths and other workers in iron and makers of implements.	» 5 9	1	1,384	2	1,140	••	683	13
3.02 3.03	Workers in copper, brass and bell metal Workers in other metals	· ••/	• • •	568	1	260	••	413 7	61 26
5 3 .1	Irom.and steel (Basic manufacture) Manufacture of iron and steel, including all processes such as smelting and refining; rolling and drawing; and alloying and the manufacture of castings, forgings and other basic forms of ferrous metals.	1	••	28	••	403	••	168	••
3.2	Non-ferrous metals (Basic manufacture). Smelting and refining, rolling, drawing and alloying and the manufacture of castings, forgings, and other basic forms of non-ferrous metals.	-: •i •	•••	12	••	••		••	5
3.3	Transport equipment		••	262		11	••	25	••
3.31	Building and repairing of ships and boats	** •	• •		10 • •				• •
· 3·32	Manufacture, assembly and repair of railway equipment, motor vehicles and bicycles. (Railway fitters are included in this	" ●●	••	262	` ••	11	••	24	
3 ·34	group). Coach builders and makers of carriages, palki, rickshaw, etc. and wheel wrights	·••	••	••	•••	. ••	••	1	••
3.4	Electrical machinery, apparatus, appli- ances and supplies	•••	••	3	**	36	••	••	••
3.43	Manufacture of electric wire and cable	•••	• •	••	••	- 36	••	••	. ••
3.40	Manufacture of electrical generating, transmission and distribution appara- tus; electrical household appliances other than lights and fans; electrical equipment for motor vehicles, aircraft and railway locomotives and cars; communication equipment and related products, including radios, phono- graphs, electric batteries, X-Ray and therapeutic apparatus, electronic tubes, etc.	••••	••	3					
	Machinery (other than electrical mechinery) including Engineering Workshops. Engineering Workshops engaged in producing machine and equipment parts, Mechanics uuspecified.	. 8	••	· 49	••	20	• ••	-	• •
3.6	Basic industrial chemicals, fertiliser and power alchohol.	• •	、 ••	13	••	· 2	••	5	••
3·8 3·7		••	••	13 10		. 2	••	5 . 1	••
3.8		**	••′	10		3	••	15	••
3.8	wise unclassified. 1 Manufacture of perfumes, cosmetic and		••				••	••	•
	other toilet preparations. 32 Soaps and other washing and cleaning	••	••	- 1	· • •	••	••	11	••
- 3-8	compounds. 33 Paints, varnishes and lacquers and polishes.	· ••	••• •	••	`••	••	••	• ••	х ¹¹ •
3-8	35 Matches			••	••	••	••	4	••
. 3.8	6 Candle		•••		••	••	••	••	••
3.8	87 Starch	••	••	. ••	••	3	• •	••	••
· · 3·8	80 Other chemical products	**	• •	••	· • •	• •	• •	••	•

DISTRICT INDICES OF NON-AGRL. OCCUPATIONS 467

Keon	njhar	P	hulbani	Bola	ingir	Sun	dargarh	Kal	ahandi	Mayu	rbhanj	Group Code
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	No.
30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(1)
803	1	723	••	1,189	110	1,188	146	688	274	1,745	609	Dn. 3
788	••	695	••	552	89	692	62	6 4 7	244	1,324	423	3.0
751	••	557	•.•	370	62	675	61	441	217	910	423	3.01
34	••	138	••	182	27	17	1	193	27	414	••	3 ∙02
3 <i>2</i>		••	••	••	••		••	13	•••	••	100	3.03
6	1	•••	••	466	20	379	83	8.	11	346	185	3.1
				۰.		•	·			y ∳ Northe		•
				71		• ,		7		5		3.2
-						••,	••	•				
13	••	1	••	44	1	68	7	15	15	51	1	3.3
13 7 6	••	••	••	43		7	1	10	ĨŐ.		1	3.31
U	••	1	••	43	••	6	••	••	••	32		3.32
						,						•
•	••	••	•• *	1	1	55	• • •	ប	9	19.	1	3.34
. ••	••	22	••	23	••	81		•••	4 · .	8	• ••	3.4
• •	• •	22	••	23	•••	31	· · · · · · · · · · · · · · · · · · ·	••	.	8	i 	3·43 3·40
	•						••					
						•	- - 6	••				1
			•									`
		,										
•	••	••	••	10	••	•••	••	2.	••	5		3•5
								•			- -	
•	•	••	• •	2	••	4		9	••		••	8.6
••	• •	••	••	2	••	4		9	.,	•••		3.62
. •	• *	5	••	6	••	5	••		••	•••	••	3.7
٠	••	Ð	••	15	• •	9	••	1	••	6	••	3.8
••	•.	••	••	••	••	••	• *	••	••	••	••	3.81
••	••	••	••	9	••	••	• •	1	••	••	••	3.82
••	••	••	••	6	••		••	••	••	6	••	3 ·83
••	••	••	••		••	••	••	••	•• '	••	· ••	3∙85 3∙86
••	••	5	••	••	••			••	••	••	••	3.87
••	• •	5	••	••	••	••	••	••	••		••	3.80

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Group			ORISSA	L	Orissa 1	3.33 Inland Di	ivision	Orissa C	5.11 Joastal D	ivision
Code Number	Occupation	Persons	Males	Females	Persons	Males	Females		Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Division 4	Processing and Manufacture—Not else- where specified.	71,376	59,345	12,031	32,920	27,176	5,744	38,456	32,169	6,287
4.0	Manufacturing industries otherwise un- classified.	13,289	12,009) 1,280	5,275	4,789	486	8,014	7,220	794
4∙02 4∙03	Photographic and optical goods Repair and manufacture of watches and	21 258	21 258		11 118	11 118		10 140	10 140	
4.04	clocks. Workers in precious stones, precious metals and makers of jewellery and ornaments.	8,836	8,644	192	3,407	3,336	71	5,429	5,308	121 ,
4 ·05	Manufacture of musical instruments and appliances.	1,014	864	150	493	413	80	521	451	70,
4.06	Stationery articles other than paper and paper products.	176	128			••			128	
	Toy makers Other miscellaneous manufacturing industries, including bone, ivory, horn, shell, etc.	1,139 1,845	634 1,459							· · · ·
4·2	Bricks, tiles and other structural clay products. Structural clay products such as bricks	2,177	1,920	257	909	769	140	1,268	1,151	117
4 ·3	tiles, etc. Cement—Cement pipes and other cement products.									
	Manufacture of cement, cement pipes and cement concrete products.	59	50) 9	59	50	9 9		-	
4.4	Non-metallic mineral products	16,759								
	Potters and makers of earthen ware Glass bangles, glass beads, glass neck- laces, etc.	15,589 350								
4·44 4·40	Makers of other glass and crystal ware Makers of other miscellaneous non-metalli mineral products and lime burners.	657 c 163						. 638 5 24		
4·5 4·6	Rubber products	. (35,909		6 . 4 7,265	17,854	13,94	3,912	. 6 3 18,055		6 3 3,352
4 ·61	furniture and fixtures.	0.044						4 1,083	-	
4.62		15 444						l 10,435		
4.64	Basket makers	16,285								
4.60	Other industries of woody meterial, including leaves, but not including furniture or fixtures.	1,936								
4.7	Furniture and fixtures Manufacture of household, office, public building, professional and restaurant furniture; office and store fixtures, screens, shades, etc., regardless of meterial used.	•	y 1,17	7 376	0 600) 57(0 30	0 947	' 60	7 340
4 ·8	Paper and paper products Manufacture of paper and paper board and articles of pulp, paper and paper board.	1,088	88	7 201	1 1,085	5 88:	4 201	1 3		3
4·9 4·91	Rools hindres and stitchess	4774	36	3 .	. 20) 2	0.	. 43	; 4	3
4 ·92	Book binders and stitchers	. 479) 43	6 43	3 74	L 5	8 10	6 405	5 37	0 21
_lvision 5·0	5. Construction and Utilities Construction and maintenance of works- otherwise unclassified.	. 35,75 4 - <i>6,928</i>								
5-1 5-11 5-12 5-13 5-10	Construction and maintenance—buildings Masons and bricklayers	. 1,679 . 1,570 . 149 a 9,164	9 1,67 9 1,49 2 19	19 . 17 7: 22 2	. 568 3 533 0 129	8 56 7 48 9 10	8. 9.4. 9.2	. 1,111 8 1,033 0 13	1,11 1,00 1,00	1 8 25 3

DISTRICT INDICES OF NON-AGRL. OCCUPATIONS

Cu	ittack	Bal	asore	Puri	Ĺ	Samba	alpur	Gan	jam	Group
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Code Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	((1)
13,322	3,035	2,123	400	8,640	1,455	6,993	1,688	8,326	1,443	Division 4
2,891	428	488	191	2,681	155	1,268	114	1,196	23	4.0
3 97	••	ï	• •	38	6	6 2	*•••, g. D••*	' 7 4	••	4·02 4·03
1,662		452 ·	79	2,086	33	950 [·]	25	1,144	12	4.04
155	34	7	4	276	32	162	27	13	••	4.05
128	48	* * .		••	••		••	•	• ••	4.06
70 776	213 133	5 23	66 42	20 261	11 79	.35 113	21 41	28 ••	11	4.09 4.00
. 276	79	34	26	406	12	82	51	442		4 · 2·
						2.5.5		·. ·	• •	· •
•••	••	••		••	• •	· • • •	••	••	••	4.3
4, 096 3,429 72	<i>1,210</i> 1,177 15	<i>599</i> 531 44	66 57 9	<i>1,597</i> 1,572	.5 5	1,090 994 .96	<i>164</i> 160 4	<i>1,835</i> 1,831 4	389 389	4·4 4·41
595	18		-	25	••		•	4	••	4.43
		24 24	••	••	••	••	•••	••	•••	4.44 4.40
6 5,253	990	961	117	3,802	1,266	3,369	1,158	4,817	1,009	4.5 4.6
348 4,684 . 170 51	73 661 256	190 384 288 99	11 88 18	252 2,127 1,324 99	 1,106 160	136 1,355 1,715 163	1,098 60	298 3,143 1,339 37	21 845 143	4.61 4.62 4.64 4.60
448	• 318	38	••	99	••	299	2	. 22	22	4.7
•• .	••	•		x .	•	,	, 1		• • • •	•
1	••	••	••	2	••	884	199	1 • *	••	<u>4</u> .8
••	•••	••••••	• • •						· ·	1 • 1
251 29 322	<i>10</i> 10	3	••	53 10 43	17 17	1 i	• • • • • •	<i>14</i> 1 13	· • •	4·9 4·91 4·92
4,235 1,058	1,797 157	1,292 52	76	7,915 2,001	1,299 <i>244</i>	3,073 558	1,589 <i>65</i>	3,675 164	1,315 55	Divn. 5 5·0
1,147 102 88	1,097	669 174 28	15 	4, 375 233 466	475	120 44 54	595	<i>1,754</i> 617 474	155 25	5-1 5-11 5-12
13 944	1,097	467	15	3,676	475	22	595	663	130	5·13 5·10
-	.				• • .		i .		•	

Group		A	gency	· P	lains	Ko	raput	Dhenk	anal
E Code Number	Occupation	Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29).
Division	 Processing and ManufactureNot else- where specified. 	242	46	8,084	1,397	2,497	416	3,258	559
4.0	Manufacturing industries otherwise un- classified.	36	3	1,160	20	480	77	469	65
	Photographic and optical goods Repair and manufacture of watches and clocks.	••	••	7 4	••	i9	••	3 24	• ••
4 ∙04	Workers in precious stones, precious metals and makers of jewellery and ornaments.	. 36	3	1,108	9	323	7	275	11
4.05	Manufacture of musical instruments and appliances.	••	••	13	••	14	1	91	••
4 ·06	Stationery articles other than paper and paper products.	••	••	••	••		••	••	••
4 ⋅09		••	••	28	11	120		8	
	Other miscellaneous manufacturing industries, including bone, ivory, horn, shell, etc.	••	••	••	••	4	1	68	24
- 4.2	Bricks, tiles and other structural clay products.	~		495					
4 ·3	Structural clay products such as bricks, tiles, etc. Cement—Cement pipes and other cement	7	••	435	••	44	••	35	2
	products. Manufacture of cement, cement pipes and	••	••	••	••			••	••
4.4	cement concrete products. Non-metallic mineral products	69	13	1,766	376	613	162	812	44
4.41		69	13	1,762	376	613	162	777	44
4 · 4 3	Glass bangles, glass beads, glass neck- laces, etc.	••	••	4	••	••	•••	• 3	••
4·44 4·40	mineral products	••	••	••	••	••	••	32	••
$4 \cdot 5 \\ 4 \cdot 6$	Robber products	130	 30	4,687	979	1,209	177	1,885	 448
4.61		5	••	293	••	21	••	63	••
4.62		8	••	3,135	21	416	••	380	1
4.64	Basket makers	111	11	1,228	834	761	173	1,153	365
4 ∙60	Other industries of woody meterial, including leaves, but not including furniture or fixtures.	6	19	31	. 124	11	4	289	82
4•7	Furniture and fixtures	••	••	22	22	138	••	7	••
2	Manufacture of household, office, public building, professional and restaurant furniture; office and store fixtures, screens, shades etc., regardless of								
4.8	meterial used. Paper and paper products							••	
	Manufacture of paper and paper board and articles of pulp, paper and paper board.							•	
4 ·9	Printing and allied industries	• •	••	14	••	13		50	••
4·91 4·92	Printers, lithographers, and engravers Book binders and stitchers	••	••	1 13	••	1 12		15 35	••
Division	5. Construction and Utilities	100	74	3,487	1,245	1,153	215	672	228
5.0	Construction and maintenance of works— otherwise unclassified	188 <i>13</i>	70 4	3,487 151	1,245 51	130		86	
5.1	Construction and maintenance—buildings	121	11	1,633	144	528		55	
5.11	Masons and bricklayers	15	••	602	• • 9 =	251		38	
$5 \cdot 12 \\ 5 \cdot 13$		48	••	426	25	58	••	5	
	Other persons engaged in the construction or maintenance of buildings other than	58	ii	605	119	219	e."	 12	4
	buildings made of bamboo or similar meterials.						*		

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DISTRICT INDICES OF NON-AGRL. OCCUPATIONS

-		yha r	rnu	bani	DOL	angir	Sundar	garn	Kalal	nandi	Mayu	ronsnj	Group	
	Males	Females	Males	Females	Males	Femnles	Males	Females	Males	Females	Males F	emales	Code Number	
	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(1)	÷
	2,608	305	1,781	301	3,600	424	1,723	294	1,108	613	3,366	1,098	Divn, 4	
	551	20	347	••	1,103	26	85	32	130	96	320	53	: 4 ∙0	
	••	••	2	••	46	••		••	2 4	11.0 • •	13		: 4∙02 : 4∙03	
	286	e:e	267	••	846	3	54	3	77	5	222	14	4.04	;
	7	••	28	••	••	••	12	. 11	. 14	.2	85	39	4.05	
	••	••	••	••	••.	••	••	••	••		••	•••	4·06	
	162 96	20	23. 27	••	145 66	21 2	ii	4 14	19 14	39 50	•••	••	4∙09 4∙00	
								•••		•				
	96	17) 15	7	248	23	64	11	156	8	22	21	_ 4 ·2	
							•							
	••	••	••	••	••	••	36	· · 9	: 14	••,	••	••	4 ·3	
	330 327 3	••	<i>533</i> 531 2	••	83 <u>4</u> 750 84	<i>140</i> 126 .14	<i>530</i> 530	<i>95</i> 95	<i>369</i> 298	<i>146</i> 110	<i>915</i> 896	185 185	4•4 4•41 4•43	
	••	••	••	••	••	••		1.2	()	••	19	· · ·	4.44	
	••	••	••	••	••		••		71	36	••	••	4.40	
	1,631	268	886	294	1,409	231	919	120	407	349	2,096	838	4.5 4.6	
	217 370	4	98 409	••	85 565	••	82 585	••	76 184	•.•	374	••	4.61	
	1,044	264	379	294	759	231	229	107	147	331	736 889	525	4.62 4.64	
	••	••	••	••	••	••	23	. 13	•••	18	97	313	4∙60	
	••	••	••	••	••	••	89	27	30	••	7	1	4.7	
			•					••	5 .		•		::	
			••		••	2		4					4 ·8	
						-		••	••	••	••	••	T.O	•
	••	••	••	••	6	2	••	••	· 2	14	6	• •	4.9	
	••	••	••	••	2 4	2	••	••	2	. ii	2 4	••	4·91 4·92	·
	337 52	177 <i>31</i>	1,124 289	380 72	996 375	248 56	728 299		1,229 <i>410</i>		1,100 498		Divn.5 5·0	
	62	43	60 4	26	85	2	88	19	254	93	156	21	5·1	
	3 25	21	53 196	••	41 26	2	20 14	••	40 51	25	63 12	••	5·11 5·12	
	· 13 21	7 15	23 332	26	18	••	54	i9	24 139	1 67	31 50	12 9	5·13 5·10	

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APPENDIX III

Group	Occupation	•	ORISSA		Orissa I	3.33 nland D	ivision	Orissa (5·11 loastal	Divisio
Code No.		Persons	Males	Females	Persons	Males	Females	Pe ons	Males	Femal
. (1)	(2)	(3)	(4)	(5)	(6)	(7)	<u>(8)</u>	()	(10)) (1
5•2	Construction and maintenance—Roads,	4,200	3,903	3 297	2,433	2,262	171	1,767	1,641	! i
5.3	bridges and other transport works. Construction and maintenance—Telegrap	h .478			282	. 282	3	196	196	Ī.
5.4	and telephone lines. Construction and maintenance operations- Irrigation and other agricultural works.	- 4,123	2,659) 1,464	2,530	. 1,468	1,062	1,593	1,191	Ì,
5.5	Works and services—Electric power and ga supply.	8 347	343	3 4	172	172		<i>i</i> 75	171	!
5·51 5·6	Electric supply Works and Service—Domestic and indu	. 347 3- 360	343 274		. 172 <i>175</i>	172 112		175 185	171	
5.7	trial water supply. Sanitary works and services—Including scavengers.	6, 766	4, 003	2,763	2,605	1,521	1,084	4,161	2,482	. 1,
Division (B. Commerce	. 138,539	104,694	33,845	47,035	36,373	10,662	91,504	68,32 ⁻	1 23,
6∙0 6∙01	Retail trade otherwise unclassified Hawkers and street-venders otherwise un	• 43,186 • 6,248	<i>32,791</i> 3,53(<i>16,218</i> 2,499	13,079 1,528		26,968 3,749	19,712 2,008	
6·0Ž	classified. Dealers in drugs and other chemical store	58 756			317	312		439	436	
6-03 6-00	Publishers, booksellers and stationers . General storekeepers, shopkeepers an persons employed in shops otherwis unclassified.	d 32,659		4 7, 315		1,384 9,854 -			1,779 15,489	
6•1	Retail trade in foodstuffs (including beverag and narcotics).	es 53,317	40,16	2 13,155	17,180	12,790) 4,390	36,137	27,372	8 8
6.11	Retail dealers in grain and pulses; swee meats, sugar and spices, dairy product	8.	28,510) 10,429	12,066	8,671	3,395	26,873	19,839	97,
•	eggs and poultry; animals for food fodder for animals; other foodstuff	l; 8,	•	, ,	• •	••	•	•••		• - • -
6.12	vegetables and fruits. Venders of wine, liquors, aerated wate and ice in shops.	ər 1,004	97	8 26	. 402	. 389) . 13	602	589).
6·13 6·14	Retail dealers in tobacco, opium and gan Hawkers and street-venders of drink an foodstuffs.	ja 1,158 d 4,098				573 612		554 3,271	54] 2,26]	
6·15 <i>6·2</i>	Retail dealers in pan, bidis and cigarettes	8,118			3,281 <i>3,859</i>	2,540 <i>2</i> ,68	5 736 4 1, 175	4,837 10,496	4,142 5,470	
6·21	Petroleum distributors	. <i>14,355</i> . 454	44	9 5	92	8'	75	362	362	2
6-20	Retail dealers (including hawkers an street-venders) in firewood charcoal, coal cow dung and all other fuel excep petroleum.	,	7,70	5 6,196	3,767	2,597	1,170	10,134	5,108	3 5,
6.3	Retail trade in textile and leather goods Retail trade (including hawkers and stree venders) in piece goods, woll, cotton	t 7,249	6,75	7 492	3,113	2,91	3 200	4,136	3,84	4
	silk, hair, wearing apparel, made-u textile goods, skin, leather, fur feathers, etc.	v v			••		• •			
6•4	Wholesale trade in foodstuffs. Wholesale dealers in grains and pulse	6,159	4,33	4 1,825	2,304	1,25	2 1,052	3, 855	3,08	2
	sweetmeats, sugar and spices dain products, eggs and poultry animal fo food, fodder for animals, other food stuffs, wholesale dealer in tobacco	У Эг -	. 1	•			• • • • •	•		•
6•5	opium and ganja. Wholesale trade in commodities other than foodstuffs	9,686	8,44	7 1,239	3,655	3,11	538	6,031	5,330	
6.6	Real Estate House and estate agents and rent collector	or <i>352</i>	23		122	71	51	230	165	1
6•7	except agricultural land. Insurance Insurance carriers and all kinds o	:	-	3 5	10	10		57	52	
	insurance agents and all kinds o insurance agents and other person connected with nsurance business.	r 07 15	02	у – Э	10	10	•			

DISTRICT INDICES OF NON-AGRL. OCCUPATIONS

Grouj Code	jam	Gan	alpur	Samb	ri	Pu	850re	Bal	Cuttack	
No.	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males
· (* 1 :	(21)	(20)	(19)	<u> </u>	(17)	(16)	(15)	(14)	(13)	(12)
5-2	• •	636	27	918	••	254		162	126 ·	- 92
5.		49	••	36	••	25	••	14	••	108
5.	216	313	497	872	58	196	36	242	120	455
5.	••	18	••	· 48	••	56	•••	17	4	85
5. 5.		. 13 <i>24</i>	30	. 48 <i>41</i>	. 4	56 <i>36</i>	6	17 25	4 6	85 77
5.	882	722	375	4 80	• 518	972	19	111	287	713
Division.	9,058	24,662	2,931	6,621	4,124	16,913	1,587	5,875	8,807	3,447
6. 6.	<i>3,853</i> 133	9,172 343	<i>690</i> 221	<i>2,513</i> 150	<i>1,243</i> 568	<i>3,980</i> 515	437 216	2,057 233	<i>1,915</i> 866	5,257 948
6.	3	135	••	74		86	••	168	••	47
6. 6.	73 3,644	399 8,295	22 447	419 1,870	140 535	904 2,475	55 166	242 1,414	1,049	234 4,028
6.	2,647	8,952	883	2,224	1,356	7,858	792	2,59 4	4,061	8,516
6.	2,184	7,021	596	1,312	881	6,173	702	2,041	3,349	5,072
6	. 8	316	••	90	••	154	5	92	••	27
6.	13	175	18	218	••	176	••	19	••	171
6.	155	357	36	120	329	437	• •	29	530	1,451
6. 6.	287 <i>2,331</i>	1,083 <i>3,526</i>	233 <i>152</i>	484 236	146 1,339	918 <i>971</i>	85 85	413 <i>81</i>	182 1,379	1,795 1,582
6- 6-	2,331	14 3,512	152	13 223	1,339	5 966	95	2 79	1,379	341 1,241
0.	2,001	0,012	102		1,000	000			2,070	2,212
6.	118	1,170	94	570	••	863	19	280	155	1,746
6-	36	526	735	371	56	1,265	160	222	521	1, 187
ŕ	•	1,112	282	570	116	1,786	61	610	472	2,066
- 6 r	\$2	1 ,116			110					
6-6	•••	1	32	35		31 ·	15	1	50 ·	132
6_	,	26	••	••	4	12	••	••	• •	15

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Group	- ··	Ag	ency	Plains		Kor	aput	Dhenkanal		
Code No.	Occupation	Malaa	Females	Maleg	Females	Males	Females	Males	Kamalan	
140.		110108	r omates	maios	T CILLAICS	110105	remates	1119168	Females	
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	
5.2	Construction and maintenance—Roads, bridges and other transport works	ž	ś.,	638	;	145	••	76	•••	
5.3	Construction and maintenance—Telegraph and telephone lines.	•	• ••	49		15 .	••	62	••	
5.4	Construction and maintenance operations— irrigation and other agricultural works.	18	28	298	188	73	56	122	66	
5.5	Works and services—Electric power and gas supply.	. •	••	13	•••	25	••	28	••	
5.51	Electric supply	• •	••	13		25	••	28	••	
5.6	Works and Services—Domestic and indus-	• •	••	24	4 7	20	••	4	2	
- 5-7	rial water-supply. Sanitary works and services—Including scavengers.	3	5 27	680	3 855	217	46	239	156	
Division	6. Commerce	2,576	391	22,086	8,665	5,434	908	3,536	1,151	
6.0	Retail trade otherwise unclassified	754	192	8,418	3,661	1,951	218	1,327	198	
	Hawkers and street venders otherwise un- classified.	3		312		34	5	25	27	
6.02	Dealers in drugs and other chemical stores		••	135		18	••	44	••	
6.03	Publishers, booksellers and stationers			399		102		357	28	
6∙00	General storekeepers, shopkeepers and persons employed in shops otherwise unclassified.	723	150	7,572	3,494	1,797	213	901	143	
6.1	Retail trade in foodstuffs (including beverages and narcotics).	548	8 91	8,404	2,556	1,247	235	1,069	544	
6·11	Retail dealers in grain and pulses; sweet- meats, sugar and spices, dairy products, eggs and poultry; animals for food; fodder for animals; other foodstuffs,	468	82	6,553	3 2,102	1,015	199	723	505	
6.12	vegetables and fruits. Venders of wine, liquors, aerated water and ice in shops.	••	••	316	8	50	••	109	4	
6·13 6·14	Retail dealers in tobacco, opium and ganja Hawkers and street-venders of drink and		··· 4	175 344		80	3	24 3	1	
6.15	foodstuffs. Retail dealers in pan, bidis and cigarettes	67		1,016		102 1,257	33 447	210 65	34 194	
6·2 6·21	Retail trade in fuel (including petrol)	690	108	2,836 14		1,207		1		
6·20	Retail dealers (including hawkers and street-venders) in fire wood charcoal, coal, cow dung and all other fuel except petroleum.	690	108	· 2,822		1,246	447	64	194	
6.3	Retail trade in textile and leather goods Retail trade (including hawkers and street- venders) in piece goods, wool, cotton, silk, hair, wearing apparel, made-up textile goods, skin, leather, furs, fea- thers, etc.	215.	••	95 5	i 118	<i>559</i>	2	192	12	
6.4	Wholesale trade in foodstuffs Wholesa'e dealers in grains and pulses, sweetmeats, sugar and spices dairy products, eggs and poultry animal for food, fodder for animals, other food- stuffs, wholesale dealer in tobacco,	118		408	3 36	122	•• '	120	119	
6.5	opium and ganja. Wholesale trade in commodities other than	244	· ••	. 868	3 52	236	6	727	84	
6.6	foodstuffs Real Estate House and estate agents and yout college			נ	1	7		2		
6.7	House and estate agents and rent collec- tors except agricultural land. Insurance	**	••			•		-	<u>.</u>	
1	Insurance carriers and all kinds of insurance agents and other persons con- nected with insurance business,	1	••	. 25	1	. •• .	••	••	• •	

DISTRICT INDICES OF NON-AGRL. OCCUPATIONS

Keo	njhar	Phu	lbani	Bola	ngir	Sunda	rgarh	Kalah	andi	Mayurbhanj		Group Code
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(30)	(31)	(32)	, (33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(1)
51	••	114	4 8	288	32	219	27	232	••	216	37	5.2
14	••	13	••	36	••	11	••	52	••	43		5.3
96	85	56	73	72	38	34	51	85	110	43	58	5.4
6	• ••	3	•••	18	••	27	••	7	••	10	••	5.5
6 3	6	3	••	18 6		27 10		7 13		10 <i>15</i>	·· 4	5•51 <i>5</i> •6
53	12	45	161	116	110	40	56	176	98	119	43	5.7
1,443	337	4,362	899	3,826	1,418	1,943	498	3,639	1,442	2,993	687	Divn. 6
617 337	<i>131</i> 120	1,236 43	250 58	1,137 662	<i>498</i> 316	868 38	113 44	1,401 117	<i>519</i> 69	1,275 . 69	<i>330</i> 91	6∙0 6∙01
105 104 71	5 6	8 38 1,147	12 180	29 446	17 165	14 114 702	11 58	23 108 1,153	2 448	. 26 113 1,045	 261	6•02 6•03 6•00
501	145	2,356	602	1,434	728	823	247	1,593	664	995	251	6.1
395	129	1,570	464	1,276	678	594	167	808	388	510	187	6·11
								•			на. • ц	
. 14	••	23	••	7	••	17	-	64	3	15	6	6.12
21	7	120 415	125	14 	••	48 . 8	4 2	19 ••	2	29 53		6·13 6·14
71 73	9 61	228 <i>102</i>	13 46	137 80	50 47	156 23	38 15	702 85	271 95	388 · 73	50 10	6·15 6·2 6·21
73	61	102	46	7 73	47	23	15	24 61	5 90	31 42	10	6-21 6-20
`							- · ·					
166	••	281	1	262	28	127	5	281	37	260	21	6.3
							. t		 	•		
	•											
. 43	••	179	••	21	27	18	. 46	100	91	160	84	. 6• 4
					. ·						Ň	•
33	•	205	••	746	83	81	32	103	25	172	26	6.5
•	• 1 -	••	••	1	••	2	••	. 19	0 10	ť	5 9	6.6
· · ••	/-	••	••	••	. ••		•••)) 		• •	6-7
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Group		• (RISSA	• '	Orissa i	3.33 Inland I	Division	Orissa	5-11 Coastal I	Divisio n
Code Numbe		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	· (11) ·
6.8	Moneylending, banking and other financial business.	4,168	3,751	417	574	457	117	3,594	3,294	300
	Officers, employees of joint stock banks and co-operative banks, munims, agents or employees of indigenous banking firms, individual money londers, ex- changers and exchange agents, money changers and brokers and their agents.		•	•		••	•	-	•	• •
Dive 7	. Transport, Storage and Communications	05 000	04 E00 '	* 4 200	0.410	0.007	070	40 400 ·	·	
7·0 7·1	Transport and communications otherwise unclassified and incidental services. Transport by road	25,900 912	24,508 864	1,392 48	9,410 643	9,037 621	373 22	16,490 269	15,471 243	1,019 <i>26</i>
	Owners, managers and employees con- nected with mechanically driven and other vehicles (excluding domestic	8,851	8,420	431	3,052	2,974	78	5,799	5,446	35 3
	servant) palki, etc., bearers and owners, pack elephant, camel, mule, ass and				:	,		۰		
· · ·	bullock owners and drivers, porters and messengers, persons engaged in road transport not otherwise classified includ-					·.				
	ing freight transport by road, the opera- tion of fixed facilities for road transport such as toll roads, highway bridges, terminals and parking facilities.	•			•					
7.2	Transport by water Owners and employees, officers, mariners, etc., of ship plying on the high seas,	2,590	2,438	, 152	659	621	38	1,931	1,817	114
. i	ships and boats plying on inland and coastal waters, persons employed in harbours, docks, rivers and canals, including pilots, ship brokers.									
7.3	Transport by Air Persons concerned with air fields. and aircrefts other than construction of airfields and air ports.	. 39	39		5	. 5	••	34 <u></u>	34	••
7-4	Railway transport Railway employees of all kinds exceept those employed in manufacture, assembly or repair of railway equip-	9,948	9,338	610	3,426	3,279	147	6,522	6,059	463
	ment and those employed on construc- tion works.	- 			0.00	0.000			9 00F	454
	Railway employees of all kinds except those employed on construction work.	6,861	6,261	600	2,412	2,266	146	4,449	3,995	454 9
7·42 7·5	Railway porters	3,163`	3,153	10	1,090	1,089	1	2,073 <i>28</i> ,4	2,064 <i>228</i>	56
	The operation of storage facilities such as warehouse, cold storage, safe depo- sits when such storage is offered as an independent service.	848	704	144	90 4	476	: 88	20 <u></u> ±	220	
	Postal services	2,332 73	2,330 73	2	884 18	884 18	••	1,448 55	1,446 55	2
7.8	Telephone Services	151	146	5.	71	. 71	••	80	75	5
7.9	Wireless Services	156	156	•••	. 88	88		68 05 05 7	68 21 701	••• 2 566
Division 8	B. Health, Education and Public Adminis- tration	59,909	55,458	4,451	24,552	23,667	885	35,357	31,791	3,566
8·1 8·11	Medical and other health services Registered medical practitioners	6,957 1,421 -	<i>5,864</i> 1,418	1,093 3	2,649 · 655	2,343 · 654	306 1	4, 308 766	3,521 764	787 2
8.12	Vaids, Hakims and other persons practising medicine without being registered.	1,958	1,953	5	836	836		1,122	1,117	5
	Dentists	10 389	• 10	389	· 4 · 140	•• 4	140	6 249	6	249
8 1 5	Vaccinators	220	220	••	94	94	· • •	126	126	••
	Compounders	1,160 555	1,160 24	531	· 368 124	· 368 9	115	792 431	792 15	 4
	Veterinary Services	76	76	••	36	36		40	40	••

Cuttack		Bala	Balasore		ari -	Saml	alpur	Gar	Group	
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Code Number
(12)	(13)	(14)	(15)	(16)	· (17)	(18)	(19)	(20)	(21)	(1)
2,946	254	30	18	147	10	102	63	177	18	6.8
	• .	ı			;	1				
							·			
			•			• •				
6,110 <i>62</i>	526 26	2,183	192	4,003 174•	119	2,550 1	94 5	3,189 7	182	Dn. 7 7.0
2,184	111	<i>N 9 4</i>	07	·		1 011	111			
Z,_04	111.	734	97	1,11 7	• 63 -	1,011	17	1,411	62	7.1
						1				
1,344	113	96 ·	5 9	203	1	125	5 .	174	_	7.2
					-	, .			·	
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25	••	••*	918	4	* fere	5	· · ·	5	-	7-3
								•	·	
1,408	270	1,233	95	2,370	· 84	1,126	60	1,048	64	7.4
						•			·.	
708	270							007		
700	210	745	95	1,737	34	549	60	805	55	7.41
	•••	488	••	633	****	• 577	` • ••	243	9	7.42
15	••	4	••	-7	•.•	119	7	207	56	7.5
1000						•				
960 36	2	93 · - 5 ·	 	95 7	••	· 119 4		· 307 7	••	7·6 7·7
48 28	4	8 10	••	13 13	1	16 14	· • •	6 17	••	7·8 7·9
14,412	2,185	4,635	353	6,341	492	7,578	287	6,830	554	Dn. 8
1,840	433	288								
256 571	••	112	52	643 113	124	569 150	67 ••	783 290	_ 183 2	<i>8·1</i> 8·11
.4	••	89	••	140	••	119	•.•	343	5	8·12
*	102		30	1	-25	••	23	· · ·	97	8·13 8·14
20 514		26 41	••	16 152	55	9 83	••	64 85	••	8·15 8·16
8 23	261	6 3	21	132	55		22	1	79	8.17
#U	•••	3	••	14	•••	10	••	••	••	8·18

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APPENDIX III

Group	· · ·	Age	mcy	Pla	ins	Kor	aput	Dhenk	8nal
Code Number	Occupation ~	Males	Females	Males	Females	Males	Females	Males 1	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
6-8	Moneylending, banking and other financial business.								
•	Officers, cmployees of joint stock banks and co-operative banks, munims, agents or employees of indigenous banking firms, individual moneylenders, ex- changers and exchange agents, money changers and brokers and their agents.	6	••	171	18	55	••	34	••
Divn. 7.	Transport, Storage and Communications	-14	••	3,175	182	875	27	1,304	24
7·0 7·1	Transport and communications otherwise unclassified and incidental services. Transport by road	••	••	7	••	••	••	6	••
	Owners, managers and employees connected with mechanically driven and other vehicles (excluding domestic servant) palki, etc., bearers and owners, pack elephant, camel, mule, ass and bullock owners and drivers, portars and messen- gers, persons angaged in road transport not otherwise classified, including freight transport by road, the operation of fixed facilities for road transport such as toll roads, highway bridges, terminals and parking facilities.		••	1,411	6 2 '	350	3	351	8
7-2	Transport by water Owners and employees, officers, mariners, etc., of ship plying on the high seas, ships and boats plying on inland and coastal waters, persons employed in harbours, docks, rivers and canals, including pilots, ship brokers. Transport by Air	••	••	174	.	20	2	113	2
	Persons concerned with air fields and aircrafts other than construction of airfields and air ports.	••	••	5	. •• ,	. •	• ,. ••	••	••
7·4	Railway transport Railway employees of all kinds except those employed in manufacture, assembly or repair of railway equip- ment and those employed on constru- ction works.	••	•	1,048	64	215	5	596	2
7-41	Railway employees of all kinds except those employed on construction work.	••	•*	805	55	21	5	263	1
7-42 7-5	Railway portors	8.9	••	243	9	•	• ••	333	1
	The operation of storage facilities such as warehouses, cold storage, safe deposits when such storage is offered as an inde- pendent service,	5	••	202	56	14	8 22	68	12
•7.6	Postal services	. 9	••	298	••	13	4	151	
7.9 7.9	Telegraph Services	••	••	.7	••		3	<i>2</i> 8	
7·8 7·9	Telephone Services	••	••	17	••	•	8	· 9	
	. Health, Education and Public Adminis-	427	17	6,403	537	3,11	7 57	4,141	126
8-1	tration ' Medical and other health services	33	5	750	178	52		282	
<i>8.11</i>	Registered medical practitioners	7	••	283	25	7 34	8	93 38	
8·12 8·13	Vaids, Hakims and other persons practising medicines without being registered. Dentists	.26	••	317	5	34	·	30	· ••
8·14		••	5	••	92	•	. 27	••	21
8.15	Vaccinators			64	• ••	. 4	6	25	
8.16	Compounders	••	••	85	79		4 ··· . 1	61	31
8·17 8·18	Nurses	••	••	1			δ	7	
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	veterinary services	••	••	••	••				

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DISTRICT INDICES OF NON-AGEL. OCCUPATIONS

	Kee	njhar	Phu	lbani	Bola	ngir	Sunda	rgarh	Kala	handi	Mayu	rbhanj	Group
•	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Code Number
	(30)	(31)	(32)	(33)	34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(1)
	-0		0		145	 N	1	40	48		50		
	10	619	3	. **	140	7	1	40	40	1	53	6,	6.8
					•				• •		÷.,		
				•					÷) ¹			
	247	7	272	20	1,585	58	954	28 12	421	20	815	. 95	Dn. 7
	8	••	1	••	••	••	429	12	33	5	143	••	7.0
-	116		50	11	480	7	333	. 5	106	2	• 177	. 25	7.1
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	4	· 	82	C	245	28	17	7		ан —			N. 0
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	. 		••	••			••	••	••••			••	7.3
						×	•			1.1	•		
	••	878	e 20	1120 ·	709	17	. 41	••	178	2	414	.66	7.4
					•					•	•		
					· .			••					-
	••	818	••	618	709	17	27		178		325	66	7•41
	••	••	· • •	••	••	••	14	••	20) 	14	i	7.42
	26	7	48	9	13	6	18	10	25	5 - E 11	· . · (3 · 4	7.5
								•			·		
	72 1	••	84 1	••	113 2	••	97 3 8	••	55	••	53 1		7-6 7-7
	13 7	•••	 6	••	10 13	• •	. 8	••	7	′ 			7.8
	757	28	828	51	1,792.	90	1,456	72	1,273		2,298		
	133	16	80	17	232	39	92	27	168	1			
	39	818- 818	30 33	••	41 88.	••	33 14	••	50 50 84	••	83	1	
	` 	••	500 500			••		••	1		59	•	
	84	7	7	·	7	24	ï	6	••	3	3	7	8·13 8·14
	. <u>4</u>	9	10 	`•• ••	41.	 15	25	•••••	16 12		15	•••	8·15 8·16
	-	· ••	••	••	5	10	2	•• •	4		5 7	18	8·17 8·18

Group	Granation	(ORISSA		Orise	3.3 sa Inland		5·11 Orissa Coastal Division		
Code No.	Occupation (2)	Persons (3)		Females	Person (6)	s Males (7)	Females (8)			
(1) 8·10	All other persons employed in hospitals or other public or private establishments rendering medical or other health services; but not including scavengers or	1,168	1,003	165	392	342	(°) '50	(9) 776	(10) 66Ì	(11)
8-2 8-21	other sanitary staff. Educational Services and Research Professors, lecturers, teachers and research workers employed in universities, colleges	14,3 78 539	<i>12,554</i> 516	1,824 23	<i>5,340</i> 81	<i>5,028</i> 81	312	9,038 458	7,526 435	1, 51 2 23
8·22 8·20	and Research Institutions. All other professors, lecturers and teachers Managers, clerks and servants of educa- tional and research institutions, including libraries and museums, etc.	12,911 928	11,198 840	1,713 88	4,691 568	4,4 28 519	263 49	8,220 360	6,770 321	1,450 39
8• 4 8•5	Police (other than village watchmen) Village Officers and servants, including village watchmen.	10,057 8,157	10,057 7,907	250	6,003 4,037	6,003 3,989	 48	4,054 4,120	4,054 3,918	202
8.6	Employees of municipalities and local bodies (but not including persons classifiable under any other division or subdivision).	2,579	1,680	89 9	660	503	157	1,919	1,177	742
8.7	Employees of State Governments (but not including persons classifiable under any other division or subdivision).	14,165	13,832	333	3,699	3,677	22	10,466	10,155	311
8.8	Employees of the Union Governments (but not including persons classifiable under any other division or subdivision).	3,616	3,564	52	2,164	2,124	4 0	1,452	1,440	12
Division 9.0	9. Services not elsewhere specified Services otherwise unclassified (Palmists, astrologers, zamindar's rent collection staff,	208,047		83,459 57,191		133,498 <i>86,025</i>	34,982 24,665	188,238 97,357	139,761 <i>64,831</i>	48,477 32,526
9-1	home guards, etc. fall under this subdivision Domestic services (but not including services rendered by members of family households to one another).	77,632	59,768	17,864	33,782	25,902	7,880	43, 850	33,866	9,984
9.11 9.12 9.13 9.10 <i>9.2</i>	Private motor drivers and cleaners Cooks	1,133 15,279 1,841 59,379 <i>13,639</i>	1,133 12,771 1,404 44,460 <i>12,797</i>	2,508 437 14,919 <i>842</i>	678 2,927 1,059 29,118 <i>5,613</i>	678 2,325 679 22,220 <i>5,425</i>	602 380 6,898 <i>188</i>	455 12,352 782 30,261 <i>8,026</i>	455 10,446 725 22,240 • 7,372	1,906 57 • 8,021 654
9.3	Laundries and laundry services Laundries and laundry services, washing and cleaning.	21,639	15,280	6,359	9,041	6,898	2,143	12,598	8, 382	4,216
9• 4 9•5	Hotels, restaurants and eating houses Recreation Services	3,351	3,027	324	1,078	1,057	21	2,273	1,970	303
	Production and distribution of motion pictures and the operation of cinemas and allied services, managers and employees of theatres, opera compa- nies, etc. musicians, actors, dancers, etc., conjurers, acrobats, wrestlers, pahalwans, recitors, exhibitors of curiceities and wild animals, radio broadcasting studios.	8,391	2,517	874	1,018	933	.85 ••	2,373 .	1,58 4	789
9·6 9·61	Legal and business services	13,408 4,427	13,405 4,427	3	3,380 97 1	3,380 974	••	10,028 3,453	10,025 3,453	3
9·62 9.63	Clerks of lawyers, petition writers, etc	6,969 1,310	6,966 1,310	3	1,786 200	1,786 200	••	5,183 1,110	5,180 1,110	3
9 ∙64	Public Scribes, Stenographers, Account- ants, Auditors	298	298	••	198	198 	••	100	100	-
9.65	Managers, clerks, servants and employees of Trade Associations, Chamber of Commerce, Board of Trade, Labour Organisation and similar organisation	404 	404	-	222	222 	•• - •	182-	182 `•	••••
	Arts, letters and journalism	<i>1,723</i> 1,575 68	1,723 1,575 68	•••	240 221 12	240 221 12	••	1,483 · 1,354 56 -	1,354 +	- -

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Cut	tack	Bal	880 re]	Puri	Sam	balpur	Gan	ijam	Grouj Code
Males (12)	Females (13)	Males (14)	Females (15)	Males (16)	Females (17)	Males (18)	Females (19)	Males (20)	Females (21)	
444	70	10	1	207	44	198	22	••	••	8.10
2,354	1,039	1,251	75	2,285	230	1,101	. 76	1,785	172	8·2
320	20	62	••	23	••	45	• •	30	3	8 ∙21
1,862 172	982 37	1,128 61	73 2	21 83	230	1,029 27	76 ••	1,750 5	169	8·22 8·20
2,051 1,563	199	212 245		752 1,006	••	1,262 935	••	1,078 1,210	••	8•4 8•5
270	388	201	32	299	138	145	93	427	192	8.6
5,851	114	1,621	190	1,267	••	1,587	11	1,493	1 7	8.7
483	11	817	.1	. 89	••	1,979	40	54	••	8.8
60,668 27,312	19,058 <i>15,077</i>	13,884 8,024	4,603 2,902 y	23,728 - 7,189	3,344 908	26,600 20,094	8,252 6,918	44,132 23,875	22,865 14,646	Divn. ! . 9·0
15,105	1,867	3,010	1,321	6,916	1,423	2,671	624	9,312	5,631	9·1
194 6,237	878	113 290	•• 45	82 3,421	••	204 • 263		68 599	1,078	9·11 9·12
345 8,329	989	72	25	230	32	48	••	85		9.13
2,385	989 145	2,535 <i>539</i>	1,251 73	3,183 2,073	1,391 <i>436</i>	2,156 979	615 <i>32</i>	8,560 <i>2,494</i>	4,553	9:10 <i>9:2</i>
3,338	1,049	558	273	2,158	523	1,235	613	2,457	2,496	9.3
822	275	247	6	288	22	312	8	644		9·4
1,107	645	140	23	242	32	366	67	101	92	9•5
					· .				•	
7 ,782 3,095	• • • • •	360 73	. 3	<i>543</i> 126	••	<i>360</i> 90		<i>1,425</i> 181	••	9.6 0.61
4,465 93	••	260 18	3.	330 87	••	154 49	••	167 927	••	9·62 9·63
83	••	••	••	••	••			23		9·64
[,] 46	••	9	• ••	 		67		127	••	9·65
· 922	-	~						м. м.		
· 855	, ••	7 1	· •	<i>482</i> 459	••	10 10	••	74 30	••	9·7 9·71
- 21	•• *•	6	• • • •	22				7	•••	9.72

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APPENDIX III

Group		Age	ncy	Pl	ains	Ko	aput	Dhenl	anal
Code No. (1)	Occupation (2)	Males (22)	Females (23)	Malee (24)	Female (25)	s Males (26)	Females (27)	Males (28)	Females (29)
8·10	All other persons employed in hospitals or other public or private establishments rendering medical or other health services; but not including scavengers or	••	••	••	••	••	••	58	4
8•2 8•21	other santary stall. Educational Services and Research Professors, lecturers, teachers and research workers employed in universities, colleges and Research Institutions.	149	4 	1,636 30	168 3	700	29	929 ••	23
8-22 8-20	All other professors, lecturers and teachers Managers, clerks and servants of educa-	149	4	1,601 5	165	700	29	905 24	23
8· 4	tional and research institutions, including libraries and museums, etc. Polics (other than village watchmen)	39		1,039		616	•••	1,276	
8.5	Village Officers and servants, including village watchmen.	106		1,104	••	90 0	••	821	4
8.6	Employees of municipalities and local bodies (but not including persons classifiable under any other division or subdivision).	20	8	407	18 4	64	••	101	32
8-7	Employees of State Governments (but not including persons classifiable under any other division or subdivision).	77	••	1,416	7	287	••	728	11
8.8	Employees of the Union Governments (but not including persons classifiable under	3	••	51	• •	24	••	4	••
	any other division or subdivision). 9. Services not elsewhere specified Services otherwise unclassified (Palmists, astronogers, zamindar's rent collection staff, home guards, etc., fall under this	2,651 1,569		41,481 22,306 \		32,446 11,389	3,526 <i>1,011</i>	9,986 7,206	1,811 <i>1,280</i>
9 •1	subdivision). Domestic services (but not including services rendered by members of family households	477	2 58	8,835	5,373	15,528	2,109	766	245
9.11 9.12	Cooks	2 101	95	66 498	983	20 668	50	66 95	-
9.13 9.10 <i>9.2</i>		7 367 119	163	78 8,193 2,375	4,390	13 14,827 <i>1,210</i>	2,059	13 592 586	245 9
9.3	Barbers, hair dressers and wig makers, tatooers, shampoors, both houses. Laundries and laundry services								
~ ~	Laundries and lanndry services, washing and cleaning.	129	125	2,328	2,371	1,672 389	402 3	918 10	273 1
9• <u>4</u> 9•5	Hotels, restaurants and eating houses Recreation Services Production and distribution of motion	31 6	•• 3	613 95	•• 89	389 250	э 1	10 45	3
	pictnres and the operation of cinemas and allied services, managers, and employees of theatres, apera companies, etc., musicians, actors, dancers, etc., conjurers, acrobats, wrestlers, pahal- wans, recitors, exhibitors of curiosities and wild animals, radio broadcasting studios.	-	•						. •
9·6 9·61	y and a second damp and	85	••	1,340		619	610	96 PM 22	-
9·62 9.63	agents and mukhtiars. Clerks of lawyers, petition writers, etc Architects, Surveyers, Engineers and their employees (not being State servants).	22 42 15	••	159 125 912	••	116 158 73	••	39 13	-
	Public Scribes, Stenographers, Account- ants, Auditors,	6	••	17	••	163	••	••	-
	Managers, clorks, servants and employees of Trade Associations, Chamber of Commerce, Board of Trade, Labour Organisation and similar organisation of employers and employees.	••		127	••	109	••		-
9·7 9·71	Arts, letters and journalism	8	••	7 <i>2</i> 39	••	2 1		37 34	=
9.72	Authors, editors and journalists.		-	7	-	ĩ	-	-	

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DISTRICT INDICES OF NON-AGRL. OCCUPATIONS

Keon	jhar		Phulbani	Bo	langír	Sunda	garh	Kalah	andi	Mayur	bhanj	Group Code
Males (30)	Females (31)	Males (32)	Females (33)	Males (34)	Females (35)	Males (36)	Females (37)	Males (38)	Females (39)	Males (40)	Females (41)	(1)
••	••	••	••	••	••	17	16	51	8	18	••	8.10
251	12 	203	34	<i>589</i> 18	40	249	25	238 1	24 	<i>619</i> 17	4 5 ••	<i>8·2</i> 8·21
180 71	9 3 ·	203	34 • • •	399 172	20 20	240 9	25	98 139	16 8	525 77	27 18	8·22 8·20
131 109	••	223 214	••	368 328	3	693 188	16	444 144	 13	951 244	 12	8• 4 8•5
36	••	26	••	35	8	26	4	29	5	21	7	8 ·6
90	••	77		215	••	196		209	••	2 11	••	8.7
7	••	5	••	25	••	12	••	41	•••	24	••	8.8
8,199 2,948	1,589 <i>1,048</i>	8,936 7,135	2,153 1,879	13,877 9,618	5,014 2,841	7,664 6,105	1,911 <i>1,657</i>	14,177 12,225	4,787 <i>3,510</i>	10,962 7,7 <i>36</i>	4,546 D 3,514	ivn. 9 <i>9</i> ·0
1,051	426	570	159	609	1,922	752	164	1,350	1,142	2,128	831	9·1
22 151 152 726 1,199	42 52 332 3	10 92 10 458 208	91 68 6	16 127 96 370 500	93 202 1,627 <i>1</i> 7	20 265 52 415 <i>150</i>	164 7	146 150 232 822 <i>169</i>	210 95 837 <i>61</i>	172 413 56 1,487 <i>305</i>	12 31 788 53	9·11 9·12 9·13 9·10 <i>9</i> ·2
709	110	708	106	724	· 229	229	77	203	72	377	136	9.3
8	2	83	2	52	2	77	••	· 42	••	53	3	9· 4
16	••	24	1	- 37	3	113	6	30	2	46 、	9 .	9.5
						•••						
<i>53</i> 23	•••	<i>49</i> 33	••	<i>1,906</i> 608	••		••	<i>31</i> 10	••	110 30	••	9·6 9·61
24 2 4	••	15 `i	••	1,233 43 22	••	26 1	••	15 4 2	•••	· 80	••	9·62 9·63 9·64
••	••	••	••	••	••	24	••	••	••	••		9·65
18 16 2	•• •• ••	7 - 4 3	•••	121 116 5	••	<i>3</i> 3	••	23 23 ••	••	17 14 1	••	9•7 9·71 9·72

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APPENDIX III

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Group	、		ORISS	A	Orissa I	3.33 Inland D	ivision	Orissa C	5.11	wision
Code Occupations	L									NEION
Number		Persons	Males .	Females	Persons	Males	Females	Persons	Males	Female
(1) (2)		(3)	(4)	(5)	(6)	(7)	(8)		(10)	(11)
		80	80	••	. 7	7	1	73	73	• (
engravers. 9.8 Religious, Charitable and I 9.81 Priests, Ministers, monks, Religious mendicants and workers.	Nuns, Sadhus,	<i>13,888</i> 12,187	<i>13,886</i> 12,185	2 2		3,638 3,057		<i>10,250</i> 9,130	<i>10,248</i> 9,128	. 2
9.82 Servants in religious edific burning grounds, pilgr and circumcisors, etc.		1,411	1,411	••	318	- 318	• •• _ •	1,093	1,093	• •
9.83 Managers and employees of and institutions render and other welfare service	ing charitable	290	290	;	263	263	3 . ••	. 27	27	••
Unproductive occupati Persons living principally on inco agricultural property.		39,600 2,495	26,046 1,985	13,55 4 510					1,696	409
Pensions Remittances Scholarships	·· ··	986 3,890 116	864 3,472 94	122 418 22	393 2		3 157	845 3,497 116	738 3,236 94	261 22
Other funds	· · · · · · · · · · · · · · · · · · ·	10 3,682 737	7 3,607 442	2 75 295	5 1,969			209	7 1,676 129	37 80
Alm houses	v on income	1 9,480 18,049 154			5 7,393	4,45	7 2,936	10,656	1 1,689 6,567	2,230 4,089
derived from non-productive activ and prostitutes. Group		A	gency		Plain	5	Ka	raput	Dhe	nkanal
Code Occupation		Males	Fema	les	Males	Females	s Males	Fem ales	Males	Female
(1) (2)		(22)) (2	3)	(24)	(25)	(26)	(27)	(28)	(29
9.73 Photographers employees Press other than au journalists, lithographer	thors, editors,	. 2		••	26	••	••	••	1 3	•
9.8 Religious, Charitable and .9.81 Priests, Ministers, Monks, Religious Mendicants and workers.	Welfare Šervices Nuns, Sadhus,	233 233			3,517 3,362	••	1,387 925		<i>328</i> 315	
9.82 Servants in religious ediff burning grounds, pilgr and circumcisors, etc.	ces, burial and im conductors	••		• •	155	••	216	••	••	•
9.83 Managers and employees o and institutions rende and other welfare service	ring charitable	••		••	••	••	246	••	13	•
Unproductive occupation Persons living principally on income agricultural property	s ne from non-	62 ••		53	2,857	1,176 17	1,250 52	379 4	851 26	5 4
		24		20	18 104 	2 91 	7	••	7 50	6
Pensions Remittances	•• ••									
Pensions Remittances Scholarships Other funds Jails	··· ·· ·· ··	•••		••	631		406		183	3 -
Pensions Remittances Scholarships Other funds	••••••	••	.		••	••	••		••	i

DISTRICT INDICES OF NON-AGRL. OCCUPATIONS

Cu	ttack	Ba	lasore	P	uri	· Samb	alpur	Gan	jam	Group Code
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
46	•••	••	••	1	••*	••	•••	28		9.73
1,895 1,644	•••	<i>999</i> 992	2 2	<i>3,837</i> 3,130	••	573 573	••	3,750 3,595	••	<i>9·8</i> 9·81
237	••		••	701	••	• • *	••	155	•••	9.82
14	••,	7	••	6	••	••	••	••	••	9.83
7,181 1,048	2,909 295	3,154 648	1,520 97	2,641	1,767	1,540 47	613 34	2,919	1,229 17	
545 2,507	67 118	98 128	15 21	77 497	23 31	93 96	¹² 17	18 128	2 111	· .
94 568 57	22 15 28	218 17	 7 25	7 259 30	 3 7 11	363 47	9 33	631 25	8 16	•
236 2,126	887 1,461 16	867 1,178	728 604 23	586 1,185	615 1,016 61	120 774	508	1 2,116	1,041 3 4	

Keonj	har	' Phulk	ani	Bolar	ngir	Sundar	garh	Kalah	andi	Mayur	bhanj	Group Code
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males		
(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(1)
••	••	••	••	•••	••	• ••	••	• ••	••	. 2	••	9.73
<i>197</i> 189	• •	<i>152</i> 107	••	<i>310</i> 310	•••	<i>164</i> 164	••	10 4 89	••	<i>190</i> 152	••	9.8 9.81
8		43		••	••	•4	••	15	••	36	••	9.82
••		••	••	••	. ,	•.•	••	••	••	••	• •	9·8 3
541	300	225 • •	87 	942 ` 84	604 32	756 17	321 12	574 37	240	3,472 26	3,126 14	
i7 	20	3 19	 13	 15 	25	6	••	11 4 	••	5 5	2	
99 21	1 9	83 25	 17	169 65	11 25	135 20	4 22	152 63	1 52	341 . 37	10 18	
37 367	270	••• 95	 57	609	 511	 578	283	307	187	2,704 374	2,700 362 20	
••	••	••	••	••	••	•	••	••	••	••	24	,

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APPENDIX IV

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List of Registered Factories in Orissa

District	Centre of location		Total number of Factories	Type of Factories		Number
(1)	(2)		(3)	(4)		(5)
CUTTACK (59 Factories)	1. Banki	••	1	Lime	••	1
(2. Barang	••	2	Glass Ceramics	••	1
	3. Cuttack	••	45	Rice Milling	••	× 1 2
				Biscuit	••	2
				Ply-Wood	••	1
				Iron and Steel General Engineering	••	1
				Lime	••	3 1
				Bidi	••	3
	•			Tobacco		3 1
	•			Saw Milling		8
		•		Bobbin	••	1
			`	Printing	• •	14
	•		5	Dyeing	••	1
				Automobiles B. N. B. Wesh here	••	2
,				BN. R. Workshop Spraw Pointing	••	1 1
•	•			Spray Painting Hume Pipe	••	1
				Ice	••	2
	4. Jagatsingpur	••	1	Textile	•••	ĩ
	5. Kendrapara	••	6	Bidi	••	6
	6. Chaudwar	••	1	Textile	••	1
· .	7. Вугее	••	1	Rice Milling		1
•	8. Baitarani Road		1	Rice Milling	••	1
	9. Narsingpur	••	1	Bidi	••	1
BALASORE	1. Bhadrak		3	Rice Milling	••	2
(48 Factories)				Oil Crushing	• •	1
-	2. Chandbali		5	Rice Milling	••	5 '
	3. Markona		2	Rice Milling	••	2
	4. Soro	••	3 .	Rice Milling Iron and Steel	••	2 1
	5. Bahanaga		3	Rice Milling	••	3
	6. Khantapara	••	3	Rice Milling		3
	7. Balasore		11	Rice Milling	••	6
	-			General Engineering	••	1
				Saw Milling	••	1
				Printing	• •	1
				Electricity	••	1
•	9 Dunas		2	Arms and Ammunitions	••	1 5 6 5
•	8. Rupsa 9. Basta	••	5 6	Rice Milling Rice Milling	••	C, A
	10. Jaleswar	••	6	Rice Milling	••	5
		••	U U	Hosiery	••	ĭ
,	11. Lakhannath Road	8.4	. 1	Rice Millng	••	Ī,

LIST OF REGISTERED FACTORIES

(1)						
(1).	(2)		(3)	(4)		(5)
PURI (20 Factories)	1. Puri	••	1	Electricity	••	1
(2. Sakhigopal		1	Rice Milling .	• •	1,
	3. Jatni		6	Wheat Flour	••	1
				Rice Milling	••	3
				Lime	••	1
				Bidi		1
	4. Balugaon	••	4	Rice Milling		1
		••	_	Saw Milling	•••	ī
				Ice		$\overline{2}$
	5. Kaluparaghat	••	1	Ice		ī
	6. Tangi		ī	Rice Milling		ī.
	7. Bhubaneswar		5	Saw Milling	••	5
	8. Khandpara	•••	ĩ	Printing		ĭ
		••	•	THUNG	••	-
·						_
SAMBALPUR	1. Sambalpur	••	99	Rice Milling	••	2
126 Factories)				Oil Crushing		2
				Weaving	••	1
				General Engineering		1
				Bidi	••	82
				Saw Milling	·	8
				Sisal Hemp	• •	2
				Dyeing and Bleaching	••	1
	2. Sason	••	10	Rice Milling	••	· · 1
				Bidi	• •	8
•				Dyeing and Bleaching	•••	1
	3. Jharsuguda	••	10 ·	Bidi	••	9
(- ·			Saw Milling		1
	4. Brajarajnagar	••	1	Paper	••	1.
	5. Bamra		4	Saw Milling		2
				Printing		1
				Woodware	••	1
	6. Bargarh	••	1	Rice Milling		1
	7. Burla	••	1	Automobiles '	••	1
GANJAM	1 Dambha		9	Diss Million		~
(28 Factories)	1. Ramtha	• •	3	Rice Milling Ice	••	2
(no raccortos)	2. Chatrapur		1	Oil Crushing	••	1
	3. Aska	••		Sugar	••	1
		• •	U	Distillery	••	
				Saw Milling	••	1
				Aurvedic Pharmacy	••	î
			`	Automobiles	••	i
	4. Berhampur			Rice Milling	••	5
	To Boundarbar	••		Distillery	••	ĭ
				Cil Crushing	••	î
		•		General Engineering	••	i
				Saw Milling	••	1 2
					••	1
				Hosiery Electricity	••	1
				Metal Works	• •	1
					• •	1
	5. Parlakimedi			Jewellery Workshop	••	
•	6. Russelkonda	••		Rice Milling	••	1 4
	ANTIATOODIA 1	•• •	4	Saw Milling	••	**

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APPENDIX IV

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	District	Centre of location		Total number of Factories	Type of Factories	÷.,	Number
	· (1)	(2)		(3)	. (4)		(5)
	KORAPUT	1. Gunupur	••	2	Rice Milling	••	1
	(31 Factories)	· · ·			Distillery		1
	•	2. Rayaghada		4	Sugar	••	1
		· · · ·	•		Distillery	••	1
		•			General Engineering	••	1
	• • •				Agar Factory	••	1
	, ,	3. Koraput		1	Rice Milling		1
	•	4. Jeypore	•	11	Rice Milling		· 8
					Distillery		ĭ
÷		•	•		Tile	••	1
					Automobiles	••	1
		5. Machkund	• •	2	General Engineering	••	1
		6. Boriguma		2	Electricity Biog Milling	**	1
		7. Kotpad		2 4	Rice Milling Rice Milling	•••	2 4
		8. Nowrangpur	• •	4	Rice Milling	•••	4
		9. Boipariguda		ī	Saw Milling	••	ī
		· · ·					
	DHENKANAL	1. Dhenkanal		т	Som Milling		
	(17 Factories)	2. Meramundali	• •	1 1	Saw Milling Saw Milling	••	1
		3. Angul	••	15	Bidi	••	13
		••••			Saw Milling		- 1
					Automobiles	• •	1
	· •	•			. •		
	KEONJHA R	1. Keonjhar		ì	Printing	••	1
	(1 Factory)	- 			_		
	PHULBANI	1. Baudh	••	1	Tanning	••	1
	(1 Factory)				3		
		• •					
	BOLANGIR	1 Title gamb		8	Rice Milling		1
	(11 Factories)	1. Titlagarh	• •	o	Tannery	••	1
	(11 1 00001105)				Weaving	••	i
					Tile	••	1
					Saw Milling	•••	1
					Printing	• ••	1
	• ·				B. N. R. Workshop	••	1
		9 Dolonain		2	Graphite Mining Bidi		2
		2. Bolangir 3. Kantabanji	••	1	Saw Milling	••	1 1 2 1
		o. Kataoanji				•••	_
	SUNDARGARH	1. Birmitrapur	••	3	Lime	••	1
	(8 Factories)			-	Lao	••	、2 1 2
		2. Homgir Road	•	. 1	Saw Milling	••	1 9
		3. Bisra 4. Jaraikella		2 1	Saw Milling Saw Milling	••	1
		5. Rajgangpur		· 1 /	Cement	••	i
	•			-			-

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LIST OF REGISTERED FACTORIES

District	Centre of location	Total number of Factories		Type of Factories	Number
(1)	. (2)		(3)	. (4)	(5)
KALAHANDI (10 Factories)	1. Khariar Road	••	7.	Rice Milling Soap Saw Milling Ice	··· 4 ·· 1 1
	2. Nawapara Road	••	2	Rice Milling Saw Milling	
	3. Kesinga	• •	1	Rice Milling	î
MAYURBHANJ (10 Factories)	1. Baisinga	••	1	Rice Milling	1
(10 1 0000100)	2. Betnoti		. 3	Rice Milling	3
	3. Baripada	••	3	Rice Milling Oil Crushing Textile	$\begin{array}{ccc} \bullet & 1 \\ \bullet & 1 \\ \bullet & 1 \end{array}$
-	4. Rairangpur	•••	2	Potteries Iron and Steel	
	5. Bahalda	••	1	Glass	. 1

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