

CENSUS OF INDIA, 1951

VOLUME XI

ORISSA

PART I—REPORT

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

CUTTACK
SUPERINTENDENT, ORISSA GOVERNMENT PRESS
1953

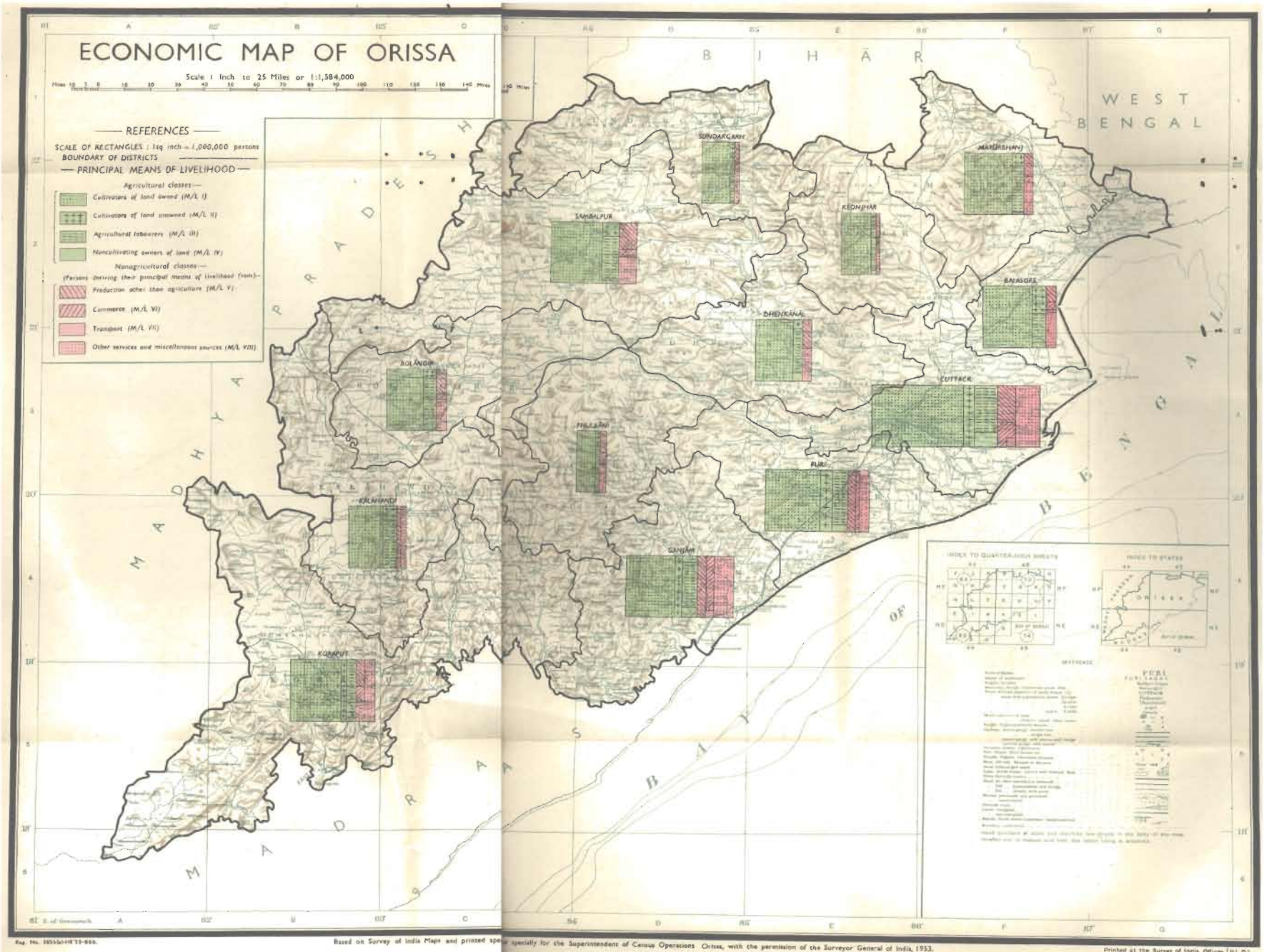
[*Price—Rs. 17*]

CENSUS OF INDIA, 1951

VOLUME XI

ORISSA

Part I—Report



Based on Survey of India Maps and printed specially for the Superintendent of Census Operations Orissa, with the permission of the Surveyor General of India, 1953.

Printed at the Survey of India Offices (H.L.O.)

TABLE OF CONTENTS

INTRODUCTION

		PAGE
I.	GENERAL DESCRIPTION OF THE STATE—Geographical Setting—Physical Configuration—Rivers—Cross-Section of Orissa	1—4
II.	BRIEF HISTORY OF THE LAND AND THE PEOPLE	4—6
III.	CHANGE IN AREA	7
IV.	POPULATION ZONES AND NATURAL DIVISIONS	7—9
V.	GEOLOGY AND MINERALS—Geological Outline—Mining : Early History—Slow Unmethodical Development—Mineral Resources—Orissa Inland Division—Orissa Coastal Division—Economic Minerals—Iron—Coal—Manganese—Bauxite—Chromite—Limestone—Mica—Glasss-and—Vanadium—Other Minerals	9—15
VI.	THE SOIL—Constituents—The Northern Plateau—The Eastern Ghats Region—The Central Tract—The Coastal Division—Soil Erosion	15—17
VII.	CLIMATE AND RAINFALL—Orissa Inland Division—Orissa Coastal Division—Rainfall Satatistics	17—20
VIII.	FORESTS—Area—Classification—Districtwise Distribution—Extent—Income and Forest Produce	21—23

CHAPTER I—General Population

SECTION I—Preliminary Remarks

Population—Comparison with Other States—Reference to Statistics—Non-census Data Inadequate and Erroneous—Indispensability of up-to-date Statistics .. .. 25—27

SECTION II—General Distribution and Density

Comparison with India—Comparison with other States—Comparison with other Countries—Average Density—Thinly Populated Areas—Thickly Populated Areas—Orissa Inland Division—Orissa Coastal Division—Disparity in Density between two Natural Divisions—Increase in Density—Distribution by Districts—Distribution by Police-stations .. 28—32

SECTION III—Growth of Population

Conditions in Pre-census Days—Earlier Estimates—First Decennial Census—Census of 1881—Decade 1881-91—Decade 1891-1901—Summary of Censuses 1872-1901—Territorial Adjustment since 1901—Decade 1901-11—Decade 1911-21—Decade 1921-31—Decade 1931-41—The Last Decade : Material Condition—Calamities—Public Health—Precarious Food Position—Price of Rice—Economic Crisis : Inflation—Post Office Remittances and Deposits—Increase in Railway Traffic—Summary of Material Condition—The Last Decade : Growth of Population—Mean Decennial Growth Rate—Growth during the last 50 years—Growth in Other States—Foreign Countries—Change in Trend since 1921—Growth in Natural Divisions .. .. 33—48

Growth of Population in Districts—Cuttack—Balasore—Puri—Sambalpur—Ganjam—Koraput—Dhenkanal—Keonjhar—Phulbani—Bolangir—Sundargarh—Kalahandi—Mayurbhanj .. .. 48—85

SECTION IV—Movement

PAGE

Earlier Accounts—Immobility of the Population—Home-born Proportion—Types of Migration, Casual, Temporary, Periodic, Semi-permanent, Permanent—Immigration—Immigration into Natural Divisions—Immigration into Districts—Internal Movement—Direction of Inward Movement—Displaced Persons—Emigration—Distribution of Emigrants—Decline in Emigration : Its Causes—Occupation of Emigrants ; West Bengal, Madhya Pradesh, Assam, Bihar, Madras—Direction of Outward Movement—Migration of Muslims—Net Migration—Variation in Natural Population .. .. 86—96

SECTION V—Natural Increase—Births and Deaths

Natural Increase—Defects in Registration System—Wrong basis of Calculation of Birth and Death Rates—Registration Area not Extensive—Omissions in Registration—Procedure of Registration of Vital Statistics—Deterioration in Vital Statistics since War-time—Absence of Estimates of Births and Deaths—Value of Vital Statistics—Birth Rates—Birth Rates of States in India—Cause of High Birth Rate—Decline in Birth Rate—Causes of Decline in Birth Rate—General Causes—Effects of Food Scarcity—Unfavourable Age Structure—Selective Incidence of Influenza Epidemic of 1918-19—Consequences of Industrialization—Influence of Decline in Infantile Mortality—Decline Partially Transitory in Character—Trend of Birth Rate in Natural Divisions—Death Rates—Indian Death Rate—Death Rates Compared—Annual Death Rate—High Death Rate : Fluctuations in Rate—Decline in Death Rate—Unsatisfactory Public Health—Toll of Life from Diseases—Fever—Diarrhoea and Dysentary—Cholera—Smallpox—Trend of Death Rate in Natural Divisions—Natural Increase—Extent of Registration Error .. .. 97—112

SECTION VI—Livelihood Pattern

Livelihood Categories and Classes—Agricultural Classes : Livelihood Class I, Livelihood Class II, Livelihood Class III, Livelihood Class IV—Non-agricultural Classes : Livelihood Class V, Livelihood Class VI, Livelihood Class VII, Livelihood Class VIII—Livelihood Classes Summarised—Principal Means of Livelihood—Terminology—Livelihood Pattern of General Population—Comparison with Other States—Livelihood Pattern of Natural Divisions—District Pattern—Distribution by Livelihood Classes—Class I : Cultivators of Land Owned—Class III : Agricultural Labourers—Class II : Cultivators of Land Unowned : Bhag Tenants—Class IV : Non-cultivating Owners of land : Zamindars, etc.—Class VIII : Other Services and Miscellaneous Sources—Class V : Production other than Cultivation—Class VI : Commerce—Class VII : Transport—Poverty of Road, Railway and Water Transport .. .. 113—120

SECTION VII—Concluding Remarks

Year 1921 A Turning Point—Fast Growth of World Population—Lower Growth Rate in India and Orissa—Public Health : A Matter of Concern—The Primary Problem—Fight against Death—Complexity of Problem—Agricultural Expansion—Industrialization—Birth Control—Official Policy—Decline in Fertility through improved Way of Life—Secondary Importance of Contraceptive Measures—Qualitative Improvement of Population—Ultimate Solution—Is Orissa Overpopulated ?—Optimum Population—Poverty in Plenty—Ability to Support Larger Population—The Future Trend .. .. 121—131

SUBSIDIARY TABLE 1 SERIES (Tables 1·1 to 1·8) .. .. 132—139

PAGE

CHAPTER II—Rural Population

SECTION I—Preliminary Remarks

Indispensability of Rural Statistics—Stability of Rural Life—Definition of Village—Uninhabited Village—Reference to Statistics—District Census Handbooks .. 141—143

SECTION II—General Distribution and Distribution among Villages classified by Size of Rural Population

Comparison with States in India—Rural-Urban Proportion—Countries outside India—Distribution—Distribution by Natural Divisions—Distribution by Districts—Distribution according to Size of Villages—Average Population per Village—Density .. .. 144—147

SECTION III—Growth

Importance of the Year 1921—Decreasing Growth Rate—Causes of Decline in the Rate—Decennial Growth—Growth in Natural Divisions—Rural Population of Districts—Villages—Number of Villages—Growth of Villages—Large Villages .. .. 148—152

SECTION IV—Movement

Limitations of Migration Statistics—Rural-Urban Migration—Inter-village Movement—Extra-State Migration—Classification of Figures available—Extent of Immobility—Immigration from Other Districts—Migration from Other Parts of India—Migration from beyond India—Immigration into Natural Divisions—Districts .. .. 153—156

SECTION V—Natural Increase—Births and Deaths

Rural Registration Area—Birth Rates—Birth Rate in Natural Divisions—Birth Rate in Districts—Annual Birth Rates—Death Rates—Death Rate in Natural Divisions—Annual Death Rate—Cause of Death—Health Condition in Districts—Balasore—Cuttack—Other Districts—Natural Increase .. .. 157—162

SECTION VI—Livelihood Pattern

Agricultural Classes—Non-agricultural Classes—Natural Divisions—District Pattern .. 163—165

SECTION VII—Concluding Remarks

Density and Distribution—Rate of Growth—Public Health—Economic Outlook—Rural Uplift .. .. 166—168

SUBSIDIARY TABLE 2 SERIES (Tables 2·1 to 2·5) .. .. 169—172

CHAPTER III—Urban Population

SECTION 1—Preliminary Remarks

Emergence of Towns—Rural Tinge—Causes of Slow Urbanisation—Increasing Tendency—Definition of Town—City—Reference to Statistics .. .. 173—175

PAGE

SECTION II—General Distribution and Distribution among Towns classified by Size of Urban Population

Percentage of Urban Population—Urban Density—Urban Density in Other States—Towns with Highest Density—Classification of Towns—Extent of Urbanisation—Distribution among Towns Classified by Size of Population—Distribution in Natural Divisions—Distribution of Sex .. .. 176—180

SECTION III—Growth

Slow Rate—Special Feature—Growth during last 50 years—Natural Divisions—Districts—Revision of List of Towns—Future Towns—Growth of City : Cuttack—Comparison with Other Indian Cities—Growth of Important Towns—Berhampur—Puri—Sambalpur—Balasore—Other Towns .. .. 181—188

SECTION IV—Movement

Migration from Rural Areas—Composition of Urban Population—Natural Divisions—Districts—Migrants from Other Districts—Migrants from Other Parts of India—Migrants from beyond India .. .. 189—191

SECTION V—Natural Increase—Births and Deaths

Urban Registration Area—Birth Rates—Natural Divisions—Districts—Annual Birth Rate—Death Rates—Annual Death Rate—Urban Statistics more Erroneous than Rural —Condition of Health—Natural Increase .. .. 192—198

SECTION VI—Livelihood Pattern

Agricultural Classes—Non-agricultural Classes—Livelihood in Natural Divisions—Districts 199—201

SECTION VII—Concluding Remarks

Growth of Population—Condition of Health—Controlled Development 202—203

SUBSIDIARY TABLE 3 SERIES (Tables 3·1 to 3·8) .. .. 204—210

CHAPTER IV—Agricultural Classes

SECTION I—Preliminary Remarks

Importance of Agriculture—Low Yield—Causes of Low Productivity—Pressure on Agricultural Land—Insufficiency of Irrigation—Loss of Fertility—Lack of Crop Rotation—Antiquated Impliments—Uneconomic Cattle-keeping—Other Factors—The Example of Japan—Agricultural Development—Agrarian Reforms—Deficiency of Agricultural Statistics—Reference to Statistics .. .. 211—219

SECTION II—Agricultural Population Ratios ; Self-supporting Persons and Dependants ; Secondary Means of Livelihood of Agricultural Classes

Percentage of Agricultural Population—Livelihood Classes of the Agricultural Population—Livelihood Sub-classes—Definition—Self-supporting Person—Non-earning Dependant —Earning Dependant—Classification made by the Agricultural Labour Enquiry—Proportion of Sub-classes—Secondary Means of Livelihood of Agricultural Classes—Secondary Means of Livelihood of Working Agricultural Population—Abnormal Dependence on Agriculture .. .. 220—226

PAGE

SECTION III—Relative Proportions of different Agricultural Classes ; Correlated to Distribution of Land in Agricultural Holdings by Different Sizes

Proportions of Agricultural Classes—Agricultural Classes of 1951 and 1931—Proportion of Agricultural Classes in Natural Divisions and Districts—Agricultural Holdings—Source of Information—Definition of Agricultural Holding—Distribution of 1,000 Holdings according to Size of Holdings—Findings of the Agricultural Labour Enquiry—Distribution of 1,000 Acres according to Size of Holdings—Correlation of Agricultural Population with Holdings by Different Sizes—Districtwise Distribution of Holdings—The Median-quartile Size of Holdings—Fragmentation of Holdings—The Remedy .. 227—236

SECTION IV—Cultivators of Land wholly or mainly Owned and their Dependants

Population—Sub-classes—Self-supporting Persons—Earning Dependants—Non-earning Dependants—Causes of High Incidence of Dependency—Secondary Means of Livelihood 237—239

SECTION V—Cultivators of Land wholly or mainly Unowned and their Dependants

Population—Sub-classes—Secondary Means of Livelihood—General Condition .. 240—241

SECTION VI—Cultivating Labourers and their Dependants

Population—Working Population and Dependants—Secondary Means of Livelihood—Labour System : Halia System—Shortage of Agricultural Labour .. .. 242—244

SECTION VII—Non-cultivating Owners of cultivated Land ; Agricultural Rent Receivers and their Dependants

Population—Working Population and Dependants—Secondary Means of Livelihood .. 245—246

SECTION VIII—Active and Semi-active Workers in Cultivation

Population—Livelihood Class of Workers—Number of Active Workers in Agriculture—Ratio of Workers and Consumers—Surplus and Deficit Districts .. .. 247—249

SECTION IX—Progress of Cultivation Correlated to Growth of Population

Disparity in Growth of Population and Cultivation—Classification of Areas—Net Area Sown—Causes of Decrease in the Net Area Sown—Area Sown More than Once—*Per Capita* Land—Irrigation—Inadequate Irrigation Area—Diminishing Scope—Area Irrigated more than Once—Manuring—Crops—Cash Crops—Dependence on Agriculture—Progress of Cultivation—From 1901 to 1921—From 1921 to 1941—The Last Decade—Correlation with Population Growth—Dangers of Imbalance—Increasing *Per Capita* Consumption—Actual Production, Consumption and Surplus—Exportable Surplus—Diet—Food Habit of the People—Rice versus Wheat—Food Production to be Increased—Improvement of Yield per Acre—Extension of Cultivation : Fallows and Waste Lands—Preference for Food to Cash or Fodder Crops—Difficulties in Indefinitely Increasing Food Production .. .. 250—266

SECTION X—Concluding Remarks

General Backwardness—Abnormal Dependence on Agriculture—Classification of Population—Under-employment of Agriculturists—Other Difficulties—Progress of Cultivation—No Occasion for Complacency .. 267—270

SUBSIDIARY TABLE 4 SERIES—(Tables 4·1 to 4·9) .. 271—279

PAGE

CHAPTER V—Non-agricultural Classes

SECTION I—Preliminary Remarks

Importance of Non-agricultural Occupations—Their Limitation—The Decline of Handicrafts and the Rise of Modern Industries—Orissa's Resources—The Example of Japan—Unauthenticated Census of Small Scale Industries—Reliability of Non-agricultural Statistics—Reference to Statistics—District Index of Non-agricultural Occupations .. 281—287

SECTION II—Non-Agricultural Population Ratios ; Self-supporting Persons and Dependants ; Secondary Means of Livelihood of Non-agricultural Classes

Ratio of Non-agricultural Population—Distribution—Ratio in Natural Divisions—Districts—Livelihood Classes—Livelihood Sub-classes—Self-supporting Persons and Dependants—Secondary Means of Livelihood—Livelihood Class V—Livelihood Class VI—Livelihood Class VII—Livelihood Class VIII—Comparison of Occupational Distribution in 1931 and 1951 .. 288—294

SECTION III—Employers, Employees and Independent Workers ; and Persons in Unproductive occupations

Classification of Economic Activities and Economically Active Persons : Employer, Employee, Independent Worker—Unproductive Occupations—Proportion of Employers, Employees and Independent Workers—Ratio of Independent Workers and Employees—Employers, Employees and Independent Workers in Different Classes of Non-agricultural Occupation—Extent of Unproductive Activities .. .. 295—297

SECTION IV—Primary Industries other than Cultivation, Mining and Quarrying

Primary Industries not Specified—Stock Raising—Fishing—Marine Fishery—Estuarine Fishery—Inland Fishing—Forestry and Wood Cutting—Other Industries .. .. 298—300

SECTION V—Mining and Quarrying

Coal Mining—Iron Ore Mining—Metals Other than Iron Ore—Quarrying of Stone, Clay, etc.—Other Industries .. .. 301—302

SECTION VI—Processing and Manufacture—Foodstuffs, Textiles, Leather and Products thereof

Cotton Textiles—Weaving—Handloom—Textile Mills—Textile Industries otherwise Unclassified—Jute—Silk—Wool—Rope Making—Wearing Apparel (Except Footwear) and Made-up Textile Goods—Leather, Leather Products and Footwear—Grains and Pulses—Vegetable Oil and Dairy Products—Unclassified Food Industries—Manufacture of Salt—Other Industries .. .. 303—309

SECTION VII—Processing and Manufacture—Metals, Chemicals and Products thereof

Unclassified Metal Products—Manufacture of Iron and Steel—Non-ferrous Metals—Transport Equipment—Electrical Machinery, Apparatus, Appliances and Supplies—Machinery (other than Electrical Machinery) including Engineering Workshops—Basic Industrial Chemicals, Fertiliser and Power Alcohol—Medical and Pharmaceutical Preparations—Manufacture of Chemical Products otherwise unclassified .. .. 310—311

PAGE

SECTION VIII—Processing and Manufacture—Not Elsewhere Specified

Wood and Wood Products other than Furniture and Fixtures—Furniture and Fixtures—Non-metallic Mineral Products—Bricks, Tiles and Other Structural Clay Products—Cement, Cement Pipes and Other Cement Products—Paper and Paper Products—Manufacturing Industries otherwise Unclassified—Other Industries .. .. 312—313

SECTION IX—Construction and Utilities

Construction and Maintenance of Buildings—Sanitary Services—Construction and Maintenance of Roads, Bridges and Other Transport Works—Construction and Maintenance Operation—Irrigation and other Agricultural Works—Other Subdivisions .. 314

SECTION X—Commerce

Retail Trade in Foodstuffs (including Beverages and Narcotics)—Retail Trade in Fuel including Petrol—Retail Trade in Cotton Textiles and Leather Goods—Wholesale Trade in Foodstuffs—Wholesale Trade in Commodities other than Foodstuffs—Other Industries 315

SECTION XI—Transport, Storage and Communications

Railway Transport—Inadequacy of Railway Transport—Transport by Road—Poor Road Communications—Transport by Water—Ports—Other Transport Services—Postal and Allied Services—Other Services .. .. 316—319

SECTION XII—Health, Education and Public Administration

Educational Services and Research—Employees of State Government—Police (excluding Village Watchmen)—Medical and Health Services—Village Officers and Servants including Village Watchmen—Other Employments .. .. 320—321

SECTION XIII—Services not elsewhere specified and Miscellaneous Means

Domestic Services—Laundries and Laundry Services—Religious, Charitable and Welfare Services—Legal and Business Services—Recreation Services—Hotels, Restaurants and Eating Houses—Arts, Letters and Journalism—Unclassified Services .. .. 322—323

SECTION XIV—Concluding Remarks

Non-agricultural Population—Cottage Industries—Medium Industries—Heavy Industries—Mining Industry—List of Factories—Electricity—Balanced Development of Resources 324—327

SUBSIDIARY TABLE 5 SERIES (Tables 5·1 to 5·17*a*) .. .. 328—350

CHAPTER VI—Families, Sexes and Principal Age Groups

SECTION I—Preliminary Remarks

Interpretation—House—Household—Reference to Statistics—Comparability of Statistics of Previous Censuses .. .. 351—352

PAGE

SECTION II—Territorial Distribution of Houses and Households

House : Increase in Number—Households in Rural Areas—Household Population in Rural Areas—Urban Households and Household Population—Overcrowding of Houses in Towns and Villages—Pressure of Population upon Housing—Shortage of Houses—Housing Conditions .. .. 353—356

SECTION III—Size and Composition of Family Households

Size of Households—Predominance of Medium-sized Households—Small-sized Households—Households of Larger Size—Distribution of Household Population—Sex Ratio in Household Population—Composition of Families—Trend of Family Size .. 357—359

SECTION IV—Sex Ratio

Sex Ratio in Orissa and other States—Fluctuation in Female Ratio—Rising Female Ratio during 1901-21—Decline in Female Ratio from 1921—Causes of Declining Female Ratio—Pockets of Female Minority—Sex Ratio in Rural Areas—Sex Ratio in Urban Areas—Sex Ratio among Agricultural Classes—Sex Ratio among Non-agricultural Classes 360—365

SECTION V—Marital Status Ratios

Interpretation : Married, Widowed : Divorced—Past Trend : Married, Unmarried, Widowed—Distribution of Population by Marital Status—Excess of Married Males—Age and Marital Ratio—Changes since 1941—Extent of Early Marriage—Fertile Age Group—Late Reproductive and Old Age Groups—Late Marriage—Sarda Act .. .. 366—372

SECTION VI—Infants

Definition—Increase in Number—Greater Survival of Females—Rural and Urban—Livelihood Classes .. .. 373—374

SECTION VII—Young Children

Diminishing Proportion—Sex—Rural and Urban—Proportion in Livelihood Classes .. 375—376

SECTION VIII—Boys and Girls

Poor Proportion—Sex—Rural and Urban—Livelihood Classes 377

SECTION IX—Young men and Women

Proportion—Sex—Rural and Urban—Livelihood Classes 378

SECTION X—Middle-aged Persons

Proportion—Sex—Rural and Urban—Livelihood Classes .. .. .. 379—380

SECTION XI—Elderly Persons

Proportion—Sex—Rural and Urban—Livelihood Classes .. .. .. 381—382

SECTION XII—Concluding Remarks

Reliability of Age Statistics—Age Pyramid—Comparison with Advanced Countries—Special Features of Age Structure—Correlation with Economic Condition .. 383—386

SUBSIDIARY TABLE 6 SERIES—(Tables 6·1 to 6·14) .. .. 387—396

PAGE

CHAPTER VII—Special Topics

SECTION I—Literacy and Education

Reference to Statistics—Interpretation—Extent of Literacy based on Total Count of Population—Comparison with Other States—Partly Literate—Extent of Literacy as found on Sample Count—Progress of Literacy between 1941 and 1951—Variation by Ages—Literacy Standard of Livelihood Classes—Educational Services and Research—Educational Institutions and Students—Primary Education—Secondary and Collegiate Education—Technical and Professional Education—General Progress .. .. 397—404

SECTION II—Language

Reference to Statistics—Mother Tongue—Difficulties in Preparing Correct Record—Tribal Languages—Analysis and Comparison with Previous Censuses—Percentage of Speakers—Oriya—Tribal Languages—Telugu—Hindi and Urdu—Bengali—Other Indian Languages—Non-Indian Languages—Bilingualism .. .. 405—412

SECTION III—Religion

Substitution of Economic Classification for Classification Based on Religion—Classification by Religion and Community—Distribution of Population by Religion—Growth—Hindus—Muslims—Christians—Tribal Religions—Sarana—Other Non-tribal Religion : Kumbhipatia—Sikhs—Other Religions .. .. 413—417

SECTION IV—Backward Classes

Classification—Tribewise or Castewise Figures not Worked out—Specification of Backward Classes not Satisfactory—Scheduled Tribes—List of Tribes—Distribution of Population—Variation in the Composition and Population of Tribes—Important Tribes—Kond—Gond—Santal—Saora—Paroja—Other Important Tribes—Problem of Scheduled Tribes—Scheduled Castes—List of Scheduled Castes—Distribution—Other Backward Classes—List of Other Backward Classes—Total Backward Population—Proportion of Backward and Non-backward Population—Ameliorative Measures ; Educational, Health and Sanitation, Economic, Social .. .. 418—433

SECTION V—Displaced Persons

Definition—Volume of Migration and Date of Arrival—Occupation of Displaced Persons—Registration of Displaced Persons—Initial Relief—Rehabilitation Schemes .. 434—436

SECTION VI—Anglo-Indians

Population—Distribution—Decrease since 1941 437

SUBSIDIARY TABLE 7 SERIES—(Table 7·1 to 7·7) .. .. 438—451

APPENDICES

APPENDIX I .. Notes on the procedure of Collection and Registration of Vital Statistics in Orissa (supplied by the D. H. and I. G. Prisons, Orissa) .. .. 452—453

APPENDIX II .. Notes on the Progress of Cultivation of Orissa (supplied by the Director of Agriculture and Food Productions) .. .. 454—455

APPENDIX III .. District Indices of Non-agricultural Occupations .. .. 456—485

APPENDIX IV .. List of Registered Factories in Orissa .. .. .. 486—489

INDEX .. .. 490—497

PREFACE

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 non-census 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 II	..	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 co-operation, 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 cross-legged 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 expéditiously.

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 liabilities 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.

I have had the privilege of looking at the 13 valumes of handbooks and two volumes 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 urgency 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.

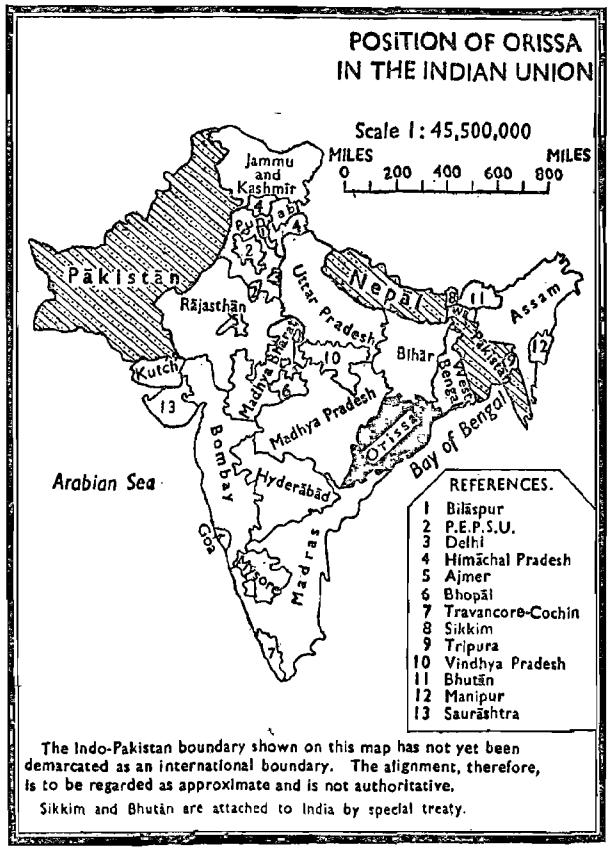
M. ASAF ALI
GOVERNOR OF ORISSA

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 well-defined 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 Subarnarekha, the Burabalang, the Salandi, the Baitarani and 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.

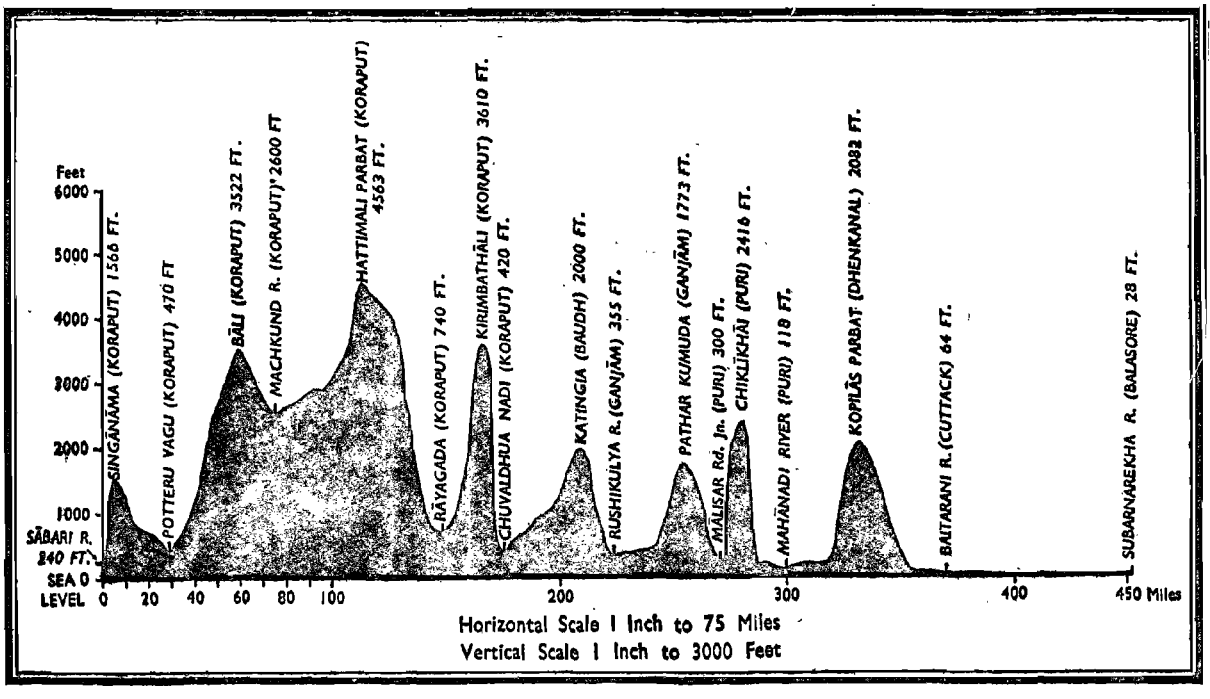
4. The Central Tract lies in between the Northern Plateau and the Eastern Ghats region and mainly covers the districts of Bolangir, Sambalpur and Dhenkanal. Isolated hills rising abruptly from the plains are commonly seen in this tract. This tract contains some of the fertile parts of the State, such 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 north-west 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

* 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 empire-making 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 of 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 tributary states of Patna, Kalahandi, 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.

11. Orissa continued to be an outlying 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, Nawapara subdivision and Ganjam and 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.

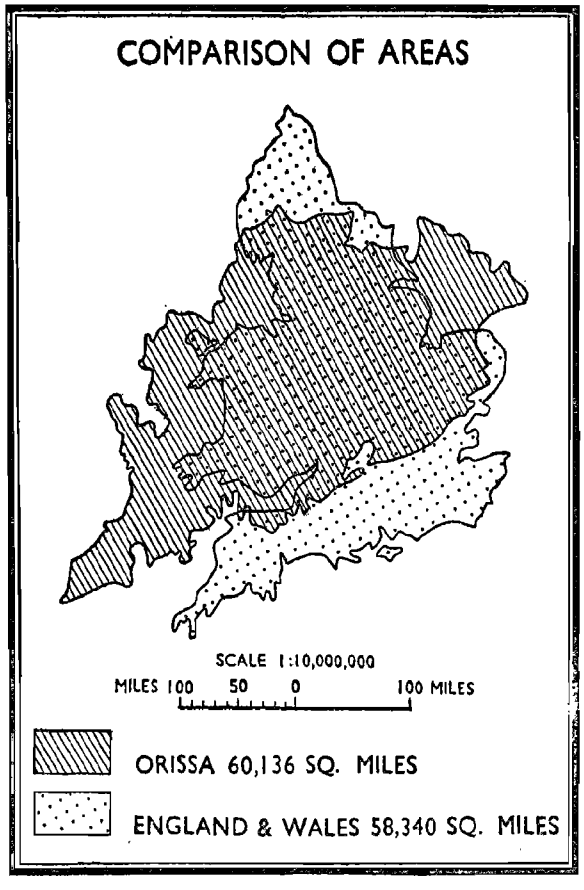
12. The province of Orissa as thus constituted comprised the six districts of Cuttack, Balasore, Puri, Sambalpur, Ganjam and Koraput. Oriya-speaking feudatory states, numbering twenty-four were placed under the Political Agent in charge of the Eastern Zone stationed at Sambalpur. One of the first tasks 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 Mayurbhanj, 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 man-power 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.

III. Change in Area

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

Year	Area in square miles		
	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.

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.

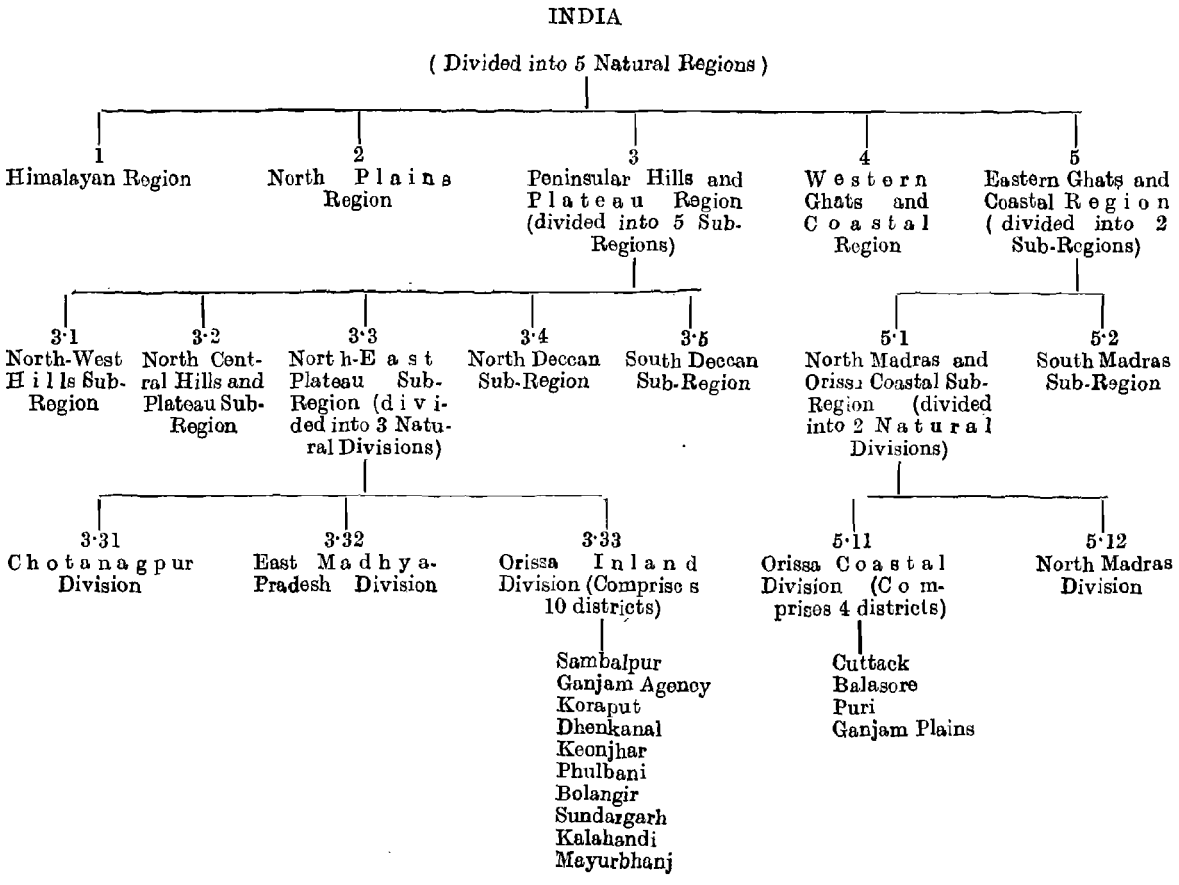
IV. Population Zones and Natural Divisions

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 considerations. Accordingly, India has been 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 ever-increasing demand for other metals and minerals. Under 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.*

* 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 sub-continent 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, pitchblende, vanadiferous magnetite, 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 $2\frac{1}{4}$ 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, kyanite, 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 kyanite 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, Mayurbhanj and Keonjhar which 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, Rairakhol, Sambalpur 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 glass-sands, steatite, etc. A small 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 Minerals

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 appearance and properties. High level 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 widely covered with redistributed 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 clay-silica 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 surf-beaten 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 different in the inland 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 November to February. 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 thunder-showers.

66. The weather starts getting hot by March and continues so upto 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 controlled by the formation and movement 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 only 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 rains 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 Balasore, Cuttack, Puri and Gopalpur illustrate the climatic features.

69. December to February has a fine weather except occasionally 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 three-quarters 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 north-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 same 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.

Monthly Rainfall (in inches) in Orissa in 1950

District	January	February	March	April	May	June	July	August	September	October	November	December	Annual normal rainfall
Cuttack ..	0	0·60	2·50	0·97	2·39	8·91	13·19	14·24	12·93	2·49	8·40	0	58·51
Balasore ..	0	0·52	2·95	0·42	3·79	8·68	12·35	8·32	11·83	3·25	7·47	0	59·41
Puri ..	0	0·33	3·83	1·05	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	0·45	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	11·45	13·03	6·22	2·97	4·71	0	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
Keonjhar ..	0	0·69	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	8·35	0·77	5·86	0	63·65
Bolangir ..	0	1·09	3·51	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	10·85	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

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 district	Annual rainfall for the year									
	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	58·55	83·20	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	71·01	56·80	75·51	62·23
Ganjam ..	49·79	50·99	72·00	44·70	35·53	61·65	47.99	50·32	46·32	62·59
Koraput ..	65·87	53·56	66·30	64.81	48·92	73·20	57·84	65·70	58·97	60·46
Dhenkanal ..	58·45	58·14	73·75	54·18	44·49	70·09	56·65	47·65	65·16	60·66
Keonjhar ..	66·07	63·21	63·54	59·05	49·82	66·06	71·51	58·40	62·93	81·46
Phulbani ..	51·21	61·96	91·98	65·53	53·64	88·68	69·31	53·89	80·46	69·90
Bolangir ..	50·57	66·72	80·92	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

Name of the district	Annual rainfall for the year									
	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	49·50	68·41	70·69	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	50·84	..	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	83·59	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	..	..	..
Mayurbhanj ..	74·75	70·33	83·22	69·29	64·62	81·40	56·62	69·10	52·83	..

VIII. Forests

Area

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. 22-F., dated the 19th October 1894 of the Government of India in the Department of Revenue and Agriculture.

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

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	Demarcated forests	Undemarcated 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	1,288	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 :—

Kalahandi	..	400 square miles
Sundargarh	..	500 square miles
Cuttack	..	250 square miles
Ganjam	..	750 square miles
Koraput	..	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.

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.

CHAPTER I

General Population

SECTION I

Preliminary Remarks

Population

1. The population of Orissa as it is recorded on the reference date of the present census operations, namely, at sunrise on the 1st March 1951, is 14,645,946. The population of the areas which to-day form the State of Orissa was 13,767,988 in 1941. The present population has thus increased by 877,958, in other words by 6·38 per cent during the last decade. This figure includes the displaced persons from Pakistan numbering 20,039. The present population of the State numbering 14,645,946 is constituted of 7,242,892 males and 7,403,054 females, the percentage of sex being 49·45 and 50·55 respectively. The population of 1941 comprises 48·71 per cent males and 51·29 per cent females. During the last 10 years, the males have increased by 536,405 and the females by a lesser margin of 341,553. Even then, Orissa to-day is a country with a majority of females in the general population.

Comparison with Other States

2. On point of numerical strength of the population, Orissa is a small State as compared with others in India. By far the most populous State in India is Uttar Pradesh, with a population of over 6·32 millions, the next in order being Madras having 57·0 millions of persons living there. Orissa stands 7th among the nine Part A States, and 9th among all States in India, for among other States, Hyderabad and Rajasthan have larger population than Orissa. The population of a few important States in India is shown below :—

State	Persons	Males	Females
INDIA*	356,829,485	183,305,654	173,523,831
Uttar Pradesh ..	63,215,742	33,098,866	30,116,876
Madras ..	57,016,002	28,419,003	28,596,999
Bihar ..	40,225,947	20,223,675	20,002,272
Bombay ..	35,956,150	18,614,862	17,341,288
West Bengal ..	24,810,308	13,345,441	11,464,867
Madhya Pradesh	21,247,533	10,662,812	10,584,721
Hyderabad ..	18,655,108	9,431,062	9,224,046
Rajasthan ..	15,290,797	7,961,673	7,329,124
Orissa ..	14,645,946	7,242,892	7,403,054
Punjab (I) ..	12,641,205	6,786,934	5,854,271
Travancore-Cochin	9,280,425	4,620,803	4,659,622
Mysore ..	9,074,972	4,657,409	4,417,563
Assam ..	9,043,707	4,812,166	4,231,541
Madhya Bharat	7,954,154	4,133,075	3,821,079

Reference to Statistics

3. The main set of statistics on the basis of which the present Report has been written is contained in a series of Tables published in Parts II-A and II-B of this Report. Part II-A of the Report contains General Population Tables, Social and Cultural Tables and Tables relating to Ownership and Cultivation of land. In these Tables will be found statistics relating to area, houses and population of districts, subdivisions, police-stations and towns. Part II-B contains Economic Tables and Tables relating to Household and Age Composition.

4. In addition to the main tables as mentioned above, a number of Subsidiary Tables have been prepared from the main tables as well as from information available from Departments of State Government and other sources.

*Figures for the State of Jammu and Kashmir and Part B Tribal areas of Assam not included.

Each Chapter of this Report has a set of Subsidiary Tables appearing at the end of the text of the Chapter.

5. The discussions embodied in the present Chapter are supported by a series of 8 Tables, known as Subsidiary Table 1 Series, as mentioned below:—

Table 1·1—Area and population, actual and percentage by police-station density. This corresponds to the Subsidiary Table No. II of main Table I of 1941 and to the Subsidiary Table III of Chapter I of 1931.

1·2—Variation and 'Density of General Population. This corresponds to the Subsidiary Table to the main Table II of 1941 and to the Subsidiary Tables II and IV of Chapter I of 1931.

1·3—Inter-Census Growth rate during three decades. This corresponds more or less to the Subsidiary Table V of Chapter I of 1931. There was no such Subsidiary Table in 1941.

1·4—Immigration. No corresponding table in earlier decades.

1·5—Emigration. No corresponding table in earlier decades.

1·6—Migration between the State and other parts of India. No corresponding table in earlier decades.

1·7—Variation in Natural Population. This corresponds to Subsidiary Table VI of Chapter I of 1931. There was no corresponding table in 1941.

1·8—Livelihood Pattern of General Population. No corresponding table in earlier decades.

NON-CENSUS DATA INADEQUATE AND ERRONEOUS

6. In considering the various aspects of population the insufficiency of the existing knowledge derived from non-census data is striking. The registration of births and deaths is not only grossly deficient but has undergone marked deterioration during the last decade as observed in course of this Chapter. The margin of error in the vital statistics of the coastal districts is very high, while the recorded figures relating to the inland districts are thoroughly unacceptable. It may be seen that birth rates and death rates in some localities have been shown so low as 5 per mille or so, and that in view of the partial collapse of the registration system since the war time, added to the inherent defects in the system since its inception, the under-registration in birth records may be taken to be 45 to 50 per cent while that in the record of deaths may nearly be 30 per cent. In view of this highly erroneous and misguiding character of the recorded figures, the need for collection of more complete and accurate data relating to vital statistics requires no argument in support. Worse still are the non-census data, such as, agricultural statistics used in other Chapters of this Report, regarding which observations will be made in due course.

INDISPENSABILITY OF UP-TO-DATE STATISTICS

7. The necessity of collection of reliable and complete data is not limited to vital or agricultural statistics alone, but extends to general demographic matters as well. Such information is indis-

pensably necessary to any Government which considers itself modern, so that orderly development of the unbounded resources of the State and wise planning for the future may be facilitated. The mere improvement in the recording of births and deaths may not be sufficient. Problems of population are multi-headed and are by no means confined to *enter* and *exit* from this worldly stage. The growth of population is a continuing process, and in this age of speed and acceleration in all fields, the system of decennial census, unaided by intercensal investigation of population trends, is fast growing obsolete. Deploring the absence of intercensal continuity, and commenting on the views of Mr. Yeatts, the Census Commissioner for India in 1941, an author on India's Population Problems observes,* "The Indian Census is a kind of comet appearing once in every ten years in the statistical firmament, attracting much attention at its culmination, but passing away eventually unnoticed. The present Indian Census throws only one slender beam of rather dubious light on a subject that should be under the watchful observation of the eye of a cinecamera. Therefore, the primary reform from the purely statistical and demographic points of view, would be to have a permanent census body at the federal capital with provincial and state branches having a large measure of administrative autonomy." With all the gravity of consideration in its favour, the Government of India decided in May 1949 to initiate steps forthwith for developing and improving the systematic collection of statistics bearing upon the size and growth of population. In pursuance of the above decision, a single permanent organization at the Centre was established under the Registrar General, India. Corresponding permanent organizations at State level were indispensably necessary and so the Registrar General examined the question and reached definite conclusions regarding the manner in which the problem of improvement of population data in the country as a whole should be tackled. The State Governments were then requested to give effect to certain operative proposals in this connection. Orissa would be well advised to accept these proposals of the Government of India, like many other States which have already signified their consent and given effect to the Scheme. Orissa's necessity of improvement of population data is not less pressing than that of any other State in India.

*India's Population—Fact and Policy by S. Chandrasekhar, P. 118.

SECTION II

General Distribution and Density

1. The economy of Orissa, as of India is primarily agricultural. About 80 per cent of the people are directly dependent on cultivation. The population is so overwhelmingly rural that it has concentrated in good arable areas where the terrain is level, soil rich and irrigation adequate. Where such maximum agricultural facilities are absent, people are fewer in number. The density map of Orissa shows at a glance that the densest belt of poupla-tion lies along the sea coast and then along the valley of the river Mahanadi. The least crowded areas appear to be at two ia· flung positions on the extreme nor.h-west and the extreme south. The main cluster of population is along the south-east and the central region, compared to which the extreme north-west and south seem sparse and insub-stantial. Here there are vast tracts of forests and mountains which are either sparsely inhabited or are devoid of inhabitants. Similarly the regions which are unirrigated or have low rainfall carry smaller population.

Comparison with India

2. The area, population and density of Orissa may be compared with those of India as follows :—

	Area in Sq. M.	Population	Density per Sq. M.
India ..	12,69,640	356,829,485	312*
Orissa ..	60,136	14,645,946	244

Orissa forming 4·7 per cent of India's area holds 4·1 per cent of India's popula-tion. This may signify that the State should be able to support a little more than its present proportion of popula-tion, judging alone from the all-India average.

Comparison with Other States

3. It will be of interest to compare the area, population and density of Orissa with those of other States in India as given below:—

State	Density	Area in Sq. M.	Population
Delhi ..	3,017	578	1,744,072
Travancore-Cochin	1,015	9,144	9,280,425
West Bengal ..	806	30,775	24,810,308
Bihar ..	572	70,330	40,225,947
Uttar Pradesh ..	557	113,409	63,215,742
Madras ..	446	127,790	57,016,002
Punjab ..	338	37,378	12,641,205
Bombay ..	323	111,434	35,956,150
Mysore ..	308	29,489	9,074,972
Orissa ..	244	60,136	14,645,946
Hyderabad ..	227	82,168	18,655,108
Assam ..	176	85,012	9,043,707
Madhya Pradesh	163	130,272	21,247,533

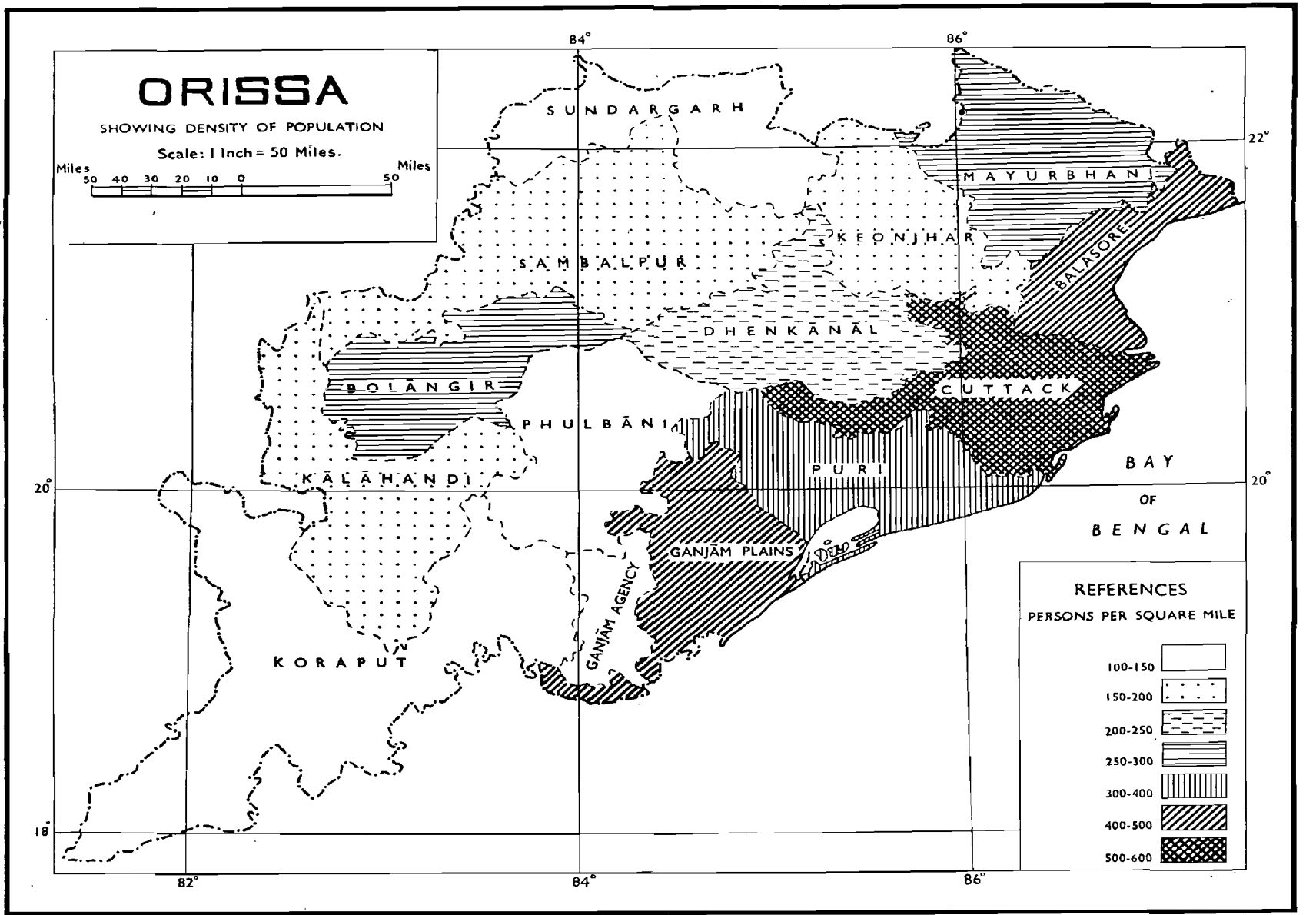
4. The above list arranged in order of density shows Orissa occupying a posi-tion below many of the States in India. Orissa has less than half the density of Uttar Pradesh, West Bengal or Bihar but has decidedly more than Assam or Madhya Pradesh. Orissa is thus not more thickly settled than most States in India.

Comparison with Other Countries

5. The density of Orissa compares with the density of a few typical countries of the World as follows :—

Name of the country	Date of census	Area (in thousand Sq. M.)	Popula-tion (in thou-sands)	Density
Egypt ..	1947	13·5	19,090	1,406
England and Wales	1940	58·3	41,862	718
Japan ..	1940	147·5	73,114	496
Orissa ..	1951	60·1	14,645	244
Hungary ..	1941	66·3	14,683	221
U. S. S. R. ..	1939	8,351·0	192,667	23
Canada ..	1941	3,466·0	11,507	3
Australia and Possessions.	1943	3,065·0	7,332	2

* Calculated by excluding uncensused areas.



Based upon Survey of India Maps and printed specially for the Superintendent of Census operations, Orisso, with the permission of the Surveyor General of India,

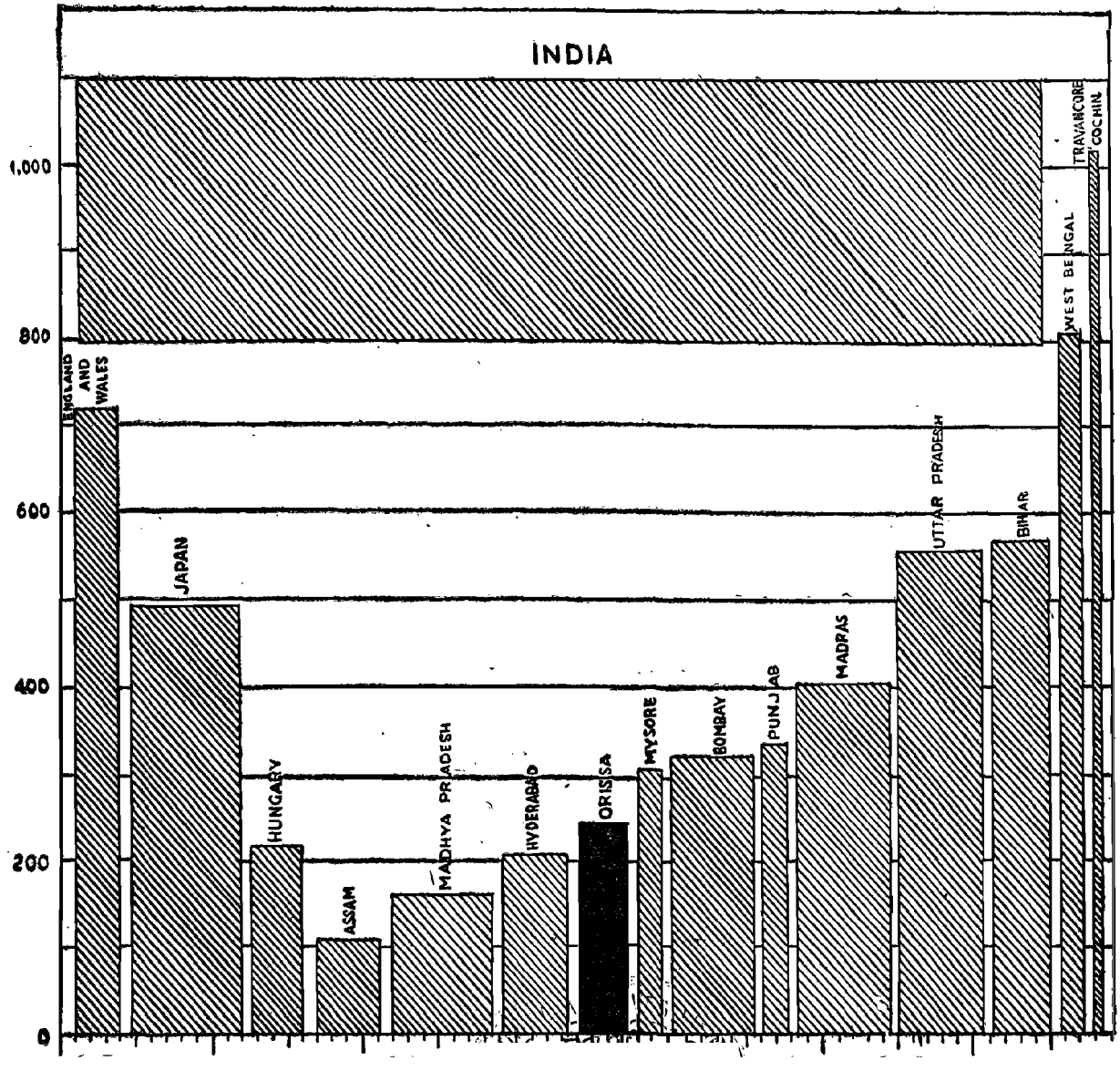
1952.

Reg. No. 2791 XDD'52-1000.

Printed at the Survey of India Offices(P. Z. O.).

6. So far as superficial area is concerned, Orissa is a little larger than England and Wales but the latter has about three times the population of the former. The country which is approximately equal to Orissa in population, density and area is Hungary. But Australia with her possessions which is 51 times bigger than Orissa in area, contains only half of Orissa's population. Egypt, on the other hand, which is smaller than the area of two districts of Orissa, namely, Ganjam and Koraput, has a population exceeding that of Orissa by a considerable margin. Comparing with Russia, Orissa's density of population appears to be ten times greater than that of Russia. So extreme is the disparity of density in different countries of the World! Such disparity is bound to create problems. Western Europe which sent out waves of migrants to different countries during the last three centuries is again teeming with millions of surplus population so that an International Committee for the movement of emigrants was set up in Brussels in December 1951 to adjust the balance between the over-population in Europe and equally serious under-population in the fast developing areas of Cannada, Australia and South America.

7. The following diagram displays the comparative area, density and



population of Orissa and some important States in India, as well as of India as a whole and three foreign countries, namely, England and Wales, Japan and Hungary. For want of space, other typical countries could not be shown. The base of the rectangle represents area, at the rate of one inch equal to 2,00,000 square miles. The height of the rectangle represents density, one inch being equivalent to 200 persons per square mile. The area of the rectangle shows the total population of the country, as the total population is obtained by multiplying area by density of the country concerned. The diagram shows considerable disparity in these aspects between different States in India. Travancore-Cochin, for example, has the look of a long thin stick while Assam looks like a short thick block of wood. Hungary and Orissa are, however, not much different from one another.

Average Density

8. The average density of Orissa as mentioned above, is 244 per square mile. On a reference to the Subsidiary Table 1·1, it will appear that there are vast regions with scant population, the outstanding cases being the districts of Phulbani, Koraput and Sundargarh. There are others that have an extremely dense population, such as the Sadar subdivision of Cuttack, Berhampur subdivision of Ganjam and several police-station areas in the coastal districts.

Thinly Populated Areas

9. Considering 244 persons per square mile as the average density of Orissa, it would be reasonable to treat areas with less than this number as thinly populated and areas with more than this number as thickly populated. But the Subsidiary Table 1·1 prepared on an all-India basis does not show 244 as a dividing line for exhibiting areas of varying density. Immediately lower division relate to the density of 200 and less. As it is possible to get figures on this basis, it will be convenient to treat police-station areas with a population of 200 or less to a square mile as thinly populated areas. As such, it is seen that the thinly populated area of the State with less than 200 persons to a square mile extends over an area of 52·4 per cent of the area of the State but contains only 23·3 per cent of its total population. Going further down to areas with lesser density, namely areas containing less than 100 persons to a square mile, it appears that about one-fourth of the area of the State contains one-sixteenth of the total population, or to be more precise, 6·4 per cent of the total population occupies 24·5 per cent of the area of the State.

Thickly Populated Areas

10. In view of the considerations mentioned above, areas having 200 or more persons to a square mile may be treated as thickly populated areas. When police-stations having such a density of population are grouped together, it is seen that they contain nearly three-fourths of the State's population in less than half the area of the State, or more specifically 47·6 per cent of the total area of the State holds 76·7 per cent of the State's population. The most thickly populated area of the State with a density of 750 and over to a square mile is confined to 3·2 per cent of the State's area accommodating 13·0 per cent of the population. This means roughly that one-seventh of the total population live in one-thirtieth of the total area of the State. Other tracts of the thickly populated areas have the following features :—

Density	Percentage of area	Percentage of population
300—450	17·6	26·0
450—600	6·6	14·1
600—750	1·9	5·5

ORISSA INLAND DIVISION

11. It contains 76·6 per cent of the area with a population of 54·4 per cent of the State. Average density is 175 per square mile. This natural division forms a part of the North-East Plateau Sub-Region which in turn is a part of the Peninsular Hills and Plateau Region. The Sub-Region has a density of 195 and the Natural Region a density of 209 per square mile. The Orissa Inland Division therefore has lesser density of population than the Natural Sub-Region or the Natural Region of which it forms a part. It has a large extent of thinly populated areas, having less than 200 persons to a square mile, which constitute 66 per cent of the area but contain only 41·4 per cent of the total population of the division. In other words, two-thirds of the area of this division contains a little over two-fifths of the population of the division. 31·1 per cent of the total area with a density less than 100 persons per square mile contains 11·4 per cent of the population of the division, while 18·4 per cent of the area having density of 100-150 holds a population of 13·3 per cent. The division has a small extent of thickly populated areas. The total area with a density of 450 and over is only 1·9 per cent, while there is no locality with a density of 750 and over. Areas containing more than 200 persons to a square mile form 34 per cent of the area of the division, providing residence for 58·6 per cent of the total population.

ORISSA COASTAL DIVISION

12. This division constitutes an area of 23·4 per cent of the State and contains 45·6 per cent of the total population of the State. It has an average density of 473 persons per square mile. The average density of the Natural Sub-Region, North Madras and Orissa Coast is 438 and of the Natural Region, Eastern Ghats and Coastal Region is 500. This Natural Division therefore has a little more density than the Natural Sub-Region but has less than that of the Natural Region of which it forms a part. It has a small extent of thinly populated area which extends to 7·7 per cent of the area of the division, containing only 1·5 per cent of the population. 92·3 per cent of the area of the division therefore comes under thickly populated area with more than 200 persons to a square mile and contains 98·5 per cent of the population of this Natural Division.

DISPARITY IN DENSITY BETWEEN TWO NATURAL DIVISIONS

13. Noticeable disparity in density exists in the two Natural Divisions of the State. The coastal division presents a contrast with the other Natural Division, mainly because the belt of high density lies along the coast of Bay of Bengal. While there is no area with a population of 750 and over in the inland division, such areas are extensive in the coastal division. The total density groups of 450 and over comprise 44 per cent of the area of the coastal division but is confined to 1·9 per cent only of the area of the inland division. The general tendency for large percentage of population of the inland division is to live in areas with a density of less than 300 while a larger percentage of the people of the coastal division live in areas with a density exceeding 300 to a square mile.

INCREASE IN DENSITY

14. Orissa has gained in density from decade to decade as follows :—

1901	..	171
1911	..	189
1921	..	186
1931	..	208
1941	..	229
1951	..	244

DISTRIBUTION BY DISTRICTS

15. Average population of a district of Orissa is 1,126,611 and the average area is 4,626 square miles. In point of size the largest district in Orissa is Koraput, covering an area of 9,875 square miles having a population of 1,269,534. Similarly, the smallest district in area is Balasore, having an area of 2,462 square miles and with a population of 1,106,012. The most populous district in the State in point of number of population and also in point of the highest density is Cuttack, with a population of 2,529,244, an area of 4,224 square miles and a density of 601 persons per square mile and the smallest district in population is Phulbani with a population of 456,895 and an area of 4,270 square miles.

16. There are 9 districts in the State with less than the average area of a district, namely, Cuttack, Balasore, Puri, Dhenkanal, Keonjhar, Phulbani, Bolangir, Sundargarh and Mayurbhanj. Only 4 districts, namely, Sambalpur, Ganjam, Koraput and Kalahandi exceed the average size of a district in the State. Similarly, there are 8 districts in the State which contain less than the average number of population of a district, namely, Balasore, Dhenkanal, Keonjhar, Phulbani, Bolangir, Sundargarh, Kalahandi and Mayurbhanj. The remaining 5 districts, namely, Cuttack, Puri, Sambalpur, Ganjam and Koraput have a population exceeding the average population of a district in Orissa.

17. The average density of population of different districts is given below. This has been worked out on the basis of area of districts adopted in the Table E appearing in Part II-A of this Report, which is slightly different from the area intimated by the Surveyor General, India. The map of Orissa showing density of population which faces the opening page of this Section has been drawn by the Surveyor General, India on the basis of area figures maintained by him. According to his figures, the density of Dhenkanal district comes to 201 per square mile while according to the area locally ascertained, the density stands at 199 per square mile. Dhenkanal district has thus been hatch marked in the Density map according to Surveyor General's area.

Name of district	Density per Sq. mile
Cuttack ..	601
Balasore ..	441
Puri ..	389
Ganjam ..	344
Bolangir ..	269
Mayurbhanj ..	256
Dhenkanal ..	199
Sambalpur ..	192
Keonjhar ..	183
Kalahandi ..	170
Sundargarh ..	146
Koraput ..	129
Phulbani ..	107

DISTRIBUTION BY POLICE-STATIONS

18. The total number of police-stations in the State is 290. On the average, each police-station has an area of 207·3 square miles and a population of 50,503 persons. The following statement shows the area and population of the largest, the smallest and the most populous police-station in the State.

	Area in Sq. mile	Population
Largest police-station—Venkatapallam (district Koraput).	1,014	26,927
Smallest police-station—Puri Town (district Puri).	6·5	49,057
Smallest rural police-station—Baideswar (district Cuttack).	30	23,540
Most populous police-station—Jagatsingpur (district Cuttack).	215	163,158

SECTION III

Growth of Population

1. The principal factors governing the growth of population are births, deaths and migration. Other factors of importance which considerably influence the growth are the age and the sex composition of the population, and the fertility of women in the child bearing period. The influence of these factors on the growth of population will be specifically examined in the Chapters ahead. At present, the history of growth of population in Orissa and the facts relating to such growth are discussed in the paragraphs below. It will be seen that the demographic history of Orissa is closely connected with the tragedy of deaths and devastations from famines, floods and pestilence. The study of these incidents of the past is essentially necessary for appreciating the future trend of population of Orissa. Such a study is more particularly necessary because Orissa as a whole had never a Census Report of its own. The State was created in 1936 with portions taken from three provinces in India, and although the first census of the newly created province of Orissa came in 1941, there was no writing of the Report that year due to war conditions. This is therefore the first comprehensive review of demographic facts and problems relating to Orissa as one political unit.

Conditions in Pre-Census Days

2. In old times, Orissa must have been a fairly populous country as may be judged from the part it has played in history, but, in fact, little is known of the actual population in those days. The population, however, could not have been very dense at any time, because of the liability of the country to draught and inundation, wars and epidemics. Great famines * occurred in the 14th, 15th and 16th centuries, followed by the great Bengal Famine of 1770 which was grievously felt in Orissa. In 1774-75 there was a serious scarcity and in 1792-93, came he last great famine of the 18th century. In the first decade of the 19th century, annual calamity in various forms, such as failure of rains, scarcity of food grains and heavy floods devastated the country. The most serious calamity of the first half of the 19th century was the inundation of the sea on Balasore coast, which greatly disorganised the agricultural system of the district and depopulated the lower tracts. In the second half of the century came the greatest of Orissa's famines, the 'Na-anka' famine of 1866. a catastrophe unparalled in frightful sufferings and countless deaths. This was not the last in the series of periodical calamities in Orissa but within half a decade thereafter, regular administrative operations in the form of decennial census of population were started, eliminating dependence upon mere approximate estimates of vital losses in natural calamities, as was hitherto the case.

Earlier Estimates

3. Accounts based on conflicting estimates are available regarding the population of Orissa in the 19th century. The earliest estimate ever attempted

* Fuller details are given fn page 136-37, Volume I of the Final Report on the Survey and Settlement of the Province of Orissa by S. L. Maddox, I. C. S.

relates to year 1822, when Stirling calculated 'from data prepared with much care and accuracy' that the inhabitants of the Mogulbandi number 1,296,365. Just prior to the horrors of the great famine of 1866, the population was estimated to be 3,015,826. About a fourth of this population was wiped out by this calamity according to the Famine Commissioners, who estimated the survivor at 2,086,288.

First Decennial Census

4. The first attempt to number the population of Orissa by a full-count process was made in 1872 when the Imperial Census Operations in India began. At that time Orissa Division, forming a part of the province of Bengal was limited to the three coastal districts of Cuttack, Balasore and Puri, and the tahsil of Angul with Khondmals and 17 tributary mahals, namely, Athgarh, Baramba, Tigiria, Narsingpur, Nayagarh, Khandpara, Daspalla, Ranpur, Talcher, Pal-Lahara, Athmalik, Hindol, Nilgiri, Mayurbhanj, Keonjhar, Dhenkanal and Baudh. The coastal districts and Angul with Khondmals had an area of 9,841 square miles and a population of 3,214,300 and the tributary mahals named above comprised an area of 14,387 square miles and a population of 1,103,699. Thus, Orissa Division in 1872 had a population of 4,317,999 and an area of 24,228 square miles. According to some reports, the area was either 23,901 or 24,240 square miles, but this does not appear to be correct.

Census of 1881

5. In the year 1881, there was another enumeration of the population within the same territorial limits, when it appeared that in course of 9 years that elapsed, the population had increased to 5,199,982 of which 3,789,799 were inhabitants of the three coastal districts and Angul and Khondmals and 1,410,183 of the 17 tributary mahals. This marks a general increase of 20·4 per cent in nine years, which is an exceedingly good record. But a part of this increase is unreal, as in the year 1872 there was a considerable extent of under-enumeration of the population. That was the first occasion when a comprehensive house-to-house visit for taking census of the population was attempted on a risky experiment of the principles of unpaid enumeration, and it was but natural that omissions in rounding up all houses and enumerating all individuals crept in. This was improved in 1881, with the result that the part of the population left out of enumeration in the first census was included in the second, marking a larger difference between the results of the two. This, by no means, is the sole explanation of the large increase. The principal reason is the extraordinary powers of the people to recuperate under favourable circumstances. The calamitous famine of 1866 caused large mortality and abandonment of cultivation, with the consequence that there was reduction in the size of family and there was the facility in the following years in getting enough cultivable lands. Subsistence therefore became a matter of lesser struggle, correspondingly encouraging reproductive activities. There was also the absence of epidemic diseases or other widespread calamities during the nine years upto 1881. The natural result of these plentiful years easily brought about a large increase in the population.

Decade 1881-91

6. In the third decennial census held in 1891, the population of Orissa stood at 5,744,062. The accelerated growth which was noticeable in 1881 had been effectively checked. The decade had seen a terrible cyclone passing over the district of Cuttack in 1885 making many

breaches in the natural sea embankments of sand dunes. There was a high flood in the river Baitarani in 1886, extensively damaging crops on either side. In Angul and in neighbouring tributary states, there was failure of crop in 1887 and again in 1888, the yield being less than half the average. Relief work was extensively organized. In 1889, Ganjam, which was then outside Orissa, was in the grip of a grave famine, when the Government opened the Rushikulya canal and other subsidiary works. Death rate was abnormally high. The effect was felt in the neighbouring district of Puri. All these calamities during the decade resulted in reducing the high rate of increase of population as was noticed in the previous decade. The rate of increase observed in the previous decade could not therefore be maintained. The increase of population during the period 1881-91 was 10·5 per cent.

DECADE 1891-1901

7. The decade 1891-1901 was not free from natural calamities but on the whole there was no grave loss of population. In 1891, there was the failure of rains and then a heavy flood which caused considerable loss of crops. In this year, the position was worse in parts of Bengal and Bihar where there was acute scarcity and the price of rice rose up high. Some effect was therefore felt in the bordering district of Balasore. In 1896, there occurred in all the principal rivers of Orissa a flood of great height and unprecedented duration followed by short rain in September and an almost complete failure of rain in October. Similar causes led to scarcity and famine throughout India. The outturn of rice was estimated at 7 to 8 annas of the normal crop and the shortage to be supplied by import was put at 10 lakh maunds for Cuttack district alone. In Balasore, though there was considerable distress, very little relief was found necessary beyond such as was afforded by the earth work on the railway. In Puri, the distress was more serious in the neighbourhood of the Chilka lake, but the people proved capable of supporting themselves. At one time, it appeared that the horrors of 1866 would be repeated now after a lapse of 30 years, but thanks to the improved communications and resources of the country, a famine was not only averted, but considerable quantity of grains was exported to other distressed areas. This was followed by three prosperous years but in the last year of the decade, matters took a different turn in and around Sambalpur, which area was outside the limits of Orissa Division in those years. The famine of 1900 was attended by epidemics of fever, cholera and smallpox, raising the death rate in Sambalpur to the appalling figure of 108 per mille. The sufferings extended to Baudh, Sonepur and Patna states, wherefrom a large number of population migrated in order to avoid the distressful effects of epidemics and famine. There was a heavy fall in the population of Sonepur and Patna states particularly. Angul and other feudatory states which were included in the bounds of Orissa Division, however, had prosperous years and were able to contribute to the growth of the population to a satisfactory extent, although from 1897 till the end of the decade, Angul was faced with partial failure of crop verging on scarcity. In Khondmals, the position was worse, resulting in considerable decay of population. In spite of all these localised distress, prosperity of the people was noticeable. In the coastal region and in the northern fringe of Orissa, railway communication was built up during the decade, giving employment in earthwork to thousands and bringing prosperity in other ways. As a result, the population of Orissa grew from 5,744,062 in 1891 to 6,290,952 in 1901, an increase of 9·5 per cent.

Summary of Censuses 1872-1901

8. The statement below summarizes the position relating to growth of population of Orissa from the beginning of the census operations to the end of the 19th century.

Territory	Area in Sq. M. as finally corrected in 1901	Population in				Percentage variation		
		1872	1881	1891	1901	1872-81	1881-91	1891-1901
Orissa proper with Angul and Khondmals.	9,841	3,214,300	3,789,799	4,047,352	4,343,150	17·9	6·8	7·3
17 Tributary states ..	14,387	1,103,699	1,410,183	1,696,710	1,947,802	27·8	20·3	14·8
ORISSA DIVISION	24,228	4,317,999	5,199,982	5,744,062	6,290,952	20·4	10·5	9·5

Territorial Adjustment since 1901

9. From the year 1901 the boundary of Orissa has undergone extensive changes from time to time. A study of the growth of population of Orissa, if confined to the areas which actually existed in different decades, will have no comparable basis. It is therefore necessary that the growth of population since 1901 may be examined not on the basis of areas existing in the years of different censuses but on the basis of the present territorial set up of the State. At present, Orissa extends over an area of 60,136 square miles comprising 13 districts constituted out of 6 old districts of the province and 24 ex-state areas. Figures have been adjusted for the past five censuses as if Orissa had the same territorial limit in all these years as it has now. On this basis, adjusted figures relating to the growth of population is shown in the general population table published in Part II-A of this Report. Relevant figures are shown below for the sake of convenience.

Year	Population of Orissa	Variation	Percentage variation
1901	10,302,917	..	..
1911	11,378,875	+ 1,075,958	+ 10·4
1921	11,158,586	− 220,289	− 1·9
1931	12,491,056	+ 1,332,470	+ 11·9
1941	13,767,988	+ 1,276,932	+ 10·2
1951	14,645,946	+ 877,958	+ 6·4

It will be seen from the table above compared with the table on the preceding page that the population of Orissa in 1901 as its boundary stood on those days was 6,290,952 but if the territory in 1901 was what it is now, the population should have stood at 10,302,917.

Decade 1901-11

10. The recorded increase of population of Orissa between 1901 and 1911 is 1,075,958 bringing the total population to 11,378,875, an increase of 10.4 per cent. During this decade, there was a series of floods resulting in failure of crops and outbreaks of cholera and fever. The two opening years of the decade were years of short crop followed by two more when the harvests were fairly good. But from 1905 onwards, there was repeated failure of crop due to flood or draught and the effect of shortage of food on vital occurrence became very marked. In some districts, deaths exceeded births between 1906 and 1908. In 1908, particularly, the distress arising out of succession of bad agricultural seasons developed into famine conditions in various areas and the resources of the people were severely tried. In the last two years of the decade, however, the harvests were excellent and general prosperity of the people was revived. But during the major part of the decade the combined effect of disease and scarcity and the stimulus given to emigration due to bad harvests was responsible for arresting the rapid growth of

population. The facilities of communication with the outside world which the railway now afforded caused increase in the volume of emigration. In spite of these factors, there was satisfactory growth of population in all the districts of Orissa (as constituted at present) except in Balasore where the population diminished by 15,820. The district therefore displayed an unusual phenomenon and stood out distinguished from all the other districts of Orissa. This was due to rise in death rates in the first half of the decade and to poor vitality and general health of the people. The railway was administering slow poison by disseminating what was known as Burdwan fever from Bengal to the adjoining areas of Balasore district. There was, however, growth of population in the remaining 12 districts, and Orissa was able to show an increase of 10·4 per cent in 1911 over the population which it had ten years earlier.

DECADE 1911-21

11. This was a period of disasters, of epidemics and war, of scarcity and high prices and of high mortality and low birth rates. The first four years of the decade on the whole were healthy and prosperous. A series of unhealthy years started from 1915 when the death rate began rising with the frequency of outbreak of cholera, dysentery and smallpox. The flood of 1917 and the draught of 1918 following a series of years in which the harvest was not good resulted in reduced stocks of food grains and rise in the price of agricultural and industrial produce. The price of rice rose to $4\frac{1}{2}$ seers per rupee. The price of imported articles also rose as a result of four years of war. In addition to severe outbreaks of cholera and dysentery here and there, the disastrous epidemic of influenza now visited the country. It was more fatal to females than to males and inflicted heaviest casualties among infants and younger adults (i.e., persons between 20 and 35 years of age). Children and adolescents suffered much less and so also the old people. An extract from the Census Report of India, 1921, Volume I, Part I, is given below in order to illustrate the distress caused by the influenza epidemic of 1918 :—

> The rural areas were most severely infected, the reason probably being that while villages have little advantage over towns in the matter of over-crowding, sanitation and ventilation, the urban areas have the benefit of qualified medical aid and organised effort. Mortality was specially high among adults (20—40), particularly among adult females, the disease being generally fatal to women in pregnancy. It is suggested that the high mortality among women may have been due to the fact that, in addition to the ordinary tasks of the house, on them fell the duty of nursing the others even when themselves ill. The figures show that the excess mortality between the ages 20 and 40 amounted in some cases to nearly four times the mean. It is no exaggeration to say that at the worst period whole villages were absolutely laid desolate by the disease. There was sometimes no means of disposing of the dead, crops were left unharvested and all local official action was largely paralysed, owing to the fact that the majority of the official staff was put out of action by the epidemic. To add to the distress the disease came at a period of widespread crop failure and reached its climax in November when the cold weather had set in ; and, as the price of cloth happened at the time to be at its highest, many were unable to provide themselves with the warm clothing that was essential in the case of an illness that so readily attacked the lungs.

Although Orissa did not suffer from this calamity as acutely as did Bihar and other parts of India, the infection lingered on for a longer period here. The disease lasted well into the year 1919 and gave a high mortality in that year.

12. The decade thus saw the outbreak of the most decimating epidemic in living memory, and other diseases in virulent form and the country deeply suffered from these diseases and from the effects of war which worsened with the concurrent agricultural distress. The cumulative effects of all these unhappy circumstances was a decrease rather than

any amount of increase of population during the 10-year period. About half the number of districts suffered loss of population which diminished below 1911 level. The districts which did not lose in absolute numbers had only gains to a small extent. The statement below shows the total loss or gain of population in each district, between 1911 and 1921.

District	Increase(+) or decrease(−)	Percentage of variation
Cuttack ..	− 62,390	− 2·8
Balasore ..	− 78,556	− 7·0
Puri ..	−136,952	−10·1
Sambalpur ..	+41,474	+ 4·5
Ganjam ..	−41,221	− 3·2
Koraput ..	−27,745	− 3·3
Dhenkanal ..	−75,719	−12·8
Keonjhar ..	+14,794	+ 4·1
Phulbani ..	− 1,684	− 0·4
Bolangir ..	+96,790	+15·5
Sundargarh ..	+15,311	+ 4·2
Kalahandi ..	+10,513	+ 1·8
Mayurbhanj ..	+25,096	+ 3·4

It will appear that the Orissa coastal division suffered heavily where not a single district escaped diminution of population. Inland Natural Division fared much better although there was loss of population in Phulbani, Dhenkanal and Koraput. The result of all these prolonged and disastrous natural calamities ultimately brought about a loss of population of Orissa by 220,289 or in other words a decrease of population by 1·9 per cent over the population of 1911.

DECADE 1921-31

13. This was on the whole an era of prosperity but the blessings were by no means unmixed. In the first year of the decade, the people were still struggling to get over the decimation caused by the calamities of the previous decade. The number of deaths out-numbered the number of births in most of the districts but by 1922 improvement was noticeable and in the next year, there was further advance towards prosperity except in the district of Balasore where the standard of public health continued to be very low, the number of deaths invariably exceeding the number of births from 1921 to 1927. Elsewhere and particularly in Khurda subdivision of Puri, in Angul and in most of the ex-state areas steady improvement in all directions was noticed. But from 1924 onwards, the recovery was checked as a series of unhealthy years came. Malaria, some times in malignant form, became widespread not only in the coastal districts but even in Angul, Sambalpur and some ex-states. Fever and dysentery started taking a good toll of human life during the years 1925 to 1927. These three years and particularly the last one brought devastating floods which resulted in damage to crops extensively over the deltaic area and was responsible for deterioration of public health. In 1927 there was a virulent type of cholera epidemic in Sambalpur and neighbouring areas. The last three years of the decade however, were healthy and plentiful and although by now malaria had moved from north to south and areas of Cuttack and Puri were affected, the disease had lost its virulence.

14. Excepting in the coastal districts, the decade had good crops in the other parts of the State. Sambalpur and Bolangir, particularly had bumper crops for the entire period. The harvests in the coastal districts also were good in the last three years of the decade.

15. The decade marks the beginning of industrialisation in Orissa. Two new railway lines were opened, one joining the Talcher coal fields with the main railway line connecting Calcutta and Madras and the other, Raipur-Vizianagram railway line, which passed through the western portion of the State was completed in 1929. In addition to opening of railways, road communications were extended and improved during this decade. Two new iron mines were opened in the Mayurbhanj district while

manganese and limestone quarries were developed in Sundargarh district. A large number of rice mills came into existence particularly in the district of Balasore. The timber resources of the forests as well as bamboo and lac were effectively exploited. These and many other smaller industrial developments brought about prosperity to the country. Another special feature of the decade was the increased emigration for Assam Tea Labour. During this decade many of the ex-states relaxed rules prohibiting such emigration and consequently a large exodous of landless class towards Assam took place. Emigration to Burma, particularly from the districts of Puri and Ganjam was on the increase.

16. When the census of 1931 took place, it was seen that Orissa had gained by 1,332,470 bringing the total population to 12,491,056. This meant an increase of 11·9 per cent, the highest since 1881.

DECADE 1931-41

17. This decade is memorable for Orissa as it was constituted into a separate province on the 1st April 1936. Ganjam and Koraput districts which were hitherto in the Presidency of Madras became a part of Orissa. Some portions of the Central Provinces, namely Nawapara subdivision and Mahadebpali police-station were added to Sambalpur district. The decade was one of general peace and prosperity in all direction as the effect of World War I had completely gone. The condition of crop in most of the years was satisfactory except in 1933, 1937 and 1938 when the harvests yielded inadequate outturn. The position relating to food stock was satisfactory. Occasional floods particularly in 1933 and 1937, which were rather high, visited the coastal districts and deposited sand on agricultural lands in some localities of Cuttack and Puri districts between 1937 and 1940. There was also a flood in October 1938 in river Vansadhara affecting the agricultural position of Gunupur taluk. This year, there was a cyclone in October which damaged crops in Puri and Ganjam districts. Thus, the closing years of the decade were not as prosperous as the earlier ones. Relief operations and distribution of Taccavi loans were organised in the coastal districts and remission of rent was granted in 1938 in some parts of Ganjam district while in 1939 the Jeypore estate remitted a liberal amount of rent of Rs. 65,000. In the year 1940, there was heavy rain and high flood between June and August damaging crops in the coastal districts though Sambalpur suffered from deficient rain. Employment of agricultural labour was normal throughout the period. Emigration of landless persons continued throughout the decade, particularly on the close of the agricultural season. Such people generally used to seek their livelihood in Calcutta, Jamshedpur and Rangoon, most of them returning before the next agricultural operations began.

18. Considering the general level of public health in Orissa, the decade 1931-41 was comparatively healthy. It may be borne in mind that even in normal times there are a number of sporadic outbreaks of epidemics in different parts of the State. So in this decade, there were epidemics of cholera, smallpox, malaria, typhoid, diarrhoea and dysentery and other endemic diseases. Cholera was prevalent in all the years of the decade more or less but it was most virulent in the years 1932, 1936 and 1939. This epidemic was mostly confined to the three coastal districts of North Orissa. Smallpox, on the other hand, was less severe throughout the period probably due to the immunity conferred by more extensive vaccination. There were local outbreaks, however, in Khondmals, Sambalpur and the coastal districts particularly. Fever continued to claim a heavy toll of human life.

The foreshore of the Chilka lake and parts of Puri sadar subdivision, Kendrapara subdivision, Khondmals, Angul, Balasore and many other parts of the State suffered heavily. In the year 1936, a severe epidemic of malaria spread over 417 villages in Ganjam. In the year 1938, the incidence was very high, death rates from this disease rising to the high figure of 30·0 per mille in Khondmals, 22·1 in Balasore and 22·0 in Angul. Ganjam and Cuttack also suffered extensively. Koraput had also some share of this disease. The outbreak of dysentery and diarrhoea in epidemic form was also experienced, particularly in 1932 when out of 15,727 deaths from this disease in Bihar and Orissa, as many as 12,606 occurred in Orissa districts alone. On the whole the first half of the decade was a little healthier than the second. But the decade as a whole was comparatively much better in public health than the decade which preceded or succeeded it.

19. In the year 1939, World War II came and although India was one of the belligerant countries and the people used to take a good deal of interest in the progress of war, the economic or material condition of the country did not deteriorate till the close of the decade. There was rise in the price of gold which had a psychological effect on the price of other commodities which showed a small amount of rise. The prosperous years of the decade ensured satisfactory growth of population which increased by 1,276,932, a growth of 10·2 per cent during the decade so that the population of Orissa in 1941 stood at 13,767,988.

The Last Decade: Material Condition

Calamities

20. It seems the days of normal prosperity through which Orissa had passed during the previous two decades had come to an end in 1941. The country was in the midst of war which brought high prices and resultant distress. The decade also saw memorable historical events, such as, the political freedom of India from British rule and the merging of the fuedatory states with Orissa proper. The opening year of the decade brought moderate floods in the rivers of Balasore district, but there was insufficient rain and poor harvest in portions of Kalahandi, Sambalpur and Sundargarh districts. In the following year, namely 1942, the position deteriorated in all directions. The economic repercussion of the war was effectively felt by the man in the street due to sharp rise in the price of commodities. The events of war were taking uncertain turns so that people started feeling the apprehension of invasion by a foreign power. There were at least two events of incindiary bombs being thrown by the enemy in the coastal districts of Orissa. The position became worse with the severe cyclone which visited parts of Bengal and the northern portion of Balasore district. A month later, namely in November 1942, another cyclone passed over Puri and Ganjam districts not altogether sparing areas of Sadar subdivision of Cuttack. Extensive relief operations in these districts were undertaken by Governmental and non-official agencies. Ring bunds in Parikud in Puri district were constructed at a heavy cost to offer employment to the people and to prevent the spread of salt water from Chilka. The relief operations were continued right upto 1943. In 1944, there was again a high flood and in the year 1945 the rainfall was inadequate at the sowing time but there was flood when the crops had fairly grown up. In 1946, again abnormal rainfall and high flood caused damage in Balasore and Cuttack and a sum of Rs. 62,312 was advanced as taccavi loans in Balasore alone. There was heavy and unequal

distribution of rainfall in 1947 causing loss to crop in Sambalpur and in the coastal districts. The last three years of the decade also had moderate floods in the three principal rivers of Orissa. There was unfavourable weather in the year 1948 when storms damaged crops in Sambalpur and untimely rains were detrimental to the agricultural position in parts of Ganjam.

PUBLIC HEALTH

21. There was marked deterioration in public health during the last decade. Outbreaks of cholera which came almost every year during the decade carried away large number of victims in Balasore, Cuttack and Puri, particularly during the years 1943 and 1944 when the virulence reached its peak. Smallpox was less severe in attack but incidence was high in 1944 and it reached its peak in the year following. Fever simultaneously took a heavy toll of life in the year 1941 and then showing an upward curve for three years from 1943 to 1945 declined in 1946 but again caused the highest percentage of death in 1947. The areas affected most notoriously were Khondmals, Balasore, Kendrapara and Jajpur and parts of Puri and Ganjam districts. Meanwhile, dysentery and diarrhoea were very active in Kendrapara, Jajpur, Puri and to some extent in Ganjam and Koraput districts between the years 1941 to 1944. In the year 1943, there was a small surplus of births over deaths but in 1944, 1945 and 1947 deaths exceeded births. A description of the unusual mortality during a portion of the period has been graphically given in the Report on Bengal of the Famine Enquiry Commission, an extract from which is given below : *

The total recorded number of deaths in Orissa in 1943 was 233,584, an increase of 17·9 per cent over the quinquennial average of 198,150. In the district of Balasore, bordering on Bengal, the increase in mortality was 40·7 per cent. In this district 1,105 deaths from starvation were recorded, but many of the victims were destitutes from Bengal. The rise in the death rate in the province as a whole was due largely to epidemics of cholera and malaria but there was also an increase in the number of deaths reported under the head ' dysentery and diarrhoea'. During the months August to December, 11,194 deaths were recorded as against a quinquennial average of 7,563. The Director of Public Health, Orissa, in giving evidence before the Commission, expressed the opinion that the increased mortality in Orissa in 1943 was due to food shortage, migration within the province, and the influx of destitutes from Bengal. Some of the latter died in Orissa and moreover they carried with them epidemic diseases which spread among the Oriyas.

22. Marked improvement came in the second half of the decade except for the year 1947 which was very unhealthy as stated above. The surplus of births over deaths began to rise from the year 1948 onwards and was maintained till the last year of the decade.

PRECARIOUS FOOD POSITION

23. The position of food stocks during the decade was rather unusual for Orissa. Local shortage occurred in the years 1942 and 1943 and to some extent in later years when the surplus areas had to send out food grains. Till the middle of 1943, the annual carry-over of food stock used to be high but with the introduction of free trade that year and with the export of rice to other provinces of India under a central basic plan, there was quick depletion of the old stock. The condition of agriculturists generally was fair due to rise in price of crops notwithstanding the fact that other necessaries of life became costlier as a result of the war. Administrative measures were taken extensively to check unfair high price of commodities on account of the activities of black marketeers and profiteers. High powers under

* Famine Enquiry Commission, 1945, Report on Bengal, page 144. An excellant review of this Report has been given in the Discovery of India by Jawaharlal Nehru, page 606.

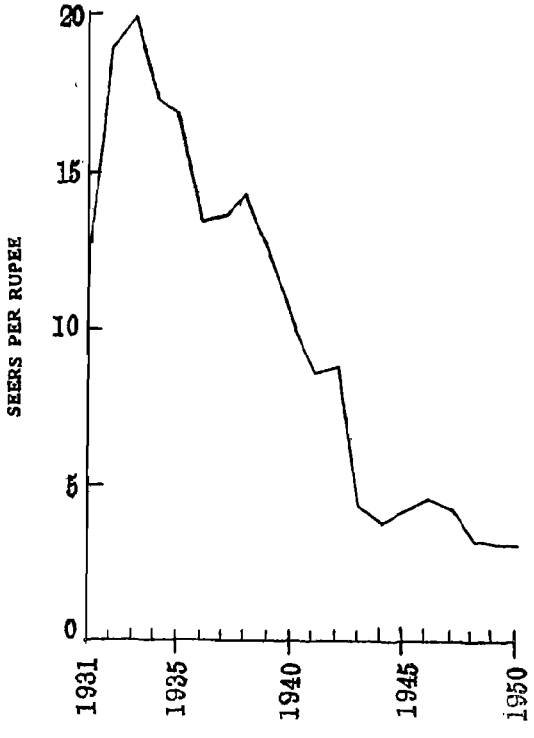
the Defence of India Rules were delegated to the District Officers to check the profiteering and hoarding activities. The rise in price of agricultural produce brought some relief to bigger cultivators who had surplus stock to spare but it did not materially improve the condition of petty cultivators and agricultural labourers. Such people and the people belonging to non-agricultural category were relieved to some extent by price control measures which were now introduced. Although free trade in 1943 depleted the resources of reserve food stocks, legal restrictions came towards the end of the year against export of food grains, which had the effect of maintaining the remaining stocks in the districts and keeping the price of rice within a reasonable level and within the purchasing power of the people. Grow More Food Operations were started in 1943 for grant of loans to agriculturists for reclaiming the waste lands, renovation of tanks, digging of wells and purchase of ploughs and bullocks and seeds. Ammonium sulphate was made available to agriculturists at cheap rate to manure the crops. Vigorous propaganda was undertaken to instruct cultivators and land owners to make the best use of fallow or uncultivated lands to grow food crops. A scheme for killing monkeys in the interest of protection of food crops was also launched. There was general paucity of labour which resulted in the increase of wages. Although the war came to an end in 1945, there was no tendency in the prices of commodities to fall. On the other hand, further steady rise in prices from 1946 onwards was felt.

Price of Rice

24. In the opening year of the decade common rice was selling at the rate of 8½ seers per rupee but in the closing year, the price rose to 3 seers. A statement of the price of common rice during the last 20 years is given below :—

Year	Standard seers per rupee	Year	Standard seers per rupee
1931	12·0	1941	8·5
1932	19·0	1942	7·9
1933	20·0	1943	4·5
1934	17·4	1944	3·9
1935	17·0	1945	4·2
1936	13·3	1946	4·6
1937	13·7	1947	4·2
1938	14·4	1948	3·2
1939	12·7	1949	3·1
1940	10·0	1950	3·0

PRICE OF COMMON RICE



Economic Crisis : Inflation

25. The paragraphs above describe how natural calamities, unsatisfactory public health and precarious food position affected the material condition of the people of Orissa. But the biggest single factor affecting the material condition of the people during the last decade was the World War II which broke out in 1939, but made itself seriously felt by the man in the street towards the

close of 1941. The war preparations on huge scale on behalf of India and of the Allies led to considerable inflation of money in the country with its usual evil consequences. Abnormal rise in the cost of living was experienced which rapidly outpaced all pre-1939 base. Increased circulation of money quickly deteriorated into mal-distribution, even though a series of anti-inflationary measures were adopted from the middle of 1943. Legal and executive action in introducing control of commodities was partially successful due to the apathy and at times hostility of the public and of the powerful business community towards the control machinery. By the time the war was coming to an end in 1945, there was a widespread belief that the cessation of hostilities would be followed by economic depression, mostly due to withdrawal of unprecedented war-time expenditure. It was thus thought necessary that the war expenditure should be replaced by other expenditure to keep away unemployment and depression. This idea was implemented by the Central Government asking the States to go ahead with projects of capital expenditure, mainly based on a five-year plan, for which the Government of India promised substantial financial support. But the expectation was not realised. The enhanced purchasing power arising from war and post-war inflation was diverted to the stock market where speculation was rampant, rather than to productive enterprise. The attempt to reduce the black marketeer by demonetisation of one thousand rupee notes did not prove successful. The decision to execute large schemes of capital expenditure led, under the circumstances, to still higher prices. The index number of cost of living rose almost by four times over that of 1939 base during a period of ten years till 1948.

Post Office Remittances and Deposits

26. An idea may be formed of the extensive circulation of money in the country by the rapidly mounting amount of remittances and savings deposits in the post offices * during the post-war years of the last decade.

Year	Value of Money Orders remitted to Post Offices in Orissa	Savings Bank Deposits	Sale of Cash or National Savings Certificates
	Rs.	Rs.	Rs.
1945	54,77,318	6,07,999	2,22,174
1946	1,50,54,074	21,03,766	5,80,534
1947	3,43,46,003	53,13,715	12,02,644
1948	4,87,80,927	94,72,718	15,54,822
1949	5,41,02,801	1,20,61,110	11,57,895
1950	10,96,14,718	1,36,09,705	10,81,100
1951	5,90,14,461	1,47,81,064	17,96,835

Increase in Railway Traffic

27. The effect of expansion of money was readily felt in various aspects of national life, namely, in the increased standard of living and in the ability to spend more. In spite of rise in price, there was a tendency to spend more on consumer goods, luxury and travel. The growth in the travelling habit of the people was conspicuously marked during these years. The increase in such movements not only resulted from activities connected with the war but also with those arising from cheapening of money, speculation and growth of business and industries connected with the war and post-war periods. The following statement † giving the number of railway passenger tickets sold per year during the last 15 years in a few important railway stations of Orissa shows how travel habits increased rapidly during these years.

* Figures supplied by the Director of Posts and Telegraphs, Orissa.

† Statement received from the Statistical Officer, Eastern Railway, Garden Reach.

Total number of railway passenger tickets sold per year

Year	Berhampur Railway Station	Puri Railway Station	Cuttack Railway Station	Balasore Railway Station	Sambalpur Railway Station
1936-37	157,779	258,166	301,171	130,457	10,752
1937-38	155,716	295,533	337,317	128,510	12,687
1938-39	142,279	266,067	321,583	125,376	12,535
1939-40	148,537	287,792	346,380	131,419	13,478
1940-41	173,770	300,293	354,365	137,835	12,574
1941-42	181,262	320,332	376,635	150,376	12,171
1942-43	230,245	240,993	421,579	123,487	14,406
1943-44	189,131	438,318	411,325	124,591	21,844
1944-45	250,050	518,380	447,859	141,999	32,598
1945-46	301,721	689,386	534,578	133,960	44,042
1946-47	273,524	683,907	668,255	168,384	48,444
1947-48	318,389	730,640	676,116	353,191	44,648
1948-49	380,480	795,740	906,884	378,592	54,820
1949-50	335,779	821,554	960,446	301,903	68,065
1950-51	295,643	969,767	993,404	253,828	74,354

SUMMARY OF MATERIAL CONDITION

28. In the above paragraphs, a broad outline of the material condition of the people has been given to indicate how they fared during the last decade. There was a series of calamities, war, political changes and economic crisis in consequence of which a considerable section of population suffered in health and lived on the margin of subsistence. Public health was bad and the economic stress severe. The increasing pressure on land was not relieved by industries growing at a parallel rate. The agricultural classes, in spite of rise in the price of agricultural produce, were hit hard by the greater rise in the prices of other commodities, particularly cloth and consumer goods. Similarly, persons belonging to ' Other services and miscellaneous sources' who had the least elasticity in their incomes, gradually fell behind on the face of rising cost of living. Comparatively much better off were the persons engaged in ' Production other than cultivation ; commerce and transport,' as they constituted the sections of population benefited most by increased circulation of money. On the whole however, there was not so much of a rise in the standard as in the cost of living. The *per capita* income took an upward trend during the decade, as the general level of income in terms of money substantially increased. Yet there was no equivalent increase in terms of goods acquired or benefits accrued Strain and anxiety in the affairs of life gradually took the place of contentment and peace of mind.

The Last Decade : Growth of Population

29. The decade 1941-51 was less favourable than the two previous decades in the matter of weather, natural conditions, vital occurrences and the material condition of the people which deteriorated due to the war and political unrest. All these circumstances had the effect in lowering the rate of growth of population during the decade which fell down to 6·4 per cent from 10·2 in 1931-41 and 11·9 in 1921-31. During the period of ten years upto March 1951, the population of Orissa grew by 877,958 bringing the total population of the State to 14,645,946.

MEAN DECENNIAL GROWTH RATE

30. The growth of population in Orissa during the last decade compares unfavourably not only with the growth in two previous decades but also with the growth noticeable in India as a whole and in different States in India during the last decade. The following statement shows the mean decennial growth rate during the period from 1941 to 1951 relating to India and different States arranged in order of growth rate. The mean decennial growth rate is the difference between the general population

totals of two successive censuses expressed as a percentage of the arithmetical mean of these two totals and is slightly different from the ordinary rates of percentage variation, which expresses growth of population at the beginning of the decade.

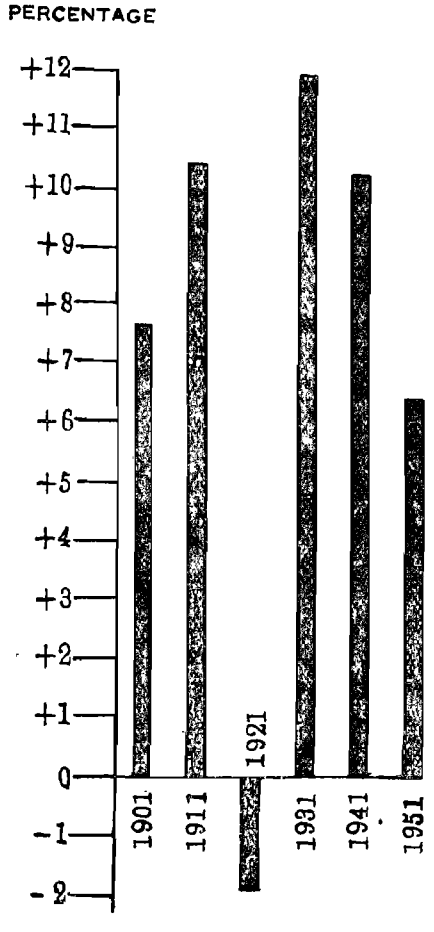
State	Mean decennial growth rate (1941-51)
INDIA ..	+12·5
Travancore-Cochin ..	+21·2
Mysore ..	+21·2
Bombay ..	+20·8
Assam ..	+17·4
Rajasthan ..	+13·9
Madras ..	+13·4
Hyderabad ..	+13·3
West Bengal ..	+12·7
Uttar Pradesh ..	+11·2
Madhya Bharat ..	+10·4
Bihar ..	+ 9·6
Madhya Pradesh ..	+ 7·9
Orissa ..	+ 6·2
Vindhya Pradesh ..	+ 6·0
Punjab (I) ..	− 0·5

31. At the bottom of the statement are Punjab (I), Vindhya Pradesh and Orissa. Punjab's figure does not give the real indication of the trend of growth, as the State was torn asunder when India was partitioned, resulting in waves of migration, murder and abduction. The real significance can only be studied after the Report on the 1951 Census is published. Next comes Vindhya Pradesh which occurs below Orissa but has so little difference from Orissa's growth rate that for practical purposes both may be taken to stand bracketted. Thus, Orissa may be taken to have the lowest gain in India by way of decennial growth. All other States have higher growth rate than Orissa, so much so that two of her immediate neighbours, namely, Madras and West Bengal have a growth rate exceeding double that of Orissa. These three States are sea-board countries with some inland regions and so the dissimilarity between Orissa and the other two States in respect of growth of population is a matter of serious consideration. The growth rates of Assam, Bombay, Mysore and Travancore-Cochin are nearly or more than three times Orissa's growth rate.

GROWTH DURING THE LAST 50 YEARS

32. The population of Orissa has increased from 10,302,917 in 1901 to 14,645,946 in 1951, an increase of 4,343,029 in course of the last half a century. This means an addition of 42·2 per cent in 50 years. The growth of population between 1901 and 1911 amounted to 1,075,958 which is an increase of 10·4 per cent. In the

VARIATION OF POPULATION



subsequent decade, namely between 1911 and 1921 there was a decrease of population to the extent of 220,289 on account of the reasons mentioned earlier in this Section. This decrease amounts to 1·9 per cent. The increase of population from 1921 to 1931 was the highest during the last half a century amounting to 1,332,470 or 11·9 per cent. After that the increase has not been so high but fairly satisfactory. The population grew between 1931 and 1941 by 1,276,932 or 10·2 per cent. The last decade (1941—51) saw an increase of 877,958 in the population of Orissa which works out to 6·4 per cent. The diagram given in the previous page depicts the percentage of increase or decrease in the population from 1901 to 1951.

GROWTH IN OTHER STATES

33. As mentioned above, the population of Orissa grew by 42·2 per cent during the last 50 years. During this period, the growth of population in India (adjusted according to the present territorial limit) was somewhat greater. The statement below illustrates the growth in India and various States between 1901 and 1951.

State	Population in 1901	Population in 1951	Pecentage of growth in 50 year
INDIA ..	235,478,813	356,829,485	51·5
Assam ..	3,814,188	9,043,707	137·1
Bombay ..	21,217,221	35,956,150	69·5
Madhya Pradesh	13,464,782	21,247,533	57·8
West Bengal ..	15,834,010	24,810,308	56·7
Madras ..	36,675,556	57,016,002	55·5
Orissa ..	10,302,917	14,645,946	42·2
Bihar ..	28,393,457	40,225,947	41·7
Uttar Pradesh ..	48,625,310	63,215,742	30·0
Punjab ..	10,476,970	12,641,205	20·7

FOREIGN COUNTRIES

34. An interesting comparison is available from a study on the growth of population in the world by Dr. S. Swaroop who observes* "The rate of increase from 1900 to 1949 has been slowest (36 per cent) in Europe (excluding U. S. S. R.) and most rapid in the Americas (112 per cent). Among the European countries the Republic of Ireland has actually shown a decrease of 7 per cent while France shows only negligible increase. The total addition to the population of Europe has been of the order of 100 millions. The present territory of U. S. S. R. which in 1900 contained less than half of the population of the remainder of Europe, added about 74 millions in the same period. The rates of population growth in Australia, Canada, New Zealand and United States have exceeded those of Europe. The most rapid increase has been recorded in Argentina (251 per cent) followed by Cuba (231 per cent), Columbia (213 per cent) and Brazil (191 per cent). On the whole, the American continent added about 170 millions and doubled her number from 1900 to 1949. Africa which in 1900 had presumably a population as large as that of both Americas, added only one-third (57 millions) of the American increase. Half of the total world increase has been contributed by Asian countries alone. Even though some of the smaller countries, such as Indonesia, the Philippines, Thailand, etc., recorded rates of increase well over 100 per cent, the two large countries, viz., China and India, increased relatively slowly at the rates of approximately 30 per cent and 49 per cent respectively, yet their countribution to the total world increase is almost one-third."

CHANGE IN TREND SINCE 1921

35. The growth of population in Orissa during the half-century has not proceeded from decade to decade in a consistent manner. The increase has been very slow during the first two decades and

* Growth of Population in the World by Dr. S. Swaroop (World Health Organisation Epidemiological and Vita. Statistics Report, April 1951) page 167.

rather fast during the following three decades. The year 1921 divides the first half of the present century into two periods, firstly from 1901 to 1921, a period of slow growth and from 1921 to 1951, a period of markedly fast growth. The growth during the first 20 years comes to only 855,669, or in other words 8·3 per cent while the growth in the next 30 years comes to the high figure of 3,487,360, or 31·3 per cent. Thus, in the demographic career of Orissa, the year 1921 will remain an important cross-road as it is from this year that a systematic trend in the growth of population is noticeable, which is expected to continue for a few decades in the future. As elsewhere in the world, the growth of population in the present times is connected with the advent of the Industrial Revolution. The industrial era came to India late in comparison with the advanced countries of the world and to Orissa it came much later. That was the decade 1921-31 when Orissa began to extend its railways and hard surfaced road communications and built up power-worked factories and mines, though small in number. The growth of such industries in Orissa has been continuing since this decade and together with it, the increase of population has kept consistent pace.

GROWTH IN NATURAL DIVISIONS

36. The following statement compares the growth of population of the two natural divisions of the State during the last 50 years.

Decade	Orissa Inland Division		Orissa Coastal Division	
	Increase(+) or decrease(−)	Percentage variation	Increase (+) or decrease (−)	Percentage variation
1	2	3	4	5
1901—11	+ 904,866	+19·6	+171,092	+ 3·0
1911—21	+ 94,195	+ 1·7	−314,484	− 5·4
1921—31	+ 892,203	+15·9	+440,267	+ 8·0
1931—41	+ 843,322	+12·9	+433,610	+ 7·3
1941—51	+ 610,530	+ 8·3	+267,428	+ 4·2
Total for 1901—51 ..	+ 3,345,116	+72·3	+997,913	+17·6

The growth of population has been extraordinarily rapid in the inland division while it is poor in the coastal division. Even during the decade 1911-21 when not only the coastal division of Orissa but many provinces in India lost in population, the inland division made a gain although it was small, namely 1.7 per cent. The increase of population of this natural division in the first decade of the century which is approximately 20 per cent in 10 years, was due to the speedy recovery from the effects of the famine of 1900 in which Sambalpur, Bolangir and Phulbani districts suffered grieviously and other districts felt the effects of scarcity. The growth of population in other decades has consistently remained high because the inland natural division unlike the coastal division is free from annual devastations of floods which not only affect crops but also spread or prolong epidemics and diseases. On the other hand, the coastal division has all along shown a poor rate of increase and in the decade 1911-21 actually lost population to an extent of 5·4 per cent. The increase in the first decade of the present century was very low, namely 3 per cent on account of heavy and repeated floods, scarcities and epidemics. The coastal

division lost heavily during the influenza years but maintained its growth on a moderate level in the two succeeding decades, namely 1921-31 and 1931-41, the growth being more than 7 per cent in each decade. The last decade, 1941-51, again experienced poor increase limited to 4·2 per cent as against the Orissa average of 6·4 per cent and India average of 13·4 per cent. Public health in the coastal division, particularly, in Cuttack and Balasore and very notoriously in the latter district, remained low all throughout the decade and there was serious diminution of population in a large number of police-station areas in these two districts. This is primarily responsible in bringing down the rate of growth of population in the coastal division in the decade 1941-51. The details will, however, be seen in course of review of the position relating to individual districts.

Growth of Population in Districts

37. As stated above, the growth of population of Orissa during the last 50 years comes to 42·2 per cent. This growth is the result of very unequal progress made by different districts during the period. Between 1901 and 1951, Keonjhar and Bolangir show the highest percentage of increase amounting to over 105 per cent. Sundargarh is closely behind, being 100 per cent. The coastal districts, however, showed a poor rate of increase. Balasore most strikingly stands out as the only district in Orissa with an adverse figure of loss of population to the extent of 3 per cent below what the district had 50 years back. The population of Balasore was 1,140,102 in 1901 which was reduced to 1,106,012, a deficit of 34,090 in 50 years. Thus, while the districts of the inland natural division have gained highly during the last 50 years and the districts of the coastal division except Balasore have gained to a small extent in population, Balasore district has undergone loss of population during this period.

38. The growth or decline of population during the period of 50 years from 1901 to 1951 in different districts is shown below :—

State and district	Increase (+) or decrease (−) in population between 1901 and 1951	
	Actual	Percentage
ORISSA ..	+4,343,029	+ 42·2
Cuttack ..	+ 322,204	+ 14·6
Balasore ..	− 34,090	− 2·9
Puri ..	+ 246,687	+ 18·6
Sambalpur ..	+ 512,546	+ 64·9
Ganjam ..	+ 482,866	+ 42·3
Koraput ..	+ 576,347	+ 83·1
Dhenkanal ..	+ 267,166	+ 46·7
Keonjhar ..	+ 302,683	+105·9
Phulbani ..	+ 122,859	+ 36·8
Bolangir ..	+ 470,250	+105·1
Sundargarh ..	+ 275,030	+ 99·2
Kalahandi ..	+ 380,039	+ 79·4
Mayurbhanj ..	+ 418,442	+ 68·6

39. In discussing the growth of population in different districts of Orissa, a comparable basis has been maintained for the past six censuses upto 1901 by adjustment of population to the territorial limit of each district as it existed in 1951. In other words, the population of a district as shown in the following paragraphs from 1901 onwards relates to the area of the district as it had in 1951 and not to the area which the district actually had in the respective censuses. But the population in respect of censuses from 1872 to 1891 wherever exhibited, relates to the unadjusted area of the district which actually existed in the respective census year.

Cuttack

40. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1872 ..	1,636,015	
1881 ..	1,908,349	+16·6
1891 ..	2,061,195	+ 8·0
1901 ..	2,207,040	+ 7·1
1911 ..	2,260,585	+ 2·4
1921 ..	2,198,195	− 2·8
1931 ..	2,339,243	+ 6·4
1941 ..	2,448,772	+ 4·7
1951 ..	2,529,244	+ 3·3

41. The increase in the first decade was high, firstly because the district was recovering fast from the terrible effects of the famine of 1866, commonly known as the '*na-anka*' famine. This corroborates the generally accepted view that there is an accelerated increase of population by way of natural economy after a decay, or loss of population due to calamities. Secondly, the percentage of increase during the decade appears to be high on account of the fact that in 1872 when the first decennial census was taken in the absence of any previous administrative experience of similar nature, it was estimated that about

CUTTACK DISTRICT

Scale 1" = 25 miles



one lakh persons escaped enumeration in Cuttack district alone. The real rate of growth was therefore much less than what has been shown. In the next decade the rate of increase was normal in spite of the effects of the devastating cyclone of 1885 known as '*sunia batasa*' which severely affected 45 villages in Patamundai police-station. The last decade of the 19th century was also not free from a disastrous cyclone, which visited the district in November 1892, and is still remembered as '*Naga Chaturthi batasa*'. In 1893, Rajnagar

police-station area extensively suffered on account of saline inundation resulting in loss of cattle, crops and houses. But even then there was steady increase of population throughout the district. During this decade the Bengal-Nagpur Railway was built across Orissa which brought prosperity to the land. The advent of railway, however, showed another effect on the population in the decade 1901-11. Migration outside Orissa automatically increased. In this decade, a series of floods, failure of crop and outbreak of epidemics occurred leading indirectly to a large increase in the number of men going out of the district in search of work. In 1907, Kendrapara subdivision particularly suffered from a high flood and in the following year, the coastal area was flooded with salt water from the sea. The sadar subdivision also experienced shortage of food. The effect of all these adverse conditions resulted in a small increase of population of 53,545 or 2·4 per cent between 1901 and 1911. But the district had a more unfortunate history in the next decade.

42. The census of 1921 showed the first actual decline in the number of population of the district. The first half of the decade was a period of steady prosperity in spite of seasonal floods but thereafter not only the country was in the midst of war conditions but natural calamities visited the district in succession. The disastrous epidemic of influenza appeared in the year 1918 and lingered on in this district more than in any other district of the State. Failure of monsoon resulted in reducing stocks of foodgrain, while prices were increasing on account of war conditions. The last two years of the decade brought more severe floods and more disastrous epidemics of cholera, dysentery and fever. Scarcity of foodgrains was felt all over the district, and particularly in Banki, Narsingpur and Baramba. The birth rate was severely affected as a result of repeated visits of epidemics. All these encouraged migration with the result that the population of the district in 1921 was less than in 1911 by 62,390, a loss of 2·8 per cent.

43. The district had a period of distress in various forms in the decade 1921-31. The aftermath of war was effectively felt in every field. There were natural calamities resulting from floods and epidemics. The number of deaths was in excess of the number of births in 1921 and although the following years were not bad, the year 1924 showed a large increase in death rate which outnumbered birth rate to the extent of 5 per thousand. In the last half of the decade, disastrous floods repeatedly visited the district necessitating extensive distribution of taccavi loans and gratuitous relief. On the whole, this was a decade of floods and epidemics of cholera, malaria and dysentery. But in spite of all these adverse conditions, the district showed an increase of 141,048 souls, an increase of 6·4 per cent, which is the highest during last half a century. This unprecedented increase amidst adverse conditions is explained partly by the return of emigrants, particularly to Banki and Aul police-stations and partly due to rapid growth of the headquarters town Cuttack.

44. The decade 1931-41 was one of general peace and prosperity. There was steady growth of population which increased by 109,529 or 4·7 per cent. The country had completely recovered from the effects of the World War I and the people were engaged peacefully in agriculture, industry and other avocations. But the district was not free from adversities. Ruinous floods came in 1933, 1934, 1937, 1939 and 1940. The flood of 1937 was the highest in living memory, causing several breaches in embankments and spreading sand over cultivated lands and causing damage to

crops. Other floods of the decade also caused considerable damage to crops. In the year 1936, Jajpur subdivision was subjected to the desolation of a cyclone, greatly damaging crops, while the lower regions of the district suffered from salt water flooding in 1939. There was partial failure of crop in 1933, 1937 and 1939 and the harvest of 1940 was very poor. Public health during the decade was much better than it was previously. But the district was not completely free from epidemics and diseases. Cholera was widespread throughout the decade but was particularly destructive in the years 1932, 1935 and 1939. The most virulent attack of cholera occurred in the year 1939 when the death rate from this disease alone rose to the high figure of 4·1 per mille. Smallpox was not so active as cholera but it was extensive in 1938 and 1940, particularly in the latter year when the death rate in Cuttack town rose to 2·7 per mille from this epidemic alone. The district was also a frequent sufferer from fever, diarrhoea and dysentery. Kendrapara subdivision particularly, deteriorated during the decade as cases of fever, dysentery and diarrhoea increased highly. Jajpur and parts of Sadar subdivision also suffered extensively particularly in the year 1936 from fever and in 1938 from dysentery and diarrhoea. In spite of these adverse conditions, there was economic and general prosperity and the population grew steadily.

45. In the last decade (1941-51), the population of the district grew by 80,472 out of which Cuttack city alone contributed an increase of 28,214, leaving 52,258 for the rest of the district. The district had to pass through unfavourable times in various ways during the decade. There were a series of high floods in different years, namely, in 1941, 1943, 1947, 1949 and 1950. The flood of August 1943 was particularly damaging, as all the three principal rivers of the district were in spate simultaneously. The flood of 1947 was also very high which destroyed the standing winter paddy. Due to these reasons the outturn of crop in the years 1943, 1947 and also in the year 1950 was poor. Public health was by no means good except in Athgarh subdivision where occasional outbreaks of epidemics were not only of limited scope but were also few and far between. In other subdivisions of the district, cholera took away lives year after year throughout this period. In 1943 and 1944 the death rate from cholera alone rose to 3·5 and 4·3 per mille respectively which was the highest in any district of the State. Diarrhoea and dysentery were running parallel claiming heavily at the rate of 4·3 per mille in 1941 and a little less from 1942 to 1944. The outbreak of a severe type of smallpox in 1945 came simultaneously with extensive sufferings from malarial and other fevers in that year. The death rate from fever alone rose to 16·9 per mille in this year. The lower portion of the district, particularly Kendrapara subdivision was consistently under some sort of suffering during the decade. In the Sadar, Jajpur and Kendrapara subdivisions, a number of police-stations suffered from a decrease of population on account of unsatisfactory health conditions. These circumstances were responsible in checking the rate of growth of population of the district during the decade which was limited to 3·3 per cent inclusive of the considerable gain made by the city of Cuttack.

46. The growth of population in each subdivision during ten years upto 1951 is shown in the following page :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
CUTTACK	2,448,772	2,529,244	+80,472	+ 3·3
Sadar subdivision	1,129,583	1,175,759	+46,176	+ 4·1
Jajpur subdivision ..	615,125	622,530	+ 7,405	+ 1·2
Kendrapara subdivision ..	520,863	526,472	+ 5,609	+ 1·1
Athgarh subdivision ..	183,201	204,483	+21,282	+11·6

47. The gain in population of Athgarh subdivision has been substantial. But in the remaining three subdivisions, it has been poor. The percentage of increase in sadar subdivision, as it appears from the statement above, is 4·1 but this is mostly due to the increase in the population of Cuttack city. If the rural areas of the sadar subdivision are taken into consideration, the increase is nominal, namely, 1·7 per cent. Similarly, the other two subdivisions, Jajpur and Kendrapara have made nominal gains. Out of 33 police-stations in the district, the population has decreased in 10, namely, Sadar, Salepur, Mahanga, Kissennagar, Ersama, Binjharpur, Dharmasala, Korai, Kendrapara and Patamundai. Moreover, out of 5 towns in this district, one has lost population, namely, Jajpur. Police-station areas which have gained in population do not show in any case a high percentage.

48. During the last 50 years the population of the district of Cuttack has increased from 2,207,040 in 1901 to 2,529,244 in 1951, a gain of 322,204, which amounts to 14·6 per cent.

Balasore

49. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1872	804,176	
1881	996,252	+23·9
1891	1,050,873	+ 5·5
1901	1,140,102	+ 8·5
1911	1,124,282	— 1·4
1921	1,045,726	— 7·0
1931	1,059,194	+ 1·3
1941	1,108,775	+ 4·7
1951	1,106,012	— 0·2

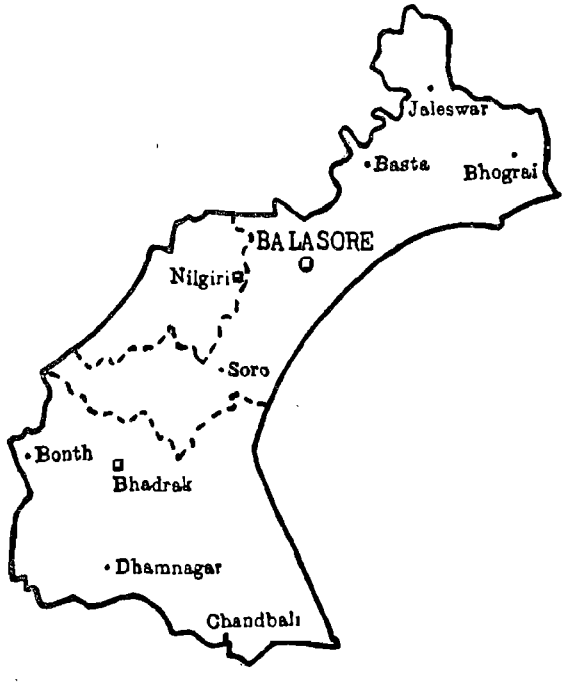
50. The study of population growth of this district presents a dismal picture and calls for effective administrative action for improvement. During the first half of the present century the district has lost population in three decades out of five, while in the 19th century, at least two major calamities brought utter desolation and severely crippled the growth of population. In 1831, a devastating cyclone swept over the entire district and storm waves 3 to 30 feet high surged over the land depopulating a third of the district. The second calamity of unparalleled misery and suffering was the '*na-anka*' famine of 1866, reducing the population of the district, according to one estimate, from 732,280 to 485,113.

51. The district, however, showed an extremely good record of increase of population amounting to 23 per cent in the period 1872-81. Of course, this high rate of increase was partly due to improved enumeration in 1881 but the chief factor which contributed to the high increase is the speedy recovery from the effects of the devastating famine of 1866. In the next decade (1881-91) some amount of prosperity came to the district with the opening of the coast canal in 1885. But there was a high

flood of 1886 in the Baitarani which damaged crops in the southern part of the district. By 1891, census enumeration had assumed normal level of accuracy and the district profited by a modest increase of 5 per cent of the population. The period between 1891 and 1901 was generally good and prosperous for the district except in the closing year of the decade when epidemics of cholera and high flood led to migration of a considerable number of persons just before the census enumeration. The rate of increase during this decade was 8·5 per cent. The opening decade of the present century was the first in the series of censuses when the district lost its population numbering 15,820 or 1·4 per cent. There was a serious failure of crop in 1901 and except for the year 1903, the crops were below the normal for the whole decade. The

BALASORE DISTRICT

Scale 1" = 25 miles



first half of the decade witnessed the rise of death rate from 31 to 34 per mille and in the second half the district entered into a series of unhealthy years. Epidemics of cholera broke out in a serious form in the year 1907 and in 1908, as a result of uneven rainfall leading to scarcity of food and high price, which compelled the major part of the population to take resort to bad diets. In the years 1906 and 1907, deaths exceeded births but in 1908, the number of deaths was actually double the number of births. Under the circumstances, not only the natural increase of population was checked but emigration on a large scale was taken resort to. The final result was the loss of population as stated above.

52. The first four years after 1911 were on the whole a period of prosperity for the district, as the birth rate was well over the death rate. The agricultural

condition was fair. But the remainder of the decade was a period of bad health and poor harvest. Except in the year 1917, when the number of births was a little in excess of the number of deaths, the entire period was one of deaths exceeding births. Inadequate rainfall in 1915 and 1916 brought about scarcity of food as well as outbreaks of cholera. There was again failure of rains in 1918 resulting in fall in the outturn of winter rice crop to about a third of the normal which led to considerable distress. Common rice was selling at 10 seers or more a rupee in 1917 but rose to 7½ seers per rupee in 1918. When the havoc of influenza visited the district this year, the people were ill-nourished and had little power of resistence. The effect of this epidemic continued also in 1919 when the number of deaths was greater than in the previous year on account of the most virulent form of cholera during the decade. The death rate was over 50 per thousand in this year. By the end of the decade, the death rate was still higher than it had been in the opening years of the decade. Meanwhile, the birth rate was also falling during the last years of the decade. The harvests of 1919 and 1920 were on the whole good but they were hardly sufficient for recouping the loss sustained by the people in other forms. Malaria of a deadly type had also come in, particularly in the sadar subdivision. Emigration was on the increase, mostly from the Bhadrak subdivision. The result of 1921 census showed that the population of the district decreased by 78,556 since 1911, a reduction of 7 per cent.

53. From 1921 onwards, the district had years of unhappy events. Recovery from the effects of influenza and malaria was not seen till the last years of the decade. The first seven years of the decade were particularly unhealthy as the number of deaths always exceeded the number of births. The average death rate for these years being 37·2, the average birth rate was 30·5. The principal factor leading to the decay of population in these years was malaria which had assumed a destructive form in an extensive scale, particularly between the years 1921 and 1926. In the latter year, there was also a severe outbreak of smallpox and heavy floods. By the end of 1927, the natural decrease in the population of the district was approximately half a lakh. During the last three years of the decade, however, considerable improvement was noticed and the losses were being quickly recouped. The standard of public health was now quickly improving. The people were recovering their vitality as malaria had greatly reduced its scope of activity. Birth rate rose up and death rate fell. The loss of population which had occurred during the first seven years was not only levelled up during the succeeding three years but the census of 1931 showed a small increase of 13,468 over the population of 1921 which is an increase of 1·3 per cent. This of course is by far the lowest increase recorded by any district in Orissa during the decade. In fact, some of the districts had shown an increase of over 21 per cent in this decade.

54. During the decade 1931-40, the district enjoyed the most prosperous times within the last half a century. Public health during the decade was much better than it was previously but the district was not completely free from epidemics and diseases. There was a severe outbreak of cholera in the year 1932 which started from Chandaneswar Mela and gave cause for anxiety. Cholera was prevalent in all the years of the decade but was particularly virulent in 1935, 1936 and 1939. The occurrence of fever though much less distressing than in the previous decade, was still high. There was a virulent outbreak

of smallpox in the year 1938 when the death rate from this disease rose to 1·9 per mille. Dysentery and diarrhoea were occasionally seen but very much less than in the districts of Cuttack and Puri. There was adequate rainfall in 1934, 1935 and 1939 when the crop position was affected. There were also floods particularly in the years 1933 and 1940. In the latter year, the floods in rivers Burabalang, Salandi as well as in Baitarani and Subarnarekha were of devastating magnitude. The damaged crop was recovered to some extent by retransplantation. But in the remaining years of the decade, the rainfall was either sufficient or excessive and the crops were good. The census of 1941 recorded a moderate increase of population to an extent of 49,581 over the population of 1931 which amounts to 4·7 per cent. This is the lowest percentage recorded by any district of the State during the decade. So the district could not help occupying the lowest position even in a decade which was the most prosperous one for itself in the first half of the present century.

55. The last decade (1941-50) was marked by the occurrence of a number of calamities. There was insufficient rainfall upto the month of August 1941 which resulted in poor crops. The crop was further affected on account of unusual heavy rain in October and the presence of insect pests at places. In 1942, the paddy crop along the banks of the Subarnarekha and the Coast Canal were damaged by floods. This was followed by a destructive cyclone accompanied by heavy rain on the 16th of October which swept over north Balasore, particularly affecting Bhograi, Baliapal, Jaleswar and Singla police-stations. Bamboo clumps, old cocoanut and date-palm trees, huge *banyan* and *pipal* trees were up-rooted in thousands. Houses collapsed and thatched and corrugated roofs were flown away. Jackals, vultures, crows and, in fact, the entire bird life perished. The fish in the tanks died and began to float. A large number of boats capsized and an enermous number of cattle numbering 23,315 and persons numbering 291 lost their lives. The cyclone inflicted the greatest damage on early paddy which was ripe. This was followed by a high flood on one side and by high sea waves on the other. In addition to establishment of grain shops and distribution of doles, 8 free kitchens were started in different parts of the district, taccavi loans amounting to Rs. 39,350 and gratuitous relief amounting to Rs. 7,50,000 were distributed and land revenue was suspended for three kists in the affected areas. The people were helped to secure employment in the Army Labour Corps. In the year 1943, the autumn and winter paddy crops were damaged on account of dificiency in timely rainfall as well as excessive untimely showers. There was reappearance of insect pests also. Relief operations in the cyclone and flood affected areas continued in this year also. In the year 1944, a strong easterly wind caused saline inundation of crops once in August and again in October in the coastal areas of the district. There were high floods in the Baitarani, Subarnarekha and the Salandi. Gratuitous relief both in cash and in rice doles and taccavi loans were distributed. In 1946 and 1947, there was again heavy downpour in the middle of September and the low-lying regions of Bhograi, Baliapal, Basta, Jaleswar and Singla police-stations remained submerged under water and the crop was affected. The closing year of the decade (1950) saw a high flood, necessitating relief in extensive scale.

56. There was marked deterioration in public health during the decade. The rigours of fever which had decreased in the previous decade now reappeared with severity. From 1941 to 1947, the sufferings from fever were great except

in the year 1946 and the death rate from this cause alone ranged from 17·7 in 1941 to 24·3 per mille in 1947. There was a severe outbreak of cholera in 1943 which carried away 6,367 souls at the rate of 6·1 per mille. Cholera in 1944 and smallpox in 1945 visited the district and carried away large number of victims. The health conditions, however, showed some improvement from 1948 onwards when the epidemics were gradually on the decline till the end of the decade.

57. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (—)	Percentage of increase or decrease
BALASORE	1,108,775	1,106,012	—2,763	—0·3
Sadar subdivision	579,044	580,012	+ 968	+0·2
Bhadrak subdivision.	456,622	447,270	—9,352	—2·1
Nilgiri subdivision.	73,109	78,730	+5,621	+7·7

58. Nilgiri subdivision which constitutes a very small area of the district shows a moderate gain in population and the sadar subdivision shows a gain of population which is negligible while Bhadrak subdivision shows reduction of population during the decade to the extent of 2·0 per cent. Out of 19 police-stations of the district, as many as 10 show decrease of population from what they had 10 years back. Jalewsar, Basta, Soro, Simulia and Khaira in sadar subdivision and Bonth, Bhandaripokhari, Dhamnagar, Tihiri and Chandbali police-stations in Bhadrak subdivision as well as Bhadrak town show loss of population. The position is grave and calls for immediate administrative action, particularly because the district is noted for food production and had the distinction of being a surplus district even in the year 1943 but it is a tragedy that the people should have been dying in a large scale, not surely on ground of insufficient food, but perhaps on account of uncontrolled epidemics and neglected public health. The last decade is not the only one to mark loss of population in the district. In fact, during the last 5 decades, the district has lost three times and the gain in the remaining two occasions is so slight that on taking count of 50 years' situation, Balasore happens to be the only district in the State of Orissa which has suffered reduction of population from what it had 50 years back. The population of the district was 1,140,102 in 1901 but instead of increasing during the long period of 50 years, it was reduced to 1,106,012 in 1951. The number of females in proportion to males is surprisingly decreasing mostly due to premature death of this particular sex. The general standard of health has remained at an unenviable level all throughout since the beginning of the 20th century.

Puri

59. The statement below shows the growth of population of the district from decade to decade.

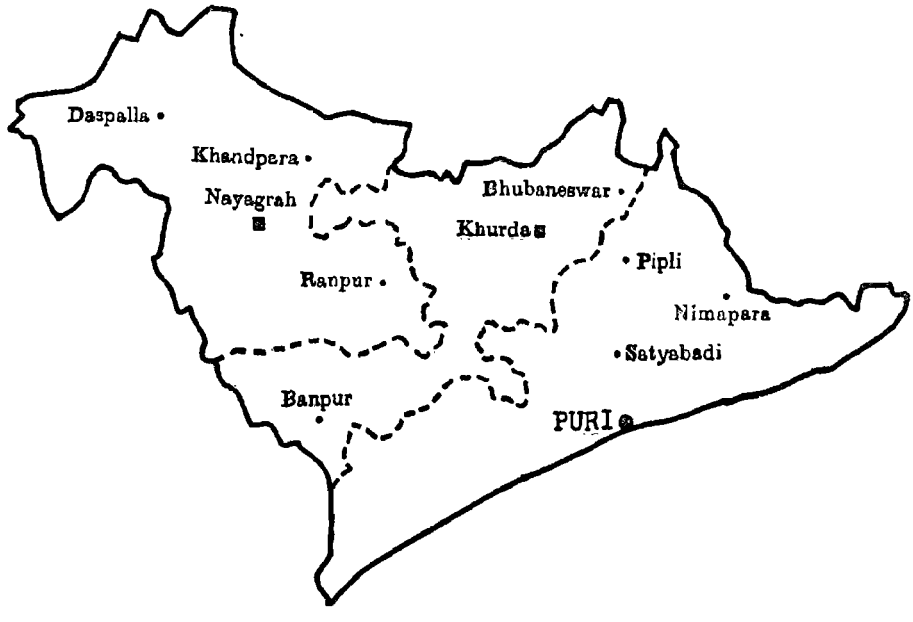
Year	Population	Percentage of variation
1872	975,911	
1881	1,147,657	+17·6
1891	1,211,859	+ 5·6
1901	1,325,575	+ 9·4
1911	1,351,525	+ 2·0
1921	1,214,573	—10·1
1931	1,346,602	+10·9
1941	1,455,888	+ 8·1
1951	1,572,262	+ 8·0

60. The population of Puri which was decimated after the great famine of 1866 partially recovered by the time census of 1872 was taken. The growth was accelerated during the following ten years with a gain of 17·6 per cent, but during the next two decades,namely, in the censuses of 1891 and 1901, the growth of population slowed down to a steady level, the percentage of increase being 5·6 and 9·4 respectively. This

growth took place in spite of some adverse conditions, such as failure of crop, floods and cyclone in the year 1891 and scarcity in 1897. In the first decade of the present century the rate of growth fell down to a low percentage. In 1901, there was a partial loss of winter paddy in Khurda and along the borders of the Chilka lake. Although the years 1902 to 1904 were good from the point of view of harvest, the next four years brought unhappy times in the shape of failure of crop and distress in various forms, resulting in deaths outnumbering births. Mortality was great in 1908 on account of a serious outbreak of cholera. Fortunately, the last two years of the decade brought good harvests and improved health resulting in a small increase of 25,950 persons or in other words, 2·0 per cent over the population of 1901.

61. From 1911 came a decade of unfavourable circumstances as in other coastal districts of Orissa. The decade

PURI DISTRICT
Scale 1″=25 miles



began with years when there was deficiency of rainfall as in 1911 or excess rainfall followed by cyclone as happened in October 1912. This was the cause of outbreak of cholera and rise in death rate. Next four years from 1913 to 1916 were on the whole prosperous. In 1917, heavy rainfall in November washed away the ripe crop, resulting in scarcity round the Chilka lake, as well as fever and rise of death rate. This was followed by the disastrous outbreak of influenza in the year 1918 when the death rate rose to 47·7 per thousand which continued in the year 1919 with full force. The floods of 1917 and the draught of 1918 with rise in death rate in these two years resulted in raising the death rate in 1919 to an unprecedented height of 70·3 per mille. This year the number of deaths was twice the number of births. During all these years, birth rate was gradually sinking, reaching 35·6 in the year 1920. The result as could be expected was decrease in population. When the census

was taken in 1921, the population of the district fell from 1,351,525 in 1911 to 1,214,573 in 1921, a decrease of 136,952 or 10·1 per cent.

62. In the opening year of the decade 1921-30, the effects of the natural calamities of the previous decade, were still continuing and the number of deaths was in excess of the number of births. Recovery started in the year 1922 and was followed up in 1923. Not only improvement was noticed in the public health but also in the excellence of crops with the result that a part of the loss sustained in the previous decade was recouped. But the three following years relapsed into unhealthy and unfavourable conditions with the advance of a virulent type of malaria in 1925. In 1926, severe outbreak of smallpox combined with the effects of floods resulted in further deterioration which continued unabated till 1927. The year 1928 and the remaining two years of the decade brought bumper crops and there was absence of any natural calamity. Cholera had practically disappeared during these years. Recovery in general health of the people and in the birth rate was markedly high resulting in the increase of population to an extent of 132,029 over the population of 1921 which amounts to an increase of 10·9 per cent, the highest during the last half a century.

63. The period 1931-40 was one of general progress and advancement. Public health during the decade was much better than it was previously but the district was not completely free from epidemics and diseases. The year 1932 was unhealthy because of extensive outbreak of cholera and smallpox as well as dysentery and diarrhoea, the latter in epidemic form carrying away the high figure of 5·1 per mille of the population. Cholera is practically an annual visitor to this district and so also dysentery and diarrhoea. In 1938 and 1939, again, there was heavy loss of life from these epidemics. Malaria extensively spread in this district during the decade, particularly affecting the sadar subdivision and the villages bordering the Chilka lake, especially under Banpur and Tangi police-stations and in Parikud. The sufferings from malaria around the Chilka lake was so great that it attracted the attention of the Provincial Government who organised remedial and research measures to prevent its recurrence. There was insufficient rainfall in the years 1931, 1934, 1935 and 1937 which was not conducive to good harvests. On the other hand, there was very heavy rainfall in 1933 when the district experienced one of the heaviest floods. Extensive relief operations were organized to remove the distress. In the year 1936, the weather conditions were not favourable and the harvest was below normal. There was a cyclone in October 1938 which damaged the crop particularly in Krushnaprasad police-station. The coastal tracts suffered not only from draught but also from over-flow of saline water. In the year 1938, there were high floods resulting in breaches in embankments and damage to standing crops. A second flood came in the month of September causing further loss to crops. Gratuitous relief was given in the flood affected areas till December. Emigration to Calcutta, Rangoon and Jamshedpur increased due to the above reasons. In 1939, the sadar subdivision considerably suffered from floods in August and September, resulting in poor outturn of crop. In 1940, the district suffered from excessive rainfall at the time of growth of paddy crop. In spite of these adverse conditions, prosperity of the people became so deeprooted during the decade, that an increase of population to the extent of 109,286 or 8·1 per cent over the population of 1931 was the result of the census of 1941.

64. The last decade (1941-51) is noted for some adversities. In November 1942, a severe cyclone accompanied with heavy rain passed over the district causing considerable damage to crops, cattle and houses, and necessitating distribution of gratuitous relief and taccavi loans to the distressed people for construction of houses or purchase of seeds and cattle. Ring bunds in Parikud were reconstructed at a heavy cost to provide employment to the people and to prevent lands from being flooded by the salt water of the Chilka. Grain golas were also opened in scarcity areas. In the year 1943 and 1944, floods visited the district a number of times. Local shortage of foodgrains in deficit areas was met by export from surplus areas. There was excessive rainfall in the year 1946 during the sowing and flowering season which resulted in poor outturn of paddy. In 1947, the rainfall was not only inadequate but uneven in different months which affected the crops.

65. There was deterioration in public health during the decade. The district suffered extensively from dysentery and diarrhoea, particularly in the first half of the decade and also from cholera. The outbreak of smallpox in 1945 was responsible for carrying away a large number of men. The district, particularly the sadar subdivision, and the areas round the Chilka lake, became very malarious. But the district was much better off than either Cuttack or Balasore in health and material prosperity. The census of 1951 showed a satisfactory growth of population in this district marking an increase of 116,374 persons or 8·0 per cent during the decade. This is the highest percentage of increase in the Coastal Natural Division. A part of the growth was due to establishment of the State capital at Bhubaneswar.

66. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
PURI	1,455,888	1,572,262	+116,374	+ 8·0
Sadar Subdivision	691,355	726,482	+ 35,127	+ 5·1
Khurda Subdivision	410,584	444,671	+ 34,087	+ 8·3
Nayagarh Subdivision	353,949	401,109	+ 47,160	+13·3

67. The district has shown steady progress during the decade, Nayagarh subdivision showing the highest percentage of 13·3 and sadar the lowest amounting to 5·1 per cent.

68. During the last 50 years, the population of the district of Puri has increased from 1,325,575 in 1901 to 1,572,262 in 1951, a gain of 246,687 which amounts to 18·6 per cent.

Sambalpur

69. The statement below shows the growth of population of the district from decade to decade.

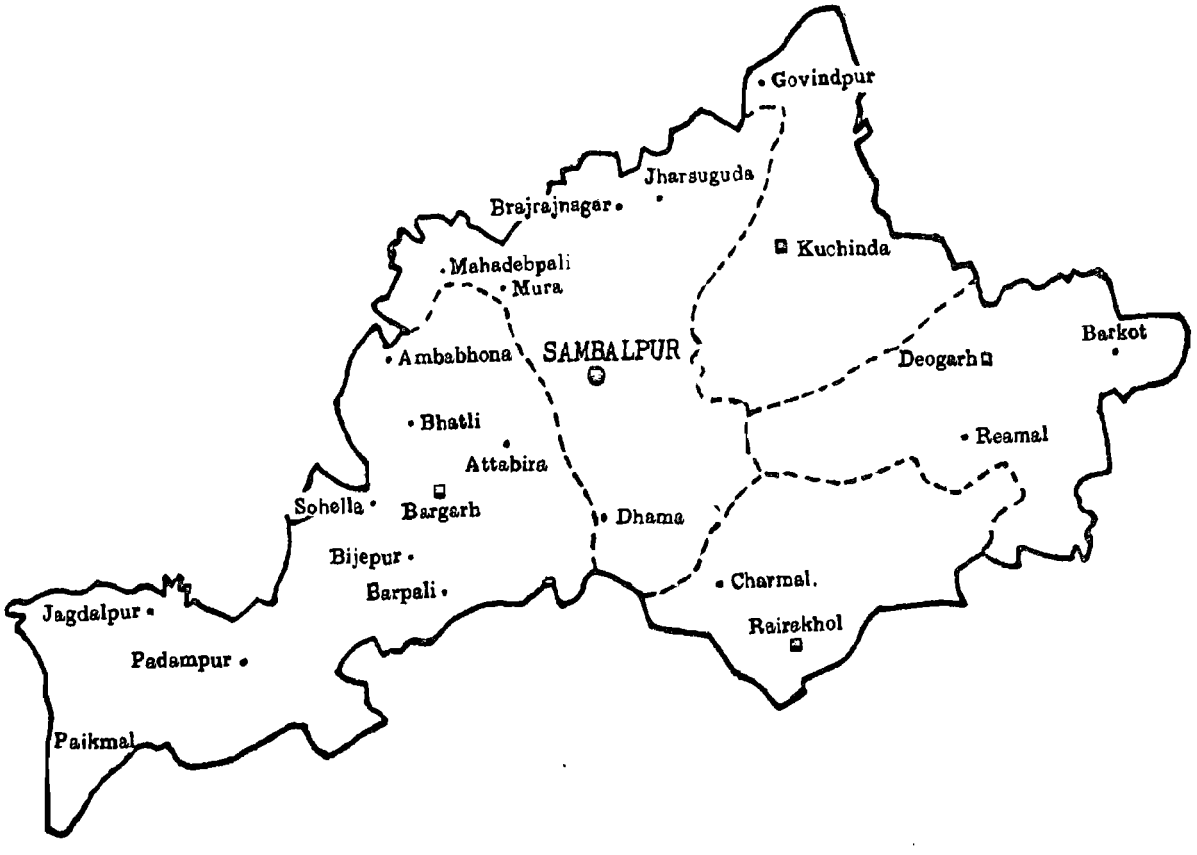
Year	Population	Percentage of variation
187	506,834	
1881	653,201	+28·9
1891	743,527	+13·8
1901	789,258	+ 6·2
1911	913,938	+15·8
1921	955,412	+ 4·5
1931	1,067,702	+11·8
1941	1,202,584	+12·6
195i	1,301,804	+ 8·3

70. The district has shown all along a good progress in the growth of population. The high percentage in increase in 1881 is partly due to omissions in enumeration in 1872. The census of 1891 which was comparatively free from enumeration errors showed a satisfactory increase of population to the extent of 13·8 per cent, mostly due to prosperous years. But this growth rate could not be maintained in the next decade,

primarily because of the famine of 1900 and the mortality resulting from the epidemics of fever, cholera and smallpox which came together with the famine. The death rate for this year rose to the appalling figure of 108 per mille. The distress was very acute in the south-west of Bargarh subdivision, particularly in Borasambar zamindary area. But in spite of these adverse circumstances, the district showed an addition to the population to an extent of 3·3 per cent during the decade. The statement in the previous page showing an increase of 6·2 per cent in 1901 is due to adjustment of area of the district as explained in paragraph 9 of this Section.

71. In the opening decade of the present century, recovery from the effects

SAMBALPUR DISTRICT
Scale 1″=25 miles



of the famine was rapid, birth rate rising abruptly from 30·0 in 1901 to 46·6 in 1902 per thousand. The birth rate continued at a high level throughout the remaining years of the decade while the death rate was low in all these years except in 1908. The effect of low death rate and high birth rate was combined with a succession of good annual harvests except in 1901-03 and 1907-08. All these features resulted in satisfactory growth of population amounting to 15·8 per cent in 1911 which is the highest for the district in any census.

72. The first seven years of the decade beginning with 1911 were prosperous as the harvests were good, there was no

epidemic worth notice and the birth rate was well over the death rate. The birth rate reached the highest point of 46·7 in 1914. The year 1918 was very unhealthy. Cholera reappeared together with influenza epidemic pushing up the death rate to 56·6 per thousand, when the birth rate was much lower. In 1919, the outbreak of cholera was repeated but influenza had ceased to cause distress. The closing year of the decade was also not free from calamity as a severe flood affecting 60 villages visited the district. In spite of these calamities, Sambalpur did not show an absolute loss of population as most of the districts of Orissa did during this decade. A small increase of 41,474 persons or 4·5 per cent was achieved during the decade.

73. The decade 1921-30 started with a year of struggle for recovery from the effects of calamities in the previous decade. Death rate was still high although the birth rate was coming to the normal level. Public health was unsatisfactory but the harvest of 1921 was plentiful and put the people to steady progress which continued to help the people to recoup fast. The remaining 9 years of the decade were marked with steady progress on account of a series of good harvests except in the year 1928. The district was not completely free from epidemics as smallpox, cholera, fever and other diseases were occasionally visiting parts of the district. The district considerably gained in population during the decade as the population increased by 112,290 or 11·8 per cent.

74. During 1931-40 public health was much better than it was previously but the district was not completely free from epidemics and diseases. The year 1932 was particularly unhealthy on account of widespread outbreak of cholera and heavy deaths resulting from it as well as from diarrhoea and dysentery. Smallpox in 1935 and cholera in 1936 broke out in virulent form. There were high floods in 1936 in Kuchinda subdivision and in 1937 in the Sambalpur sadar subdivision but they did not cause any considerable damage to the crop or the property. One important advancement in the direction of industrial enterprise was taken by the district when the Orient Paper Mills were established at Brajarajnagar in the year 1937-38. The weather conditions were favourable throughout the decade although there was deficient rainfall in 1932 and 1935. Harvests were excellent and there was no shortage of foodgrains anywhere. All these factors contributed to a satisfactory growth of population which was increased by 12·6 per cent during the decade.

75. In 1941-50, general peace and prosperity of the district continued though it was affected by conditions due to the World War. Public health was normal. The first three opening years of the decade had virulent epidemic of cholera when the death rate particularly in the year 1942 rose up. Sporadic outbreaks of smallpox and malarial fever were reported during the decade. The second half of the decade was comparatively better in matters of health. The district benefited by bumper crop in most of the years. The rainfall was generally below the normal but not to the extent of affecting crops seriously. As a result, the district was able to export sufficient quantity of paddy every year under the procurement plan. Although general rise in the price of commodities and other conditions usually arising from the war affected the material condition of the district, the position was improved considerably by the execution of a notable multipurpose scheme at Hirakud in the year 1946 estimated to cost Rs. 92 crores. Many gainful side occupations developed in the wake of this great scheme. As a result, there was a wave of emigrants to participate in the economic prosperity which the district was

likely to have in coming years. This was one of the reasons why there was some additional increase in the population enumerated in the 1951 census. The district gained by 8·3 per cent of population during the decade.

76. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
SAMBALPUR	1,202,584	1,309,804	+99,220	+ 8·3
Sadar subdivision	405,249	448,821	+43,572	+10·8
Bargarh subdivision	580,873	612,037	+31,164	+ 5·4
Deogarh subdivision	87,925	96,875	+ 8,950	+10·2
Kuchinda subdivision	90,352	101,447	+11,095	+12·3
Rairakhol subdivision	38,185	42,624	+ 4,439	+11·6

77. All the subdivisions of the district have made steady gains in population during the last ten years. Highest increase has occurred in Sambalpur police-station on account of increase of population in the town area due to the Hirakud project and in Jharsuguda and Brajarajnagar police-stations which are business localities. A few police-stations, however, have lost population during the decade, namely, Jujumura, Mahadebpali, Rampella and Bheden but the extent of loss is negligible. The district has been advancing in material condition and it is likely to benefit by further growth of population in future decades.

78. During the last 50 years, the population of the district of Sambalpur has increased from 789,258 in 1901 to 1,301,804 in 1951, a gain of 512,546, which amounts to 54·9 per cent.

Ganjam

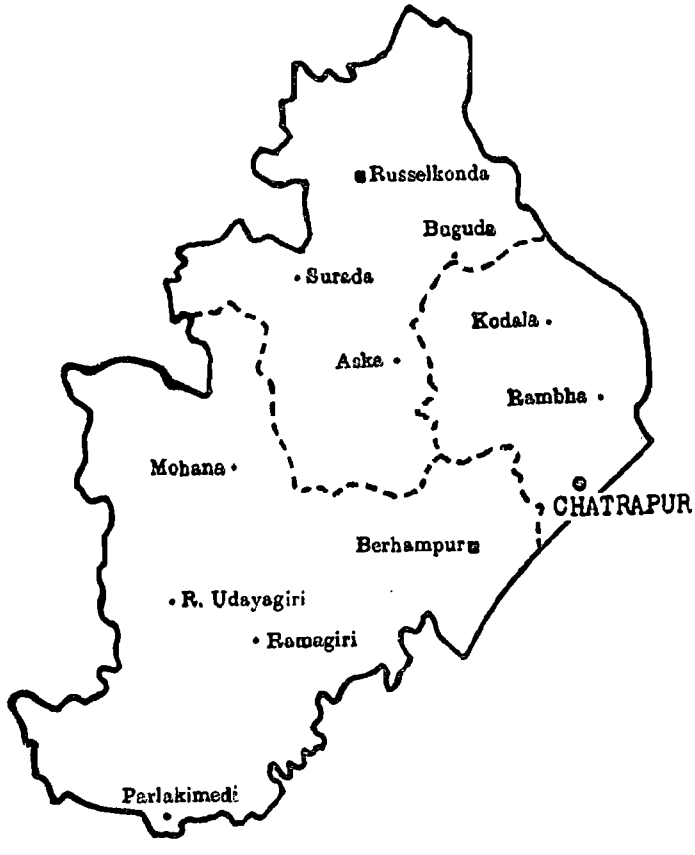
79. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1901	1,141,963	..
1911	1,269,686	+11·2
1921	1,228,465	− 3·3
1931	1,391,069	+13·2
1941	1,560,669	+12·2
1951	1,624,829	+ 4·1

80. The district suffered from famine frequently during the second half of the 19th century and thereafter. The more serious famines are those that occurred in 1865-66, 1888-89, 1896-97, 1908-09 and 1919. The famine of 1865-66 affected chiefly the northern part of the district. Deaths from starvation were numerous and the total mortality during this famine was very large. In 1871, there was considerable failure of crop. In 1878, there was great distress caused by high price of grains in consequence of export to the famine striken parts of southern India. In 1888-89, another severe famine occurred, and great mortality resulted specially from cholera. The distress resulted by continued failure of crop as there was extremely deficient rainfall in every year between 1881 and 1888 except in the year 1886. Nearly six lakhs of rupees were spent on relief work. The next famine of considerable distress visited the district in 1896-97. The rainfall in 1896 was nearly half the annual normal rainfall, resulting in failure of crops. But the people showed great strength of mind and powers of resistance in order to tide over the distress. The villagers did not care to work at the famine wages in the test works although many of them went long distances to do earth work for annas two per day only.

81. With all these natural calamities visiting the district again and again under which growth of population could not but be restricted, the district in its present territorial set up had a population of 1,141,963 in the census of 1901 of which 1,002,421 belonged to Ganjam Plains and 139,542 to the Ganjam Agency.

GANJAM DISTRICT
Scale 1" = 25 miles



82. The district then enjoyed a period of quick recovery, in spite of occasional adversities. There were unfavourable seasons for crops in the years 1905, 1906 and 1907 in the agency tracts of the district. The inadequacy of rains in the later part of 1907 caused total failure of crops throughout this tract. Except in 1910, none of the years of the decade had normal rainfall. In 1908-09, another famine occurred mostly affecting the agency tracts of Parlakimedi zamindary and Berhampur taluk. Between April and September 1908 severe distress was felt in 131 villages of Khonds and Savaras in Berhampur taluk and in the villages of Mohiri Khonds and Savaras in Parlakimedi agency taluk. The situation was met with gratuitous relief and test works. This famine, however, did not affect other parts of the agency area and also the plains. There was satisfactory growth of population during this decade and when the census of 1911 came, the district gained by 127,723 over the population of 1901, namely,

20,306 in the agency and 107,417 in the plains of the district.

83. The decade 1911-21 was on the whole a period of unsatisfactory public health. There was excessive rainfall in the years 1914, 1915, 1917 and 1919 and very poor rainfall in 1911, 1918 and 1920. The grain outturn was poor in 1918 and reserve stocks of food became unusually low. This misfortune was not to come alone. The devastating epidemic of influenza broke out in July 1918, reaching its climax towards the last quarter of the year. The immediate effect was the excessive rise in the death rate to nearly double the normal level and the severe fall in the birth rate. The effect was most grievously felt in Ganjam Plains though the Agency was not altogether spared. But this was not the end of evil days. In 1919, came another famine, severely affecting Ghumsur, Kodala and Chatrapur taluks. The main reason for this famine was the general deficiency of rainfall in 1918 and particularly the complete failure of the north-east monsoon. The reserve stock of food was quickly depleted and prices rose sharply. Test and relief works were opened in Ghumsur, Khallikote and Athgarh and charitable relief given extensively in order to mitigate the distress. Bad public health during the decade and excessive deaths caused by influenza and famine encouraged large scale emigration to Burma and other places. The result was a decrease of population by over 41,000 during the decade in the district, namely, 36,586 in the plains and 4,635 in the agency. The total population of the district stood at 1,228,465 in 1921.

84. During the decade 1921-30, the district quickly recovered from the after-effects of the great influenza epidemic of 1918 and the famine of the following year. Except for sporadic outbreaks of epidemics, general health during the decade continued to be good. The harvests were also plentiful. Towards the last year of the decade, there was a large number of returning emigrants from Burma coming to their homeland in this district on account of the anti-Indian riots in Rangoon in 1930. This fact attributed partly to the high increase of population in many taluks as seen in the census of 1931. In this census, the district gained by 13·2 per cent of population over what it had 10 years before. This is the highest percentage achieved by the district during last fifty years.

85. During the next ten years from 1931 to 1940 the satisfactory rate of growth of population as noticed in the previous decade was practically maintained. There was general peace and prosperity during the decade although it was not completely free from natural calamities. The district was hit hard by the effect of a severe cyclone in 1933. In October 1938, another cyclone accompanied by heavy rain passed over the district and severely affected crops. Remission of rent was granted to agriculturists having an outturn of 4 annas or less. In the year 1940, there was heavy rain and high flood at the commencement of the cultivating season and the position was later saved partially by taking resort to transplantation. During the years 1934 and 1935, there was shortage of rainfall and harvest was poor. During the decade the villages round the Chilka lake became malarious and unhealthy and so also some of the villages nearby the sea coast. There were large number of deaths due to fever in most of the years of the decade. In 1937, 417 villages were affected by malaria and 73,000 cases were treated. The next year also was malarious and unhealthy for the district. In spite of these adverse circumstances, the district had good times otherwise, particularly because the general health was good. The district made an addition of 169,600

persons in the census of 1941 which means a satisfactory growth of population.

86. The next 10 years from 1941 to 1950 were a period less favourable for the growth of population. Rainfall was deficient in most of the years, namely, 1941, 1942, 1943, 1945, 1948 and 1950. Paddy crop was affected in 1941 in parts of Ghumsur, Aska, Berhampur and Chatrapur taluks on account of insufficient rainfall between September and November. This necessitated grant of remission of rent in deserving cases. In the year 1942, a severe cyclone passed over the district in November damaging crops, houses and cattle. Outturn of crop was poor and gratuitous relief was given. In the year 1943, the rains were irregular and brought no good crop. In 1944, on the other hand, the rainfall was heavy leading to submersion of crops and necessitating remission of rent. The same phenomenon was repeated in the year 1947. To add to the vicissitudes of the season, there was marked deterioration in public health during the decade. A severe outbreak of cholera in 1941 led to the high death rate of 2·6 per mille from this cause alone. Malaria was spreading fast, particularly in the coastal villages of the Chilka and the sea. Death rate from fever alone was 22·5 per mille in 1944. In 1945 also, the death rate was high from the same cause. Diarrhoea and dysentery were also responsible in keeping up mortality rate high particularly in the opening years of the decade. There was some improvement in public health, however, in the second half of the decade, but there was excessive rise in the number of emigrants to the Assam tea gardens during all the years of the decade.

87. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
GANJAM	1,560,669	1,624,829	+64,160	+ 4·1
Berhampur subdivision (Agency)	165,525	155,990	− 9,535	− 5·8
Ghumsur subdivision (Agency)	2,956	3,306	− 350	+11·8
Chatrapur subdivision (Plains)	455,341	471,528	+16,187	+ 3·6
Berhampur subdivision (Plains)	459,732	476,440	+16,708	+ 3·6
Ghumsur subdivision (Plains)	477,115	517,565	+40,450	+ 8·5

88. The statement above shows that there was decrease of population in the agency portion of Berhampur subdivision to an extent of 5·8 per cent while there was gain in the other portions of the district including the Ghumsur agency. The loss of population in the Berhampur agency area is partly due to increased emigration to Assam tea gardens. The Tea Districts Labour Association which has a depot in Berhampur town gets most of its recruits from the agency area of the subdivision. It appears from the figures of recruitment by this depot that the number has increased during the decade 1941-50 by about 300 per cent over the number of recruitments in the previous decade. Another locality in the district where the population has diminished is the rural areas of Parlakimedi police-station which has lost population to an extent of 3·6 per cent. This is due to internal movement in the district as also to emigration. All the remaining police-stations of the district have gained population more or less, larger gains occurring in the inland subdivision, Ghumsur, rather than the

coastal subdivisions of Chatrapur and Berhampur.

89. During the last 50 years, the population of the district of Ganjam has increased from 1,141,963 in 1901 to 1,624,829 in 1951, a gain of 482,866 which amounts to 42·3 per cent.

Koraput

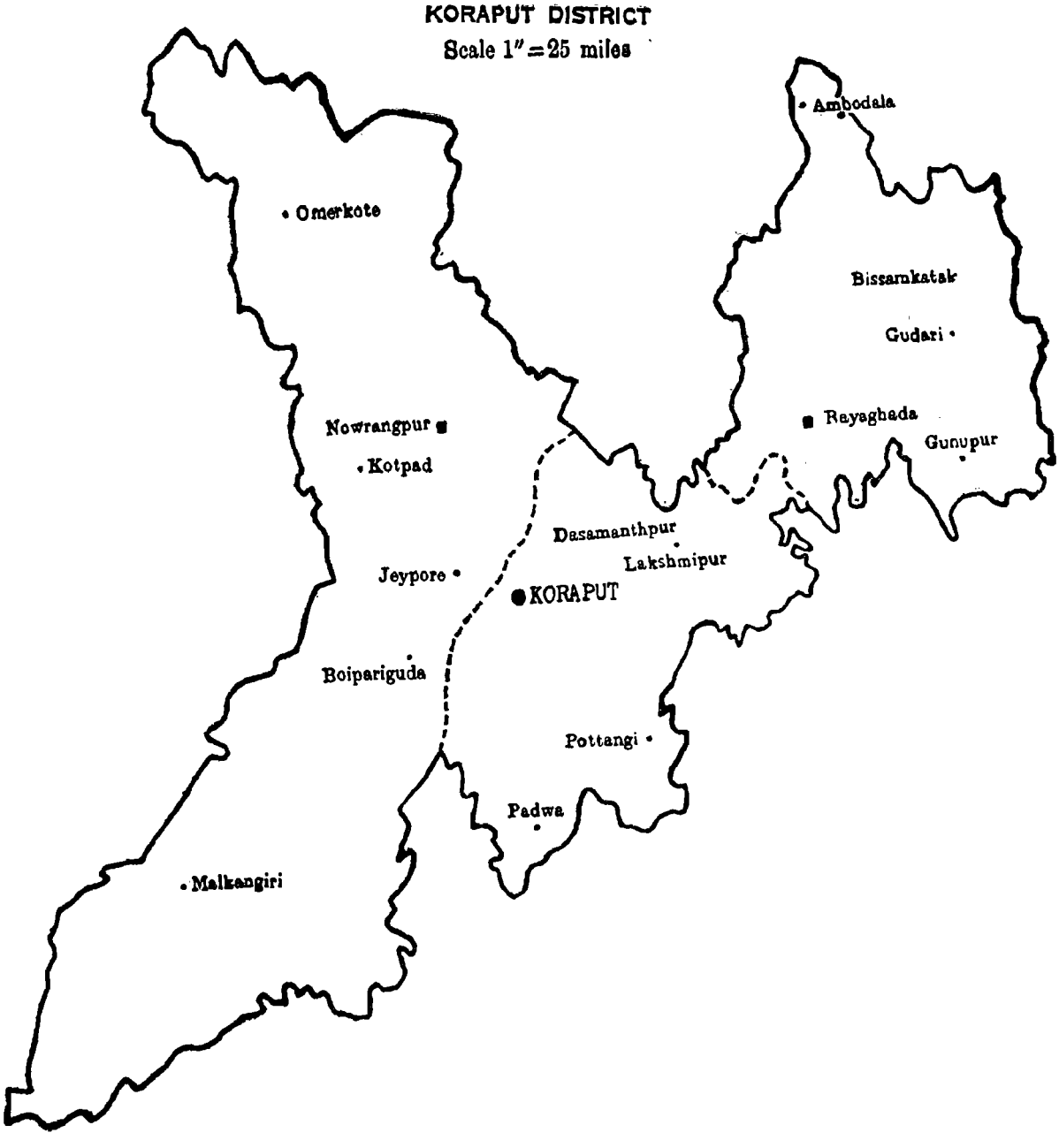
90. The statement below shows growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1891	690,303	..
1901	693,187	+ 0·4
1911	833,328	+20·2
1921	805,583	− 3·3
1931	949,652	+17·9
1941	1,127,862	+18·8
1951	1,269,534	+12·6

91. Reliable figures of population are not available for the first two censuses held in the years 1872 and 1881. But it appears that population could not have grown remarkably during this period because of the great famine of 1876-78, the prolonged distress of which adversely affected the growth of population. Relief work was extensively opened. The material condition of the district was likely to have improved with the opening of the Ghat Road from Salur to Koraput and from Koraput to Jeypore in the year 1887. The inhabitants of the interior hilly areas who were not able to contact with the outside world were now benefited by movement of goods and agricultural products by this road. In 1891, the population of the areas now constituting the district stood at 690,303. During this decade the road communications in the district were improved. The Ghat Road from Koraput to Jeypore was metalled in the year 1892. But another great famine came in the year 1896-97 which raised the death rate so high as to wipe out practically all the additions to the population which the decade was likely to have made. In 1901, when the census was taken, there was a negligible growth of population amounting to 0·4 per cent. The decade 1901-11 was a period of peace and prosperity for the district except for the solitary occurrence of a localised famine in Bissamkatak in the year 1910. The harvests were plentiful and the general public health was satisfactory. The result was seen in high percentage of increase of population in the census of 1911 when the district gained by 20·2 per cent. Between 1911 and 1921, the district was very severely affected not only by stray incidents, such as the high flood in the Vansadhara river in 1913 but also by the widespread and destructive influenza calamity of 1918-19 which carried away a large number of population of the district. There was reduction of population by 3·3 per cent when the census was taken in 1921.

92. From 1921 onwards, the district has been gaining in population consistently. There was extension of the Parlakimedi light railway to Gunupur in the year 1929 which was a cause of additional prosperity of the land. Public health was good and so also the harvests. In 1931, the population rose to 949,652 after making a gain of 17·9 per cent in 10 years. The increase was specially rapid in Jeypore, Nowrangpur and Malkangiri taluks not only on account of good natural growth but also on account of rapid extension of cultivation in these areas, as well as of the return of emigrants to Rangoon in the last year of the decade, as a result of anti-Indian riots in 1930 in that city. Between 1931 and 1941 the rate of growth almost kept the same pace as in the previous decade. The prosperity of the district was due once again to the opening of another railway line through the district, namely, from

Raipur to Vizianagram line in 1932. Road communications were developed to a considerable extent. The roads from Kolab to Padwa and Kolab to Malkangiri were opened in 1933-34 and the road between Koraput and Rayaghada was opened in 1938. In 1938, there was, however, a very high flood in Gunupur



taluk due to heavy rainfall in October. The Vansadhara river damaged the cultivated lands by sand deposit. The Jeypore estate had to remit rent to the extent of Rs. 65,000 on account of the damage by this flood. The remarkable increase of population during this decade as well as in the decade 1921-31 was due

partly to the gains from immigration from neighbouring districts by the influx of cultivators who were attracted by easy availability of land in this district. It was during this decade that the district was taken from Madras Presidency and annexed to the newly formed province of Orissa.

93. There was partial failure of crop in 1945 and 1950 but the harvest was good ranging from 10 annas to 14 annas in other years of the decade. Although the rainfall is usually high, the annual normal being 59·58″, the district is generally free from floods and famines. In 1949, however, there was a flood in the Indravati and the Kolab rivers causing fairly heavy damage to crops. In the year 1950, scarcity of foodgrains was felt in some localities particularly in Gunupur taluk on account of partial failure of crop but foodgrains were imported and the situation was saved. There was a severe outbreak of cholera in 1945 and again in 1949 and 1950. Smallpox usually prevails in one part of the district or the other almost every year but this does not cause severe loss of life except in the year 1942 when the attack was severe. There was extension of cultivation during the decade on account of the Intensive Cultivation Scheme and the Grow More Food Campaign. The decade on the whole was prosperous and was comparatively free from bad health and failure of crops. The population increased during the decade by 12·6 per cent so that the population of the district in 1951 was 1,269,534.

94. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
KORAPUT	1,127,862	1,269,534	+141,672	+12·6
Sadar subdivision	250,687	295,009	+ 44,322	+17·7
Nowrangpur subdivision	593,290	686,390	+ 93,100	+15·7
Rayaghada subdivision	283,885	288,135	+ 4,250	+ 1·5

95. It will appear from the above statement that Koraput sadar and Nowrangpur subdivisions made considerable gain in population during the decade while Rayaghada had a poor percentage to contribute. The highest gain in Koraput sadar subdivision was made by Lakshmipur, Pottangi and Padwa police-stations where the increase of population ranged between 33 to 39 per cent. The high increase in Lakshmipur is due to the prosperity that has come to it after the opening of the Koraput-Rayaghada road. Pottangi police-station seems to be gaining in population due to influx of cultivators from other parts of the district and outside the district. In Padwa police-station, the multipurpose project in the river Machkund is now under execution and is the reason of increase of population in the police-station. In Nowrangpur subdivision, gain in population exceeding 30 per cent has been made in Tentulikunti, Kodinga, Dabugam and Malkangiri police-stations while there has been reduction of population in the police-station areas of Nowrangpur, Maidalpur and Jeypore. The reasons of high increase in some and decrease in other police-stations is mostly related to either attraction for cultivating immigrants or exodous to Assam tea gardens. Rayaghada subdivision which shows the poorest progress in the district has many police-station areas showing decline of population. The loss of population in these areas may be partly explained by the fact that Saoras of this locality are recruited in large numbers for the Assam tea gardens.

96. During the last 50 years the population of the district of Koraput has increased from 693,187 in 1901 to 1,269,534 in 1951, a gain of 576,347, which amounts to 83·1 per cent.

Dhenkanal

97. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1901	572,075	..
1911	590,895	+ 3·3
1921	515,176	−12·8
1931	635,628	+23·4
1941	741,900	+16·7
1951	839,241	+13·1

98. The district fared much better than many districts of the State in the last quarter of the 19th century. It was not, however, free from calamities during this period. Notable events are the scarcity of foodgrains experienced in and around Angul in the year 1887 and again in 1888 when the yield of crop was less than half the average. In 1897, Hindol was affected by a famine which, however, was localised. In 1900 again, there was scarcity in Angul. But none of these distresses was as grave as the famines experienced either in Sambalpur in 1900 or in the coastal districts where it very frequently prevails. The census of 1901 showed a fair increase in the population of the district which reached

DHENKANAL DISTRICT
Scale 1″=25 miles



the figure of 572,075. All the component parts of the district, more or less, equally shared the increase, Talcher contributing 14·7 per cent, Pal-Lahara 13·5, Dhenkanal and Kamakhyanagar 14·8, Athmalik 28·9, Hindol 24·3 and Angul 23·1 per cent over the population of 1891. In the next decade, the population showed

a moderate increase except in Dhenkanal where population diminished by 1·3 per cent on account of what is known as the 'Khuda' famine of 1908 and due to mortality from cholera and other epidemics and in Angul subdivision which lost population by 1·9 per cent due to short harvests in 1902 and 1903 and scarcity in 1908. Other subdivisions of Dhenkanal contributed to a satisfactory amount of increase, particularly Athmalik showing 31·9 per cent advance over the previous decade's population. This large increase is the result of the natural growth among the prolific people of the subdivision and due to increased immigration on account of easy availability of cultivable lands. Cultivation was expanded considerably during the decade and there were improvements in road communications. But there was increased emigration on account of repeated scarcities and the district was able to show a poor increase of 3·3 per cent in the census of 1911.

99. Between 1911 and 1920 the district suffered from a series of short crops and epidemics in different parts. Pal-Lahara and Athmalik which are very sparsely populated areas and were able to attract immigrants on a large scale in previous decades were not able to show good progress. Athmalik was able to show a moderate increase of population but Pal-Lahara showed a decrease of 7·4 per cent. Rainfall was deficient in many years and crops were generally poor. Epidemics of cholera and smallpox and lastly the frightful epidemic of influenza of 1918 effectively reduced the population which with concurrent agricultural distress showed in 1921 that the population of the district had decreased by 12·8 per cent.

100. But the district quickly recuperated in the period of 10 years started from 1921. In this year, the Talcher coal field was opened and a few years later, railway line was opened in this district in order to connect the coal field with Cuttack. Agricultural conditions were quite satisfactory and road communications were improved. The rapid growth of Talcher subdivision is understandable because of the railway line and colliery which gave a great stimulus to immigrants. Emigration was increasing to the tea gardens of Assam. On the other hand, Pal-Lahara subdivision was beginning to gain by immigration of Hos from the district of Singhbhum. At the close of the decade, the population of the district increased by 23·4 per cent, which is the highest during the last 50 years.

101. The period of 10 years from 1931 was a period of general progress and prosperity for the district. The first three years of the decade had plenty of rainfall and good harvests followed by two years, namely, 1934 and 1935 when the outturn of the crop was poor on account of deficient rainfall. The year 1938 also experienced inadequate rainfall and poor crop but the remaining years of the decade were good from the point of view of agriculture and weather. The district is free from floods but suffers from local scarcity of foodgrains at times. Bumper crop was reaped in almost all subdivisions of the district in most of the years of the decade, except in Kamakhyanagar where the crop was very good in 1936 and normal in other years. Public health during the decade was much better than it was previously but the district was not completely free from epidemics and diseases. Fever and malaria spread into this district during the decade. Towards the later part of the decade, incidence of death from malaria became very heavy. The death rate in Angul from this disease alone in the years 1936, 1937 and 1938 was 19·7, 21·9 and 22·0 per mille respectively. During the decade, population grew to the extent of 106,272 or 16·7 per cent

which is the highest next to Koraput among all the districts of Orissa during the decade.

102. In the last decade (1941-51), the district continued to make good progress in growth of population as it had done since 1921. Although the rainfall was below the normal, in all the years of the decade except in 1943, 1944 and 1946, the weather was not unfavourable for agricultural purposes and the outturn of crop was good in most of the years. In the years 1946 and 1947, the sadar subdivision only had poor crop and some amount of scarcity was felt in that area. The people maintained good health but there were occasional outbreaks of epidemics here and there. There was a severe outbreak of cholera in Angul in 1941. Fever was more frequent in and around Angul, causing higher death rate. The population grew by 97,341 or in other words, by 13·1 per cent during the decade which coming in succession of the previous two decades of high growth rate was quite satisfactory.

103. The growth of population in each subdivision during the ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase(+)or decrease(—)	Percentage of increase o decrease
DHENKANAL	741,900	839,241	+97,341	+13·1
Sadar subdivision	165,293	186,711	+21,418	+13·0
Kamakhyanagar subdivision	158,919	176,563	+17,644	+11·1
Talcher subdivision	86,432	92,770	+ 6,338	+ 7·3
Pal-Lahara subdivision	34,130	40,799	+ 6,669	+19·5
Athmalik subdivision	72,765	84,040	+11,275	+15·5
Hindol subdivision	58,505	67,926	+ 9,421	+16·1
Angul subdivision	165,856	190,432	+24,576	+14·8

104. All the subdivisions of the district have increased population by fairly high percentage ranging from 7·3 per cent in Talcher to 19·5 per cent in Pal-Lahara. The high increase in Pal-Lahara, Hindol and Athmalik subdivisions is due to the influx of agricultural settlers from other parts of the State as there is plenty of waste lands for reclamation in these subdivisions. General health of the district has remained satisfactory throughout the decade. The district is free from floods and other natural calamities and so it easily increases its population by high percentage.

105. During the last 50 years, the population of the district of Dhenkanal has increased from 572,075 in 1901 to 839,241 in 1951, a gain of 267,166 which amounts to 46·7 per cent.

Keonjhar

106. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1871	181,871	..
1881	215,612	+18·6
1891	248,101	+15·1
1901	285,758	+15·2
1911	364,702	+27·6
1921	379,496	+ 4·1
1931	460,609	+21·4
1941	529,786	+15·0
1951	588,441	+11·1

107. Starting with a population of 181,871 in 1872, Keonjhar continued to make steady progress in increase of population during the last three decades of the 19th century. In none of these decades, the growth was below 15 per cent which is a satisfactory record. The district had years of distress and bad health but the birth rate was all along liberal. The population of Keonjhar in 1901 was 285,758 which grew by 78,944

in 1911. The growth between the years 1911 and 1921 was very small, namely, 14,794, primarily on account of the influenza and other epidemics. Agricultural condition was on the whole prosperous, partly due to rise in price of agricultural produce. The northern most subdivision, Champua started developing mining and timber industries attracting a considerable number of immigrants. The prosperity of this area was also partly due to the construction of the Amda-Jamda section of the railway line. But in spite of all these improvements, epidemics and other diseases restricted the growth of population to the small figure of 14,794 bringing the total population of the district to 379,496 in 1921.

108. In the decade 1921-31, the district quickly recovered from the effects of the influenza epidemic and made steady progress in the growth of population. There was a great improvement in the health of the people and the outturn of principal crops was satisfactory throughout the decade. There was however a heavy flood in the river Baitarani in 1927 and the health and agriculture of the riparian areas was affected. Cholera and other epidemics were present but were

KEONJHAR DISTRICT
Scale 1″=25 miles



much less severe. There was increase of population particularly in Champua and Sadar subdivisions where the pressure on soil is lighter than in Anandapur subdivision.

109. During ten years from 1931, there was insufficient rain in the years 1934, 1935 and 1938 when the outturn of crops was poor. In other years the rainfall was quite sufficient and the harvest was plentiful. In 1940 excessive rainfall amounting to 81·46″ as compared with the annual normal of 62·13″ caused heavy flood and damage to crops. In the years 1936 and 1937, there were bumper crops but in 1939 the harvest was

exceedingly poor. In other years the condition of crop was satisfactory. Occasional outbreak of cholera and smallpox, particularly in 1936 and 1937 were stamped out by suitable medical measures. Barbil and Champua were faced with scarcity of rice probably due to smuggling of foodgrains to Bihar. In 1938 and 1939, there was draught at the time when crops needed water and was later followed by high floods due to excessive rains. In the census of 1941,the district showed a growth of population by 69,177 bringing the total population to 529,786.

110. During the last decade, harvest was moderate to the extent of about eight annas in each of the years 1942, 1946, 1947 and 1949. In other years, crop condition was satisfactory and the outturn was better though really a very rich harvest never came any time during the decade. There was deficient rainfall in 1942 and from 1947 to 1950. In other years, it was above normal. Insects damaged the paddy crop considerably in the year 1945. Unequal distribution of rain in 1947 caused high floods in the rivers affecting crops to some extent. Cholera and smallpox broke out in 89 villages in 1947 when the death rate was high.

111. The census of 1951, however, showed a moderate increase of 58,655 bringing the total population to 588,441 which is an increase of 11·1 per cent and is considered as satisfactory.

112. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
KEONJHAR	529,786	588,441	+58,655	+11·1
Sadar subdivision	259,686	288,367	+28,681	+11·0
Anandapur subdivision	152,504	163,719	+11,215	+ 7·4
Champua subdivision	117,596	136,355	+18,759	+16·0

113. All the subdivisions of the district have made steady gain in population. The district is free from floods except in a small area on the either side of river Baitarani in Anandapur subdivision, which, therefore, has shown the lowest percentage of increase among the subdivisions of the district. Public health in Champua and sadar subdivisions is better than in the lower area of Anandapur subdivision.

114. During the last 50 years, the population of the district of Keonjhar has increased from 285,758 in 1901 to 588,441 in 1951, a gain of 302,683, which amounts to 105·9 per cent.

Phulbani

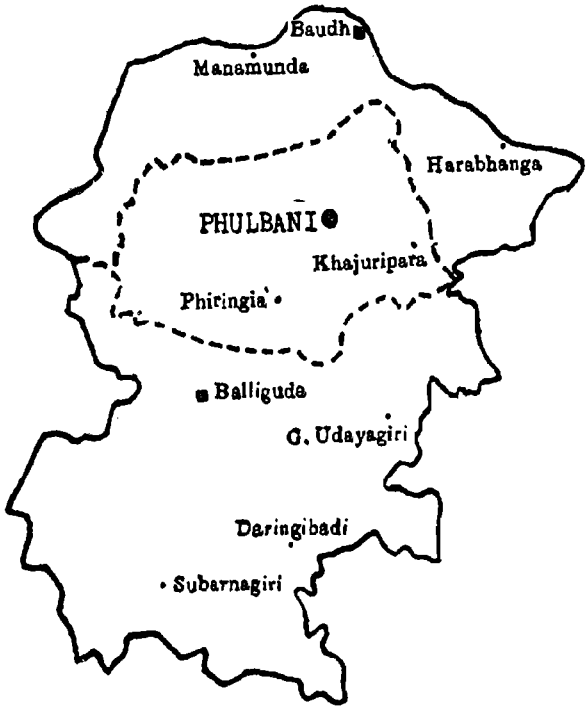
115. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1901	334,036	..
1911	378,039	+13·2
1921	376,355	− 0·5
1931	411,669	+ 9·4
1941	450,059	+ 9·3
1951	456,895	+ 1·5

116. The population of the district in 1901 was 334,036 which was less than the population in 1891 because of repeated scarcity of foodgrains which resulted in high mortality during the decade. Baudh had lost a population to an extent of 1·5 per cent and Khondmals and Balliguda subdivisions to a greater extent of about 3 per cent during the decade. The greater loss in Khondmals and Balliguda

is due to the great famine known as 'Chhapansal' famine of 1899. In the next decade (1901-11), the district gained population to an extent of 13·2 per cent but again lost, though to a small extent, in the decade 1911-21. There were short harvests in 1902 and 1903 and again in 1907 and 1908 when even mango and mohua crops in Khondmals and Balliguda failed resulting in serious distress to the scheduled tribes. But Baudh was passing through very good times particularly in agricultural matters and gained by 28·5 per cent during the decade 1901-11. Khondmals and Balliguda also gained considerably during the decade, bringing the total increase in the district to 13·2 per cent. Between 1911 and 1921, increase in the population of Baudh was moderate to an extent of 9·7 per cent while Khondmals' population was practically steady. Balliguda lost heavily so that the district as a whole had a population less than 1911 to an extent of 0·4 per cent. This was a decade, as in other parts of the country, of epidemics and of high rate of death. There were also repeated failure of crops leading to a famine in the year 1919 in the southern part of the district. Emigration to Assam had started in the decade 1901-11 but it was most marked in the following

PHULBANI DISTRICT
Scale 1"=25 miles



decade. Baudh had heavy mortality among infants which is ascribed to the prevalence of venereal diseases.

117. The district recovered quickly between the years 1921-31 and made a gain of 35,314 in population, which comes

to 9·4 per cent. Public health had improved. There were scarcities of food in some years but in 1924 an area of 109 square miles in Chokkapad Khandam of G. Udayagiri Taluk. Test work was started and relief given in extensive scale.

118. During the decade 1931-41, there was excessive rainfall in 1933 amounting to over 91″ although the annual normal rainfall for the district is 63·7″. There was also heavy rainfall in the year 1939 but the years 1931 and 1935 particularly had deficient rainfall. As there was no irrigation system in the district, during the decade, rainfall is an important factor for the success of the crops. The district had no bumper crop during the decade and mostly remained a deficient area depending upon import of foodstuffs from other districts of the State. The position in Baudh subdivision is a little better than in the other two subdivisions. Khondmals subdivision passed through a period of scarcity in 1935 when Taccavi loans had to be liberally given. This led to increase of emigration in Assam. Public health during the decade was much better than it was previously but the district was not completely free from epidemics and diseases. Smallpox started taking a heavy toll particularly in the years 1936 and 1937. In the later year, vaccination was declared compulsory in the district with a view to control the epidemic. The district largely suffered from malaria and other fevers, the death rate towards the later years of the decade rising very high, namely, 28·5 in 1936, 27·7 in 1937 and 30·3 in 1938 per mille in Khondmals from this disease alone. The district made a good progress during the ten years from 1931 to 1941 when the population grew by 9·3 per cent.

119. During the next ten years following 1941, the general condition of the district was worse than in the previous decade. Deficiency of foodstuffs continued. There was marked deterioration in public health, for as it appears, fever had established its stronghold in Khondmals and Balliguda. Death rate from this cause alone was as high as 30·1 per mille in the year 1941 and it continued with slight decline till the year 1947. This is ascribed to the fact that the people were suffering from under nutrition. This was also indirectly the cause of greater emigration to Assam tea gardens. Higher rate of mortality also resulted from cholera and smallpox. Except in Baudh subdivision, the population decreased considerably. At the end of the decade, the district was seen to have nominal gain in population amounting to 1·5 per cent. The adverse circumstances under which the population of the district is practically unable to grow is a matter of concern for the administration.

120. The growth of population in each subdivision during the ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
PHULBANI	450,059	456,895	+ 6,836	+1·5
Kh ndmals subdivision	86,779	85,543	− 1,236	−1·4
Balliguda subdivision	207,816	203,639	− 4,177	−2·0
Baudh subdivision	155,464	167,713	+12,249	+7·9

121. Phulbani is next to Balasore in respect of the unfortunate position relating to loss of population. Two out of the three subdivisions of the district show reduction of population. Baudh only has shown some amount of addition to

the population during the decade but Balliguda subdivision has suffered heavily by losing population to the extent of 2 per cent and Khondmals to the extent of 1·4 per cent. Part of this loss is due to the increased emigration to the Assam tea gardens. There is a recruitment depot in this district for sending labour to the tea gardens of Assam. Moreover, infant deaths and deaths in general are still high in these two subdivisions which is the principal reason of decay of population in this area. Public health measures should be organized to a satisfactory extent in this district in order to counteract the vital losses.

122. During the last 50 years, the population of the district of Phulbani has increased from 334,036 in 1901 to 456,895 in 1951, a gain of 122,859 which amounts to 36·8 per cent.

Bolangir

123. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1872	229,349	..
1881	436,660	+90·4
1891	527,442	+20·8
1901	447,625	−15·1
1911	624,417	+39·5
1921	721,207	+15·5
1931	804,844	+11·6
1941	871,804	+ 8·3
1951	917,875	+ 5·3

124. The phenomenal increase of more than 90 per cent of population in 9 years till 1881 as shown in the statement above is principally due to defective enumeration in 1872. Errors in enumeration were considerably reduced in the census of 1891 when an increase of 20·8 per cent was noticed. This appears to be reliable. The next decade upto the year 1901 was a calamitous period for the district as it is the only decade since the census in India began when the district suffered from a decrease of population. The famine of Sambat 1956 which occurred in the year 1899-1900 was devastating for the Patna state while the great famine of Sonepur in 1900 was equally severe. Sonepur lost about 13 per cent and Patna state about 19 per cent during this decade.

125. After 1901 the district quickly recovered from the effects of the famine and showed an increase of 39·5 per cent in the census of 1911. Moreover, the persons who had left the district during the famine years now returned and took part in the revival of agricultural prosperity of the district, which continued in extensive scale throughout the decade. Development of road communication was also one of the causes of the prosperous material condition of the people.

126. The disastrous decade of 1911-21 which ruined the prosperity of many of the districts of Orissa, spared this district almost entirely. While this district showed an increase of 15·5 per cent in the decade, no other district in Orissa came upto 5 per cent of increase, while as many as seven districts actually had a decreased population. The increase is also partly the result of immigration as the district was enjoying comparatively better health than the adjoining districts. The decade was not completely free from epidemics as cholera in 1912, smallpox in 1916 and influenza to some extent in 1918 took away larger number of lives than in a normal year.

127. In the decade 1921-31, exceptionally good public health was responsible in recording again a substantial increase of population. Except in the year 1927-28 when there was a fairly severe outbreak of cholera, the decade

was singularly free from deaths from epidemic diseases. The agricultural conditions were very encouraging both from the point of view of good harvests and expansion of cultivation and there was no scarcity of food, no flood, no smallpox or other epidemics. But the trend of migration was taking a different turn on account of relaxation of the rules of prohibiting emigration which resulted in movement of the non-cultivating section of the people to Assam in search of livelihood. Cottage industry, particularly in Sonepur was not only developing but had started attracting attention of the outside world, particularly with regard to textile products. All these factors resulted in increase of population by over 83,000 during the decade.

128. The decade 1931-40 was a period of general progress and prosperity for the district. Rainfall throughout the decade was sufficient except in the years 1931, 1935 and 1938. The harvest was good throughout and public health, except for localised outbreaks of cholera and smallpox, was excellent. These factors contributed to the growth of population to an extent of 8·3 per cent during the decade.

129. During the last decade (1941-50), the prosperity of the district was some-

BOLANGIR DISTRICT
Scale 1"=25 miles



what affected by special circumstances, such as, the war conditions and the merger of the state with Orissa. Agricultural conditions were as favourable as in the previous decade but there was general rise in the price of commodities which brought some amount of distress to the poorer section of the people. Public health seemed to be deteriorating which was evident from frequent outbreak of epidemics. This was one of the reasons why the rate of growth of population in the district has been consistently declining from decade to decade during the last 50 years. At the end of the decade, the district was seen to have made a moderate gain in population to the extent of 5·3 per cent which is not high in comparison with the gains made by the other districts of the inland division.

Sonepur and Patnagarh subdivisions particularly had shown tendency to deteriorate in health.

130. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
BOLANGIR	871,804	917,875	+46,071	+5·3
Bolangir subdivision	243,123	261,724	+18,601	+7·7
Titlagarh subdivision	235,194	257,323	+22,129	+9·4
Patnagarh subdivision	153,903	157,415	+ 3,512	+2·3
Sonepur subdivision	239,584	241,413	+ 1,829	+0·8

131. All the subdivisions of the district have added to their population during the decade although Sonepur's contribution is just nominal. During the decade it suffered from repeated attacks of epidemics keeping up the mortality rate higher than in the other subdivisions of the district. Titlagarh subdivision has gained most as it is developing as an industrial locality.

132. During the last 50 years the population of the district of Bolangir has increased from 447,625 in 1901 to 917,875 in 1951, a gain of 470,250 which amounts to 105·1 per cent.

Sundargarh

133. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1872	98,464	
1881	131,995	+34·0
1891	223,560	+69·4
1901	277,173	+24·0
1911	362,138	+30·7
1921	377,449	+ 4·2
1931	436,860	+15·7
1941	490,708	+12·3
1951	552,203	+12·5

134. District Sundargarh had a steady increase in population and suffered no decrease of population in any decade since the beginning of the census. Its phenomenal increase of about 70 per cent as revealed in the census of 1891 is due to the fact that the earlier censuses in this part of the country suffered from omissions and under enumeration. By 1891 the enumeration defects had been squared up and it was possible to get a correct picture of the number of people. The increase of population in the next two decades as shown in the censuses of 1901 and 1911 was quite high amounting to about 24 and 31 per cent respectively. This is not only due to the fact that there was satisfactory natural growth among the prolific people of the district where the material condition was good enough to act as a stimulus, but also to the fact that there was ample room for agricultural expansion which encouraged immigration from neighbouring areas. The construction of the Bengal Nagpur Railway line through the district brought it in direct contact with the outside world. The produce of the district could now find better markets outside and this brought about a rise in the price of agricultural produce to the prosperity of the large section of agricultural people. This resulted in influx of settlers from Chotanagpur in large number. In 1908 Bonai was in the grip of a great famine due to failure of crops but in all other years the harvest was plentiful and large extent of waste lands were reclaimed.

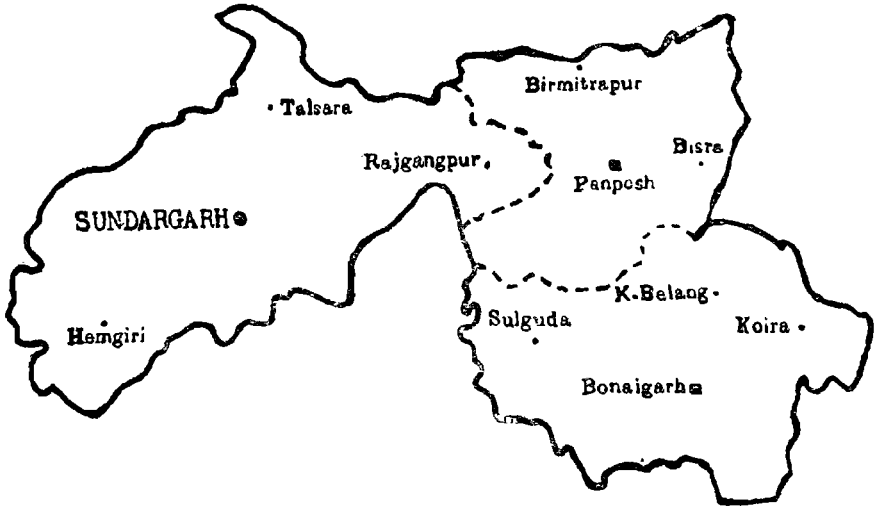
135. In the decade 1911-21 public health was good for the first seven years but in 1918 along with a bad harvest in Sundargarh and Panposh subdivisions, the influenza epidemic broke out throughout the district. In 1919, cholera and smallpox took a heavy toll of life but as the district is inhabited mostly by scheduled tribes who have a high birth

rate and as there was immigration from Chotanagpur Division, the district instead of showing a decrease of population as many other districts did, showed a surplus, though small, of 4·2 per cent over the population of 1911. The increase of population was also partly the result of opening the dolomite and limestone quarries in Rajgangpur and Raghunathpali.

136. In the decade 1921-31, the loss suffered earlier in the shape of low increase of population was quickly recouped to an extent of 15·7 per cent. Public health continued to be exceptionally good throughout the decade except probably in 1921 when the effects of influenza were still lingering in Bonai. There was great agricultural prosperity both in the shape of good harvests and by way of extension of cultivation by reclamation of waste lands and forests. The harvest of 1926-27 in Bonai was not quite satisfactory but this is probably the singular case of low outturn of crop in the whole decade. Material prosperity was increased owing to the extension of the railway line to Birmitrapur in 1922. The limestone and manganese quarries were further developed during the decade. The district also gained considerably due to excess of inward flow of migration.

SUNDARGARH DISTRICT

Scale 1″=25 miles



137. The decade 1931-41 was a period of general peace and prosperity for the district. The general health of the people was good throughout the decade. Agricultural conditions in sadar and Bonai subdivisions were very favourable but in Panposh subdivision the outturn of crop was not satisfactory in some years. There was poor rainfall in 1932, 1935 and 1938 when the outturn of crop was lower than in other years but no scarcity was felt. As a result, the population grew steadily to the extent of 12·3 per cent during the decade.

138. During 1941-51, the district achieved one of the highest percentage in increase of population. This is specially because the harvests were good throughout and there were no natural calamities or any type of severe epidemics. In 1943, the highest flood in

living memory was seen in the river Brahmani when 66 villages were affected and some damage to crops and houses resulted. But this is probably the singular incident of a calamity during the decade. The material condition of the district was affected on account of general reasons such as war time and merger of the states with Orissa but these did not seriously affect the people except in the matter of high price by which they were hit hard. In the census of 1951, the district made an addition of 61,495 persons to the population it had in 1941.

139. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
SUNDARGARH	490,708	552,203	+61,495	+12·5
Sundargarh subdivision	253,598	285,261	+31,663	+12·5
Panposh subdivision	144,573	161,451	+16,878	+11·7
Bonai subdivision	92,537	105,491	+12,954	+14·0

140. Each of the three subdivisions of the district made steady progress in the growth of population. The district is advancing in industrial field particularly with the establishment of the Cement Factory at Rajgangpur and with the further development of limestone industries. As there is the prospect of development of various industries, the district seems to have a bright future both from the point of view of population and their material condition.

141. During the last 50 years, the population of the district of Sundargarh has increased from 277,173 in 1901 to 552,203 in 1951, a gain of 275,030, which amounts to 99·2 per cent.

Kalahandi

142. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1901	478,742	..
1911	576,122	+20·3
1921	586,625	+ 1·8
1931	698,381	+19·1
1941	794,440	+13·8
1951	858,781	+ 8·1

143. The first decade of the present century was a period of general prosperity. The district was comparatively immune from the famine of 1899-1900 which severely affected Sambalpur, Patna, Sonepur and Baudh. As a result, the district showed a high rate of increase of population amounting to 20·3 per cent in the census of 1911. The increase was partly due to the fact that there are vast areas of cultivable waste lands and the rent is low which encouraged influx of cultivators from Madras and the Central Provinces. In the decade 1911-21 the district was one of the six in Orissa which escaped reduction of population on account of the influenza epidemic though the growth was highly restricted. In fact, Kalahandi emerged with a small increase of 1·8 per cent over the population of 1911. The district had scarcities in 1918 and 1920 which came in succession of the influenza epidemic of 1918 and resulted in reducing the growth of population effectively. A virulent type of cholera also visited the district in 1919 which came on the top of the distress caused by influenza epidemic and agricultural failure and raised the death rate to above 80 per mille. It was no wonder therefore that gain in population during the decade was so small.

144. During the period of 10 years from 1921 to 1931, the district made a bad start in the first year when the number of deaths was in excess of the number of births chiefly due to outbreak of malaria. During the remaining

KALAHANDI DISTRICT
Scale 1"=25 miles



nine years of the decade, the district had occasional distress for short periods either due to epidemics, such as, smallpox in 1929 or due to floods as in 1927. But the harvests were good throughout except in the years 1923 and 1924. The material condition of the people considerably improved with the abolition of the system of ' begari and Bahabandha ' and with the advent of the Raipur-Vizianagram railway line which passes through the district. The census of 1931 brought the

population of the district to 698,381 marking an increase of 19·1 per cent in ten years.

145. The decade 1931-41 was a period of general peace and prosperity which was conducive to the growth of population. There was deficiency in rainfall in 1931 and 1935 but in other years the rain was plentiful although not well distributed. The harvest was good throughout except in the year 1938 on account of untimely rainfall reducing the outturn to about 8 annas. Except for sporadic outbreaks of cholera and smallpox, public health was good throughout. During the decade, the population increased by 96,059 or 13·8 per cent which is satisfactory.

146. The last decade (1941-51) was less favourable for the growth of population. In 1941, rainfall was poor, particularly in Nawapara subdivision and the crops suffered. In 1942 and 1946, rainfall was also below the normal causing lower outturn of the crop. In 1943 and 1944, on the other hand, the rainfall was excessive, namely, between 69″ and 70″ per year against the annual normal of 54·8″. The district had good harvests except in the years 1945, 1946, 1947 and 1950 when the outturn was 9 annas or lower. The district being surplus in food production, it always had reserve stocks of foodgrains though its export capacity was not high on account of unfavourable agricultural season. In 1944, there were outbreaks of cholera and smallpox throughout the district and the mortality rate was high. The decade was thus less fortunate than the previous two, and caused a comparatively small growth of population of 8·1 per cent. The total population of the district in the census of 1951 stood at 858,781 with a gain of 64,341 during 10 years.

147. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (−)	Percentage of increase or decrease
KALAHANDI ..	794,440	858,781	+64,341	+ 8·1
Sadar subdivision ..	211,513	224,027	+12,514	+ 5·9
Dharamgarh subdivision ..	386,427	414,904	+28,477	+ 7·4
Nawapara subdivision ..	196,500	219,850	+23,350	+11·9

148. All the three subdivisions of the district have made satisfactory gain in the number of population during the decade. Nawapara subdivision has gained most particularly because it is developing in industrial field and was able to keep good public health during the decade. In the sadar subdivision, however, there were cases of epidemics during the decade keeping down the rate of increase of population.

149. During the last 50 years the population of the district of Kalahandi has increased from 478,742 in 1901 to 858,781 in 1951, a gain of 380,039 which amounts to 79·4 per cent.

Mayurbhanj

150. The statement below shows the growth of population of the district from decade to decade.

Year	Population	Percentage of variation
1872	258,680	
1881	385,737	+49·1
1891	532,238	+38·0
1901	610,383	+14·7
1911	729,218	+19·5
1921	754,314	+ 3·4
1931	889,603	+17·9
1941	984,741	+10·7
1951	1,028,825	+ 4·5

151. The high rate of growth in the first two decades may be the result of improved enumeration. It appears that although the coastal districts of Orissa succeeded in utilising the experiences of the census of 1872 to bring about improved enumeration in 1881, in Mayurbhanj the process was delayed. In other words, the first census of 1872 must have been highly defective so that some amount of improvement was effected in 1881 leaving still more to be achieved by 1891. After 1891, there were two decades of normal prosperity

MAYURBHANJ DISTRICT
Scale 1" = 25 miles



during which the population grew steadily till the census of 1911.

152. During the decade 1901-11, a narrow gauge railway line was built connecting the headquarters town Baripada with the Bengal Nagpur Railway line at Rupsa in Balasore district, and another line on the north of the district connecting the mines at Gorumahisani with the work-site of the Tata Iron and Steel Company. This brought prosperity

to the district. Cultivation also appears to have undergone extension. There was, however, some scarcity in 1908 necessitating relief operations. There was an addition of 118,835 souls to the population of 1901, so that the district had a population of 729,218 in 1911. In the next decade the position was less favourable. Three years from 1913 to 1915 had poor harvests. There was failure of crop in 1918 during which years the influenza epidemic visited the district and carried away at least 17,000 persons. The remaining years of the decade were noted for bad public health. The decade was however not devoid of material improvements. In 1918, a Circular Road was built from Baripada to Udala. The next year is noted for opening of the iron mines at Suleipat in Bamanghaty subdivision. During this decade the light railway line from Rupsa to Baripada was also extended for a few miles more upto Bangriposi. The overall increase of population during the decade was so small as 25,096 during the period of 10 years upto 1921. The percentage of growth was only 3·4 which is the smallest for the district in any decade since the census operations began.

153. In the decade 1921-31, there was remarkable recovery from the effects of the epidemic. This was possible partly because of the wellknown fecundity of the aboriginal population of the district. Public health was good throughout the decade except for occasional outbreak of smallpox, particularly in 1926. In 1927 the district suffered from the highest flood within living memory on account of heavy rainfall. Relief measures were started in aid of sufferers. The other years of the decade were happy on the whole. The district underwent a number of improvement schemes particularly relating to communications and expansion of industries. A Rice Mill was established, timber, log and other forest produce were exploited and iron mines started working. It was a period of remarkable prosperity for the district and the increase of population during the decade amounted to 135,289 or 17·9 per cent which is a satisfactory record.

154. Years 1931 to 1941 were a period of general peace and prosperity. The standard of public health was on the whole good except for occasional epidemics in certain localities. With the improvement of administrative machinery during this period, development schemes in industry and irrigation added to the prosperity of the district. Rainfall was deficient in 1932, 1934, 1935 and 1938 and abundant in 1931 and 1936 and very heavy in 1933, 1937, 1939 and 1940. In the last year of the decade the rainfall amounted to 83·97″ against the normal of 63·46″. In 1936 there was a failure of crops to some extent but there was no scarcity of food. Low price of agricultural produce from 1937 to 1939 led to econon ic depression felt by the agricultural population. In July 1940 there was a high flood which caused some amount of damage to the crops but there was no scarcity of food in stock. In spite of these occasional distresses, general prosperity of the people was not seriously affected. The result was that the population of the district increased by 95,138 during the decade, an increase of 10·7 per cent.

155. Circumstances obtaining in the last decade were less favourable to growth of population. In 1941 the crop condition was satisfactory and there was no scarcity but the low price of agricultural produce caused economic depression among the agriculturists. Prices rose slightly in the year 1942 due to war conditions, ultimately leading to scarcity of food in Panchpir subdivision in the year 1943. From 1944 to 1946 food shortage was reported from some localities of Bamanghaty and Panchpir subdivisions and action was taken to supply rice at controlled rates to the people. From

1947 onwards, prices rose higher. In the year 1950, Panchpir subdivision again suffered from food shortage partly due to failure of paddy crop in that subdivision due to attack of insects. Weather conditions during the decade varied from year to year. There was excessive rainfall in 1943 and 1946 and draught in the years 1947 and 1949. In the remaining years, the rainfall was abundant and the crop condition good enough enabling the district to export paddy to the deficit States. The industrial and agricultural development started in the previous decade continued in this decade also and were further stimulated when Mayurbhanj merged with Orissa on the 1st of January 1949. In the year 1949-50, 105 bundhs and 53 tanks were constructed for irrigation purposes which were expected to irrigate more than 25,000 acres of land. In the year 1950-51 68 bundhs and 27 tanks were constructed with a capacity to irrigate over 12,000 acres.

156. The result was an increase in the population amounting to 44,084 during the decade which comes to 4·5 per cent more than the population of the district in 1941.

157. The growth of population in each subdivision during ten years upto 1951 is shown below :—

District or subdivision	Population in 1941	Population in 1951	Increase (+) or decrease (—)	Percentage of increase or decrease
MAYURBHANJ	984,741	1,028,825	+44,084	+4·5
Sadar subdivision	411,109	440,019	+28,910	+7·0
Bamanghaty subdivision	255,287	260,220	+4,933	+1·9
Panchpir subdivision	181,423	183,444	+2,021	+1·1
Kaptipada subdivision	136,922	145,142	+8,220	+6·0

158. Panchpir and Bamanghaty subdivisions have shown poor rate of increase of population during the decade. A number of police-stations in these subdivisions have actually suffered from diminution of population from what they had 10 years before. This is mostly due to outbreak of epidemics at frequent intervals during the decade. Sadar and Kaptipada subdivisions have shown a satisfactory rate of increase in population although they contain some localities which are also affected by epidemics.

159. During the last 50 years, the population of the district of Mayurbhanj has increased from 610,383 in 1901 to 1,028,825 in 1951, a gain of 418,442 which amounts to 68·6 per cent.

SECTION IV

Movement

EARLIER ACCOUNTS

1. The people of Orissa are essentially home loving. They leave their homes only when there are pressing necessities for doing so, and take the earliest opportunity of coming back. An appreciable outward flow of migration in Orissa was first started in the later part of the last century from the low-lying tracts along the sea coast towards Calcutta. Orissa had taken to manufacture of salt along the sea coast but it was abolished when cheaper salt came from abroad. The abandonment of this industry led to unemployment and consequent migration towards Bengal, where the agricultural operations in Sundarbans and the rapid expansion of Calcutta in trade and industries required labour from outside. Repeated visits of cyclones and other calamities were also partly responsible for emigration from coastal areas of Orissa to Bengal. When the railways came in the closing years of the last century, the easy communication provided by it encouraged emigration towards Bengal. There was also an increasing exodus of landless persons towards Assam and Burma. Ganjam district in particular started sending migrants to Burma from Gopalpur Port. Thus between 1901 and 1921, the outward flow of migration developed to a considerable extent.

2. During the first two decades of the present century, there was also an inward flow, although the net out-migration was greater in volume than the net in-migration. Between 1901 and 1921, the south and the west of Orissa were gaining by immigration on account of influx of cultivators from Madras and Central Provinces as there was plenty of cultivable waste land to attract the settlers. From 1921 onwards, the flow of immigration into the western and southern parts of Orissa decreased while emigration started increasing. There was relaxation of rules prohibiting emigration from the ex-state areas which resulted in movement of non-cultivating section of the people to Assam in search of livelihood. In the meanwhile, emigration in coastal Orissa was also increasing particularly towards Assam, Burma and Bengal. During the last few decades Orissa has an adverse balance of movements as the number of emigrants is larger than that of immigrants.

IMMOBILITY OF THE POPULATION

3. A characteristic feature of the population of Orissa is the stay-at-home tendency. A very small percentage of the population is involved either in internal movement within the State or movement outside the State. Even when people move away from their homes they take to short distance journey in most cases. The primary reason for the immobility of the population is the predominance of agricultural profession, which requires constant attention and discourages travel to any place except the markets nearby for disposal of the agricultural produce. It is not that agriculture is such a paying proposition as to discourage the people from moving to distant places in search of earning but there is want of any other source of maintenance for the people in general. The social conditions, the caste system and the early marriages in spite of decline in their traditional sanctity at present still continue to induce home-sickness, while lack of education acts as an impediment to extensive movement. Another reason why movement of population has remained so small is the absence of large scale industries or large cities in Orissa which would encourage rural-urban movements.

HOME-BORN PROPORTION

4. As home-loving habit is prominent among the people of Orissa, the percentage of persons born and enumerated in the same district is enormously high. The actual number of such persons is exhibited in the Subsidiary Table 1·4, but as absolute figures do not always afford the best illustration of the extent of home-born proportion in the population of a district, the following table will show the number of such persons per 1,000 of the population.

District	Home-born persons per 1,000		
	Persons	Males	Females
Cuttack ..	967	977	958
Balasore ..	957	968	946
Puri ..	971	973	969
Sambalpur ..	936	943	929
Ganjam ..	989	988	991
Koraput ..	970	970	970
Dhenkanal ..	967	972	962
Keonjhar ..	938	931	944
Phulbani ..	942	964	920
Bolangir ..	972½	981	962
Sundargarh ..	941	940	942
Kalahandi ..	974	980	967
Mayurbhanj ..	960	968	952
ORISSA ..	987	985	988

5. A remarkably preponderating home-born composition is at once apparent in respect of each district. Only in four cases, namely, Sambalpur, Keonjhar, Sundargarh and Phulbani the proportion of persons born and enumerated in the same district falls below 95 out of 100. The highest percentage is shown by Ganjam where nearly 99 out of 100 persons born in the district stay at home. Other districts where the people keep at home to a high extent are Kalahandi, Bolangir, Puri and Koraput. It is easy to understand that places like Ganjam Agency, Koraput, Kalahandi and Bolangir do not attract strangers in appreciable number and so they suffer from comparative isolation. But it is strange that Puri also comes under this category. The reason may be that in spite of the spectacular attraction of outsiders by Puri town, Bhubaneswar and Khurda Road, the general population of the rural areas, and particularly of Nayagarh subdivision is more immobile than the inhabitants of Cuttack or Balasore, for example. The female element among the home-born is stronger than the male in Ganjam, Keonjhar and Sundargarh and weaker in the remaining districts. This is to a great extent a marriage phenomenon.

TYPES OF MIGRATION

6. Migration of population according to old practice is classified into five different types as mentioned below :—

(*i*) *Casual*—The migration of population of this type relates mostly to small distance movements between contiguous villages and is reflected in the census returns only when such villages belong to different districts. This is inclusive of migration of women on account of marriage.

(*ii*) *Temporary*—This is due to movements outside the district of birth on account of pilgrimage or fairs or temporary employment in miscellaneous services, construction work or in business.

(*iii*) *Periodic*—This is connected with agricultural operations mostly. During the season when there is no work in the fields, people move elsewhere in search of employment and return either at the harvest time or in the beginning of the next agricultural season.

(*iv*) *Semi-permanent*—This involves keeping up connection with the pre-migration residence during the period when livelihood is earned in a district other than that of birth. Such connection is maintained either by short time occasional visits, or by correspondence or remittance of money. On the termination of the work connected with earning of livelihood, such people return to their original district of birth.

(*v*) *Permanent*—Better climatic or living conditions, or economic prospects attract population from one district to another for good. The immigrants permanently change their place of residence.

7. In many cases it will be dfficult to draw a dividing line between the different types of migration, as the information relating to migration of population comes practically from one source, namely, the census question relating to birth place and this does not enable differentiation between various types of migration. A few factors, however, are observable, such as, the districts involved in the migration and the sex ratio among migrants. The distance involved in the migration or the preponderance of one sex over the other sometimes indicates the nature of migration, for example, the excess of females among migrants denotes that the movement has resulted mostly from marriage. In periodic and semi-permanent migrations, the male sex predominates very largely, but in the permanent type of migration no sex characteristic is marked. These reasonings, however, cannot be stretched far and the total number of persons involved in the movement cannot be satisfactorily classified under the types mentioned above.

Immigration

8. The total number of immigrants to the State in 1951 number 195,262 which constitutes 1·33 per cent of the population of Orissa. Of these, a very large majority, namely, 158,360 have come from the bordering States, 11,661 from other parts of India and 23,928 from Pakistan. Bihar has contributed the largest number of immigrants into Orissa, namely, 55,545. Next in order of importance are Madhya Pradesh sending 34,690, Madras 34,127 and West Bengal 33,998.

9. Among the immigrants from the adjoining States, there is a preponderance of males in the flow of people from Bihar and Madras but West Bengal and Madhya Pradesh have sent a larger number of women than men. This is due to the fact that the influx of people from Bihar and Madras into Orissa is mostly connected with the earning of livelihood while that with regard to West Bengal is connected mostly with marriages as well as economic rehabilitation of families. Madhya Pradesh shows only a nominal excess of females, which is a marriage phenomenon. The following table shows the sex ratio among the immigrants into Orissa.

State of origin	No. of immigrants		
	Persons	Males	Females
Bihar ..	55,545	33,980	21,565
Madhya pradesh ..	34,690	17,003	17,687
Madras ..	34,127	19,519	14,608
West Bengal ..	33,998	14,859	19,139

Immigration into Natural Divisions

10. The inland division is gaining remarkably by immigration in comparison with the coastal division. Firstly, in the exchange of population between the two natural divisions, the inland division has gained more, as 69,273 persons have migrated from the coastal division to the inland division while only 44,188 have gone on the opposite direction. This may be due to the fact that pressure on land is much greater in the coastal division and there is the attraction for the people of the coastal division to settle in the inland division where there is more of waste lands to be brought under the plough. Yet another reason might be that on account of comparatively larger preponderance of females in the population of the coastal division, there is a flow of women by marriage to the inland division. On examination of the inter-district migration figures, it appears that there is a greater flow of women from Cuttack to Dhenkanal and Keonjhar, than from these districts to Cuttack. But this is not true in all cases, for 7,053 females have moved from Balasore to Mayurbhanj as against 10,476 females from Mayurbhanj to Balasore.

11. The current of external immigration is still stronger in the inland division

rather than in the coastal. The number of immigrants coming from the adjacent States of West Bengal, Bihar, Madras and Madhya Pradesh into the inland division is 119,486 and into the coastal division is 38,874 only. Similarly, there is a larger influx of people from other parts of India and Pakistan into the inland division rather than into the coastal division. The principal reason why the immigration from external sources is heavier in the inland division lies in a few spectacular industrial developments in this division, such as, the Hirakud multi-purpose project and the Duduma hydro-electric scheme and development of a number of mining industries. The coastal division has no such schemes of all-India importance to attract settlers from beyond the limits of the State. The coastal division of course has some industrial developments, such as, the textile mills and glass factory but the inland division too has got parallels in cement, limestone and paper mills.

Immigration into Districts

12. The immigration figures are high in the bordering districts of Balasore, Sambalpur, Ganjam, Koraput, Sundargarh and Mayurbhanj. The districts situated inwards have a lesser percentage of immigrants. Sambalpur and Koraput are attracting people from outside the State because of the costly multi-purpose projects in the river Mahanadi at Hirakud and the hydro-electric project in the river Machkund, now under construction. The unsatisfactory food situation in Madras is another reason why Koraput attracts immigrants from that State. So the movement of population into this district is mostly due to economic reasons and not so much to marriage alliances. In Sambalpur, however, in addition to the economic reason, there is the considerable influence of social character, namely, marriage. Out of the total number of 35 thousand migrants from Madhya Pradesh into Orissa, Sambalpur alone attracts nearly 21 thousand. The geographical location of Sambalpur is favourable for inter-State as well as inter-district movements. The railway establishment at Jharsuguda and the location of the Orient Paper Mills at Brajrajnagar also contribute to the larger number of immigrants to this district. Sundargarh which adjoins the boundary of Bihar attracts a large number of settlers from that State, namely, 11,642, mostly males because of the limestone and cement industries in this district. But Bolangir which is also a bordering district does not attract a large population from outside because of its unfavourable geographical feature, namely, situation of high hill ranges nearby the boundary of the district. Keonjhar which borders Singhbhum district of Bihar attracts a large population from it because of mining industries and transport of raw materials from this district to Jamshedpur. There is a remarkable preponderance of males over females numbering 14,221 and 4, 355 respectively among the immigrants to Keonjhar which is easily explained by the employment of men in transport and mining industries, a small number of women following the male relatives under such employment. Mayurbhanj similarly attracts a liberal number of immigrants from Bihar because of the working of the mines. Some immigrants from West Bengal, however, are to be seen in Mayurbhanj. Balasore almost wholly gets its quota of immigrants from West Bengal with a preponderance of females, namely, 9,899 as against 6,232 males, principally on account of marriage across the borders.

Internal Movement

13. A vast majority of the inhabitants of the State live lifelong in the district in which they are born. Of the total population of 14,645,946 in Orissa as many as 14,118,302 or in other words 96·4 per

cent are attached to the soil being born and enumerated in the same district. Of the remaining population, 218,921 or 1·5 per cent have migrated from other districts of the same natural division to the district of enumeration and 113,461 or 0·8 per cent have migrated from the other natural division of the State to the district of enumeration. Thus the total movement from other districts within the State to the district of enumeration comes to 332,382 or 2·3 per cent. The internal movements within the State is not of a pronounced character as it thus appears. Such movement has little real significance as most of it means simply crossing over the border between one district and another. As women figure to a large extent in the internal migration, it may be taken to be ' casual ' in character. Among migrants from other districts of the same natural division are 145,914 females and 73,007 males. Similarly, among the migrants from the other natural division, women preponderate to a considerable extent. The migration between non-contiguous districts is insignificant.

14. The percentage of persons born in the district of enumeration is highest in Ganjam Agency which stands at 99·4 per cent, followed next by Ganjam Plains which stands at 98·9 per cent while the lowest is in Sambalpur and Keonjhar with 93·6 and 93·8 respectively. This shows that the people of the agency areas of Ganjam, particularly are least adventurous in the State and do not like to move away from their place of birth. Maximum movement is however indicated in respect of Sambalpur and Keonjhar which may be explained on the basis of larger number of women involved in movements due to marriage.

Direction of Inward Movemeet

15. The following statement shows the direction of principal waves of inward migration. Unimportant currents have been either omitted or left blank.

Destination	Migration from			
	Madras	West Bengal	Bihar	Madhya Pradesh
Mayurbhanj ..	..	5,075	10,829	..
Balasore	..	16,131	..	..
Cuttack ..	2,864	4,279	..	..
Koraput ..	20,006	..	..	..
Sambalpur ..	..	4,195	6,024	20,992
Sundargarh ..	..	..	11,642	4,807
Keonjhar ..	..	..	18,576	..

16. Immigration from other parts of India excluding the four adjoining States into different districts of Orissa is small and is confined mostly to Cuttack, Balasore, Puri, Sambalpur, Bolangir and Sundargarh. The Pakistan-born people are found in the highest number in Mayurbhanj because of the location of the transit relief camp at Amarda. Cuttack, Balasore, Puri and Sambalpur also get a reasonable number of persons from Pakistan. Among these new comers from Pakistan, the proportion of women is a little more than that of men.

Displaced Persons

17. While migration from Orissa to Pakistan was insignificant in character, the influx of persons from Pakistan into the State occurred in a larger scale. The causes for this influx must be identical with those relating to the persons that immigrated to other States in India from Pakistan, viz., the incidents that took place in the Punjab and Bengal in the pre-partition and post-partition periods.

18. The census of 1951 revealed that altogether 20,039 persons (10,801 males and 9,238 females) returned themselves on the census day as displaced persons from Pakistan. Of these, 17,741 (9,306 males and 8,435 females) came from East Pakistan. The number of such persons who came form West Pakistan was 2,298

(1,495 males and 803 females). Information collected through the census shows that the influx of these persons from East Pakistan to India started as early as the closing months of 1946 and from West Pakistan to India from the beginning of 1947 in the pre-partition period. The number of persons who immigrated into India upto the end of 1946 and ultimately came to Orissa was 333 and a majority of these were from East Pakistan districts. Tables D—V(*i*) and (*ii*) appearing in Part II-A of this Report show the trend of immigration from Pakistan to Orissa. For other details relating to the displaced persons in Orissa, reference may be made to Section V, Chapter VII of this Report.

Emigration

19. Emigration from Orissa is heavy. In 1951, the number of persons born in Orissa but enumerated in the census elsewhere was 416,408 or 2·84 per cent of the total population. The principal cause which leads to emigration is economic. It is primarily indicated by unemployment due to undeveloped industrial conditions, or poor agricultural prospects due to unfavourable seasons. In the coastal areas, pressure upon the land may be one of the fundamental causes. Lastly, the proximity of the port and business centre at Calcutta, the attractions of industrial employment at Jamshedpur and the organized recruitment facilities for the plantations of Assam undoubtedly stimulate emigration. Sometimes, emigration is the outcome of a family-habit, as it often appears in the districts of the inland division.

Distribution of Emigrants

20. The statement below shows the distribution in number and percentage of the emigrants from Orissa between the various principal destinations :—

Destination	No. of emigrants	Percentage of Total No. of emigrants from Orissa
West Bengal ..	202,154	48·5
Assam ..	87,216	20·9
Madhya Pradesh	66,668	16·0
Bihar ..	38,199	9·2
Madras ..	14,645	3·5

21. The overwhelming importance of Bengal which takes almost half the number of emigrants from Orissa is apparent. Next comes Assam, which though not contiguous to Orissa, is benefited by a substantial flow of population from Orissa. Bengal and Assam together take 7 emigrants out of 10. Spreading it over the total population, it appears that one person out of every 50 born in Orissa is to be found residing either in Bengal or in Assam. The flow of Orissa-born people towards Madhya-Pradesh is quite substantial and not far short of the number moving towards Assam. There is also a perceptible current of migration to Bihar and Madras. These are all the principal States which attract the migrating population of Orissa. Among other States which contain a little sprinkling of Oriya emigrants, Bombay, Uttar Pradesh and Tripura are important.

Decline in Emigration : Its Causes

22. The stream of outward migration is drying up gradually during the last 20 years. In the census of 1931, there were 627,000 persons of Orissa or 5·02 per cent of the general population who were recorded as migrant to other States. In 1951, the figure stood at 416,408 or 2·84 per cent. There was thus a fall of 210,592 in the number of emigrants during the period 1931-51. The decline in emigration seems to have resulted from a variety of causes. The difference in the general economic condition of Orissa and of the States which were

attracting migrants from Orissa was gradually narrowing down during the intervening period. Bengal particularly was hit hard by industrial depression, resulting in substantial fall in the volume of mirgration to that State. Conditions during the war and Post-war periods were not favourable for distant journey. Closing down of the ports of Chandbali and Gopalpur, curtailment in the number of daily train services, reduction in road transport services on account of petrol rationing and various other factors justifying the motto ' travel when you must ' had perceptible effect on the current of outward migration from Orissa. Political disturbances were widespread and even the more adventurous considered it hazardous to go out far in search of livelihood. In Assam, which is a popular destination of emigrants from Orissa, there was steady increase in labour obtained locally and consequently the need for immigrant labour was decreasing. In Burma, the position had completely changed and the flow of Oriya population came to a dead stop. Indo-Burman feelings had deteriorated fast, culminating in anti-Indian Riots in Rangoon in 1930. The decline in the stream of Oriya migration continued till the separation of Burma in 1938, when the movement completely stopped. On the other hand, in Orissa, urban and industrial areas were gradually though slowly developing, and the food situation was decidedly more satisfactory than in any of the States getting migrants from Orissa. Under the circumstances it was natural that the flow of outward migration decreased gradually.

Occupation of Emigrants

23. It is interesting to investigate how the large number of persons proceeding outside the bounds of Orissa in search of livelihood find employment in the new surroundings. This may be examined on the basis of different States.

24. *West Bengal*—Persons migrating from Orissa are found living widely dispersed in different districts of Bengal, although there is heavier concentration in the City of Calcutta. The districts which have attracted above 10,000 Orissa-born people are mentioned below. Districts of minor importance are omitted.

District	Number of emigrants		
	Persons	Males	Females
Calcutta City ..	78,659	70,437	8,222
24-Parganas ..	35,717	28,534	7,183
Midnapur ..	31,028	18,452	12,576
Howrah ..	18,186	13,619	4,567
Hoogly ..	14,214	9,180	5,034
Total—WestBengal	202,154	156,776	45,378

25. Of the total number of Oriya emigrants in West Bengal, 25,156 have taken to agriculture while 176,998 are employed in non-agricultural pursuits. Those employed in agriculture appear to be living mostly in Midnapur and to some extent in the 24-Parganas. Among the agriculturists 15,462 are males and 9,694 are females. This may mean that some of the agriculturists have settled with their families in the adjacent district and that some males have gone without family members as agricultural labourers to different places of West Bengal. It is of interest to note that out of the total number of Oriya agriculturists in West Bengal, 245 males and 134 females belong to the livelihood class IV, i.e., such persons are zamindars or agricultural rent receivers or land owners.

26. Among the non-agricultural classes of Oriya population living in West Bengal 62,903 are employed in production other than cultivation, 36,184 in commerce, 20,400 in transport and 57,511 in miscellaneous services. Among the

section of people employed in production other than cultivation, 46,628 are males and 16,275 are females. These people mostly are employed in cotton and jute mills and in other similar productions and have a number of female dependants showing that some of the emigrants belonging to this class take their family members with them to West Bengal. The section of Oriya population engaged in commerce is mostly connected with running betel and sweetmeet shops in Calcutta, Kharagpur and other places of West Bengal. They have also a number of dependants among them, for the total number of 36,184 is composed of 31,322 males and 4,862 females. Transport employees numbering over 20 thousand Oriyas are generally engaged in trams, buses, and railways. The population under this category is composed of 16,093 males and 4,307 females. Lastly, out of 57,511 persons depending upon miscellaneous services as their livelihood, 47,271 are males and 10,240 are females. The females are mostly dependants of the male workers who are engaged in large number in domestic services, such as, cooks, *malis*, *beheras*, *mistris* and technical workers.

27. *Madhya Pradesh*—This State has taken 66,668 persons from Orissa of whom 29,150 are males and 37,518 females. The total number of agriculturists among these emigrants is 38,837 of whom females predominate to a conspicuous extent, numbering 24,742 as against 14,095 males. The disparity between the two sexes is most prominent in livelihood class I or among the agriculturists who cultivate their own land. This class alone, out of the 4 classes of agriculturists, contains by far the largest number of emigrants, namely, 6,548 males and 16,866 females. This shows that a large number of women born in Orissa are married to the owner-cultivators among the agriculturists of Madhya Pradesh. The non-agriculturist emigrants number 27,831 of whom 15,055 are males and 12,776 females. The most prominent group among the non-agriculturists is livelihood class VIII (miscellaneous services) comprising 16,543 persons, namely, 10,283 males and 6,260 females. Other classes of non-agriculturists do not call for any remark.

28. *Assam*—The number of Orissa-born people now living in Assam is 87,216 out of which 50,115 are males and 37,101 are females. Unlike Madhya Pradesh, the emigrants to Assam are mostly non-agriculturists as among the total emigrants 8,648 belong to the category of agriculturists and 78,568 come under the non-agricultural group. This means that in every 10 migrants from Orissa to Assam, 9 have taken to non-agriculture and 1 only to agriculture. The most noticeable feature is that 75,314 persons are engaged in livelihood class V and are obviously attached to the tea plantations there. Among these workers in the plantations, 42,610 are males and 32,704 are females. These figures are, however, inclusive of dependants of the workers in the tea gardens, as under the present relaxed conditions of the contract, many of the emigrants live with non-working women and children.

29. Orissa is one of the most important States among the controlled emigration areas for recruitment of labour in the tea gardens of Assam. It supplies above one quarter of the total immigrant labour from all over India for the Assam tea plantations. In the year 1948-49 the number of Oriya labourers recruited by the Tea Estates was 8,987 out of the total of 34,213 recruited during the year. There are three principal centres of Tea Districts Labour Association in Orissa, namely, at Sambalpur, Berhampur and Koraput. Besides these, there is a small depot at Cuttack. The total

number of labourers recruited during 1941-51 by the three principal centres is given below.

Year	Number of labourers recruited by the Tea Districts Labour Association at		
	Berhampur	Koraput	Sambalpur
1941-42 ..	865	477	Approximate figures for 1941-42 to 1947-48 is 20,669 (Actual figures not available)
1942-43 ..	720	1,956	
1943-44 ..	2,868	2,410	
1944-45 ..	5,569	2,739	
1945-46 ..	6,101	2,179	
1946-47 ..	5,286	2,061	
1947-48 ..	3,547	1,753	
1948-49 ..	3,068	1,569	3,141
1949-50 ..	3,171	1,765	2,677
1950-51 ..	2,638	2,973	3,040
Total for 1941-51 ..	33,833	19,882	29,527

30. The number of Oriya labourers recruited for the tea gardens as shown above may not be comprehensive. The figures relating to Cuttack, though small (it was 236 in 1948-49), has not been shown above. Moreover, it appears that a substantial number of labourers from Mayurbhanj and Balasore are recruited through the Kharagpur Association which automatically is shown under Bengal. It is reported that immigrant labour is gradually decreasing in Assam in view of the steady increase in the locally available labour, but there is no indication that the recruitment in Orissa is decreasing to any extent. Figures are available in respect of at least one recruitment centre in Orissa, namely, Berhampur which shows that the recruitment during the decade 1941-51 standing at 33,833 is more than double than that of the decade 1931-41, which is 14,254.

31. *Bihar*—Emigrants from Orissa to Bihar number 38,199 with almost a balanced sex ratio, namely, 19,143 males and 19,056 females. There is a preponderance of non-agriculturists among this class of men as they number 26,502 while the agriculturists are limited to 11,697. The agriculturist-migrants move across the border of the State mostly on the basis of marriage. But the non-agricultural class who go out to Bihar are mostly seekers of fortune in Jamshedpur and a number of railway colonies in Chotanagpur either as technical workers or as demestic servants. The balance in sex proportion which is noticeable in the total number of emigrants to Bihar is completely absent when applied to the agricultural and non-agricultural category, for among the agriculturists the females outnumber the males by 3 to 1 (females 8,474, males 3,223), while among the non-agriculturists, males are 50 per cent more than females (males 15,920, females 10,582). This clearly shows that females among agricultural population of Orissa being in excess, have been moving into Bihar on the basis of marriage and that the primary cause of movement among non-agriculturists, where males predominate, is search of livelihood. Nearly 82 per cent or 31,083 out of the total emigrants to Bihar, numbering 38,199 are attracted by one district alone, namely, Singhbhum.

32. *Madras*—Migrants from Orissa number 14,645, the ratio between the sexes being almost equal. There is no special feature in this migration.

Direction of Outward Movement

33. From the review of migrants to different States in India, it appears that there is a larger flow of males north-eastwards and of females westwards. The two States Assam and West Bengal have attracted between them 206,891 males and 82,559 females or in other words, 5 males for every two females. The westward movement is opposite in character because of the preponderance of females over males though the disparity between the two sexes is not so great as in the case of north-east movement. For every 38 females leaving for Madhya Pradesh, there are only 29 males who follow suit.

Migration of Muslims

34. The problem of migration of Muslims from Orissa which was indeed very small in magnitude, actually arose in the wake of partition of India in

August 1947. There were no communal disturbances or other incidents in Orissa leading to the migration of Muslims. It appears to be due more to psychological reasons than to stress or strain in any form on the Muslims. It seems that migration of a negligible number of Muslims took place from the following districts of Orissa, viz., Koraput, Ganjam, Puri, Cuttack, Balasore, Sambalpur, Bolangir and Sundargarh. Neither the number nor the occupation of the persons who left is available from any source even to a degree of approximation. It is, however, believed that the migration took place mostly from urban areas. A very small number of Muslims evacuated from the rural areas of the districts of Balasore, Ganjam and Bolangir. Out of the total emigrants, 75 per cent were in trade or business and the rest in service.

35. In 1941, the Muslims formed 1·203 per cent of the total population of Orissa. In 1951, they constitute 1·204 per cent, i.e., 0·001 per cent more than the 1941 composition. Again, while the population has increased by 6·376 per cent during the decade, the Muslim population showed an increase of 6·445 per cent, i.e., 0·069 per cent more than the general growth rate. These percentages are of mathematical interest but being insignificant in dimension, have no practical value. In fact, percentages are worked out in census studies upto one place of decimal only, but here it has been extended to three places, merely because the insignificant character did not become apparent in the figures upto one place of decimal. Similarly, in the case of the districts wherefrom Muslim migration is believed to have taken place, a comparison between the percentage of Muslims in 1941 and 1951 and the rate of growth of general population and the Muslim community, reveals no migration of any magnitude. It is therefore clear beyond doubt that the migration of Muslims, if any, is insigniffcant.

Net Migration

36. The net result of inward and outward flow of migration for the year 1931 and 1951 has been shown in the Subsidiary Table 1·6. Corresponding figures for 1941 are not available as the tabulation of figures relating to movement of population was not taken up due to war conditions. So the position relating to movement in the State can only be compared between the years 1931 and 1951. It will appear that Orissa has an adverse balance of migration in 1931 as well as in 1951 and as such throughout the entire period. If in any particular period the number of persons moving out of the State exceeds the number of persons coming into it, the population is really growing at a more rapid rate than the census rate of increase indicates. This is what is happening in Orissa, where the increase in the natural population is greater than the increase in the actual population. The number of emigrants recorded in 1931 was 627,000 while that of immigrants for that year was 186,661. Similarly, the number of emigrants in 1951 was 416,408 while that of immigrants is 195,262. In other words, there was an excess of outward flow over inward flow of population in 1931 to the extent of 440,339 while the corresponding figure for 1951 is 221,146. Between 1931 and 1951, there has been a fall of 210,592 or 33·6 per cent in the number of emigrants, while there has been a small increase of 8,601 or 4·6 per cent in the number of immigrants into Orissa during this period. Although the emigrants are still larger in number than immigrants, the difference between the two classes has been considerably reduced during the intervening period of 20 years. The emigrants have decreased from 5·02 per cent of the total

population in 1931 to 2·84 per cent in 1951. The decrease in the percentage of immigrants is almost insignificant as it has reduced from 1·49 in 1931 to 1·33 in 1951. The net loss of population by migration in 1931 was 3·53 per cent of the total population which was reduced to 1·51 per cent in 1951.

37. Orissa has thus been heavily losing population by migration although the extent of such loss is diminishing with the passage of time. In 1951, she had a gain of 195 thousand persons (in round figures) due to the influx of persons not born within the State but sustained a loss of 416 thousand persons who were born in Orissa but had moved outside it. This loss, however, may not be of a permanent character as periodic type of migration seems to be considerable in the total volume of emigration. The census enumeration was done in February which is a slack season for agricultural operations. During this time many of the cultivators being free from harvests and other agricultural responsibilities move into Bengal and Jamshedpur in search of temporary employment, where they wait for the monsoon to break before starting on their journey back. The tide of periodic emigration is at its height at the time when the census enumeration takes place. Therefore, the loss of population due to excess of emigration as revealed by the census presents mostly a temporary and not permanent feature.

Variation in Natural Population

38. Natural population is the sum total of population as recorded in the census and the result of net migration. The recorded population of Orissa in 1951 is 14,645,946, and the result of net migration, that is to say the excess of emigration over immigration, is 221,146. Therefore, the natural population of the State in 1951 is the result of addition of these two figures which comes to 14,867,092.

39. It may be desirable to see how fast the natural population has been growing and what is its relation to the growth in the enumerated population of the State. As the relevant figures for the census of 1941 are not available, the variation in natural population may be examined between the years 1931 and 1951. The recorded population of the year 1931 was 12,491,056 and the difference between emigration and immigration was 440,339. Thus, the natural population in 1931 was 12,931,395. The increase in the natural population of Orissa during the period 20 years from 1931 to 1951 comes to 1,935,697 or 15·0 per cent. But the increase in the enumerated population for the same period is 2,154,890 or in other words, 17·3 per cent. Thus, during the last 20 years the enumerated pouplation has increased by 17·3 per cent while the natural population has increased by 15·0 per cent only. The growth of natural population has been slower than that of the recorded population. It was seen earlier that the net migration loss of Orissa has decreased during the last two decades. This is principally because of the shrinkage in the number of men who are moving out of the State elsewhere on account of various reasons. As more and more people have been keeping at home, the percentage increase of recorded population has been correspondingly increasing over the natural population. Subsidiary Table 1·7 gives the statistical illustration of the percentage increase in the natural population of Orissa.

SECTION V

Natural Increase—Births and Deaths

Natural Increase

1. Natural increase in population is the difference between births and deaths. It is necessary to study facts relating to births and deaths in order to find out the extent of natural increase. It will then be seen that Orissa's natural increase of population has not been high, because the high birth rate has been considerably counterbalanced by the high death rate. It will also be seen that the rate of decennial natural increase has been fluctuating primarily on account of the unsteady death rate.

2. The study of birth and death rates in Orissa is handicapped by the incompleteness of statistics with regard to them and whenever such statistics are available, they contain a considerable amount of error. In spite of these defects, the birth and death statistics cannot be dismissed altogether as they still provide the only basis of study of their rate from time to time. It would, however, be necessary to have a clear idea about the bright and dark sides of these statistics so that it may be possible to assess their implications on growth of population correctly.

Defects in Registration System

Wrong Basis of Calculation of Birth and Death Rates

3. To begin with, the birth and death rates worked out till the year 1942 had a wrong basis as the rate was calculated not on the estimated population of the State for any particular year but on the basis of the population enumerated in the preceding census. This was the inevitable result of lack of annual population estimates during the intercensal period. From 1943 onwards, the position was improved when the birth and death rates were calculated on the basis of the mid-year estimated population for any particular year. There was no occasion to check up if the formula adopted for ascertaining the mid-year population is theoretically correct but, at any rate, it appears that the basis was defined by the Public Health Commissioner with the Government of India* and is more suitable for the purpose than the figures of population recorded in the previous census. In the discussions which will follow, we will have to come accross birth and death rates calculated on two different basis, namely, the old basis of census population which had the effect of artificially inflating the birth rates towards the later part of the intercensal period and the new basis adopted since 1943 on the principle of calculating mid-year population.

Registration Area not Extensive

4. Secondly, the statistics relating to vital occurrences do not cover the entire population of the State. They relate merely to the registration area of the State which forms 36·1 per cent of the area of the State and comprise 54·1 per cent of the State's population. Although the registration area covers a fair amount of population in the coastal division, it does not do so in the case of the inland division, where the registration area is limited to 21·7 per cent of the area of the natural division comprising only 24·2 per cent of its population. It cannot be said that the extent of registration area of Orissa and particularly of the

* Letter No. 30-2/46—S. B. dated the 4th October 1951 from the Public Health Commissioner with the Government of India to the Director of Health and Inspector-General of Prisons, Orissa.

inland division is adequate enough to give a comprehensive and reliable picture of births in Orissa but there is one redeeming feature in the sense that the registration areas are scattered over different parts of the State and may be roughly taken to be typical of the State.

5. The following statement shows the total extent of registration area in different districts of the State.

District	Area in Sq. miles (From Table E)	Area under Registration in Sq. miles	Population of district	Population of Registered area
Cuttack	4,210	3,654	2,529,244	2,324,761
Balasore	2,507	2,244	1,106,012	1,027,282
Puri	4,043	2,492	1,572,262	1,171,153
Sambalpur	6,765	3,944	1,301,804	1,060,858
Ganjam	4,725	4,174	1,624,829	1,575,814
Koraput	9,875	20	1,269,534	60,262
Dhenkanal	4,226	902	839,241	190,432
Phulbani	4,282	2,952	456,895	289,182
Kalahandi	5,057	1,312	858,781	219,850
Inland Division	46,052	9,989	7,972,895	1,930,865
Coastal Division	14,075	11,705	6,673,051	5,988,729
ORISSA	60,127	21,694	14,645,946	7,919,594

6. It will appear that out of 13 districts in Orissa, four, namely, Keonjhar, Bolangir, Sundargarh and Mayurbhanj have no registration area, and that the registration area in three other districts, namely, Koraput, Dhenkanal and Kalahandi covers a small area of the district. In Koraput it is only limited to urban or urban-like areas and not to any rural area.

Omissions in Registration

7. The third defect in the registration of births and deaths is that there are too many omissions in the record. Births generally escape registration more easily than deaths. Again, female births and deaths are less often recorded than in the case of males. In course of the present discussion there will be occasion to ascertain the extent of error in registration and the manner in which the system of registration has undergone deterioration since the last war. The published figures with relation to births and deaths vary in percentage from district to district and cannot be accepted as correct anywhere. There is nothing to wonder why such deficiency exists. The work has been left to illiterate and ill-paid village watchmen who do not diligently collect information as their reports are seldom verified or checked. These poor workers have no promise of reward and no fear of punishment in connection with reporting of vital events although they have many occasions of being rewarded or punished for good or bad work relating to their other responsibilities. In Ganjam, however, though the reports are quite deficient, the work is a little more systematic as it is collected by the village officer who has some amount of education and is trained in sending reports on various administrative matters relating to the village.

Procedure of Registration of Vital Stastistics

8. The collection of vital statistics in the primary stage is done by village chowkidars in north Orissa districts and by village officers in district Ganjam. In urban areas of the State, this work is left to the employees of the

municipal or other local bodies. Chowkidars of north Orissa orally report the vital occurrences at the weekly parade held in the police-stations, where a literate constable or an Assistant Sub-Inspector collects the information and incorporates them in a monthly statement which is forwarded to the District Health Officer. The local bodies of urban areas similarly prepare monthly returns and forward them to the District Health Officer. This officer, on getting the monthly returns from the rural and urban areas of north Orissa and from the urban areas only of Ganjam and Koraput districts, compiles them into monthly district statistics and forwards them to the Director of Health, Orissa. The vital statistics of the rural areas of Koraput district are not collected as there are no registration areas there, but the vital statistics of the rural areas of Ganjam district which are received from village officers by the officer in charge of the Taluk office are compiled in his office into monthly returns and are forwarded direct to the Director of Health. A note on the method of registration of vital statistics prepared by the Director of Health and I. G. of Prisons, Orissa, may be seen in Appendix I.

Deterioration in Vital Statistics since War Time

9. During the pre-war times the system of registration was far from accurate and with the advent of the war there were fresh factors responsible for greater number of errors and omissions. In some villages, the salaries of chowkidars were not paid on account of the prevailing political unrest and they deserted their posts sometimes without permission to obtain work on establishments connected with war activities, food procurement and so on. The replacement of chowkidars who were found negligent, inefficient or absent, took several weeks during which period the vital occurrences remained unrecorded. The Thana Officers who were responsible for enforcing discipline among the primary reporters of vital statistics were now saddled with many additional responsibilities which were new on account of war conditions and had scarcely any time or inclination to check the regularity or correctness of reports. After the termination of the war, things did not improve as post-war problems were worse, demanding attention on more urgent matters. On account of these circumstances, the registration of vital statistics underwent marked deterioration during the last decade and the margin of error in registration considerably increased.

Absence of Estimates of Births and Deaths

10. As the registered vital statistics are considerably deficient, it should have been desirable to get estimates of births and deaths prepared from time to time by qualified statisticians. This, however, has never been done in Orissa or in fact in most of the States in India, although there is a Statistical Bureau under the Government. Estimates of births and deaths in India have been prepared for several years by a distinguished Actuary. But a more reliable estimate comes from an eminent American author, who has worked out the following figures with relation to births in India.*

Year	Reported births	Estimated births
1891—1901	34	46
1901—11	37	48
1911—21	37	49
1921—31	33	46
1931—41	34	45

* The population of India and Pakistan by K Davis, P. 69.

The above estimates reveal deficiency ranging from 30 to 40 per cent in the rates of birth reported officially. The same author has also prepared estimates of deaths in India which similarly reveal deficiency in official rates, though to a lesser extent than in the case of births. The deficiency between the real and the reported rates for Orissa is not likely to be less than those of India as a whole. In fact, the difference in Orissa will be much more.

VALUE OF VITAL STATISTICS

11. It is thus apparent that the public health statistics of Orissa are not only inadequate but also deficient and therefore unreliable. But in spite of the shortcomings discussed above, the available informtion cannot be rejected out-right. The registered figures help to localise diseases so that causes which produce it may be sought out and remedies provided for. Secondly, a study of the reported figures reveals the trend of births and deaths of any particular locality and is useful in the understanding of the demographic situation.

Birth Rates

12. For better appreciation, the position regarding birth rates in Orissa may be studied in a wider context. India, to start with, seems to have one of the highest birth rates in the world though of late years it is showing a tendency to decline. The birth rate of a few countries of the world are given below for the sake of comparison.

Countries	Birth rate (1941-43)
England and Wales	16·3
U. S. A.	22·6
Canada	24·0
Australia	20·7
India	32·0
Japan	31·6 (in 1931-35)

BIRTH RATES OF STATES IN INDIA

13. The birth rate of Orissa when compared with that of other States in India stands as follows :—

States	Birth rate	
	1937-43	1945
INDIA	34·5	27·3
Punjab	43·8	36·2
Madhya Pradesh	42·5	39·2
Bombay	39·1	33.8
Madras	36·1	29·4
Orissa	33·9	27·9
Utter Pradesh	33·6	27·3
Bengal	32·7	20·8
Bihar	31·8	23·5
Assam	29·4	17·0

CAUSE OF HIGH BIRTH RATE

14. It will thus appear that the birth rate in Orissa though not the highest in India, is fairly high. The causes of high birth rate relate primarily to the comparative early marriage in rural areas which gives a longer span of reproductive period. Social sanction favours early marriage for members of joint families who are not handicapped as individuals by the consideration of independent means of living. The economic and biological disadvantages of early marriage are however gradally being realized and are changing the attitude of the people even in rural areas to a perceptible extent. Another factor conducive to higher birth rate is the preponderance of females in the general population of Orissa, making it easier for a widower to take a new wife and thus keep on reproduction at a higher level. Poly amy, though very much restricted in practice in Orissa, is encouraged in the presence of the higher female ratio, leading to greater number of births.

DECLINE IN BIRTH RATE

15. The birth rate in Orissa, though belonging to high level group, is registering a perceptible downward trend during the last decade. The recorded birth rate in British India remained steady at about 34 per mille from 1920 to 1940. In 1941, it fell to 32·1 and in 1942 to 29·3. In the year 1943 there was

remarkable fall to 25·9 when decline was recorded in almost every province. The table given in the preceding page shows the fall of birth rate between the average of 1937-43 and the birth rate of 1945. This decline is quite substantial.

16. So far as Orissa is concerned, there has been a drop in birth rates as illustrated below :—

Inter-census birth rate		
1921-30	1931-40	1941-50
37·3	35·7	28·2

17. The drop in birth rates between decades 1921-30 and 1931-40 is moderate amounting to 1·6 but the drop between the next decades is very heavy amounting to 7·5. With such a high fluctuation, it becomes necessary to examine the annual rate of birth for locating the specific causes of decline in the rate of birth. The annual birth rate for the State is given below from 1936, the year of creation of Orissa as a separate province.

Year	Birth rate	Birth rate for quinquennium	Birth rate for decennium
1636	36·6		
1937	34·8	35·2	
1938	33·8		
1939	34·9		
1940	35·9		
1941	30·9		
1942	31·5		
1943	30·8	29·2	
1944	25·2		
1945	27·4		
			28·0
1946	27·5		
1947	26·7		
1948	26·4	26·7	
1949	26·1		
1950	26·8		

Causes of Decline in Birth Rate

18. The decline from 36·6 in 1936 to 26·8 in 1950, or in other words 10 per mille in 15 years is very remarkable. A part of this heavy decline may be explained by the marked deterioration in registration of vital occurrences during the last decade. There is nevertheless a real decline in birth rate which has been continuing from the decade 1921-30.

General Causes

19. The decline in birth rate of Orissa may be a part of the general phenomenon experienced in India and other States. It may also be the consequence of the change in social habits arising from the effects of legislation discouraging early marriage. The people are gradually realising the economic disadvantages of early marriage. Increasing urbanisation and effects of modern education discourage not only early marriage but also unrestricted reproductive activities. These tendencies are slowly but effectively working throughout India and are responsible in restricting the number of births.

Effects of Food Scarcity

20. The general scarcity and distress which came in the wake of disturbed food position and calamities like cyclone, floods and epidemics from 1942 to 1947 resulted in high mortality and extensive devitalization of the general population. Although Orissa was a surplus country in food production all through, the food situation was precarious particularly in 1943 and 1944. In one district alone, namely, Balasore, there were more than 1,100 deaths due to starvation in 1943. The first half of the last decade was notoriously unhealthy due to increased incidence and virulence of fever, diarrhoea and dysentery, cholera and smallpox. Under these circumstances, it is no wonder that birth rate in 1944 sank to 25·2, the lowest level during the decade.

Unfavourable Age Structure

21. One of the direct causes of the fall in birth rate during the last decade is the decrease in the number of women

belonging to the effective child bearing age group, namely, between ages 15 and 34. The number of females in this age group in 1941 was 618 per 1,000 married females. It fell down to 552 in 1951. There was simultaneous rise in the number of less productive age group of women between ages 35 and 54 during this decade. The more fertile group being reduced and the less fertile group being increased, the birth rate was effectively reduced.

SELECTIVE INCIDENCE OF INFLUENZA EPIDEMIC OF 1918-19

22. This disastrous epidemic directly inflicted the heaviest casualty among infants (below one year of age) and younger adults (persons between 20 and 35 years of age). Moreover, it caused such a high mortality particularly among females, that it may be taken to be the indirect cause of a large number of children not being born who otherwise would have been born. It is also believed that the reproductive powers of many persons who suffered but survived were permanently impaired. These three-fold reasons, nameyl, heaviest mortality among infants, reduction of births due to death in large number of women of reproductive age and permanent impairment of reproductive powers of many survivors, led to the serious depletion of the age group 0-5 as revealed in the census of 1921.

23. The selective character of the influenza mortality was also noticeable in the age group 20-40, particularly among females rather than males. The result was that for many years ahead, the number of women at the child bearing age remained disproportionately low, and this circumstance accounted for the failure of birth rate to rise to its normal level.

24. The conclusions drawn above may be easily illustrated by examining the variations in age structures of 1911 and 1921, as calculated for Orissa and shown below. The figures have been worked out on the basis of 1,000 population.

	Age group						
Year	0—5	5—10	10—15	15—20	20—40	40—60	60 and over
1911	137	149	119	83	317	149	46
1921	113	155	131	86	313	157	45
Variation 1911—1921	−24	+6	+12	+3	−4	+8	−1

25. The age group 0-5 has been seriously depleted in 1921 and also the age group 20-40 to an extent. The loss in these age groups in 1921 would have a bearing on births during 1941-50. The age group 0-5 of 1921 progresses itself into the age-group 20-25 in 1941 or 30-35 in 1951 and remains depleted all through. This is the principal fertility group of the decade 1941-50, and as it was highly depleted as a result of the influenza of 1918-19, the birth rate during 1941-50 was bound to fall, as indeed it did. The other depleted age group 20-40 of 1921 had risen up into 40-60 age group in 1941. The reproductive potentiality of this age group though considerably lowered had not completely come to an end, and as this age group had suffered from heavy mortality in the influenza years, the birth rate in 1941-50 could not have escaped corresponding reduction.

26. It is thus clear how the reduced birth rate in 1941-50 is partly accounted for by the selective character of the influenza scourge of the year 1918-19. Commenting on the high mortality of adult women as a consequence of this

epidemic, Mr. Lacey in his Census Report of Bihar and Orissa for 1931 remarked—

> The results of this would be that for several years to come, the number of women at the childbearing age would be disproportionately low, and this circumstance may account in a large measure for the failure of the birth rate to rise to its normal level even after conditions of apparent prosperity had been re-established.

Consequences of Industrialization

27. Decline in birth rate would seem to be an inevitable consequence of the pressure of an industrializing and modernizing economy. As Orissa is just beginning to get into the sphere of industrialization, and as modern ways of life are spreading effectively, even into rural areas, the decline in birth rate naturally set in.

Influence of Decline in Infantile Mortality

28. There is a school of thought, particularly led by Professor Fisher of England which has attempted to establish a correlation between birth rate and rate of infantile mortality. As it will be seen in Chapter VI of this Report, infantile mortality in Orissa is deminishing of late years. The fall in infant death rate is likely to relieve parents from the urge to compensate the loss by having a larger number of children. Therefore, reduction in infant mortality has a potent influence on birth rate which correspondingly declines.

Decline Partially Transitory in Character

29. There are thus a number of causes of the decline of birth rate in the last decade. Some of these causes are general in nature, applicable to India as a whole, while the others are particularly born of conditions obtaining in Orissa. Whether this decline is lasting or is just tenuous in character depends upon the circumstances through which the country will be passing in coming years. Industrialization and modernization will continue at increasing rate, no doubt, but there are other potent factors to determine the trend of birth rate. The youngest of the age groups depleted by the influenza epidemic of 1918 reached the last lap of its reproductive career in the present decade. The coming decade therefore will be influenced by undepleted and full-fledged reproductive age groups, capable of giving the country larger number of births than in the last decade. Secondly, the devitalization of general population experienced in 1943-47, which kept down the birth rate during the last decade, has passed away, making it favourable for birth rate to automatically rise up in the present decade. The decline in the rate is not free from impermanent elements and is thus precarious. The continuance of the downward trend of the rate of birth in future will depend upon the extent to which the permanent elements in the declining phenomenon may overcome the transitory ones.

Trend of Birth Rate in Natural Divisions

30. There has been a regular fall in the birth rate of the inland division during the last 30 years. It fell from 29·2 in 1921-30 to 27·1 in 1931-40 and again down to 24·7 in 1941-50. The birth rate in this natural division remained much lower than the average rate for Orissa which is 37·3, 35·7 and 28·2 respectively for the three decades mentioned above. On the other hand, the birth rate of the Orissa coastal division remained always higher than the average for Orissa or of the inland division. The birth rate of the coastal division during the decade 1921-30 and the two subsequent decades was 39·4, 42·4 and 29·3 respectively.

31. The trend of birth rate in the inland division has been one of continued decline from decade to decade since 1921, in the same manner as the average birth rate for the State. But the birth rate of the coastal division has shown rise and fall during the three decades. How far this conclusion is to be accepted depends upon the reliability and completeness of the registration figures. The coastal division has a greater percentage of area where registration is in force. The record of registration in this area though far from correct is more reliable than that of the inland division which has comparatively a poorer percentage of registration area and where the magnitude of under registration is greater. On the face of these circumstances, it cannot be accepted that the inter-census birth rate of the inland division has been lower during the last three decades than the average birth rate of the State. In fact, the birth rate for the inland division should have been higher not only than that of the average for Orissa but also than that of the coastal division. The inland division is inhabited to a large extent by tribes who are noted to be prolific. Secondly, the inland division has enjoyed better health, being less prone to outbreaks of epidemics. Industrialization and modern education which generally cause a decline in birth rate have lesser scope in this division. Therefore, if the registration figures show that the birth rate in the inland division is lower than that of Orissa as a whole or of the coastal division, the records of birth registration maintained by the Director of Health are to blame.

Death Rates

32. Of the two principal factors, birth and death, it is death much more than birth which governs the fluctuations in the natural increase of population of Orissa. The variations in the death rate are generally wider than in the birth rate. Whenever in the past population declined or remained stagnant, the reason lay chiefly in increased deaths due to some natural calamity and whenever the population grew perceptibly the principal reason was absence of any such calamity. Death rate in Orissa however continued to be high even when the times were prosperous. This high death rate was a part of the general phenomenon noticeable in India which country is practically at the top of countries of the world in the matter of high death rate.

Country	Death rate (1941-43)
England and Wales	12·1
U. S. A.	11·7
Canada	10·0
Australia	10·3
India	22·0
Japan	(17·9 in the period 1931-35)

Indian Death Rate

33. It will appear from the above that the death rate of India during 1941-43 was approximately twice the rate of Australia, Canada, England and Wales and America. Prior to the period 1941-43, India had a higher death rate which stood at about 34 per mille from 1901 to 1920 and dropped down to 26 in the decade 1921-30. Since then there was further reduction till the rate was 22 during the period 1941-43.

Death Rates Compared

34. Death rate of Orissa may now be compared with that of India and other States as follows :—

State	Death rate			
	1937-41	1942	1943	1944
INDIA ..	24·3	21·3	23·6	24·1
Madhya Pradesh	37.6	33·3	27·6	30·0
Orissa ..	28·8	25·7	30·7	31·0
Bombay ..	27·9	24·4	23·4	25·6
Bengal ..	25·0	20·0	31·1	28·1
Punjab ..	24·7	28·3	25·0	25·3
Uttar Pradesh ..	23·6	18·5	19·2	18·7
Madras ..	23·0	22·5	25·2	25·4
Bihar ..	21·8	15·4	16·0	22·5
Assam ..	20·9	15·4	16·3	17·1

ANNUAL DEATH RATE

35. The above statement shows that death rate in Orissa has always remained very high and in 1944 Orissa was next to none of the provinces in India in this matter. The above figures have been taken from the Annual Reports of the Public Health Commissioner with the Government of India and are slightly different from the figures obtainable from the Director of Health, Orissa. The difference between the two sets of figures may be partly explained by the fact that the rates shown in the Public Health Commissioner's Report are based on mid-year estimated population but the rates given by the Director of Health, Orissa are calculated on the decennial census population. The death rates maintained by the Director of Health, Orissa from 1936 (the year of separation of Orissa as a province) is given below:—

Year	Death rate	Death rate for quinquennium	Death rate for decennium
1936	27·8		
1937	28·6		
1938	29·5	27·8	
1939	28·2		
1940	24·7		
1941	28·0		
1942	25·4		
1943	30·3	28·4	
1944	30·4		
1945	27·9		25·8
1946	23·8		
1947	26·9		
1948	22·6	23·2	
1949	22·1		
1950	20·5		

HIGH DEATH RATE : FLUCTUATIONS IN RATE

36. The death rate of Orissa is high and there are fluctuations in the rate, but the general tendency has been to drop down. The death rate for the quinquennium 1936-40 was 27·8 ; it was 28·4 for 1941-45 and 23·2 for 1946-50. The quinquennium 1941-45 showed a rise in the rate over the previous quinquennium due to special conditions arising from war, natural calamities and deficiency of food. Examining the figures for individual districts, the highest death rate appears against Balasore and the lowest against some districts of the inland division, namely, Sambalpur and Kalahandi. There was a sharp rise in the death rate from the year 1942 to 1944 but from 1945 to the end of the decade, a decline is noticeable except in the year 1947 which was an unhealthy year. The rise in death rate particularly during the years 1943 and 1944 was on account of serious food shortage, and natural calamities like cyclone, flood and epidemics. The total recorded deaths in Orissa in 1943 was 233,584, an increase of 17·9 per cent over the quinquennial average of 198,150. In the district of Balasore which borders Bengal, the increase in mortality was 40·7 per cent. In this district, 1,105 deaths from starvation were recorded though many of the victims were destitutes from Bengal. The total number of deaths in 1944 was higher than in 1943 and with a birth rate sinking down to 25·2 which is the lowest during the decade, there were about 40 thousand more deaths in Orissa than the total number of births that year. Similarly in 1945 and 1947, deaths outnumbered births. But the last three years of the decade showed decided improvement when the death rate underwent a sharp decline, till the lowest recorded figure of 20·5 was registered in 1950. These figures, however, are subject to a good percentage of omission in registration and the real death rate, like the real birth rate is much higher than the figures maintained by the Director of Health. But even if this considerable under-registration is kept out of consideration, the recorded rate is much higher than that of many advanced countries of the world. For example, the death rate of Orissa is more than twice the death rate of England and Wales for any particular decade. If all

the deaths were registered, the rate would be much higher.

DECLINE IN DEATH RATE

37. In spite of all the shortcomings and the unreliability of registration figures as observed above, the death rate shows an unmistakable and real downward trend. It has registered a fall from 27·8 in 1936 to 20·5 in 1950, a decline of 7·3 per mille in 15 years, which is by no means unsubstantial. During the years 1943 to 1945 and in 1947, death rates were subjected to severe disturbance due to special conditions. There were fluctuations in other years too, but in spite of these ups and downs the general tendency has been a lowering of the death rate during the last 15 years and perhaps during the last 30 years. The reduction in death rate in Orissa as much as in other States in India, seems to have come as a part of the world phenomenon of the present age. The effect of modern medicines has also been responsible to an extent in prolonging life. To a small extent, however, it may be due to such indirect reasons as construction of hard surfaced roads, extension of telegraphs and postal systems to remote villages and development of road transport. But much seems to be left desired in the direct line of attack on high mortality, by substantial improvement in public health measures and by effective control of epidemics and natural calamities.

38. Thus, the present reduction in death rates has come mostly as a part of the general world phenomenon and not so much due to effective measures of mortality control in Orissa. With a change in such phenomenon, a relapse may take place, except in countries which have planned control measures for checking rise of mortality rates. Orissa does not seem to come under the exception, and hence her precarious position. The economic situation does not look altogether favourable. The rural areas still remain insanitary, the villager unable to appreciate the indispensability of sanitary measures. In the towns, there is lack of municipal funds for three essentials of public health, namely, conservancy, water-supply and drainage. Even in Cuttack, the only city in Orissa, conditions are not less dismal than in any other town. So long as no substantial improvement is effected in public health in town and in village, the reduction in death rates in recent years will remain a precarious matter.

UNSATISFACTORY PUBLIC HEALTH

39. Apart from deaths caused by special circumstances such as starvation, accidents and other causes of occasional or minor character, deaths in Orissa have been caused generally by unsatisfactory public health. The outbreaks of epidemics particularly fever and cholera have become regular annual events in many districts. Diarrhoea and dysentery as well as smallpox are also inimical to long life in Orissa. These diseases have acquired endemic character in several areas of the State. It is worth investigating what causes have led to the unsatisfactory state of public health in Orissa. But whatever be the causes, there has been no determined effort to improve the situation because of the following circumstances :—

(*i*) There is absence of sufficient weight of public opinion with regard to the necessity of improvements in sanitation and general health of the people. The lack of public opinion in this matter is due to want of knowledge as regards the loss in economic field on account of suffering from bad health, which in turn causes general backwardness in day-to-day problems of life in comparison with other States in India.

(*ii*) There is lack of sound administrative principle with regard to co-ordination

of and distinction between hygiene and preventive care on the one hand and suitable medicine and medical care on the other. There is also no sufficient co-ordination between departments of the Government dealing with public health and allied subjects.

(*iii*) There is lack of adequate training of the health staff in practical control of epidemics and other diseases.

Toll of Life from Diseases

40. The extent of loss caused to human lives by different diseases, namely, fever, diarrhoea and dysentery, cholera and smallpox may now be examined. The statement below gives the number of deaths in the registration areas of Orissa in different years due to these principal diseases.

Year	Fever	Diarrhoea and dysentery	Cholera	Smallpox	Total number of deaths inclusive of 'other causes'
1941	107,848	20,147	9,325	6,156	213,274
1942	102,998	15,635	8,908	4,165	194,726
1943	117,700	19,165	20,502	4,244	233,584
1944	129,273	18,803	18,246	8,124	235,581
1945	121,585	17,093	10,587	12,018	217, 12
1946	101,720	14,157	7,209	6,060	187,348
1947	124,501	17,449	4,772	1,689	213,162
1948	104,921	12,607	6,651	1,581	179,829
1949	96,960	14,285	6,576	1,330	177,008
1950	86,992	13,066	3,532	3,023	165,246
Total for the decade	1,094,498	162,407	96,308	48,390	2,017,370

Fever

41. By far the highest number of deaths from any single disease is caused by fever which claimed 54·3 per cent of the total number of deaths in Orissa during the last decade. This high percentage is partly due to the fact that the term ' fever ' includes a large number of diseases in which the rise of temperature is a marked symptom. The primary reporters of vital statistics work under the general instruction that is all doubtful cases fever should be reported as the cause of death. Generally many diseases are accompanied by fever although fever may not be the principal ailment and the immediate cause of death. Such cases are invariably reported under the head fever.

42. Among fevers of different types prevalent in Orissa, malaria is the principal one. Malaria accounts for the bulk of the fever deaths either directly or indirectly by lowering the vitality of the victims and thus rendering them an easy prey to other more fatal diseases. The exact proportion of deaths due to malaria is not known but it may be as high as half, which means that roughly 25 to 30 per cent of all deaths in Orissa is traceable to this one disease alone.

43. The magnitude of loss in the economic field on account of suffering from malaria in Orissa has little been realised. Malaria tends to attack heavily during the agricultural season and particularly in rural areas and therefore food production suffers to a considerable extent. The following extract * taken from a bulletin entitled ' What Malaria Costs India ' by Lieutenant-Colonel Sinton, who was the Director of the Malaria Survey in India some years back, is interesting.

* Quoted at page 170 of the Final Report of the Famine Enquiary Commission, 1945.

As malaria is pre-eminently a rural disease and agriculture is the chief support of the country, the loss which the staple industry of India sustains must be enermous. The influence of this disease upon agriculture is therefore one of the most important economic problems of India.....It constitutes one of the most important causes of economic misfortune, engendering poverty, diminising the quantity and quality of the food supply, lowering the physical and intellectual standard of the nation, and hampering increased prosperity and economic progress in every way.

44. The history of deaths due to fever during the decade 1941-50 may now be briefly given. The decade commenced with an average death rate of 14·2 in 1941. Khondmals contributed the highest death rate of 30·1 followed by Angul and Balasore with 19·8 and 18·0 respectively. In 1942, the death rate fell down to 13·5, Khondmals again showing the highest death rate in Orissa with Angul and Balasore following. Then began the upward curve of incidence of deaths from the year 1943. The total number of deaths rose from 102,998 in 1942 to 117,700 in 1943. The year 1944 brought the climax of mortality due to fever when deaths rose to 129,273 which persisted with a negligible fall in the following year. Another disastrous year during the decade was 1947 when the number of deaths rose to 124,501, which represents 58 per cent of the total mortality during the year, the highest percentage on record during the decade. The localities where this misfortune was most markedly felt are Khondmals with a death rate of 24·9, Balasore with 24·3, Angul with 23·0, Sambalpur with 17·8, Cuttack with 17·6 and Puri with 13·6 per mille of population. The year 1948 was also a year of suffering, though to a lesser extent, but the last two years of the decade had perceptible decline in the incidence of fever, and are regarded as comparatively healthy years.

Diarrhoea and Dysentery

45. Next to fever, this is the most fatal group of diseases in Orissa claiming 8 per cent of the total number of deaths. The reported number of deaths are inflated to some extent because a large number of cases of intestinal disorders which are actually neither diarrhoea nor dysentery are included in this category. But on the other hand, as infants are particularly prone to this disease, and as a large percentage of infant deaths remain unregistered, the mortality from diarrhoea and dysentery are some times under-recorded. Unlike fever, this disease has remained more or less steady throughout the decade, the total number of deaths ranging between 20,147 in 1941 to 12,607 in 1948. Cuttack, Puri and Ganjam districts are the worst sufferers, the incidence of death per mille being 4·3 in Cuttack, 3·6 in Puri and 2·4 in Ganjam in the opening year of the decade. Among the towns, Kendrapara, Puri and Jajpur are worst affected. The incidence in 1942 came down to some extent, Cuttack and Puri recording death rates of 3·2 and 2·7 respectively. During this year Ganjam Plains and Koraput districts also registered 2·1 and 2·0 respectively. The incidence of deaths in 1943 again rose up in the years 1943 and 1944, Cuttack and Puri suffering most. The other years of the decade when deaths due to this disease were high are 1945 and 1947. But thereafter there was a substantial fall till the close of the decade. The extensive popularity of the sulfa drugs, which effectively arrest the mortality from this disease, is partly the reason why improvement was noticed in closing years of the decade.

Cholera

46. Of total number of deaths during the decade, 4·8 per cent relates to cholera. Not a year passed without cholera in some part or other of the country. In spite of the improvements in sanitation, the outbreak of cholera is still a matter of chance although it is now capable of being controlled within a shorter duration

that it used to be before. The years 1943 to 1945 should be taken as the peak years for the epidemic of cholera. In 1943, Balasore suffered most, about 6,220 people died of it in this district, the death rate from this disease alone rising to 6·1 per mille. Puri and Cuttack districts also recorded a high death rate of 3·9 and 3·5 respectively. In 1944, Cuttack recorded the highest death rate of 4·3 during the decade. The death rate in Puri and Balasore was 3·8 and 2·6 respectively. Similarly the year 1945 was a year of virulent cholera epidemic in the coastal districts. From 1946 onwards, the epidemic was on the decline till the end of the decade. The progress in cholera control in Orissa has been slow indeed, because such a control, apart from medical attention, is dependent to a great extent on public health measures, particularly purification of food and water supplies.

SMALLPOX

47. Smallpox of all the principal fatal diseases in Orissa is least important and has taken 2·4 per cent of the total deaths in Orissa during the decade. Although its outbreak is still a matter of chance, its spread and virulence has been controlled effectively by extensive vaccination. The worst year during the decade was 1945 when the total number of deaths was many times more during this year than during any other year of the decade. Sambalpur and Koraput in the inland division and Cuttack, Puri and Balasore in the coastal division are generally prone to this disease.

TREND OF DEATH RATE IN NATURAL DIVISIONS

48. Although the inter-census death rate of Orissa shows a regular decline during the last 30 years, this is not so in the case of the inland division. The death rate for Orissa was 30·8 in 1921-30 and it fell down to 28·4 in 1931-40 and further down to 26·0 in 1941-50. But in case of the inland division the death rate seems to have remained steady barring negligible fluctuations during the last 30 years. The death rate in 1921-30 was 20·1 which came down to 19·8 in 1931-40 and again rose up to 20·2 in 1941-50. So far as the coastal division is concerned, the disturbance in the trend is opposite in character. It was 33·6 in 1921-30, rising to 34·3 in 1931-40 and ultimately falling to 27·9 in the last decade. The death rate in the inland division during the last three decades has remained lower than the average rate for Orissa. It is also much lower than the death rate of the coastal division in each of the three decades. As in the case of births, the inland division is remarkably subject to omissions and errors in the registration of death statistics. It cannot be accepted for a moment that although the average death rate for Orissa in 1921-30 was 30.8, it was so low as 20·1 for the inland division in the same decade. It is known from common experience that mortality is very high in Khondmals, Balliguda and other parts of the inland division. The unreliable character of registration in the inland division with regard to death statistics is mostly due to the fact that the area under registration in the inland division is too small and the machinery of registration highly defective. If any lesson has to be drawn from the recorded statistics as they are, it is that there has been some amount of decline in death rate in each of the two natural divisions separately, during the last three decades.

Natural Increase

49. As stated earlier, the difference between the number of births and the number of deaths makes the natural increase of population. The position relating to births and deaths has been examined separately. It will be necessary now to find out the excess or deficit of both these factors in order to calculate

the natural increase or decrease of population. The following statement shows the number of annual births and deaths and the excess or deficit between these two figures for the registration areas of Orissa during the decade 1941-50.

Year	Births	Deaths	Excess or deficit of births over deaths
1941	234,674	213,274	21,400
1942	241,296	194,726	46,570
1943	237,023	233,584	3,439
1944	195,835	235,581	—39,746
1945	213,655	217,612	— 3,957
1946	216,391	187,348	29,043
1947	211,639	213,162	— 1,523
1948	210,390	179,829	30,561
1949	208,816	177,008	31,808
1950	216,531	165,246	51,285
Total	2,186,250	2,017,370	168,880

50. From the above statement, it appears that during 10 years from 1941 the excess of births over deaths amounted to 168,880 with relation to the population of the registration areas. The mean population of the registration areas for the decade is 7,753,569. Accordingly the decennial rate of natural increase works out to 2·2 per cent. The rate of natural increase for previous decades, as shown in Subsidiary Table 1·3 compares as follows :—

1921-30	..	6·5
1931-40	..	7·3
1941-50	..	2·2

51. But these rates have been worked out on the basis of recorded vital statistics which are not reliable, and thus cannot be accepted except roughly for ascertaining the general trend. It will be futile to ascertain with any amount of accuracy either the natural increase of population or the registration error on the basis of defective registration statistics.

52. The natural increase of population of the State may however be worked out by deducting the net migration from the growth of population as revealed by the census. No information regarding migration is available for the census of 1941. It will therefore be necessary to revert to the position in 1931. The natural increase during the period 1931-51 may be worked out as follows :—

Population in 1951	..	14,645,946
Population in 1931	..	12,491,056
Increase recorded in censuses between 1931-51.		2,154,890
Percentage of recorded increase 1931-51.		17·3
Net migration loss† 1931-51	..	— 219,193
Natural increase * of population 1931-51.		1,935,697
Percentage of Natural Increase 1931-51.		15·0

53. As it will appear from Subsidiary Table 1·6, Orissa has an adverse migration balance on account of emigrants being larger in number than immigrants. The net loss due to migration has decreased between 1931-51. In 1931 the loss sustained by adverse migration was 440,339 while in 1951 such a loss stood at 221,146. The growth of population of Orissa between censuses of 1931 and 1951 is 2,154,890 which amounts to an increase of 17·3 per cent over the population of 1931. But the growth in the natural population between 1931-51 is only 1,935,697 or 15·0 per cent. Thus the rate of natural increase of Orissa's population is lower than the rate of increase in the recorded population between 1931 and 1951. To sum up, the natural population of Orissa has been greater than the recorded population in 1931 and 1951 although the rate of natural increase has been lower than the rate of recorded increase in population during this period.

† See column 10 of Subsidiary Table 1·6.

* Deduct column 9 from column 5 of Subsidiary Table 1·7.

Extent of Registration Error

54. It has been observed on more than one occasion in course of the present review that the system of registration obtaining in Orissa is highly defective and the vital statistics as available from the office of the Director of Health cannot be relied upon for accurate calculation of survival and growth of population. It has also been observed earlier that the registration figures relating to the coastal division have lesser extent of errors than those of the inland division. A perusal of the birth and death rates of the districts of inland division as appearing in the Subsidiary Table 1·3 will show at a glance the unreliable character of the figures. For example, the inter-census birth rate for the decade 1941-50 of Balliguda and Ganjam Agency is 5·0 and of Koraput is 14·9 per mille. Similarly, the inter-census death rate of Balliguda and Ganjam Agency is 4·4 and of Koraput is 11·1 per mille. It requires no argument to show that there is abnormal deficiency in the registration of birth as well as of death statistics in these places. There has similarly been marked under-registration in other districts of the inland division. In the coastal division although the records are better, they are not free from omissions. This may partly be due to the defective character of the registration system coming down from its very inception and partly to the marked deterioration in registration during the last decade.

55. In view of the admitted under-registration in birth and death statistics, if the natural increase of population or other similar estimates are made on this defective basis, the result will not be free from error. It would be possible to ascertain the extent of such an error if estimates of births and deaths were prepared from time to time. But no such estimates are available. It has been shown in paragraph 10 of this Section that the estimate of births made by a distinguished scholar revealed deficiency in the reported number of births to the extent of 30 to 40 per cent. Secondly, the extent of registration error has been discussed in the Census Report of India, 1931 by Dr. Hutton who was of the view that on the whole the defect in vital statistics was probably to be estimated at about 20 per cent though it was, in his view, much higher at its maximum. In Mysore the deficiency was put at 50 per cent or even more. In Assam the Census Superintendent was of the view that at least one-third of vital occurrences had gone unreported. Lastly, the matter was re-examined by the Population Data Committee, Government of India, who in their Report* pointed out that the under-registration of deaths ranged from 35 per cent in some areas to 55 per cent in others. The Committee finally was of the view that the average under-registration is nearly 50 per cent.

56. The registration system of Orissa may be as unsatisfactory as those of other States in India. Taking into consideration the existence of large percentage of registration error as discovered by the three authorities mentioned above, and the fact that there was partial collapse of the registration system during and after the war time, the under-registration in vital statistics of Orissa may range from 30 to 50 per cent. Since it is a fact that births escape registration more easily than deaths, the registration error in the record of births may be taken to be 45 to 50 per cent while that in the

* Report of the Population Data Committee (Simla, Government of India Press, 1945) P. 6.

record of deaths may nearly be 30 per cent. The rates of births and deaths maintained by the Director of Health are not as high as they should have been. Roughly speaking the real death rate during quinquennium ending 1950 should be taken to be 30 and the birth rate to be 40 per mille instead of 23·2 and 26·7 as shown in earlier paragraphs of this Section. This is nearly confirmed by the computation made by a distinguished Actuary * who arrived at 39·3 per mille as the birth rate of Orissa by Reverse Survival Method and 29·9 per mille as the death rate computed by Differencing Method for the period 1941-50.

* Birth and Death rates for 1941-50, computed by Shri S. P. Jain, communicated in the Registrar-General, India's letter No. 29/45/52—RG., dated the 19th January 1953.

SECTION VI

Livelihood Pattern

1. One of the fundamental changes introduced in the 1951 census is the substitution of economic classification of population for the classification based on religion. In the past, census statistics used to be maintained and displayed on the basis of religion but with the political independence won in 1947 and with the emphasis laid on the secular character of the Indian Union since then, the focus of attention has shifted from religion to economics. In the census of 1951, therefore, great importance was attached to the economic status and the means of livelihood of the people. Prior to 1951, no full-fledged statistics regarding classification of the total population according to means of livelihood was available. The census of 1941 omitted such a classification, while the census of 1931 provided for classification of only persons following some occupation. The rest of the population which was numerically larger was left unclassified. The principal change involved in the 1951 classification scheme is the adoption of a comprehensive economic classification of the entire population and not merely of those that were engaged in gainful occupation as was done in 1931. The Indian Census Economic Classification Scheme, 1951, as prepared by the Registrar General, India, has been reproduced in Part II-B of this Report and the implications of such statistics have been discussed in Chapters IV and V of the present volume. At present, the pattern of livelihood of the general population is broadly examined.

Livelihood Categories and Classes

2. The general population has been divided into two broad livelihood categories, namely, agricultural and non-agricultural.

AGRICULTURAL CLASSES

3. The agricultural category has been divided again into four classes as defined below :—

(*a*) *Livelihood class I* comprises cultivators of land, wholly or mainly owned and their dependants. The word 'owned' includes every tenure which involves a right of permanent occupancy of land for purpose of cultivation. Such a right must be heritable. It may, but need not in all cases, be transferable. This class covers all occupancy tenants in temporarily settled areas and raiyats in permanently settled areas and persons with similar status in other parts of the country. In Sambalpur or in the Agency tracts of South Orissa, a tenant has heritable right over the land but may have no right to transfer it. He is also included in this livelihood class. Village servants having heritable right as regards the service and enjoying Jagir lands have also been taken in this class. Of course, such a village servant is liable to be dismissed and with his dismissal the service land is liable to be taken out and given to the next official successor. But this is an exceptional case. Similar fate may overtake an occupancy tenant who may be evicted from his land for nonpayment of rent, etc. These special considerations should not take away the right of an heriditary village servant any more than that of an occupancy tenant, to be classified as owner of the land which he cultivates. Zamindars or Thikadars ordinarily have been included in livelihood class IV and not in class I, as will be mentioned below. But in case of any Zamindar or Thikadar who had large extent of *nijchas* lands which he cultivated himself and had lesser extent of other lands from which he collected rent, he has been included

in class I because his status as the owner of *nijchas* lands economically is greater than his status as the collector of rent. The idea relates to what is known as the principal means of livelihood, which is explained in a subsequent paragraph.

(*b*) *Livelihood class II* relates to cultivators of land, wholly or mainly unowned and their dependants. The word 'unowned' should be understood as an antithesis of 'owned' as defined above. Persons who have taken temporary lease of land and who have not yet got any right or title over the land but are merely cultivating the land at the will of the owner have been recorded in this class. *Sanja, bhag, thica* and other similar varieties of leases have been included in this class.

(*c*) *Livelihood class III* comprises cultivating labourers and their dependants. This is meant for persons doing agricultural work on daily or periodical wages. These persons are not entitled to any part of the produce as persons falling in class II but they are merely entitled to the daily wages or periodical remuneration either in cash or kind or both. *Mulia, halia, kothia,* etc., come under this class.

(*d*) *Livelihood class IV* covers non-cultivating owners of land, agricultural rent receivers and their dependants. It relates to persons who receive rent either in cash or kind in respect of the land cultivated by other persons. Generally, Zamindars, Proprietors, Sub-proprietors, Thikadars and other types of landlords who settle cultivated or cultivable lands with tenants and other persons in lieu of rent have been shown under this class.

NON-AGRICULTURAL CLASSES

4. There are 4 classes among the non-agricultural category of population as described below :

(*a*) *Livelihood class V* comprises persons (and their dependants) who derive their principal means of livelihood from production other than cultivation. Such production relates to primary industries, such as, live-stock raising, forestry, plantation, hunting, fishing as well as employment in other types of production, such as, mining and quarrying, processing and manufacture of foodstuffs, textiles, leather goods, metals, chemicals, etc. Some of these industries are akin to or associated with agricultural activities, while others are altogether non-agricultural in character.

(*b*) *Livelihood class VI* relates to persons (including dependants) who derive their principal means of livelihood from commerce, i.e., wholesale or retail trades of various kinds, money lending, banking, insurance and similar business.

(*c*) *Livelihood class VII* covers the group of persons (including dependants) who derive their principal means of livelihood from transport of various categories, namely, transport by road, rail, water and air.

(*d*) *Livelihood class VIII* comprises, men and their dependants engaged in other services and miscellaneous sources of income not covered by the three other non-agricultural classes of professions. This class mainly relates to persons engaged in construction and utility services, storage and communications, health, education and public administration. Miscellaneous sources of livelihood, such as, income from investments, scholarships, pensions and family remittances, produce of begging and other unproductive activities are also included in this livelihood class.

LIVELIHOOD CLASSES SUMMARISED

5. For the sake of convenience, the classification of livelihood as mentioned above, is summarised as follows :

The people are divided into two broad livelihood categories, viz., the agricultural and the non-agricultural. There are four agricultural classes, namely—

(I) Cultivators of land, wholly or mainly owned; and their dependants,

(II) Cultivators or land, wholly or mainly unowned; and their dependants,

(III) Cultivating labourers; and their dependants, and

(IV) Non-cultivating owners of land; agricultural rent receivers and their dependants.

Similarly, there are four non-agricultural classes, comprising all persons (including dependants) who derive their principal means of livelihood from—

(V) Production (other than cultivation),

(VI) Commerce,

(VII) Transport, and

(VIII) Other services and miscellaneous sources.

Each of the above eight classes will be referred to as a livelihood class.

PRINCIPAL MEANS OF LIVELIHOOD

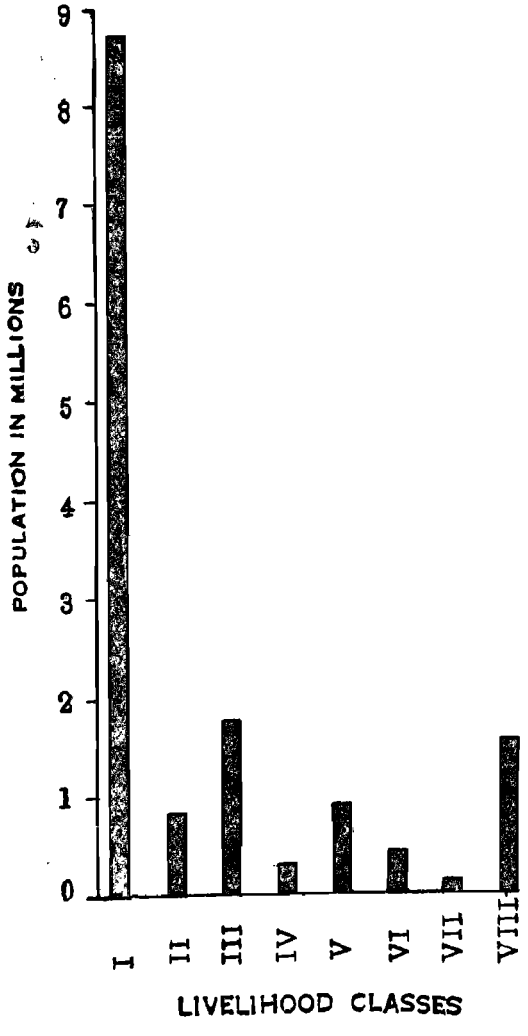
6. The present discussion on the livelihood pattern of the general population is based on the principal means of livelihood of the people. Some persons have more than one means of livelihood and in such cases the criterion of describing the pattern is the chief source of sustenance. Ordinarily, the means of livelihood of any individual relates to the gainful occupation which forms the source from which the income utilized for his maintenance is normally derived. For purposes of the present discussion, however, the expression has been given more comprehensive significance, inasmuch as in exceptional cases, income may be secured without gainful occupation. 'Principal means of livelihood' means the same thing as 'means of livelihood' for every person who has only one means of livelihood. Where a person has more than one, that which gives him the greater part of his income is his principal means of livelihood. Every non-earning dependant is maintained exclusively by the income of some self-supporting person on whom he is dependant. Consequently the principal means of livelihood of the latter has been recorded as the principal means of livelihood of the former. The same rule applies to the earning dependants, no attempt being made to assess the degree of sufficiency of their income or the extent of their dependence on others.

TERMINOLOGY

7. It will appear from the scheme of classification of livelihood that there are several new features in it and several new terms have been employed to define different sections of the population. Such terms, for example, 'cultivators of land, wholly or mainly owned', 'non-cultivating owners of land', 'agricultural rent receivers', 'self-supporting persons', 'earning dependants', 'non-earning dependants', etc., may be in common use but they have specific meanings attached to them under the scheme of economic classification and unless the real significance of the terms is understood, there is likelihood of erroneous conclusions being drawn when trying to compare the 1951 census economic data with those of other economic enquiries. The definition of these terms as given by the Registrar General, India, may be seen in Annexure I to the General Notes appearing in Part II-B of this Report. These definitions should be carefully read together with the Indian Census Economic Classification Scheme reproduced in the above mentioned General Notes.

Livelihood Pattern of General Population

8. Subsidiary Table 1·8 gives the distribution of 10,000 persons of general population among different livelihood classes. Arranging them in order of percentage, the livelihood classes stand



as follows. The actual population of each class, as shown in Table B-I published in Part II-B of this Report is given below. Greater details in the matter may be seen in respective Sections of Chapters IV and V.

Livelihood class	Population	Percentage
I	8,718,822	59·5
III	1,803,968	12·3
VIII	1,603,400	11·0
V	926,788	6·3
II	869,751	5·9
VI	425,852	2·9
IV	219,827	1·5
VII	77,538	0·5

9. The total of livelihood classes I to IV which constitute the agricultural section of the population comes to 79·3 per cent while the total of livelihood classes V to VIII which form the non-agricultural population stands at 20·7 per cent. Among the agricultural classes, livelihood class I, namely the owner-cultivators claims the highest percentage, namely 59·5, the agricultural labourers (class III) following next, being 12·3 per cent of the population. The agriculturists of the status of *bhag* tenants who fall under class II form a modest percentage of 5·9, while the zamindars and rent receivers are the lowest in percentage among the agriculturists, namely, 1·5. Among the non-agricultural classes, livelihood class VIII, i.e., persons engaged in other services and miscellaneous sources of income constitute the highest percentage of 11·0 followed by persons belonging to class V, those that are engaged in production other than cultivation, forming 6·3 per cent. Commerce has absorbed a poor percentage of 2·9, while transport, as might naturally be expected, is the lowest being limited to half a per cent of the population.

Comparison with Other States

10. The following statement compares the livelihood pattern of Orissa with those of India and of other States based on the general population of 10,000.

State	Total agricultural classes	Total non-agricultural classes	Livelihood classes I	II	III	IV	V	VI	VII	VIII
INDIA ..	6,990	3,010	4,720	900	1,230	140	1,040	600	160	1,210
Vindhya Pradesh ..	8,713	1,287	6,262	636	1,762	53	459	280	43	505
Bihar ..	8,605	1,395	5,529	827	2,187	62	394	340	72	589
Orissa ..	7,929	2,071	5,953	594	1,232	150	633	291	53	1,094
Madhya Pradesh ..	7,600	2,400	4,950	447	2,041	162	1,060	439	147	754
Uttar Pradesh ..	7,418	2,582	6,227	515	571	105	839	503	136	1,104
Assam ..	7,334	2,666	5,789	1,281	174	90	1,468	390	128	680
Madhya Bharat ..	7,222	2,778	5,043	1,022	1,067	90	996	561	107	1,114
Rajasthan ..	7,088	2,912	4,331	2,286	311	160	888	658	94	1,273
Mysore ..	6,990	3,010	5,546	476	679	289	1,024	557	341	1,375
Madras ..	6,490	3,510	3,490	960	1,820	220	1,240	670	170	1,430
Punjab ..	6,473	3,527	3,876	1,609	774	214	736	915	104	1,772
Bombay ..	6,146	3,854	4,074	969	905	198	1,376	761	223	1,494
West Bengal ..	5,721	4,279	3,234	1,201	1,226	60	1,536	932	305	1,506
Travancore-Cochin ..	5,485	4,515	2,634	710	2,017	124	2,119	680	341	1,375

11. The States mentioned above have been arranged in order of their agricultural character. It will appear that Orissa comes next to Vindhya Pradesh and Bihar as regards the highest percentage of population belonging to the agricultural profession. Orissa is thus a predominantly agricultural country.

Livelihood Pattern of Natural Divisions

12. The inland division has got a higher percentage of agricultural people than the coastal division. The agricultural classes of the inland division constitute 82·7 per cent and the non-agricultural classes 17·3 per cent while the corresponding figures for the coastal division are 75·2 and 24·8 per cents respectively. The preponderance of agricultural livelihood in the inland division is due mostly to the absence of a better calling to take its place. Moreover, lands are more extensive in the inland division and the *per capita* acreage of waste lands as well as cultivated lands is almost twice as much as in the coastal division. So it is natural that agriculture provides employment for a larger percentage of the people of the inland division. The excess of population of the agricultural classes in the inland division, however, is confined to the owner-cultivators and agricultural labourers only, for this natural division has got lesser percentage of population than the coastal division in the remaining two classes of agricultural population, viz., the non-owning cultivators and the non-cultivating owners (classes II and IV). This is mostly due to the peculiarities of the tenancy laws in different natural divisions. So far as non-agricultural section of the population is concerned, the coastal division has got greater percentage than the inland division. The excess is found not only with regard to the total non-agricultural population, but also in respect of each of the four classes thereof taken separately. This is primarily due to greater pressure on land in this division which turns the attention of the people to avocations other than agriculture. Development of heavy industries being inadequate and slow, people have taken to small scale productions, cottage industries and miscellaneous services in greater number than in the inland division.

District Pattern

13. The division of population of each district into agricultural and non-agricultural category is illustrated by the follow-

ing statement which is arranged in order of agricultural character of the district :—

District	Total agricultural classes	Total non-agricultural classes
Keonjhar ..	89·9	10·1
Mayurbhanj ..	87·2	12·8
Sundargarh ..	86·8	13·2
Balasore ..	85·2	14·8
Kalahandi ..	84·4	15·6
Dhenkanal ..	83·7	16·3
Bolangir ..	82·7	17·3
Sambalpur ..	79·2	20·8
Phulbani ..	79·0	21·0
Puri ..	78·7	21·3
Koraput ..	77·3	22·7
Cuttack ..	74·9	25·1
Ganjam ..	66·1	33·9
Agency ..	*80·7*	*19·3*
Plains ..	*64·5*	*35·5*

14. It will appear that Keonjhar is the most agricultural in character among all districts of Orissa with 89·9 per cent followed by Mayurbhanj with 87·2 and Sundargarh with 86·8 per cent. The least agricultural districts are Ganjam with 66·1 per cent followed by Cuttack and Koraput with 74·9 and 77·3 per cents respectively. Districts which are highly non-agricultural in character or in other words where production, other than cultivation, commerce, transport and other miscellaneous services are more developed are on the reverse order. Thus, Ganjam, Cuttack, Koraput and Puri are the most developed districts so far as business and commercial enterprise or miscellaneous sources of income are concerned. In this matter Keonjhar and Sundargarh may be taken to be most backward. Phulbani was likely to have occupied a much lower position but the extensive establishments of weaving industries particularly in Baudh subdivision considered in relation to a population which is the smallest in number of all districts in Orissa, has ultimately suppressed its real backward character. Sambalpur, in spite of its spectacular multi-purpose project, just occupies a middle position in the list of districts, both with regard to agricultural and non-agricultural character.

Distribution by Livelihood Classes

Class I—Cultivators of Land Owned

15. Of all the livelihood classes, class I constitutes the highest percentage ranging from 76·8 in Keonjhar to 42·1 in Ganjam Plains. Highest percentage is noticeable in the districts of the inland division, namely, Keonjhar, Sundargarh and Mayurbhanj which are at the top. On the other hand, the lowest percentage of owner-cultivators is noticed in the districts of the coastal division. Ganjam, Puri and Cuttack are among the last of the districts of Orissa in the proportion of owner-cultivators to the general population. The reason why the percentage of owner-cultivators is small in the districts of the coastal division is that cultivation under *bhag* system is quite popular so that a large number of agriculturists of the coastal division prefer to lease out their lands to be cultivated by non-owners of land.

Class III—Agricultural Labourers

16. Next to owner-cultivators, the group of persons deriving their principal means of livelihood by working as agricultural labourers is the highest within the category of agricultural population of the State. This class of persons constitute 13·2 per cent in the inland division and 11·3 per cent in the coastal division. The largest percentage is found in Kalahandi district where the agricultural labourers form a fifth of the general population or to be more exact, constitute 19·3 per cent of the total population. The lowest is found in Balasore with 8·4 per cent. Agricultural labour is shrinking faster in the coastal division than in the inland division because of the tendency of day labourers to undertake non-agricultural labour which is more profitable. This explains why there

is a lower percentage of such labourers in the coastal division.

CLASS II—CULTIVATORS OF LAND UNOWNED : BHAG TENANTS

17. Persons belonging to livelihood Class II form a small percentage of the agricultural population. Although the average for Orissa is 5·9 per cent, a great dispariety is noticeable in the proportion relating to the two natural divisions of the State. The number of non-owner cultivators is almost double in the coastal division than that of the inland division, the percentages being 8·1 and 4·1 respectively. There is more of inequitable distribution of land in the coastal division with the consequence that all the agriculturists do not own the land that they cultivate to the same extent as in the inland division. In the inland division, lands are comparatively more plenty so that a larger number of men are in a position to own the land which they cultivate. But this is not the case with regard to the coastal division. The highest number of *bhag* tenants in the State occur in the district of Puri which absorbs 10·9 per cent of the total population in this livelihood class, as against the Orissa average of 5·9 and the coastal division average of 8·1 per cent. A large number of land owners in Puri district are Brahmins who on account of caste prejudice do not cultivate their own lands and generally lease them out to non-Brahmins. There are a large number of temples including the great temple of Lord Jagannath and also a large number of Mathas in the district owning vast extent of landed properties. In all such cases the lands are leased out on *bhag*. This explains why Puri district has strikingly large percentage of *bhag* tenants.

CLASS IV—NON-CULTIVATING OWNERS OF LAND : ZAMINDARS, ETC.

18. It is natural that this class of persons is lowest in percentage in the State being limited to 1·5 only. As in the case of *bhag* tenants, there is great disparity in the proportion of livelihood class IV between the two natural divisions, inland division having 0·8 and coastal division 2·4 per cent. A larger number of non-cultivating owners of land and agricultural rent receivers in the coastal division has resulted partly from the facility under the Orissa Tenancy Act of what is known as 'opening separate account' which results in the proprietory right over land being fragmented into a number of small independent units. The right of primogeniture though not completely absent, has limited scope in the three coastal districts. It is not unusual to come across zamindars in these districts who pay an insignificant amount of, say, a few annas as land revenue payable to the Government for their estates. Technically such people belong to the same class of livelihood as the biggest landlord of the State.

19. Zamindars have been treated as agricultural rent receivers or as non-cultivating owners of land. There is justification for this, as the zamindars are really the owners of estates and not of the lands in the estates. Lands in the estate are always owned by the innumerable peasants belonging to livelihood Class I. The abolition of zamindary, when it comes, will hardly affect the livelihood pattern of the country, except that persons belonging to livelihood Class IV will dwindle down.

CLASS VIII—OTHER SERVICES AND MISCELLANEOUS SOURCES

20. Among the non-agricultural section of the population the largest percentage of people belong to livelihood class VIII comprising 11·0 per cent of the population of the State. This class contains the members of all public services, legal profession, health and educational institutions, domestic, religious and charitable concerns, storage and communication as well as construction and utility services.

The inland division has a smaller percentage, namely, 9·1 under this livelihood while the coastal division has 13·1 per cent. In the coastal division life is more varied in character and hence the larger percentage of population under this livelihood class. The highest percentage occurs in Ganjam district with 17·9 per cent of men under this livelihood class. Among the districts of the inland division, Koraput also shows very high percentage, namely, 15·6 under this class. The lowest percentage occurs in Keonjhar with 5·2 and Dhenkanal with 6·8 per cent. These are the districts where agricultural profession has predominance over others and hence a correspondingly smaller percentage of non-agricultural professions.

Class V—Production other than Cultivation

21. Employment under this livelihood class is somewhat balanced between the two natural divisions as the inland division has 5·9 and the coastal division 6·7 as against the Orissa average of 6·3 per cent. The lowest percentage occurs in Ganjam Agency followed by Balasore and Keonjhar which districts are poor in the matter of non-agricultural productions, such as, processing and manufacture of metals, chemicals, leather goods, textiles, foodstuffs, etc. Details of distribution of the people engaged in these industries will be found in Subsidiary Tables 5·8 to 5·12 which will be discussed in Chapter V.

Class VI—Commerce

22. Commercial activity is more prominent in the coastal division where 4·1 per cent of the people are engaged in this class of livelihood than in the inland division which has a poorer percentage of 1·9. The district which has the largest number of population engaged in commerce is Ganjam where 6·7 per cent have been recorded under this livelihood. Keonjhar is poorest in this matter. Mayurbhanj, Sundargarh and Kalahandi are a little better than Keonjhar but very much below the average for the State.

Class VII—Transport

23. Of all the livelihood classes, agricultural as well as non-agricultural, transport claims the smallest percentage, the average for Orissa being 0·5. The percentage is exceedingly poor in the inland division being limited to 0·3 as against 0·8 in the coastal division. The very small number of persons engaged in this livelihood class calls for attention. The State of Orissa, with vast stretches of mountaneous ranges, forests and uninhabited localities, is one of the most backward areas in India so far as transport facilities are concerned. Such localities are conspicuous by absence of communications in any form, namely, road, rail or water.

Poverty of Road, Railway and Water Transport

24. Orissa is deplorably poor in communications and transport of all types. The total extent of extra municipal roads was 7,397 miles in 1948 which works out to 12·3 miles of road for 100 square miles of area. This is exceedingly poor as compared with the extent of roads not only of foreign countries but also of other States in India. Similarly Orissa appears to be very poor in the matter of railway transport. Facts and figures relating to the roads, railways and the water transport of Orissa and their comparison with those of foreign countries have been given in detail in Section XI of Chapter V to which reference may be made.

25. With markedly undeveloped transport and communications in Orissa, it is natural that the number of persons depending on 'Transport' for their livelihood is so small.

SECTION VII

Concluding Remarks

1. In this Chapter, the growth of general population of the State as well as its distribution, movement and economic pattern has been examined. It has been seen that for centuries in the past, wars and decimating calamities were dealing havoc to the people of Orissa almost uninterruptedly. The population started growing somewhat fast only from the last quarter of the 19th century. Several factors were responsible for such growth. The general insecurity resulting from political rivalry and banditry was passing away and the effects of peace and order began to be felt. This provided a new phase of population growth. But insecurity in economic life of the country was still apparent. Famines and pestilence were taking tremendous toll of human life from time to time. Administration was hardly equipped with effective plans for fighting against the uncertainties of the monsoon, which is considered as ' the biggest single factor influencing life in India ', or the catastrophes of epidemics.

Year 1921 a Turning Point

2. The precarious tendencies continued right upto the close of the second decade of the present century. But the circumstances largely underwent change from 1921, which year marks an important juncture in the history of population growth in Orissa. Prior to that year, the growth was sporadic in nature, swinging between increase or decrease or characterised by wide variations in rate. The year 1921 divides the first half of the present century into two periods, namely, from 1901 to 1921, a period of slow growth when population increased by 8·3 per cent in 20 years, and from 1921 to 1951, a period of markedly fast growth when the rate of increase was 31·3 per cent in 30 years. The steady growth noticeable during the last 30 years synchronised with the advent of industrial era in this country in the same manner as it happened in other countries during their high growth period. The available evidence goes to show that the trend of rapid growth will be kept up for the next few decades, unless new factors alter the value of the present cycle.

Fast Growth of World Population

3. The period of rapid increase in population came to Orissa and in fact to India at a time when the western nations, after growing at a phenomenally fast rate, were approaching demographic stability. During the last three centuries, the population of the world grew at an unprecedentally high rate, the highest ever known. According to the figures computed by Professor Julian Huxley, the human race has increased from 10 millions just before the beginning of agriculture in 8000 B.C. to 200 millions in 400 A.D., 540 millions in 1650 and finally 2,200 millions in 1950. Carr-Saunders, * who is considered an accepted authority, gives somewhat higher figures, for according to him, the population of the world was 728 millions in 1750, 1,171 millions in 1850 and 2,387 millions in 1950. These figures reveal slow growth upto the 17th century and extremely tremendous rate of expansion thereafter. It is believed that population of the world is growing now at the rate of twenty-five millions per year or 70,000 per day or 4 persons every 5 seconds.

* Carr-Saunders : World Population, p. 42.

Lower Growth Rate in India and Orissa

4. India has had a share in this increase, but it not only started late, but also with comparative lower increase rate. Compared to many other countries, India's population has not increased with marked rapidity. The population of undivided India, for example, increased about 54 per cent during the period 1872 to 1941, but Japan practically during the same period, namely, from 1873 to 1942 experienced a growth rate of 136 per cent. The populaton of U. S. A. increased 16 per cent during the decade 1920-30, a rate never yet equalled in India, and much less in Orissa. Just as India has remained behind the world in growth of population, Orissa has remained behind India. In fact, the rate of increase of population of Orissa is very low in India, although Indian rate of increase has been low compared with that of many other countries of the world.

Public Health—A Matter of Concern

5. What are the causes of low growth rate of Orissa's population ? Is this welcome ? The present tendency is generally to look upon increase in population with alarm and to welcome a fall in the growth rate. Although the growth of Orissa's population in absolute numbers has been high during the last three decades, the rate has actually been falling all the while, from 11·9 per cent in 1931 to 10·2 in 1941 and finally to 6·4 in 1951. The fall in the rate of growth of Orissa's population is entirely of a different type, and far from being welcome, it should be a matter of grave concern for the administrators, social workers and the people in general. If the growth was kept low by healthy and conscious effort, or as a result of improved way of life, resulting in a balance between development of resources and growth of population, it would be a matter of satisfaction. But the low rate of increase is primarily the outcome of failure to control repeated visitations of epidemics and prevalence of endemic diseases which are sapping the vitality of the people. Whenever the distress tends to prolong or be widespread, the people with low resistance powers succumb to it in large numbers. In many of the districts the population has either actually diminished or shown negligible increase due to high death rate, even though the birth rate has remained high. This is the principal reason why the rate of growth of Orissa's population is so low, placing her practically at the bottom in the list of all States in India in this matter.

The Primary Problem

6. The first and foremost problem of population in Orissa is that of too many births, of too many deaths and of low survival rate. The growth of population is small, and this small growth is achieved after enoromous wastage of life. What is important in population growth is the rate of increment. A high rate of increase is possible even by low birth rate, if the death rate is relatively low, but on the other hand, a low rate of increase may be caused by high birth rate if the death rate is also high. It has been seen earlier that the birth rate in Orissa, though not the highest in India, is fairly high, and that the death rate is so high that Orissa occupied a position next to none of the States in India during the last decade. Life is cheap and longivity is practically the lowest here. The tremendous wastage of reproductive energy and life which is the most prominent feature of demographic position in Orissa, calls for earliest attention and deserves highest priority in national planning. The problem may require sustained effort at solution and may not yield spectacular short-time results for impressing on superficial observers among

the population. But since high death rate invariably reduces national economic efficiency, the problem is of uncommon importance and imposes grave administrative and moral responsibility on the Government to devise ways and means to conserve human life, which is the highest function of the State.

FIGHT AGAINST DEATH

7. The first and foremost need for Orissa's population, therefore, is limitation of deaths by health measures which can be achieved by improvement in the standard of public health. There is much under-nutrition particularly among the vast section of the poor people. Much of ill health, disease and mortality among infants, children and women in child-bearing period is ascribed to under-nutrition or mal-nutrition. So improvement in nutrition should be an essential part of the public health programme, and the people must be made to learn to be strong enough to fight against premature deaths. Outbreak of epidemics is an annual event in many of the districts. Fever, dysentery and diarrhoea, respiratory diseases and a host of other ailments carry away good toll of human life. Factors which are inimical to long life in Orissa must be studied and a scheme of fight against death or some sort of a "HEALTH FIRST" drive should be launched with the whole-hearted co-operation of the people at large, for any health scheme of country-wide magnitude is difficult to succeed without full popular support. The process of improving general hygienic conditions, or altering social or personal habits in the interest of improvement of public health, or the provision of medical remedies of quick and inexpensive type may be slow. But it is not always necessary to pass through all the stages that the western countries went through in lowering their mortality to the present level. It should be possible to gain by the experience of other countries and apply the latest scientific achievements to produce a quick decline in mortality within the shortest time. It is not argued that this is an easy task, but it is within practical possibility and must be considered indispensable in the light of deplorable vital conditions obtaining in Orissa.

Complexity of Problem

8. It has been mentioned above that the rate of population growth in Orissa is rather low and that this low rate is from most points of view a cause for alarm than for satisfaction. In spite of this, the fact remains that the population has grown much faster in the present century than ever in the past. During the last 50 years, the population of Orissa has become nearly half as large again as it was in 1901. This figure in itself is not frightful but it becomes so when related to existing socio-economic conditions. The conditions relating to public health constitute a primary problem for Orissa, as observed above. Equally important are the problems arising out of our primitive and over-burdened agriculture and the extremely backward state of industrialization. These matters will be scanned and discussed in Chapters IV and V respectively, but it may be necessary here to make a brief survey in order to give an overall picture of the complex population problem.

AGRICULTURAL EXPANSION

9. The growth of population in itself is no problem, but it becomes a serious problem if the growth is leading to the decline in cultivation *per capita*. This indicates an increasing pressure of population on land and the decrease of man-to-land ratio. Such increased pressure on land is bound to create problems. People who hold that Malthus is wrong, do not conceive that the earth as a whole may ultimately have reduced *per capita* cultivation. The earth is not inde-

finitely large so as to be able to provide for cultivation for unlimited number of inhabitants. So Multhus may ultimately be right. So far as Orissa is concerned, it has a steadily diminishing *per capita* area of cultivation, as will appear from facts presented in Chapter IV. Orissa presents a paradoxical position with regard to matters connected with its agriculture. The country is surplus in rice production and is able to export over one lakh tons of rice every year to relieve distress in suffering areas of India. Yet Orissa itself has localities suffering from scarcity and acute distress, and during the last decade there were hundreds of cases of death due to starvation, as mentioned in section III of this Chapter. This may, however, have resulted from a special set of circumstances and confined to a particular period, but what is chronic in economic history of Orissa is that a good percentage of population, particularly small agriculturists and agricultural labourers are so poor that they cannot afford to take two full meals a day. The small quantity of food crops grown in tiny uneconomic holdings is barely sufficient for the family for a few months of the year, and the purchasing capacity is so small that during the rest of the year they pass under half-fed condition. Thus, due to low purchasing power of a vast section of the population, some quantity of rice is left out of consumption, which is ultimately exported for consumption in other States of India and which earns for Orissa the distinction of a surplus country. Discussions in Chapter IV will show that the so-called surplus of rice is precarious in character. This does not indicate, however, that our agricultural resources are poor. If the present deterioration in agriculture which has been a continuing process since 1921 and which was subjected to abortive Grow More Food Campaign since 1943, is effectively arrested under wise planning and sound organization, the prospect of a stable and substantial food resource for increasing population is assured. Moreover, it has been shown elsewhere that there is a liberal extent of waste and fallow lands still available for extension of cultivation. At least two million acres can be brought under plough merely by 'upturning' the fallows and another 5 million acres as soon as reclamation and extension of irrigation facilities are made. This vast resource has been left neglected at present. An all-out effort for speedy agricultural expansion, including measures to ensure enhanced yield, is indispensable in the interest of providing two square meals to the half-starved millions and to ensure adequate sustenance for millions to come in the not distant future.

10. But after all, there is little sign as yet that food production in Orissa may assume such proportion in the coming decade as the greatly increased wheat production in the American continent during the last two decades. Even if the Hirakud and the proposed Delta Irrigation Scheme and the Intensive Cultivation Scheme bring the proposed 2 million acres under cultivation, the one sided development of agriculture does not provide a solution of the tangled population problem. The fact should not be lost sight of that attempts to increase production of food to an adequate extent and sufficiently fast to keep pace with the necessity of a steadily growing population, encounter fundamental difficulties. If the cultivation is going to be economic, the number of individuals that can work on a given area of land is limited. Increased population may lead to a surplus or floating population which is not engaged in agriculture and which has nothing to exchange for products of agriculture which it requires. The alternative is that this surplus population should be employed in industrial activities and this leads us to the paragraph following.

INDUSTRIALIZATION

11. Industrialization in Orissa came late and has proceeded at a snail's pace. Orissa has 300 miles of sea-board, 23,000 square miles of rich forests and has mineral occurrences of high economic value numbering 30 or more. Some of these minerals are considered to be of high grade, not inferior to the best found elsewhere in the world. Yet no exploitation worth the name has been done. Census figures show that only 10 per cent of the entire population get their livelihood from commerce, transport and production other than cultivation and out of this small percentage, more than half is constituted of idle non-earners depending on a still smaller number of actual workers in various industries. Thus persons actively engaged in industrial activities in Orissa are small in number and even then they are mostly engaged in small scale and cottage industries. A survey of industrial resources of Orissa will show that there is immense scope for development of heavy, medium as well as small scale industries of innumerable types, which will ultimately usher in better conditions of life characteristic of industrial countries. But up till now the industrial sector in Orissa has not grown at a rate rapid enough to offset the increasing pressure of population on land, not to speak of bringing about a shift from agriculture to industry.

12. With all the arguments in favour of industrialisation, it would at best be a solution of the population problem for some time to come. A permanent remedy of the complicated problem of population can only result if the growth of population is limited not only to the food production but also to the maximum demand for industrial labour in the country. Whatever progress may be made in agriculture and industry, it would be largely infructuous if the population goes on increasing beyond the limits which the agricultural and industrial resources of the country are capable of sustaining. Where is the guarantee that there will be infinite improvement in the technique of production and exploitation of resources to cope with ever-increasing population? Moreover, population cannot be increased merely with the hope of industrial and agricultural developments because of other influences at work. The past growth of population during the period of industrialisation of western countries and Japan is hardly comparable to the existing situation in Orissa. The growth of population in Orissa, or in fact in India, has come at a much later period. Japan and the western countries had the advantage of trade and commerce with countries of the world that had not been industrialised. Now the position has changed and the backward areas are gradually being industrialised and Orissa by no means is ahead in industrial activity. This is an age of keen competition. On account of this reason, Orissa will hardly be able to get the advantage of increase in wealth resulting from a widespread demand of her industrial produce outside her limits to the same extent as Japan or western countries were fortunate to avail of. Although Orissa has unbounded resources for industrial development, and her agriculture has still scope for expansion, and although she is still far from reaching the point of optimum population, she cannot afford to tolerate the large scale increase of population which came to western countries in the wake of industrialization. She has to take precaution in good time because of the changed set of circumstances in the present age. Ultimately, she has to tackle the question of limitation of population, by adoption of artificial means or by improvement in social altitudes.

Birth Control

13. There is considerable amount of divergence of views on this subject. This is apparent from the fact that there are two distinct camps, one favouring the adoption of birth control as a solution of the rapidly deteriorating population problems and the other opposing it strongly.

14. The opposition comes, on both religious and moral grounds, from a strong ascetic element and has been followed up, though not in an organized manner, by eminent social workers. According to them, the so-called family limitation leads to moral degradation and material ruin. Such views are sought to be justified from pages of history, by referring, for example, to the utterances of General Petain of France who said, " We lost the war for fewer children ", or to the pro-natal state policy of Russia, where the birth of highest number of children is rewarded.

15. There is on the other hand, a camp of ardent supporters of an all-out birth control campaign. The National Planning Committee of India was of the view that birth control would prevent undesired births by methods which are safer and surer than those which were in vogue and advocated practical methods of diffusion of contraceptive knowledge.* Recent writers on the Population Question in India, e.g., S. Chandrasekhar and Dr. Chandrasekharan have little doubt that birth control has an important role to play in the social, health and economic planning of India. The scholars of this class are impressed by the menace of rapidly growing population. The over-population of Japan, for example, was ultimately the cause of her catastrophe as her rapid industrial developments and intensive agriculture modernised by scientific methods did not do so much in solving the problem of her surplus population. The instances of Italy and Germany are likewise cited.

Official Policy

16. Uptill now in Orissa, birth control has been a matter of academical or practical interest mainly among some intelectuals. But when it comes to adoption of a deliberate State policy and initiation of action, it finds little support. Among items of the questionnaire which was circulated by the Famine Enquiry Commission of 1945, one referred to the limitation of the rate of increase of population. In reply, the Government of Orissa stated that in view of possibilities of extension of cultivation, and in view of the poor increase of population of Orissa as compared with other provinces, there was no necessity of securing a limitation of the rate of increase of population. In fact, it is not at all necessary that promotion of birth control should be adopted as an official policy. Even in western countries, official campaign for popularizing the use of contraception is not known. Such countries have simply tolerated or at best favoured private enterprise in this connection. Similarly in Orissa it should, if at all, be the burden of social workers and private humanitarian organizations to teach, encourage and spread the family limitation measures among the general public. The State can, however, indirectly help the movement in various ways such as those recommended by the Famine Enquiry Commission, 1945. The Commission observes, † " There is, however, no reason why the State should not take other steps, through the medium of health services, which will have the effect of encouraging family limitation. Knowledge of birth control could be imparted through maternity and child welfare centres, by women doctors, to women whose health would be endangered by further or excessive

* Report of the Sub-Committee on Population—N. P. C. Series, p. 81.
† Final Report of the Famine Enquiry Commission, 1945, p. 101.

child-bearing, and also to women who seek advice because of a reasonable desire to 'space' their children. The satisfactory 'spacing' of children, to ensure that each child will be born healthy and can receive adequate maternal attention, is a legitimate and desirable public health objective. If sound advice given by qualified doctors is unavailable, advertisers who offer for sale injurious and ineffective contraceptives may reap a rich harvest."

DECLINE IN FERTILITY THROUGH IMPROVED WAY OF LIFE

17. Thus the State should not directly associate itself with the policy of diffusion of contraceptive knowledge. This does not mean that the Government should remain indifferent to the indispensability of speeding up the decline in birth rate. If a lesson is to be drawn from earlier instances, it will appear that decline in fertilty in western countries came in the wake of increase of wealth and expansion of intellectual activities. In Orissa, it is similarly possible to achieve the desired fall in birth rate, by causing improvement in the standard of living, expansion of education, introduction of women into sphere of public activities and finally, adoption of improved public health measures.

SECONDARY IMPORTANCE OF CONTRACEPTIVE MEASURES

18. While this process of decline in birth rate through improved mode of life will be at work, the other force, viz., spread of contraceptives will be gaining momentum even though the State may take no initiative in its support. The opposition based on religious and moral grounds has not been active or organised anywhere in Orissa. It is expected that the attitude of those who may not support the movement in Orissa, may be one of indifference rather than opposition. Even if it comes in the shape of opposition by the time the birth control movement gains strength, it will not be able to stop the spread of contraceptive measures, any more than opposition based on orthodox opinion has been able to stop widow marriage or entry of harijans into the temple. Even though devoid of State support, and repugnant to orthodox sentiment, the movement seems to have an automatic future particularly among the middle and upper classes. Its spread however, is likely to be slow, keeping pace with the extent of education in the country. But it is doubtful if it will spread in foreseeable future to any appreciable extent among the lower strata of society, which constitute by far the greater bulk of population of Orissa and which believe that fertility is a divine phenomenon. Therefore, there should be no full-scale dependence on birth control measures for any considerable decrease in the overall birth rate of the country. The principal contribution to the decline in fertility will come from improvements in economic and intellectual spheres, and from industrialization and higher standard of living, to which birth control measures will be able, under best of circumstances, to add an humble quota.

QUALITATIVE IMPROVEMENT OF POPULATION

19. We have come to a stage of civilization when improved breeding of lower animals such as, poultry, cattle, dogs and horses has received attention, but little has been done to solve the population problem in its qualitative aspect. While the quantity of population may be controlled more or less successfully by such measures as contraception, industrialization, educational and economic advancement, the improvement of the calibre of the race can be achieved by more judicious and difficult measures. The qualitative improvement of population may be brought about by what is known as negative eugenics which discourages or prevents the increase in numbers of such persons who are bodily

or mentally defective or socially considered undesirable. Families which are considered much below the average level in health, education and economic resources, are least qualified for the rearing of the nations' future generation. This will necessitate compulsory segregation and sterilization of the unfit, namely, persons who are deformed, imbecile or social criminals.

20. Another way to improve the quality of the population is of positive character, but this is still more difficult to be achieved, particularly because of our poor knowledge with regard to the mystery of heredity and the transmission of qualities. Broadly speaking, in order to multiply the reproduction of our best stocks, persons of superior qualities or those who are intelligent, virtuous and healthy, should have larger number of offspring. This proposition however is not free from difficulty as there is no accepted standard of what constitutes the most ideal human qualities. For Orissa however this aspect of population problem cannot receive prior consideration on the face of more urgent programmes relating to improvement of health and economic resources.

Ultimate Solution

21. The problem of population is a multiheaded problem, as described above, arising from the indispensability of assuring an increasing population of the increasing standard of living. To deal with a population that is ever increasing, we have an almost stagnant economy which is unable to provide bare subsistence to the teeming millions suffering in consequence of unwanted births, premature deaths and poverty-stricken life in between birth and death. The primary aim should be to check the extravagance in vital occurrences, the excessive births and deaths, in which matter Orissa compares so unfavourably with other States in India. This will be achieved by the much-needed improvement in public health, which stood at a low level during the last decade. Neglected sanitation, inadequate control of epidemic and endemic diseases, woeful lack of medical facilities particularly in rural areas are some of the evils which should be eradicated with determined effort. The problem thereafter should be tackled from a higher plane, so that the existing number of population may harmonize with the resources available and ultimately the increase in population may keep pace with the development of resources. There may be nothing new in the idea of planning the economic development of a country, particularly like Orissa which is regarded as the Nature's Favourite. Socialistic Russia Fascist Italy, Germany and Japan and even a country like China, which till yesterday was noted for corruption, inefficiency, poverty and mal-administration, have shown the modern world how vast scale planning and development of resources through organized human endeavour can bring an era of prosperity and greatness for the country. President Roosevelt's New Deal and the Tennessee Valley Development Scheme have examplified the same basic idea to a more or less extent.

22. Thus the real problem to be tackled is not over population but under development of resources in Orissa. Even the development of resources to the maximum may not bring about the ultimate solution of the population problem. Industrialization and agricultural improvements are not always enough to meet the needs of the rapidly growing population. Japan for example, with her rapid industrial development and intensive agriculture of high yields did not do much in solving of her own problem of increasing population and was at last compelled to make demands on Western Colonial Powers for terri-

torial expansion. Japan's economic history and foreign policy during the second quarter of the present century can be explained by her demographic dilemma alone. We in Orissa are far from such a situation but it is wisdom to look ahead and draw a lesson from the history of other nations. Whatever solution of the population problem may come through agricultural and industrial resources should be supplemented by control of fertility mostly through improved way of life and higher personal discipline, as mentioned earlier. In the last stage and in the long run, attention will have to be paid to a eugenic programme. The overall problem may be regarded as having the following aspects :—

(*i*) improvement of public health
(*ii*) expansion and intensification of agriculture
(*iii*) development of industrial and miscellaneous resources
(*iv*) limitation of population by suitable measures
(*v*) a programme of eugenics, or improvement in the calibre of the general population.

The first three items are of extreme urgency and require to be implemented with no loss of time and with the best of foresight and organized effort. The other items are of lesser importance, particularly the last one which may deserve attention sometime in future. The complicated population problem can thus be solved, by various measures as mentioned above, some of which demand immediate and simultaneous and others remote application. A noted author recently uttered a word of caution that there are two grave dangers which may lead to the extinction of the present civilization, namely, unsolved population problems and unrestricted use of atomic energy. The gravity of the problem should on no account be underrated.

Is Orissa over-Populated ?

23. Facts and figures contained in Section II of the present Chapter show that Orissa's density of population is lower than that of many States in India as well as of India as a whole. *Prima facie*, Orissa should be able to support larger population and is not yet over-populated. But in fact, density alone is no criterion for judging over-population. It is a mere arithmetical ratio having no relation with income *per capita* or standard of living, which are economic phenomena. Thus the density of population in Orissa, which is low as compared with that of other States in India, shows nothing about over-population, unless the *per capita* income and the standard of living are also taken into consideration. The conception of over-population is closely connected with food output within the country and the food supply which can be obtained from outside the country, as well as with other resources necessary to maintain standard of living at a suitable level. Moreover, a finding on over-population can be arrived at after investigation into what is known as optimum population.

OPTIMUM POPULATION

24. The theory of optimum value has been described as follows. "At any given time, knowledge and circumstances remaining the same, there is a point of maximum return, when the amount of labour is such that both an increase or a decrease in it would diminish proportionate returns ". The optimum population represents a theoretical number of persons per square mile at which the optimum income or the highest standard of living is available *per capita* to every body in the area. If the number is more, i.e., if the number of people exceed the optimum density, the income *per capita* becomes less and the situation is one of over-population. On the other hand, if

the number is less the income *per capita* becomes less also, which indicates a level lower than that of optimum population.

25. The question of over-population is rendered difficult of investigation because of extreme paucity of data relating to these economic phenomena. Alternatively however, the examination of existing resources, agricultural, industrial and others and the volume and the pace at which further exploitation of such resources can be made in coming years, may yield an answer.

POVERTY IN PLENTY

26. There can be no truer picture of Orissa than the one painted by Mahatma Gandhi after his first visit to Orissa, when he wrote in the Young India that "Orissa is the epitome of India's poverty". This fact of abject poverty may facilitate the study of over-population, but there is such a bewildering set of theories and opinions, that conclusions are greatly shaken and rendered hazy. To Jose'de Castro, poverty is the cause of over-population; to Malthus over-population is the cause of poverty; Marxists believe that over-population is a myth and poverty is man-made. Leaving aside these conflicting theories and turning to facts, it appears that Orissa is a land where proverbial poverty in plenty is seen. With the reputation of being surplus in rice production, her people suffered from food scarcity, acute economic distress and even death due to starvation during the last decade. Agriculture in Orissa is losing in acreage and yield but as observed in a paragraph above, there are millions of acres now waiting for the plough. As regards industrial resources, Orissa has by far greater scope of development than in the agricultural field. The survey made in a later Chapter shows how there are great opportunities for the development of heavy, medium and small scale industries extensively throughout the State. In fact, what Ukraine has given to Russia and the Rhineland to Germany, may be available to Orissa from her extensive and rich lands, forests and mines. Most of these resources lie unexploited or are being worked here and there in primitive fashion. They are capable of yielding food and wealth to an unprecedented extent for the subsistence of the growing future population.

ABILITY TO SUPPORT LARGER POPULATION

27. Accepting the proposition that population is necessarily limited by the means of subsistence, it would seem that Orissa at present is far from the point at which her ability to feed the people may be taxed. Her resources, though vast and plentiful, have remained undeveloped and this has resulted in the poverty of the general population, which in turn has produced a false picture of over-population. China, for example, was considered to be poverty-ridden and over-populated till 1949. But a radical change has overhauled various aspects of her economy and she is no longer over-populated or suffering from shortage of food. The case of Orissa, and in fact of India, may be similar. Orissa cannot be regarded as over-populated at all, because all her resources have not yet been harnessed and the man-power is not yet fully employed. In other words, she is now far from reaching the limits of means of subsistence and is thus far from the danger of over-population. She has potential ability to support a larger population. The orderly development of her resources will enable her to keep pace with the necessities of growing population. But before this is done, she has problems to face, quite serious ones as discussed above.

THE FUTURE TREND

28. It is somewhat difficult to give indication about the future trend of population as such trend may be

disturbed by entrance of new social and economic factors not envisaged now. It appears that the birth rate of Orissa as available from the records of the Director of Health is high in India, though this recorded rate is much lower than the real rate of births in Orissa. During the last quinquennium, some amount of decline in birth rate is noticeable, but as observed elsewhere, such a trend is precarious in character. There were many temporary causes which induced it and which will be over by 1961 when the favourable age structure of the population will work the rate to a higher level. If some amount of success is achieved in the field of mortality control and if infectious diseases are more satisfactorily controlled, the present birth rate which in spite of recent decline is still high, may cause a further upsurge in the rate of increase of the population. If, however, tangible improvements in the overall material condition of the people are achieved in the meanwhile and measures relating to control of fertility and family limitation are on the way to popularity, they will act as a deterrent for the rise in birth rate. It is not likely that these factors will come into effective play to any marked extent by 1961. But they may exercise greater influence in the following decade. To what extent the birth rate of the period 1961-71 will be affected, depends on the degree of success of these factors in influencing life of the people.

Subsidiary Table 1 Series

1·1—Area and population, actual and percentage, by police-station density

Natural division and district	Police-station with density: Under 100		100—150		150—200		200—300		300—450		450—600		600—750		750 and over	
	Area	Population	Area	Population	Area	Population	Area	Population	Area	Population	Area	Population	Area	Population	Area	Population
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ORISSA	**14,725**	**932,327**	**9,153**	**1,138,039**	**7,618**	**1,330,080**	**10,978**	**2,651,803**	**10,578**	**3,814,878**	**3,997**	**2,065,663**	**1,174**	**800,114**	**1,904**	**1,913,042**
	24·5	**6·4**	**15·2**	**7·8**	**12·7**	**9·1**	**18·3**	**18·1**	**17·6**	**26·0**	**6·6**	**14·1**	**1·9**	**5·5**	**3·2**	**13·0**
3·33 Orissa Inland Division.	**14,319**	**910,329**	**8,474**	**1,058,575**	**7,618**	**1,330,080**	**8,456**	**2,035,426**	**6,305**	**2,182,190**	**736**	**368,150**	**144**	**88,145**	..	..
	31·1	**11·4**	**18·4**	**13·3**	**16·5**	**16·7**	**18·4**	**25·5**	**13·7**	**27·4**	**1·6**	**4·6**	**0·3**	**1·1**	..	..
5·11 Orissa Coastal Division.	**406**	**21,998**	**679**	**79,464**	..	..	**2,522**	**616,377**	**4,273**	**1,632,688**	**3,262**	**1,697,513**	**1,030**	**711,969**	**1,904**	**1,913,042**
	2·9	**0·3**	**4·8**	**1·2**	..	..	**17·9**	**9·2**	**30·4**	**24·5**	**23·2**	**25·4**	**7·3**	**10·7**	**13·5**	**28·7**
Cuttack	..	..	..	..	..	..	545	122,294	1,321	521,605	600	330,387	318	216,207	1,426	1,338,751
	..	..	..	..	..	..	*13·0*	*4·8*	*31·4*	*20·7*	*14·3*	*13·1*	*7·6*	*8·6*	*33·9*	*52·9*
Balasore	..	..	..	..	..	..	63	18,726	1,449	552,982	882	453,076	113	81,228	..	..
	..	..	..	..	..	..	*2·5*	*1·7*	*57·8*	*50·0*	*35·2*	*41·0*	*4·5*	*7·4*	..	..
Puri	..	298	679	79,464	..	..	779	198,901	589	224,110	1,012	511,842	517	358,623	169	183,874
		7·4	*16·8*	*5·1*	..	..	*19·3*	*12·7*	*14·6*	*14·3*	*25·0*	*32·6*	*12·8*	*22·8*	*4·2*	*11·7*
Sambalpur	..	2,205	682	80,718	1,013	166,870	1,506	361,200	955	324,468	259	123,646	144	88,145	..	..
		32·6	*10·1*	*6·2*	*15·0*	*12·8*	*22·3*	*27·8*	*14·1*	*24·9*	*3·8*	*9·5*	*2·1*	*6·8*	..	..
Ganjam	..	852	529	62,853	..	..	1,269	312,598	917	334,920	768	402,208	82	55,911	309	390,417
		18·0	*11·2*	*3·9*	..	..	*26·9*	*19·2*	*19·4*	*20·6*	*16·3*	*24·8*	*1·7*	*3·4*	*6·5*	*24·0*
Agency	..	744	529	62,853	..	..	134	36,142	3	929	..	..	..	..	..	..
		52·8	*37·5*	*39·5*	..	..	*9·5*	*22·7*	*0·2*	*0·6*	..	..	..	..	..	..
Plains	..	108	..	..	..	..	1,135	276,456	914	333,991	768	402,208	82	55,911	309	390,417
		3·3	..	..	..	..	*34·2*	*18·9*	*27·6*	*22·8*	*23·2*	*27·4*	*2·5*	*3·8*	*9·3*	*26·6*
Koraput	..	3,513	3,168	383,294	1,607	284,486	1,274	299,413	313	100,224	..	..	..	..	..	..
		35·6	*32·1*	*30·2*	*16·3*	*22·4*	*12·9*	*23·6*	*3·2*	*7·9*	..	..	..	..	..	..
Dhenkanal	..	861	653	82,687	1,154	210,354	833	182,521	516	189,835	209	105,837	..	..	..	..
		20·4	*15·5*	*9·9*	*27·3*	*25·1*	*19·7*	*21·8*	*12·2*	*22·6*	*4·9*	*12·6*	..	..	..	..
Keonjhar	..	1,191	229	34,385	316	49,928	683	172,793	797	253,649	..	..	..	..	..	..
		27·0	*7·1*	*5·8*	*9·8*	*8·5*	*21·2*	*29·4*	*24·8*	*43·1*	..	..	..	..	..	..
Phulbani	..	2,541	760	99,912	884	157,708	98	21,957	..	..	..	..	..	..	..	..
		59·3	*17·8*	*21·9*	*20·6*	*34·5*	*2·3*	*4·8*	..	..	..	..	..	..	..	..
Bolangir	..	..	..	..	680	118,060	1,374	333,101	1,358	466,714	..	..	..	..	..	..
	..	..	..	..	*19·9*	*12·9*	*40·3*	*36·3*	*39·8*	*50·9*	..	..	..	..	..	..
Sundargarh	..	1,404	508	74,970	962	176,619	835	186,058	80	25,484	..	..	..	..	..	..
		37·1	*13·4*	*13·6*	*25·4*	*32·0*	*22·0*	*33·7*	*2·1*	*4·6*	..	..	..	..	..	..
Kalahandi	..	933	1,680	209,081	902	149,646	992	251,700	550	172,114	..	..	..	..	..	..
		18·4	*33·2*	*24·4*	*17·8*	*17·4*	*19·6*	*29·3*	*10·9*	*20·0*	..	..	..	..	..	..
Mayurbhanj	..	927	264	30,675	100	16,409	728	190,541	1,733	648,773	268	138,667	..	..	..	..
		23·1	*6·6*	*3·0*	*2·5*	*1·6*	*18·1*	*18·5*	*43·1*	*63·1*	*6·7*	*13·5*	..	..	..	..

NOTE.—The area figures adopted in this table are those obtained from local sources and exhibited in table E.

1·2—Variation and density of general population

Natural division and district	General population						
	Percentage increase (+) or decrease (−)			Density			
	1941 to 1951	1931 to 1941	1921 to 1931	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ORISSA	**+ 6·4**	**+ 10·2**	**+ 11·9**	**244**	**229**	**208**	**186**
3·33 Orissa Inland Division	**+ 8·3**	**+ 12·9**	**+ 15·9**	**173**	**160**	**142**	**122**
5·11 Orissa Coastal Division	**+ 4·2**	**+ 7·3**	**+ 8·0**	**474**	**455**	**424**	**393**
Cuttack	+ 3·3	+ 4·7	+ 6·4	601	582	556	522
Balasore	− 0·2	+ 4·7	+ 1·3	441	442	422	417
Puri	+ 8·0	+ 8·1	+ 10·9	389	360	337	300
Sambalpur	+ 8·3	+ 12·6	+ 11·8	192	178	158	141
Ganjam	+ 4·1	+ 12·2	+ 13·2	344	330	294	260
Agency	*− 5·5*	*+ 2·7*	*+ 5·7*	*113*	*119*	*116*	*110*
Plains	*+ 5·3*	*+ 13·5*	*+ 14·3*	*442*	*420*	*370*	*324*
Koraput	+ 12·6	+ 18·8	+ 17·9	129	114	96	82
Dhenkanal	+ 13·1	+ 16·7	+ 23·4	199	176	150	122
Keonjhar	+ 11·1	+ 15·0	+ 21·4	183	165	143	118
Phulbani	+ 1·5	+ 9·3	+ 9·4	107	105	96	88
Bolangir	+ 5·3	+ 8·3	+ 11·6	269	256	236	211
Sundargarh	+ 12·5	+ 12·3	+ 15·7	146	130	115	100
Kalahandi	+ 8·1	+ 13·8	+ 19·0	170	157	138	116
Mayurbhanj ..	+ 4·5	+ 10·7	+ 17·9	256	245	221	187

1·3—Inter-census growth

General

Natural division and district	Mean population of decade			Mean population of decade for area under registration of births and deaths		
	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA ..	**14,206,967**	**13,129,522**	**11,824,321**	**7,753,569**	**7,285,289**	**6,582,345**
3·33 Orissa Inland Dn.	**7,667,630**	**6,940,704**	**6,072,941**	**1,864,640**	**1,676,007**	**1,332,585**
5·11 Orissa Coastal Dn.	**6,539,337**	**6,188,818**	**5,751,880**	**5,888,929**	**5,609,282**	**5,249,760**
Cuttack ..	2,489,008	2,394,008	2,268,719	2,295,166	2,221,139	2,120,692
Balasore ..	1,107,394	1,083,984	1,052,460	1,028,356	1,010,015	985,552
Puri ..	1,504,075	1,401,245	1,280,588	1,136,546	1,068,547	993,403
Sambalpur ..	1,252,194	1,135,143	1,011,557	1,023,490	945,420	835,205
Kalahandi ..	826,611	746,410	642,508	208,175	178,696	..
Ganjam ..	1,592,749	1,475,869	1,309,767	1,746,557	1,623,787	1,444,838
Ganjam Plains ..	1,428,860	1,309,581	1,150,113	1,423,861	1,309,581	1,150,113
Ganjam Agency ..	163,889	166,288	159,654	111,989	113,227	108,810
Phulbani { Balliguda }	453,477	430,864	394,012	205,728	200,979	185,914
Phulbani { Khondmals }				86,161	84,528	78,268
Dhenkanal ..	790,570	688,764	575,402	178,144	153,157	124,386
Koraput ..	1,198,698	1,038,757	877,617	50,974	..	..
Keonjhar ..	559,114	495,198	420,052	..	..	..
Bolangir ..	894,839	838,324	763,026	..	..	..
Sundargarh ..	521,455	463,784	407,154	..	..	..
Mayurbhanj ..	1,006,785	937,172	821,959	..	..	..

Natural division and district	Inter-census birth rate (Registered)			Registered deaths during the decade		
	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30
(1)	(17)	(18)	(19)	(20)	(21)	(22)
ORISSA ..	**28·2**	**35·7**	**37·3**	**2,017,370**	**2,069,927**	**2,030,427**
3·33 Orissa Inland Dn.	**24·7**	**27·1**	**29·2**	**376,467**	**331,527**	**267,262**
5·11 Orissa Coastal Dn.	**29·3**	**42·4**	**39·4**	**1,640,903**	**1,738,400**	**1,763,165**
Cuttack ..	29·3	34·8	35·5	668,627	678,928	691,005
Balasore ..	27·9	31·9	31·7	317,317	316,579	337,421
Puri ..	29·9	35·6	35·7	307,911	305,841	295,340
Sambalpur ..	28·3	31·9	36·6	292,618	267,773	215,195
Kalahandi ..			..			..
Ganjam ..	25·4	41·4	44·8	360,981	437,052	439,399
Ganjam Plains	29·9	..	..	347,048	..	..
Ganjam Agency	5·0	..	..	13,933	..	..
Phulbani { Balliguda }	30·8	40·6	41·2	24,499	63,754	52,067
Phulbani { Khondmals }	34·6			39,754		
Dhenkanal ..	14·9	..	..	5,663	..	..
Koraput ..	..	..	..	..	..	..
Keonjhar ..	..	..	..	..	..	..
Bolangir ..	..	..	..	..	..	..
Sundargarh ..	..	..	..	..	..	..
Mayurbhanj ..	..	..	..	..	..	..

NOTE—1. This table is prepared from main table A—II (Variation in Population during 50 years).

2. In case of figures not available Columns have been left blank.

3. Bracketed figures relate to areas for which separate statistics were not maintained.

4. Columns 2 to 31 of the table are filled in as follows :—

Columns 2 to 4—These are arithmetical mean of the census general population at the beginning and at the end of the decade in each column.

Columns 5 to 7—These are arithmetical mean of the general population of the area under registration at the beginning and at the end of the decade in each column. As already mentioned the population of the areas referred to in paragraph 2 above has been excluded from consideration in filling up these columns in respect of the State as a whole and the Natural Divisions, and it is included only in respect of the particular districts and the Natural subdivisions.

rate during three decades
population

Growth of population during the decade			Inter-census growth rate			Registered births during the decade			Natural division and district
1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(1)
877,958	**1,276,932**	**1,332,470**	**6·2**	**9·7**	**11·3**	**2,186,248**	**2,604,118**	**2,456,134**	**ORISSA**
610,530	**843,322**	**892,203**	**8·0**	**12·2**	**14·7**	**460,480**	**454,995**	**389,213**	**3·33 Orissa Inland Dn.**
267,428	**433,610**	**440,267**	**4·1**	**7·0**	**7·7**	**1,725,768**	**2,149,123**	**2,066,921**	**5·11 Orissa Coastal Dn.**
80,472	109,529	141,048	3·2	4·6	6·2	671,464	773,568	753,083	Cuttack
−2,763	49,581	13,468	−0·2	4·6	1·3	286,823	322,114	311,988	Balasore
116,374	109,286	132,029	7·7	7·8	10·3	340,340	380,527	354,760	Puri
99,220	134,882	112,290	7·9	11·9	11·1	348,871	358,497	305,802	Sambalpur
64,341	96,059	111,746	7·8	12·9	17·4			..	Kalahandi
64,160	169,600	162,604	4·0	11·5	12·4	442,918	672,914	647,090	Ganjam
73,345	165,214	153,722	5·1	12·6	13·4	427,141	..	..	Ganjam Plains
−9,185	4,386	8,882	−5·6	2·6	5·6	15,777	..	..	Ganjam Agency
6,836	38,390	35,314	1·5	8·9	9·0	26,541	96,498	83,411	Phulbani — Balliguda, Khondmals
97,341	106,272	120,452	12·3	15·4	20·9	61,696			Dhenkanal
141,672	178,210	144,069	11·8	17·2	16·4	7,595	..	..	Koraput
58,655	69,177	81,113	10·5	14·0	19·3	..	..	..	Keonjhar
46,071	66,960	83,637	5·1	8·0	11·0	..	..	..	Bolangir
61,495	53,848	59,411	11·8	11·6	14·6	..	..	..	Sundargarh
44,084	95,138	135,289	4·4	10·2	16·5	..	..	..	Mayurbhanj

Inter-census death rate (Registered)			Decennial rate of natural increase (Registered)			Migration-*cum*-registration error			Natural division and district
1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(1)
26·0	**28·4**	**30·8**	**2·2**	**7·3**	**6·5**	**4·0**	**2·4**	**4·8**	**ORISSA**
20·2	**19·8**	**20·1**	**4·5**	**7·3**	**9·1**	**3·5**	**4·9**	**5·6**	**3·33 Orissa Inland Dn.**
27·9	**34·3**	**33·6**	**1·4**	**8·1**	**5·8**	**2·7**	**−1·1**	**1·9**	**5·11 Orissa Coastal Dn.**
29·1	30·6	32·6	0·2	4·2	2·9	3·0	0·4	3·3	Cuttack
30·9	31·3	34·2	−3·0	0·6	−2·5	2·8	4·0	3·8	Balasore
27·1	28·6	29·7	2·8	7·0	6·0	4·9	0·8	4·3	Puri
23·8	23·8	25·8	4·5	8·1	10·8	3·4	3·8	0·3	Sambalpur
20·7	26·9	30·4	4·7	14·5	14·4	−0·7	−3·0	−2·0	Ganjam
24·3	..	..	5·6	..	..	−0·5	..	..	Ganjam Plains
4·4	..	..	0·6	..	..	−6·2	..	..	Ganjam Agency
28·4	26·8	25·7	2·4	13·8	15·5	−0·9	1·6	5·4	Phulbani — Balliguda, Khondmals
22·3			12·3			..			Dhenkanal
11·1	..	..	3·8	..	..	8·0	..	..	Koraput
..	..	..	..	..	..	..	..	..	Keonjhar
..	..	..	..	..	..	..	..	..	Bolangir
..	..	..	..	..	..	..	..	..	Sundargarh
..	..	..	..	..	..	..	..	..	Mayurbhanj

Columns 8 to 10—These are the differences between the census general population at the end and at the beginning of the decade in each column.

Column 11—100 × Col. 8 ÷ Col. 2 ; Column 12—100 × Col. 9 ÷ Col. 3 ; Column 13—100 × Col. 10 ÷ Col 4.

Columns 14 to 16—These are the total number of births in the general population registered during the decade in each column.

Column 17—100 × Col. 14 ÷ Col. 5 ; Column 18.—100 × Col. 15 ÷ Col. 6 ; Column 19.—100 × Col. 16 ÷ Col. 7.

Columns 20 to 22—These are the total number of deaths in the general population registered during the decade in each column.

Column 23—100 × Col. 20 ÷ Col. 5 ; Column 24.—100 × Col. 21 ÷ Col. 6 ; Column 25.—100 × Col. 22 ÷ Col. 7.

Column 26—Col. 17 − Col. 23 ; Column 27.—Col. 18 − Col. 24 ; Column 28.—Col. 19 − Col. 25.

Column 29—Col. 11 − Col. 26 ; Column 30.—Col. 12 − Col. 27 ; Column 31.—Col. 13 − Col. 28.

1·4—Immigration

Natural division and district where enumerated	Born in: District of enumeration			Other districts of same natural division			Other parts of the State		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA	**14,118,302**	**7,020,086**	**7,098,216**	**218,921**	**73,007**	**145,914**	**113,461**	**44,708**	**68,753**
3·33 Orissa Inland Dn.	**7,636,712**	**3,824,825**	**3,811,887**	**126,153**	**41,963**	**84,190**	**69,273**	**26,928**	**42,345**
5·11 Orissa Coastal Dn.	**6,481,590**	**3,195,261**	**3,286,329**	**92,768**	**31,044**	**61,724**	**44,188**	**17,780**	**26,408**
Cuttack	2,446,990	1,220,429	1,226,561	47,378	13,530	33,848	17,256	7,179	10,077
Balasore	1,058,687	538,465	520,222	8,403	2,457	5,946	17,440	5,694	11,746
Puri	1,526,508	754,174	772,334	34,493	13,597	20,896	2,540	1,461	1,079
Sambalpur	1,218,514	610,771	607,743	37,859	13,110	24,749	10,039	5,712	4,327
Ganjam	1,607,740	759,940	847,800	7,544	3,879	3,665	2,818	1,237	1,581
Agency	*158,335*	*77,747*	*80,588*	*857*	*185*	*672*	*59*	*25*	*34*
Plains	*1,449,405*	*682,193*	*767,212*	*2,494*	*1,460*	*1,034*	*6,952*	*3,446*	*3,506*
Koraput	1,231,052	618,629	612,423	8,568	3,289	5,279	6,196	1,840	4,356
Dhenkanal	811,237	404,208	407,029	13,245	5,297	7,948	9,712	3,769	5,943
Keonjhar	551,912	274,691	277,221	10,594	3,123	7,471	6,024	1,961	4,063
Phulbani	430,517	218,674	211,843	6,510	2,068	4,442	19,120	5,614	13,506
Bolangir	891,836	447,882	443,954	18,324	4,521	13,803	2,347	1,253	1,094
Sundargarh	519,442	257,854	261,588	11,774	4,499	7,275	1,833	1,177	656
Kalahandi	836,063	416,641	419,422	13,611	4,475	9,136	2,535	1,315	1,220
Mayurbhanj	987,804	497,728	490,076	4,811	1,396	3,415	11,408	4,262	7,146

Natural division and district where enumerated	Born in: Adjacent States (West Bengal, Bihar, Madras and Madhya Pradesh)			Other parts of India			Beyond India: Pakistan			Beyond India: Other countries		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
ORISSA	**158,360**	**85,361**	**72,999**	**11,661**	**7,044**	**4,617**	**23,928**	**11,776**	**12,152**	**1,313**	**910**	**403**
3·33 Orissa Inland Dn.	**119,486**	**66,835**	**52,651**	**7,219**	**4,339**	**2,880**	**13,299**	**6,329**	**6,970**	**753**	**514**	**239**
5·11 Orissa Coastal Dn.	**38,874**	**18,526**	**20,348**	**4,442**	**2,705**	**1,737**	**10,629**	**5,447**	**5,182**	**560**	**396**	**164**
Cuttack	10,190	4,522	5,668	1,966	777	1,189	5,356	2,661	2,695	108	80	28
Balasore	17,505	6,991	10,514	1,063	840	223	2,762	1,503	1,259	152	116	36
Puri	5,134	3,480	1,654	1,011	762	249	2,359	1,202	1,157	217	154	63
Sambalpur	31,600	16,284	15,316	1.715	829	886	2,001	1,092	909	76	60	16
Ganjam	6,072	3,543	2,529	410	330	80	161	85	76	84	46	38
Agency	*27*	*10*	*17*	*8*	*4*	*4*	*9*	*4*	*5*	*1*	..	*1*
Plains	*6,045*	*3,533*	*2,512*	*402*	*326*	*76*	*152*	*81*	*71*	*83*	*46*	*37*
Koraput	23,230	13,795	9,435	309	236	73	139	80	59	40	34	6
Dhenkanal	3,924	2,042	1,882	549	344	205	260	148	112	314	240	74
Keonjhar	18,906	14,480	4,426	256	156	100	712	461	251	37	30	7
Phulbani	542	256	286	60	47	13	133	72	61	13	7	6
Bolangir	3,113	1,604	1,509	1,950	1,184	766	282	148	134	23	14	9
Sundargarh	17,259	9,731	7,528	1,103	695	408	594	342	252	198	103	95
Kalahandi	4,801	1,702	3,099	926	660	266	802	438	364	43	20	23
Mayurbhanj	16,084	6,931	9,153	343	184	159	8,367	3,544	4,823	8	6	2

1·5—Emigration

State where enumerated	Born in Orissa and enumerated in India														
	State			Adjacent States			Other States			Outside India			Natural Population		
	Persons	Males	Females	P	M	F	P	M	F	P	M	F	P	M	F
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
States	**14,450,684**	**7,137,801**	**7,312,883**	**321,666**	**212,501**	**109,165**	**94,742**	**55,238**	**39,504**	..	..	..	**14,867,092**	**7,405,540**	**7,461,552**
Bihar	..	..	..	38,199	19,143	19,056	..	..	..	..	..	..	..	..	..
Madhya Pradesh	..	..	..	66,668	29,150	37,518	..	..	..	..	..	..	..	..	..
Madras	..	..	..	14,645	7,432	7,213	..	..	..	..	..	..	..	..	..
West Bengal	..	..	..	202,154	156,776	45,378	..	..	..	..	..	..	..	..	..
Assam	..	..	..	..	..	..	87,216	50,115	37,101	..	..	..	..	..	..
Bombay	..	..	..	..	..	..	1,216	987	229	..	..	..	..	..	..
Punjab	..	..	..	..	..	..	315	160	155	..	..	..	..	..	..
Uttar Pradesh	..	..	..	..	..	..	1,689	1,158	531	..	..	..	..	..	..
Madhya Bharat	..	..	..	..	..	..	73	57	16	..	..	..	..	..	..
Mysore	..	..	..	..	..	..	435	400	35	..	..	..	..	..	..
PEPSU	..	..	..	..	..	..	202	201	1	..	..	..	..	..	..
Rajasthan	..	..	..	..	..	..	476	299	177	..	..	..	..	..	..
Saurashtra	..	..	..	..	..	..	43	15	28	..	..	..	..	..	..
Travancore-Cochin	..	..	..	..	..	..	43	36	7	..	..	..	..	..	..
Ajmer	..	..	..	..	..	..	591	317	274	..	..	..	..	..	..
Coorg	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Himachal Pradesh	..	..	..	..	..	..	4	2	2	..	..	..	..	..	..
Cutch	..	..	..	..	..	..	18	11	7	..	..	..	..	..	..
Manipur	..	..	..	..	..	..	14	12	2	..	..	..	..	..	..
Tripura	..	..	..	..	..	..	1,821	1,058	763	..	..	..	..	..	..
Vindhya Pradesh	..	..	..	..	..	..	275	186	89	..	..	..	..	..	..
Sikkim	..	..	..	..	..	..	14	14	..	..	..	..	..	..	..
Hyderabad	..	..	..	..	..	..	213	130	83	..	..	..	..	..	..
Delhi	..	..	..	..	..	..	83	80	3	..	..	..	..	..	..

1·6—Migration between the State and other parts of India

State	Immigration			Emigration			Immigration minus Emigration		
	1951	1931	Variation	1951	1931	Variation	1951	1931	Variation
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA ..	195,262	186,661	8,601	416,408	627,000	—210,592	—221,146	—440,339	—219,193

NOTE—Figures in columns 3 and 6 are based on *pro rata* basis

1·7—Variation in natural population

State	1951				1931				Percentage increase (+) decrease (—) 1931-1951 in Natural Population.
	Recorded Population	Immigration	Emigration	Natural Population	Recorded Population	Immigration	Emigration	Natural Population	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA ..	14,645,946	195,262	416,408	14,867,092	12,491,056	186,661	627,000	12,931,395	+15·0

1·8—Livelihood pattern of general population

Natural division and district	Per 10,000 of General Population belonging to livelihood class							
	I	II	III	IV	V	VI	VII	VIII
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA ..	**5,953**	**594**	**1,231**	**150**	**633**	**291**	**53**	**1,095**
3·33 Orissa Inland Dn.	**6,467**	**412**	**1,317**	**75**	**594**	**192**	**31**	**912**
5·11 Orissa Coastal Dn.	**5,339**	**811**	**1,130**	**240**	**679**	**409**	**79**	**1,313**
Cuttack ..	5,442	663	1,063	319	648	354	76	1,435
Balasore ..	6,711	805	843	165	365	200	59	852
Puri ..	5,260	1,094	1,342	170	726	394	93	921
Sambalpur ..	5,986	432	1,426	77	911	194	55	919
Ganjam ..	4,494	725	1,161	230	852	672	76	1,790
Agency ..	*7,088*	*321*	*492*	*166*	*248*	*618*	*1*	*1,066*
Plains ..	*4,212*	*769*	*1,233*	*237*	*918*	*678*	*84*	*1,869*
Koraput ..	5,942	685	1,038	66	439	244	24	1,562
Dhenkanal ..	6,762	230	1,165	210	750	170	32	681
Keonjhar ..	7,675	233	1,000	81	393	88	9	521
Phulbani ..	6,367	330	1,166	33	738	376	12	978
Bolangir ..	6,130	326	1,786	28	681	171	56	822
Sundargarh ..	7,519	273	865	25	458	141	42	677
Kalahandi ..	5,921	559	1,925	37	451	181	12	914
Mayurbhanj ..	6,929	380	1,343	71	478	107	23	669

CHAPTER II

Rural Population

SECTION I

Preliminary Remarks

INDISPENSABILITY OF RURAL STATISTICS

1. The people of Orissa are predominantly village-dwellers. A vast majority of the population live in rural areas which spread over a very large number of villages. The villages of Orissa are generally small in size and the people follow a traditional way of life and are mostly engaged, men, women and children, in agriculture or primary industries. These villages are the main source of strength and subsistence for the population of the country in general. Their development should be the principal aim of the nation-building programme, for this will lead to the solution of most of the fundamental problems that face us to-day. The improvement of the rural economy, for example, is the most effective way not only of increasing production but also of initiating the much needed process of levelling up of incomes in the lowest strata. It will be a step in the direction of narrowing the disparity between the conditions prevailing in rural and urban areas. This positive approach to the problem of economic inequality can be planned only on the basis of reliable statistics going down to villages, and hence the necessity of study of the rural population.

STABILITY OF RURAL LIFE

2. Rural life generally stands in sharp contrast to urban life, but in Orissa the contrast is not as pronounced in character as elsewhere. The principal difference lies in the means of livelihood of the majority of the people, which varies from agriculture in rural areas to non-agricultural pursuits in towns and cities. There is also lesser overcrowding of population in villages than in towns. But many of the towns in Orissa are on the border line of distinction or are in a state of transition from truly rural to truly urban character. Such localities have hardly got rid of all the rural characteristics which were associated with them from time immemorial. With regard to localities treated as villages, the way of life has remained distinctly traditional. Our rural society is usually a stronghold of orthodox views and conservative outlook on life, and offers resistance to passing phases of modernism and innovation. It has thus a great stabilizing effect on the tradition and culture of our State, which has a great past behind it.

DEFINITION OF VILLAGE

3. The term ' village ' as understood in census does not necessarily mean a village in the ordinary sense. In settled areas, the census village is the ' *mauza* ', the boundaries of which have been demarcated in survey and settlement operations. It may contain one or many groups of houses or hamlets, or on the other hand, may contain no houses at all. In unsurveyed areas, the group of houses paying government revenue as a unit has been taken to be a census village. In exceptional cases, however, where the above principles could not be conveniently applied, an aggregation of residential houses became the basis of the village. Therefore the term village

does not generally connote a normal residential unit. It is mostly a survey or revenue unit and may at times be completely uninhabited. This indeterminate nature of the villlage unit impairs the significance of the figures of the population as distributed in villages of various sizes. Population, for instance, shown as residing in a village of 2,000 to 5,000 persons may really be the population of several small residential units, each of which may be known according to popular notion as a village, while a number of census villages of comparatively small population may be taken as one contiguous residential aggregation according to the usual notion.

4. The disadvantages of basing the census organization on the residential village as a rule arise from such facts as the difficulty to decide which groups of houses form a particular village and which groups are parts of other villages. Sometimes, groups of houses appear or disappear between one census and another and so reliable comparison between different censuses is not possible. On the other hand, a revenue or survey unit has a more permanent character, and is more suitable for purpose of study and comparison from decade to decade.

Uninhabited Village

5. As stated above, a census village may not always be one which contains population. In fact, it may at times be uninhabited. The uninhabited villages are entered in the preliminary census records, along with inhabited villages. These preliminary records are known as the village list (or the Lay Out Register) and the 'Primary Census Abstract'. The names of uninhabited villages together with the names and population details of inhabited villages within each police-station or taluk may be seen in the District Census Handbooks for different districts of Orissa, a compilation made for the first time in Orissa during the present census. The uninhabited villages like the inhabited ones are inspected at the final enumeration of population, in case there be any 'floating population' therein by the final census night. But the uninhabited villages are not included in any of the main census statistics. The number of villages and towns shown in Tables A-I and A-III appearing in Part II-A of this Report refer only to the inhabited villages. The total number of uninhabited villages in each district may, however, be seen in the Fly-leaf note to Table A-III.

Reference to Statistics

6. For census purposes, the State has been divided into rural and urban areas and statistics relating to these two areas will be found separately in most of the main tables published in Part II of this Report. Information relating to the total number of villages and towns in different districts will be found in Table A-I (Area, Houses and Population). In Table A-III, the classification of towns and villages by population has been given. This classification has been made on the basis of groups of population as mentioned below :—

(*i*) Less than 500

(*ii*) 500 to 1,000

(*iii*) 1,000 to 2,000

(*iv*) 2,000 to 5,000

(*v*) 5,000 to 10,000

(*vi*) 10,000 to 20,000

(*vii*) 20,000 to 50,000

(*viii*) 50,000 to 100,000

(*ix*) 100,000 and above.

7. The discussions embodied in this Chapter are based on a set of five Subsidiary Tables given at the end of this Chapter as follows :—

Subsidiary Table—

2·1—Distribution of population between villages.

2·2—Variation and Density of rural population.

2·3—Inter-census Growth rate during three decades (Rural Population).

2·4—Livelihood pattern of rural population.

2·5—Immigration into rural areas.

Subsidiary Table 2·1 is akin in some respects to the Subsidiary Table I of Chapter II of the Census Report of 1931. Subsidiary Tables 2·2 to 2·5 are new ones and no corresponding statistics are available in the 1931 Report.

DISTRICT CENSUS HANDBOOKS

8. The detailed statistics for every village included within the jurisdiction of a particular police-station (or taluk so far as Ganjam and a portion of districts of Koraput and Phulbani are concerned) will be found in the District Census Handbook of each district appearing under the heading Primary Census Abstract. This abstract furnishes a complete list of villages within a police-station or taluk as the case may be and gives the number of occupied houses, households, the number of houseless and institutional population, literacy by sexes and the total number of persons of each village shown by different sexes and by eight livelihood classes. The villages included in this list strictly comply with the definition of village (including uninhabited village) as given above. The District Census Handbooks also contain a villagewise list of small scale industries, employment in textile and non-textile establishments, number of handlooms, etc., which do not come under the purview of the Factories Act. They also contain, among other useful matters, a map of each district showing density of population by police-stations. None of these features are intended to be included in the present Report. It is regrettable that it has not been possible for the State Government to undertake printing of the Handbook series so that it could be available to the public on sale. In most of the States of India the Handbooks have been printed at the cost of the State Government. In Orissa, however, as this was not done, utmost pains were undertaken to cyclostyle and distribute a few sets of the Handbooks at the cost of the Central Government as an exceptional case.

SECTION II

General distribution and distribution among Villages classified by Size of Rural Population

The distribution of rural population in different localities of the State shows great disparity. There are vast regions with scant population while there are others that have an extremely dense population. The deltaic area with abundant water supply, great river valleys and strips of land irrigated by canals are densely populated. But the hilly tracts and forest areas having no facility for irrigation are sparsely inhabited. It is perhaps possible to maintain that the rural areas of Orissa have a density of population which corresponds to the agricultural resources of the locality.

RURAL—URBAN PROPORTION

2. The rural population constitutes 95·9 per cent of the total population of the State. The population is thus overwhelmingly rural. Out of every 25 persons in Orissa, 24 live in villages and only one is a town-dweller. Among the rural population, females are larger in proportion than males while in the towns as a whole, there is a greater concentration of males than females. The actual distribution of population between the rural and urban areas is shown below :—

	Persons	Percentage	Males	Percentage	Females	Percentage
Total ..	14,645,946	100·0	7,242,892	49·5	7,403,054	50·5
Rural ..	14,051,876	95·9	6,927,016	47·3	7,124,860	48·6
Urban ..	594,070	4·1	315,876	2·2	278,194	1·9

COMPARISON WITH STATES IN INDIA

3. Orissa tops the list of all Part A States in India in the extent of its rural character. This may be seen from the statement below showing the percentage of rural and urban population of other States, as revealed by the census of 1951.

State	Rural	Urban
INDIA ..	82·7	17·3
Orissa ..	95·9	4·1
Assam ..	95·4	4·6
Bihar ..	93·3	6·7
Madhya Pradesh ..	86·5	13·5
Uttar Pradesh ..	86·4	13·6
Punjab ..	81·0	19·0
Madras ..	80·4	19·6
West Bengal ..	75·2	24·8
Bombay ..	68·9	31·1

4. Thus the percentage of village-dwellers in Orissa is the highest among all the Part A States of India. Even Assam, the hilly frontier State with a large preponderance of backward population has a somewhat smaller rural population than Orissa. All the Part B States and most of the Part C States have also a smaller rural percentage than Orissa. Only a few of the Part C States like Manipur, Bilaspur, etc., have a higher percentage of rural population.

COUNTRIES OUTSIDE INDIA

5. It would be interesting to compare Orissa's case with that of other countries of the world. It is however not possible to get the relevant figures of the year 1951 for such countries. Chandrasekhar

gives the figures for earlier years as mentioned below* :—

Country	Year	Rural	Urban
United States ..	1940	43·5	56·5
Russia ..	1926	83·4	16·6
Sweden ..	193[illegible]	67·7	32·3
Japan ..	1925	35·5	64·5
Italy ..	1936	29·3	70·7
Germany ..	1933	43·5	56·3
France ..	1936	53·1	46·9
England and Wales ..	1930	22·7	77·3
Canada ..	1930	58·3	41·7

6. The above figures relate to several years back. In the meanwhile ruralism has undergone further fall and if 1951 figures were available for comparison with those of States in India, the remarkable difference in the rural character of our country was possible of more impressive display. The decline in the percentage of rural population of the above mentioned countries has not only been steady but quite fast in the intervening years. Russia, for example, is shown above to have 83·4 per cent of rural population in 1926. But in 1939, the percentage declined to 67·8 and by 1951 the fall would have been quite considerable. Apart from the striking difference in percentage, there is the notable fact that these advanced countries of the world have extended the usual urban conveniences to rural population, so that the countryside has really been more urbanizedt han that of Orissa, or in fact, of India. Better communications, educational and medical facilities, electricity and even modernised recreations are to be found to a great extent in the rural areas of the West. All these are missing in the villages of Orissa.

Distribution

DISTRIBUTION BY NATURAL DIVISIONS

7. The inland division contains 55·1 per cent and the coastal division 44·9 per cent of the total rural population of the State. This, however, may not be indicative of the comparative rural character of the two parts of the State, as one is not equal to the other in area or in total population. Subsidiary Table 2·1 gives the number of rural population out of 1,000 of the general population. It appears therefrom that 972 persons out of every 1,000 or 97·2 per cent of the general population of the inland division are residents in villages. In the coastal division, such percentage is lower, namely, 94·5. Therefore the inland division is more rural in character than the coastal division.

8. There are 30,189 villages in the inland division with a total population of 7,746,958. The coastal division has a much smaller number of villages, namely, 18,209 containing a population of 6,304,918. In the coastal division, the concentration of rural population is mostly in villages of 500-2,000 group which claims 49 per cent of the total rural population. Villages with a population of below 500 contain 45·9 per cent of the population. But in the inland division, the concentration is greater in the group of villages with less than 500 population which contian 56·4 per cent of the rural population. The villages of 500-2,000 group contain only 39·8 per cent of the population. The coastal division is thus ahead of the inland division in its march towards development of populous localities.

DISTRIBUTION BY DISTRICTS

9. The details of distribution of the population in districts, subdivisions and police-stations may be seen in Table E

* Page 47—India's Population by S. Chandrasekhar.

which appears in Part II-A of this Report. A few other details may also be seen in the Subsidiary Table 2·1. In the Ganjam Agency, 100 per cent of the population is rural. This is because there is no town located within the agency area. But on the other hand, the Ganjam Plains are the most urbanised area of the State or in other words, it is the least rural. Here 92·2 per cent of the people live in villages and the rest in towns. In ascending order of the rural character, next to Ganjam Plains come Cuttack with 94·6 per cent, Puri with 95·2 per cent, Bolangir with 95·6 and Koraput with 95·7 per cent. The most rural districts, barring the case of Ganjam Agency, are Mayurbhanj with 99·1 followed by Phulbani with 98·8 and Keonjhar with 98·4 per cent of the population.

10. The number of inhabited villages in the State is 48,398. The number of villages contained in each district may be seen in Section III of the present Chapter.

Distribution according to Size of Villages

11. Villages may be divided mainly into three categories, namely, a small village with a population under 500, a medium village with a population from 500 to 2,000 and a large village with a population from 2,000 to 5,000. There are, however, a few exceptional cases of villages having a population exceeding 5,000. Such localities should have been treated as towns but on account of their want of predominant urban characteristics, they have been included in the list of villages. The proportion of population in different districts under each of the above classification of villages may be seen in Subsidiary Table 2·1.

12. By far the largest percentage of the rural population is confined to small and medium sized villages. Villages containing less than 500 population each comprise 51·7 per cent of the rural population while the villages with a population of 500 to 2,000 each contain 43·9 per cent. Large villages containing more than 2,000 and upto 5,000 population each claim only 4·3 per cent of the population. The percentage of villages containing a population of more than 5,000 is negligible. This shows that a larger number of rural population prefer to live in small sized villages. This is indicative of the fact that it will take a comparatively long time for Orissa to develop populous towns or villages.

13. Districts where a larger percentage of population prefer to live in medium sized villages are, Cuttack, Ganjam, Dhenkanal and Sambalpur. In the remaining districts of the State, greater concentration of population is to be found in small sized villages. Among the districts which have a noticeable percentage of population living in large sized villages are Ganjam and Sambalpur.

Average Population per Village

14. As the total rural population of the State numbering 14,051,876 reside in 48,398 inhabited villages, the average number of persons per village is 290. In the census of 1941, the average population of a village was 294. The decrease in average number in 1951 is due to the increased number of villages as obtained by more reliable investigation in the present occasion. The average population per village in 1931 was 266, and in 1921 it was 250. In the present census, the highest average number of population per village comes from Ganjam Plains which heads the list in the State with 442 followed by Cuttack and Sambalpur with 383 and 365 respectively. The smallest number of average population per village occurs in Phulbani with 105 and Ganjam Agency with 110. There is however little advantage in examining the distribution of rural population on this basis because the

superficial area differs from one village to another and the definition of the term village is not constant throughout the State.

Density

15. The density of rural population of the State is 234 persons to a square mile compared to the overall density of 244. Here again, the coastal division is more densely populated than the inland division. There are 451 persons to a square mile in the rural areas of the coastal division, but only 169 persons in the corresponding area of the inland division. Among the districts, Cuttack and Balasore have the densest villages, accommodating 573 and 427 persons respectively to a square mile. Ganjam Plains come next with 410. The rural density of Puri district has been lower, namely, 372, particularly because of inclusion of low population areas of Nayagarh subdivision. Lowest density is noticed in Phulbani having 105 to a square mile and Ganjam Agency with 113. Other districts are midway between the above mentioned high and low density groups.

16. Density of population in the rural areas of many States in India is higher than in Orissa. Madras, for example, has a rural density of 368, Uttar Pradesh 487 and Travancore-Cochin 881. But Madhya Pradesh has a lower density, namely, 146 persons to a square mile.

SECTION III
Growth

Importance of the Year 1921

1. The slow and uneven rate of increase of population before the year 1921, as was observed in the last Chapter, is an important feature of the rural population of Orissa. The general conditions of economy and health of the people had not settled down to any consistent trend by that year. Diseases reared their heads at frequent intervals, and some times, as in 1918-19, the country was laid desolate by the deadly invasion of epidemics. The rural areas were most severely infected by such epidemics and the loss of life was appalling, particularly due to lack of adequate medical aid. The period prior to 1921 was also notable for vicissitudes of monsoon, sometime with widespread failure and sometime with excessive or untimely distribution of the rains. Occurrence of floods and draughts played havoc with the health and food resources of the people. It is not that the occurrence of these calamities was eliminated in the post-1921 period, but in earlier years they were generally more destructive and widespread and visited at much shorter intervals. These caprices and uncertainties have robbed the rural population figures of the earlier years of the importance which they otherwise would have in the series of statistical study. It will therefore be more useful to concentrate on the position obtaining since 1921 for finding out the trend of rural population.

Decreasing Growth Rate

2. The general trend noticeable in the growth of rural population since 1921 shows a continuous decline in the rate of increase. The decline in the rate is sharper for the population of the rural areas than for the general population of the State as a whole. The extent of fall in the increase rate may be illustrated with the help of the following statement.

	Percentage increase		
	1921-30	1931-40	1941-50
Total population ..	11·9	10·2	6·4
ural population ..	11·9	10·1	5·7

3. It thus appears that the percentage of increase of total population of the State has been declining from decade to decade since 1921 but the decline in the percentage of the rural population is greater. In the census of 1931, the growth rate of the general population and the rural population stood at the same level but in 1941 the rate for the rural polulation showed a slightly greater decrease as compared with the general population by 0·1 per cent. In 1951, however, the difference between the growth of general and of the rural population increased to 0·7 per cent.

Causes of Decline in the Rate

4. The decrease in the rate of growth of rural population is mostly due to the same causes as for that of the general population. Such a decrease is a part of an extensive countrywide phenomenon of the present period. In addition to the usual reasons applicable to the general population, there is another why the rural population has been dwindling faster. This is due to the increase in the urbanization movement, although such a movement has been slow and feeble. But the drift of population from rural areas to towns is gradually tending to become more pronounced. It is thus natural that the growth of population in rural areas has been smaller than the growth of the population of the State as a whole. The extent of increasing urbanisation will be reviewed in the next Chapter.

Decennial Growth

5. Between 1921 and 1931, the population of rural Orissa grew by 11·9 per cent which is a fairly good index of increase.

The population of the rural areas of Orissa in 1921 was 10,794,089. It increased to 12,082,042 in 1931. Therefore during 10 years from 1921, the rural population increased by 1,287,953. The increase during the next 10 years was somewhat lower. The rural population of Orissa in 1941 stood at 13,298,829 marking an increase of 1,216,787 or 10·1 per cent. But in the following decade the growth was remarkably smaller. The rural population of Orissa as enumerated in the census of 1951 is 14,051,876 which is an increase of 753,047 or 5·7 per cent over the population of 1941. Thus the growth of population during 1941-51 is much smaller than during the period 1931-41, which again is a little smaller than during the previous ten years 1921-31.

GROWTH IN NATURAL DIVISIONS

6. It was seen in the last Chapter that the growth of general population of the inland division was higher in percentage than that of the coastal division. With regard to the rural areas of these two divisions, the same characteristic is noted. The growth of rural population has been much higher in the inland division than in the coastal division.

7. The population of the rural areas of the inland division in 1921 was 5,503,182. It increased to 6,374,458 in 1931 which amounts to an increase by 871,276 or 15·8 per cent. In the next 10 years, that is to say, by 1941, the population stood at 7,183,870 marking an increase of 809,412 or 12·7 per cent. During the last decade, the increase was much smaller. The census of 1951 recorded the rural population of the inland natural division at 7,746,958 which is an increase of a moderate number of 563,088 or 7·8 per cent. Thus the rate of growth has been slowing down during the last three decades.

8. The rural population of the coastal division shows a poor rate of growth, not only as compared with that of the inland division, but also with that of the general population of the coastal division. The population of the rural areas of the coastal division in 1921 was 5,290,907. It increased by 416,677, i.e., by 7·9 per cent in 1931 raising the population to 5,707,584. In the next 10 years, namely, by 1941, the population increased by 407,375 or by 7·1 per cent and stood at 6,114,959. As in the other natural division, the coastal division recorded a poor increase rate of the rural population between 1941 and 1951. During these 10 years, the population increased only by 189,959. The enumerated population of the rural areas of Orissa coastal division was 6,304,918 in 1951.

RURAL POPULATION OF DISTRICTS

9. The rural population of districts and the percentage it bears to the total population is shown in the statement below. It will appear that only 2 out of 13 districts of the State have a percentage of rural population below 95. These two districts are Cuttack and Ganjam. The remaining 11 districts have a higher rural proportion, as more than 95 per cent of population live in rural areas. The percentage in Mayurbhanj district is as high as 99·1 and in Ganjam Agency it is 100. Phulbani, Kalahandi and Keonjhar are also overwhelmingly rural.

Name of district	Total population	Rural population	Percentage of rural population
Cuttack ..	2,529,244	2,392,614	94·6
Balasore ..	1,106,012	1,064,366	96·2
Puri ..	1,572,262	1,496,718	95·2
Sambalpur ..	1,301,804	1,249,966	96·0
Ganjam ..	1,624,829	1,510,516	93·0
Agency ..	*159,296*	*159,296*	*100·0*
Plains ..	*1,465,533*	*1,351,220*	*92·2*
Koraput ..	1,269,534	1,214,876	95·7
Dhenkanal ..	839,241	811,785	96·7
Keonjhar ..	588,441	579,098	98·4
Phulbani ..	456,895	451,397	98·8
Bolangir ..	917,875	877,182	95·6
Sundargarh ..	552,203	536,836	97·2
Kalahandi ..	858,781	846,974	98·6
Mayurbhanj ..	1,028,825	1,019,548	99·1

Villages

Number of Villages

10. The number of villages have grown between 1941 and 1951 in all districts of the State excepting Keonjhar, Sundargarh and Mayurbhanj. The decrease in the number of villages in Mayurbhanj is mostly due to the transfer of a portion of the erstwhile Mayurbhanj state to Balasore district. Similarly the decrease in the number of villages of Keonjhar is due to exchange of enclaves between this district and the districts of Cuttack and Balasore . The decrease of villages in Sundargarh is small, namely, 7 and may be due to depopulation of forest villages or villages in hilly areas. These villages are usually small, and at times contain one to five houses each. It is not uncommon for the residents in such villages to abandon the village site on ground of depredation of wild animals, drying up of water sources or failure of cultivation due to various reasons, and to migrate to a more favourable neighbouring tract.

11. The increase in the number of villages is most noticeable in the districts of Puri, Ganjam, Koraput, Phulbani and Cuttack. It appears that this increase is partly unreal for in the census of 1941, the village numbering was done in the midst of war conditions when scrupulous care was not always possible on the part of the local official or non-official agencies engaged in this work. Moreover, in unsurveyed and unsettled areas, a number of hamlets or groups of habitations were taken at times as a single census village. In the present census, however, it was possible to scrutinise the matter more thoroughly. The number of villages in different districts as recorded in the last two censuses is given below.

Name of district	No. of villages in		Increase (+) or decrease (−)
	1941	1451	
Cuttack ..	5,842	6,248	+406
Balasore ..	3,716	3,833	+117
Puri ..	4,405	5,068	+663
Sambalpur ..	3,358	3,426	+ 68
Ganjam ..	3,928	4,513	+585
Agency ..	*1,313*	*1,453*	*+140*
Plains ..	*2,615*	*3,060*	*+445*
Koraput ..	5,181	5,746	+565
Dhenkanal ..	2,457	2,526	+ 69
Keonjhar ..	1,993	1,982	− 11
Phulbani ..	3,850	4,307	+457
Bolangir ..	2,457	2,524	+ 67
Sundargarh ..	1,638	1,631	− 7
Kalahandi ..	2,885	2,939	+ 54
Mayurbhanj ..	3,677	3,655	− 22

Growth of Villages

12. The total number of villages in 1941 was 45,387 which increased to 48,398 in 1951. Thus during the period of 10 years, there was an increase in the number of villages to an extent of 3,011. This number relates to inhabited villages only. The increase during the last decade which may be regarded as considerable is due to the fact that with the growth of population and extension of cultivation some of the uninhabited villages were occupied, thus swelling the number of inhabited villages. In some cases, however, there was the splitting up of a particular tract previously regarded as one village into more than one. This was occasionally the case in unsurveyed areas. The increase may also be due to the fact that during the present census operations a thorough and systematic investigation was made as regards the number of villages in the State and a register was prepared in each

district which ultimately has taken the shape of village statistics appearing in the District Census Handbooks. This has made good any possible omission in the list of inhabited villages drawn up in 1941. The total population of villages existing in 1941 was 13,355,460 which has increased to 14,051, 876 in 1951. The average number of persons inhabiting one village was 294 in 1941 and 290 in 1951. The decrease in the average number of population per village in 1951 is slight and is mainly due to the establishment of new villages in localities which were previously uninhabited and which now contain a small number of population so as to affect the average for the State as a whole.

13. The principal feature of growth in the number of villages during the last decade lies in the fact that the small-sized villages have grown both in number and in population while the large-sized villages have decreased bothways. The following statement shows that there was a high amount of increase in the number of villages with a population of less than 500 and a moderate amount of increase with regard to villages with a population between 500 to 1,000 while the larger villages have shown adverse signs of development.

Year	Number and population of villages with									
	Less than 500		500—1,000		1,000—2.000		2,000—5,000		5,000—10,000	
	No.	Population	No.	Population	No.	Population	No.	Population	No.	Population
1951	40,654	7,266,033	5,852	4,030,961	1,652	2,141,301	237	596,650	3	16,931
1941	37,967	6,746,790	5,562	3,779,065	1,606	2,143,886	244	641,140	8	44,528

LARGE VILLAGES

14. The above statement shows the overwhelming preponderance of small-sized villages but there is no dearth of large-sized villages particularly with a population from 2,000 to 5,000. The villages of this size number 237 in the State and figure mostly in district Ganjam, Sambalpur, Cuttack and Puri have also a good number of these large villages. There are also villages of larger size, namely, those containing a population from 5,000 to 10,000. Such villages are three in number, namely, Barpali (5,311) and Hirakud (6,559) in Sambalpur district and Kantilo (5,561) in Puri district. But, in fact, if the splitting up into artificial boundaries is not taken into consideration, there will be many more localities with a population above 5,000 each, residing in contiguous wards or hamlets. At least six such places, in addition to the three noted above, deserve mention. These localities are Gadjit (5,509) in district Cuttack, Rampella (5,804) in district Sambalpur, Boirani (5,379)and Baranasi (6,619) in district Ganjam, Kotpad (6,196) in district Koraput and Rajgangpur (5,184) in district Sundargarh. Although the population of each of these villages exceeds the limit of 5,000 which is usually taken as a qualification for declaring the locality a town, they have not been declared as such as they principally lack in urban characteristics. In some of these villages, such as Gadjit and Rampella, the population is mostly agricultural by profession, creating little urban atmosphere in the locality. Others however, such as, Hirakud, Barpali and Kantilo, etc., have a greater percentage of non-agricultural population but in villages like Barpali or Kantilo this is mostly due to concentration of small scale and cottage industries of such types that though they are non-agricultural in character they do not give the population an urban way of life. In places like Hirakud and Rajgangpur, the non-agricultural population is also larger than the agricultural. But

in the year 1951, these places were principally peopled by daily labourers which again is not sufficient to give the locality the character of a town. In most of the 9 villages named above, there is want of urban recreations, public utility services or local body administration. Under these circumstances, they were not considered suitable for being ranked as towns.

SECTION IV

Movement

1. The people of rural areas being mostly agricultural by profession have a distaste for movement beyond their village. Such movement occurs with regard to a limited percentage of the rural population in case where there are powerful factors to induce. Circumstances which encourage migration from the village are mostly born of such conditions as decreasing *per capita* arable land, precarious character of yield from lands and lack of employment for those that cannot be absorbed in agriculture. Of late, a new factor has been added, namely, the influx of refugees arising from political causes, such as, partition of India and consequent deterioration of communal relations. These conditions lead to a three-fold movement of the rural population, viz., (*i*) rural-urban movement, (*ii*) inter-village movement and (*iii*) movement between rural areas and States outside Orissa.

Limitations of Migration Statistics

2. The description of the movement of rural population, as given in the paragraphs below, is one-sided and is confined to immigration into rural areas only. Emigration statistics of rural population are not available, as the requisite information could not have been gathered without undue strain on the non-official enumeration agencies and without the risk of confusion and errors. In fact, such a type of information was never before collected. The following discussions will thus relate to one-way traffic. Even with regard to this inward migration, the scope of information is limited, as may be seen below.

Rural-Urban Migration

3. There is no statistics whatsoever relating to rural-urban migration. Such statistics even if built up, would have a number of shortcomings. Information regarding the place of birth would usually be the source of these statistics. But they generally underrate the extent of migration in the sense that the birth place of children which might occur in the latest place of residence is at times recorded erroneously as the place of birth of their parents. Secondly, if the birth place has been different from the normal place of residence on account of medical facilities or domestic convenience, the record would usually show the normal residence. Lastly, as the place of birth is intended to record only the district of birth, it will not be indicative of any movement between rural and urban areas of the same district or of other districts.

4. The principal cause of rural-urban migration is complementary in character, namely, the towns pull and the villages push the migrants. When a village proves to be inhospitable on account of over-crowding in agriculture or other similar reasons, the urban areas offer attractions mainly of economic type. The migrants are assured of readily available means of subsistence in towns. The industrial movement and the growth of towns encourage migration from rural areas into towns, though such movement has been small on account of the usual prejudice of villagers against town life. In the Report on labour conditions in India, the Royal Commission in 1931 remarked as follows. " The industrial recruit is not prompted by the lure of the city life, or by any great ambition. The city as such has no attraction for him, and when he leaves the village, he has seldom an ambition beyond that of securing the necessities of life. Few industrial workers would remain in industry, if they could secure

sufficient food and clothing in the village." Thus the volume of movement between villages and towns is bound to be small. On the one hand, the villager is unwilling to move until faced with economic compulsion. On the other hand, most of the towns of Orissa have hardly any attraction, economic, social or cultural, to offer to the villager. The towns, excepting a very small number, exercise but little 'pull' and so the rural-urban migration has not developed. The current however is there, though feeble.

Inter-village Movement

5. In addition to movements from rural to urban areas, there is a constant current of interchange of population between rural areas themselves. These movements may be either within the same district or within the neighbouring districts or sometimes may extend to non-contiguous districts. Marriage is the principal cause of such movements. But there are other minor causes such as cultivation of land lying in other villages or trade and business on which account a small percentage of people also make inter-village movement.

Extra-State Migration

6. In the previous Chapter the position was examined as regards migration of general population from Orissa into West Bengal, Assam, Bihar, Madhya Pradesh and to some other States in India. Although the total volume of outward migration cannot be divided between the urban and rural population of the State, the movement may be attributed to a great extent to the rural rather than urban population This is because the principal motive of migration outside the State is economic and the villages have little resources beyond agriculture to give sustenance to all the children of the soil. The towns are definitely better off in this regard and so a townsman feels lesser urge than a villager to part with his home and go out to a distant land in search of livelihood. The tea labour of Assam draws practically the whole number of Oriya migrants from the rural areas. So also happens in the case of West Bengal and Bihar where the migrants from rural Orissa are engaged largely in factories and workshops. With regard to Madhya Pradesh, the movement relates mostly to marriages and even in this case, the rural population plays a greater part, though towns have some contributions to make. Thus there is no definite information about the number of population that has migrated from rural areas to States outside Orissa. But specific figures are available as regards the number of persons who have come from different States into the rural areas of Orissa.

Classification of Figures Available

7. The discussion on the movement of rural population may be based on three sets of figures, namely, those that are attached to the villages within the district of their birth, those that have come from some other district of the State into the rural areas of a particular district and those that have come from outside Orissa to the rural areas inside.

Extent of Immobility

8. Subsidiary Table 2·5 illustrates, though in an abridged manner, the currents of inward migration from different directions. It appears that out of the total rural population of 14,051,876, as many as 13,627,295 or 97 per cent do not move out of the villages within the district of birth. It is not possible to show what number have moved between villages of the same district. This is because the statistics are collected from the information recorded in the enumeration slips which give the name of the district and not the village where a person was born or enumerated. Thus the percentage of rural population who

do not travel beyond the villages of their districts is very high. The rural population is immobile to a great extent, greater than the general population. The inward movement to villages is confined to 3 per cent of the population, out of which about 2·0 per cent come from other districts of Orissa, 0·9 per cent from other States in India and 0·2 per cent from outside India, principally from Pakistan.

Immigration from Other Districts

9. The exchange of population of the rural areas of one district with the general population of other districts of the State is poor in magnitude. The number of such migrants is only 282,719 or 2·0 per cent of the rural population, out of which the majority, namely, 188,623 hail from districts of the same natural division and the remaining 94,096 come from districts of the other division. Females preponderate to a remarkable extent in this movement. This shows that the movement is mostly a marriage phenomenon. In many cases, it may just be a question of crossing over the borders of contiguous districts. The location of educational institutions, official and business establishments in rural areas also results to a certain extent in the movement of population to those areas. Among districts which appear prominent in rural inter-district traffic are Cuttack, Balasore, Puri, Sambalpur and Phulbani.

Migration from Other Parts of India

10. A little less than one per cent of the rural population of Orissa is constituted of persons hailing from other parts of India. In other words, approximately one in every 100 persons living in villages is an Indian not born in Orissa. This is a satisfactory index of interest which the villages of Orissa have created among persons of other States. The reasons for this happy movement will be given when discussing about the natural divisions below. The districts which have gained most from this type of immigration are Sambalpur, Mayurbhanj, Sundargarh, Keonjhar and Balasore. Most of the migrants have come from the States adjacent to Orissa, such as, West Bengal, Bihar, Madhya Pradesh and Madras. Out of the total number of 121,359 persons coming from other parts of India, 115,831 have come from the adjacent States and 5,528 from other parts outside the adjacent States.

Migration from beyond India

11. The total number of persons coming from beyond India to the villages of Orissa is 20,503 out of which the overwhelming majority of 19,920 come from Pakistan and the remaining 583 from countries other than Pakistan. Out of the Pakistan-born persons, a large majority may be classed as displaced persons. There are also some men in business and professions, who have come and settled in villages of Orissa before the partition of India. Districts which have accommodated the Pakistan-born people to a subtantial extent are Mayurbhanj, Cuttack, Sambalpur, Balasore and Puri. The number of persons born in foreign countries other than Pakistan who have settled in villages of Orissa is small and does not call for remarks.

Immigration into Natural Divisions

12. Among the two natural divisions, the inland division shows greater volume of immigration. The number of persons coming into the rural areas of the coastal division from other districts of the State is 107,668 while the corresponding figure for the rural areas of the inland division is 175,051. It is surprising that the coastal division is poorer in the matter of such movement. But the explanation is chiefly to be found in the fact that on account of construction of the multipurpose project at Hirakud in Sambalpur district, there has been a heavy flow of population both from within the State

and from outside. The principal seats of the project at Hirakud and Burla have not yet been declared as towns and the remarkable influx of population to these centres which are treated as rural areas and also to other places in the district where irrigation canals and other subsidiary works are being executed have contributed to the large amount of immigration into the rural areas of the inland division. Similarly, the number of persons hailing from other parts of India into the rural areas of the coastal division is 25,328 but it is as heavy as 96,031 in the case of the inland division. This is again due to the Hirakud multi-purpose project in the inland division, which has attracted contractors, engineers, businessmen and officials engaged in construction work who were born in different parts of India, but are now living in a rural area of Orissa. This is the principal reason why the proportion of non-Oriya Indians living in Orissa villages is satisfactory.

DISTRICTS

13. Among the districts which have attracted a large number of migrants from other parts of Orissa, the important ones are Cuttack with 49,932, Sambalpur with 42,949, Phulbani with 25,335, Balasore with 25,283 and Puri with 24,915. The industrial establishments, such as Textile Mills, Glass Factory, etc., in Cuttack and Rice Mills in Balasore have drawn population from other districts. Marriage relations and employment in Government service are also the causes of attraction. These two reasons are principally applicable to the case of immigration into the rural areas of Puri and Phulbani. As regards Sambalpur, the additional reason is the Hirakud project, observations about which have been made in the paragraph above. Figures relating to other districts may be seen in the Subsidiary Table 2·5.

SECTION V

Natural Increase—Births and Deaths

1. The study of births and deaths in rural areas, which is necessary for determining the natural increase of population in such areas, meets with the same difficulty as that of the general population. The study is limited to the records of vital statistics maintained in respect of rural registration areas in the State. The registration areas are inadequate and the statistics kept are incomplete and not always reliable. Moreover, as in the case of general population, the registration of vital events among the rural population has been undergoing marked deterioration since the war time. All these factors combine to reduce the usefulness of the data but in spite of their deficient and defective character they cannot be discarded altogether because they are at least capable of showing the general trend in the birth and death rates which in the absence of any other more reliable information should be the basis of the present discussion.

Rural Registration Area

2. The registration areas in the coastal division cover a considerable percentage of the rural tract and population. But it is very poor with regard to the inland division. More than half the districts of the inland division, namely, Keonjhar, Bolangir, Sundargarh, Mayurbhanj and Koraput have no rural registration area at all. Out of the remaining districts, Sambalpur and Ganjam Agency have a substantial extent of registration area in the rural portion of the district and others have just a small extent of such area. The rural portion of the inland division has a total area of 45,951 square miles and a population of 7,746,958, out of which the registration area covers only 9,965 square miles and 1,847,078 persons. In other words, birth and death statistics are maintained only in respect of 21·7 per cent of the area and 23·8 per cent of the population of the rural inland division. Thus more than three-fourths of the area and the population are outside the scope of registration. This is highly inadequate. In the coastal division, the position is much better. An extent of 11,650 square miles out of the total rural area of 13,984 square miles or 83·3 per cent is under registration. As regards the rural population of the coastal division 5,706,424 out of 6,304,918 or 90·5 per cent is covered by the registration system. The extent of registration in this division is adequate for statistical purpose.

Birth Rates

3. The inter-census birth rate of rural population does not vary to any considerable extent from that of the general population, which may be seen from the following statement.

Decade	Inter-census birth rate	
	General populat on	Rural population
1921-30	37·3	38·5
1931-40	35·7	36·9
1941-50	28·2	28·3

4. The birth rate of the rural population is slightly higher than that of the general population. The margin of difference remained steady, the rural rate being higher by 1·2 per mille, from 1921 to 1940, but in the last decade, it narrowed down to an insignificant figure, namely, 0·1 per mille. This shows that the rural birth rate is declining and that the rate of decline is faster than that of the general population. The reasons for

this fall in rural birth rate is the same as in the case of the general population.

BIRTH RATE IN NATURAL DIVISIONS

5. According to the recorded figures of births available from the Director of Health, the birth rate of the rural areas of the inland division is much lower than that of the coastal division. This low rate in the inland division has been continuing from decade to decade for some time past. As the difference in rate is very remarkable, it is worth mention.

Natural division	Inter-census birth rate		
	1921—30	1931—40	1941—50
Inland Division	29·5	27·4	25·1
Coastal Division	40·9	39·8	29·3

6. The difference in the inter-census birth rate ranged from about 10 to 15 per mille in the two decades beginning from 1921. In the last decade, however, the difference in the rate between the natural divisions has narrowed down to about 4 per mille. The social and economic conditions and the influence of environment and climate are different in the two natural divisions and this may account for some amount of difference in the rates of birth. But the difference could not have been as high as exhibited by the recorded vital statistics. In the previous Chapter, observation was made as regards the unreliability of these statistical figures. The record of births particularly relating to the inland division are unacceptable. It cannot therefore be stated that the inter-census birth rates as disclosed by the figures above are correct to any extent with regard to this division. The rates of the coastal division are, however, within the margin of error which in spite of inaccuracy deserves study.

BIRTH RATE IN DISTRICTS

7. Coming down to districts, the rural areas of Cuttack, Balasore, Puri and Ganjam Plains show an inter-census birth rate ranging from 28·3 to 30·3. But in the rural areas of the inland division it ranged from 5·0 in Ganjam Agency to 34·6 in Angul. The figures relating to Ganjam Agency are grotesque and have been partly responsible for the average figure of the inland division being so low. In the decade 1931-40, the inter-census birth rate of different districts was much higher, namely, 43·1 in Ganjam and 40·6 in Khondmals. The lowest figure was recorded by Balasore and Sambalpur districts where the birth rate was 32·5 and 32·4 respectively. In the decade 1921-30, Ganjam recorded a rate of 46·5 while Balasore stood more or less at the same low level, namely, 32·2.

ANNUAL BIRTH RATES

8. The annual birth rate of rural Orissa as maintained by the Director of Health is given below f om the year 1936.

Year	Birth rate
1936	37·0
1937	35·1
1938	34·0
1939	35·2
1940	36·0
1941	30·9
1942	31·6
1943	30·8
1944	25·3
1945	27·4
1946	27·4
1947	26·7
1948	26·2
1949	25·8
1950	26·6

9. The above rate is obviously much lower than the real rate of birth. It has got a considerable margin of error. It has been observed with regard to the general population that the margin of registration error in the record of births may be taken to be 45 to 50 per cent. The registration error with regard to the rural population is not likely to be less than that of the general population. So the birth rate in the last year of the decade 1941-50 may be taken not to be

less than 40 per mille for the rural areas, although the records of the Director of Health shows it to be 26·6. In spite of inaccuracies the figures are useful in showing the declining trend in the rate of birth.

Death Rates

10. The death rate of the rural population does not show a steady trend as does the birth rate. Death rate is more conspicuous by the fluctuations that it has suffered in different years. The registration figures with regard to the incidence of death are defective although not to the same extent as births. According to the maintained figures, the inter-census death rate of the rural population is higher than that of the general population as shown below.

Population	Inter-census death rate		
	1921-30	1931-40	1941-50
General Population	30·8	28·4	26·0
Rural Population	31·8	29·3	26·2

11. Although the rural death rate has been higher than the death rate of general population all along, the difference has narrowed down gradually from 1·0 in 1921-30 to 0·2 per mille in 1941-50. The figures moreover indicate a decline in the death rate. The fall in the rate of general population during the last 30 years amounts to 4·8 but it has been greater; namely, 5·6 with regard to the rural population. This is a happy sign for villagers. The greater fall in the mortality rate in the rural areas is undoubtedly due to the extension of medical facilities to rural areas during this period and to organised control of epidemics which in spite of all its failures has progressed to some extent.

Death Rate in Natural Divisions

12. The Orissa coastal division records higher death rate than the inland division. As stated in connection with the birth rate, the favourable position shown by the inland division with regard to low death rate is not acceptable in view of inaccurate vital statistics of this natural division. There has been such a large extent of ommissions in the record that the figures are not worth consideration. In the coastal division death rate remained high during the last 30 years. The inter-census death rate for the period 1921-30 was 34·9 per mille which declined to 32·2 in the following decade. In the decade 1941-50, the rate has been shown as 28·0 but this fall is not real on account of marked deterioration in the registration system since the war time. The death rate has fluctuated badly and the registration records were maintained inefficiently. In spite of these shortcomings, it will not be incorrect to presume that the death rate of the rural population is declining though very slowly.

Annual Death Rate

13. The annual death rate as recorded by the Director of Health for the rural areas of Orissa is given below from the year 1936.

Year	Death rate
1936	28·1
1937	28·9
1938	29·8
1939	28·4
1940	24·7
1941	28·1
1942	25·5
1943	30·2
1944	30·4
1945	27·9
1946	23·8
1947	27·1
1948	22·6
1949	22·1
1950	20·4

14. The annual rates of death as shown above according to registration records are not as high as the real rate. There is considerable amount of under-registration in the recording of death cases. It was estimated in the previous Chapter that the extent of error in the registration of death may be nearly 30 per cent. Although the death rate for 1950 has been shown as 20·4 per mille above, the real rate may be as high as 30 per mille. Even if the amount of under-registration is not taken into consideration, the recorded rate is much higher than that of the rural areas of many States in India, not to speak of foreign countries.

15. The death rate though persisting at high level has suffered from fluctuations but in spite of this it is clear that the rate of death of the rural population has been coming down in recent years. During the last decade, the years 1943 and 1944 are notable for the high rate of mortality which well exceeded the normal recorded figures. This rise in mortality is primarily due to the extreme widespread and fatal character of the epidemics that broke out during these years and to the immigration of people from malarious areas outside the State. There was shortage of staple foods in some parts of the State and the resistance power of the people was low when epidemics imported from outside played havoc with the life of the people. In the rural areas, death rate from cholera alone rose to the high figures of 4·3 per mille in Cuttack in 1944 and to 6·1 in Balasore in 1943. The rural areas of the other districts had also more than normal suffering. Fever was claiming heavy number of deaths in the villages of Cuttack district between 1944 and 1947 when the death rate ranged from 15·3 to 17·6 per mille from this single cause. Puri and Sambalpur were suffering more or less to the same extent. In Balasore and Khondmals the position was still worse. In 1944 the death rate due to fever alone in Khondmals reached the high figure of 27·7 per mille. Dysentery and diarrhoea and also to some extent smallpox were widespread all over the State. The year 1947 was also a bad year for the rural population as the incidence of death was very high. Improvements however were noticed during the last three years of the decade when the death rate fell to one of the lowest figures ever recorded.

Cause of Death

16. The rural population pays a heavy toll to countless diseases, about which no correct information is available. The causes as recorded in the departmental statistics are limited to a few, such as, cholera, smallpox, fever, dysentery and diarrhoea, respiratory diseases, injuries and 'other causes.' The agency which is primarily responsible for recording the cause, has no qualification to do so, and is guided by a slogan most helpful to him, viz., "when in doubt, call it fever". Therefore, on account of the capricious character of reporting, the figures should be accepted with great caution. With regard to smallpox however, the registration figures are reliable, though there is an amount of omission. Next to it, cholera has some accuracy, although this is confused with cases of diarrhoea and dysentery. There is no way of knowing the correct incidence with regard to other diseases.

17. The recorded vital statistics, as they stand, show that in the rural portion of the registration area of the State, the total number of deaths during ten years from 1941 to 1950 was 1,949,066. Fever alone was responsible for 1,075,641 deaths or 55·2 per cent of the total deaths. Cholera carried away 94,440 or 4·8 per cent, smallpox 46,686 or 2·4 per cent, and dysentery and diarrhoea 153,667 or 7·9 per cent. The number of unnatural deaths is surprisingly high in rural areas, for 7,382

deaths resulted from suicide and 5,586 from wild animals or snake bite. Cholera was most virulent in 1943 and 1944 when it was responsible for a high number of deaths, namely, 20,072 and 17,934 respectively. Similarly smallpox carried away 7,831 and 11,631 in these two years. Fever was most fatal in the year 1944 when the appalling number of 127,102 deaths resulted from it. In 1945 and 1947, the number of deaths was also very high, namely, 119,396 and 122,738 respectively. This heavy toll of death was not, however, shared equally by different districts. There are a few which suffered most, and it is necessary to examine conditions of health in these districts.

Health Condition in Districts

18. A study of death rates of individual districts shows most deplorable conditions in the rural areas of Balasore. The decennial death rate for 1941-50 was the highest here of all the rural areas in the State. The rate was 31·3 per mille as against rural Cuttack recording 29·4, Puri 26·7 and Ganjam Plains 24·5. Public health conditions in the villages of Cuttack were also far from satisfactory. Death rate rose to the high figure of 35·2 in the year 1944 in the villages of Cuttack. The non-urban areas of Balasore suffered from high mortality in the years 1943 and 1944 when the rate rose to 38·9 and 36·1 per mille respectively. These were of course unusually bad years from the point of view of public health, but taking for example, the year 1949 when health was normal all over the State, the death rate was 27·1 in Cuttack and 30·6 in Balasore, which are very high rates indeed. In view of the seriousness of the situation, there may be justification in examining the cases of these districts individually.

Balasore

19. The rural areas of Balasore virtually became a death-ridden country during the last decade. In seven out of ten years from 1941 to 1950 the total number of deaths exceeded the total number of births. Only three years during the entire decade, namely in 1941, 1942 and 1946 had a surplus, though small, of births over deaths. Even in the closing year of the decade, namely, in 1950 when normal health had returned to all parts of the State and no district showed any excess of deaths over births, rural Balasore continued to display the dismal phenomenon. The stock-taking of vital occurrences for the decade 1941-50 shows that in the registration areas of the rural portion of Balasore district there was a total number of 284,629 births and 314,869 deaths. Therefore, the population instead of increasing during these ten years, actually decayed to the extent of 30,240. The loss of life was most severe in ten police-station areas, namely, in Jaleswar, Basta, Soro, Simulia and Khaira in Sadar subdivision and in Bonth, Bhandaripokhari, Dhamnagar, Tihiri and Chandbali in Bhadrak subdivision. In each of these police-stations, mortality was so heavy that the population of 1951 registered a decrease over that of 1941. Balasore district is noted for adequacy of food stock at all time. It has been a surplus district all through, even in the year 1943, when the position of other dependable districts was shaken. The people had sufficient to eat. Why then were they dying ? Not surely due to deficiency of food. The reason was bad public health. Control over epidemics was not effective. Medical facilities were not adequate to the extent of prevailing illness. The Public Health Administration was inefficient and did not keep itself alert about the mounting death roll in villages. There was no determined attack on the causes that gave birth to widespread diseases and high rate of death. The result was abnormal decay of population, which continued almost unabated throughout the period.

CUTTACK

20. Villages of Cuttack district also suffered badly, though not to the same extent as in Balasore. In five out of ten years of the decade, deaths exceeded births. These years are 1944 to 1947 and 1949. The total registration figures of the decade show the number of births at 638,799 and of deaths at 642,599. Therefore the rural areas of Cuttack had a net loss of population amounting to 3,800 during the decade. The police-stations where population decreased during this period are Sadar, Salepur, Mahanga, Kissennagar and Ersama in Sadar subdivision, Binjhārpur, Dharamsala and Korai in Jajpur subdivision and Kendrapara and Patamundai in Kendrapara subdivision. Here again, the cause of this gloomy situation is not so much the deficiency of food, as the inefficiency of Public Health Administration.

OTHER DISTRICTS

21. Puri district and Ganjam Plains were comparatively better off. Although in 1943 and 1944, the loss of life was greater than the gain in births, the total for the decade showed a satisfactory margin of survival in both these districts. Puri had a gain of 36,721 and Ganjam Plains of 70,335, being the excess of births over deaths in the rural registration areas.

22. In the inland division, the position appears to be unsatisfactory particularly in Khondmals and Balliguda subdivisions. There was high mortality and decrease of population in the police-station areas of Khajuripara, Phiringia, Subarnagiri, Belghar and Daringibadi. Malaria and other fevers had high incidence. Cholera was also virulent in several years of the decade. The situation calls for effective control of epidemics and endemic diseases.

Natural Increase

23. During the last decade, the excess of births over deaths in rural areas of Orissa has yielded only a small surplus so that the natural increase of rural population stands at the low rate of 2·1 per cent. This rate is somewhat lower than that of the general population for the State which is 2·2 per cent. As however this estimate is inclusive of the figures of the inland division which are vitiated with a high amount of error, it may be worthwhile to confine study to the figures of the coastal division only. In this division the rate of natural increase during the last decade was remarkably low, namely, 1·3 per cent for the rural population as against 1·4 relating to the general population. In the rural registration areas of the coastal division, the number of births and deaths during the decade 1941-50 were 1,653,573 and 1,580,556 respectively. Therefore during the period of 10 years, the excess of births over deaths amounted to a small surplus, namely, 73,017. As the mean decennial population of the rural registration areas of the coastal division is 5,636,578, the annual rate of growth during the decade works out to the poor figure of 1·3 per cent. The natural increase in the rural areas of the inland division is shown to be higher but as remarked above, this does not appear reliable on account of a large extent of errors.

SECTION VI

Livelihood Pattern

1. Nowhere is the contrast between rural and urban population more striking than in the matter of livelihood pattern. The principal factor that determines the classification of a locality lies in its agricultural or non-agricultural character. The rural population is predominantly agricultural by profession. In Orissa, a very high percentage of the rural population has taken to agriculture.

2. Subsidiary Table 2·4 gives the distribution of 10,000 persons of rural population among different livelihood classes. It appears that classes I to IV which constitute the agricultural category comprise 82 per cent of the total rural population while classes V to VIII which relate to non-agricultural professions absorb the remaining 18 per cent.

Agricultural Classes

3. The distribution of agricultural population between different livelihood classes is mentioned below :—

Livelihood class	Percentage
I—Cultivators of land owned ..	61·7
II—Cultivators of land unowned ..	6·1
III—Agricultural labourers ..	12·8
IV—Non-cultivating owners of land	1·5

4. In order to properly appreciate the implications of the classification of agricultural population as stated above, it is necessary to be acquainted with the definition of the terms employed to denote the classification, which has been discussed in the previous Chapter. It will appear that the owner-cultivators (class I) constitute by far the highest percentage of the population. The percentage among the general population of the State belonging to livelihood class I is 59·5, but when considered with relation to the rural population this class claims 61·7 per cent. In other words, among the rural population, the proportion of owner-cultivators is higher. The next important livelihood group is class III, the agricultural labourers, who constitute 12·8 per cent of the population. In other words, one out of every 8 persons living in the village is an agricultural labourer or his dependant. The agriculturists who mainly depend upon cultivation of land belonging to other persons constitute only 6·1 per cent while the class of persons known as Zamindars or Jagirdars, etc., are limited to the modest percentage of 1·5.

Non-agricultural Classes

5. The non-agricultural classes are a weaker community so far as the numerical strength is concerned but their importance in the village life is not to be underrated. This is particularly true of villages far in the interior where each village tends to be self-sufficient. While the large percentage of agricultural community is engaged in production of food, the non-agricultural section takes charge of various other aspects of the villager's life. The agriculturist has to be dependent on a carpenter or a blacksmith for preparation of his plough implements, on a weaver for his clothing requirements, on a potter for his kitchen equipments and so on. This important non-agricultural community is divided into four livelihood classes, as usual, absorbing percentages of population as indicated below :—

Livelihood class	Percentage
V—Production other than cultivation.	6·0
VI—Commerce ..	2·3
VII—Transport ..	0·3
VIII—Miscellaneous services ..	9·3

6. The most important class relates to miscellaneous services which comprise nearly one-tenth of the total population of rural areas. In this class are included day labourers, teachers, washermen, barbers, domestic servants, beggars, vagrants and mendicants and other similar classes of people. This livelihood is important in the rural areas of Ganjam, Koraput and Cuttack. The next important livelihood class relates to persons who are engaged in production other than cultivation (class V), such as, stock raising, rearing of small animals and insects, plantation industries, foresty and wood cutting, hunting, trapping, game propagation and fishing. A reference to Subsidiary Table 5·8(A) shows that in the rural areas of the State, 6·8 per cent of the total number of self-supporting persons are engaged in these professions. There are also other professions included in livelihood class V, such as, processing and manufacture of foodstuff, textiles, leather goods, metals and chemicals, etc. All weavers, fishermen, wood cutters, bidi-makers, vegetable growers, gardeners and persons who prepare *murhi, chura,* sweets, etc., are included in this class. Mining and quarrying are important means of livelihood in Dhenkanal, Mayurbhanj, Keonjhar and Sundargarh districts. Phulbani and Dhenkanal are prominent for sheep and cattle keepers, wood cutters and collectors of forest produce. Fishing is important for Puri and weaving for Sambalpur, Bolangir, Kalahandi and Mayurbhanj. Balasore has prosperous men in processing of foodstuffs. The matter will be discussed in greater detail in Chapter V. The livelihood which comes next to class V in importance is class VI (Commerce). But commercial activities in villages are seldom prominent and absorb only 2·3 per cent of the people. Wholesale or retail dealers in foodstuffs, textiles, timber and fuel, money-lenders, etc., come under this class. Ganjam again has given the highest prominence among all districts of the State to this source of livelihood. Phulbani also shows some amount of prominence, more for the fact that the district has other economic activities less developed so that the one under consideration automatically secures higher percentage. Lastly, the number of persons engaged in transport is negligible, because the rural areas have not developed communications. Some boatmen or cartmen come under this class. Cuttack heads the list under this class.

Natural Divisions

7. The livelihood classification of rural population of the two natural divisions follows almost the same pattern as that of the State as a whole. There is, however, one noticeable feature in the distribution between different classes, viz., the agricultural population is larger in percentage in the inland division than in the coastal. The inland division has 84·5 per cent of people in agricultural profession while the other division has only 79·0 per cent. On the other hand, the inland division has got a lesser proportion of men engaged in non-agricultural pursuits, namely, 15·5 per cent while the coastal division has got a larger percentage, namely, 21·0. The owner-cultivators as a class are much stronger in the inland division than in the coastal. This is due to the peculiarity of the land system of Sambalpur and the ex-state areas where even service tenures or chaukidari jagirs are treated, in view of the definition adopted in the census, as owner-cultivators. Similarly, there is a stronger element of the agricultural labourers in the inland division than in the coastal but with regard to the landholders or those who do not cultivate their own land, the strength is by far greater in the coastal division. This may be attributed to the definition of a landlord under the Orissa Tenancy Act where there are small proprietors

of land paying nominal amount of land revenue direct to the Government.

8. Among the non-agricultural classes, the percentage under each of the four classes is higher in the coastal division than in the inland division. But greater margin of difference is seen in class VI, persons engaged in commerce. Evidently, there is greater commercial activity in the sural areas of the coastal division than in the inland division. Similarly, the difference between the two natural divisions with relation to persons in transport is remarkable, being quite high in the coastal division. The coastal division has got a large extent of inland water ways which may partly be the explanation, for the larger number of men engaged in transport. The difference in the other classes do not call for remark.

District Pattern

9. The following statement gives the percentage of rural population engaged in agricultural or non-agricultural professions in different districts.

District	Agricultural	Non-agricultural
Cuttack ..	78·5	21.5
Balasore ..	88·0	12·0
Puri ..	82·3	17·7
Sambalpur ..	81·9	18·1
Ganjam ..	70·3	29·7
Agency ..	*80·7*	*19·3*
Plains ..	*69·1*	*30·9*
Koraput ..	80·3	19·7
Dhenkanal ..	85·4	14·6
Keonjhar ..	90·6	9·4
Phulbani ..	79·7	20·3
Bolangir ..	85·6	14·4
Sundargarh ..	88·3	11·7
Kalahandi ..	85·3	14·7
Mayurbhanj ..	87·9	12·1

10. The rural areas of Keonjhar are most highly agricultural, absorbing above 90 per cent of the population in this livelihood. Consequently it is the least non-agricultural or industrial among the districts of the State. The agricultural character of Balasore is also highly prominent. This district is surplus in food production and has done well even in the crucial years of 1943 and 1944. Other districts which keep their rural population fixed to agriculture to a high extent are Sundargarh and Mayurbhanj. Among districts which are prominent in non-agricultural professions are Ganjam and Cuttack.

SECTION VII

Concluding Remarks

Traditional ruralism of Orissa's life is obvious. An enormous majority of the people forming about 96 per cent of the total population live in 48,398 villages, mostly small-sized and lying scattered. Orissa has been so highly rural because of her extensive agricultural economy. The people want to be close to the lands which they till. This saves time and facilitates protection of crops particularly when the cultivated lands are not far from hills and forests infested with wild animals. This is why so many small and nearly self-sufficient villages of agricultural character have developed throughout the State.

Density and Distribution

2. The density of rural population in Orissa being 234 to a square mile is not very high. There are many States in India, such as, West Bengal, Bihar, Madras and other States which have a higher density in the rural areas. But if the density of the coastal division is taken into consideration, which stands at 451 persons to a square mile, the position may compare favourably with many other parts of India. The inland division has vast expanse of forests, hills and uninhabited tracts which fact is responsible in bringing down the average density of that division as well as of the State as a whole. On examination of the distribution of the population, it appears that the rural population is mostly to be found in small and medium villages which together contain 95·6 per cent of the population leaving the remaining small percentage to the large sized villages with a population exceeding 2,000. The number of populous villages in Orissa is not high. There is thus greater amount of decentralisation of the population which may cause delay in the growth of populous towns or villages in Orissa.

Rate of Growth

3. The rural population has been growing at a slower rate than the general population of the State. Moreover, the rate of growth has also been falling particularly during the last decade. This may be partly due to the general tendency for rural population to move into the urban areas, though in an imperceptible scale, and thereby give the growth of rural areas a smaller rate. But the most important reason seems to be the unsatisfactory public health conditions in rural areas where mortality has been higher than that of the general population which itself stands at a high level. The rural birth rate has been falling faster than the birth rate of the general population and although the death rate is also falling faster, the survival rate of the rural population has been low enough to contribute to a substantial rate of growth.

4. In spite of the slow rate, the rural population has been growing and with it has resulted the increase in the total number of villages in the State. Between the last census and the present, more than 3,000 villages in Orissa have come into existence. Many of the localities which were uninhabited in the past are now sites of habitation for villagers. This growth, however, is confined mainly to villages which are not large in size or population.

Public Health

5. Condition of public health during the last decade has been far from satisfactory. Epidemics and endemic diseases were frequent and widespread and carried away heavy toll of life. This unsatisfactory condition is most noticeable in the rural areas of Balasore, Cuttack, Balliguda and Khondmals although there are many other tracts where conditions

were more or less the same. Keeping aside the consideration of such years as 1943 and 1944 which were abnormally unhealthy, the health conditions in other years in the rural areas were such as will bring no credit to any modern Government. In seven out of ten years between 1941 and 1950, the rural areas of Balasore had a larger number of deaths than births and in the remaining three years the surplus of births was so small that an absolute decrease of population was the result of the decade. The interior of Cuttack was involved in the same misfortune, though to a lesser extent. The rural areas of Balasore along with portions of Cuttack and Phulbani districts enjoyed the evil distinction of being the sanctuary of deadly malaria, which though not dramatic like cholera or smallpox, is the most decimating of all diseases and is responsible, along with other types of fever, for carrying away more than a lakh of victims every year from the villages of Orissa. It is an insidious enemy, particularly of the rural population, producing anaemia and lethargy and destroying initiative and ambition. It is found in endemic form in the deltaic areas of Balasore, Cuttack and Puri and is hyper endemic in the agency tracts of Ganjam and Koraput and also in a greater part of Angul and Khondmal subdivisions. Other districts, which are not under the ragistration system also suffer but no account is available with regard to them. Rural Balasore and Cuttack, as well as some other parts of the State are also the stronghold of cholera and smallpox, which, far from being eliminated under the modern medical remedies, have not been sufficiently brought under control. Under the circumstances, the imperative need of improvement in Public Health Administration cannot be over-stressed. This is indispensably necessary for the suffering districts at least. Nothing can be more deplorable than the fact that in the villages of Orissa, most people die without ever having been seen by a qualified doctor. With the extension and improvement in Public Health Administration, it will be necessary to instal a reliable index for assessing the progress achieved. The system of collection of vital statistics, particularly in the above mentioned areas, must therefore be reviewed at once and improved.

Economic Outlook

6. Of the rural population, as many as 82 per cent depend for their livelihood upon agriculture, while industrial productions, commerce and transport sustain much smaller number of persons who constitute less than 9 per cent. The remaining 9 per cent have been absorbed in miscellaneous services, including unproductive activities of various categories. The rural population of Orissa is thus very greatly dependent on agriculture. This has resulted, not from the fact that agriculture is a paying proposition for such a vast proportion of population but from the inability of the villager to find alternative means of livelihood. A larger number of men have turned on to the cultivation of a particular piece of land where a much smaller number would do. This is not only a handicap to the efficiency in agriculture, but amounts to a tremendous wastage of human labour and is one of the principal causes of economic backwardness of the State. Diversion of the surplus rural population to industrial activities should therefore have maximum priority in the planning operations.

Rural Uplift

7. The flow of rural population to industrial centres or to towns may drain off surplus population and thus improve the demographic problem of the village, but this is often more than counterbalanced by the fact that such movement takes away the able bodied workers, leaving the children and the old to carry on agriculturural operations and rural

industries. Moreover, the glamour of English education, as introduced by Macaulay in India, draws away to towns those who would have in usual course supplied to the village the initiative, the technique and the imagination required in the uplift of poor and backward village population. Thus the village is left mainly with persons who are physically as well as mentally inferior to the average standard of general population. If the village life is to be resusciated, it is indispensable that men of high calibre having requisite initiative and intelligence should live in the villages and solve rural problems through their life-long association with the rural population. They will be able to introduce modern notions and scientific ways of life in a natural manner. Mere introduction of large scale machineries, as in the West, will not bring intrinsic beauty to village life and therefore will not solve the real problem. This will have to be combined with well chosen projects of community development relating to the rural health, education, agriculture and industries.

Subsidiary Table 2 Series

2·1—Distribution of population between villages

Natural division and district	Population per village	No. per 1,000 of general population in villages	No per 1,000 rural population in villages with a population of			
			5,000 and over	2,000 to 5,000	500 to 2,000	under 500
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA	**290**	**959**	**1**	**43**	**439**	**517**
3·33 Orissa Inland Division ..	**257**	**972**	**2**	**36**	**398**	**564**
5·11 Orissa Coastal Division ..	**346**	**945**	**1**	**50**	**490**	**459**
Cuttack ..	383	946	..	29	537	434
Balasore ..	278	962	..	32	402	566
Puri ..	295	952	4	45	393	558
Sambalpur ..	365	960	10	80	504	406
Ganjam ..	335	930	..	97	535	368
Agency ..	*110*	*1,000*	..	..	*141*	*859*
Plains ..	*442*	*922*	..	*108*	*582*	*310*
Koraput ..	211	957	..	20	305	675
Dhenkanal ..	321	967	..	65	513	422
Keonjhar ..	292	984	..	26	349	625
Phulbani ..	105	988	..	9	119	872
Bolangir ..	348	956	..	28	440	532
Sundargarh ..	329	972	..	23	466	511
Kalahandi ..	288	986	..	41	486	473
Mayurbhanj ..	279	991	..	13	335	652

2·2—Variation and density of rural population

Natural division and district	Percentage increase (+) or decrease (−)			Density 1951
	1941 to 1951	1931 to 1941	1921 to 1931	
(1)	(2)	(3)	(4)	(5)
ORISSA ..	**+ 5·7**	**+10·1**	**+11·9**	**234**
3·33 Orissa Inland Division ..	**+ 7·8**	**+12·7**	**+15·8**	**169**
5·11 Orissa Coastal Division ..	**+ 3·1**	**+ 7·1**	**+ 7·9**	**451**
Cuttack	+ 2·2	+ 4·4	+ 6·0	573
Balasore	− 0·5	+ 4·6	+ 1·2	427
Puri	+ 6·8	+ 8·1	+11·3	372
Sambalpur	+ 7·5	+12·6	+11·5	186
Ganjam	+ 2·7	+12·2	+13·2	321
Agency	*− 5·5*	*+ 2·7*	*+ 5·7*	*113*
Plains	*+ 3·8*	*+13·6*	*+14·4*	*410*
Koraput	+10·9	+18·3	+18·0	123
Dhenkanal	+12·7	+16·7	+23·3	193
Keonjhar	+11·2	+15·0	+21·1	180
Phulbani	+ 1·6	+ 9·1	+ 9·4	105
Bolangir	+ 5·0	+ 7·8	+11·5	259
Sundargarh	+12·8	+12·3	+15·7	142
Kalahandi	+ 8·1	+13·4	+19·1	168
Mayurbhanj	+ 4·4	+10·5	+18·1	254

2·3—Inter-census growth rate

Rural

Natural division and district	Mean population of decade			Mean population of decade for area under registration of births and deaths		
	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA	**13,675,352**	**12,690,435**	**11,438,065**	**7,429,942**	**7,057,147**	**6,375,236**
3·33 Orissa Inland Division ..	**7,465,414**	**6,779,164**	**5,938,819**	**1,793,364**	**1,659,959**	**1,318,279**
5·11 Orissa Coastal Division ..	**6,209,938**	**5,911,271**	**5,499,246**	**5,636,578**	**5,397,188**	**5,056,957**
Cuttack	2,367,098	2,291,752	2,177,977	2,183,595	2,128,181	2,038,096
Balasore	1,067,094	1,046,443	1,016,791	1,007,228	991,391	968,112
Puri	1,449,125	1,348,754	1,230,016	1,091,490	1,029,235	955,272
Sambalpur	1,206,333	1,097,842	979,775	1,003,188	929,372	820,899
Kalahandi	815,276	737,392	635,733	208,175	178,696	..
Ganiam	1,490,510	1,390,610	1,234,116	1,671,961	1,562,587	1,390,202
Ganjam Plains ..	1,326,621	1,224,322	1,074,462	1,354,265	1,248,381	1,095,477
Ganjam Agency ..	163,889	166,288	159,654	111,969	113,227	108,810
Phulbani { Balliguda ..	447,858	425,740	389,686	205,728	200,979	185,914
Phulbani { Khondmals ..				86,161	84,528	78,268
Dhenkanal	766,014	668,649	558,725	178,144	153,157	124,386
Koraput	1,155,330	1,011,085	855,678	..	..	..
Keonjhar	549,941	486,914	413,555	..	..	..
Bolangir	856,432	805,624	735,505	..	..	..
Sundargarh	506,837	449,695	394,740	..	..	..
Mayurbhanj	998,004	929,935	815,768	..	..	..

Natural division and district	Inter-census birth rate (Registered)			Registered deaths during the decade		
	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30
(1)	(17)	(18)	(19)	(20)	(21)	(22)
ORISSA	**28·3**	**36·9**	**38·5**	**1,949,066**	**2,069,927**	**2,030,427**
3·33 Orissa Inland Division ..	**25·1**	**27·4**	**29·5**	**368,510**	**331,527**	**267,262**
5·11 Orissa Coastal Division ..	**29·3**	**39·8**	**40·9**	**1,580,556**	**1,738,400**	**1,763,165**
Cuttack	29·3	36·3	37·0	642,599	678,928	691,005
Balasore	28·3	32·5	32·2	314,869	316,579	337,421
Puri	30·1	37·0	37·1	291,500	305,841	295,340
Sambalpur ..	28·6	32·4	37·3	290,324	267,773	215,195
Kalahandi ..			..			..
Ganjam	25·0	43·1	46·5	345,486	437,052	439,399
Ganjam Plains ..	30·3	..	..	13,933	..	..
Ganjam Agency ..	5·0	..	..	13,933	..	..
Phulbani { Balliguda ..						
Phulbani { Khondmals ..	30·8	40·6	41·2	24,449	63,754	52,067
Dhenkanal	34·6			39,754		
Koraput	..	..	..	..	..	..
Keonjhar	..	..	..	..	..	..
Bolangir	..	..	..	..	..	..
Sundargarh	..	..	..	..	..	..
Mayurbhanj	..	..	..	..	..	..

NOTE.—The notes of Subsidiary Table 1·3 apply to this table also with the substitution of word 'Rural' for 'General'.

during three decades

population

Growth of population during the decade			Inter-census growth rate			Registered births during the decade			Natural division and district
1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(1)
753,047	**1,216,787**	**1,287,953**	**5·5**	**9·6**	**11·3**	**2,104,328**	**2,604,118**	**2,456,134**	**ORISSA**
563,088	**809,412**	**871,276**	**7·5**	**11·9**	**14·7**	**450,755**	**454,995**	**389,213**	**3·33 Orissa Inland Dn.**
189,959	**407,375**	**416,677**	**3·1**	**6·9**	**7·6**	**1,653,573**	**2,149,123**	**2,066,921**	**5·11 Orissa Coastal Dn.**
51,031	99,663	127,886	2·2	4·3	5·9	638,799	773,568	753,083	Cuttack
−5,454	46,752	12,554	−0·5	4·5	1·2	284,629	322 114	311,988	Balasore
95,185	105,558	131,919	6·6	7·8	10·7	328,221	380,527	354 760	Puri
87,266	120,715	106,419	7·2	11·8	10·9	346,741	358,497	305,802	Sambalpur
63,397	92,370	110,948	7·8	12·5	17·5			..	Kalahandi
40,012	159,788	153,200	2·7	11·5	12·4	417,701	672,914	647,090	Ganjam
49,197	155,402	144,318	3·7	12·7	13·4	401,924	..	..	Ganjam Plains
−9,185	4,386	8,882	−5·6	2·6	5·6	15,777	..	..	Ganjam Agency
7,078	37,157	34,953	1·6	8·7	9·0	26,541	96,195	53,411	Phulbani — Balliguda / Khondmals
91,540	103,192	116,656	12·0	15·4	20·9	61,696			Dhenkanal
119,093	169,396	141,417	10·3	16·8	16·5	..	..	..	Koraput
58,316	67,738	78,977	10·6	13·9	19·1	..	..	..	Keonjhar
41,498	60,120	80,118	4·8	7·5	10·9	..	..	..	Bolangir
60,997	52,288	57,621	12·0	11·6	14·6	..	...	..	Sundargarh
43,088	93,050	135,285	4·3	10·0	16·6	..	..	..	Mayurbhanj

Inter-census death rate (Registered)			Decennial rate of natural increase (Registered)			Migration *cum* registration error			Natural division and district
1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(1)
26·2	**29·3**	**31·8**	**2·1**	**7·6**	**6·7**	**3·4**	**2·0**	**4·6**	**ORISSA**
20·5	**20·0**	**20·3**	**4·6**	**7·4**	**9·2**	**2·9**	**4·5**	**5·5**	**3·33 Orissa Inland Dn.**
28·0	**32·2**	**34·9**	**1·3**	**7·6**	**6·0**	**1·8**	**−0·7**	**1·6**	**5·11 Orissa Coastal Dn.**
29·4	31·9	33·9	−0·1	4·4	3·1	2·3	−0·1	2·8	Cuttack
31·3	31·9	34·9	−3·0	0·6	−2·7	2·5	3·9	3·9	Balasore
26·7	29·7	30·9	3·4	7·3	6·2	3·2	0·5	4·5	Puri
24·0	24·2	26·2	4·6	8·2	11·1	2·6	3·6	−0·2	Sambalpur
20·7	28·0	31·6	4·3	15·1	14·9	−1·6	−3·6	..	Kalahandi
24·5	..	..	5·8	..	..	−2·1	..	−2·5	Ganjam
								..	Ganjam Plains
								..	Ganjam Agency
28·4 / 22·3	26·8	25·7	2·4 / 12·3	13·8	15·5	−0·8 / −0·3	1·6	5·4	Phulbani — Balliguda / Khondmals
									Dhenkanal
..	..	..	..	..	..	..	..	..	Koraput
..	..	..	..	..	..	..	..	..	Keonjhar
..	..	..	..	..	..	..	..	..	Bolangir
..	..	..	..	..	..	..	..	..	Sundargarh
..	..	..	..	..	..	..	..	..	Mayurbhanj

2·4—Livelihood pattern of rural population

Natural division and district	Per 10,000 rural population belonging to livelihood class							
	I	II	III	IV	V	VI	VII	VIII
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA	**6,172**	**613**	**1,275**	**145**	**603**	**229**	**32**	**931**
3·33 Orissa Inland Division ..	**6,617**	**420**	**1,345**	**72**	**572**	**155**	**16**	**803**
5·11 Orissa Coastal Division ..	**5,625**	**850**	**1,190**	**235**	**641**	**320**	**50**	**1,089**
Cuttack ..	5,724	694	1,116	320	613	271	57	1,205
Balasore ..	6,947	828	871	157	325	132	40	700
Puri ..	5,509	1,146	1,406	165	714	321	49	690
Sambalpur ..	6,190	446	1,473	77	884	129	24	777
Ganjam ..	4,805	763	1,243	217	796	561	43	1,572
Agency ..	*7,088*	*321*	*492*	*166*	*248*	*618*	*1*	*1,066*
Plains ..	*4,536*	*815*	*1,332*	*224*	*860*	*554*	*48*	*1,631*
Koraput ..	6,184	707	1,076	58	416	177	11	1,371
Dhenkanal ..	6,912	227	1,192	207	702	142	24	594
Keonjhar ..	7,760	231	993	80	388	73	8	467
Phulbani ..	6,427	333	1,179	31	713	368	9	940
Bolangir ..	6,355	338	1,843	29	639	118	9	669
Sundargarh ..	7,655	275	878	25	454	121	35	557
Kalahandi ..	5,984	565	1,949	36	446	165	10	845
Mayurbhanj ..	6,980	384	1,355	66	475	91	20	623

2·5—Immigration into rural areas

Natural division and district	Total rural population	Born in							
		District of enumeration		Other districts of the State		Other parts of India		Beyond India	
		Actual	Percentage	Actual	Percentage	Actual	Percentage	Actual	Percentage
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA ..	**14,051,876**	**13,627,295**	**97·0**	**282,719**	**2·0**	**121,359**	**0·9**	**20,503**	**0·2**
3·33 Orissa Inland Dn.	**7,746,958**	**7,463,662**	**96·3**	**175,051**	**2·3**	**96,031**	**1·2**	**12,214**	**0·2**
5·11 Orissa Coastal Dn.	**6,304,918**	**6,163,633**	**97·8**	**107,668**	**1·7**	**25,328**	**0·4**	**8,289**	**0·1**
Cuttack ..	2,392,614	2,331,877	97·5	49,932	2·1	6,512	0·3	4,293	0·2
Balasore ..	1,064,366	1,019,960	95·8	25,283	2·4	16,728	1·6	2,395	0·2
Puri ..	1,496,718	1,469,614	78·2	24,915	1·7	644	0·0	1,545	0·1
Sambalpur ..	1,249,966	1,179,965	94·4	42,949	3·4	25,669	2·1	1,383	0·1
Ganjam ..	1,510,516	1,500,517	99·3	8,454	0·6	1,479	0·1	66	0·0
Agency ..	*159,296*	*158,335*	*99·4*	*916*	*0·6*	*35*	*0·0*	*10*	*0·0*
Plains	*1,351,220*	*1,342,182*	*99·3*	*7,538*	*0·6*	*1,444*	*0·1*	*56*	*0·0*
Koraput ..	1,214,876	1,199,281	98·7	7,948	0·7	7,539	0·6	108	0·0
Dhenkanal ..	811,785	785,523	96·8	21,737	2·7	4,278	0·5	247	0·0
Keonjhar ..	579,098	543,069	93·8	16,238	2·8	19,045	3·3	746	0·1
Phulbani ..	451,397	425,452	94·3	25,335	5·6	557	0·1	53	0·0
Balangir ..	877,182	858,695	97·9	17,487	2·0	886	0·1	114	0·0
Sundargarh ..	536,836	506,369	94·3	12,772	2·4	16,976	3·2	719	0·1
Kalahandi ..	846,974	826,632	97·6	14,316	1·7	5,347	0·6	679	0·1
Mayurbhanj ..	1,019,518	980,341	96·2	15,353	1·5	15,699	1·5	8,155	0·8

CHAPTER III
Urban Population

SECTION I

Preliminary Remarks

1. Urban development is a good index of past economic progress of the country. It also gives a vision of the future advancement in various fields. Specialisation and talent necessary for national progress attain their maximum growth in towns and cities. Changes in social customs and initiative in cultural spheres also originate in urban areas. A study of urban conditions and population is therefore necessary for assessing the past progress and future development of the country.

Emergence of Towns

2. Urbanisation in Orissa is a slow process although now it is tending to proceed at a faster pace than before. Development of towns in Orissa has resulted not so much from industrial or commercial activities but from political or religious necessities. In the past the establishment of headquarters of rulers and chiefs who were not small in number in Orissa, led to the development of populous localities and served as nucleus for ultimate growth into towns in many cases. Some towns however rose on account of religious importance attached to the localities, where temples were built and pilgrimage made. Occasionally however strategic importance of a place was the decisive factor in selection of the site as political or military headquarters. It is only during the recent years that some tendency is noticeable for development of towns on account of industrial or commercial activities. But generally the towns of Orissa have grown as a result of non-economic factors. After such towns came into existence, small scale industries and commerce followed and ultimately gave them a greater non-agricultural character which is the most important test of an urban area.

Rural Tinge

3. The gulf of difference in popular characteristics and conditions generally observable elsewhere between the populations of towns and villages is to be found existing in Orissa, but only to a small extent. The contrast between urban and rural life has not yet become very sharp. Many of the towns of Orissa are small ones. In agricultural character, in relative degree of literacy and sex ratio, in housing conditions, density and in age structure these small towns display little difference from large sized populous villages of Orissa. There is plenty of rural tinge in the way of life followed by the people residing in these small towns. It is a common sight, for example, to see herds of cattle passing through the streets of these towns at dusk and dawn, which is a typical village scene. Urban characteristics have developed only to a limited extent, but are progressing steadily and at least a few towns have attained a degree of urbanization which compares favourably with other parts of India.

Causes of Slow Urbanisation

4. In most of the States of India the drift towards urbanization is proceeding faster than in Orissa. The movement has been small and slow in this State. The primary inducement for a villager to migrate to a town comes from economic consideration. The number of persons who are attracted to towns

purely from non-economic reasons, such as, social or cultural advantages is negligible. Towns have wider field for different classes of persons to eke out subsistence and therefore attract the landless or the surplus village population. There is thus a flow of population to the urban areas, comprising mainly of those who are in search of livelihood. But in fact, barring the exceptional cases of 2 or 3 towns, there are none in Orissa which have anything of attractive life so as to induce a considerable number of rural population to come and settle there. On the other hand, all these towns have disadvantages which are the characteristics of general urban life. Housing accommodation is short, food dear and working conditions hard, as compared with those in villages. These conditions discourage permanent shift to the towns. For those who have the necessity to move into towns temporarily there are disadvantages of other types. Family members, particularly, women and children, have to be left at home. This is the reason why the temporary migrant to the town has his attachment and feelings centred round his home in the village and finds little attraction in the town life. He desires to get back as early as the principal purpose of sojourn is satisfied. Such migrants are generally industrial workers. In Orissa, the number of temporary migrants is small as there are but a few industrial towns. Thus neither permanent settlers nor temporary migrants are moving in large number from villages to towns. Urban development has therefore been slow.

Increasing Tendency

5. In recent times, the migrant to the town is increasingly becoming reluctant to return to villages. Once a person has been in a town for some length of time, he is looking for passing the rest of his life there. Recreations and diversions of the towns are gradually changing the conventional ideas of permanent home. He gets accustomed to purchase his necessities from .the daily bazaars in the towns rather than wait for the weekly or bi-weekly markets dealing with a limited number of commodities. The gradual spread of electricity and motion pictures in towns are features to captivate his choice of permanent residence. Higher education is also available in towns. In fact, he is slowly but effectively developing urban tastes and finds it difficult to adjust himself to the lack of amenities in old fashioned villages. There is evidence of a tendency for families rather than single individuals to move and settle in the towns permanently.

Definition of Town

6. The definition of a town as adopted in the present census does not differ materially from that of the past. A town is a continuous group of houses inhabited by usually not less than 5,000 persons, which having regard to the character of the population, the relative density of dwellings, the importance of the place as a centre of trade and historic associations, the Superintendent of Census Operations decides to treat it as a town for census purposes. The distinction between 'town' and 'village' is not free from difficulties. The great majority of the rural areas is indeed rural in the most unqualified sense, but the urban character of some of the towns is not above suspicion and in some cases it is hard to decide whether a particular collection of houses should be more correctly treated as an overgrown village or a small town. The chief criterion, however, is the character of the population indicating whether the majority of residents are non-agricultural or non-pastoral by occupation. There must also be the existence of distinct urban characteristics, such as, facilities for higher education, public utility services, local body administration and urban diversions and recreations.

It is difficult to condense into a working formula the attributes of a town, and in spite of all the care to secure a consistent application of the definition, the conferment of the urban status may at times be liable to be affected either by wrong exclusion or by wrong inclusion.

CITY

7. A city is a town in the above sense, with a population ordinarily not less than 100,000.

REFERENCE TO STATISTICS

8. In spite of the difficulty in drawing a line of distinction between towns and villages, the figures in the Tables are a close representation of effective urban-rural distribution. Statistics of the population of towns may be seen in the following tables appearing in Part II-A of this Report.

(*i*) Table A-III—Towns and villages classified by population.

(*ii*) Table A-IV—Towns classified by population with variation since 1901.

(*iii*) Table A-V—Towns arranged territorially with population by livelihood classes.

9. These tables give a statistical picture of the growth of towns in Orissa and of the broad economic classification of the population in each town. The area, density, population and percentage variation, etc., of each town may be seen in Table E. The statistics relating to economic classification in detail and relating to household and age structures which are known as B and C series tables also give the relevant statistics relating to urban areas.

10. Besides the above, a set of eight subsidiary tables appear at the end of this Chapter. They are—

Subsidiary Table—

3·1—Distribution of population between towns.

3·2—Variation and density of urban population.

3·3—Inter-census growth rate during three decades (urban population).

3·4—Towns classified by population.

3·5—Cities—Chief figures.

3·6—Number per 1,000 of the general population and of each livelihood class in towns.

3·7—Livelihood pattern of urban population.

3·8—Immigration into urban areas.

SECTION II

General distribution and distribution among Towns classified by size of Urban Population

1. The total urban population of Orissa is 594,070 living in 39 towns, one of which is a city. The average population per town comes to 15,233.

Percentage of Urban Population

2. The rural-urban proportion in the general population of Orissa has been examined in Section II of the last Chapter (Rural population) and it need not be repeated here. It may however be briefly stated that the urban population constitutes 4·1 per cent of the general population of the State and that this percentage is one of the lowest as compared with that of other States in India. The percentage of urban population is as high as 31·1 in Bombay, 24·8 in West Bengal, 19·6 in Madras and 19·0 in Punjab. Among the States with low percentage are Assam with 4·6, Bihar with 6·7 and Madhya Pradesh with 13·5. The percentage of urban population in England and Wales was 77·3 as early as 1930, and it must have been higher now. Among advanced countries, Russia only has a low proportion of urban population which stood at 32·2 in 1939, but the figure must have been considerably higher in the meanwhile.

Urban Density

3. Towns vary widely in the amount of vacant land included in their boundaries. Because of this reason and also because they have grown in a haphazard manner, their densities cannot be compared in a consistent manner. On account of these vagaries the density of some of the towns which are known to be small and not over-crowded appears high, while the density of some others which are definitely overgrown, congested and large stands at a low level. A reference to Subsidiary Table 3·2 shows, for example, that the density of the urban area in Ganjam district is much higher than that of Cuttack. According to these figures, Ganjam district has the highest urban density standing at 6,354 per square mile. Cuttack comes next with 3,761. The lowest urban density occurs in Bolangir with 1,698 persons to a square mile followed by Phulbani with 1,815, Sambalpur with 1,904, Keonjhar with 2,290 and Sundargarh with 2,364. Other districts of the State are in between these high and low density figures.

Urban Density in Other States

4. The average density of population of the urban areas of Orissa is 3,087 persons to a square mile. Other States that have furnished information by the time this Report is written, show higher density as mentioned below :—

Name of State	Density per square mile of the urban area
Orissa ..	3,087
Travancore-Cochin ..	4,991
Madhya Bharat ..	13,700
West Bengal ..	13,632
Madras ..	3,855
Uttar Pradesh ..	5,943
Madhya Pradesh ..	7,394

The difference in the urban density is considerable between one State and another. This is due to the fact that the States have not adopted any uniform principle in the fixation of limits of urban areas. Sometimes the area is too small for the population or the number of houses contained therein and sometimes it is too extensive and contains paddy lands and stretches of

pastures and unoccupied lands. This has resulted in widely different rates of density in respect of different States. Madhya Pradesh, for example, which is highly rural in character, is seen to have much denser population in the urban area than either Uttar Pradesh or Madras. Madhya Bharat presents a case which cannot be explained without presuming that the State is niggardly in allowing extension of urban limits for the over-growing population of its towns. Too much literal significance should not therefore be attached to the above figures.

Towns with Highest Density

5. The reasons given in the paragraph above regarding the wide variation of urban density in different States in India also explain why different towns within a particular State show sharp difference in density. A list of 10 towns of the State having the highest density of population per square mile is given below.

Sl. No.	Town	Population	Density
1	Bhuban ..	7,915	26,383
2	Parlakimedi ..	22,270	16,375
3	Puri ..	49,057	7,544
4	Berhampur ..	62,343	7,232
5	Sambalpur ..	23,525	5,881
6	Dhenkanal ..	10,352	5,816
7	Chatrapur ..	7,746	4,611
8	Cuttack ..	102,505	4,478
9	Machkund ..	8,591	3,835
10	Birmitrapur ..	9,408	3,763

The figures show some queer features, namely that an obscure and little class V town, namely Bhuban, in district Dhenkanal, has the highest density in the State, exceeding 26,000 persons to a square mile, although the total population of the town is less than 8,000. The town is exceedingly small in extent, being a third of a square mile, and when the population is worked out to one square mile, it yields a high density, exceeding that of Bombay. The second highest density is displayed by a class III town, Parlakimedi, showing over 16,000 per square mile, although the total population of the town is about 22,000. The city of Cuttack occurs 8th in the list with a density of 4,478. This is a poor index of population density for a city. In order to illustrate the congestion or over-crowding in cities, the density of population of a few important Indian cities as revealed by the census of 1951 is given below.

City	Density
Calcutta ..	78,858
Bombay ..	25,579
Madras ..	28,899
Delhi ..	18,568
Nagpur ..	54,768
Kanpur ..	36,577
Lucknow ..	24,706
Patna ..	12,885
Jamshedpur ..	7,655

Classification of Towns

6. Towns have been classified according to population under six classes as follows :—

Class I ..	100,000 and over
Class II ..	50,000 to 100,000
Class III ..	20,000 to 50,000
Class IV ..	10,000 to 20,000
Class V ..	5,000 to 10,000
Class VI ..	Less than 5,000

7. Out of 39 towns in Orissa, there is only one belonging to class I, which is more appropriately known as a city. This is the city of Cuttack which contains 102,505 inhabitants. There is also one class II town, namely Berhampur in district Ganjam, having a population of 62,343 in the present census. Class III towns each having a population between 20,000 to 50,000 number 5, namely, Puri, Sambalpur, Balasore, Parlakimedi and Jeypore. Puri is the largest of class III towns with

a population of 49,057. It is short of about 1,000 population for being ranked higher in class II. Sambalpur, with a great future, is the next important town in this class. There are 8 class IV towns, namely, those that have a population between 10,000 to 20,000. Such towns are Bhadrak, Bhubaneswar, Bolangir, Jharsuguda Kendrapara, Bhawanipatna, Jajpur and Dhenkanal. The biggest town in the class is Bhadrak with a population of 18,795 and the smallest is Dhenkanal containing 10,352 persons. Class V among all the classes has the largest number of towns. These towns have each a population of 5,000 to 10,000 and their number in the State is 23, namely, Khurda Road, Birmitrapur, Rayaghada, Keonjhargarh, Baripada, Bargarh, Talcher, Gunupur, Machkund, Russelkonda, Bhuban, Chatrapur, Kantabanji, Sonepur, Nowrangpur, Surada, Aska, Titlagarh, Sundargarh, Patnagarh, Athgarh, Deogarh and Baudhgarh. Khurda Road is the biggest of these towns with a population of 9,975. Important towns in this class are Baripada, the headquarters of Mayurbhanj district and Machkund which has a future on account of hydro-electric scheme which is under construction there. In class VI, that is towns with a population of less than 5,000, there is only one town, namely, Banki in district Cuttack which has a population of 4,956.

Extent of Urbanization

8. Subsidiary Table 3·1 gives the proportionate number of persons living in towns per 1,000 of the general population of the district. It appears that Ganjam is the most urbanized district in the State where 70 persons per 1,000 of the general population live in towns. In Cuttack, 54 out of 1,000 of the general population live in urban areas. The corresponding figures for other important districts are Puri 48, Bolangir 44, Koraput 43 and Sambalpur 40. The least urbanized population appears to be living in Mayurbhanj where only 9 persons out of 1,000 of the general population live in towns. In Phulbani the number is 12, in Kalahandi it is 14 and in Keonjhar 16. Other districts are in between these groups of high and low urbanized population.

9. On examination of proportion between the inland and the coastal divisions, it is seen that out of 100 persons living in urban areas of Orissa, 38 live in towns of the inland division, namely 7 in Class III, 23 in Class V and 8 in Class IV towns while 62 live in towns of the coastal division, namely, 17 in Class I, 10 in Class II, 16 in Class III, 10 in Class IV, 8 in Class V and 1 in Class VI towns. The distribution of population is more varied in the towns of the coastal division.

Distribution among Towns Classified by Size of Population

10. Districts where a large percentage of the urban population reside in towns having a population of 20,000 and over are Cuttack, Ganjam, Puri, Balasore, Sambalpur and Koraput. These are the districts where there are towns of class III or of higher classes. In the district of Cuttack, out of 1,000 urban population, as many as 750 reside in large sized towns with population exceeding 20,000. But there is only one town of such description in the district, namely Cuttack city. All other towns of the district have population below 20,000 each. Thus, Cuttack city alone contains 75 per cent of the total urban population of the district. The percentage of inhabitants of such towns (20,000 or above) to the total urban population of the district is 74 for Ganjam, 64·9 for Puri, 54·9 for Balasore, 45·4 for Sambalpur and 37·2 for Koraput. Among the districts where there are a substantial population living in towns of 10,000 to 20,000 size are Kalahandi, Balasore, Dhenkanal, Bolangir, Sambalpur, Puri

and Cuttack. The entire urban population of district of Kalahandi live in towns of this size. In fact, the district has only one town and it comes within this size of population and therefore shows 100 per cent within the size. Other districts have lesser percentage of total urban population, living in towns of this size, viz., Balasore 45·1 per cent, Dhenkanal 37·7, Bolangir 33·5, Sambalpur 25·9, Puri 21·9 and Cuttack 17·1 per cent. As regards the towns of the next size, namely with population between 5,000 and 10,000, two districts, namely, Balasore and Kalahandi have none in the category. Four districts, namely, Mayurbhanj, Sundargarh, Phulbani and Keonjhar each have 100 per cent of their urban population living in such small-sized towns. The remaining districts have a smaller percentage. The last size is the town with less than 5,000 population. There is only one such town in the State, which is located in district Cuttack and comprises only 3·6 per cent of the total urban population of the district.

Distribution in Natural Divisions

11. As stated above, the inland division has got a larger number of towns, namely 23 than the coastal division which has 16 towns only. But the urban population of the coastal division is larger than that of the inland division. The 16 towns of the coastal division contain a population of 368,133 while the 23 towns of the inland division have a population of 225,937 only. The average number of persons per town in the coastal division is 23,008 and in the inland division 9,823. In the coastal division, 55 persons out of 1,000 of the general population live in towns while in the inland division only 28 persons do so. The distribution of population between the towns of different sizes shows that out of the total urban population of the district, a greater proportion in the coastal division and a lower proportion in the inland division live in large-sized towns. In the inland division, a large proportion, namely 588 out of 1,000, or in other words more than half the total urban population live in class V towns, but in the coastal division this proportion is confined to 124 only. The coastal division has thus more populous towns than the inland division although the latter has got a larger number of towns than the former. The only class I and class II towns of the State, namely Cuttack and Berhampur respectively, are situated in the coastal division. Out of 5 towns of class III, 3 namely, Puri, Balasore and Parlakimedi are situated in the coastal division and only two, namely Sambalpur and Jeypore, are within the inland division. Out of class IV towns numbering 8 in Orissa, 4 are in the coastal division and the other 4 in the inland division. But among class V towns which are 23 in number in the State, as many as 17 are in the inland division while the small number of 6 are to be found in the coastal division. There is thus a high preponderance of large towns in the coastal division and of small towns in the inland division.

Distribution of Sex

12. The proportion of males to females is apt to be greater in towns than in villages. This is what might be expected because the industrial, commercial and professional interests which draw wage-earners from their families are generally concentrated in towns. Immigration to these towns brings males to a considerable extent. This is why the proportion of males is higher in the urban population. Out of the urban population of Orissa numbering 594,070, there are 315,876 males and 278,194 females, constituting 2·2 and 1·9 per cent respectively of the total population of Orissa. The male preponderance is maintained in the two natural divisions separately, there being 118,874 males to 107,063 females in the inland division and 197,002

males to 171,131 females in the coastal division urban areas. In the towns of all districts except in a few towns of Dhenkanal, Bolangir and Ganjam, males numerically preponderate over females. In Dhenkanal and Bolangir, the males are larger in number than females so far as the total urban population of the district is concerned, but in a few individual towns of these districts, namely, in Bhuban, Sonepur and Patnagarh, females are slightly higher in number than males. It is only in Ganjam that the females are more in number than the males in the total urban population of the district. Taking towns individually, 4 out of 6 towns of Ganjam, namely, Parlakimedi, Russelkonda, Surada and Aska have a preponderance of females while the remaining two, namely, Berhampur and Chatrapur, have an excess of male population, though by a small margin.

13. Masculinity of the urban population has been increasing in Orissa from decade to decade. A reference to the Subsidiary Table 6·4 is interesting as it shows the decline of feminine ratio in the population of towns in different years. Out of 1,000 males in the urban population of Orissa, the number of females stood at 963 in 1921, 930 in 1931, 918 in 1941 and finally 881 in 1951. This means that masculine proportion correspondingly grew during these years and the trend of growth has remained steady.

SECTION III

Growth

1. With the growth of general population, the population of urban areas has also been growing. But the trend in the growth rate of general or rural population stands in contrast with the trend shown by the urban population. The discussions in previous Chapters show that in spite of growth in numbers, the rate of growth of the general as well as of the rural population has been declining particularly since 1921, but with regard to the urban population, growth is perceptible not only in numbers but also in the rate. The growth has been steady but slow during the last 50 years.

Slow Rate

2. Both as regards the percentage of urban population and its rate of growth, Orissa offers a poor comparison with the urban population of other States in India. During the last decade the urban population grew by 26·6 per cent in Orissa while in Madras, the growth rate is 38·7, in Bihar 38·3, in Madhya Pradesh 29·7 and in Travancore-Cochin 55·7. In the decade 1931-41 also, the towns of Orissa experienced a small rate of growth, namely 14·7 as against 25·6 in Madras, 34·2 in Bihar, 26·4 in Madhya Pradesh and 26·5 in Travancore-Cochin. This is a definite evidence of the slow urbanization process in Orissa.

Special Feature

3. There is a special feature in considering the growth of urban population. The number of towns have varied from census to census. Some localities, treated as rural in one census, have been given urban status in subsequent censuses. On the other hand, towns recognised in one census have been taken into the category of villages in the next, on the ground that they no longer possessed chief urban characteristics. It is therefore necessary to consider the growth of towns in two different ways. At the outset, the growth in the number and population of towns as they actually stood at various censuses will be examined and thereafter the growth in different decades by computation of figures on the basis of towns existing in 1951 will be discussed.

Growth during last 50 Years

4. For making a review of the growth of urban population, it may be sufficient to start from the year 1901 which will give a study for the last half a century. Moreover, it is not necessary to go back to older periods as the criterion adopted for distinguishing an urban from a rural area was vague prior to the year 1901. The conception of a census town as accepted since that year has been retained with little modification till now. The real growth or decline in the urban population is therefore more accurately discernible from the year 1901. The following statement gives the increase in the population and number of towns and also shows the percentage to the total population of the territory now covered by the State of Orissa.

Year	No. of towns	Population	Percentage
1901	14	254,684	2·47
1911	18	275,159	2·42
1921	20	281,498	2·52
1931	21	317,254	2·54
1941	29	412,528	3·00
1951	39	594,070	4·06

5. During the last 50 years, the number of towns has increased from 14 to 39 within the territory now covered by Orissa and the population has grown from 254,684 to 594,070 which amounts to an increase of 133·3 per cent.

6. The mere mention of the growth in number of towns from 14 to 39 as stated above is not sufficiently indicative of their real growth. Apart from the growth in number there has been improvement in the classification of towns. In other words, on account of growth of population of individual towns, some have been promoted to higher classes. According to the present classification, Cuttack was a class II town in 1941 but has become a city, or in other words, a class I town on the present occasion. Similarly, Berhampur has arisen from class III to class II and Sambalpur, Balasore and Jeypore have risen from class IV to class III during the last decade. In 1901, there was one class VI town, four class V towns, five class IV towns, three class III towns and one class II town. In 1951, the number of towns of higher classes has increased. There is now one class VI town, 23 class V towns, 8 class IV towns, 5 class III towns and one under each of the classes II and I towns.

7. The account given above, relates to the number of towns and the population thereof as they were actually recorded in previous censuses. No adjustment has been made on the basis of the number of towns existing at present. In order to obtain a comparable basis, figures have been computed and exhibited in Table A-IV, published in Part II-A of this Report, which shows what should have been the population if all the 39 localities treated as towns in 1951 census were so treated in all the previous censuses. In other words, the actual population as recorded in different censuses of all the 39 localities now treated as towns has been shown in the Table mentioned above. According to this estimate, the population of urban areas of Orissa has grown from 280,882 in 1901 to 594,070 in 1951, a gain of 313,188 in 50 years. This amounts to an increase of 111·5 per cent as against 133·3 per cent shown in paragraph 5 above calculated on the basis of unadjusted number of towns.

8. Subsidiary Table 3·2 gives the variation of urban population from 1921 onwards. It appears that the percentage increase of the urban population of Orissa between 1921-31 was 12·2 which increased to 14·7 in 1931-41 and to 26·6 in 1941-51. The increase of urban population has thus been high during the last decade. In fact the rate has been much faster than the rate of growth of the general population or of the rural population. The following statement gives the decennial rate of increase of the general, rural and urban population.

Year	General population	Rural population	Urban population
1941-51	+ 6·4	+ 5·7	+26·6
1931-41	+10·2	+10·1	+14·7
1921-31	+11·9	+11·9	+12·2

NATURAL DIVISIONS

9. The growth of urban population during the last 50 years has been higher in the inland division than in the coastal, mainly because of the greater increase in the number of towns in the inland division during this period. In 1901, the population of urban areas of the inland division stood at the humble figure of 50,856. But in 1951, it increased to 225,937, making an increase of 175,081 or 344·3 per cent. In the coastal division, the population of the urban areas was 230,026 in 1901 which increased to 368,133 in 1951, an increase of 138,107 in 50 years which amounts to 60·0 per cent. Though there is a sharp difference over a period of 50 years, the percentage increase of urban population in both the divisions during the last decade (1941-50) is practically the same, namely, 26·6 in the inland division and 26·7 in the coastal division. But in the previous two decades the percentage increase of the coastal division was very much smaller than that of the inland division. Between 1921 and 1931, the increase wa

16·9 per cent and between 1931-41 it rose to 23·5 per cent in the inland division. But the increase was so low as 9·8 and 9·9 per cent respectively in the coastal division during the two previous decades.

DISTRICTS

10. During 1941-51, the population of urban areas of all the districts has increased except in Phulbani where there has been a decrease to the extent of 4·2 per cent. Among districts which have shown poor rate of increase are Sundargarh with 3·3 per cent, Keonjhar with 3·8 and Balasore with 6·9 per cent. As against these poorly growing districts, there are others that have made remarkable gains in the percentage increase of urban population. Notable among such districts are Koraput which has gained during the decade by 70·4 per cent, Puri by 39·0, Sambalpur by 30·0 and Cuttack by 27·5. This is not only due to the increase in the population of old towns of these districts but also on account of inclusion of new towns.

REVISION OF LIST OF TOWNS

11. In 1941, Orissa had 29 towns including one, namely, Binka in Sonepur subdivision. This locality was declared as a town first in the census of 1911 when it had a population of 4,130. Its population in 1921 was reduced to 3,597 and in 1951 to 3,151. Not only on account of gradual decline in population but also on account of loss of urban characteristics, Binka was removed from the list of towns in 1951. To the 28 other towns of 1941 were added 11 new ones in the present census, namely, Athgarh and Banki in Cuttack district, Bhubaneswar and Khurda Road in Puri district, Rayaghada, Machkund and Nowrangpur in Koraput district, Kantabanji and Patnagarh in Bolangir district and finally Sundargarh and Birmitrapur in Sundargarh district. The aggregate population of these new towns is 91,620.

FUTURE TOWNS

12. A number of localities which have been treated as rural areas in the present census are likely to develop industrial and commercial activities in the coming years. The population is also increasing perceptibly. The inhabitants of these localities are gradually taking to urban way of life and by the time the census of 1961 comes, the case of the following localities will deserve consideration for declaration as towns. The localities are Choudwar, Jagatsingpur and Salepur in district Cuttack, Jaleswar and Soro in district Balasore, Khurda and Nayagarh in district Puri, Hirakud, Burla, Barpali and Padampur in district Sambalpur, Boirani and Rambha in district Ganjam, Koraput and Kotpad in district Koraput, Angul in district Dhenkanal, Phulbani in district Phulbani, Rajgangpur in district Sundargarh and Khariar Road in district Kalahandi.

Growth of City : Cuttack

13. Cuttack, the only city of Orissa, first sprang into importance in the 10th century A.D. An interesting account regarding the origin of this town is given by Rajendralala Mitra.*

According to the Temple Annals, Nripa Kesari, anxious to immortalize himself by founding a new capital, selected Bidanasi at the point where the Mahanadi throws out the Katjuri to the west of the present town of Cuttack, as strategically the most secure and having the advantage of two navigable rivers for commercial purposes. The site did not however prove the most convenient. It was subject to inundations from the two rivers; and his son Makara Kesari (955-961 A. D.) found it necessary to protect the new capital

* Antiquities of Orissa, Vol. II, p. 163 by Rajendralala Mitra.

by an extensive revetment along the left bank of the Katjuri. The evil was not, however, entirely overcome, and Madhava Kesari, the grandson of the last, was obliged to fly from the capital and establish a new metropolis on the other side of the Katjuri, away from the river bank. This he named Sarangad. A few reigns after, when Anangabhima was once cruising in the Mahanadi, he saw in the village of Chauduar, a common crane (Vaka) sitting over a large hawk (Syamala) which it had killed. He took this to be a sign of the special goodness of the place, and established his metropolis there.....The present town is due to the Musulmans, who settled to the west of the old town, which was gradually forsaken, particularly as the Katjuri threw up a large sand bank in front of the town, and rendered access to it by the river difficult.....The antiquities of the old town have all disappeared under the ravages of time, and little can be said of them. The only masonry work of note now existing is the revetment on the bank of Katjuri. The only other work which had come down to the 19th century was the fort of Barabati, which protected the old city from the land side. This was broken down by the English to supply materials partly for the erection of the False Point Light House, and partly for metal for paving of the city roads.

14. The construction of the fort of Barabati is assigned to various monarchs. Stirling is of opinion that it was built by Raja Anangabhima Deo in the 14th century. In the Purnachandra Bhashakosha * mention is made of the construction of the stone embankment on the bank of the Kathjuri by Marakata Kesari and of the Barabati fort by Anangabhima Deva. The Ain-i-Akbari, a reliable contemporary historical record gives a detailed account of the royal palace at Cuttack having nine extensive court yards, which was built by Mukunda Deva in the middle of the 16th century.

15. Cuttack continued to be the headquarters of different Hindu dynasties who ruled over the country till the last independent King of Orissa, Mukunda Deva, was defeated in 1568. Khan Jahan Lodi who was appointed as the first Governor of Orissa by the Agfhan Sultan of Bengál also selected Cuttack as his capital. Within a few years, namely in 1575, Cuttack passed under the suzerainty of the Moghuls of Delhi, during the reign of Emperor Akbar. Cuttack was then governed as a part of the Suba of Bengal, till in 1751 Alivardi Khan, Nawab of Bengal ceded Orissa to the Marhattas. The Marhatta Governors established their headquarters at Cuttack and ruled over Orissa for about half a century. On the 8th October 1803, Col. Harcourt of the East India Company led on expedition, and crossing the river Kathjuri, entered into the town by way of Lalbagh. Col. Harcourt and Mr. Melvill then became the first 'Commissioners for settling the affairs of Cuttack'. For many years after the first occupation by the British, Cuttack gave its name to the whole province, till the three districts of Balasore, Cuttack and Puri were created.

16. The city stands at the apex of the delta formed by Mahanadi and Kathjuri rivers and is protected from inundation by solidly built stone embankment. It is the railway junction between Calcutta-Madras and the Talcher-Cuttack lines and many principal inter-district roads converge on it. The national highway between Calcutta and Madras which has partly been laid passed through Cuttack. The city is however curiously devoid of large public buildings or ancient temples of interest. It has a steadily increasing trade, and imports large quantities of piece goods, cotton twist, kerosene, salt, sugar, spices and other miscellaneous articles. The principal exports are rice, hide, timber, brassware, stone vessels and grains of various kinds. Besides having special reputation for attractive filigree work in silver and gold and workmanship in horns and ivory, it is the home of many cottage industries. At close distance from the city are a

* Purnachandra Oriya Bhashakosha, Vol. II, page 1,234 by G. C. Praharaj

glass factory, a textile mill and an electric power-generating station with promise of several industries springing up in the coming years. Cuttack is still continuing to be the headquarters of the State Government, in spite of transfer of a few departments and offices to Bhubaneswar, and is the seat of the Utkal University, the High Court and the Central Rice Research Station.

17. The population of Cuttack town is available from census records from the year 1872. Prior to that there were estimates, one of which shows that the town had a population of 40,000 in 1825 and 46,436 in 1869. It appears that these figures were too liberal, for the population in 1869, that is to say two years after the decimating famine of 1866-67, could not have been higher than the recorded population of 1872. The population as recorded by different censuses from 1872 is shown below. Starting with a population of 42,667 in 1872 the town grew slowly to the level of 52,528 in 1911, making a gain of 9,861 in 39 years. The population however declined by the census of 1921 on account of the influenza and other epidemics so that the population was less than what it was 20 years before. The town, however, made a good progress in the next 10 years and contained 65,263 souls in 1931. The growth of population between 1921 and 1931 was nearly 28 per cent. Between 1931 and 1941, the status of the town was changed from the headquarters of an administrative division in the Governorship of Bihar and Orissa to that of a full-fledged province. It was expected that between 1931 and 1941 the population should have grown faster but on account of extreme congestion and limited scope of expansion, the increase was moderate, namely, 9,028 in 10 years. The population of the town in 1941 was 74,291 which is an increase of 13·8 per cent over the population of 1931. Between 1941 and 1951, the growth has however been satisfactory, although a part of the increase was the consequence of extension of the municipal limits. The population has increased by 28,214 or by 38 per cent. The population of Cuttack in 1951 exceeded the level of 100,000 and it was declared as the first and only city of Orissa.

Year	Population
1872	42,667
1881	42,656
1891	47,186
1901	51,364
1911	52,528
1921	51,907
1931	65,263
1941	74,291
1951	102,505

COMPARISON WITH OTHER INDIAN CITIES

18. Cuttack has been declared a city on the result of the 1951 census. It is therefore one of the youngest cities of India. It is also one of the smallest in India as its population which is 102,505 is just a little above the minimum limit of qualification of a city. The result of 1951 census recognises 75 cities in India most of which are by far larger than the new city of Cuttack. A list of 12 largest cities of India in order of their population is given below :—

Sl. No.	City		Population
1	Bombay	..	2,839,270
2	Calcutta	..	2,548,677
3	Madras	..	1,416,056
4	Hyderabad	..	1,085,722
5	Delhi	..	914,790
6	Ahmedabad	..	788,333
7	Bangalore	..	778,977
8	Kanpur	..	705,383
9	Lucknow	..	496,861
10	Poona	..	480,982
11	Nagpur	..	449,099
12	Howrah	..	433,630

Growth of important Towns

BERHAMPUR

19. Of all towns in Orissa, Berhampur seems to have gained most by growth of population during the last 50 years. It had a population of 25,729 in 1901 which increased to 62,343 in 1951, an increase of 36,614 which amounts to over 142 per cent. The maximum growth took place in the last decade when the population of the town grew from 43,536 to the present level which is an increase of 18,807 in 10 years. The principal reason of this large increase is the extension of the limit of the town. The town is also developing as the nerve centre of an extensive road transport system and a distributing centre of commercial commodities for the inland district of Phulbani and the agency areas of Ganjam. It is gaining prominence due to export of various forest produce, particularly timber and hides. The population of the town as recorded in different censuses is given below :—

Year	Population
1872	21,670
1881	23,599
1891	25,653
1901	25,729
1911	31,456
1921	32,731
1931	37,750
1941	43,536
1951	62,343

PURI

20. Being a place of pilgrimage of all-India importance, Puri town shows fluctuations in the number of its inhabitants at different periods. This is due to a large extent to the volume of pilgrim traffic that happens to be present in the town at the time when the census is taken. Earlier estimates show that the town had a population of 30,000 in 1825 and 19,825 in 1869. The decrease was due to the widespread mortality in the unforgettable famine year 1866-67. The population of the town as recorded in different censuses is as follows. The recorded figures show a steep rise in 1901 and a gradual fall from decade to decade, till in 1941 it starts rising again. According to these figures, the town had more population 50 years back than now, but this is somewhat misleading. The population of the town was 28,794 in 1891 but it rose to 49,334 in 1901 and fell down to 39,686 in 1911. In fact, when the census was taken in 1901, it is estimated that no less than 17,000 pilgrims were present in the town, as the census happened to coincide with a big festival. The principal reason of the striking difference in recorded population of 1891 and 1901 is that railway communications were opened during this decade, leading to the extraordinary facility, unknown in history, in the movement of pilgrims from distant parts of India. There was thus a heavy stream of pilgrims to Puri in 1901, and if their number is kept out of consideration, the permanent population of Puri that year would be approximately 32,000. In the year 1911, the recorded population of 39,686 contained about 5,000 pilgrims. So the permanent population was a little above 34,000. In 1921 and 1931, the normal population of the town either grew negligibly or declined. The town usually suffered from uncontrolled seasonal epidemics during occasions of festivals and had in those years a high death roll on account of fever, cholera, dysentery and diarrhoea. The population of the town however increased steadily during the last 20 years, from 37,568 in 1931 to 49,057 in 1951, again of 11,489 or 30·6 per cent. The town has no commercial or industrial importance, but being mainly a sea-side health resort

and a place of pilgrimage of top-most importance, is likely to develop slowly.

Year	Population
1872	22,695
1881	22,095
1891	28,794
1901	49,334
1911	39,686
1921	38,694
1931	37,568
1941	41,055
1951	49,057

SAMBALPUR

21. A small and insignificant inland town, Sambalpur in 1872 had a population of 11,020, and slowly grew till 1891. But this growth could not be maintained in the next decade, primarily due to the famine of 1900 and the high mortality due to fever, cholera and smallpox. The population declined, as shown below from 14,571 in 1891 to 12,870 in 1901. Between 1901 and 1941, the population steadily but very slowly grew to the level of 17,079, an increase of 4,209 in 40 years, but during the last 10 years the growth amounts to 6,446, so that the population stood at 23,525 in 1951. Probably, this is but the beginning of what is to happen. A bright future for the town was assured when the foundation stone of the multi-purpose project at Hirakud was laid on the 15th of March 1946. The site of the project is only 9 miles distant from the town, and the town has already started attracting business men and speculators from different parts of India. The importance of the town as a business centre is rapidly increasing, and the growth of population is likely to be much faster in coming decades.

Year	Population
1872	11,020
1881	13,939
1891	14,571
1901	12,870
1911	12,981
1921	13,594
1931	15,017
1941	17,079
1951	23,525

BALASORE

22. The town is noted for slow growth of population. Starting with a population of 18,263 in 1872, it grew to the level of 20,265 in 1881 and then remained practically stationary for a period of 20 years, recording a population of 20,880 in 1901. A negligible growth was achieved in the census of 1911 when the population stood at 21,362. Then followed a series of years when health was bad and mortality high, culminating in the catastrophic influenza epidemic of 1918-19 which was finally responsible in reducing the population by about 20 per cent. The town was able to recoup such a small fraction of this loss, that even after years, namely in 1941, its population was less than in 1911 or even 1881. During the last decade, however, it has made some progress, its gain in population amounting to 3,446 or 17·8 per cent in 10 years. The town has a moderate amount of business and commercial activities, and is likely to grow though not as fast as other important towns.

Year	Population
1872	18,263
1881	20,265
1891	20,775
1901	20,880
1911	21,362
1921	17,037
1931	17,843
1941	19,405
1951	22,851

OTHER TOWNS

23. Among other towns of importance from the point of view of population, are Parlakimedi and Jeypore. Parlakimedi has grown very slowly but steadily from a population of 16,390 in 1891 to 22,270 in 1951, an increase of 5,880 or 35·9 per cent in a period of 60 years. It is an inland town and, in all likelihood, will keep on growing slowly as a result of increase in natural population. Lastly, Jeypore, an inland

town in Koraput district nearly 80 miles from the nearest railway station grew steadily and rapidly on account of being the headquarters of the administration of the Maharaja, Jeypore, whose proprietory rights extend over the entire district of Koraput and beyond. Moreover, this town serves as a base for the execution of the hydro-electric project at Duduma, though the site of the project is 46 miles distant from Jeypore. With the growth of Machkund, which is assured, Jeypore will have a period of progress. The town started with a population of 7,065 in 1891 and grew up slowly to 12,504 in 1941. During the last decade, its growth has been very remarkable as it gained by 7,848 or 62·8 per cent in 10 years, its present population being 20,352.

24. The growth of all the towns, including smaller ones not mentioned above, has been shown by sexes and decennial variation in Table A-IV, published in Part II-A of this Report.

SECTION IV

Movement

1. The growth of cities and towns and the gradual industrialisation of the country encourages movement of population not only from villages to urban areas but also from outside the State. The larger the town, the greater is the proportion of migrants residing therein. In fact, migration is the principal factor which contributes to the growth of urban areas, the rate of growth mainly depending upon the volume of migration.

MIGRATION FROM RURAL AREAS

2. The characteristics and causes of rural-urban migration have been discussed in Section IV of the previous Chapter and need not be repeated here. It is apparent that among the migrants to towns, the rural element is highly preponderating, although the total volume of rural-urban movement is small in Orissa, on account of the villager's general preference to rural life. Some of the migrants from rural areas become permanent settlers in towns, but others continue to stay on temporary basis, till it suits them on economic or other grounds. They keep contact with their villages, send remittances and return to their homes when out of work or ill or when there is any important ceremony. Discussing the attitude of such migrants, the Royal Commission on Labour in India, 1931, says, " In sickness and in maternity, in strikes and in lockouts, in unemployment and in old age, the village home is a refuge for many". The permanent migrants however are guided by different points of view and generally move with members of the household in a body.

COMPOSITION OF URBAN POPULATION

3. Out of the total urban population of 594,070 in Orissa, as many as 491,007 or 82·6 per cent are attached to the urban areas of the district of birth. This shows that the population of towns is mainly composed of those that are born within the district whether in a village or a town. It is not possible to ascertain the number and percentage of population moving from the rural to the urban areas of the same district, as the recording of place of birth in the census enumeration slip is confined to the mention of the district of birth, and does not extend to any administrative unit below the level of a district. It will not therefore be indicative of any movement between rural and urban areas of the same district or of other districts. The question whether more elaborate record of the place of birth could have been prepared is connected with other problems. In addition to the district-born people, the urban population comprises 17·3 per cent of persons who are born outside the district. Of this, 8·4 per cent have come from other districts of the State and the remaining from outside the State.

NATURAL DIVISIONS

4. The inland division has got a large number of immigrants into the urban areas than the coastal division. Out of the urban population of 225,937 living in the inland division, 173,050 or 76·6 per cent are persons born in the district of enumeration. The percentage of immigrants therefore comes to 23·4. In the coastal division, the urban population of 368,133 contains district-born people numbering 317,957, constituting 86·4 per cent. The urban areas of the coastal division thus contain 13·6 per cent of the population as immigrants.

5. Among the immigrants into urban areas of the inland division, 20,375 or 9 per cent are persons who have migrated from other districts of the State while 30,674 persons or 13·6 per cent have migrated from other parts of India. The number of persons migrating into

the towns of the inland division from beyond India is 1,838 out of which a large majority, namely 1,533, were born in Pakistan and a small number of 305 in countries beyond India and Pakistan. In the coastal division, the urban areas contain 29,288 persons or 8 per cent of the population who have migrated from other districts of the State. The number of persons that have come from other parts of India is 17,988 or 4·9 per cent. Persons belonging to countries outside India who are found residing in these towns number 2,900 out of which a majority, namely 2,475, have come from Pakistan and the remaining 425 from other territories. The percentage of people migrating from other parts of India is high in the inland division as compared with the coastal division. This is principally due to the construction of the multi-purpose project at Hirakud and the hydro-electric scheme at Duduma in the inland division which have attracted workers, technicians, businessmen and others from various parts of India.

DISTRICTS

6. The district which has got the largest percentage of mirgrants in its urban areas is Koraput. The towns of this district contain migrants who constitute 41·9 per cent of urban population. Other districts which are prominent in this matter are Sambalpur with 25·6 per cent and Puri with 24·7 per cent. Keonjhar, Ganjam and Dhenkanal, on the other hand, show the lowest percentage of immigrants in their towns. Koraput being a comparatively backward district, there are not sufficient number of district-born people to capture business activities and public services which consequently has fallen to the lot of persons belonging to other districts. In the town of Machkund a large number of persons coming from other districts and also from Madras are to be seen. This is why the percentage of immigrants in the towns of Koraput district is so high. Sambalpur shows a high percentage of immigrants because of the well konwn reason of attraction offered by the execution of the Hirakud scheme. Although Hirakud itself is a rural area, the population of Sambalpur town contains a good number of outsiders who have come in connection with activities allied with the construction of the Hirakud project. In Puri district, a large number of immigrants are seen as a result not only of the importance of Puri town as a health resort and a pilgrimage centre but also due to the location of Bhubaneswar containing the seat of the State Government where a large number of persons belonging to different districts have moved. Cuttack does not figure very prominent in this matter because it has its own large population in which the number of immigrants, though considerable, make up only a small percentage.

MIGRANTS FROM OTHER DISTRICTS

7. About half a lakh, or more accurately 49,663 persons, born in some other district of Orissa, are found residing in urban areas of particular districts. They constitute about 8·4 per cent of the total urban population. Judging from the actual number of migrants from other districts, Cuttack comes first with 14,702 persons who were born in some other district but are residing in one of the towns within the district of Cuttack. Puri comes next with 12,118 such persons. But, if considered on the basis of percentage, Puri comes first with 16 per cent and Kalahandi next with 15·5 per cent although the number of immigrants into the urban area of Kalahandi is very small, numbering 1,830 only. Kalahandi has only one town, namely Bhawanipatna, which is a town with less than 12,000 population and therefore displays a high percentage of mirgants although the actual number of such migrants is much smaller than many other districts. Koraput and Sambalpur

urban areas are also quite prominent in the matter of attracting persons born in other districts of the State.

MIGRANTS FROM OTHER PARTS OF INDIA

8. The State of Orissa contains 170,021 Indians born outside Orissa. Of these, 121,359 live in villages of Orissa and the remaining 48,662 n the towns. The non-Oriya Indians residing in towns of Orissa form 8·2 per cent of the urban population. Among the districts, Koraput shows high figure of migrants from other parts of India who number 16,000, while the corresponding figure for Sambalpur is 7 646 and Cuttack 5,644. The high number of extra-State migrants living in Koraput towns is due to a large number of Madras-born persons coming and living in the town of Machkund on account of the hydro-electric project under execution there. It also seems likely that a good number of persons born in Bisakhapatnam in Madras are found in Jeypore town which has grown rapidly during the last decade. The number of migrants from other parts of India into the towns of Sambalpur and Cuttack are obviously explainable because of their special importance.

MIGRANTS FROM BEYOND INDIA

9. The number of persons born beyond the territorial limits of India and found residing in the towns of Orissa is 4,738. Out of this, a great majority, namely, 4,008 have come from Pakistan alone. Most of these Pakistan-born people, but not all, are displaced persons who have settled down in the urban areas of Orissa. A small number of these persons, though born in districts now included in Pakistan, do not come under the technical classification of displaced persons, as they migrated prior to certain specified dates, or when the partition of India had not taken place. Migrants from Pakistan are to be seen mostly in the towns of Cuttack, Puri, Sambalpur and Balasore districts, though other towns also contain some of them. The number of migrants from foreign countries other than Pakistan is small and amounts to 730 only and does not call for any remarks.

SECTION V

Natural Increase—Births and Deaths

1. The difficulties in the study of births and deaths and consequently in the determination of natural increase have been discussed in the two earlier Chapters relating to general and rural pouplation. To recapitulate, the difficulties are mainly two-fold. First, the registration areas are not extensive and cover only a moderate portion of the total area and population of towns. Secondly, the quality of registration work is inferior and contains a large amount of error. Deterioration has particularly set in since the years of war when the agencies entrusted with the work of registration were unable to pay as much attention as before on account of their other increased responsibilities. On account of these reasons, the value of birth and death statistics is not high.

URBAN REGISTRATION AREA

2. The urban areas of Orissa cover 192 square miles and contain a population of 594,070. Registration of vital statistics has been extended to an area of 79 square miles only containing a population of 366,091. Thus 40·3 per cent of the total area and 60·2 per cent of the total population of the urban areas of the State are under the registration system. These figures are inequally divided between the two natural divisions. In the coastal division the registration of vital statistics covers a considerable percentage of the area and population of towns. But in the inland division it is poor. The registration system covers 76·7 per cent of the population and 59·9 per cent of the area of towns of the coastal division but only 34·9 per cent of the population and 23·2 per cent of the area of towns of the inland division. Thus, more than three-fourths of the population of the coastal division and a little more than one-third of the population of the inland division get the benefit of registration. But although the registration area covers about a third of the population in the inland division, it is not spread over different districts and cannot be taken to be representative of the conditions existing in the natural division. Only two districts out of nine in the natural division have the system in force in their towns. No record of vital statistics is maintained in the towns of the remaining seven districts of the inland division. The figures are therefore not typical of the tract they represent. The case is otherwise with the coastal division where all the districts of the natural division are represented. The extent of area and population covered in this division is also satisfactory.

3. Urban areas as recognised by the Public Health Administration are not identical with the urban areas adopted in the census. According to the census, there are 39 urban units covering 192 square miles of area and 594,070 of population but according to the Public Health Administration, there are 15 urban units covering 79 square miles and having a population of 366,092. In other words, the Public Health urban areas are less than half the census urban areas. There are however certain localities, namely, Koraput, Kotpad and Gudari all located in Koraput district which are urban areas according to the Public Health Department, but not according to the census. On the other hand, the census has declared many more localities as towns which the Public Health Administration has not yet recog-

nized. Urban areas for purpose of vital statistics are as follows :—

Cuttack district	..	Cuttack city, Kendrapara and Jajpur towns.
Balasore district	..	Balasore town
Puri district	..	Puri town
Ganjam district	..	Berhampur and Parlakimedi towns.
Sambalpur district	..	Sambalpur town
Koraput district	..	Union Board areas of Koraput, Jeypore, Nowrangpur, Rayaghada, Gunupur, Kotpad and Gudari.

Birth Rates

4. Birth rates of urban areas are not available on reliable basis prior to the year 1936, i.e., before Orissa was created as a separate province. The inter-census birth rates for the decades 1921-30 and 1931-40 could not therefore be worked out and exhibited in the Subsidiary Table 3·3. The rate for the last decade (1941-50) has, however, been calculated and shown. This shows that the birth rate for the urban areas for the last decade was 25·3 per mille. The birth rates of the general and the rural population are higher than this, standing at 28·2 and 28·3 per mille respectively. As there are no inter-census birth rates for earlier decades, it is not possible to study the trend in decennial rates for the urban areas.

Natural Divisions

5. The figures available from the Director of Health show that the decennial birth rate of the towns of the inland division in 1941-50 is 13·6 per mille which is too good a record to be believed. The corresponding rate for the coastal division is as high as 28·6. For reasons given in previous Chapters there should be no difficulty in rejecting the rate shown against the inland division as thoroughly unreliable. The rate shown against the coastal division, subject to characteristic errors and omissions, is less open to objection.

Districts

6. A reference to the decennial birth rate relating to urban areas of individual districts shows 10·5 per mille against Sambalpur and 14·9 against Koraput. These are rates not yet achieved by many highly progressive Western countries and are, in fact, the result of defficiency in record. Both the districts mentioned above occur in the inland division, and as mentioned in the paragraph above, deserve no notice. Among the districts of the coastal division, similar unreliable statistics come from Balasore town. The decennial birth rate for this town is shown as 10·4 per mille, a figure which is obviously absurd. The rates shown with relation to the towns of Cuttack district is 29·3, of Puri district 26·9 and of Ganjam district 33·8. Of these three districts, the record of Ganjam seems to be nearer the truth as the real birth rate is some where near 40 per mille.

Annual Birth Rate

7. The annual birth rates for the urban areas of Orissa as maintained by the Director of Health is given in the following page from the year 1936. The rates are much lower than what they should have been. The recorded rate is the average for all the urban areas of the State. The birth record of the towns of the inland division and of the town of Balasore in the coastal division is unreliable, as pointed ou above. As a result of the low rates thown against these towns, the aveage for the urban areas of the State as a whole has been correspondingly reduced. Added to this is the fact that the record of the towns of Cuttack and Puri districts though somewhat better, is far from correct. All the districts are subject to the inherent defects of the registration system. Errors and omissions are usual. Moreover, the annual birth rates as mentioned in the following page show inexplicable fluctuation and indic ate no trend.

According to these figures, the birth rate is much higher in 1950 than it was 15 years back. This shows that birth rate in towns is rising, which judging from the health conditions of the last decade is hard to accept. The only explanation that may be offered in this connection is that the record of births in towns as maintained by the Director of Health is highly faulty if not spurious in respect of a few towns. The decennial rate of birth of the coastal division for the decade 1941-50 comes to 28·6 according to the Subsidiary Table 3·3. If the under-estimate is calculated at about 33 per cent in the minimum, the real rate of birth in towns may be 38 per mille.

Year	Birth rate
1936	26·0
1937	23·6
1938	24·8
1939	26·3
1940	32·3
1941	29·4
1942	28·3
1943	28·6
1944	24·3
1945	27·3
1946	30·1
1947	27·3
1948	32·7
1949	34·7
1950	33·7

Death Rates

8. The observations made above with regard to the reliability of birth rates of the towns of Orissa apply mostly to death rates. Keeping aside the figures of the inland division which are too faulty to be considered, the decennial death rate for the last decade for the towns of coastal division is shown as 23·9 per mille, as against 27·9 for the general population and 28·0 for the rural population. This may broadly show that the death rate in the urban areas is lower than the death rate of the general or rural population. This view is but weak in nature on account of defective character of the statistics. Moreover, the mortality figures were not made available prior to the year 1936 and as such the rates for the decades 1931-40 and 1921-30 could not be worked out. It is therefore not possible to examine the decennial trend in the death rate of urban areas.

Annual Death Rate

9. The record of annual deaths of the urban areas of Orissa as maintained by the Director of Health, shows great fluctuations, which is not always possible to explain. The annual rates are shown below from the year 1936. Reliable figures prior to that year are not available. It appears from these figures that death rate in towns was higher in 1950 than 15 years back. The death rate for the year 1947 is shown to be low, although the available information shows that this year was noted for high mortality and bad health and stands next to 1943 and 1944 in the matter of widespread disease and virulent epidemics. The explanation may probably be the same as in the case of birth records, namely, the faulty character of registration.

Year	Death rate
1936	21·3
1937	21·4
1938	20·2
1939	22·4
1940	24·5
1941	27·4
1942	22·2
1943	32·4
1944	29·8
1945	27·5
1946	24·0
1947	20·6
1948	20·5
1949	22·3
1950	24·1

Urban Statistics more Erroneous than Rural

10. Vital statistics are at their worst in urban areas. In previous Chapters observation has been made elaborately

about the various defects in the registration system, such as, the wrong basis of calculation of birth and death rates, inadequate extent of registration area and omissions in registration. Over and above these shortcomings, there were special reasons during the war period why less attention was paid to the fullness or regularity of registration by the primary reporters or their superiors being faced with added responsibilities of more emergent character. These conditions resulted in deterioration in the quality of record. Thus, the vital statistics of the postwar period became less dependable. Again, in the statistics of the postwar period, it is possible to distinguish the extent of erroneous character between the rural and the urban rates. While the reporting and recording agencies of the rural area still clung to their time-old responsibilities with whatever amount of seriousness the situation permitted, the urban areas faced a virtual collapse in this matter. The administration of urban areas was concerned with more varied responsibilities than the mere supply of food, clothes and kerosene with which the crying needs of rural areas were satisfied. The responsibility of reporting vital occurrences passed from the police to the local body administration of the town in the meanwhile. In many a town, the elected self-governing body proved unequal to the wartime emergencies, resulting in supersession of the administration. Under the circumstances, the towns were unable to pay usual attention to the responsibility of maintaining birth and death records, to the same extent as was possible in the rural areas. The result is seen in the irreconcilable disparity of figures received from different towns. For example, the urban areas of Balasore, Cuttack, Puri and Ganjam which districts are situated in the same natural division and are identical more or less in climatic, health and food conditions display great difference in birth and death rates for any particular period. The death rate of urban population for the decade 1941-50 stands at 23·3 for Cuttack, 11·6 for Balasore, 36·4 for Puri and 20·7 for Ganjam. Conditions in these contiguous districts could not have been so diverse as to produce the result exhibited by the recorded figures of death. The districts of the inland division present a feature which is still worse and need no discussion.

11. As compared with the above position existing in urban areas, the statistics of rural areas present a more consistent picture. The decennial death rate of 1941-50 for the rural areas is 29·4 for Cuttack, 31·3 for Balasore, 26·7 for Puri and 24·5 for Ganjam Plains. These figures show a range of difference which agrees with general conditions existing in the districts concerned.

Condition of Health

12. The highly faulty and misleading character of vital statistics makes it difficult to examine health conditions of the urban population. The review therefore should be confined to certain broad features in respect of towns where conditions of public health are grave and call for urgent attention. The most remarkable feature of population growth as seen in the present and previous Chapters is that while the general and rural population has been growing but slowly, the increase of population of towns has been quite fast. Growth of towns is a general phenomenon to be seen almost everywhere in the present age. But a number of towns in Orissa present a gloomy picture of stagnant or even decreasing population. This unwelcome condition has not resulted from migration but as a consequence of unsatisfactory public health due to lack of adequate prophylactic measures and to ineffective control of epidemics and

other diseases. The case of a few individual towns may be examined.

13. Out of 39 towns in Orissa as many as 7 have lost population during the last decade so that the population of each of them at present is less than what it was in 1941. These are Jajpur, Bhadrak, Baudhgarh, Sonepur, Patnagarh, Deogarh and Birmitrapur. The loss of population in Birmitrapur is nominal and for practical purposes it may be taken that the population has remained stationary during the last decade. In the remaining 6 towns, the loss of population is worth notice. The heaviest loss has occured in Sonepur, Deogarh and Bhadrak. The loss of population of all these towns is shown below.—

Town	Population in 1941	Population in 1951	Decrease
1. Sonepur	9,065	7,356	—1,709
2. Deogarh	6,537	5,711	— 826
3. Bhadrak	19,550	18,795	— 755
4. Patnagarh	6,189	5,900	— 289
5. Baudhgarh	5,740	5,498	— 242
6. Jajpur	11,188	11,026	— 162
7. Birmitrapur	9,426	9,408	— 18

14. None of the above towns except Jajpur comes under the registration system. It is therefore not possible to specify the cause of decrease of their population. In Jajpur fever appears to be the chief casue of high mortality and carried away a large number of victims every year during the decade. Diarrhoea and dysentery were also prevalent to a considerable extent throughout the decade and were responsible for the high rate of death rising to 4·4 per mille in 1941 from this cause alone. The town continuously suffered from cholera and smallpox also. Cholera recorded the mortality rate of 3·7 in 1943 and 2·5 in 1944 while smallpox took the death rate to the unprecedented level of 5·6 in 1944 and 6·1 in 1945, which is the highest record in Orissa. These epidemics and fevers persisted in other years, though to a lesser extent. On the whole, the general health of the town was not satisfactory as a result of which the population instead of increasing during the period of 10 years showed an amount of decrease by 162 persons.

15. More important and deserving of notice are the cases of Sonepur, Deogarh and Bhadrak where the loss of life was heavier. The decrease in population in Sonepur seems to have resulted from frequent and widespread outbreak of cholera and other epidemics. It is not clear what led to the fall of population in Deogarh as it is not usually known to be an unhealthy place. There may possibly be a common cause applicable to Sonepur and Deogarh, namely, that after the merger of states leading to the transfer of political and administrative activities to the headquarters of the districts concerned and due to the loss of powers of the ruling chiefs, there was a fall in the temporary population of these towns. As regards Bhadrak, the cause of decrease is mainly the unsatisfactory health condition. In course of the review of health conditions in rural areas, it was seen that as many as 5 police-stations within Bhadrak subdivision suffered from high mortality during the last decade resulting in decrease of population. There were several years when deaths outnumbered births. Conditions of health could not have been very much different in the headquarters of the subdivision, particularly as it has suffered from loss of population like the rural areas. Other towns, namely, Patnagarh and Baudhgarh where population diminished during the last ten years, must have been under adverse conditions, but as the registration system has not been extended there, it is not possible to assign specific reasons.

16. There are several towns, which though not registering a decrease of population in the last decade have been persistently suffering from bad public

health and high rate of mortality. They have just escaped an absolute decrease of population due to the general tendency at the present time for towns to grow in population on account of various factors. If these special factors were absent and the population was confined only to natural growth, the death rate in these towns was so high that a decline in population was certain. The mere overall increase as a consequence of the combination of several circumstances should by no means take away the serious character of the health condition of these towns. Most notable among the towns where death rate has been high and conditions of health unsatisfactory are Kendrapara and Balasore. Conditions of health in these towns are more or less akin to those of the rural areas of the districts concerned, which has been fully described in Section V of the previous Chapter. It also appears that the system of recording births and deaths in these towns is highly defective and inefficient and therefore the recorded statistics fail to impress about the gravity of the situation.

17. So far as the situation may be judged from the available figures on record, Kendrapara had very high incidence of death from fever. Death rate from fever alone ranged from 16·9 per mille in 1941 to 18·8 in 1946 with extensive suffering all throughout the intervening years and thereafter. Dysentery and diarrhoea claimed 8·0 per mille in 1941 and above 5 per mille between 1942 and 1944. In the year 1942 Kendrapara and Sambalpur recorded the highest death rate in the province on account of cholera, which continued to be virulent, sometimes in combination with smallpox in subsequent years. Similarly, Balasore town had most adverse times between 1941 and 1947 on account of malaria, which took a heavy toll of life. There were also frequent outbreaks of cholera and smallpox. Dysentery and diarrhoea are however not to be seen in this town to any marked extent. Among other towns of Orissa which suffered to a perceptible extent during the last decade are Puri, Berhampur and Parlakimedi. Puri was a chronic sufferer from cholera, diarrhoea and dysentery, the mortality from the latter cause alone being as high as 9·4 in 1943 and 8·3 in 1944. There was a heavy number of deaths due to fever in 1943 and 1944. Berhampur was highly malarious in 1943, death rate rising to 15·8 from fever alone that year. The town was visited by a severe epidemic of cholera in 1941 and smallpox in 1946. Parlakimedi suffered heavily from cholera and smallpox in the year 1941.

18. The standard of health in the towns of Orissa is generally poor. It is more so in respect of those that have been mentioned in the paragraphs above. It is sad to find that the urban death rate in Orissa is much higher than that of many other States in India. It is of utmost importance that public health activities and general medical facilities should be further extended, at least in the suffering towns. The Government, no doubt, have taken measures for the improvement of health in towns but the question arises if such measures were adequate. It appears that anti-mosquito scheme was launched in many towns, and distribution of quinine and atebrin, draining and cleaning of water courses and similar other actions were taken. These activities have not sufficiently controlled the outbreak of diseases and so require radical extension. Many of the towns have got insanitary tanks, swamps and rice fields and wild growth of plants. They require continuous and intensive anti-larval and anti-malarial campaign, and in fact a determined fight against disease and death. Unfortunately the local bodies were mainly responsible for improvement of public health in towns and the Government could at least help by advice, funds and extra staff. It was with this view that

provincialization of the Public Health staff was done in February 1947, but the scope for further work is as great as before.

NATURAL INCREASE

19. In view of the highly defective character of birth and death statistics in towns, it is not possible to work out the decennial rate of natural increase. But from all the evidence recorded above, it appears reasonable to conclude that the natural increase of population in the towns of Orissa could not have been considerable on the whole.

SECTION VI

Livelihood Pattern

1. The composition of the urban population generally differs from that of the rural population. It is in the nature of things that the more varied activities of towns should attract a mixed population with less homogeneity than that of the countryside. Further, there appears to be a tendency for the population of the towns to show different characteristics from those of rural areas in certain definite directions. In Orissa, the difference between the occupational structure of the rural and urban population is noticeable as elsewhere, though a few towns are dominated by rural economy. Subsidiary Table 3·7 gives the distribution of 10,000 persons of urban population among different livelihood classes from which it appears that there are 1,398 persons belonging to the agricultural classes and 8,602 to the non-agricultural. Agriculturists therefore constitute 14 per cent and non-agriculturists 86 per cent of the total population of towns.

Agricultural Classes

2. The agricultural population is divided into the usual four different livelihood classes. The percentage which each class bears to the total population of towns is shown below :—

Livelihood class	Percentage
I—Cultivators of land owned	7·8
II—Cultivators of land unowned	1·5
III—Agricultural labourers	2.0
IV—Non-cultivating owners of land	2·7

Among the agricultural classes, owner cultivators are found in large numbers living in towns. In fact, they constitute a little less than 8 per cent of the total urban population, or more than half the agricultural population of towns. Next in importance is class IV, or Zamindars, land-holders and other classes of agricultural rent receivers and non-cultivating owners of land, who constitute 2·7 per cent of the urban population or nearly, one-fifth of the agricultural population. The agricultural labourers, who belong to class III, are smaller in number, being limited to 2 per cent of the urban population. The lease-holding cultivators, such as, *sanja*, *bhag*, or *thica* tenants are the smallest in number and form 1·5 per cent.

Non-agricultural Classes

3. The non-agricultural classes are overwhelmingly greater in percentage in the population of towns. They number 8,602 out of 10,000, or approximately 86 per cent of the total urban population. They are divided into the four non-agricultural livelihood classes as follows :—

Livelihood class	Percentage
V—Production other than cultivation	13·3
VI—Commerce ..	17 5
VII—Transport ..	5·6
VIII—Miscellaneous services ..	49·6

The most important livelihood class among the above is class VIII or those who depend for their principal means of livelihood on 'other services' and miscellaneous sources. They alone constitute about half the total urban population or a little less than two-thirds of the non-agricultural population of towns. In this class are included persons who derive their livelihood from construction and utilities, storage and communication, professions and arts and those who have taken to health, education, public administration and other services, and employment in hotels and restaurants, laundries and beauty shops as well as domestic service. Miscellaneous sources of livelihood, such as, income from investments, pensions, family remittances,

proceeds of begging and other unproductive activities come within this class of livelihood. This is therefore a very important livelihood class for the town population and absorbs nearly half of them. Details regarding these different classes of persons will be discussed at length in Chapter V. The livelihood class which comes second in importance among the non-agricultural classes is commerce (class VI) which engages 17·5 per cent of the total population of towns. In this class are included the retail and wholesale traders in foodstuffs, beverages and narcotics and in textiles, leather goods and financial business. The next important livelihood class is class V relating to persons who are engaged in production other than cultivation. This class comprises persons who derive their livelihood from processing and manufacture of foodstuffs, textiles, leather products as well as metals and chemicals. Persons engaged in mining and quarrying and in primary industries, such as, livestock, forestry, hunting and fishing, etc., are also included in this livelihood class. Among the urban population a good many persons are employed in activities connected with processing and manufacture of foodstuffs, metals and chemicals, etc. Lastly, comes transport, which as a class of livelihood and claims an humble percentage of 5·6 of the total population of towns.

Livelihood in Natural Divisions

4. The livelihood classification of urban population of the two natural divisions shows notable difference in distribution among different classes. In the inland division 19·9 per cent of the population are engaged in agriculture, leaving the remaining 80·1 per cent to non-agricultural pursuits. But in the coastal division agriculture claims a lesser percentage, namely, 10·3 while the remaining 89·7 per cent of population have taken to non-agricultural professions. Among the agricultural classes, class I has a small percentage in the coastal division but not so in the inland division. 13·2 per cent of the total population belong to livelihood class I in the inland division but only 4·5 per cent belong to the same class in the coastal division. Similarly, while 9·9 per cent are agricultural labourers in the coastal division, 35·4 per cent earn their livelihood as such in the inland division. The number of class IV population is however greater in the coastal division being 3·3 per cent as against 1·7 per cent in the inland division.

5. The sharp difference in percentage which is noticeable between the two natural divisions with regard to the different classes of agricultural population is however absent in the case of non-agricultural classes. The difference is much smaller. As in the case of Orissa as a whole, each of the natural divisions has got a high preponderance in class VIII constituting 51 per cent of the total urban population in the coastal division and 47 per cent in the inland division. Next in importance is class VI, with 19·3 per cent in the coastal and 14·5 per cent in the inland division. The percentage with regard to the other classes is practically equal in both the divisions, being 13 in class V and 5 in class VII.

Districts

6. The percentage of agricultural and non-agricultural classes in the urban population of different districts of the State is given below :—

District	Agricultural classes	Non-agricultural classes
Cuttack	10·7	89·3
Balasore	14·0	86·0
Puri	7·4	92·6
Sambalpur	15·2	84·8
Ganjam	10·6	89·4
Koraput	12·0	88·0
Dhenkanal	33·0	67·0
Keonjhar	43·8	56·2
Phulbani	18·5	81·5
Bolangir	19·1	80·9
Sundargarh	33·9	66·1
Kalahandi	18·7	81·3
Mayurbhanj	12·7	87·3

It appears that the percentage of non-agricultural classes is very high in the towns of Puri, Ganjam, Cuttack and Koraput. On the other hand, the districts where agricultural classes are prominent among urban population are Keonjhar, Sundargarh and Dhenkanal. The towns in these three districts are small ones and have got greater affinity with the rural areas and therefore they have a comparatively larger percentage of agricultural population. It may perhaps be correct to hold that the percentage of agricultural classes varies inversely with the size of the town.

SECTION VII

Concluding Remarks

1. Although Orissa has been traditionally rural, there are unmistakable signs that a change is under way. With the overall growth of population and the trend towards industrial and commercial expansion, a faster growth of urban population is inevitable. Urbanization in this State bears a resemblance to the history of urbanisation in other parts of India in the sense that everywhere the process is relatively slow at first and gradually gains momentum as it goes forward. The fall in fertility, the growth of education, the advancement in womens' activities, the decline of caste and the development of political consciousness are all steadily contributing to the growth of urbanization. In short, as modern civilization tends to dominate the country, the pace of urbanization becomes rapid and the growth of towns is assured.

Growth of Population

2. The urban population constitutes a poor percentage in the general population of the State. Only 4 out of 100 in the general population live in towns and the rest in villages. This is one of the lowest figures in India. But there is evidence that the number of towns and the population residing therein are growing faster with the progress of time. The urban population grew by 12·2 per cent in 1921-30, 14·7 per cent in 1931-40 and 26·6 in 1941-50. There were 21 towns in 1931 within the territory now covered by the boundaries of Orissa. But the number increased to 29 in 1941 and to 39 in 1951. This shows that the growth is becoming faster. Acceleration in the growth of towns has started and will be kept up in all likelihood for many decades in future, till a larger number of cities and towns come into existence and the country is more extensively industrialized, modernized and urbanised.

3. The distribution of urban population goes mostly in favour of the coastal division, where 62 per cent of the total live in 16 towns, leaving the remaining 38 per cent to live in 23 towns of the inland division. A larger percentage of the total urban population live in towns which are big in size, though the number of such towns is small. The towns of classes I to III number 7 and contain a population of 302,903, while the towns of smaller size, namely, those that belong to classes IV to VI, number 32 and contain a population of 291,167.

Condition of Health

4. A review of the condition of health in the towns of Orissa has been made in Section V of this Chapter. A considerable handicap was felt in this work on account of the extremely erroneous character of the records of births and deaths maintained for the population of towns. Though the vital statistics are generally deficient and inadequate, there was considerable deterioration in the maintenance of these records since the war years. This deterioration was to be seen to a very pronounced extent in the towns rather than in the rural areas. As observed earlier, there was a virtual collapse of the registration system in most of the towns of Orissa during the last decade. The records relating to the towns of the inland division are thoroughly unreliable and those of the coastal division show such wide difference in figures of contiguous districts that they cannot be accepted without proper caution. The maintained statistics however are useful for forming an idea of the comparative mortality and ill-health caused by different diseases in towns. Fever, particularly malaria, in its endemic and hyper-endemic form has been causing severe loss of life in

many towns of Orissa. Mainly as a result of this, the population of as many as 7 towns has decreased during the last decade. Moreover, there are other towns which have just escaped an absolute decrease of population by a small margin. This is due to deplorable public health in these towns. Public Health Administration and medical facilities existing in these towns have been utterly inadequate to bring the incidence of various diseases under effective control. Most unsatisfactory health conditions prevailed during the last decade in Jajpur, Kendrapara, Balasore, Bhadrak, Berhampur, Sonepur and to some extent in Puri, Parlakimedi and the towns of Koraput district. Ill health is thus widespread in the towns of Orissa and unless effective and adequate measures are taken to improve the condition, Orissa will be left far behind other States in India in the urbanization movement and consequently in the march towards the ultimate goal of general and industrial development, and national progress.

CONTROLLED DEVELOPMENT

5. The growth of towns in Orissa has proceeded in an unrestricted and haphazard manner. In consequence, extreme congestion has resulted in particular portions of a town while there are plenty of open space and unoccupied lands within its limits. The municipalities and other local bodies in charge of town administration had scarcely the inclination or financial ability for undertaking the orderly development of towns. Only two towns in Orissa, namely ,Puri and Berhampur have got water supply schemes, and even the City of Cuttack, excepting with regard to a few Officers' quarters, was devoid of this usual urban amenity in the year 1951. Water supply schemes are most unavoidably necessary for many more towns, particularly those that suffer from bad health due to epidemics and diseases. Existence of insanitary ponds and wild growth of shrubs and bushes are usual sights to come across in a town of Orissa. No town has got an Improvement Trust or Development Board. As the towns are growing in population, area and number, the situation is becoming more complicated day by day. It is easy to lay out a plan in an undeveloped or open area and to control the construction of buildings and the lay out of roads or parks from the very beginning than to attempt to remodel the localities which have developed unmethodically, which means wasteful expenditure on the part of the administration and annoyance and loss in various forms to the people concerned. It is therefore necessary that measures should now be taken for the controlled development of towns, particularly of classes I to III. The necessity of creation of an Improvement Trust for the City of Cuttack needs no argument.

Subsidiary Table 3 Series

3·1—Distribution of population between towns

Natural division and district	Population per town	No. per 1,000 of general population in towns	Number per 1,000 of urban population in towns with a population of			
			20,000 and over	10,000 to 20,000	5,000 to 10,000	under 5,000
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA	**15,233**	**41**	**510**	**182**	**300**	**8**
3·33 Orissa Inland Division ..	**9,823**	**28**	**194**	**218**	**588**	..
5·11 Orissa Coastal Division ..	**23,008**	**55**	**704**	**159**	**124**	**13**
Cuttack ..	27,326	54	750	171	43	35
Balasore ..	20,823	38	549	451	..	..
Puri ..	25,181	48	649	219	132	..
Sambalpur ..	12,960	40	454	259	287	..
Ganjam ..	19,052	70	740	..	260	..
Agency ..	..	..	..	..	..	..
Plains ..	*19,052*	*78*	*740*	..	*260*	..
Koraput ..	10,932	43	372	..	628	..
Dhenkanal ..	9,152	33	..	377	623	..
Keonjhar ..	9,343	16	..	..	1,000	..
Phulbani ..	5,498	12	..	..	1,000	..
Bolangir ..	8,139	44	..	335	665	..
Sundargarh ..	7,684	28	..	..	1,000	..
Kalahandi ..	11,807	14	..	1,000	..	..
Mayurbhanj ..	9,277	9	..	..	1,000	..

3·2—Variation and density of urban population

Natural division and district	Percentage increase (+) or decrease (−)			Density
	1941-51	1931-41	1921-31	1951
(1)	(2)	(3)	(4)	(5)
ORISSA ..	**+26·6**	**+14·7**	**+12·2**	**3,087**
3·33 Orissa Inland Division ..	**+26·6**	**+23·5**	**+16·9**	**2,231**
5·11 Orissa Coastal Division ..	**+26·7**	**+ 9·9**	**+ 9·8**	**4,039**
Cuttack ..	+27·5	+10·1	+15·6	3,761
Balasore ..	+ 6·9	+ 7·8	+ 2·6	2,731
Puri ..	+39·0	+ 7·4	+ 0·2	3,502
Sambalpur ..	+30·0	+14·9	+20·4	1,904
Ganjam ..	+26·8	+12·2	+13·3	6,354
Agency ..	..	..	..	..
Plains ..	*+26·8*	*+12·2*	*+13·3*	*6,354*
Koraput ..	+70·4	+37·9	+12·9	2,815
Dhenkanal ..	+26·8	+16·6	+25·7	2,918
Keonjhar ..	+ 3·8	+19·0	+39·3	2,290
Phulbani ..	− 4·2	+27·4	+ 8·7	1,815
Bolangir ..	**+12·7**	+23·4	+13·7	1,698
Sundargarh ..	+ 3·3	+11·7	+15·5	2,364
Kalahandi ..	+ 8·7	+51·4	+12·5	2,302
Mayurbhanj ..	**+12·0**	+33·7	+ 0·1	3,667

3·3—Inter-census growth rate

Urban

Natural division and district	Mean population of decade			Mean population of decade for area under registration of births and deaths		
	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA ..	**531,615**	**439,087**	**386,576**	**323,627**	**228,142**	**207,109**
3·33 Orissa Inland Division ..	**202,216**	**161,540**	**134,122**	**71,276**	**16,048**	**14,306**
5·11 Orissa Coastal Division ..	**329,399**	**277,547**	**252,634**	**252,351**	**212,094**	**192,803**
Cuttack ..	121,910	102,256	90,742	111,571	92,958	82,596
Balasore ..	40,300	37,541	35,669	21,128	18,624	17,440
Puri ..	64,950	52,491	50,572	45,056	39,312	38,131
Sambalpur ..	45,861	37,301	31,782	20,302	16,048	14,306
Ganjam ..	102,239	85,259	75,651	74,596	61,200	54,636
Ganjam Agency ..	..	..	..	..	..	..
Ganjam Plains ..	*102,239*	*85,259*	*75,651*	*74,596*	*61,200*	*54,636*
Koraput ..	43,368	27,672	21,939	50,974	..	..
Dhenkanal ..	24,556	20,115	16,677	..	..	..
Keonjhar ..	9,173	8,284	6,497	..	..	..
Phulbani ..	5,619	5,124	4,326	..	..	..
Bolangir ..	38,407	32,700	27,521	..	..	..
Sundargarh ..	15,118	14,089	12,414	..	..	..
Kalahandi ..	11,335	9,018	6,775	..	..	..
Mayurbhanj ..	8,779	7,237	6,191	..	..	..

Natural division and district	Inter-census birth rate (Registered)			Registered deaths during decade		
	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30
(1)	(17)	(18)	(19)	(20)	(21)	(22)
ORISSA ..	**25·3**	..	..	**68,304**	..	..
3·33 Orissa Inland Division ..	**13·6**	..	..	**7,957**	..	..
5·11 Orissa Coastal Division ..	**28·6**	..	..	**60,347**	..	..
Cuttack ..	29·3	..	..	26,028	..	..
Balasore ..	10·4	..	..	2,449	..	..
Puri ..	26·9	..	..	16,411	..	..
Sambalpur ..	10·5	..	..	2,294	..	..
Ganjam ..	33·8	..	..	15,459	..	..
Ganjam Agency ..	..	..	..	..	..	..
Ganjam Plains ..	*33·8*	..	..	*25,459*	..	..
Koraput ..	14·9	..	..	5,663	..	..
Dhenkanal ..	..	..	..	..	..	..
Keonjhar ..	..	..	..	..	..	..
Phulbani ..	..	..	..	..	..	..
Bolangir ..	..	..	..	..	..	..
Sundargarh ..	..	..	..	..		..
Kalahandi ..	..	..	..	..	..	..
Mayurbhanj ..	..	..	..	..	..	..

NOTE—1. Notes of Subsidiary Table 1·3 apply to this table also with the substitution of word 'Urban' for 'General' wherever it occur.

2. In respect of Koraput district the figures given include the three Union Board areas of Koraput, Kotpad and Gudari which are treated by the Health Department as "Urban" for collection of vital statistics.

during three decades

population

Growth of population during decade			Inter-census growth rate			Registered births during decade			Natural division and district
1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(1)
124,911	**60,145**	**44,517**	**23·5**	**13·7**	**11·5**	**81,920**	..	..	**ORISSA**
47,442	**33,910**	**20,927**	**23·5**	**21·0**	**15·6**	**9,725**	..	..	**3·33 Orissa Inland Division**
77,469	**26,235**	**23,590**	**23·5**	**9·5**	**9·3**	**72,195**	..	..	**5·11 Orissa Coastal Division**
29,441	9,866	13,162	24·1	9·6	14·5	32,665	..	..	Cuttack
2,691	2,829	914	6·7	7·5	2·6	2,194	..	..	Balasore
21,189	3,728	110	32·6	7·1	0·2	12,119	..	..	Puri
11,954	5,167	5,871	26·1	13·9	18·5	2,130	..	..	Sambalpur
24,148	9,812	9,404	23·6	11·5	12·4	25,217	..	..	Ganjam
..	..	..	..	..	..	..	..	..	*Ganjam Agency*
24,148	*9,812*	*9,404*	*23·6*	*11·5*	*12·4*	*25,217*	..	..	*Ganjam Plains*
22,579	8,814	2,652	52·1	31·9	12·1	7,595	..	..	Koraput
5,801	3,080	3,796	23·6	15·3	22·8	..	..	..	Dhenkanal
339	1,439	2,136	3·7	17·4	32·9	..	..	..	Keonjhar
−242	1,233	361	−4·2	24·1	8·3	..	..	..	Phulbani
4,578	6,840	3,519	11·9	20·9	12·8	..	..	..	Bolangir
498	1,560	1,790	3·3	11·1	14·4	..	..	..	Sundargarh
944	3,689	798	8·3	40·9	11·8	..	..	..	Kalahandi
996	2,088	4	11·3	28·9	0·1	..	..	..	Mayurbhanj

Inter-census death rate (Registered)			Decennial rate of natural increase (Registered)			Migration-*cum*-registration error			Natural division and district
1941-50	1931-40	1921-40	1941-50	1931-40	1921-30	1941-50	1931-40	1921-30	
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(1)
21·1	..	..	**4·2**	..	..	**19·3**	..	..	**ORISSA**
11·2	..	..	**2·4**	..	..	**21·1**	..	..	**3·33 Orissa Inland Division**
23·9	..	..	**4·7**	..	..	**18·8**	..	..	**5·11 Orissa Coastal Divisi on**
23·3	..	..	6·0	..	..	18·1	..	..	Cuttack
11·6	..	..	−1·2	..	..	7·9	..	..	Balasore
36·4	..	..	−9·5	..	..	42·1	..	..	Puri
11·3	..	..	−0·8	..	..	26·9	..	..	Sambalpur
20·7	..	..	13·1	..	..	10·5	..	..	Ganjam
..	..	..	..	..	..	..	..	..	*Ganjam Agency*
20·7	..	..	*13·1*	..	..	*10·5*	..	..	*Ganjam Plains*
11·1	..	..	3·8	..	..	48·3	..	..	Koraput
..	..	..	..	..	..	..	..	..	Dhenkanal
..	..	..	..	..	..	..	..	..	Keonjhar
..	..	..	..	..	..	..	..	..	Phulbani
..	..	..	..	..	..	..	..	..	Bolangir
..	..	..	..	..	..	..	..	..	Sundargarh
..	..	..	..	..	..	..	..	..	Kalahandi
..	..	..	..	..	..	..	..	..	Mayurbhanj

3·4—Towns classified by population

Class of town	Towns of each class in 1951	Proportion to total urban population	Percentage increase (+) or decrease (—) in class totals		
			1941 to 1951	1931 to 1941	1921 to 1931
(1)	(2)	(3)	(4)	(5)	(6)
I	1	17·3	+38·0	+13·8	+27·9
II	1	10·5	+43·2	+15·3	+15·3
III	5	23·2	+24·3	+10·0	+ 3·4
IV	8	18·1	+19·4	+14·6	+ 4·7
V	23	30·0	+22·7	+19·3	+17·1
VI	1	0·8	+ 7·6	+ 6·3	+15·4

3·5—Cities—Chief figures

City	Population 1951	Density	Percentage increase (+) or decrease (—)		
			1941 to 1951	1931 to 1941	1921 to 1931
(1)	(2)	(3)	(4)	(5)	(6)
Cuttack	102,505	4,457	+38·0	+13·8	+27·9

3·6—Number per 1,000 of the general population and each livelihood class in towns

Natural division and district	General Population	Livelihood classes							
		I	II	III	IV	V	VI	VII	VIII
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA ..	**41**	**5**	**10**	**6**	**73**	**85**	**244**	**428**	**184**
3·33 Orissa Inland Dn.	**28**	**6**	**10**	**8**	**63**	**65**	**215**	**488**	**145**
5·11 Orissa Coastal Dn.	**55**	**5**	**10**	**5**	**76**	**107**	**261**	**400**	**216**
Cuttack ..	54	5	10	7	51	105	276	293	205
Balasore ..	38	4	10	6	88	144	363	343	209
Puri ..	48	3	3	2	73	64	223	503	287
Sambalpur ..	40	7	9	8	42	68	365	589	188
Ganjam ..	70	6	21	4	122	132	225	473	184
Agency ..	..	..	..	..	..	..	..	..	..
Plains ..	*78*	*7*	*22*	*4*	*131*	*136*	*247*	*474*	*195*
Koraput ..	43	4	11	8	170	94	306	564	160
Dhenkanal ..	33	11	44	10	48	95	192	260	157
Keonjhar ..	16	5	25	22	31	28	178	207	116
Phulbani ..	12	3	4	1	76	45	32	259	51
Bolangir ..	44	9	8	13	38	104	339	839	222
Sundargarh ..	28	10	20	12	46	38	164	194	200
Kalahandi ..	14	3	2	2	35	24	104	136	88
Mayurbhanj ..	9	1	..	..	73	16	156	136	77

3·7—Livelihood pattern of urban population

Natural division and district	Per 10,000 urban population belonging to livelihood class							
	I	II	III	IV	V	VI	VII	VIII
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA ..	**783**	**150**	**196**	**269**	**1,333**	**1,751**	**559**	**4,959**
3·33 Orissa Inland Dn.	**1,321**	**148**	**354**	**167**	**1,356**	**1,454**	**538**	**4,662**
5·11 Orissa Coastal Dn.	**453**	**152**	**99**	**331**	**1,318**	**1,933**	**572**	**5,142**
Cuttack ..	515	117	134	299	1,256	1,812	412	5,455
Balasore ..	673	215	124	385	1,399	1,925	541	4,738
Puri ..	335	77	66	258	965	1,827	975	5,497
Sambalpur ..	1,058	97	285	81	1,555	1,785	812	4,327
Ganjam ..	376	219	71	399	1,595	2,150	509	4,681
Agency ..	..	..	..	..	..	..	..	..
Plains ..	*376*	*219*	*71*	*399*	*1,595*	*2,150*	*509*	*4,681*
Koraput ..	556	177	203	263	958	1,734	317	5,792
Dhenkanal ..	2,333	309	351	307	2,182	998	254	3,266
Keonjhar ..	2,460	366	1,393	158	702	984	120	3,817
Phulbani ..	1,421	102	118	209	2,776	1,006	247	4,121
Bolangir ..	1,282	58	544	25	1,599	1,306	1,069	4,117
Sundargarh ..	2,772	192	386	42	620	826	293	4,869
Kalahandi ..	1,465	73	235	94	785	1,370	116	5,862
Mayurbhanj ..	678	5	8	577	849	1,850	348	5,685

3·8—Immigration into urban areas

Natural division and district	Total urban population	District of enumeration		Other districts of the State		Other parts of India		Beyond India	
		Actual	Percentage	Actual	Percentage	Actual	Percentage	Actual	Percentage
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA ..	**594,070**	**491,007**	**82·6**	**49,663**	**8·4**	**48,662**	**8·2**	**4,738**	**0·8**
3·33 Orissa Inland Dn.	**225,932**	**173,050**	**76·6**	**20,375**	**9·0**	**30,674**	**13·6**	**1,838**	**0·8**
5·11 Orissa Coastal Dn.	**368,133**	**317,957**	**86·4**	**29,828**	**7·9**	**17,988**	**4·9**	**2,900**	**0·8**
Cuttack ..	136,630	115,113	84·2	14,702	10·8	5,644	4·1	1,171	0·9
Balasore ..	41,646	38,727	93·0	560	1·3	1,840	4·4	519	1·3
Puri ..	75,544	56,894	75·3	12,118	16·0	5,501	7·3	1,031	1·4
Sambalpur ..	51,838	38,549	74·4	4,949	9·5	7,646	14·8	694	1·3
Ganjam ..	114,313	107,223	93·8	1,908	1·7	5,003	4·4	179	0·2
Agency ..	—	..	..	..	..	..	..	..	..
Plains ..	*114,313*	*107,223*	*93·8*	*1,908*	*1·7*	*5,003*	*4·4*	*179*	*0·2*
Koraput —	54,658	31,771	58·1	6,816	12·5	16,000	29·3	71	0·1
Dhenkanal —	27,456	25,714	93·7	1,220	4·4	195	0·7	327	1·2
Keonjhar —	9,343	8,843	94·6	380	4·1	117	1·3	3	0·0
Phulbani —	5,498	5,065	92·1	295	5·4	45	0·8	93	1·7
Bolangir —	40,693	33,141	81·4	3,184	7·8	4,177	10·3	191	0·5
Sundargarh —	15,367	13,073	85·1	835	5·4	1,386	9·0	73	0·5
Kalahandi ..	11,807	9,431	79·9	1,830	15·5	380	3·2	166	1·4
Mayurbhanj ..	9,277	7,463	80·4	866	9·3	728	7·9	220	2·4

CHAPTER IV

Agricultural Classes

SECTION I

Preliminary Remarks

IMPORTANCE OF AGRICULTURE

1. Agriculture has ever held the pride of place in the life and economy of the people of Orissa. It is the main occupation of the people and nearly 80 per cent of the total population depend upon it for their principal means of livelihood. Agriculture is the premier source of national income of Orissa, provides food for 15 millions people living in the State and constitutes the bulk of export to other States, mainly in the form of rice which goes to meet India's food deficit to a certain extent in the present situation of the country. Moreover, the problems relating to agriculture and population are inter-related on account of the fact that rates of fertility and mortality in Orissa respond to conditions of agriculture no less than to state of public health. It is therefore necessary to study the major issued involved in the agricultural economy of the State.

LOW YIELD

2. With all the unparalleled importance of agriculture for the people of Orissa, its efficiency is surprisingly low, which may appear quite paradoxical in view of the fact that Orissa is one of the few States in India which is surplus in food production. This agricultural inefficiency and backwardness may be a feature more or less common to other States in India, for India as a whole is noted for extremely low yield. According to one estimate,* the average outturn of rice in lbs. per acre stands at 1,240 for India, 2,185 for U. S. A., 2,433 for China, 2,998 for Egypt, 3,444 for Japan and 4,568 for Italy. Thus the average yield per acre in India compares very unfavourably with that of other countries. Crops other than rice also have low yield in India. In Orissa, the yield of rice is 975 lbs. per acre, which is much lower than the average yield per acre in India. The economic loss that is occasioned on account of this low yield is indeed very high. If the output of rice per acre were raised to that of Egypt, the wealth of Orissa would increase by 213·5 crores † of rupees per year. Similarly, if the output will be equal to that of Japan, the additional annual income would be 260·6 crores of rupees and if raised to the level of Italy, it would be 379·3 crores of rupees per year. If this is the staggering loss in rice alone, the total loss on account of low agricultural productivity of all crops must be very high indeed. In other words, Orissa is poorer year by year to this stupendous extent, and the root cause of proverty of the general population is inefficiency in agriculture.

---

*Agriculture and its Problems by A. N. Agrawal,(Ranjit Printers, Delhi, 1951), P. 3.

† The amount is calculated as follows :

Orissa has 9·5 million acres of land under rice. The annual yield at the rate of 975 lbs. per acre comes to 9,263 million lbs. But in terms of Egyptian output, the production will come to 9·5 millions × 2,998 lbs. ≐28,481 million lbs. The present price of coarse rice (in husk) is 9 lbs. per rupee. The difference between Egyptian and Orissa's production being 19,219 million lbs., the loss amounts to 213·5 crores of rupees.

Causes of Low Productivity

3. If the productivity of the land in Orissa has been low, it is not so much on account of the natural deficiency of the land but on account of the way in which the land is handled. This is mostly born of factors arising from the cultivators' poverty and the increasing pressure on agricultural land and similar other causes. A knowledge of the conditions that induce low productivity is necessary for planning and development of agriculture. Very often the problem of low agricultural productivity has been analysed mainly from its technological aspect, quite in isolation from its social and economic background. The problem must be viewed in a comprehensive way and not merely on the basis of technological grounds. The whole set of social, economic and technological factors that are prejudicial to the progress of agriculture must be taken into consideration. A few such factors are examined below.

Pressure on Agricultural Land

4. There is considerable pressure of population on cultivated lands which has been increasing during the last few decades. Discussing about the effects of excessive pressure on land, Davis remarks,*

> The average agricultural holding is quite small. Pasture land is overgrazed. Few forests are left. Rural housing is extremely inadequate. Excess labor is backed up and wasted. Rural indebtedness is burdensome. And most lamentable of all, the competition for bare sustenance is very grim even in the richest food-growing areas. There should be a surplus of the means of subsistence, but there is none. Everywhere in this fertile land of abundance the people who live on the soil and grow the food have less than enough to eat, not because the land is poor, not solely because the techniques are antiquated (though they are bad enough), but because the numbers are too great.

In 1881, the percentage of population depending on agriculture was 61·6. This proportion increased to 75·6 per cent in 1911, and to 79·3 per cent in 1951. In the early years of the British rule, indigenous industries began to decay fast, which coupled with the rapid growth of population led to an abnormal and increasing dependence on agriculture. The salt manufacture in Orissa coast declined rapidly in the last century being unable to stand the competition against Liverpool salt. Similarly, the weaving industry which was the most important occupation of the people of Orissa next to agriculture became less remunerative year by year with the flooding of Orissa markets with British textiles and piece goods. Similar decline resulted in the manufacture of indigenous articles of household use and stationeries. The people had therefore no other option than to fall back upon agriculture in ever-increasing number. This has resulted in fragmentation of cultivated land to such an extent that agriculture is tending to become less and less an economic proposition for most of the people who depend upon it for their livelihood.

Insufficiency of Irrigation

5. Inadequate water supply is also an important cause of unsatisfactory yield from land. The capricious character of rainfall has been discussed in the Introduction to this Report. In any particular year, the rains may be too inadequate or may come in excessive fall. Again, they may start too early or too late and may not be well distributed throughout the season. This has a serious effect in the success of the agricultural operations. Development of irrigation is indispensably necessary if the agriculturist is no more to remain under

* Population of India and Pakistan by Kingsley Devis, Page 22.

the mercy of the monsoon. The *per capita* irrigated area in Orissa, instead of increasing, has been consistently declining for the last few decades.

Loss of Fertility

6. The soil is gradually losing in fertility due to soil erosion and other reasons. It is believed that the agricultural land loses a part of its natural fertility every time a crop is grown which takes away about 25 lbs. of nitrogen from an acre of land. If this land is not recouped by the application of appropriate manure, the fertility of the soil decreases and with it, the yield. The loss in fertility on account of raising of crops from year to year is restored by natural process but not to the full extent. It is therefore necessary to fertilize by artificial methods the lands which grow crops. As this is not done to an adequate extent, the level of fertility of the land is going down.

Lack of Crop Rotation

7. The technique of crop rotation and mixed cropping is but slowly spreading. It cannot be extensively adopted by the agriculturists because of the pressure on land. The holdings are small and the agriculturist is anxious to get as much money as possible from it and prefers growing of cash crops wherever possible. The scientific method of crop rotation is thus neglected, leading to soil depletion and plant diseases.

Antiquated Implements

8. Another main cause why productivity has not improved is the use of obsolete and inefficient agricultural implements and tools which are in vogue in Orissa. Most of these implements have remained unchanged from time immemorial. Although advanced countries have taken to the use of improved agricultural implements, ensuring the cultivator better crop at reduced cost, the agriculturists of this country have not changed their implements of the primitive type. The wooden plough which merely loosens rather than upturns the soil does not contribute to enhance the fertility of the soil. The thrashing of grains by making bullocks tread over them and the winnowing operation with the help of wind have been in existence for milleniums.

Uneconomic Cattle-keeping

9. There exists a state of competition between human and bovine population on account of insufficiency of scope for food and fodder crops. The cattle population in Orissa is excessive which has resulted in the uneconomic proposition of maintenance of superfluous cattle. The natural result of such a large number of cattle is reflected in the poor health and small size of bullocks which are less efficient for agricultural purposes and of cows which are less useful for milk yielding purposes. Orissa has 7,888,736 heads of cattle inclusive of cows, oxen and young ones but exclusive of buffaloes, sheep, goats, etc. This means that there is one head of cattle for every two persons living in Orissa. The following table * shows the number of cattle, the average annual milk yield per cow and the *per capita* consumption of milk in different States in India.

State	No. of cattle	Average annual milk yield per cow in lb.	*Per capita* consumption of milk in ozs. per day
Orissa ..	7,888,736	245	2·64
Assam ..	4,244,232	140	1·23
Bihar ..	11,388,328	620	4·37
Bombay ..	10,890,044	140	3·02
Madras ..	16,563,920	450	4·18
Punjab ..	4,192,062	1,445	16·89
Madhya Pradesh	12,836,108	65	2·00
Uttar Pradesh ..	21,696,045	625	7·16
West Bengal ..	8,456,721	420	2·77

* Collected from Indian Live-stock Statictics, 1947-48 to 1949-50 issued by the Ministry of Food and Agriculture, Government of India, 1952.

10. The preceding statement shows that with regard to the superfluous cattle, the position is not commendable anywhere in India but that is no argument why imporvement of the situation in Orissa should not be aimed at. Conditions in India are very much different from those of advanced countries of the world. India contains nearly one-fourth of the total bovine population of the world. In the year 1945-46, the territories now consitituting India had more than 134 million cattle while U. S. A. had 82·4, United Kingdom had 9·3, Australia had 13·8, China had 19·8 and Russia had 63·2 million heads of cattle. A planned programme of restrictions of the number of cattle and of controlled breeding is essentially necessary not only for improved dairy farming but also for improvement of agricultural efficiency. This will prevent the aggravation of poverty of small holders and the exhaustion of grass-land resources.

OTHER FACTORS

11. Other factors which are responsible for the low yield of crops are connected with such matters as inadequate facility of rural credit, difficulties in marketting agricultural produce, fluctuation in the price level of commodities which makes the cultivator less confident, lack of capital investment on land and want of education in modern agricultural technique. These are the several factors which are responsible for low productivity and backwardness of agriculture in Orissa. The various problems mentioned above are closely bound up with one another and cannot be isolated and dealt with piecemeal if a rapid agricultural development is aimed at.

THE EXAMPLE OF JAPAN

12. Agricultural conditions in Orissa are in many ways similar to those in Japan. Yet it is remarkable that in the matter of yield of rice per acre, there should be such an enormous difference between the two countries. Should Orissa be able to emulate Japan's example with regard to productivity of land, an immense improvement in her agricultural economy and increase in national income was assured. What might be learnt from Japan * in this connection is highly interesting.

13. The most important crop of Japan is rice which is cultivated over 7·8 million acres out of the total cultivated area of 15 million acres. The total production of rice is 10·4 million tons giving an average yield of 2,350 lbs. of clean rice per acre. The Japanese Government have given serious attention to the improvement of rice cultivation with the result that during the last 60 years the area under rice has increased by about 25 per cent while the yield per acre during the same period has increased by about 70 per cent. In 1880, the total production of rice was 4·9 million tons but it rose to 10·4 million tons during 1942, an increase of 113 per cent in 62 years. Japan is able to produce about 80 to 85 per cent of food requirements for its population of 78 millions from a cultivated area of 15 million acres. The extent of cultivated area in Orissa exceeds 12 million acres of which nearly 9·5 million acres are devoted to rice cultivation. This huge extent of land yields only 4·1 million tons of rice (in husk), which after meeting the requirements of 15 million inhabitants results in a small surplus for export to other States in India. This makes a very unfavourable comparison with the production of rice in Japan which yields more than 10 million tons from less than 8 million acres of land.

14. The soil of Japan is generally poor in natural fertility as is the case with

* Adopted from an article in the Indian Farming, Volume XI, No. 2, February, 1950, page 54.

Orissa. Japan's cultivated land consists mostly of coastal plains and narrow river valleys made up of sandy and sterile elements of volcanic material consisting of acidic lavas and ash which by no means make the land fertile. The soil of Orissa as has been observed in detail in the Introduction of this Report is mostly either of lateritic origin or of old alluvial deposits which are deficient in organic matter, nitrogen and calcium. As in Orissa, the holdings in Japan are small and the land is mostly prepared with hand tools and with implements driven by animal power. The high level of production in Japan has been attained in spite of poor quality of the soil, and the smallness of holdings, mainly through the application of results of research in practical farming, and by the disciplined and hardworking character of the Japanese cultivator.

15. The efficiency of Japanese agriculture may also be due to the well organised administration for agricultural improvements. The country is divided into a number of agricultural districts of about 500 square miles each. Each of the districts has a Central Research and Experimental Station with a large number of technicians roughly one for two to three square miles of area. These technicians maintain the liaison between the farmers and the Experimental Station, passing the results of research to the farmers and bringing the problems of the farmers to the notice of the Research Station for investigation and advice. Yet another factor that contributes to efficiency is the use of small, sturdy and economical machines. The use of such small implements for cultivation is a special feature in Japan which minimizes labour and cost. Over 500 factories produce agricultural machinery and implements worth about 40 million dollars every year. The special characteristics of these implements are that they can be used efficiently in small plots and are suitable for small scale farming. Notable among such implements are the '*Suki*' or the Japanese light weight plough weighing about 35 to 40 lbs., harrows of various types including the notched rotary type for wet paddy lands and disc type for dry fields, paddy weeders driven either by hand or by live-stock, power tillers mostly dirven by oil engines of 5 H. P. or so, threshing machines which are either pedal driven or power driven, and many other implements, such as, winnowers or hulling machines. These simple machines save time and labour of the small cultivators and add to their incomes and increase their efficiency. These are ideally suited for our country where holdings are small and fragmented.

16. In spite of high amount of urbanization and industrialisation, Japan more or less is a nation of farmers, with 43 per cent of households engaged in farming as against 80 per cent of the population depending on agriculture in Orissa. The average size of a holding per family comes to 2·6 acres in Japan while it stands at 4·2 in Orissa. Thus, the average holding is very small and the cultivator and his family pay personal attention to cropping more on the fashion of a garden than a field. Generally two successive crops of rice are raised in the land, the seed being sown at first in nursery beds. The first crop is transplanted in April and harvested in August while the second crop which is sown in nursery beds in July is transplanted after the first crop is harvested. The yield of the second crop is about 60 to 70 per cent of the first crop.

17. Thus the high yield in rice crop in Japan is due to successful double cropping but there are other important factors too. The cultivators have become fully conscious of the advantages of improved methods of agriculture. Their nursery and field practices have been modernised and they rely to a great extent on application of fertilisers

and use of improved varieties of seeds. Very often the seeds are treated with nutrient solutions or with chemicals so as to stand against plant diseases. Selection of seeds is done by discarding lighter seeds that float out in salt water solution. Lastly, intensive manuring which is highly necessary when improved varieties of seeds are used leads to the desired result.

18. In Orissa, the use of improved seeds has hardly become extensive. Usually little or no manure is applied to the rice crop as the available cattle manure is very limited. The sowing of mixed seeds, the absence of fertilising practice and the lack of water-supply at critical times are mainly responsible for the low yield of rice in Orissa. Orissa gets about 650 lbs. of clean rice per acre as compared to 1,010 lbs. and 890 lbs. per acre in the adjacent States of Madras and Bengal respectively.

Agricultural Development

19. The development of agricultural resources requires first of all tackling the question of land reforms. Such reforms will involve a thorough overhauling and re-organisation of the economic and social structure of the country. The abolition of Zamindari may just be the beginning of a difficult and complicated programme. Thereafter, many other problems have to be faced. The land must be redistributed, adequate water-supply must be assured, good manure, efficient tools and implements and improved methods of cultivation may ultimately bring the chances of doubling or tripling the food production. Without these fundamental measures no real improvement of agriculture is possible.

Agrarian Reforms

20. In view of the pressing need for improvement of agriculture, measures have been taken for agrarian reforms on various occasions since the creation of Orissa as a separate province, by legislative and executive actions. One such notable measure is the appointment of a Committee on the 15th November 1946 headed by Shri Nabakrushna Chaudhuri "to recommend legislative and other measures for reforming the different systems of land revenue and land tenure that are in vogue in different parts of the province". But the greatest of the agrarian reforms was announced on the 27th November 1952 when Orissa entered upon a career of transformation into a new democratic order by abolition of 480 age-old Zamindaris which were either permanently settled or governed by the law of primogeniture, under the Orissa Estates Abolition (Amendment) Act, 1952. Abolition of many other Zamindaris followed soon after this date. Orissa has about 1,23,000 estates in all which it is intended to abolish in due course. Connected with this remarkable achievement in the domain of agrarian reforms is the de-provincialisation of land revenue and setting up of local authorities for the management of lands and for carrying out functions of the Local Government. The basic principle that underlies these reforms is that, in the ultimate analysis, land belongs to the community and the community has always the right to regulate it in its own interest. The principle was accepted at all time in the past in Orissa and in fact elsewhere in India, the king or the ruler exercising the right as the representative of the community. It, however, receded to the background under the British rule, but during the last decade the food crisis in India and the futile, though costly, attempts to increase food production in the country ultimately brought home to all thinking people that the needs and interest of the community must be the prime consideration in any agrarian reform. Action on these lines has just started and it will be the future which will give the verdict on the success of the scheme. A good

deal of uphill task in the matter of agrarian reform, however, has yet to be done. The incidence of land revenue or rent should be made uniform and equitable. The proprietory and intermediary interests that exist to-day should be eliminated, consolidation of holdings should be fostered, adequate provision of pasture and other types of communal lands should be made and finally the agricultural production should be stepped up and the standard of living of the cultivating class raised. The institution of zamindary is only one among a large number of factors contributing to the agricultural inefficiency in the country. Abolition of zamindary is undoubtedly an indispensable pre-requisite for the improvement of agriculture but its abolition will not, by itself, bring in an era of plenty and prosperity unless accompanied by appropriate measures to tackle other connected problems. Advantage should now be taken of the reforms sponsored through legislation which are likely to give to the tenant a new social status and also the much needed sense of security and confidence.

Deficiency of Agricultural Statistics

21. The statistics relating to acreage of cultivation and irrigation discussed in this Chapter are of non-census origin. In dealing with such statistics one is struck by the extreme deficiency and defective character of the records maintained in this connection. The necessary facts and figures have been gathered from the Director of Agriculture, and from such publications as the Season and Crop Reports, Land Utilization Statistics, Agricultural Statistics of India, Agricultural Satatistics of the Eastern States Agency, etc. These publications with the exception of the last one, are most likely dependent upon materials supplied by the Director of Agriculture, who happens to be the only ultimate source of information, particularly with regard to the old districts of Orissa. The Directorate was created a few years after the creation of Orissa as a separate province, and it was not till 1944 that a whole-time Director of Agriculture was appointed. It took sometime more to organize the collection of agricultural statistics. This is why the Agricultural Statistics of Orissa are not quite useful, firstly because the agency of collection was not efficient and secondly because the satatistics did not go much into the past. With some difficulty, figures for the last 10 years have been gathered. The further back of 1941 one goes, the poorer are the statistics, till one finds nothing but imagination for the period prior to 1931.

22. The most reliable source, with regard to areas under different types of cultivation and irrigation, should have been the Land Settlement Reports. But it is unfortunate that more than half the area of the State never had any authentic survey and settlement operations. In the rest of the area, the operations were held more than 20 years ago, so that the results are not useful for the study of the present situation. The Land Revenue Settlement of Sambalpur district took place in 1926 and of the three coastal districts during the years 1922 to 1932. Radical changes have taken place in various fields in the meanwhile.

23. On account of these difficulties, a special temporary staff was appointed early in 1944 for collection of agricultural statistics. At the head of the organisation was the Provincial Statistical Officer in charge of supervision and co-ordination of the collection of agricultural statistics throughout Orissa. Below him were District Statistical Officers in each district who were mostly officers of the Revenue Department, undertaking the responsibility of collection of agricultural statistics as a part of their multifarious

duties. In each district there were a number of agricultural statistical Inspectors under whom there were about 7 amins. Each amin was in charge of 80 revenue villages whose duty was to inspect every field once at the time of sowing and again when the crop was ripe for harvest. The collection of statistics was based on the system of plot to plot enumeration but the size of the primary reporting unit was too large and the supervision was far from adequate or efficient, resulting in collection of figures which were considered not reliable. The department was therefore closed down within a few years, as the quality of statistics collected by it did not justify the cost and trouble undertaken.

24. In the absence of any other major source of information, reliance has been made mostly on the figures available from the office of the Director of Agriculture. His figures, however, have been discarded or criticized wherever they appeared to be highly faulty. The deficiency has been met to some extent from various official Reports, such as, the Report of the Agricultural Labour Enquiry, the Report of the Land Revenue and Land Tenure Committee and publications issued by the Ministry of Food and Agriculture. With these materials, an attempt has been made to build up as much of the story of progress of agriculture in Orissa as possible.

REFERENCE TO STATISTICS

25. Table A-V appearing in part II-A of this Report contains the figures showing distribution of agricultural classes in towns of Orissa. Table E gives particulars of each livelihood class of the agricultural population in respect of different districts, subdivisions, taluks, police-stations and towns. Table D-VII shows each livelihood class of the agricultural population by educational standard. The economic tables (B Series) appearing in Part II-B of this Report show the distribution of the agricultural population by livelihood classes and sub-classes in the rural and urban areas of each district.

26. Besides the above general tables, a set of subsidiary tables has been constructed for purpose of comments given in the following pages. These tables may be seen at the end of this Chapter.

Subsidiary Table—

4·1—Agricultural classes per 1,000 persons of general population ; Number in each class and sub-class of 10,000 persons of all agricultural classes ; and comparison with agricultural holdings by size.

4·2—Livelihood class I (Cultivators of land wholly or mainly owned and their dependants). Number per 10,000 persons of livelihood class I in each sub-class ; Secondary means of livelihood of 10,000 persons of livelihood class I.

4·3—Livelihood class II (Cultivators of land wholly or mainly unowned and their dependants). Number per 10,000 persons of livelihood class II in each sub-class ; Secondary means of livelihood of 10,000 persons of livelihood class II.

4·4—Livelihood class III (Cultivating labourers and their dependants). Number per 10,000 persons of livelihood class III in each sub-class ; Secondary means of livelihood of 10,000 persons of livelihood class III.

4·5—Livelihood class IV (Non-cultivating owners of land, agricultural rent receivers and their dependants). Number per 10,000 persons of livelihood class IV in each sub-class ; Secondary means of livelihood of 10,000 persons of livelihood class IV.

4·6—Active and semi-active workers in cultivation.

4·7—Progress of cultivation during three decades.

4·8—Components of cultivated area *per capita* during three decades.

4.9—Land area *per capita* (1951); and trend of cultivation *per capita* during three decades.

SECTION II

Agricultural Population Ratios ; Self-supporting Persons and Dependants ; Secondary means of Livelihood of Agricultural Classes

PERCENTAGE OF AGRICULTURAL POPULATION

1. Persons belonging to the agricultural classes in Orissa constitute four-fifths of the total population. The population of the State is 146·5 lakhs, of which 116·1 lakhs or 79·3 per cent belong to agricultural classes. There are many States in India which have a lower percentage of agricultural population than Orissa but there are a few which have a higher percentage. The percentage of agricultural population stands at 76·0 in Madhya Pradesh, 74·2 in Uttar Pradesh, 73·3 in Assam, 64·9 in Madras, 64·5 in Punjab, 61·5 in Bombay and 57·2 in West Bengal. Bihar and Vindhya Pradesh, however, have got higher percentages of agricultural population, namely, 86·0 and 87·1 respectively. Orissa is more agricultural in character than most of the States in India.

2. In the inland division of Orissa, the agricultural classes are more numerous than in the coastal division. The inland division contains 82·7 and the coastal division 75·2 per cent of the general population. Districts having high agricultural proportion of the population are Keonjhar, Sundargarh and Mayurbhanj where 89·9, 86·8 and 87·2 per cent of the general population respectively belong to the agricultural classes. Districts which have a low proportion of agricultural clasess are Ganjam with 66·1, Cuttack with 74·9 and Koraput with 77·3 per cent. The remaining districts occur in between these districts of high and low agricultural population ratios. These figures are given in Subsidiary Table 4·1.

3. The Agricultural Labour Enquiry conducted by the Ministry of Labour made a survey of the agricultural families and has arrived at certain results. This enquiry was confined to rural areas only. According to it, the percentage of agricultural families to the total rural families in Orissa is 83·2. In order to facilitate comparison with the results of the census, the percentage of agricultural population of rural areas to the total rural population of the State may be found out. Such percentage works out to 82·0. Thus, the results of the two separate investigations have yielded results which do not show any difference except to a nominal extent. The census figures are derived from the process of complete count unlike the Agricultural Labour Enquiry which was conducted on the basis of random samples. While the results of the census are to be taken as more reliable on this ground, it is to be noted that irrespective of the insignificant difference in the result of the two sets of investigations, one corroborates the reliability of the other.

LIVELIHOOD CLASSES OF THE AGRICULTURAL POPULATION

4. Agricultural population is divided into four livelihood classes as mentioned in Section VI of Chapter I. To recapitulate, the population depending for thier principal means of livelihood on agriculture are divided into the following classes, viz.—

I. Cultivators of land wholly or mainly owned and their dependants ;
II. Cultivators of land wholly or mainly unowned and their dependants ;
III. Cultivating labourers and their dependants ; and
IV. Non-cultivating owners of land ; agricultural rent receivers and their dependants.

LIVELIHOOD SUB-CLASSES—DEFINITION

5. Agricultural population may be divided on the basis of degree of dependence for thier maintenance into three sub-classes, namely, self-supporting persons, non-earning dependants and earning dependants.

SELF-SUPPORTING PERSON

6. Where a person is in receipt of an income, and that income is sufficient *at least for his own maintenance*, then he (or she as the case may be) is regarded as a self-supporting person. Such income may be in cash or in kind. There must be at least one self-supporting person in each household and every household, howsoever poor in resources, is collectively self-supporting for otherwise it would cease to exist.

7. Self-supporting persons are economically active. But the following classes and groups of self-supporting persons constitute an exception and are not considered as economically active :—

(*i*) All self-supporting persons of agricultural class IV.

(*ii*) The following groups of self-supporting persons who are included in non-agricultural class VIII and derive their principal means of livelihood from miscellaneous sources (otherwise than through economic activity) :—

(*a*) Non-working owners of non-agricultural property ;

(*b*) Pensioners and remittance holders ;

(*c*) Persons living on charity and other persons with unproductive occupation ; and

(*d*) Inmates of penal institutions and asylums.

NON-EARNING DEPENDANT

8. Any body who is not a self-supporting person in the above sense is a dependant. A dependant may be either 'earning' or 'non-earning'. If the person does not secure any income either in cash or in kind, he is said to be a non-earning dependant. Such class of persons are economically passive. They include persons performing house work or domestic or personal services for other members of the same household but they do not include 'unpaid family workers' or persons who take part along with other members of the household in carrying on cultivation or home industry as a family enterprise.

EARNING DEPENDANT

9. A dependant who is earning some amount of income which is not adequate for maintaining himself is known as earning dependant. The test is whether or not he secures a regular income even though it may be small. If he secures a regular income which is not sufficient to support him, he is an earning dependant. Such persons are taken to be economically semi-active. Though they contribute to the carrying on of economic activity, the magnitude of their individul contribution is deemed to be too small to justify their description as economically active.

10. Where two or more members of a family household jointly cultivate land and secure an income therefrom, each of them is regarded as earning a part of the income. None of them, is, therefore, a non-earning dependant. Each of them should be classed as either a self-supporting person or an earning dependant, according to the share of income attributable to him (or her). The same applies to any other business carried on jointly. This does not mean that any one who works is necessarily a self-supporting person or an earning dependant. Thus, for instance, a housewife who cooks for

the family, brings up the children or manages the household is doing very valuable work. Nevertheless, her economic status is that of a non-earning dependant, if she does not also secure an income.

CLASSIFICATION MADE BY THE AGRICULTURAL LABOUR ENQUIRY

11. In classifying the agricultural population of Orissa, the Agricultural Labour Enquiry has adopted a criterion of its own. The figures of classification made by the Census differ considerably from those of the Agricultural Labour Enquiry, even though there is practically no difference between the two investigations so far as the total percentage of agricultural population is concerned, as seen in paragraph 3 above. Therefore, in making any comparison between the results of the Census and the Agricultural Labour Enquiry, it is necessary to allow for differences in the nature of the two enquiries and in the definitions and classifications which were adopted. These are stated below :—

(*a*) The 1951 census results are based on an enumeration of the entire population, while the Agricultural Labour Enquiry was confined to randomly selected sample villages.

(*b*) The unit of enumeration was the individual in the 1951 census and the Family in the Agricultural Labour Enquiry.

(*c*) An important item of difference between the two sets of figures arises from the method of classification. The census divides the agricultural population into 4 livelihood classes each having 3 sub-classes based on the extent of dependency. Every individual was classified as either a self-supporting person or a non-earning dependant or an earning dependant. A self-supporting person was a person whose income was sufficient atleast for his own maintenance. A non-earning dependant was one who was not in receipt of an income and was entirely dependent on a self-supporting person for his own maintenance. An earning dependant was a person who was in receipt of an income which was insufficient even for his own maintenance. In the case of an earning dependant the principal means of livelihood of the person on whom he was depending was taken to be his principal means of livelihood and the source of his own insufficient income was deemed to be his secondary means of livelihood.

12. In the Agricultural Labour Enquiry, the classification of the entire family generally follows that of the head of the household. The Enquiry distinguishes 3 main classes and 8 subclasses of the agriculturists, namely :—

(1) Agricultural Owners—
  (*a*) Non-cultivating,
  (*b*) Cultivating,
  (*c*) Partly cultivating and partly non-cultivating.
(2) Agricultural Tenants—
  (*a*) Non-cultivating,
  (*b*) Cultivating,
  (*c*) Partly cultivating and partly non-cultivating.
(3) Agricultural Workers
  (*a*) Without land,
  (*b*) With land.

13. Apparently, class 1(*a*) of the Agricultural Labour Enquiry is the non-cultivating owners which corresponds with class IV of the census. Similarly, class 1(*b*) (cultivating owners) corresponds with class I of the census. Class 2(*b*) (cultivating tenants) is the same as class II of the census. The totals of classes 3(*a*) and 3(*b*) may be taken to be

identical with class III of the census. But, in fact, it is dangerous to accept such basis of comparison, as the conception of classification under the two sets of investigations is considerably dissimilar.

14. Land tenures vary. The same kind of right in land is known by different names in different States, while the same name covers different kinds of rights in land in different States. At the 1951 census, a uniform definition of 'ownership' of land was adopted and local officers were instructed to look to the actual nature of the rights in land in their areas and apply a common principle of classification uniformly in all parts of the country. According to this principle 'ownership' of agricultural land included every tenure which involved the right of permanent occupancy of land for purpose of cultivation. Such right, it was stipulated, should be heritable; it may be, but need not necessarily be also transferable. When the Agricultural Labour Enquiry commenced there was no such definition. The local terminology was followed.

15. Now a comparison of the percentage of different classes shown by the Census and by the Agricultural Labour Enquiry may be made as follows :—

1951 Census		Agricultural Labour Enquiry	
Percentage of rural agricultural population to total rural population		Percentage of agricultural families	
Class	Percentage	Class	Percentage
Agricultural classes	82·1	Agriculturnl classes	83·2
Non-agricultural classes	17·9	Non-agricultural classes	16·8
I. Cultivators of land owned	61·7	1. Agricultural owners	41·4
IV. Non-cultivating owners	1·4		
II. Cultivators of land unowned	6·1	2. Agricultural tenants	3·9
III. Cultivating labourers	12·8	3. Agricultural workers	37·9

16. As it appears from the above statement the proportions reported by the Census and the Enquiry show insignificant difference so far as broad classification of the population into agricultural and non-agricultural categories is concerned. But very wide difference is noticeable if the agricultural population is subdivided into various livelihood groups, such as, the owner-cultivators, tenants, labourers, etc. The proportion of owners reported by the Census is very much higher and that of tenants and agricultural labourers is much lower than has been found in the Enquiry. Obviously, the Census and the Agricultural Labour Enquiry have adopted very different definitions of owners, agricultural labourers, etc. Classification of agriculturists is extremely difficult in India because of the great diversity in the systems of land rights and sharing of agricultural produce in different parts of the country. It is therefore of utmost importance that the definition of the terms used for denoting the classification must be thoroughly understood before the statistics are used or compared.

PROPORTION OF SUB-CLASSES

17. Subsidiary Table 4·1 shows that out of 10,000 persons belonging to the agricultural classes of the State a small number, namely 2,777, are self-supporting persons and 990 are earning dependants. The remaining persons numbering 6,233 belong to the category of non-earning dependants who are persons just doing nothing. This large number of persons among the agricultural population is wholly dependent upon a smaller group of persons who work and maintain themselves as well as the non-working dependants. Comparison of the figure of Orissa with those of India as a whole shows that the number of self-supoprting persons are slightly higher in India on the average than in Orissa. Consequently the number of dependants is lower. The following table gives the percentage of

agricultural sub-classes in India and in different States for the facility of comparative study.

State	Percentage of		
	Self-supporting persons	Non-earning dependants	Earning dependants
INDIA	28·7	59·6	11·7
Orissa	27·8	62·3	9·9
Uttar Pradesh	29·7	56·1	14·2
Bihar	31·9	64·0	4·1
West Bengal	26·0	69.8	4·2
Madras	25·8	69·1	5·1
Bombay	24·6	54·6	20·8
Madhya Pradesh	30·0	41·1	28·9
Punjab	26·8	58·2	15·0
Assam	24·5	58·5	17·0

18. The extent of dependency is very marked in the coastal division where 6,595 persons out of 10,000 are non-earning dependants while the corresponding figure for the inland division is 5,957. This is so because among the agriculturists of the coastal division education is spreading faster than in the inland division so that a large number of their children are sent to schools rather than to fields and have been retuned as non-working dependants. The proportion of non-working dependants though smaller compared with that of the coastal division is in fact very high with relation to other sub-classes, namely, earning dependants and self-supporting persons.

19. The large proportion of non-working dependants among the agriculturists of the two natural divisions is inversely reflected on the earning dependants who constitute a much smaller proportion in the coastal division than in the inland division. 689 persons out of 10,000 of the general agricultural population form earning dependants in the coastal division but in the inland division their number is nearly double, namely 1,220. This is again due to the fact that in the inland division a large number of children are not sent to schools but accompany their parents to the field to attend to the lighter items of agricultural operations.

20. The difference in proportion noticeable between the two natural divisions with regard to the dependants both earning and non-earning is noticeable only to a small extent in the case of self-supporting persons. Out of 10,000 persons belonging to the agricultural classes, there are 2,823 persons of self-supporting category living in the inland division and 2,716 in the coastal division.

21. Self-supporting persons constitute a little above one-fourth of the total agricultural population. The remaining three-fourths are dependants, mostly of non-earning type. In the district of Sambalpur the percentage of self-supporting persons is very high, namely 32·1 per cent while in Koraput the percentage is lowest, namely 25·6. As regards the earning dependants, Sambalpur, Dhenkanal, Bolangir, Sundargarh, Kalahandi and Mayurbhanj show very high percentage while the districts of the coastal division and in a few districts of the inland division, such as, Keonjhar, Phulbani and Koraput earning dependants are small in proportion. Non-earning dependants are highest in proportion in Koraput, Keonjhar, Puri and Balasore and are to be found in lowest number in Sambalpur and Mayurbhanj. The high proportion of dependants in some of the districts as mentioned above is due not merely to the social and economic conditions of the locality but also to the age structure of the population. A locality having a large proportion of children is likely to have a larger dependency ratio. This will be examined further in Chapter VI.

Secondary Means of Livelihood of Agricultural Classes

22. Figures relating to the secondary means of livelihood of agricultural classes may be seen in the Economic Table B-II published in Part II-B of

this Report. Among the agricultural classes, 17·2 per cent of the people only have got secondary sources of livelihood, of whom 7·3 are self-supporting persons and 9·9 are earning dependants.

23. The following table gives the number of self-supporting persons and earning dependants for 1,000 persons of all agricultural classes who have a secondary means of livelihood.

Proportion of self-supporting persons and earning dependants of agricultural classes having secondary means of livelihood out of 1,000 persons of all agricultural classes

Secondary means of livelihood	Sub-class	Orissa	Inland division	Coastal division
Class I	S. S. P.	9	7	10
	E. D.	9	11	6
Class II	S. S. P.	3	2	6
	E. D.	5	8	3
Class III	S. S. P.	14	15	15
	E. D.	32	46	19
Class IV	S. S. P.	1	1	1
	E. D.	1	1	1
Class V	S. S. P.	18	19	19
	E. D.	16	22	12
Class VI	S. S. P.	11	9	13
	E. D.	7	7	7
Class VII	S. S. P.	1	1	2
	E. D.	1	0	1
Class VIII	S. S. P.	31	28	34
	E. D.	26	34	20

24. Out of 17·2 per cent of the agricultural population having secondary means of livelihood, 7·4 per cent have returned one of the four agricultural classes of livelihood as their secondary means of occupation and about 9·8 per cent have given non-agricultural professions as being the secondary means of their livelihood. Among the persons having one of the agricultural occupations as secondary means of livelihood, the largest proportion comes under cultivating labourers (class III), as 44 out of 1,000 of the general population come under this group. Among those that have non-agricultural occupations as their secondary means of livelihood the largest group belongs to miscellaneous services (class VIII) which contributes 48 out of 1,000. The next important secondary means of livelihood for the agriculturists is the occupation of class V, namely production other than cultivation which commands nearly 3½ per cent or 34 out of 1,000.

25. The following table shows the percentage of self-supporting persons having secondary means of livelihood and earning dependants to the total population of different agricultural livelihood classes.

Sub-class	Cultivators of land owned (class I)	Cultivators of land unowned (class II)	Agricultural labourers (class III)	Non-cultivating owners of land, agricultural rent receivers (class IV)
Percentage of S. S. Ps. having secondary means of liveliood to the total population of the class.	7·3	11·1	5·2	11·7
Percentage of E. Ds. to the total population of the class having secondary means of livelihood.	9·4	11·6	12·1	5·5
Total	16·7	22·7	17·3	17·2

26. Generally speaking the earning dependants figure in larger percentage than the self-supporting persons with regard to the secondary means of livelihood. This is so because all the earning dependants have some kind of secondary means of livelihood while this is not so with regard to the self-supporting persons. In class IV, however, the position is just the reverse as this class comprises generally well-to-do persons and their children seldom take to partial earning of livelihood. Out of the four agricultural classes, class II, namely cultivators of

land unowned appear to have the highest per cent of secondary means of livelihood. This is because the cultivators of this class have to give as much as half their agricultural produce by way of rent to the owners of land and therefore stand in necessity of supplementing their income through a subsidiary occupation. The cultivators of class I have the least necessity for taking to subsidiary income because owner-cultivation is more capable of providing maintenance than other forms of cultivation.

Secondary Means of Livelihood of Working Agricultural Population

27. The working agricultural population is composed of self-supporting persons and earning dependants. The following table gives the distribution of 1,000 self-supporting persons and earning dependants belonging to all the agricultural classes into eight livelihood classes according to their secondary means of livelihood.

Secondary means of livelihood	Orissa	Inland division	Coastal division
Class I	45	42	44
II	21	23	26
III	120	142	97
IV	4	3	5
V	89	94	89
VI	45	37	57
VII	5	3	8
VIII	147	145	152
Total ...	476	489	478

28. It appears from the above table that 476 persons out of 1,000 working agricultural population of Orissa have a secondary means of livelihood. Out of them, 190 persons have for their secondary means of livelihood one of the agricultural occupations. The remaining 286 persons have taken to non-agricultural professions as their secondary source of livelihood. In the inland division dependence on agriculture by way of supplementary source of income is higher, namely 210 as against 279 in favour of non-agricultural employment, while in the coastal division, such dependence is lesser in extent, namely 172 as against 306 for non-agricultural pursuits.

Abnormal Dependence on Agriculture

29. It has been observed that 79·3 per cent of the total population of Orissa belong to the agricultural classes. This however simply gives the percentage of people who depend upon agriculture for their principal means of livelihood. There are also other people, in large number, who have taken to agriculture as their subsidiary source of maintenance. Such persons constitute 1·6 per cent of the general population of Orissa, and the details of figures relating to them have been discussed in the paragraphs above. The overall dependence on agriculture, either as principal or as secondary source of livelihood is thus overwhelmingly high in this State. Agriculture, being thus the mainstay of a very large number of people, the general economic condition of the country is vitally affected by the state of harvest from year to year. When there is a fall in agricultural prices, or the season is unfavourable, a vast majority of the people are bound to suffer.

SECTION III

Relative proportions of different Agricultural Classes; correlated to distribution of land in Agricultural Holdings by different Sizes

PROPORTIONS OF AGRICULTURAL CLASSES

1. The proportions of different classes of livelihood out of 10,000 agricultural population of the State, natural divisions and districts have been shown in Subsidiary Table 4·1. It appears that out of a population of 10,000 belonging to the agricultural occupations, cultivators of land owned (class I) constitute by far the biggest bulk, namely 7,508, while cultivators of land unowned (class II) number 749, cultivating labourers (class III) 1,554, and non-cultivating owners of land (class IV) 189 only. Thus among the agricultural classes, the owner-cultivators are the most important class and the cultivating labourers are next in importance in numerical strength. The distribution of the agricultural population into four livelihood classes is shown below on percentage basis with regard to India and important States.

State	Percentage of total agricultural population			
	Class I	Class II	Class III	Class IV
INDIA ..	67·2	12·7	18·0	2·1
Orissa ..	75·1	7·5	15·5	1·9
Assam ..	78·9	17·5	2·4	1·2
Bihar ..	64·3	9·6	25·4	0·7
Bombay ..	66·3	15·8	14·7	3·2
Madhya Pradesh	65·1	5·9	26·9	2·1
Madras ..	53·8	14.8	28·1	3·3
Punjab ..	59·8	25·0	11·9	3·3
Uttar Pradesh ..	83·9	7·0	7·7	1·4
West Bengal ..	56·5	21·0	21·4	1·1

AGRICULTURAL CLASSES OF 1951 AND 1931

2. An attempt may be made to compare the figures of 1951 census with those of 1931, regarding the percentage of different classes of agricultural population although the scope of such comparison is limited. The following Table gives the percentage of different agricultural classes to the total agricultural population of the State in the two censuses. Corresponding figures of 1941 are not available.

1951

Class of agriculturists	Percentage to total agricultural population
Cultivators of land owned	75·1
Cultivators of land unowned	7·5
Agricultural labourers	15·5
Non-cultivating owners	1·9

1931

Class of agriculturists	Percentage to total agricultural population
Cultivating owners	8·8
Tenants	49·1
Agricultural labourers	40·7
Other agricultural population	1·4

There is marked difference with regard to all except the last class of the agricultural population. Various tenancy laws which have been enacted during the last 20 years may be an important cause of this difference. Moreover, changes in methods of classifying owners, tenants, etc., at the two censuses may be a factor of importance. Yet another important explanation may be that the 1931 census shows only the distribution of working population while the figures of the 1951 census relate to the entire population. The figures of 1931 census shown above have been computed, perhaps precariously, on the assumption that the proportion of working population to the total agricultural population is constant for all the livelihood classes.

3. In spite of the limited scope of comparison on account of the above factors, it may not be far from correct to draw a general inference that the percentage of actual cultivators of the land has been increasing and that of agricultural labourers has been decreasing during the intervening two decades. Statements are often made to the effect that because of the increasing pressure of population, the number of landless labourers is steadily increasing. The 1951 census shows on the other hand that the majority of the agriculturists are owners and gives no evidence of increase in the number of agricultural labourers. The increase in the number of agricultural owners is so remarkable that it has created the problem of small and uneconomic holdings, which seems to be the biggest problem of agriculture, surpassing in magnitude even the problems of tenancy or agricultural labour.

Proportion of Agricultural Classes in Natural Divisions and Districts

4. The following table compares the distribution of agricultural classes in the State and different natural divisions.

State or natural division	Percentage of each livelihood class to the total agricultural population.			
	Class I	Class II	Class III	Class IV
Orissa	75·1	7·5	15·5	1·9
Inland Division	78·2	5·0	15·9	0·9
Coastal Division	71·0	10·8	15·0	3·2

The cultivators of land owned (class I) are to be found in larger percentage in the inland division than in the coastal division to the extent of 78 and 71 per cents respectively. On the other hand, there is a larger percentage of non-owning cultivators and non-cultivating owners (classes II and IV) in the coastal division than in the inland division. The non-owning cultivators are as high as 10·8 per cent in the coastal division while such class of people are less than half in percentage, namely 5·0 in the inland division. Similarly, the non-cultivating owners of land are significantly high in percentage in the coastal division as compared with the inland division, the percentage being 3·2 and 0·9 respectively. The position with regard to the cultivating labourers is practically the same in both the natural divisions where they constitute about 15 per cent of the total agricultural population.

5. So far as districts are concerned the percentage of owner-cultivators is very high, namely, above 80 per cent in Ganjam Agency (88 per cent) and in districts Sundargarh (87 per cent), Keonjhar (85 per cent), Dhenkanal (81 per cent) and Phulbani (81 per cent). The lowest percentage of owner-cultivators occur in Ganjam Plains (65 per cent) and Puri (67 per cent). The remaining districts of the State occur midway in the series, namely, Kalahandi (70 per cent), Cuttack 73 (per cent), Sambalpur (76 per cent), Koraput (77 per cent), Bolangir (74 per cent), Balasore (79 per cent) and Mayurbhanj (79 per cent).

6. The non-owning cultivators are to be found in large numbers in district Puri an Ganjam Plains. The cultivating laboure are seen in very high number in Kala andi and Bolangir, and in small number in Sundargarh, Balasore and Ganjam gency. Lastly, the non-cultivating owners of land are met with in large number in Cuttack and Ganjam Plains. The detailed discussion about the strength of various classes of agricultural population in different districts will be made in the succeeding Sections of the present Chapter.

Agricultural Holdings

Source of Information

7. There is remarkable paucity of information relating to agricultural holdings in Orissa. Such information is very much wanted at the present time not only for reforms and planning measures by the State Government but also by non-official bodies and social workers. The Directorates of Agriculture and of Land Records have no information. It was extremely fortunate that statistics in this connection were collected as a special measure in Orissa through the census questionnaire. The results of the census enquiry have been tabulated and shown in Table F appearing in Part II-A of this Report, which has gone to supply the much needed information relating to agricultural holdings in the State. The figures available in Table F have been reduced in the Subsidiary Table 4·1 to show the distribution of 1,000 agricultural holdings by different sizes. Moreover, some information relating to agricultural holdings has been taken from the Report of the Land Revenue and Land Tenure Committee and the Report of the Agricultural Labour Enquiry. With the help of these sources of information, the question of agricultural holdings is discussed below.

Definition of Agricultural Holding

8. The implication of a ' holding ' as understood in the census statistics covers the total extent of land held by a cultivating household. This conception may be somewhat different from that ordinarily held in land settlement operations, where the total extent of land held by an individual cultivator and not by members of his household is entered in his account as one holding. It could not have been possible in the course of the census operations without much cost and elaborate arrangements to make a note of holdings in the latter sense. It however appears that many of the socio-economic surveys define ' holding ' in the same sense as adopted in the census operations. The Agricultural Labour Enquiry of the Government of India and the Land Revenue and Land Tenure Committee constituted under the orders of the Government of Orissa have displayed their statistics on the basis of families rather than individual cultivators. A family, as understood in these enquiries, may not always be as small a unit as a census ' household', for the latter is strictly limited to members attached to a single mess with a single main door. The census conception is therefore a nearer approach to a single cultivator's possession than that of the abovementioned enquiries. In most cases in Orissa, the total possession of cultivated lands held by members of a census household is the same as that of the principal earner in the household. Therefore for all practical purposes, the agricultural holdings as adopted in the census statistics may not be different in notion from the holdings as understood in the land settlement operations.

Distribution of 1,000 Holdings according to Size of Holdings

9. The total number of holdings (or households) according to Table F is

3,159,157. The distribution of 1,000 holdings by the size of holdings is shown in Subsidiary Table 4·1. In connection with the enquiries of the Land Revenue and Land Tenure Committee, information regarding the distribution of families by size of holdings was also taken. The information was derived from a sample survey conducted by the State Government in a small area of 60,230 acres in different parts of the old Orissa districts. The survey was limited only to 12,766 families, and the selection does not appear to have been made on random sample principle. The results cannot be applied to the whole of Orissa, for, firstly they were not obtained for the entire area now covered by Orissa and secondly, their selection was made on a basis not generally adopted for statistical purposes. The census figures, on the other hand, relate to all the families in the State. The figures obtained by the census obviously are nearer the actuals than those obtained by the survey of the State Government. The following statement shows how the results of the two compare with each other :—

	Distribution of 1,000 families by size of holding										
	1 acre	2 acres	3 acres	4 acres	5 acres	6—10 acres	11—32 acres	33 acres	34—79 acres	80 acre and over	Not stated
1951 Census ..	220	161	134	101	83	140	91	5	15	4	46
L. R. and L. T. Committee.	267	192	129	96	62	147	90	..	13	2	...

If we assume that the holdings appearing under the heading ' acres not stated ' in the census figures are those that may reasonably appear under the smaller sizes of 1 acre and 2 acres, for reason of greater omission among innumerable small holders, there is broad similarity between the two sets of figures. The census figures show that 69·9 per cent of the families have holdings of the size not exceeding 5 acres, 14 per cent have holdings between 6 and 10 acres, 9·1 per cent between 11 and 32 acres and only 2·4 per cent having each over 33 acres. The corresponding figures of the Land Revenue and Land Tenure Committee are 74·6, 14·7, 9·0 and 1·5 per cent respectively.

Findings of the Agricultural Labour Enquiry

10. Some interesting information with regard to agricultural holdings is available from the Agricultural Labour Enquiry in Orissa instituted by the Ministry of Labour, Government of India in 1951. The data of the enquiry are based on a survey of 45 villages of different districts in the State selected on random sample principles. The survey covered 3,183 families which is about 0·1 per cent of the total number of rural families in Orissa. The size of the sample though small was perhaps sufficient. The method of complete count adopted in the census, however, furnishes a more reliable set of figures. The Agricultural Labour Enquiry conducted a general family survey and gives the distribution of holdings according to their size. It appears from this survey that holdings below 1 acre formed 17·98 per cent of the total number of holdings while those above 25 acres were 3·32 per cent. The majority of holdings (71·47 per cent) were below 5 acres. The average size of holdings was 5·56 acres only. The holdings of agricultural workers and non-agriculturists were generally very small, their average sizes being 2·43 and 2·09 acres respectively. The average size of holdings belonging to agricultural owners was 8·36 and that of tenants was 3·82 acres.

Distribution of 1,000 Acres according to Size of Holdings

11. Some information is available in this matter from the Appendix IX of the

Report of the Land Revenue and Land Tenure Committee. The following statement shows the distribution of 1,000 acres according to the size of holdings.

	Distribution of 1,000 acres according to size of holding										
Size of holdings in acres..	1	2	3	4	5	6—10	10—15	15—20	20—30	30—75	over 75
No. of holdings ..	33	63	73	72	60	220	124	84	92	103	76

12. Analysing the figures, it appears that 30·1 per cent of the total cultivated area comprises small-sized holdings of 1 to 5 acres and 22·0 per cent covers holdings of 6 to 10 acres. In other words, 52·1 per cent of the total cultivated area is comprised of holdings which are small, i.e., upto 10 acres. Another 30·0 per cent of the cultivated area is constituted of medium-sized holdings of above 10 and below 30 acres. Large-sized holdings viz., 30 acres and over cover 17·6 per cent of the cultivated area.

Thus more than half the cultivated area is comprised of small holdings, and only less than one-fifth of the area is available in large-sized holdings of over 30 acres.

Correlation of Agricultural Population with Holdings by Different Sizes

13. Working out the figures of distribution of households by size of holdings with the distribution of cultivated area by size of holdings, it appears that about 70 per cent of households, all having very small-sized holdings of 1 to 5 acres, occupy only about 30 per cent of the total cultivated area. 14 per cent of households having 6—10 acres each are similarly holding about 22 per cent of the cultivated areas. In other words, nearly half the cultivated area constituted of small-sized holdings of 1 to 10 acres is held by about 84 per cent of households and the remaining 16 per cent of the households occupy less than half the area under cultivation comprised of holdings of above 10 acres. Less than 2 per cent of the households having more than 33 acres occupy about 13 per cent of the land area. Thus, it is seen that the distribution is most uneven and while at the top very few families are holding a larger quota of the land in larger-sized holdings, at the bottom a vast multitude of cultivators have tiny fragments of holdings to their lot.

14. The Agricultural Labour Enquiry also gives some useful information in this connection. The survey made in course of this Enquiry showed that there were 1,963 holdings covering an area of 10,917·16 acres. Of these, 1,019 holdings or 51·91 per cent occupying 8,521·91 acres or 78·05 per cent of the total area were owned by agricultural owners and 455·75 acres or 4·17 per cent were taken on rent by tenants while 1,516·34 acres or 13·88 per cent were owned, taken on rent or held free of rent by agricultural workers. Non-agricultural families held 202 holdings covering 423·16 acres or 3·87 per cent of the total area.

Districtwise Distribution of Holdings

15. Holdings for the purpose of the present discussion may be grouped as small, medium and large. The group ' small ', may further be divided into two categories, viz., (*a*) very small, and (*b*) small, the former comprising of those upto 5 acres and the latter of 6 to 10 acres. Holdings of the sizes between 11 to 33 acres may be termed as ' medium' and those above 34 acres may be classified as ' large '. The group ' large ' may

also include very large-sized holdings of 80 acres and over, as shown below:—

1. Small { Very small 1—5 acres; Small 6—10 acres
2. Medium 11—33 acres
3. Large { Large 34—79 acres; Very large 80 acres and over.

16. The following statement shows the distribution of 1,000 agricultural holdings by the sizes given above in each of the districts of Orissa:—

District	Small		Medium	Large		Not stated
	Very small 1—5 acres	Small 6—10 acres	11—33 acres	large 34—79 acres	very large 80 acres and over	
Cuttack ..	803	65	36	8	7	81
Balasore ..	783	123	68	12	3	11
Puri ..	788	101	47	9	1	54
Sambalpur ..	619	170	155	28	7	21
Ganjam ..	733	103	65	7	2	30
Koraput ..	691	120	69	10	3	107
Dhenkanal ..	728	172	85	8	1	6
Keonjhar ..	759	133	90	5	1	12
Phulbani ..	668	209	88	15	5	15
Bolangir ..	432	227	240	40	9	52
Sundargarh ..	563	200	172	26	5	34
Kalahandi ..	453	189	201	44	7	106
Mayurbhanj ..	682	207	94	9	1	7

17. It is a well known fact that holdings, when too small in size, are uneconomic. Unfortunately, in almost all the districts of Orissa, the group of very small-sized holdings, viz., less than 5 acres predominates the structure of holdings. It is all the more dominant in the four coastal districts of Orissa, where these very small-sized holdings form more than 75 per cent of the total number of holdings. The highest frequency is shown in Cuttack. The state of things in the inland division is somewhat better, except in Keonjhar district where the corresponding figure also exceeds 75 per cent. Bolangir and Kalahandi show a low proportion of the holdings below 5 acres in size, the percentage in these districts being 43·2 and 45·3 respectively. In the remaining districts, the percentage ranges from 56·3 in Sundargarh to 72·8 in Dhenkanal. The high frequency of very small-sized holdings seems to correspond with the high pressure of population in the coastal districts. Explanation is however forthcoming for the high percentage of this group in the holdings of Keonjhar district. There seems to be a tendency for the agricultural families in this district to subdivide the ancestral holdings faster than in other districts.

18. The frequency of the small-sized holdings (6—10 acres) in most of the districts is next only to that of the 1—5 acre size holdings. Bolangir, Phulbani, Sundargarh and Mayurbhanj are the only districts where this group forms about 20 to 23 per cent of the total number of holdings. Sambalpur, Dhenkanal and

Kalahandi have between 15 and 20 per cent and the remaining districts excepting Cuttack have 10 to 15 per cent. Cuttack district has the least percentage, namely 6·5.

19. Taking the holdings from 1 to 10 acres in size together, the following districts have more than 80 per cent of such holdings as shown below:—

Balasore	90·6
Dhenkanal	90·0
Ganjam	89·6
Keonjhar	89·2
Puri	88·9
Mayurbhanj	88·9
Phulbani	87·7
Cuttack	86·8
Koraput	81·1

Sambalpur with 78·9 and Sundargarh with 76·3 have more than 75 per cent while, Bolangir and Kalahandi have about 65 per cent.

20. The highest per cent of the medium-sized holdings (11—33 acres) lies in in Bolangir where it is 24·0. Kalahandi follows with 20·1 per cent and Sundargarh and Sambalpur with 17·2 and 15·5 respectively come next. In other districts, the percentage is less than 10, the lowest being 3·6 in Cuttack district. The large-sized holdings above 33 acres in size are scarce in the coastal districts. Among the inland districts, Kalahandi, Bolangir, Sambalpur and Sundargarh districts have a few large-sized holdings and also Phulbani and Koraput to a lesser extent.

The Median-quartile Size of Holdings

21. A study of the size of holdings may be made by first ascertaining the average size in any given locality. But such a study is not always advantageous. The study of the mean or average size is helpful in case of normally distributed samples. When the samples depart notably from the normal, the average may be not at all typical. The disability of the average becomes noticeable by becoming unduly influenced by a few extreme items. In such cases, another average of concentration, the median, may be used for description of the sample with advantage. The median is the middle item in an array, or in other words, it is the size of the middle individual holding in a group of 1,000 holdings arranged in order of their size. If the median is thus used as the average of concentration, it is customary to describe the variation of a series by fixing two other values called quartiles. Just as median is the item of the middle of an array, the quartiles lie at the middle of the lower and the upper halves of the array. In other words, the quartile sizes are the sizes of individual holdings half-way between the extremes and the median, the lower quartile being less than the median which in turn is less than the upper quartile. Thus in an array of 1,000 holdings arranged in order of size, the lower quartile is the size of the 250th holding, the median the 500th holding and the upper quartile the 750th holding, the count being started from the smallest size out of 1,000 holdings.

22. The following table has been prepared from the data of agricultural holdings given in Table F as summarised in Subsidiary Table 4·1. It gives the extent in acres of holdings of the upper quartile, the lower quartile and the median size holdings in the State, natural divisions and districts. It also gives the acreage of the average size of holdings in different districts, which has been worked out on the basis of the extent of cultivated area and number of households as shown in Table F. It has been explained earlier in this Section how a census household practically corresponds with a holding.

State, natural division, or district	Size of holdings in acres			Average size
	Lower Quartile	Median	Upper Quartile	
ORISSA	1·2	2·9	6·8	4·2
Orissa Inland Division	1·6	3·6	8·4	5·5
Orissa Coastal Division	0·8	2·1	4·4	2·7
Cuttack ..	0·7	1·8	4·0	2·4
Balasore ..	1·0	2·5	4·6	3·7
Puri ..	0·8	2·1	4·6	3·3
Sambalpur ..	1·7	3·7	8·9	4·3
Ganjam ..	0·9	2·1	4·4	1·9
Agency ..	1·1	2·3	4·2	1·5
Plains ..	0·9	2·1	4·5	2·0
Koraput ..	1·5	3·3	7·5	6·0
Dhenkanal ..	1·5	3·1	5·6	4·5
Keonjhar ..	1·3	2·9	4·9	5·3
Phulbani ..	1·3	3·1	7·0	6·1
Bolangir ..	2·9	6·5	18·4	6·9
Sundargarh ..	2·1	4·3	9·7	6·6
Kalahandi ..	1·9	6·2	22·2	4·8
Mayurbhanj ..	1·4	3·2	6·7	6·5

23. The median-sized holding for Orissa is 2·9 acres while it is 3·6 in the inland division and 2·1 in the coastal division. This would show that a peasant of inland division possesses holdings which are approximately 75 per cent as much larger again as that in the coastal division. This may either mean that the cultivator of the coastal division is less prosperous than that of the inland division, or that an agricultural holding of coastal division produces as much as a larger agricultural holding of the inland division. Similarly while the lower quartile for Orissa is 1·2, it is 0·8 in the coastal division and 1·6 in the inland division. The upper quartile for Orissa is 6·8 while it is 4·4 for the coastal division and 8·4 for the inland division. This indicates that cultivators owning average small-size holdings as well as cultivators owning average large-size holdings possess only half the extent of land in the coastal division than in the inland division. In another sense this may mean that the lands of the inland division are half as productive as the lands of the coastal division.

24. As far as districts are concerned the median-sized holdings in Bolangir and Kalahandi are 6·5 and 6·2 respectively while the lowest are in Cuttack 1·8, Puri 2·1 and Ganjam 2·1 followed by Balasore with 2·5. This shows that the districts of the coastal division have got a lower median than any of the districts of the inland division. The lowest median for any district in the inland division is 2·9 in Keonjhar, the highest being Bolangir with 6·5. The upper quartile in Kalahandi is remarkably high being 22·2 followed by Bolangir with 18·4 while the same at Cuttack is 4·0 followed by Ganjam with 4·4 and Puri and Balasore with 4·6 each. This is much less than the upper quartile of any district of the inland division, the lowest of which is 4·9.

25. The examination of holdings on median-quartile basis brings graphically to notice the state of extreme fragmentation of holdings in the coastal division. With 0·8 acres as the lower quartile, the innumerable smallc ultivators of this division are bound to create serious

problem for agricultural reforms. Kalahandi with 22·2 and Bolangir with 18·4 acres as the upper quartile as best suited among the districts of Orissa for mechanized cultivation. The table given above also furnishes the average size of holdings. This figure may not be as helpful as the median-quartile, but it has other utilities, particularly of comparison on a broad basis.

Fragmentation of Holdings

26. Fragmentation of holdings is different from subdivision and relates to dispersal of land held by an individual cultivator throughout the village in separate plots. In other words, when a holding is not compact it is said to be fragmented. Subdivision of holdings in the direct result of partition between successors of a holding held by common ancestors. It would be for the improvement of agriculture if on the death of an ancestor his holding spread over a number of separate plots was assigned to successors plotwise rather than on the basis of division of each of the plots in favour of several successors. While it is not possible to do away with the subdivision of land without radical land reforms, it is possible to stop fragmentation more easily. Measures for consolidation have been taken in Baroda, Uttar Pradesh, Madhya Pradesh and the Punjab, but the results achieved are reported not to be satisfactory, except in the two latter States. It is necessary that some thing should be done on the same lines in Orissa.

27. The evils of fragmentation is manifest in the extreme smallness of innumerable holdings in Orissa, as disclosed by figures given above. The average size of holdings in Orissa is 4·2 acres, while it is 145 acres in U. S. A., 62 in England, 40 in Denmark, 25 in Sweden and 20 in France. But it is interesting to note that the average size of holdings in the advanced countries of the east is small, namely 3 acres in Japan and 3·25 in China. Orissa and in fact India has to learn a great lesson from Japan, as stated elsewhere in this Chapter. But pending this, the first step in planning agriculture must be to devise ways and means for consolidation of holdings. Till then productivity will not rise and agriculture will not attain a position of competitive efficiency. Fragmentation has gone on for centuries and work of consolidation is bound to be slow. The cultivator's indebtedness, sentimental attachment for a particular type of land, want of adequate area of the same kind of land for exchange, and other similar circumstances will deter the consolidation of holdings. The Royal Commission on Agriculture was against the use of compulsion with a view to achieve consolidation of holdings, except as a last resort. Legislative compulsion will have no meaning for practical achievement unless ownership of land is nationalised or collective or co-operative system of farming is adopted.

The Remedy

28. The ultimate solution of the problem is the creation of economic holdings. But this is dependent on determination of a balance of advantages and disadvantages of large-scale and small-scale cultivation for any particular locality. An economic holding can be determined and fixed up only when several other factors, such as, the amount and quality of labour and equipment to be used on the land, the quality of soil, the kind of crops to be raised, irrigation facilities and rainfall, etc., are known. These conditions vary from place to place. Until sufficient reliable statistics are available, it will not be possible to define economic holdings for a particular tract of the country. In view of these difficulties, and particularly in the absence of statistics, reorganisation of agriculture in Orissa should be based on some kind of collective action on the part of the culti.

vators. Collective farming or co-operative farming has thus been suggested as the more appropriate remedy.

29. Under collective farming, ownership of land vests in the community as a whole. Private property in land is completely abolished and members of the collective farm are treated as equals getting wages according to the nature and extent of work done by them. Distribution of profits of the farm is made on the basis of the wages so earned. The system of collective farming in Russia has resulted in a tremendous increase in the total cultivated area and also in the yield of the land. But this is unsuitable for conditions obtaining in Orissa and in fact in India. Abolition of the rights of peasants is bound to be opposed on a countrywide scale. The time is not yet ripe for the people to accept a position in which their deep attachment to the ownership of land from time immemorial will come to an end. On the other hand, co-operative farming being based on individual or collective ownership with individual or collective operatorship is likely to receive better response at the present time. The advantages of large-scale farming will be derived from the co-operative farming without bringing radical change in the society. Under the circumstances, this should be encouraged as far as possible in Orissa.

SECTION IV

Cultivators of Land wholly or mainly owned and their Dependants

POPULATION

1. The cultivators of land wholly or mainly owned and their dependants constituting livelihood class I, account for 75·1 per cent in the total population of all the agricultural classes in Orissa. The actual number of such persons is 8,718,822 of whom 4,308,305 are males and 4,410,517 are females. Roughly speaking, the total agricultural population of Orissa is 116 lakhs, out of which the owner cultivators number more than 87 lakhs. The distribution of persons of this class in different districts and natural divisions may be seen in Table B-I which appears in Part II-B of this Report.

SUB-CLASSES

2. The cultivators of land owned and their dependants may be divided into three livelihood sub-classes, namely, self-supporting persons, non-earning dependants and earning dependants. The definition of these sub-classes has been given in Section II of the present Chapter. The actual number of population in each of the sub-classes has been shown in the Table B-I, from which it appears that the total population of 87 lakhs under class I comprises 23·3 lakhs of self-supporting persons, 55·6 lakhs of non-earning dependants and 8·1 lakhs of earning dependants. Subsidiary Table 4·2 gives the proportion of each sub-class in a population of 10,000 belonging to livelihood class I. The percentage of self-supporting persons, earning dependants and non-earning dependants to the total population of the livelihood class in respect of different States in India is given below :—

State	Percentage to the total population of class I		
	Self-supporting persons	Non-earning dependants	Earning dependants
Orissa ..	26·8	63·8	9·4
Madras ..	24·3	71·3	4·4
Uttar Pradesh ..	28·9	57·0	14·.
Madhya Pradesh	26·4	44·4	29·2
West Bengal ..	23·3	73·0	3·7
Assam ..	24·1	58·8	17·1
Punjab ..	26·4	56·9	16·7
Travancore-Cochin	22·4	71·5	6·1

SELF-SUPPORTING PERSONS

3. Economically the most important among the sub-classes, the self-supporting persons constitute 26·8 per cent of the total population of cultivators of land owned and their dependants. Thus they are a little above one-fourth of the total population of the livelihood class. In the inland division, they constitute 27·2 per cent and in the coastal division 26·1 per cent. Among the districts, Sambalpur has the highest percentage of self-supporting persons, namely, 30·5. Mayurbhanj and Phulbani come next with 29·1 and 28·4 per cent respectively. Kalahandi, Bolangir, Koraput and Balasore have the lowest percentage of self-supporting persons which is near about 25 per cent. The difference in percentage of districts with the highest and lowest figures is not very pronounced and does not call for any remark.

EARNING DEPENDANTS

4. Earning dependants are less than 1/10th of the total population belonging to class I. They are found in larger number in the inland division, to the extent of 11·5 per cent as against 6·4 per cent in the coastal division. The districts which have larger proportion of earning

dependants among the population of class I are Sambalpur, Dhenkanal, Bolangir, Sundargarh, Kalahandi and Mayurbhanj. In these districts they range from over 10 per cent to 15 per cent. But in the remaining districts, the proportion of earning dependants is small. Keonjhar particularly shows the lowest figure of 3·6 per cent. The reason of considerable difference in the percentage of earning dependants from 15·2 in Sambalpur to 3·6 in Keonjhar lies partly in the age structure of the population of the localities concerned and partly on the social customs and availability of labour for the children of the locality. Sambalpur employs a good percentage of children in such part-time employments as bidi-making and weaving which is not to be found in Keonjhar. On account of the same reason as in the case of Sambalpur, the proportion of earning dependants is high in Bolangir, Sundargarh, Kalahandi and Mayurbhanj.

NON-EARNING DEPENDANTS

5. Nearly two-thirds of the population belonging to the class of owner-cultivators belong to the category of non-earning dependants who economically are absolutely idle and are doing nothing towards the family income. In the inland division such persons constitute 61 per cent and in the coastal division over 68 per cent, the average for Orissa being 63·8 per cent. The percentage of non-earning dependants is high in the coastal division mainly because of more extensive education among the children of the agriculturists. Among the districts, high percentage of non-earning dependants is shown by Cuttack, Balasore, Puri, Ganjam, Koraput and Keonjhar.

CAUSES OF HIGH INCIDENCE O DEPEDENCY

6. Out of the total population of 8,718,822 belonging to livelihood class I in Orissa as many as 6,383,186 or 73·2 per cent are dependants of whom 818,664 are earning and 5,564,522 are non-earning. As seen above, the non-earning dependants are 63·8 per cent and the earning dependants are 9·4 per cent of the population under class I. This shows an abnormal state of dependency particularly of non-earning type. A part of the explanation for the dominating extent of dependency in population lies in the peculiarity of the age structure of Orissa where the number of persons of lower ages is proportionately much greater than is found in advanced countries of the world. It will be seen in Chapter VI that the percentage of boys and girls upto the age of 14 years is 37·0 which indeed is very high. Another explanation for this high extent of dependency lies in the fact that the general population of Orissa contains a larger number of women than men. Confining attention to cultivators of class I only, it is seen that there are 44·1 lakhs of women as against 43·0 lakhs of men belonging to this livelihood class. Women to a great extent depend for their livelihood upon some male relative in the family. Consequently, their preponderance in the general population leads to an excess of dependants. Although among the cultivators there are women who take part in agricultural operations, many of them are of the category of earning dependants and not self-supporting persons as they generally undertake the lighter varieties of the agricultural operations which may yield an income not sufficient for their own maintenance. Thus though they work in the field, they do not contribute to the number of self-supporting persons but inflate the number of dependants. This abnormally high percentage of dependent population is one of the reasons of the economic backwardness of the country.

SECONDARY MEANS OF LIVELIHOOD

7. Table B-II published in Part II-B of this Report gives figures relating to the secondary means of livelihood

Proportionate figures for 10,000 population of livelihood class I having secondary means of livelihood have been shown in Subsidiary Table 4·2. It appears that 1,664 persons out of a population of 10,000 belonging to livelihood class I have got some secondary means of livelihood. This works out to 16·6 per cent. Out of this, 7·2 per cent are self-supporting persons and 9·4 are earning dependants. Again out of 16·6 per cent of the people who have a secondary means of livelihood, 6·9 per cent derive such livelihood from one of the agricultural professions and 9·7 get it from non-agricultural occupations. Among the agricultural occupations forming the secondary means of livelihood, a larger amout of employment is in the form of cultivating labour which absorbs 3·8 per cent, or more than half the total population having agricultural occupations as the secondary means of livelihood. Among the persons who derive their subsidiary income from non-agricultural pursuits, the largest number, namely, 4·5 per cent is engaged in 'other services and miscellaneous sources' (class VIII) and 3·4 per cent under 'production other than cultivation' (class V). Commerce and transport claim only a moderate percentage, namely, 1·5 and 0·2 respectively.

8. The percentage of persons of livelihood class I having their secondary means of livelihood in agricultural and non-agricultural occupations, in the two natural divisions may be compared as follows :—

State or natural division	Percentage of persons having secondary means of livelihood		
	Total	Agricultural	Non-agricultural
ORISSA	16 6	6·9	9·7
Inland Division	17·1	8·0	9·1
Coastal Division	16·0	5·5	10·5

9. As in the case of Orissa, each of the two natural divisions depend more on non-agricultural than on agricultural professions to serve as the secondary means of livelihood. Again, out of the agricultural professions, employment as cultivating labourer is the most popular secondary source of income for the people of each of the natural divisions. With regard to the non-agricultural occupations, classes VIII and V, namely, 'other services and miscellaneous sources' and 'production other than cultivation' supply the maximum subsidiary employment to the cultivators of class I living in either of the natural divisions. Commerce and transport only supply occasional subsidiary means of livelihood for the cultivators of both these divisions. A little larger proportion of cultivators of the coastal division have taken to commerce and transport as secondary means of livelihood than the cultivators of the inland division.

SECTION V

Cultivators of Land wholly or mainly unowned and their Dependants

POPULATION

1. The cultivators of unowned land and their dependants come under livelihood class II. Such cultivators and their dependants constitute 7·5 per cent of the total agricultural population of Orissa. Their actual number is 869,751 of whom there are 437,779 males and 431,972 females. The distribution of population of this class of cultivators is shown in Table B-I.

SUB-CLASSES

2. Subsidiary Table 4·3 gives the proportion of the self-supporting persons, earning and non-earning dependants in a total population of 10,000 belonging to this class. The total number and percentage of different sub-classes is given below :—

Sub-class	No. of persons	Percentage to the total population of class II
Self-supporting persons	231,374	26·6
Non-earning dependants	537,395	61·8
Earning dependants	100,982	11·6

It appears that the number of self-supporting persons within this class of livelihood is a little above one-fourth its total population and that non-earning dependants are in a preponderating majority of 61·8 per cent as against the earning dependants who are limited to 11·6 per cent only.

3. On comparison with the cultivators of class I it appears that the proportion of self-supporting persons is practically the same in both the classes but there is a little smaller percentage of non-earning dependants and corresponding higher percentage of earning dependants in class II as compared with class I. The high extent of dependency in this livelihood class is due mainly to the same set of facts as for class I discussed in the previous Section.

4. The percentage of self-supporting persons, earning dependants and non-earning dependants to the total population of the class in respect of different States in India is given below :—

State	Percentage to the total population of class II		
	Self-supporting persons	Non-earning dependants	Earning dependants
Orissa ..	26·6	61·8	11·6
Madras ..	22·6	72·2	5·2
Uttar Pradesh ..	30·5	52·6	16·9
Madhya Pradesh ..	27·0	40·8	32·2
West Bengal ..	25·1	69·9	5·0
Assam ..	23·9	58·6	17·5
Punjab ..	26·0	61·0	13·0
Travancore-Cochin ..	23·5	69·5	7·0

5. So far as natural divisions are concerned, self-supporting persons constitute 26·9 per cent in the inland division and 26·4 per cent in the coastal division. The position therefore is practically the same in both the divisions. But this is not so with regard to the dependants. The non-earning dependants are to be seen in smaller percentage, namely, 57·1 in the inland division but in the coastal division they are considerably larger, namely, 64·7 per cent. This proportion is inversely seen in the case of earning dependants who form 16 per cent in the inland division but only 8·9 per cent in the coastal division.

6. It will thus appear that the earning dependants are nearly double in percentage in the inland division than in the coastal division. The explanation for the smaller percentage of earning dependants in the coastal division may be that there are a larger number of school going children in the coastal division and such children are classed mostly as non-earning dependants and not as earning dependants. Secondly, among the population of the inland division women, particularly of the scheduled tribes, are to be found in larger number who frequently work in fields and have been returned as earning dependants while in the coastal division a

larger proportion of women of the cultivating class stay at home.

7. Among the districts, Sambalpur has a high proportion of self-supporting persons who constitute 30 per cent of the total population of the class. In Balasore, Phulbani, Sundargarh and Mayurbhanj the percentage exceeds 28. The lowest percentage occurs in the districts of Dhenkanal and Kalahandi with 22·8 and 23·9 respectively. As regards the earning dependants, high percentage is noticed in Sambalpur, Sundargarh and Kalahandi and low in Keonjhar and Phulbani. The non-earning dependants are found in the districts in the inverse order of the earning dependants. The reasons for the varying percentage of earning dependants in different districts is the same as mentioned in the case of natural divisions above.

Secondary Means of Livelihood

8. The total percentage of the people of livelihood class II in Orissa who have a secondary means of livelihood is 22·7 including 11·6 per cent of earning dependants. Again, out of 22·7 per cent of the the people having a secondary source of income, 9·9 per cent get it from one of the agricultural occupations and 12·8 per cent derive it from non-agricultural professions. Other services and miscellaneous sources provide the secondary income to 6·4 per cent of the people out of 12·8 mentioned above. In the inland division particularly, a large proportion of people of livelihood class II who derive their secondary means of livelihood from one of the occupations under livelihood class VIII is to be found. The next important secondary source of livelihood is provided by production other than cultivation to which 4·1 per cent of the people are attached.

General Condition

9. The cultivators belonging to this livelihood class are economically not as happy and contented as those of class I. The condition of sub-tenancy under which they cultivate the lands held by them differ from district to district. The *bhag* tenant of the coastal district or his counterpart of various denominations throughout the State ordinarily bears most of the cost of cultivation and gives to the land owner about 50 per cent of the gross produce of the land as rent. Orissa being a country of small holdings, such proportion of rent payment causes hardship to the non-owning cultivators. The amount of produce that remains with the actual tiller is not enough to maintain him and his family and to meet the needs of agriculture. On account of this reason, the cultivator is unable to invest in agriculture the necessary amount of labour and expenses. Very often these tenant cultivators belong to lower social status, and lack in incentive for efficient cultivation. The feeling of insecurity of position constantly haunt them. On the other hand, the land owner being assured of some return from the land does not take proper interest in the land. So improvement of the land held by the non-owning tenant becomes nobody's business. Therefore the efficiency of cultivation of lands held by cultivators of class II declines not only because of the small size of the holdings but also because of the actual tillers' lack of long-run security, incentive and capital for the improvement of the land.

10. The non-owning tenancy has a number of forms in Orissa. In some areas as many as 5 or 6 degrees of interest intervene between the proprietor and the actual cultivator. In order to check this tendency of multiplication of sub-tenancy of various kinds and in order to remove the insecurity of possession of the actual tiller of the soil, a number of tenant's protection laws have been passed during the last decade by the State Legislature. This had a wholesome effect in stabilizing the position of cultivators of livelihood class II.

SECTION VI

Cultivating Labourers and their Dependants

Population

1. In the agricultural population of Orissa, nearly 15·5 per cent belong to the class of agricultural labourers (Class III). Their actual number is 1,803,968 of whom 903,050 are males and 900,918 are females. Their distribution in the State, natural divisions and districts is given in Table B-I published in Part II-B of this Report.

Working Population and Dependants

2. Subsidiary Table 4·4 gives distribution of 10,000 persons belonging to this livelihood class among sub-classes. It appears that the self-supporting persons constitute 32·8, non-earning dependants 55·1 and earning dependants 12·1 per cent. The percentage of self-supporting persons in this livelihood class is higher than in any other livelihood class in the agricultural population. The self-supporting persons of livelihood Class I constitute 26·8 per cent, of class II 26·6 per cent and of Class IV 30·3 per cent as against 32·8 per cent of Class III. This is partly because the agricultural labourer earning a comparatively smaller income may be qualified to be classed as a self-supporting person although with the same amount of income a person belonging to the class of owner cultivators or non-cultivating owners of land may not. Most of the people of Class III who are capable of physical work, earn enough to support themselves and such persons come under the category of self-supporting persons.

3. The percentage of self-supporting persons, non-earning dependants and earning dependants to the total population of the class in Orissa and the two natural divisions is shown below.

State or natural division	Self-supporting persons	Non-earning dependants	Earning dependants
ORISSA ..	32·8	55·1	12·1
Inland division ..	33·3	52·0	14·7
Coastal divisien	32·1	59·4	8·5

4. The above statement shows that there is a larger percentage of non-earning dependants in the coastal division while the earning dependants are to be found in larger percentage in the inland division. This is due some extent to the larger number of women of the inland division coming to fields and ekeing out their livelihood to a partial extent, thus falling under the class of earning dependants. The women in the coastal districts stay at home to a larger extent than in the inland division.

5. The percentage of self-supporting persons, earning dependants and non-earning dependants to the total population of the class in respect of different States in India is given below :—

State	Percentage to the total population of class III		
	Self-supporting persons	Non-earning dependants	Earning dependants
Orissa ..	32·8	55·1	12·1
Madras ..	30·2	63·3	6·5
Uttar Pradesh ..	36·6	49·1	14·3
Madhya Pradesh	39·1	32·7	28·2
West Bengal ..	34·1	61·3	4·6
Assam ..	38·3	47·5	12·2
Punjab	29·4	58·5	12·1
Travancore-Cochin	33·4	56·6	10·0

Secondary Means of Livelihood

6. Subsidiary Table 4·4 gives the proportion of agricultural labourers who have a secondary means of livelihood. Such persons constitute 17·3 per cent of the total population of Class III out of which self-supporting persons constitute 5·2 per cent and earning

dependants 12·1 per cent. Agian, out of the total percentage of 17·3 having secondary means of livelihood, 8·5 per cent depend upon one of the agricultural occupations as their secondary means of livelihood. The remaining 8·8 per cent have taken to non-agricultural occupations for their subsidiary income.

7. In absolute figures, out of 1,803,968 persons belonging to the class of agricultural labourers, 994,365 or 55·1 per cent are non-earning dependants who do not contribute any thing for the family income and depend fully for their sustenance on others for the whole year. The self-supporting persons constitute 591,074 or 32·8 per cent of this class among whom 496,911 or 27·6 per cent are without any secondary source of livelihood and remain idle for about six months in a year. Thus the self-supporting persons among the agricultural labourers who have a secondary source of income form only 5·2 per cent of the total population of this class. The earning dependants who constitute 218,529 in number or 12·1 per cent of this class earn only a part of what is necessary for their sustenance. Out of this, 5·6 per cent derive their income from agricultural labour, that is to say, only 6·5 per cent have a real secondary source of income. The self-supporting persons and earning dependants who have a substantial secondary source of income, form 11·8 per cent of the total population of Class III. Thus a vast percentage of 88·2 among the population of Class III remain idle either for the whole or a part of the year. This is a serious problem not only from economic point of view but also from other considerations as they are likely to fall a prey to anti-social propaganda which may lead to serious consequences.

LABOUR SYSTEM

8. The system of agricultural labour prevalent in the coastal districts of Orissa has been described in the Settlement Report of Orissa * as follows :

Halia system—The casual day labourer in agricultural parts is known as a *mulia*. A system, however, still prevails by which labourers are retained on undefined contracts from year to year. These are designated as *halia* or *kothias*. The *halia* is engaged yearly on *Dol-Purnima day*. The basis of his contract is a loan or advance of pay from his employer, varying in amount from Rs. 5 to Rs. 50 and the *halia* although engaged for the year, cannot free himself from the obligation to work for his employer until he has repaid this advance. He gets a cash wage of about Rs. 5 to Rs. 10 for the year, and a daily wage of Re. 0-2-0 to Re. 0-3-0 cash or 2¼ or 3 seers of paddy on the days on which he works. He generally gets an area of about 20 to 25 decimals of land as his *heta* which he is allowed to cultivate with ploughs and seeds provided by his master. He also gets 4 to 8 sheaves of paddy per acre ploughed and one in 8 to 12 sheaves of paddy reaped. He is given one *dhoti* and one *gamcha* during the year. His total income from all these sources will amount to about Rs. 60 per annum. Interest on the loans taken by the *halias* is nominally 25 to 37½ per cent for cash advances and 50 per cent for paddy. But actually only half these rates are charged unless the contract of service is broken. The *halia* system does not appear to lead to opposition, as the servant can generally free himself from his bond if he really wishes to. Cases of long continued service under one contract are rare.

SHORTAGE OF AGRICULTURAL LABOUR

9. The percentage of agricultural population has been on the increase for the several decades past. But it is noteworthy that the proportion of agricultural labourers has been going down in course of time. The difficulty now experienced in the availability of getting agricultural labour is widespread. In the Season and Crop Report of the Government of Orissa for the year

* Final Report on the Revision Settlement of Orissa, 1922-32 A. D. by W.W. Dalziel, page 6.

1946-47, it is reported that there was general paucity of labour (agricultural) which resulted in the increase of wages. The principal reason of scarcity of labour for agricultural purposes may be that the labourers are changing over from agriculture to industry not only because it is more lucrative but also because industrial labour is looked upon as having higher prestige as the wages are higher than that of agricultural labour and is paid in ready cash at fixed intervals. On account of these conditions, agricultural labour is becoming very difficult to find. The paucity of labour is being partially met by mechanisation of agriculture.

10. The problem of agricultural labour is very complicated. Unlike industrial labour which is concentrated in particular areas, agricultural labour is difficult to organise and to deal with on uniform basis as it is scattered throughout the country with varying local conditions. Not even a beginning has been made in the organisation of this vast potential man power. It has no press or platform and no body to champion its cause although of all sections of the people its need for organisation is the greatest. The people of this class live in half-fed condition on account of inadequate earning hardly enough for meeting their material needs. Again, the employment is seasonal, throwing the population of this class out of work for almost half the year. Orissa is primarily a land of one crop and therefore the workers in fields remain idle for a considerable period during the year unless they take resort to some other avocations.

SECTION VII

Non-cultivating Owners of Cultivated Land; Agricultural Rent receivers and their Dependants

POPULATION

1. The non-cultivating owners of cultivated land, agricultural rent receivers and their dependants number 219,827 in Orissa of whom 95,971 are males and 123,856 are females. They constitute 1·9 per cent of the total agricultural population of the State. Their distribution in the State, natural divisions and districts is given in Table B-I appearing in Part II-B of this Report. A larger percentage of such persons are to be found among the agricultural classes of the coastal division.

WORKING POPULATION AND DEPENDANTS

2. The division of a number of 10,000 population belonging to this livelihood class into sub-classes, namely, self-supporting persons, non-earning dependants and earning dependants has been shown in the Subsidiary Table 4·5. The self-supporting persons form 30·2 per cent of the population of this class while the remaining 69·8 per cent belongs to the category of dependants. Of these, 5·5 per cent are earning dependants and the remaining 64·3 per cent are non-earning dependants. The percentage of self-supporting persons is somewhat larger in the inland division than in the coastal division. Inversely, the dependants particularly of non-earning type are seen in larger number in the coastal division. The following table shows the percentage of sub-classes in the State and the two natural divisions.

State or natural division	Self-supporting persons	Non-earning dependants	Earning dependants
ORISSA ..	30·2	64·3	5·5
Inland division	32·1	59·1	8·8
Coastal division	29·6	66·2	4·2

3. The percentage of self-supporting persons, earning dependants and non-earning dependants to the total population of this class in respect of different States in India is given below :

State	Percentage to the total population of class IV		
	Self-supporting persons	Non-earning dependants	Earning dependant
Orissa ..	30·2	64·3	5 5
Madras ..	28·9	67·8	3·3
Uttar Pradesh ..	38·1	58·5	3·4
Madhya Pradesh ..	35·6	46·3	18·1
West Bengal ..	26·1	71·6	2·3
Assam ..	27·4	61·8	10·8
Punjab ..	29·5	60·3	10·2
Travancore-Cochin	30·0	66·2	3·8

SECONDARY MEANS OF LIVELIHOOD

4. Out of the total population belonging to livelihood class IV, 17·2 per cent have got secondary source of livelihood of whom 11·7 per cent are self-supporting persons and 5·5 per cent are earning dependants. Out of the total population having secondary means of livelihood 4·0 per cent get their subsidiary income from one of the agricultural occupations and the remaining 13·2 per cent from non-agricultural occupations. It is interesting to see that the largest number of persons deriving their secondary means of livelihood from agricultural occupations find employment as cultivating labourers. The percentage of such persons is 2·4. Thus, although the principal means of livelihood of these persons is of a type equivalent to that of proprietors or rent collectors of agricultural land, a large section of them are so poor that they have taken to the agricultural labour to supplement the main source of their maintenance.

5. A large number of non-cultivating owners of land who work as cultivating labourers is to be found in the inland division. Such persons constitute 4·6 per cent in this division as against 1·6 per cent in the coastal division. Among the districts, Mayurbhanj, Kalahandi, Bolangir and Koraput (6·7, 6·4, 5·6 and 5·0 per cent respectively) have a high number of non-cultivating owners who work as labourers in the fields. Ganjam Agency, Balasore and Cuttack have got the least number of such people. This shows that the proprietors of land or agricultural rent receivers of Ganjam Agency, Balasore and Cuttack are more prosperous and do not feel the necessity of taking to secondary means of livelihood while the persons of this class in Mayurbhanj, Kalahandi, Bolangir and Koraput derive such a poor income from their main source of livelihood under class IV that they have to depend to a great extent on subsidiary income from class III.

6. Among the non-cultivating owners of land who have taken to one of the non-agricultural professions as subsidiary source of income the largest percentage come under other services and miscellaneous sources (class VIII) to the extent of 7·3 per cent. The people of the inland division have taken to this kind of secondary income to a greater extent, namely 8·2 than the people of the coastal division with 6·9 per cent. Livelihood class VIII as a secondary income is very popular with the non-cultivating owners of land of agency areas of Ganjam where 24·0 per cent belong to such category. The second in importance as a source of supplementary livelihood for the people of class IV is production other than cultivation (class V) which gives employment to 3·3 per cent of the people. Commerce (Class VI) is also important as a secondary source of livelihood as 2·4 per cent have taken resort to it in addition to their main livelihood under class IV. Transport is hardly important as a source of secondary means of livelihood for the persons belonging to class IV.

SECTION VIII

Active and Semi-active Workers in Cultivation

Population

1. The number of active and semi-active workers in cultivation is 39·7 lakhs out of the total agricultural population of 116·1 lakhs in Orissa. The distribution of these workers is shown in the Subsidiary Table 4·6. They include the self-supporting persons and the earning dependants of the agricultural classes who are engaged in cultivation and also the self-supporting persons of non-agricultural classes who have cultivation as their secondary means of livelihood and finally the earning dependants of the agricultural classes deriving their subsidiary means of income from agriculture. In other words, the total number of whole-time and part-time workers in agriculture amounts to 39·7 lakhs who are responsible in raising food and other agricultural crops for the total population of Orissa exceeding 146 lakhs.

Livelihood Class of Workers

2. persons deriving their livelihood from class IV are not treated as active workers as they do not contribute to the actual production of food and other crops. In other words, they are included among the groups of persons who are economically inactive. In calculating the total number of active and semi-active workers, the population under class IV has therefore been omitted. The percentage of workers of the remaining three classes of agricultural livelihood in the State and the natural divisions is given in the statement below :—

State or natural division	Active and semi-active workers in cultivation		
	Class I	Class II	Class III
	Cultivators of land owned	Cultivators of land unowned	Agricultural labourers
Orissa	66·5	7·5	26·0
Inland division	66·8	5·1	28·1
Coastal division	66·1	11·1	22·8

3. Class I supplies two-thirds of the active and semi-active workers in cultivation and class III supplies a little above a fourth. The contribution of class II naturally is small and is confined to 7·5 per cent of the total number of active and semi-active workers in Orissa. In the inland division although class I constitutes 78·2 per cent of the total agricultural population, the percentage of active and semi-active workers from this class is small, namely, 66·8. Similarly, in the coastal division the percentage of actual workers is 66·1 out of the total active workers in agriculture although the population of this class is 71·0 per cent of the total agricultural population. Class I contributes a lesser percentage of actual workers than is justified by the percentage of this class to the total agricultural population. On the other hand, class III contributes decidedly a larger percentage of active and semi-active workers, namely, 26·0 per cent although the general population percentage of this class is only 15·5. Class II shows an equal percentage bothways, which is 7·5. It will be easy to infer from the difference in the two sets of percentage that among the population belonging to livelihood class I, there are a larger number of economically inactive persons than amongst the persons of livelihood class III, a normal position being occupied by livelihood class II. Between the natural divisions, it is seen that the proportion of economically active and semi-active persons under class I is almost equal, but there is a greater proportion (roughly double) of such persons belonging to class II in the coastal division. There is thus a large number of non-owning cultivators or *bhag* tenants in the coastal division but in the inland division the availability of cultivating labourers is decidedly more than in the coastal division.

4. The conclusion that may be drawn from the above statement and observations is that in the coastal division there is a greater amount of economic inactivity among the owner cultivators, a greater amount of activity of non-owning cultivators, and lesser extent of availability of agricultural labour while in the inland division, the owner cultivators are a little more active, the agriculturists take to *bhag* cultivation to a lesser extent and agricultural labour is available to a greater extent.

Number of Active Workers in Agriculture

5. It is usually assumed that an earning dependant does an amount of work equal to about one-third of that done by a self-supporting person and that a self-supporting person having a secondary means of livelihood derives from such secondary livelihood about one-sixth of the earnings made from his principal means of livelihood. On this basis, it will be possible to ascertain the proportion of active workers in cultivation to the total population giving a rough idea of the number of persons feeding and supplying other agricultural needs of the total population. Reducing the total number of earning dependants of agricultural classes by one-third and the total number of self-supporting persons having secondary means of livelihood derived from agriculture by one-sixth, it appears that the earning dependants are equivalent to 228,771 and the self-supporting persons with secondary means of livelihood to 21,155 full-time active agricultural workers. By adding these numbers to the total number of self-supporting persons earning their livelihood from agriculture, it is observed that there are 3,408,010 active workers in agriculture in Orissa. In other words, the food and other agricultural necessities of 146 lakhs of people of Orissa are produced by the labour of these 34 lakhs of full-time workers.

Ratio of Workers and Consumers

6. As the food requirements of 146 lakhs of people are produced by about 34 lakhs of whole-time workers, it is possible to work out the worker-consumer ratio. On the above basis, one active agricultural worker produces food and other agricultural products for approximately 4·3 persons of the general population of Orissa, leaving some amount of food and other crops for export from the State. The corresponding figure for the natural divisions and districts is shown below :—

State, natural division or district	Number of persons for whom one active agricultural worker produces food etc.
ORISSA ..	4·3
Inland division ..	3·9
Coastal division ..	4·8
Cuttack ..	4·8
Balasore ..	4·4
Puri ..	4·7
Sambalpur ..	3·6
Ganjam ..	5·3
Koraput ..	4·8
Dhenkanal ..	4·1
Keonjhar ..	3·9
Phulbani ..	4·1
Bolangir ..	4·0
Sundargarh ..	3·9
Kalahandi ..	3·8
Mayurbhanj ..	3·4

7. These figures supply food for various thoughts. It is to be considered if in Ganjam where one active cultivator is responsible for feeding 5·3 persons of the general population, there is too much strain on that cultivator as compared with his counterpart in Mayurbhanj where he has to feed only 3·4 persons. The figures may also indicate that Ganjam with a heavier responsibility of production per cultivator is deficit in food production than Mayurbhanj which is a surplus district. It may also mean that in Ganjam an average cultivator produces more by virtue of the greater

productivity of the land while in Mayurbhanj this is not possible. A hard and fast criterion for deciding the above questions cannot be laid down.

8. The figures relating to the districts or even natural divisions should be taken as approximate indication of the number of population supported by an active worker. There are many a district which produces more than is required for its own population, so that the surplus is exported. On the other hand, there are districts which are deficit in food production with the amount of agricultural hands working for the existing population. Such districts import food from surplus districts. From the information available from the Department of Supply and Transport it is possible to classify different districts of Orissa into three categories, namely, surplus, self-sufficient and deficit in food production as follows :—

Surplus districts—

Balasore, Sambalpur, Koraput, Kalahandi and Mayurbhanj.

Self-sufficient districts—

Cuttack, Puri, Ganjam and Bolangir

Deficit districts—

Dhenkanal, Keonjhar, Phulbani and Sundargarh.

SECTION IX

Progress of Cultivation correlated to growth of Population

DISPARITY IN GROWTH OF POPULATION AND CULTIVATION

1. In the history of the people, there are some periods when the growth of population outstrips the growth of cultivation and others when the opposite takes place. There must be identifiable reasons for these disparities, for in the long run the two rates of growth must keep in step. It appears that in Orissa, the growth of cultivation during the first two decades of the present century exceeded the growth of population. During this period, the population of Orissa increased by 8·3 per cent but agriculture seems to have gained by a comparatively greater extent of increase. The position was reversed in the next 30 years from 1921 to 1951. The rate of growth of population was very rapid, namely, 31·3 per cent during this period, but the extent of cultivated area decreased considerably. Thus, while the population was quickly expanding during the last 30 years, cultivation was on the decline. Although some amount of increase in the cultivated area resulted during the last decade, the decline prior to that was so great that the cultivated area in 1951 continued to be lower in extent than that of 1921.

2. Thus the first two decades of the present century was a period of comparative stagnation for the population but was a period of satisfactory growth in cultivation. The position was just the opposite in the next 30 years from 1921 to 1951, which is a period of rapid growth of population but of agricultural stagnation or decline. Such disparity between the growth of population and of cultivation, if allowed to prolong, is bound to create complicated administrative problems. Remedial measures must be undertaken without any delay, and in order to do so, it is necessary to study the circumstances and factors that were responsible for the poor progress of cultivation during the last 30 years.

CLASSIFICATION OF AREAS

3. In order to appreciate the position with regard to increase or decrease of cultivated area, as well as the possibility of extension of cultivation, it is necessary to know how the total area of the State has been apportioned between different categories of land. The following table shows the classification of areas.

Classification	Area in acres	Percentage of total area of the State
1. Forest ..	14,720,000	38·24
2. Not available for cultivation.	4,578,902	11·90
3. Other uncultivated lands excluding current fallows.	5,448,797	14·16
4. Current fallows ..	1,819,275	4·73
5. Net area sown during the year.	11,920,066	30·97
Total area of the State	38,487,040	100

Net Area sown

4. The changes in the net area sown during the last 30 years have been shown in the Subsidiary Table 4·7. The figures represent the quinquennial average of the area sown as explained in the foot-note of the Table. They have been compiled from the records of the Director of Agriculture and from other sources where the Director could not furnish them. Before passing on for discussion, it may be stated that the figures should be accepted with caution, on account of the reason that there was no special organisation for collection of agricultural statistics prior to 1944 and the work was managed by the local Revenue staff of lower ranks and although an organisation was created after 1944, it was hardly

known to have given dependable figures. Facts regarding the extreme deficiency of agricultural statistics have been discussed in Section 1 of this Chapter. Moreover, there were frequent changes in boundaries of the districts and of Orissa as a whole during the last 30 years and in the years 1948 and 1949 there was the merger of a large number of ex-state areas which had no record to show classification of cultivated lands. It is difficult to trace the history of the progress of cultivation in Orissa on account of these deficiencies. An attempt has however been made to describe the situation with as much reliability as possible by consolidating the available sources of information.

5. As the figures stand, there has been a continuous fall in the net area sown from 1921 to 1941 and although there was a slight increase in 1951, the net area is much less than what it was 30 years before. The net area sown stood at 129·7 lakh acres in 1921, which was reduced to 123·7 lakh acres in 1931 and to 118·1 lakh acres in 1941. In 1951, however, it has arisen to 121·2 lakh acres which though higher by 3·1 lakh acres than the area of 1941, is less by 8·5 lakh acres than the area sown in 1921. A similar trend is noticeable in respect of the two natural divisions where the figures taken separately show that the net area sown declined persistently from 1921 to 1941 and rose slightly in 1951 so as to stand finally much lower than the figure of either 1931 or 1921. The overall decline in 30 years, viz., from 1921 to 1951 is 8·5 lakh acres for Orissa, 1·6 lakh acres for the inland division and 6·9 lakh acres for the coastal division. As regards individual districts, similar decline is noticeable in respect of all except Sambalpur, Keonjhar, Sundargarh and Phulbani, which districts have gained only to a small extent. The most important agricultural districts of the State, namely, Balasore, Koraput, Kalahandi Mayurbhanj and Cuttack have all suffered loss of area under cultivation.

Causes of Decrease in the Net Area Sown

6. The decrease in the total area under cultivation in most of the districts of Orissa and in the State as a whole is a matter of grave concern. Factors which brought about the decrease may be the shortage of agricultural labour, high cost of plough bullocks, adverse seasonal factors and the change from agricultural to industrial professions to a growing extent. Deterioration of land may also be another reason. Portions of the once fertile lands of the deltaic region of the Mahanadi and the Brahmani have become sand-logged as a result of frequent floods during the past two decades. Damage by sand-logging has also occurred in the valley of the Vansadhara and other areas in the inland division. Another important reason of decrease in cultivated area may be the abandonment of a number of principal irrigation sources during the last few decades. The Dudhai Irrigation Canal, the High Level Canal, Range II and the Orissa Coast Canal have all been abandoned causing considerable decrease in irrigation facilities. Although a few new irrigation sources have come into existence in the meanwhile, many of the existing ones have suffered reduction of irrigable capacity and other types of deterioration. The combined result of all these factors have led to the decrease in the total cultivated area of Orissa during the last 30 years.

Area Sown More than Once

7. The net area sown more than once declined from 1921 to 1931 but during the last two decades good progress has been done particularly in the coastal division. In 1921, such area was 7·7 lakh acres which declined to 6·7 lakh acres in 1931 but increased to 7·4 lakh acres in 1941 and further to 11·0 lakh

acres in 1951. The improvement was most noticeable in the coastal division where the area was 5·2 lakh acres in 1921, and was reduced to 4·9 lakh acres in 1931, increased to 5·5 in 1941 and further to 8·7 lakh acres in 1951. To a smaller extent such improvement is noticeable in the inland division where the area sown more than once in 1951 is still lesser than that of 1921. The districts which have gained most in the area sown more than once are Cuttack, Puri and Ganjam.

Per Capita Land

8. The area under cultivation *per capita* for the three decades between 1921 and 1951 for Orissa and the two natural divisions is shown below. The area is given in cents per head.

State or natural division	1951	1941	1931	1921
ORISSA	82·7	85·7	99·0	116·2
Inland division	103·0	108·0	127·4	148·8
Coastal division	58·6	60·1	67·9	83·2

9. A perusal of these figures show that in Orissa every man, woman and child had 116·2 cents of land in 1921 to draw sustenance from. It was reduced to 99 cents in 1931, and to 85·7 cents in 1941 and has since been further reduced to 82·7 cents in 1951. There is an overall decrease of 33·5 cents *per capita*, which amounts to a decrease by 28·8 per cent between 1921 and 1951. In both the natural divisions the *per capita* area of cultivation is also steadily declining from decade to decade. In Orissa Inland Division, the *per capita* area of cultivation in 1921 was 148·8 cents. It came down to 127·4 in 1931 and further reduced to 108·0 cents in 1941. In 1951, it reached the level of 103·0 cents. The total decrease between 1921 and 1951 is 45·8 cents which forms 30·8 per cent of the 1921 *per capita* area. In the coastal division, *per capita* cultivated land in 1921 was 83·2 cents. It came down to 67·9 cents in 1931 and to 60·1 cents in 1941. By 1951, it fell down further to 58·6 cents, thus losing 24·6 cents *per capita* since 1921, which forms 29·6 per cent of the 1921 *per capita* area.

10. The decrease in the unirrigated single crop cultivation *per capita* between 1921 and 1951 mostly accounts for the decline of the 33·5 cents in the total area of cultivation *per capita*. A small percentage of decrease in the irrigated single crop cultivation *per capita* also accounts for it. Unirrigated double crop cultivation *per capita* in Orissa has improved by 1·3 cents *per capita*, but this is infinitely small to set off the huge decrease in the unirrigated single crop cultivation *per capita*.

11. As stated above, the *per capita* cultivated area has decreased by 45·8 cents in the inland division between 1921 and 1951 and 24·6 cents in the coastal division. A large percentage of this decrease is accounted for in both the divisions by the decline in the unirrigated single crop cultivation *per capita*. In the inland division, the decrease in unirrigated double crop cultivation *per capita* by 1·6 cents has also taken place. Further, there has been a decrease in the irrigated single crop cultivation from 17·4 cents to 13·6 cents in the coastal division which has also contributed to the general decline. No doubt there has been a *per capita* increase of 5 cents in the coastal division under unirrigated double crop cultivation and 2·2 cents in the inland division under irrigated single crop cultivation, but these are too small in volume to retrieve the position of deterioration caused by the great decline in unirrigated single crop cultivation.

12. To sum up, it is observed that there has been a steady decline in the area of cultivation *per capita* in Orissa as well as in the two natural divisions between 1921 and 1951. The *per capita*

area in the inland division is greater than that in the coastal division, being 103·0 and 58·6 cents respectively in the year 1951. In other words, the *per capi a* area of the coastal division is a little more than half the area in the inland division. The rate of decline is faster in the coastal division, coming mostly from Ganjam, Cuttack and Puri districts. The position of Ganjam district is grave, for while the *per capita* area of cultivation was 95·2 cents in 1921, it came down to 47·4 cents in 1951, a decrease of about 50 per cent. Puri's decline is 25·4 per cent and Cuttack's 30·1 per cent. The following statement shows the net decline in *per capita* area of cultivation since 1921 and the percentage it represents of the area of cultivation *per capita* in 1921.

Name of district	Total decrease since 1921 in cents	Percentage of decrease since 1921
Cuttack ..	19·0	30·1
Balasore ..	6·4	6·5
Puri ..	23·0	25·4
Sambalpur ..	17·9	14·6
Ganjam ..	47·8	50·2
Koraput ..	75·8	40·4
Dhenkanal ..	70·0	45·5
Keonjhar ..	33·3	24·9
Phulbani ..	13·5	11·4
Bolangir ..	40·1	23·9
Sundargarh ..	58·6	30·1
Kalahandi ..	47·2	31·7
Mayurbhanj ..	59·1	43·2

13. Although from the above statement, it would appear that the fall in the area of cultivation *per capita* in the districts of the inland division is large in terms of cents, the position is not as serious as in the coastal districts where the area had already become too small to admit of any further diminution The lowest *per capita* area in the inland division (77·6 in Mayurbhanj) is higher than the *per capita* area of cultivation in Cuttack, Puri and Ganjam, but is only less than that of Balasore.

14. The causes of fall in the *per capita* are identical with those that led to the decline of the area of cultivated lands, namely, difficulties in securing labour and bullock power, adverse seasonal conditions, abandonment of many irrigation sources and deterioration of land. Yet the most important factor that has brought about the decrease of *per capita* cultivated area is the rapid growth of population at a rate far higher than that of cultivation. This has inevitably resulted in lesser amount of land *per capita.* The decrease of *per capita* land is a matter of concern, because the production of food per head will ultimately decrease, and the people may not get adequate food in course of time.

Irrigation

Inadequate Irrigation Area

15. The first and foremost measure necessary for increasing the yield of crops and the area under cultivation is the supply of adequate water for cultivated land. In Orissa, irrigation facilities are limited in extent. Out of the average cultivated area of 121 lakh acres for the quinquennium ending 1949-50, the area irrigated is only 19·6 lakh acres. Thus, the irrigated area amounts to 16·2 per cent of the cultivated area. Most of the States in India have got a larger percentage of irrigated area as shown below. The inland State of Madhya Pradesh has however smaller irrigation facilities than Orissa.

State	Percentage of irrigated area to cultivated area
Orissa ..	16·2
West Bengal ..	18·2
Madras ..	31·4
Madhya Pradesh ..	6·7
Uttar Pradesh ..	29·3
Travancore-Cochin ..	33·4

DIMINISHING SCOPE

16. If the extent of irrigation is an index of food security, the people of Orissa are not more protected to-day than they were 30 years before, as the irrigated area *per capita* has decreased from 14·1 cents in 1921 to 13·3 cents in 1951, a decrease of 0·8 cents *per capita* during the last 30 years. The Famine Enquiry Commission of 1945 after searching enquiries came to the conclusion that the average area under irrigation was on the decrease. According to the Report*, the average area under irrigation during the quinquennium ending 1921-22 was 6,81,000 acres which was reduced to 6,45,000 acres in the quinquennium ending 1941-42. This means that during 20 years, the irrigated area decreased by 36,000 acres. The figures relate to the province of Orissa as it was constituted in 1944-45. In other words, the figures are confined to the six old districts of the State. Further information in this connection is available from the Land Utilization Statistics of the Ministry of Food and Agriculture, Government of India, which show that in the year 1948-49 the total irrigated area in Orissa was 16,84,000 acres comprising the following sources.

	Acres
Canal Irrigation—Government	3,74,000
Canal Irrigation—Private ..	60,000
Tanks	4,84,000
Wells	36,000
Others	7,30,000

17. Subsidiary Table 4·7 gives the figures of net area irrigated in Orissa and in different districts. The irrigated area for the State and the natural divisions as shown in this Table is merely approximate and cannot be taken to represent the position accurately. According to these figures, the net area irrigated in 1921 in Orissa was 1,652 thousand acres. Between 1921 and 1931 it increased by 87 thousand acres. In the next decade, namely, 1931 to 1941, it declined by 70 thousand acres but recovered by 292 thousand acres in the decade 1941-1951. The net increase between 1921 and 1951 is 309 thousand acres. The extent of irrigation as recorded for different years is shown below :—

1921 ..	16·5 lakh acres
1931 ..	17·4 lakh acres
1941 ..	16·7 lakh acres
1951 ..	19·6 lakh acres

18. A remarkable rise in 1951 is noticeable. This is mainly due to the extensive irrigation works done during the latter half of the last decade. It is however interesting to see that the increase has been confined to the inland division only where the irrigated area has increased from 6·1 lakh acres in 1921 to 10·5 lakh acres in 1951. In the coastal division the position is unsatisfactory as the irrigation area has declined from 10·4 lakh acres in 1921 to 9·1 lakh acres in 1951. Although some new minor irrigation works were constructed in the last decade, the abandonment of major irrigation sources such as, the High Level Canal Range II, and the Dudhai Canal has resulted in the reduction of the net irrigated area in this division. In the inland division, tank and well irrigation has been on the increase resulting in some amount of addition to the irrigated area of the previous decades. The fact, however, may not be lost sight of that the quality of statistics of the inland division is inferior to that of the coastal division, and sometimes the figures are completely unreliable. This is because of the large extent of ex-state areas now forming part of the inland division, where no reliable statistics were maintained. As a result, although the net gain of the inland division during the past three decades is shown to be 441 thousand acres, the real position may not at all be so good. The figures of the coastal division, which are on the whole acceptable, show a decrease of 132

* Final Report of the Famine Enquiry Commission, 1945, page 130

thousand acres of irrigation area between 1921 and 1951. This is in conformity with the findings of the Famine Enquiry Commission, 1945. So whatever may be the official figures, it appears reasonable to conclude that during the last 30 years there has been a considerable amount of decrease of irrigation area in the coas al division and that there has been no increase but possibly decrease of such area in Orissa taken as a whole.

19. As regards the extent of irrigated area in different districts, the Director of Agriculture supplied some figures which on examination were found to be highly defective. They show that Koraput which is known to be poor in irrigation facilities has 4,73,366 acres of net irrigated area although Cuttack which has a net-work of irrigation canals is shown to have 3,19,244 acres. Similarly, Puri which has practically no irrigation is shown to have 2,57,993 acres of irrigated area while Balasore which has the High Level Canal, Range III, providing irrigation to a portion of the district is shown to have on'y 6,084 acres. Phulbani, on the other hand, is recorded to have 1,16,595 acres of irrigated area. Judging from experience, these figures are any thing but reliable.

AREA IRRIGATED MORE THAN ONCE

20. Orissa is essentially a country of single crop some of which are unirrigated and some irrigated once. There is no inducement to cultivators for raising the second crop, obviously for lack of facilities of double irrigation. In the coastal area such facilities exist to a limited extent and the area brough under second irrigated crop is very small. There is remarkable paucity of statistics in this respect and the few figures that are available are far from correct and so they have not been shown in the Subsidiary Table. According to the Season and Crop Reports, an area of 78 thousand acres was the area irrigated more than once in 1921. In 1931, the area was almost insignificant being only 13 hundred acres. Between 1931 and 1941 it rose upto 115 thousand acres and by 1951 it declined to just over 7 thousand acres. The figures are remarkable for absurd fluctuations. One reason that is assigned to such fluctuation is the difference in criterion of defining a second irrigated crop. In 1941, water supplied for the second time after the harvest of the Kharif crop to make the land fit for *Mung* crop was taken as irrigation for the second crop. In other years such irrigation was taken to be repeated supply of water for one crop only, namely, the Kharif crop. Thus, either on account of varying criteria or due to lack of agency for collection of reliable statistics there is absence of reliable information.

Manuring

21. The most important means of increasing the yield of crops, next to adequate supply of water is the use of manure. If agricultural productions have to be increased, it is indispensable that the use of organic and inorganic manures should be encouraged. Manure is used in Orissa to a limited extent only and the land is generally left to its natural powers of recuperating the loss of fertility after a crop is raised. This has led to the declining fertility of the soil. The soil of Orissa is mainly deficient in nitrogen and this can be recouped by the use of farmyard manure, compost, green manures and chemical fertilizers, etc. Results of experiment indicate that green manuring invariably gives increased yield in rice though this increase may greatly vary from place to place on account of local conditions. Sun-hemp and Dhaincha are most valuable green-manure crops for rice soils and should be extensively encouraged. Through propaganda and subsidised sales, Government have succeeded in popularizing to some

extent the use of organic manures like compost and oilcake and chemical fertilizers like ammonium sulphate and super phosphate. The progress however is very slow. Agriculturists are aware of the value of farmyard manure for purpose of increasing the yield of crops. But it is estimated that only 40 per cent of cattledung is converted into manure while another 40 per cent is used as fuel and 20 per cent lost due to difficulties of collection. It is therefore necessary to provide cheap and easily available fuel for use of the cultivator so that cattle dung may be diverted to the maximum for production of manures.

Crops

22. There are two principal crops in Orissa, namely, the Kharif crop which is planted in summar and harvested in autumn and the Rabi crop which is grown during the winter season. By far the most important single crop of Orissa is rice which constitutes the staple food of the people. According to the information available from the office of the Director of Agriculture, there is an astounding number of 1,500 varieties of rice grown in Orissa but they may be classified into 3 broad categories on the basis of the season in which they are sown and harvested. The *Biali* or autumn rice is sown in May—June and harvested in August—September. The *Sarad* or winter rice is sown in June—July and harvested in November—January while the *Dalua* or summar rice is grown in December—January and harvested in March—April. It is estimated that the *Sarad* rice is grown over 86·0 per cent of the total area under rice in Orissa while *Biali* extends to 13·7 and *Dalua* to 0·3 per cent.

23. Rice is primarily an Asiatic crop. The world acreage of rice is reported to be 207 million acres, of which 95 per cent is located in Asia. The largest rice growing area in the world is India which alone has 75 million acres of rice land while China which is the second largest country in this regard has 45 million acres under rice. Orissa has about 9·5 million acres of land under rice. Although the rice acreage of China is much less than that of India, the production is higher in China. Out of 100 million tons of rice (clean) produced annually in the world, China produces 35·9 million tons and India 22 million tons. Orissa produces only about 3 million tons per year.

24. The other crops of Orissa belonging to the class of cereals and pulses which are sufficiently important for mention are *mandia*, *kulthi*, *biri*, *mung*, and *chana*. Linseed, til (sesamum) and castor are important among oil-seeds and cotton and jute among fibres. Moreover, sugarcane, *pan*, tobacco and vegetables are grown to a considerable extent. Out of the total area under cultivation, about 92 per cent is under food crops.

The following statement gives the names of principal agricultural products of Orissa together with the acres sown in the year 1951-52 and the percentage of acreage, to the total cultivated area in the State.

Name of crop	Area in acres	Percentage of total area	
Winter rice ..	8,165,200	68·)	
Autumn rice ..	1,300,100	10· (}	79·69
Summer rice ..	33,500	0·28 J	
Jowar ..	16,830	0·14	
Bajra ..	10,307	0·09	
Maize ..	86,323	0·72	
Ragi ..	773,900	6·49	
Sugarcane ..	58,000	0·49	
Tobacco ..	32,000	0·27	
Sesamum ..	237,000	1·99	
Groundnut ..	54,700	0·46	
Raped mustard ..	61,400	0·51	
Linseed ..	17,300	0·15	
Castor ..	39,700	0·33	
Cotton ..	24,100	0·20	
Jute ..	161,340	1·35	
Wheat ..	14,260	0·12	
Barley ..	1,000	0·01	
Gram ..	40,834	0·34	
Other miscellaneous crops.	792,272	6·65	
Total ..	11,920,066	100·00	

25. The distinctive position which rice occupies among the crops of Orissa is evident. It is grown over 94,98,800 acres of land which constitutes 79·7 per cent of the total cultivated area of Orissa. In earlier years, the percentage was still higher, advancing from 88 per cent in 1901 to 93 per cent during the currency of the last Settlement Operations (1922 to 1932). The percentage has fallen by 1951 to a little below 80. This is due partly to the real decrease in the area under cultivation of rice crop and partly to the cultivation of a number of other crops during the last 30 years leading to the corresponding decline in percentage of rice area. The next important crop of Orissa is *ragi* or *mandia*, which is cultivated over 7,73,900 acres. There was a marked decline in the cultivation of *mandia* between 1901 and the period of the last settlements but the crop has undergone notable increase in the meanwhile so that at present it extends over 6·5 per cent of the cultivated area of Orissa. The principal pulses grown are *mung*, *biri*, *kulthi* and *arhar*. Gram is grown to a fairly large extent in the north-western districts. Jowar and Bajra are grown as rain-fed crops in the hilly tracts. Although the State exports different types of pulses outside, it is deficit with regard to wheat, gram and *arhar*.

Cash Crops

26. Orissa has relatively a small area under cash crops like sugarcane, jute, cotton, tobacco and oil-seeds. The area under sugarcane is 58,000 acres and is confined mostly to the Mahanadi valley and Koraput district. The average yield of cane is 20 maunds per acre. Attempts have been made to introduce better varieties of cane and it is estimated that roughly 60—70 per cent of the area is under improved varieties. Jute is the most important fibre crop of the State. It is grown mostly in the coastal districts. The area under jute has considerably increased during the last three years. The present acreage is 1,61,000 acres. In pursuance of the All-India Jute Development Programme, the State Government are taking steps to encourage extension of cultivation by distributing improved strains of jute seeds among the cultivators and other measures. Tobacco is another cash crop, but the area is round about 32,000 acres only. Mostly *desi* tobacco is grown. Attempts to popularise the cigarette tobacco were made without much success. Oil-seeds are of commercial importance for the growers. Roughly 4 per cent of the total cultivated area is under these crops. The chief types that are grown are niger, mustard, linseed, groundnut and castor. The average yield of oil-seed per acre is 360 lbs. There is a small export trade in oil-seed although the State is deficit with regard to groundnut oil and draws mostly its supply from Madras, Madhya Pradesh and Uttar Pradesh.

Dependence on Agriculture

27. A study of the progress of cultivation may be made on different basis. Firstly, the percentage of agricultural population in the total population of the State roughly gives an idea of the popularity of agriculture as the means of livelihood of the people. The previous Census Reports show that the proportion of agricultural population has increased from decade to decade with some fluctuation during the decades 1921 and 1931. The percentage of population depending on agriculture as the source of livelihood in different years is given below. Owing to lack of uniformity in occupational classification in census returns of different decades, it is difficult to work out correct proportions. So the figures are approximate.

1881	..	..	61·6
1891	..	..	65·8
1901	..	..	66·3
1911	..	..	75·6
1921	..	..	73·3
1931	..	..	67·9
1941	..	..	70·4
1951	..	..	79·3

28. The percentage of agricultural population in 1951 is much higher than it was 70 years back. From the year 1881 the percentage of agricultural population went on increasing consistently till the year 1911 but it underwent some amount of decline in 1921 and a further fall in 1931. The percentage quickly rose up however in 1941 and again in 1951. The principal cause of increase of proportion of agricultural population for the three decades from 1881 may be the set back which indigenous industries received on account of import of foreign products during the British period. Manufacture of salt, weaving and spinning, stationeries and toy making underwent decline as these industries were captured by foreign manufacturers. Naturally, persons who were earning their livelihood from industrial occupations had no other alternative but to change over to the land, thereby increasing the proportion of agricultural classes. But during the decade ending 1921, the position was changed on account of the World War when there was decline in the import of foreign products, giving an impetus to indigenous industries to some extent. The period of next 10 years was one of agricultural depression and people took resort to industries and productions other than cultivation in growing numbers. There was thus a greater drift towards industrial occupations and consequently the percentage of agricultural population was poor during the years 1921-31. The agricultural depression was over before the close of the decade 1931-40 and the agriculturists found their profession sufficiently lucrative. The dependence on land therefore increased in the year 1941 and the trend continued upto the year 1951.

Progress of Cultivation

29. The real progress of cultivation however can be examined on the basis of acreage sown in different decades. Broadly speaking, the last 50 years from 1901 to 1951 may be divided into three periods with regard to the progress of cultivation. The first period extends over 20 years from 1901 to 1921 when there was expansion of cultivation. The second period covers another spread of 20 years from 1921 to 1941 when cultivation shrank. Thirdly, the last 10 years from 1941 to 1951 is a period of some amount of increase in the extent of cultivation.

FROM 1901 TO 1921

30. Agricultural statistics for this period are not available, but some indications regarding the condition of agriculture are found in the Settlement Reports. Mr. Hamid * who conducted the Settlement Operations of the Sambalpur district has given an interesting review on the increase in the area of different crops between 1901 and 1921. It appears from his Report that the area of cultivation under rice increased during this period by 24 per cent, sugarcane by 70 per cent, wheat by 40 per cent, *mung* by 22 per cent, *kulthi* by 3 per cent and other crops by 45 per cent. Three crops however underwent decline in cultivated area, namely, til to the extent of 33 per cent, cotton 6 per cent and *kodo* 1 per cent. According to this calculation, the overall increase in area under crops comes to 17 per cent during this period of 20 years.

31. The position with regard to the coastal districts has been discussed by Mr. Dalziel † in his Settlement Report. It appears from an account given by him that the rice growing areas of the coastal districts increased during this period from 88 per cent to 93 per cent and that this increase was mainly at the expense of homestead lands indicating

*Final Report on the Land Revenue Settlement of the Sambalpur district, 1926 by M. Hamid, page 20.

†Final Report on the Revision Settlement of Orissa, 1922-32 by W. W. Dalziel, page 9.

a tendency on the part of agriculturists to reduce homestead lands to the minimum in order to grow more rice. He reports that there was slight decline in the net cropped area of *dalua* rice but *sarad* and *beali* gained in the cultivated area. Cereals and pulses showed an increase covering 12 per cent of the cropped area as against 10 per cent at the time of the Provincial Settlement in 1901. Oil-seeds including mustard increased from 0·47 to ·95 per cent of the cultivated lands. Jute, sugarcane and *pan* also got more areas of cultivation. But there was a marked decline in the cultivation of *mandia* while cotton growing dwindled into insignificance during this period.

32. On the whole, cultivation extended to a sufficient extent in the coastal districts in the same manner as it increased in Sambalpur. Accounts of other areas are not available but since the typical areas of the two natural divisions showed an increase in the cultivated areas, it may be accepted that the position was correspondingly progressive throughout the State.

FROM 1921 TO 1941

33. This is a period of decline in cultivation. Subsidiary Table 4·7 shows the average net area sown during different decades from 1921 to 1951. The matter has been discussed at length in earlier paragraphs of this Section. In spite of defective statistics, it is possible to discern the downward trend in the net area sown, the area sown more than once, the *per capita* area of cultivation and in the extent of irrigation during this period. The net area sown declined from 129·7 lakh in 1921 to 118·0 lakh acres in 1941, the *per capita* area showing a decline from 116·2 to 85·7 cents. The period is noted for all-round deterioration in agriculture.

THE LAST DECADE

34. This is on the whole a period of moderate recovery. During ten years from 1941 to 1951, the extent of area sown in the State underwent some amount of increase. The quinquennial average for 1941 is 118 lakh acres and for 1951 it is 121·3 lakh acres. The actual extent of cultivated area in 1951-52 has been reported by the Director of Agriculture to be 1,19,20,066 acres. An enquiry was made from the District Officers direct with regard to the total cultivated area in the districts. The figures reported by them were higher and after some amount of scrutiny have been adopted in the District Census Handbooks. The total cultivated area according to these Handbooks and according to Table F appearing in Part II-A of this Report comes to 1,32,73,585 acres. The figures available from the Season and Crop Reports give the extent of area sown in 1951 as 1,21,26,542 acres. Thus, none of the three figures agree with each other, evidently because they are not based on the result of actual Survey and Settlement Operations, in which case the results should have been reliable. The figures are all based on approximate estimates made ultimately by lower revenue staff of the districts. An attempt was made to compare these figures with those published in the Agricultural Statistics of India but the figures in this publication appear to be equally defective. They have not therefore been included in the present discussion. Balancing all the evidences available with regard to the extent of cultivated area in the State, it may not be far from correct to estimate that the net area sown in Orissa is 12·5 million acres in the closing year of the decade 1941-51.

35. To sum up, the overwhelming importance of agriculture in the economy of the State is evident from the fact that an increasingly large percentage

of population has been depending upon it for their source of livelihood. 50 years back, 66·3 per cent of the population maintained themselves by income from agriculture. But to-day a much larger proportion of the population, namely 79·3 per cent draw their sustenance from the same source. This does not however mean that agriculture has become a more profitable proposition in the meanwhile. The past half a century was chequered with natural calamities, wars, agricultural depression and business speculation, as a result of which agriculture suffered fluctuations in the area of cultivation, extent of irrigation and gross production. As reviewed above, cultivation was seen to have undergone expansion between 1901 and 1921, followed by reduction during the next 20 years upto 1941, and lastly, partial recovery by the year 1951. Poverty of statistics does not permit measuring the actual extent of rise and fall in agricultural production, but it may be possible to define its broad relation to the growth of population.

Correlation with Population Growth

36. The population of Orissa grew from 103 lakhs in 1901 to 111·6 lakhs in 1921, which amounts to a growth of 8·3 per cent in 20 years. During this period, cultivation was expanding rapidly, and one experienced Settlement Officer has estimated the increase in the area under crop for the district of which he was in charge, to be 17 per cent. Another Settlement Officer has lent corroboration to the fact of increasing extent of cultivaton during this period. All evidences available indicate that the increase in cultivation was comparatively greater than the growth of population during this period.

37. This happy relation between agriculture and population was changed for the worse after the year 1921. Between 1921 and 1951, the population of Orissa increased from 111·6 lakhs to 146·5 lakhs, an increase of 31·3 per cent in 30 years. The cropped area, during this period declined from 130 lakh to 121 lakh acres, a decrease of 6·5 per cent. Thus, while population increased to a notable extent, the cultivated area instead of keeping pace, did not even remain stationary, but suffered heavy decline. This is a sad phenomenon of growth of population outstripping extension of cultivation by a wide margin. As a result, the present diminished area of cultivation has to support a very much larger population, with no notable advance in the methods employed for increasing the yield of crops per acre.

Dangers of Imbalance

38. The growth of population at a rapid rate and the simultaneous decline in the area under cultivation, coupled with increasing proportion of population engaged in agriculture has inevitably resulted in lesser amount of land *per capita*. If the *per capita* land is decreasing it is a matter of concern because ultimately the food production may decrease and the people may not get adequate diet. For want of information relating to the yield per acre it has not been possible to work out the grain production capacity or the production of crops per head. But it appears that the *per capita* production has been diminishing at a higher rate in recent years. Not only has there been a lag in the rate of growth of population and an increase in cultivation but the gap between the two is consistently widening.

39. The dangers of population outstripping cultivation require no emphasis. Orissa will have to face grave consequences, if she remains complacent at the present level of agricultural production on the ground that she has now some surplus quantity of rice for export outside the State. It has been conclusively shown earlier that while population

is on the increase incessantly, the *per capita* land and correspondingly the production of food per head is diminishing fast. Moreover, the *per capita* consumption of food by the poorer classes of people is also increasing, with the result that the margin of excess in food production will be correspondingly reduced. Therefore, if there is some surplus to-day, it is going to be deficit tomorrow, if nothing is done to arrest the present tendencies in agriculture and population.

Increasing *per capita* Consumption

40. The average rate of consumption of food per head seems to be increasing considerably during the last decade. Prior to the last World War, existence of extreme poverty left a section of the population without adequate food, who remained underfed at least during certain parts of the year. But as a result of inflation of currency during and after the war, a larger percentage of the poor people could afford to take two square meals a day. It is not unusual these days to see a rickshaw-puller, bidi-maker, cart-driver, industrial worker or even an agriculturist spending more liberally for food and recreation. It may not necessarily mean that the intrinsic happiness of the man in the street has increased, but it is an unmistakable proof of the increasing material ability of the common man. The increase in the consumption of staple food per head is not limited to the more advanced section of the people of prosperous areas, but has spread into the backward areas of the State as well. The members of the tribes living in mountaineous areas, who in the past were depending on roots, fruits and hill vegetables for their sustenance are taking to rice or *mandia* in growing numbers.

Actual Production, Consumption and Surplus

41. The actual requirement of food of the people of Orissa may be estimated in the following manner. The requirements of adults and young persons, males and females, are different. In calculating the total food requirements it becomes necessary to assign a certain value for different sexes and ages of people. This can be calculated according to what R. K. Mukerjee describes as Lusk's co-efficients*. The consumption of food by an adult male is taken as one standard unit of consumption. The requirements of females and young persons are converted into this unit at the rate of one adult female equal to 0·83 adult male and one young person equal to 0·7 adult male, a young person being defined as a boy or a girl aged 15 years or less. On this basis, the consumption unit for Orissa is calculated below :

Age and sex group	Consumption unit per individual	Population (in thousands)	Total consumption unit (in thousands)
0—15 years	0·7	5,419	3,793
Males 15 years and above	1·0	4,543	4,543
Females 15 years and above	0·83	4,652	3,861
Age not stated and sampling error	1·0	31	31
Total		14,645	12,228

*Food Planning for Four Hundred Millions by Radha Kamal Mukerjee, page 23.

42. Thus the total food requirement of the population of Orissa amounts to 12,228 thousand units of consumption. Allotting 16 ozs. per day per consumption-unit, the total requirement of the population for a year comes to 19·89 lakh tons of clean rice. The *per capita* consumption of cereals in Orissa is not known. The Indian standard of consumption in 1950 seems to be 13·67 ozs. per day. This level has been considered inadequate for maintenance of proper health and it has been considered necessary to raise it to 16 ozs. per adult per day. If the average Indian standard is adopted for Orissa, the total food requirements of the population of Orissa will be 17 lakh tons of clean rice. But if the standard is raised to 16 ozs. per day the requirements will rise by 2·89 lakh tons more.

43. As against the above requirement, the production of rice in Orissa at the rate of 650 lbs. of clean rice per acre for 9·5 million acres of land under rice cultivation comes to 27·5 lakh tons. It is usual to deduct 14 per cent from the net produce towards wastage, animal consumption and seed requirements. This leaves 23·7 lakh tons of rice. The annual export of rice from Orissa is nearly one lakh tons. Therefore the quantity of rice left for consumption of the population of Orissa is 22·7 lakh tons. The requirements of the people at the rate of 16 ozs. per day per adult as estimated above, comes to 19·8 lakh tons. This still leaves a surplus of 2·9 lakh tons of rice per year. It is not known what happens to this large quantity of rice. The whole of it cannot be ascribed to the hoarding habit of the people because hoarding of foodgrains is a recurring annual affair with an amount of carry-over from year to year which cannot be increased indefinitely. It cannot also be presumed that in Orissa the wastage of foodgrains occurs to a greater extent than elsewhere in India. The only explanation for this unaccountable surplus may be that the annual production as calculated above relates to normal years and that Orissa has frequent occurrences of failure of crops. There are so many factors leading to the failure of crops in Orissa that it may be reasonable to conclude that the average production of rice is much lower than that shown above. It is also reasonable to estimate the actual consumption in Orissa on the average Indian standard, for there is no evidence to the effect that while the rest of India was living on an inadequate quantity of food at 13·67 ozs. per adult per day, the economic condition of Orissa permitted the people to take more. In fact, a vast number of agriculturists and particularly the agricultural labourers find employment only during half the length of the year, remaining without work for the other half when they live under half-fed conditions. In view of these circumstances, the actual annual consumption comes to 17 lakh tons of clean rice, as estimated in the paragraph above. Allowing 14 per cent towards wastages of all kinds and seeds and one lakh tons towards export, the actual annual production comes to 20·9 lakh tons of clean rice, as against 27·5 lakh tons calculated at the rate of 650 lbs. per acre. Local failure of crops occurs extensively in Orissa and so the actual annual production is less by 6·6 lakh tons than the normal production, although normal production itself is low on account of vicissitudes of monsoon, depradation of wild animals and several other factors contributing to low productivity, as mentioned in the opening Section of this Chapter. The above estimate, showing the actual annual production of rice in Orissa at 20·9 lakh tons, is approximately supported by statistics compiled by the Ministry of Agriculture, which shows * that the annual production of rice in Orissa in the year 1950 stood at 20,06,000 tons.

*Bulletin on Food Statistics, January 1951, issued by Economic and Statistical Adviser, Ministry of Agriculture, p. 3.

EXPORTABLE SURPLUS

44. Orissa has earned a name for being surplus in food production and has been able to contribute her share towards easing India's food deficit at the present critical juncture. The total quantity of export of rice for a period of six years from 1945-46 to 1950-51 is given below :

District	Export of rice (clean) in tons
Balasore	2,23,399
Sambalpur	1,55,249
Koraput	61,369
Puri	48,533
Cuttack	15,506
Mayurbhanj	11,305
Ganjam	11,187
Sundargarh	10,608
Keonjhar	5,919
Bolangir	2,993
Kalahandi	1,158
Dhenkanal	132
Phulbani	..
Total Orissa	5,47,358

45. Thus, during the last six years of the decade, 5·47 lakh tons of rice was exported from Orissa. This comes approximately to one lakh tons a year. A study of the actual production and consumption of foodgrains in Orissa shows that this surplus is not real in character. It has been stated earlier that a good percentage of cultivators and agricultural labourers remain inadequately fed for half the year. If their economic condition permitted them to take two square meals a day during the year, the present surplus would be easily wiped off. It has also been mentioned earlier that *per capita* consumption of food among poorer classes is increasing. This will eat up the so-called surplus at no distant time. On the top of every thing, is the problem of increasing population. The surplus is therefore small and precarious.

46. The effect of the surplus in rice is considerably reduced when viewed in the light of deficiencies which exist in other spheres of food production. Orissa faces shortage of other foods, such as, wheat, pulses, fruits, oils and fats. The quantity of wheat imported in each of the years 1949 and 1950 was 8,000 tons, and in 1951 it was higher, namely, 9,000 tons. Ragi, sugar, gram, etc., are also imported in large quantities. There is no reliable information as regards the deficiency in other items of food, but it appears that the gap between production and requirement is quite large in Orissa.

DIET

47. The problem of population has to be considered in close relation to the means of sustenance, mainly supply of food. Considering the existing resources in food supply and the general health of the people of Orissa, it is apparent that there is want of sufficient nutrition for the people. The aim of food production should be not only to have plenty of food but also to have a food of better nutritional standard. The diet must contain protective foods in sufficient quantity. A diet largely composed of cereals does not contain enough nutrient required for health and needs to be supplemented by other food. An insufficient and ill-balanced diet giving only 1,750 calories a day as against the necessary 2,400 to 3,000 calories is the typical diet for a cultivator of Orissa. The dificiency in diet is not only confined in terms of calories but also may be defined in terms of protiens and fats.

FOOD HABIT OF THE PEOPLE

48. The staple food of Orissa and other States in India differs from rice to wheat as one passes from East to West. An interesting account is given in this connection by P. Sen, * who remarks as follows : " Broadly speaking as we go from East to West in the country or from South to North, rice-eating gradually yields place to wheat-eating. An average Assamese takes 80 per cent of his diet by

* The Food Problem in India by Pravakar Sen, page 12-13.

weight in the form of rice ; an average Bengali, 75 per cent rice and 5 per cent wheat ; an average Bihari 70 per cent rice, 10 per cent wheat and maize ; an average inhabitant of C. P., 40 per cent rice, 25 per cent wheat and 15 per cent millets. An average Madrasi takes 35 per cent rice and 45 per cent ragi ; an average person in the province of Bombay, 30 per cent rice, 35 per cent wheat and 10 per cent millets ; an average resident of the U. P., 10 per cent rice, 60 per cent wheat and 10 per cent millets ; finally, an average Punjabi takes 75 per cent of his diet by weight in the form of wheat ." There is no mention regarding Orissa but the eastern portion may be akin to Bengal while the western portion may have identity in food habits with Madhya Pradesh. It may be reasonable to conclude that an average inhabitant of Orissa takes about 70 per cent of rice and 10 per cent of wheat and ragi out of the total quantity of his diet. Rice preponderates as the staple item in the diet of the people of Orissa.

Rice versus Wheat

49. It is held by some scholars that the level of health in rice-eating areas seems generally lower than in wheat-eating areas. It is also stated that rice-eating areas have higher mortality on account of more pronounced malnutrition than in the wheat-eating areas. The shortcoming of rice as a staple food is two-fold. Firstly, it loses more of its food value between the field and the table than does wheat. Secondly, rice tends to become too large a proportion of the total diet. Rice is the only cereal which is usually washed and cooked in water before consumption. Sometimes the boiled water is thrown away. These processes lead to depletion of nutrients in rice. Rice-eaters generally get more than 70 per cent of the total calories from rice alone. Foods of animal origin and other protective foods are negligible in quantity. The present standard of nutrition is not satisfied by such a high proportion of cereal diet. The wheat-eater in general is comparatively less dependent on wheat for all the nutrition that he gets. The theory of superiority of wheat as diet is however not accepted at all quarters. It is asserted by another group of dietists that the rice standard is not necessarily inferior to the wheat standard. The example of Japan, which is a predominantly rice-eating country, is cited. According to these authorities, malnutrition is a worldwide reality and is not confined to poor or rice-eating countries only. The lowest income groups even in U. S. A. are insufficiently supplied with calories. The truth seems to be that the physical or intellectual superiority of a nation depends upon so many other factors, of which climatic conditions and opportunities may not be in any way less potent than diet. There is however no doubt that wheat as a diet has higher calorie return than rice, quantity being the same.

Food Production to be Increased

50. From what has been seen above with regard to the precarious character of rice surplus and the deficiency in other foods, the need for increasing production of food requires no argument in support. At present there may be sufficiency in production of rice alone, but on the face of increasing population, how long will this sufficiency exist, is a matter of serious consideration.

Improvement of Yield per Acre

51. There should be a proper approach to the problem of increasing food supply. The remedy is not the same as it was a few decades back. The first Famine Commission in 1880 emphasised on the need of bringing waste lands under cultivation. Of course there is still room for extending cultivation, but the proper approach at present should be an increase in the productivity of the land already brought under cultivation which will

enable the additional food requirement of the growing population to be met. Factors leading to increase in yields which include irrigation, manuring, use of improved seeds and implements and protection against pests should now be extended to cultivators in the furthermost corner of the country.

EXTENSION OF CULTIVATION : FALLOWS AND WASTE LANDS

52. When considering the solution of the country's agricultural problems, nearly all eyes turn to the official statistics showing the extent of cultivable lands. In an earlier paragraph of this Section, the classification of areas of the State shows that a liberal extent of waste and fallow land is still available for extension of cultivation. The current fallows comprise 18·2 lakh acres constituting 4·73 per cent of the total area of the State. According to official figures, * fallow lands stood at 16,93,000 acres between 1936 and 1939 falling down to 11,90,000 acres in 1943-44. The area of fallow lands fluctuated from year to year but during the last four years of the decade the extent seems to have been increasing from 11,58,000 in 1946 to 12,45,000 acres in 1947 and to 14,15,000 acres in 1948-49. Figures for the latest years are not available. But it appears that the increase in the extent of fallow lands continues during the last years of the decade. It increased to 18,19,000 acres in 1952 according to the departmental figures maintained by the Director of Agriculture. The increasing extent of fallow lands may be due to the difficulties in securing labour and bullocks and adverse seasonal factors. The effects of legislation relating to land reform may to some extent be responsible for increasing amount of fallow land as the cultivation of lands through sub-tenants is being looked upon as detrimental to the rights of the owner. These and other factors call for detailed enquiry so that short term factors may be isolated from long term ones and suitable measures may be devised for discouraging the keeping of fallow lands.

53. Uncultivated lands which are fit for being brought under plough are still more extensive, being 54·5 lakh acres in extent, constituting 14·16 per cent of the total area of the State. As the net area sown is about 31 per cent of the area of the State, cultivation may still be extended over the fallow and waste lands forming more than half the present extent of the sown area. There is a greater scope for further extension of cultivation in the districts of the inland division, while such scope is comparatively less in the coastal districts. The following statement shows the *per capita* area available for cultivation in 1951 in different districts of the State. All the areas shown below are in cents *per capita*.

District	*Per capita* area in cents				
	Total land area	Cultivated and cultivable area	Percentage of col. 3 to col. 2	Cultivated area	Area available for cultivation
Cuttack ..	106·9	72·4	67·4	44·2	28·2
Balasore ..	142·7	113·7	79·7	92·2	21·5
Puri ..	162·9	90·7	55·7	67·7	23·0
Sambalpur ..	332·7	108·2	54·3	104·9	79·3
Ganjam ..	190·5	91·6	48·1	47·4	44·2
Koraput ..	497·8	250·3	50·3	111·8	148·5
Dhenkanal ..	318·8	104·1	42·7	83·7	20·4
Keonjhar ..	349·3	196·2	56·2	100·7	95·5
Phulbani ..	598·2	137·4	23·0	105·4	32·0
Bolangir ..	240·2	149·6	62·2	127·6	22·0
Sundargarh ..	435·2	175·5	40·3	136·1	39·4
Kalahandi ..	379·1	127·8	33·6	101·9	26·9
Mayurbhanj ..	250·4	128·7	51·4	77·6	51·1

*Land Utilization Statistics, page 7-8 issued by the Economic and Statistical Advisor, Ministry of Food and Agriculture, Government of India.

Preference for Food to Cash or Fooder Crops

54. Food production suffers when the cultivators take to growing of cash crops. Commercial considerations are mainly responsible for this tendency. While growing of cash crops is necessary in national interest, a radical swing in this direction is harmful. This can be checked to some extent by the stabilisation of agricultural prices at an equitable level, so that the incentive of the agriculturist for growing food crops may be maintained. Similarly, a great amount of caution is necessary with regard to reservation of communal lands for grazing or fodder crops. Lands devoted to fodder crops or grazing of domestic animals cannot return as many calories per acre in the form of milk or meat as the same land sown with cereals, fruits, vegetables and other agricultural crop. If, therefore, the amount of land *per capita* is small or is decreasing, it must be devoted to the production of foods which can give a higher calorie return. This brings a conflict between extension of food crops and reservation of grazing and other communal lands. The over population of cattle ultimately is no less serious a problem than the over population of human beings.

Difficulties in Indefinitely Increasing Food Production

55. The attempts to increase production of food to a sufficient extent and sufficiently fast to keep pace with the needs of the growing population encounter fundamental difficulties which may be expressed in terms of what is known as the law of diminishing return. To obtain the additional food, either cultivation must be extended to less fertile soils or land must be cultivated with increasing intensity. Extension in area of cultivation becomes a tougher job by and by because less fertile area has to be attacked with the progress of extension, and it involves more capital outlay and is subject to various limitations. The other alternative is to depend upon intensive cultivation which means the use of land to its utmost capacity. Although the latter is expected at the present stage to yield comparatively better result than the former, in both the measures, the cost of additional food supply in terms of human effort will increase progressively. This will itself act as a limitation to food production.

SECTION X

Concluding Remarks

General Backwardness

1. Agriculture being the mainstay of nearly 80 per cent of the people of Orissa, the general prosperity of the State is vitally connected with the condition of agriculture from year to year. A slight deficiency in agricultural produce has immediate and marked effect on the economic condition of a large section of the population and on their health and vitality. It is seen very often that in rural areas particularly mortality increases with bad harvest and diminishes with good harvest. It is deplorable that with such a high importance of agriculture in the life of the people of Orissa, it has been continuing in a state of inefficiency. Orissa is noted for low yield of crops among the States in India as the average yield of rice per acre in Orissa is 975 lbs. against 1,240 lbs. for India. The position with regard to low productivity in Orissa has been compared with that of other advanced countries of the world earlier in this Chapter, which illustrates the extreme backwardness of agriculture in Orissa and the ultimate poverty of the people.

Abnormal Dependence on Agriculture

2. Although agriculture in Orissa is noted for inefficiency, it is surprising that a vast majority of the population depend upon it as the means of livelihood. It is not that agriculture is an attractive proposition from economic point of view for all the large mass of people. It is a way of life with most of them. Moreover, the extensive popularity of agriculture is due to the lack of opportunity of better calling for the inhabitants of the State. As many as 79·3 per cent of the general population derive their principal means of livelihood from agriculture. Besides, there are some more persons who though not cultivators by profession have taken to agriculture by way of subsidiary income. Such persons constitute 1·6 per cent of the general population of Orissa. The overall dependence on agriculture, either as principal or as secondary source of livelihood is thus overwhelmingly high. The percentage of agricultural population is much higher in 1951 than it was 70 years back. In 1881, the agricultural population constituted 61·6 per cent of the general population. It was raised to 75·6 per cent in 1911 and finally to 79·3 per cent in 1951. The causes of such increasing dependence have been described in one of the previous Sections.

Classification of Population

3. Among the different classes of agricultural population, owner cultivators preponderate to a very large extent. Out of the total agricultural population of 116 lakhs in Orissa, the number of owner cultivators exceeds 87 lakhs, which comes to 75·1 per cent. The agricultural labourers constitute the next important class, numbering 18 lakhs and forming 15·5 per cent of the total agricultural population. The non-owning cultivators and non-cultivating owners are to be found in smaller proportion, namely, 7·5 and 1·9 per cent, the number of population under these classes being 8·7 lakhs and 2·2 lakhs respectively.

4. Of the total population belonging to agricultural classes, 27·8 per cent belong to the category of self-supporting persons and 9·9 per cent to earning dependants. The remaining 62·3 per cent, which indeed is a high proportion, is constituted of persons who are just doing nothing and are dependent upon

a smaller number of earners. The extent of dependency among the agricultural population of Orissa is thus very high. The total number of whole-time and part-time workers in agriculture amounts to 39·8 lakh persons, who are responsible for growing rice and a few other agricultural products necessary for consumption by the people of Orissa and for a small amount of export. If the contribution of the part-time workers, namely, earning dependants and self-supporting persons having secondary means of livelihood is reduced to the amount of work done by a full-time worker, in the proportion of 3 : 1 and 6 : 1 as calculated in an earlier Section of this Chapter, it is observed that the labour of 34 lakhs of full-time workers produces the food of 146 lakhs of people of Orissa. One active agricultural worker thus produces food for approximately 4·3 persons of the general population of Orissa.

Under-employment of Agriculturists

5. One complicated problem relating to agricultural economy is that of inadequate opportunity for the agriculturists in the matter of employment. Agriculture at best employs most of the persons depending on it for their livelihood for about half the duration of the year, keeping them idle during the other half. This raises the question of subsidiary employment for the agriculturists. There is obvious necessity of increasing employment in non-agricultural pursuits so that the pressure on agriculture may be relieved. This matter is directly connected with the industrialisation of the country and is by no means capable of speedy solution. With slow industrialisation and on the face of increasing population, the result has been that the supply of agricultural labour in many parts of the country is in excess of the demand. The main reason why the agriculturists remain unemployed for a part of the year is that there is excess of agricultural labour available and the agricultural holdings being uneconomic in size are incapable of absorbing the labour for a longer period during the year. The Royal Commission on Agriculture * observes in this connection as follows :—

> A prominent feature of Indian agriculture is the amount of spare time which it leaves for the cultivator. This varies very greatly according to the local agricultural condition, but it may be assumed as a broad generalisation that by far the greater part of cultivators have atleast from two o four months of absolute leisure in the year.....As agriculture in the greater part of India cannot offer employment for the whole of the year, the problem is to suggest lines of work which can suitably be undertaken by the cultivator or his family in their spare time and without detriment to the cultivation of their land.

Other Difficulties

6. One of the basic difficulties in the agricultural system of Orissa is that the holdings are small in size and are worked only for subsistence, with a little surplus for sale. In course of time these holdings will be further splintered and the process will continue from generation to generation unless a halt is cried. The present movement of distribution of land among the landless (*Bhudan Yajna*) with all the justification behind it, has the great danger of further shattering the agricultural economy of the country by accelerating the process of fragmentation. Consolidation of holdings is suggested as a stock remedy but this is a problem not free from inherent difficulties. The main purpose may however be satisfied to a considerable extent by taking recourse to co-operative farming. Then there are a multitude of similar difficult problems to be tackled, such as, provision of irrigation, manure, improved seeds and implements and finally modernising the agricultural technique so as to ensure the yield of

* Report of the Royal Commission on Agriculture, page 566.

highest number of calories per acre and the most economic use of the land and manual labour. This country has a lot of valuable things to learn from the technique followed by the agriculturist of Japan, Egypt and even China.

Progress of Cultivation

7. Broad facts relating to the progress of cultivation since the beginning of the present century have been discussed earlier in this Chapter. It appears that cultivation made rapid progress during a period of 20 years from 1901. During this period population grew rather slowly on account of frequent occurrences of devastating epidemics and other unfavourable factors, but cultivation was on the increase all along this period. A change however occurred during the last 30 years as there was decline in the extent of cultivation, while population grew at a faster pace. In spite of administrative efforts in the last decade in various forms, such as, land reclamation and improvement schemes, provision of irrigation, popularization of improved seeds, distribution of manures and fertilizers, encouragement in the use of agricultural implements and machinery and protection of crops from pests and diseases, the acreage of cultivation at present is much lower than what it was 30 years back. Thus, while the population has steadily increased, cultivation has failed to keep pace and has suffered considerable decline. This is a sad case of population out-pacing cultivation, a phenomenon fraught with grave consequences, if allowed to continue for some length of time. During the last 30 years, the *per capita* area of cultivated land has been decreasing, and so also the *per capita* irrigated area. What is more serious, is the fall in the extent of net cultivated area. If the available figures are to be accepted, the average net area sown has fallen by 847 thousand acres between 1921 and 1951.

No Occasion for Complacency

8. Although at present there is some amount of surplus rice for export to other States in India, the position is not such as to leave the people and the administrators under a sense of complacency. It has been shown effectively earlier that the so-called surplus is not only small but is precarious in character. The *per capita* consumption of food seems to be rising, and the number of mouths to feed is incessantly on the increase. It is therefore a matter of serious consideration how long the present surplus in rice will last. The surplus seems to have resulted because permanent underfeeding and periodic starvation is still the rule in our country. In the words of Sir Boyd Orr, about 30 per cent do not get enough to eat, while a much larger section of the population have to be satisfied almost invariably with ill-balanced diet containing a preponderance of cereals and insufficient protective foods of higher nutritive value. If these people were in a position to take two square meals a day during the year, no surplus would possibly be left. Moreover, this surplus in rice is counterbalanced to a considerable extent by the inadequacy of production of other foods necessary for the people of Orissa. Many items of food, such as, wheat, gram, *mandia*, *arhar*, sugar, oil-seeds and a number of protective foods are imported into Orissa to meet the requirements of the people. The State is markedly deficient in the production of all these indispensable sources of sustenance. Self-sufficiency only in cereals would be a poor objective of a national food policy, which should be based on recognition of the State's responsibility of providing enough for nutrition at a satisfactory level for all its subjects. Equally with cereals, self-sufficiency in other foods, which are so essential for a balanced diet, should be the aim of the State's food policy. The net production of such food is a matter of concern even at the present stage and

is undoubtedly going to become serious in future. These considerations immediately rule out any facile optimism that the present surplus in rice will enable Orissa to carry on for a good length of time.

9. A survey of the agricultural problems in Orissa points out the indispensable need for an integral planning. Agriculture in its major aspects is suffering from various obstacles and difficulties. The result is that a full utilization of the agricultural resources is not possible. The yield from land is low and the cost of production is high, which lead to the proverty and the low standard of living of the agricultural population at large. The serious character of the population situation must be recognized, but the primary problem is that of under development of resources. The agricultural situation in Orissa has been deteriorating for the past few decades on account of population pressure, fragmentation, inefficiency in technique, lack of capital, low productivity and countless other factors which mutually reinforce one another. The cumulative effect of all these complex problems cannot be improved by agricultural reforms alone. The re-organisation in agricultural field must have to be combined with the extension of industries as the two processes are inter-dependent, complementary and mutually sustaining. They have therefore to be closely integrated.

Subsidiary Table 4 Series

4·1—Agricultural classes per 1,000 persons of general population, number in each class and sub-class of 10,000 persons of all agricultural classes and comparison with agricultural holdings by size of holding.

Natural division and district	Agricultural classes per 1,000 persons of general population.	Number per 10,000 of all agricultural classes							Distribution of 1,000 Agricultural Holdings by Size of Holding										
		Total			I. Cultivators of land wholly or mainly owned and their dependants.	II. Cultivators of land wholly or mainly unowned and their dependants.	III. Cultivating labourers and their dependants.	IV. Non-Cultivating owners of land; agricultural rent receivers and their dependants.	1 Acre	2 Acres	3 Acres	4 Acres	5 Acres	6-10 Acres	11-32 Acres	33 Acres	34-79 Acres	80 Acres and over	Acres not stated
		Self-supporting persons.	Non-earning dependants.	Earning dependants.															
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
ORISSA ..	**793**	**2,777**	**6,233**	**990**	**7,508**	**749**	**1,554**	**189**	**220**	**161**	**134**	**101**	**83**	**140**	**91**	**5**	**15**	**4**	**46**
3·33 Orissa Inland Dn. ..	**827**	**2,823**	**5,957**	**1,220**	**7,819**	**498**	**1,593**	**90**	**160**	**140**	**132**	**107**	**92**	**173**	**123**	**5**	**20**	**5**	**43**
5·11 Orissa Coastal Dn. ..	**752**	**2,716**	**6,595**	**689**	**7,100**	**1,079**	**1,502**	**319**	**300**	**190**	**135**	**94**	**72**	**95**	**47**	**5**	**9**	**5**	**48**
Cuttack ..	749	2,790	6,563	647	7,269	885	1,420	426	339	198	132	82	52	65	32	4	8	7	81
Balasore ..	852	2,622	6,591	787	7,873	944	989	194	258	172	151	112	90	123	66	2	12	3	11
Puri ..	787	2,623	6,658	719	6,687	1,391	1,706	216	312	170	130	89	87	101	45	2	9	1	54
Sambalpur ..	792	3,212	5,131	1,657	7,557	545	1,800	98	160	135	129	105	90	170	150	5	28	7	21
Ganjam ..	661	2,764	6,576	660	6,799	1,097	1,756	348	266	220	139	96	72	103	54	11	7	2	30
Agency ..	*807*	*2,619*	*6,533*	*848*	*8,787*	*398*	*610*	*205*	*232*	*208*	*213*	*80*	*87*	*66*	*57*	*4*	*11*	*2*	*40*
Plains ..	*645*	*2,783*	*6,582*	*635*	*6,529*	*1,192*	*1,912*	*367*	*270*	*222*	*129*	*97*	*70*	*108*	*54*	*12*	*7*	*2*	*29*
Koraput ..	773	2,561	6,825	615	7,686	885	1,343	86	167	157	141	112	114	120	63	6	10	3	107
Dhenkanal ..	837	2,738	6,160	1,102	8,082	274	1,392	252	157	179	157	112	123	172	84	1	8	1	6
Keonjhar ..	899	2,784	6,823	393	8,538	259	1,112	91	207	155	160	125	112	133	85	5	5	1	12
Phulbani ..	790	2,968	6,458	574	8,063	418	1,477	42	206	157	124	113	68	209	76	12	15	5	15
Bolangir ..	827	2,624	5,683	1,693	7,413	394	2,159	34	57	101	99	95	80	227	238	2	40	9	52
Sundargarh ..	868	2,699	5,860	1,441	8,661	314	996	29	104	131	152	85	91	200	169	3	26	5	34
Kalahandi ..	844	2,769	5,809	1,422	7,015	662	2,280	43	176	87	59	62	69	189	195	6	44	7	106
Mayurbhanj ..	872	3,002	5,407	1,591	7,943	436	1,539	82	193	137	148	141	63	207	88	6	9	1	7

NOTE—Figures for size of holdings in columns 10 to 20 have been adopted from Table F as no information regarding size of agricultural holdings is available from other sources.

4·2—Livelihood class I (Cultivators of land wholly or mainly owned and their dependants) ; Number per 10,000 persons of livelihood class I in each sub-class ; Secondary means of livelihood of 10,000 persons of livelihood class I.

Natural division and district	Number per 10,000 of livelihood class I			Number per 10,000 of livelihood class I whose secondary means of livelihood is															
	Self-supporting persons	Non-earning dependants	Earning dependants	Cultivation of owned land		Cultivation of unowned land		Employment as cultivating labourer		Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources	
				Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
ORISSA ..	**2,679**	**6,382**	**939**	..	**205**	**65**	**27**	**120**	**266**	**10**	**3**	**183**	**160**	**92**	**59**	**13**	**6**	**242**	**212**
3·33 Orissa Inland Dn.	**2,725**	**6,127**	**1,148**	..	**277**	**30**	**23**	**101**	**365**	**5**	**2**	**170**	**192**	**57**	**54**	**5**	**4**	**196**	**233**
5·11 Orissa Coastal Dn.	**2,612**	**6,752**	**636**	..	**101**	**117**	**33**	**148**	**124**	**18**	**5**	**201**	**115**	**142**	**68**	**25**	**8**	**309**	**182**
Cuttack ..	2,703	6,705	592	..	84	99	40	94	83	17	5	193	111	148	83	26	10	312	176
Balasore ..	2,469	6,784	747	..	146	144	23	115	94	24	5	226	100	173	63	15	3	350	313
Puri ..	2,575	6,772	653	..	63	137	45	215	154	16	4	236	171	115	71	23	9	238	135
Sambalpur ..	3,049	5,432	1,519	..	361	17	19	73	338	5	4	361	421	80	79	8	2	328	295
Ganjam ..	2,633	6,748	619	..	121	84	17	191	194	13	2	149	71	116	45	35	10	325	159
Agency ..	*2,639*	*6,513*	*848*	..	*49*	*20*	*35*	*48*	*97*	*6*	*2*	*171*	*104*	*61*	*96*	*3*	*3*	*200*	*462*
Plains	*2,632*	*6,791*	*577*	..	*134*	*96*	*14*	*217*	*212*	*14*	*2*	*145*	*65*	*126*	*36*	*41*	*11*	*348*	*103*
Koraput ..	2,588	6,829	583	..	113	26	23	59	136	10	2	74	88	54	60	2	2	121	159
Duenkanal ..	2,654	6,285	1,061	..	243	26	11	81	263	3	2	198	237	82	64	8	3	275	238
Keonjhar ..	2,672	6,969	359	..	60	82	43	83	75	4	1	130	60	58	25	3	1	179	94
Phulbani ..	2,841	6,593	566	..	122	11	6	104	239	3	1	105	53	70	22	3	1	150	122
Bolangir ..	2,547	5,882	1,571	..	747	2	27	18	301	1	2	174	238	37	56	4	2	102	198
Sundargarh ..	2,605	6,002	1,393	..	355	5	4	60	476	1	1	142	193	39	68	7	3	196	293
Kalahandi ..	2,551	6,103	1,346	..	485	35	54	36	424	1	..	122	156	35	44	5	4	83	179
Mayurbhanj ..	2,905	5,515	1,580	..	60	60	14	349	937	10	1	139	157	52	32	4	11	253	367

4·3—Livelihood class II (Cultivators of land wholly or mainly unowned and their dependants); Number per 10,000 persons of livelihood class II in each sub-class; Secondary means of livelihood of 10,000 persons of livelihood class II.

Natural division and district	Number per 10,000 of livelihood class II			Number per 10,000 of livelihood class II whose secondary means of livelihood is: Cultivation of owned land		Cultivation of unowned land		Employment as agricultural labourer		Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources	
	Self supporting persons.	Non-earning dependants.	Earning dependants.	Self-supporting persons	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self supporting persons.	Earning dependants.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
ORISSA ..	**2,660**	**6,179**	**1,161**	**117**	**51**	..	**142**	**317**	**364**	**3**	**2**	**217**	**191**	**104**	**89**	**28**	**9**	**326**	**313**
3·33 Orissa Inland Division. ..	**2,690**	**5,706**	**1,604**	**77**	**48**	..	**278**	**254**	**507**	**2**	**2**	**227**	**273**	**94**	**103**	**11**	**4**	**308**	**390**
5·11 Orissa Coastal Division. ..	**2,642**	**6,466**	**892**	**142**	**53**	..	**60**	**355**	**277**	**3**	**3**	**211**	**140**	**110**	**81**	**38**	**12**	**337**	**267**
Cuttack ..	2,772	6,421	807	115	58	..	43	242	190	7	4	282	144	130	112	26	9	364	247
Balasore ..	2,863	6,031	1,106	176	70	..	56	312	214	2	6	224	145	114	81	17	5	521	529
Puri ..	2,496	6,645	859	138	36	..	53	585	367	6	1	165	154	95	75	24	6	235	167
Sambalpur ..	3,040	4,835	2,125	41	35	..	99	179	687	1	1	499	615	124	154	23	5	460	529
Ganjam ..	2,479	6,640	881	156	56	..	94	196	310	2	1	138	110	97	44	89	28	298	237
Agency ..	*2,027*	*7,541*	*432*	*10*	..	..	*8*	*22*	*172*	..	..	*80*	*102*	*16*	*27*	*6*	..	*67*	*123*
Plains ..	*2,499*	*6,599*	*902*	*163*	*59*	..	*98*	*204*	*317*	*3*	*1*	*141*	*111*	*100*	*44*	*93*	*29*	*309*	*243*
Koraput ..	2,669	6,413	918	248	26	..	136	189	237	4	4	124	124	120	90	3	1	285	300
Dhenkanal ..	2,283	5,982	1,735	93	96	..	91	211	674	4	6	172	353	80	80	26	9	355	426
Keonjhar ..	2,716	6,732	552	39	18	..	13	274	166	4	2	223	120	70	50	9	13	360	170
Phulbani ..	2,820	6,454	726	15	22	..	54	101	334	..	..	179	126	103	31	7	3	209	156
Bolangir ..	2,606	5,483	1,911	15	91	..	252	52	572	..	3	327	442	93	148	9	1	203	402
Sundargarh ..	2,892	4,661	2,447	39	92	..	334	54	381	1	1	343	379	82	274	5	2	300	984
Kalahandi ..	2,391	5,474	2,135	98	74	..	1,201	75	314	..	..	94	167	65	79	8	2	141	298
Mayurbhanj ..	2,815	5,220	1,965	177	37	..	21	106	1,232	3	1	175	168	77	52	13	8	906	446

4·4—Livelihood class III (Cultivating labourers and their dependants); Number per 10,000 persons of livelihood class III in each sub-class; Secondary means of livelihood of 10,000 persons of livelihood class III.

Natural division and district	Number per 10,000 of livelihood class III			Number per 10,000 of livelihood class III whose secondary means of livelihood is															
				Cultivation of owned land.		Cultivation of unowned land		Employment as cultivating labourer		Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources	
	Self-supporting persons.	Non-earning dependants	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
ORISSA	**3,277**	**5,512**	**1,211**	**139**	**56**	**56**	**19**	**..**	**558**	**18**	**6**	**109**	**189**	**51**	**63**	**3**	**3**	**145**	**318**
3·33 Orissa Inland Division	**3,326**	**5,204**	**1,470**	**127**	**60**	**25**	**12**	**..**	**734**	**18**	**5**	**81**	**211**	**28**	**45**	**1**	**1**	**117**	**403**
5·11 Orissa Coastal Division	**3,208**	**5,942**	**850**	**157**	**51**	**101**	**29**	**..**	**313**	**19**	**6**	**148**	**158**	**82**	**88**	**6**	**5**	**185**	**200**
Cuttack ..	3,244	5,858	898	130	68	51	24	..	235	23	11	168	180	90	116	9	11	211	251
Balasore ..	3,452	5,694	854	284	115	120	52	..	164	21	10	134	153	73	65	3	1	270	294
Puri ..	2,866	6,228	906	177	25	214	43	..	420	12	3	151	208	65	99	3	..	897	108
Sambalpur ..	3,890	3,978	2,132	158	59	34	13	..	1,013	18	2	122	407	24	68	1	1	177	569
Ganjam ..	3,390	5,893	717	102	22	31	6	..	381	21	1	117	70	92	45	4	4	209	188
Agency ..	*2,479*	*6,687*	*834*	..	..	..	..	..	*361*	*4*	..	*27*	*105*	*50*	*56*	..	..	*138*	*312*
Plains ..	*3,429*	*5,859*	*712*	*107*	*23*	*32*	*6*	..	*382*	*22*	*1*	*121*	*68*	*94*	*45*	*4*	*4*	*213*	*183*
Koraput ..	2,335	7,083	582	14	11	16	3	..	351	2	1	77	83	47	28	2	..	120	105
Dhenkanal ..	3,279	5,451	1,270	164	61	25	15	..	399	79	8	84	317	23	48	1	..	116	422
Keonjhar ..	3,604	5,764	632	220	206	44	39	..	82	29	2	69	122	31	32	..	..	48	149
Phulbani ..	3,708	5,712	580	51	26	7	7	..	260	13	1	40	129	34	42	..	2	66	113
Bolangir ..	2,886	5,038	2,076	32	44	5	8	..	1,169	4	2	75	213	17	47	1	..	79	593
Sundargarh ..	3,412	5,036	1,552	153	103	15	12	..	517	19	5	63	207	15	86	2	1	95	621
Kalahandi ..	3,546	5,001	1,453	19	29	13	12	..	714	1	19	62	163	29	36	..	..	64	480
Mayurbhanj ..	3,555	4,864	1,581	395	100	69	12	..	1,025	22	3	91	124	30	31	1	1	159	285

4·5—Livelihood class IV (Non-cultivating owners of land ; agricultural rent receivers and their dependants) ; Number per 10,000 persons of livelihood class IV in each sub-class ; Son means of livelihood of 10,000 persons of livelihood class IV.

Natural division and district	Number per 10,000 of livelihood class IV			Number per 10,000 of livelihood class IV whose secondary means of livelihood is															
				Cultivation of owned land		Cultivation of unowned land		Employment as cultivating labourer		Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources	
	Self-supporting persons.	Non-earning dependants.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.	Self-supporting persons.	Earning dependants.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
ORISSA	**3,026**	**6,427**	**547**	**89**	**36**	**11**	**12**	**132**	**110**	**..**	**14**	**223**	**111**	**175**	**67**	**13**	**2**	**530**	**195**
3·33 Orissa Inland Division.	**3,211**	**5,908**	**881**	**83**	**38**	**10**	**8**	**226**	**234**	**..**	**24**	**268**	**178**	**177**	**80**	**15**	**2**	**506**	**316**
5·11 Orissa Coastal Division.	**2,958**	**6,619**	**423**	**91**	**35**	**11**	**14**	**97**	**64**	**..**	**11**	**206**	**86**	**175**	**62**	**12**	**2**	**538**	**149**
Cuttack ..	2,801	6,780	419	69	37	10	9	75	45	..	10	183	81	109	64	17	2	548	171
Balasore ..	3,422	6,051	527	137	19	7	70	59	33	..	12	299	129	241	52	8	3	516	209
Puri ..	3,010	6,585	405	91	13	11	1	102	66	..	15	256	113	247	70	10	1	541	126
Samalpur ..	4,325	4,765	910	41	23	17	..	190	243	..	25	425	266	221	90	56	3	497	260
Ganjam ..	3,060	6,457	483	123	56	15	6	155	116	..	7	18	54	229	56	2	2	550	186
Agency ..	*3,346*	*4,937*	*1,717*	*197*	*91*	*8*	..	*38*	*49*	..	..	*57*	*38*	*117*	*31*	..	..	*894*	*1,508*
Plains ..	*3,038*	*6,572*	*390*	*117*	*54*	*38*	*6*	*155*	*121*	..	*7*	*19*	*56*	*238*	*58*	*3*	*2*	*524*	*86*
Koraput ..	2,491	6,659	850	243	20	15	1	390	114	..	18	218	141	247	189	4	..	466	367
Dhenkanal ..	2,949	6,265	786	19	22	7	15	212	249	..	12	336	246	180	62	12	2	550	178
Keonjhar ..	3,421	6,338	241	52	..	6	9	140	44	..	..	310	98	211	17	4	4	464	69
Phulbani ..	2,810	6,773	417	60	13	7	..	272	192	..	..	106	40	106	20	..	..	351	152
Bolangir ..	3,095	5,424	1,481	81	215	8	65	157	403	..	123	123	103	69	35	8	..	541	537
Sundargarh ..	4,196	4,803	1,002	57	72	..	7	165	172	..	93	272	114	165	129	14	..	580	415
Kalahandi ..	2,851	5,744	1,405	45	134	3	..	232	404	..	32	114	184	105	99	..	..	432	553
Mayurbhanj ..	3,052	6,091	857	118	21	15	..	265	405	..	33	14	103	108	53	4	7	384	235

4·6—Active and semi-active

Natural division and district	Cultivation				Cultivation of owned land			
	Total	Principal means of livelihood of self-supporting persons	Secondary means of livelihood of self-supporting persons whose principal means of livelihood is other than cultivation	Secondary means of livelihood of earning dependants	Total	Principal means of livelihood of self-supporting persons	Secondary means of livelihood of self-supporting persons whose principal means of livelihood is other than cultivation	Secondary means of livelihood of earning dependants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA	**3,971,326**	**3,158,084**	**126,929**	**686,313**	**2,642,655**	**2,335,636**	**84,252**	**222,767**
3·33 Orissa Inland Dn.	**2,402,538**	**1,842,487**	**51,163**	**508,888**	**1,605,593**	**1,404,899**	**36,098**	**164,596**
5·11 Orissa Coastal Dn.	**1,568,788**	**1,315,597**	**75,766**	**177,425**	**1,037,062**	**930,737**	**48,154**	**58,171**
Cuttack	587,253	505,679	26,045	55,529	411,520	372,036	17,184	22,300
Balasore	278,767	240,937	9,640	28,190	204,761	183,271	7,439	14,051
Puri	380,765	316,387	18,316	46,062	233,622	212,978	11,734	8,915
Sambalpur	435,548	326,894	16,647	92,007	282,670	237,595	11,893	33,182
Ganjam	357,906	285,369	21,932	50,605	217,716	192,254	11,878	13,584
Agency	*35,903*	*32,775*	*167*	*2,961*	*30,557*	*29,797*	*81*	*679*
Plains	*322,003*	*252,594*	*21,765*	*47,644*	*187,159*	*162,457*	*11,797*	*12,905*
Koraput	290,559	249,228	3,028	38,303	207,811	195,259	1,191	11,361
Dhenkanal	238,950	187,081	10,040	41,829	176,663	150,629	8,862	17,172
Keonjhar	158,780	145,612	2,356	10,812	127,033	120,683	2,004	4,346
Phulbani	124,568	106,643	3,588	14,337	89,147	82,633	2,423	4,091
Bolangir	293,016	198,389	3,529	91,098	189,924	143,298	2,359	44,267
Sundargarh	173,312	128,798	2,435	42,079	126,737	108,154	1,908	16,675
Kalahandi	276,749	199,833	1,603	75,313	156,465	129,744	787	25,934
Mayurbhanj	375,153	267,234	7,770	100,149	218,586	207,107	4,590	6,889

4·7—Progress of cultivation

Natural division and district	Average net area sown (A 1) in acres				Average area sown more than once (A 2) in acres			
	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA	**12,126,542**	**11,805,190**	**12,366,909**	**12,974,005**	**1,104,618**	**737,614**	**671,574**	**774,519**
3·33 Orissa Inland Division ..	**8,213,202**	**7,958,462**	**8,307,755**	**8,372,004**	**233,728**	**187,585**	**178,452**	**251,979**
5·11 Orissa Coastal Division ..	**3,913,340**	**3,846,728**	**4,059,154**	**4,602,001**	**870,890**	**550,029**	**493,122**	**522,540**
Cuttack	1,115,858	1,268,321	1,223,600	1,388,430	550,872	195,830	182,244	230,041
Balasore	1,019,834	970,321	993,189	1,031,189	9,199	2,332	10,100	9,500
Puri	1,063,534	817,003	854,398	1,101,798	167,681	218,330	179,792	119,592
Sambalpur	1,365,240	1,240,461	1,191,266	1,173,566	76,098	29,570	15,816	82,601
Ganjam	770,885	839,435	1,068,437	1,169,154	178,923	136,971	120,986	163,407
Agency	*56,751*	*48,352*	*80,470*	*88,570*	*35,785*	*3,434*	..	..
Plains	*714,114*	*791,083*	*987,967*	*1,080,584*	*143,138*	*133,537*	*120,986*	*163,407*
Koraput	1,419,370	1,416,261	1,460,501	1,511,549	2,694	2,694	10,222	17,749
Dhenkanal	702,371	764,430	764,430	792,230	14,496	34,300	34,300	34,100
Keonjhar	592,768	508,625	508,625	508,625	7,000	11,720	11,720	11,720
Phulbani	481,425	363,821	452,110	447,111	1,136	9,348	9,875	9,290
Bolangir	1,171,056	1,209,111	1,209,111	1,209,111	38,378	38,378	38,378	38,378
Sundargarh	751,669	734,849	734,849	734,849	11,717	11,717	11,717	11,717
Kalahandi	874,712	874,712	874,712	874,712	39,359	39,359	39,359	39,359
Mayurbhanj	797,840	797,840	1,031,681	1,031,681	7,065	7,065	7,065	7,065

NOTE—1. The relevant figures which represent the quinquennial averages have been supplied by the Director of Agriculture, Orissa (vide appendix II). The quinquennial averages have been worked out as follows :—

1951—Five years ending with crop year 1949-50
1941—Five years ending with crop year 1939-40
1931—Five years ending with crop year 1929-30
1921—Five years ending with crop year 1919-20

2. The figures shown here for previous decades relate to the entire area of the districts as they are at present constituted and are as such comparable.

workers in cultivation

Cultivation of unowned land				Employment as cultivating labourer				
Total	Principal means of livelihood of self-supporting persons	Secondary means of livelihood of self-supporting persons whose principal means of livelihood is other than cultivation	Secondary means of livelihood of earning dependants	Total	Principal means of livelihood of self-supporting persons	Secondary means of livelihood of self-supporting persons whose principal means of livelihood is other than cultivation	Secondary means of livelihood of earning dependants	Natural division and district
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(1)
295,685	**231,374**	**16,781**	**47,530**	**1,032,986**	**591,074**	**25,896**	**416,016**	**ORISSA**
121,002	**88,328**	**6,219**	**26,455**	**675,943**	**349,260**	**8,846**	**317,837**	**3.33 Orissa Inland Dn.**
174,683	**143,046**	**10,562**	**21,075**	**357,043**	**241,814**	**17,050**	**98,179**	**5.11 Orissa Coastal Dn.**
58,475	46,454	3,596	8,425	117,258	87,189	5,265	24,804	Cuttack
29,970	25,492	1,326	3,152	44,036	32,174	875	10,987	Balasore
52,164	42,947	2,993	6,224	94,979	60,467	3,589	30,923	Puri
23,033	17,093	2,679	3,261	129,845	72,205	2,075	55,564	Sambalpur
35,554	29,189	2,681	3,684	104,636	63,926	7,373	33,337	Ganjam
1,480	*1,036*	*34*	*410*	*3,866*	*1,942*	*52*	*1,872*	*Agency*
34,074	*28,153*	*2,647*	*3,274*	*100,770*	*61,984*	*7,321*	*31,465*	*Plains*
28,425	23,194	368	4,863	54,323	30,775	1,469	22,079	Koraput
5,940	4,398	451	1,091	56,347	32,054	727	23,566	Dhenkanal
6,047	3,725	108	2,214	25,700	21,204	244	5,252	Keonjhar
4,972	4,256	347	369	30,449	19,764	818	9,877	Phulbani
11,438	7,787	777	2,874	91,654	47,304	393	43,957	Bolangir
5,507	4,353	309	845	41,068	16,291	218	24,559	Sundargarh
20,023	11,467	252	9,104	99,461	58,622	564	40,275	Kalahandi
13,337	11,019	894	1,424	143,230	49,108	2,286	91,836	Mayurbhanj

during three decades

Average net area irrigated (A 3) in acres				Average area irrigated more than once (A 4) in acres				Natural division and district
1951	1941	1931	1921	1951	1941	1931	1921	
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(1)
1,960,630	**1,668,783**	**1,738,407**	**1,651,648**	**7,131**	**115,238**	**1,343**	**78,280**	**ORISSA**
1,052,956	**790,396**	**794,085**	**612,123**	**5,024**	..	..	**552**	**3·33 Orissa Inland Division.**
907,674	**878,387**	**944,322**	**1,039,525**	**2,107**	**115,238**	**1,343**	**77,728**	**5·11 Orissa Coastal Division.**
319,244	274,627	348,805	408,000	1,640	111,603	..	74,489	Cuttack
6,084	12,882	44,450	73,635	..	470	..	..	Balasore
257,993	216,903	367,074	366,884	..	..	..	..	Puri
295,330	48,490	319,223	397,977	5,024	..	..	..	Sambalpur
324,353	373,975	213,993	191,006	467	3,165	1,343	3,239	Ganjam
..	..	..	..	..	..	..	..	*Agency*
324,353	*373,975*	*213,993*	*191,006*	*467*	*3,165*	*1,343*	*3,239*	*Plains*
473,366	471,655	236,140	1,055	..	..	..	552	Koraput
34,100	34,100	34,100	34,100	Figures	not		available	Dhenkanal
..	..	..	..	do.	do.		do.	Keonjhar
116,595	95,630	47,032	22,001	..	..	..	..	Phulbani
24,260	24,260	24,260	24,260	Figures	not		available	Bolangir
12,950	12,950	12,950	12,950	do.	do.		do.	Sundargarh
52,219	59,175	59,175	59,175	do.	do.		do.	Kalahandi
44,136	44,136	60,605	60,605	do.	do.		do.	Mayurbhanj

4·8—Components of cultivated area per capita during three decades

Natural division and district	Unirrigated single crop cultivation per capita U. S. C. (in cents)				Unirrigated double crop cultivation per capita U. D. C. (in cents)				Irrigated single crop cultivation per capita I. S. C. (in cents)				Irrigated double crop cultivation per capita I. D. C. (in cents)			
	1951	1941	1931	1921	1951	1941	1931	1921	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ORISSA ..	**61·9**	**69·1**	**79·7**	**95·2**	**7·5**	**4·5**	**5·4**	**6·2**	**13·3**	**11·3**	**13·9**	**14·1**	..	**0·8**	..	**0·7**
3·33 Orissa Inland Divn.	**86·9**	**94·8**	**112·5**	**133·4**	**2·9**	**2·5**	**2·7**	**4·5**	**13·1**	**10·7**	**12·2**	**10·9**	**0·1**	..	..	..
5·11 Orissa Coastal Divn.	**32·0**	**39·6**	**43·9**	**56·4**	**13·0**	**6·8**	**8·2**	**8·0**	**13·6**	**11·9**	**15·8**	**17·4**	..	**1·8**	..	**1·4**
Cuttack ..	9·8	37·1	29·6	37·5	21·7	3·4	7·8	7·1	12·6	6·7	14·9	15·2	0·1	4·6	..	3·4
Balasore ..	90·8	86·2	91·5	90·7	0·8	0·2	1·0	0·9	0·6	1·1	1·4	7·0	..	..	..	..
Puri ..	40·6	26·2	22·8	50·7	10·7	15·0	13·4	9·8	16·4	14·9	27·3	30·2	..	..	..	..
Sambalpur ..	76·7	96·7	80·2	72·5	5·5	2·5	1·5	8·6	22·3	4·0	29·9	41·7	0·4	..	..	..
Ganjam ..	16·5	21·3	52·8	66·6	11·0	8·6	8·6	13·0	19·9	23·8	15·3	15·3	.	0·2	0·1	0·3
Agency ..	*13·2*	*26·7*	*49·0*	*57·1*	*22·5*	*2·0*	..	..	..	..	..	..	..	..	..	..
Plains ..	*16·9*	*20·6*	*53·3*	*68·0*	*9·7*	*9·4*	*9·8*	*14·9*	*22·1*	*26·6*	*17·3*	*17·5*	..	*0·2*	*0·1*	*0·3*
Koraput ..	74·3	83·5	127·9	185·4	0·2	0·2	1·1	2·1	37·3	41·8	24·9	0·1	..	..	..	0·1
Dhenkanal ..	77·9	93·8	109·5	140·5	1·7	4·6	5·4	6·6	4·1	4·6	5·4	6·6	..	..	..	..
Keonjhar ..	99·5	93·8	107·9	130·9	1·2	2·2	2·5	3·1	..	..	..	..	..	..	..	..
Phulbani ..	79·6	57·5	95·9	110·5	0·2	2·1	2·4	2·5	25·5	21·2	11·6	5·8	..	..	..	-
Bolangir ..	120·8	131·5	142·4	159·0	4·2	4·4	4·8	5·3	2·6	2·8	3·0	3·4	..	..	..	..
Sundargarh ..	131·7	144·7	162·6	188·2	2·1	2·4	2·7	3·1	2·3	2·6	3·0	3·4	..	..	..	..
Kalahandi ..	91·2	97·7	111·1	132·3	4·6	5·0	5·6	6·7	6·1	7·4	8·5	10·1	..	..	..	..
Mayurbhanj ..	72·6	75·8	108·4	127·8	0·7	0·7	0·8	0·9	4·3	4·5	6·8	8·0	..	..	..	..

NOTE—1. The per capita figures are for comparable areas for the years 1921, 1931, 1941 and 1951

2. Values for (USC), (UDC), (ISC) and (IDC) were derived from the area figures of Table 4·7—Progress of cultivation during three decades and the Census Population (P) of the census year in question (and expressed in cents) according to the formulae :

$$\text{(I) (USC)} = \frac{A(1)+A(4)-A(2)-A(3)}{P} \times 100 \text{ cents}$$

$$\text{(II) (UDC)} = \frac{A(2)-A(4)}{P} \times 100 \text{ cents}$$

$$\text{(III) (ISC)} = \frac{A(3)-A(4)}{P} \times 100 \text{ cents}$$

$$\text{(IV) (IDC)} = \frac{A(4)}{P} \times 100 \text{ cents}$$

4·9—Land area per capita (1951) and trend of cultivation per capita during three decades

Natural division and district	Land area per capita		Area of cultivation per capita (in cent)				Grain production capacity of cultivation per capita (in tons) C. R. C.				Remarks
	Total land area per capita (in cents)	Area of cultivated and cultivable land per capita (in cents)	1951	1941	1931	1921	1951	1941	1931	1921	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA	**262·7**	**129·4**	**82·7**	**85·7**	**99·0**	**116·2**					
3·33 Orissa Inland Dn. ..	**369·4**	..	**103·0**	**108·0**	**127·4**	**148·8**					
5·11 Orissa Coastal Dn. ..	**135·4**	..	**58·6**	**60·1**	**67·9**	**83·2**					
Cuttack ..	106·5	72·4	44·2	51·8	52·3	63·2					
Balasore ..	145·1	113·7	92·2	87·5	93·9	98·6					
Puri ..	164·6	90·7	67·7	56·1	63·5	90·7					
Sambalpur ..	332·6	180·2	104·9	103·2	111·6	122·8					
Ganjam ..	186·1	91·6	47·4	53·9	76·8	95·2					
Agency ..	*566·5*	..	*35·7*	*28·7*	*49·0*	*57·1*					
Plains ..	*149·6*	..	*48·7*	*56·8*	*80·5*	*100·7*					
Koraput ..	497·8	250·3	111·8	125·5	153·9	187·6					
Dhenkanal ..	322·3	104·1	83·7	103·0	120·3	153·7					
Keonjhar ..	349·8	196·2	100·7	96·0	110·4	134·0					
Phulbani ..	599·8	137·4	105·3	80·8	109·9	118·8					
Bolangir ..	237·9	149·6	127·6	138·7	150·2	167·7					
Sundargarh ..	439·0	175·5	136·1	149·7	168·3	194·7					
Kalahandi ..	376·9	127·8	101·9	110·1	125·2	149·1					
Mayurbhanj ..	250·1	128·7	77·6	81·0	116·0	136·7					

NOTE—1. The total land area in column 2 of this table is calculated on the basis of the area of districts as given in Table E

2 The cultivated or cultivable area per capita given in column 3 are calculated with reference to the information furnished by the District Officers and adopted in the District Census Handbooks

3. Columns 4—7.—A (area of cultivation per capita) is the sum of the four figures in Table 4·8, i.e. (USC)+(UDC)+(ISC + (IDC) in each year.

CHAPTER V
Non-agricultural Classes

SECTION I
Preliminary Remarks

Importance of Non-agricultural Occupations

1. The indispensability of non-agricultural pursuits arises principally from the limited scope of agriculture in solving the primary problems of existence. Agriculture supplies certain essential requisites of human existence, such as, food for the population and raw materials for industries. But no nation in modern times has grown rich, or has raised the general standard of living, or maintained military strength to defend itself through agriculture alone. In fact, agriculture in order to get on and flourish, requires constant assistance from hands adept in various crafts and vocations. Before a cultivator goes to the land, he must be equipped with a plough made by a carpenter, a spade or a sick e made by a smith ; he must have pots to cook food and clothes to wear and sundry other commodities which are the products of industry. Agriculture and industry are inter-dependent, agriculture unable to thrive until the surplus population is absorbed by industry and industry unable to develop unless the agriculturists are well off to buy the products of industry. But in spite of this close relation between the two, it would be wrong to limit the importance of non-agricultural occupation to its mere complementary character with relation to agriculture. With the growth of civilization and multiplication of human wants, the occupations of non-agricultural character, particularly associated with industries and manufactures, have grown in importance and are found to be more remunerative than agriculture. Industrialization of the country is a vital necessity, not only to supplement the gifts of agriculture but also to bring about a state of abundance and to raise the standard of living. Industrialization has come to be regarded more or less as synonymous with civilization and is generally offered as a remedy for problems arising from increasing population.

Their Limitations

2. Like agriculture, industry and other non-agricultural occupations have their own limitations, and are far from being the panacea for demographic maladies. Industry can hardly absorb as much as 20 per cent of the population, and other miscellaneous occupations much less, leaving the vast majority of the people to depend upon land. Ill-planned or excessive industrialization may actually increase the pressure on land rather than relieve it. The development of cotton textile mills, for example, has led to the throwing out of thousands of handloom workers, who have been forced to fall back upon agriculture. The industrial revolution created machines, and with the rise in importance and power of machines, the importance and value of man must inevitably decline. So the great danger of excessive industrialization is apparent. Moreover, while unplanned industry may not really help to ease other problems, it may lead to the decay of cottage industries. The solution of the problem therefore lies not in an all-out industrialization, but in developing agriculture and industry in correct proportions, so that each may grow with the aid of and not at the expense of the other. Further, it is desirable that the evils of the modern system of industrialization should be eliminated or reduced as far as possible.

In the western type of industrial organisation, the interest of the producer himself does not figure as an end, but in any system that may be adopted for this country, the principal aim should be the welfare of the producer and his family. In the western system, the emphasis is largely on the material rather than on the human element. This should be reversed.

THE DECLINE OF HANDICRAFTS AND THE RISE OF MODERN INDUSTRIES

3. The industrial activities of Orissa in the nineteenth century were mainly in the form of handicrafts, producing textiles, metal wares, wooden products, processed foodstuffs and some articles of luxury. There was a system of local self-sufficiency with regard to production of commodities necessary for the population, which was the prevailing form of economy that obtained in this country from time immemorial. But the enormous revolution in the methods of transport brought about towards the end of the last century, and the change in the outlook and habit of the people, resulted in the supersession of the old economic order. A long range drift began towards national or territorial self-sufficiency in place of local self-sufficiency, and in this movement the indigenous handicrafts were one of the first to suffer.

4. In course of discussion relating to the progress of agriculture in Orissa, as mentioned in Section IX of Chapter IV, the bulk of population depending on agriculture as the main source of livelihood during the last 70 years was ascertained, even though the estimate was at best approximate on account of changes from time to time in the basis of occupational classification of the population. On this basis it will be possible to deduce the percentage of non-agricultural population in different decades in Orissa. This is exhibited below. The percentage of such population in 1951 is much lower than it was in the last decades of the 19th century. From the year 1881, the percentage of non-agricultural population went on decreasing steadily till the year 1911. There was then partial recovery by 1921 and 1931 but decline set in by the year 1941 which continued at rapid pace upto 1951. The occupational distribution of the population is far more unbalanced now than it was 70 years back.

Census year	Percentage of non-agricultural population
1881	38·4
1891	34·2
1901	33·7
1911	24·4
1921	26·7
1931	32·1
1941	29·6
1951	20·7

5. The decline in the percentage of population belonging to non-agricultural occupations was directly the result of decay of indigenous industries which was so persistent and rapid that by 1911 many of the handicrafts and cottage industries of Orissa were a mere tradition—a memory of the past. The salt industry, for example, which gave employment not only to many agricultural labourers in the off-season which coincides with the period of salt production, but was also an essential means of subsistence for thousands of persons living in the coastal tract was a matter of the past.

6. The reasons for the decay of indigenous industry are manifold. But the most important is the fact that the establishment of an alien rule in Orissa in the beginning of the 19th century proved unfavourable to the prosperity of local industries. England being a free trade country and being the sovereign power in India forced for a long time its free trade policy on India so that local industries declined through their inability to compete with the products of highly industrialized countries like England. Production of textiles particularly was hard hit by competition

of foreign goods. Moreover, the handicrafts were affected adversely by the competition of a more highly developed form of industry. The decline in the textile industry, for example, was also due to the competition of cheap mill-made goods imported into Orissa from other parts of India. Although in the matter of quality, the Oriya weaver was in a position to hold his own, but as regards price, he was hopelessly beaten by machine-made goods. The result was a general decline so that only a small part of the local market in textiles remained with the handloom. A large number of weavers had to abandon their hereditary occupation and to take to agriculture. Other traditional occupations also began to disappear, particularly in towns, where profession became a matter of personal choice. In rural areas, continuity of traditional occupations was determined more by the economic necessity of the locality than by any sanctity of custom or restrictions of the caste. The advancement of education and growth of cosmopolitan views helped to spread these tendencies. In the result, the old occupational order faced a break down to a perceptible extent between the years 1881 and 1911.

7. The beginning of the World War I resulted in restricting import of foreign goods and consequently giving impetus to local industries. This is why the percentage of industrial workers increased, though to a slight extent, between 1911 and 1921. The improvement maintained itself during the following ten years which was a period of agricultural depression resulting in a further swing towards industrial avocations. The trend was however transitory in character for an ultimate decline came in 1941 and the position deteriorated to an uprecedented extent by 1951. This happened in spite of the outbreak of the World War of 1939-45. Conditions during this war period had undergone change in the sense that scarcity of food was widespread in India, and as Orissa was in position to play the role of a surplus province, agriculture proved to be a more profitable proposition than it was during the World War I. There was thus greater incentive to keep on to agriculture than at any time previously. Problems of the post-war period were worse, particularly in the matter of food supply, and agriculture in Orissa continued to attract more and more workers, leaving correspondingly smaller percentage to non-agricultural occupations till the close of the decade.

8. The process of decay began by the changes in the political conditions of the country, and by the forces of foreign influence and helped on by the competition of developed industries, brought about the decline both in the artistic excellence and the economic importance of the handicrafts. In order to counteract the evil results, measures were undertaken for the development of these handicrafts and cottage industries in various ways. Between 1936 and 1951, a large number of Technical Institutions, either owned or aided by the Government, and several institutions for imparting industrial training were established in different parts of the State. The object of these institutions was not only to increase the supply of trained craftsmen, but also to cause qualitative improvement of industrial products. Subsidizing industries, organizing periodical exhibitions of products of cottage industry and fine arts, encouraging tribal arts and crafts were a few of the numerous measures undertaken with a view to arrest the decline of old handicrafts and to create interest in the manufacture and expansion of indigenous products. But in spite of these efforts, the decline continued at fast pace.

9. Although old handicrafts were losing ground, industry was tending to be

organized on modern lines during the last two or three decades in Orissa. A change of some magnitude set in in the economic structure of the country. Working of coal, iron and other mines, building of hydro-electric and thermal power stations, establishment of paper and textile mills or glass and cement factories are a few of the latest modern industrial enterprises in Orissa. But though the tendency to modernize industry has taken its start, the actual progress up till now is but small and when the industrial workers employed in these new industries are counted against the population of the State, the percentage is insignificant. The decay of cottage industries and old handicrafts has been so extensive that the attempted recovery of these industries and the introduction of fresh large scale industries have yet failed to recoup even a fraction of the overall loss sustained during the last 70 years. In consequence, the percentage of non-agricultural workers in 1951 is the lowest ever recorded since the beginning of the census operations in the Indian soil. It is however heartening to note that the present trend of recovery and progress shows every sign of remaining effective and gaining momentum in the coming decades so that in future the percentage of non-agricultural and industrial workers is likely to improve to a considerable extent.

Orissa's Resources

10. Orissa indeed has got considerable opportunities for expansion in the industrial field, as the main prerequisites, namely, raw materials and labour, are available in abundance. Nature has endowed this country with great resources in land, forest, mines, rivers and waterfalls which have been preserved through long geological ages for timely exploitation. With a territory more extensive than England and Wales, and with 300 miles of sea-board giving easy accessibility, 23,000 square miles of forest rich in timber and other forest produce and vast extent of mineral deposits, namely, coal, iron, manganese, chromite, bauxite, mica, limestone and many other occurrences of immense industrial value, Orissa is regarded as the Nature's favourite, having unbounded scope for planning and development on modern lines. There can hardly be any country where the natural resources are so illimitable and numerous, and yet their exploitation has been so neglected. The State is no doubt poor at present in technical skill and capital resources as compared with many other States in India, but so long as these factors have not sufficiently developed internally, they should come from external sources, if backed up by wise planning.

The Example of Japan

11. In the last Chapter it was observed how Japan has to set an example to this country in the matter of agricultural development. Similarly, in the field of industrial progress, Orissa, and in fact India, have a good deal to learn from the rapid and intensive industrialization of Japan. India was the first of the oriental countries to feel the impact of western industrialism but was involved in a slow and prolonged transition, whereas Japan, starting late and with less opportunities, passed that stage within a few brief decades. The first Indian textile mills was established in 1851, and by 1900, there were 193 mills with nearly 5 million spindles.* Similarly, there were a few other large scale industries established on the Indian soil during the second half of the 19th century. Japan's industrialization did not, however, begin until many years after the Meiji Restoration in 1868. By 1880, Japan was much behind India in the field of large scale industries, but the process in Japan

* Handloom Weaving and Industry in India by M. P. Gandhi, page 2.

gained momentum, so that the whole industrial revolution was completed by the early decades of the present century. It soon became not only the leading industrial country in the East, but also one of the big world powers and a rival of England and America in trade and overseas enterprises. By the thirties of the present century Japan had a completely modern industrialized economy.

12. How is this speedy accomplishment of industrialization explained ? Growing population, geographical position, access to transportation or availibility of resources cannot explain this as Orissa or India is more or less in the same position as Japan in all these matters except the last one in which Japan has incomparable disadvantages. One explanation may however be the striking growth of literacy in Japan. The great handicap of the hieroglyphic script requiring learning of about two thousand characters was thrown away and the Basic Education law was passed in 1872. That the progress of education was astounding may be judged from the fact that by 1938 Japan was 95 per cent literate as compared to 16 per cent in Orissa as late as 1951. The enormous achievement may also have been possible due to the status of Japan as a sovereign country, enabling her statesmen to make a quick and conscious effort to build a powerful nation.

Unauthenticated Census of Small Scale Industries

13. In the year 1949, instructions were issued by the Government of India to different States to conduct a census of small scale industries. The census was originally intended to be conducted by the State Government, but in the last stage on account of delay, it was taken over by the organisation of the population census. The census relates to small scale industries not falling under the purview of the Factories Act and the Mines Act, such as, cottage and home industries, small workshops where articles are produced, repaired or otherwise treated for sale, use or for disposal. This census covers industrial establishments which use power and in which the number of workers is less than 10 persons as well as industrial establishments which do not use power and which employ less than 20 persons. A quick survey of the small scale industries in the State was then conducted in November 1950. The results of the census have been shown in the District Census Handbooks but these Handbooks contain a word of caution as regards the accuracy of figures in the following words.

> The small scale industries census was conducted through the agency of enumerators recruited for the population census of 1951. As this work was undertaken three months prior to the population census, the enumerators had not received adequate training by that time. The data elicited cannot be said to be as reliable as in the case of population census but they provide a basis for any future investigation.

14. The matter was examined by the Government of India who were of the opinion that the local agencies entrusted with the census of small scale industries could not and therefore, did not receive the benefit of training and supervision by Central Government agencies working on all-India lines and as such did not justify the authentication of figures for all-India use. Moreover, opinion of all the District Magistrates was called for with regard to the reliability of this census held in their respective districts. A number of District Magistrates, in reply, testified to its reliable character, while others stated that this was a good basis for future investigation. On the whole, it appears that this census produced results which are reliable to a considerable extent. There were of course some omissions for which a margin

should be given to arrive at approximately reliable figures. As however, in pursuance of an all-India policy, this census has not been authenticated, reference to its results have generally been avoided in course of discussions in this Chapter.

RELIABILITY OF NON-AGRICULTURAL STATISTICS

15. The recording of economic status of individuals was a complicated matter and gave considerable trouble to enumerators and tabulators In earlier censuses, whenever occupational returns were required to be prepared the same difficulty was experienced. It was a hard job this time for many enumerators to draw a correct line between self-supporting persons, earning dependants and non-earning dependants and similarly between employers, employees and independent workers. The utmost was however done by laying stress in course of instructions and supervision on the importance of recording occupations in a precise manner and avoiding vague and indefinite terms with regard to the mode of earning livelihood. It cannot be said that these instructions were always carried out correctly. But precautions were taken to check up the returns before the records were despatched from the villages concerned. This was in addition to the supervision and check excersised at the spot from day to day in course of progress of the enumeration work. Finally there was a check up at the tabulation office. The final result is on the whole reliable.

REFERENCE TO STATISTICS

16. The main economic tables of the 1951 census are contained in Part II-B of this Report. The United Nations Organisation has evolved a scheme of classification of all economic activities known as the " International Standard Industrial Classification " Scheme. The Economic and Social Council of the U. N. O. has recommended the use of this scheme by member Governments " either by adopting this system of classification as a national standard, or re-arranging their statistical data in accordance with this system for the purpose of international comparability". The present scheme of classification is known as the " Indian Census Economic Classification " Scheme drawn up by the Registrar General, India. It is of utmost importance to study not only the implication of different livelihood classes of non-agricultural population but also of the basis of classification of various occupations and economic activities of such population. All these economic activities have been divided into 10 Divisions, 88 Subdivisions and 215 Groups. Unless a thorough study of this basis of classification is made, there is the risk of erroneous comparison with the result obtained in different economic surveys of the country.

17. A series of 34 Subsidiary Tables appear at the end of this Chapter in order to facilitate critical study of the economic activities of the non-agricultural classes. Subsidiary Table 5·1 shows the proportion of non-agricultural classes in the general population of the State and districts, and the classification of 10,000 persons of all non-agricultural classes into each class and sub-class. The classification of the population into employers, employees and independent workers and others has also been shown. Subsidiary Tables 5·1 (a) and (b) give the details of distribution of the rural and urban non-agricultural population in the State and different districts. Subsidiary Tables 5·2 to 5·5 give each of the four non-agricultural classes separately showing the number per 10,000 persons of each livelihood class in each sub-class. The number per 10,000 self-supporting persons of each livelihood class divided into employers, employees and independent workers has also been

shown. The secondary means of livelihood of different classes of non-agricultural population has also been given. Subsidiary Table 5·6 compares the occupational structure of all livelihood classes of 1951 census with those of the 1931 census. Comparison of the sub-classes and of the active and semi-active workers of the two censuses has also been made. Subsidiary Tables 5·7 to 5·17 give the territorial distribution of 10,000 self-supporting persons of different industries and services in the State, natural divisions and districts. The figures are shown by Divisions and Subdivisions of the Indian Census Economic Classification Scheme.

DISTRICT INDEX OF NON-AGRICULTURAL OCCUPATIONS

18. The statistics relating to employment in all non-agricultural industries and services in the State have been shown in Appendix III to the Report. The figures are given for each of the 10 Divisions, 88 Subdivisions and 215 Groups into which all the non-agricultural occupations in the State have been divided under the Indian Census Economic Classification Scheme. In using these figures, it may be borne in mind that they relate, not to the entire population dependent upon a particular industry or service, but *only to the number of self-supporting persons who derive their principal means of livelihood* from such industry or service. The earning dependants and non-earning dependants, who together constitute nearly 68 per cent of the non-agricultural population are not included in the figures. Moreover, if a self-supporting person gets his principal means of livelihood from a different source, namely, agricultural or some non-agricultural occupation *other than* a particular industry or service, such a self-supporting person has been shown, not under the particular industry or service in question, but under the other source of livelihood which provides the principal means of livelihood. Thus, a weaver having cultivated lands, and earning more from such lands than from his profession of weaving, has been classified as an agriculturist and not as a weaver, although by caste or profession he may really be a weaver. The criterion is the importance of economic activity of each individual, not the social convention or traditional occupation.

SECTION II

Non-agricultural Population Ratios ; Self-supporting Persons and Dependants ; Secondary means of livelihood of Non-agricultural Classes

RATIO OF NON-AGRICULTURAL POPULATION

1. The non-agricultural population of Orissa is nearly one-fifth of the entire population. Out of the total population of 146·5 lakhs in the State, the non-agricultural classes number 30·3 lakhs, constituting 20·7 per cent. Most of the States in India have a larger proportion of non-agricultural population than Orissa. The percentage of such classes of population is 25·8 in Uttar Pradesh, 42·8 in West Bengal, 35·1 in Madras, 38·5 in Bombay, 35·5 in Punjab, 26·7 in Assam and 24·0 in Madhya Pradesh as against 30·2 for India as a whole. Bihar, however, has a lower percentage of non-agricultural population, namely 14·0.

DISTRIBUTION

2. The distribution of non-agricultural population in the State, natural divisions and districts in rural and urban areas is shown in the Subsidiary Tables 5·1 to 5·1 (b). The position is summarised below.

State or natural division	Non-agricultural classes per 10,000 of		
	General population	Rural population	Urban population
ORISSA	207	180	860
Inland Division	173	155	801
Coastal Division	248	210	897

With 20·7 per cent as the average for the State, it is seen that in the rural areas 18 per cent of the general population belong to the non-agricultural classes while in the urban areas the percentage is as high as 86. But the actual number of non-agricultural population living in rural areas is 25·2 lakhs while those living in urban areas is 5·1 lakhs only. The sexwise and districtwise figures relating to non-agricultural classes may be seen in Table B-I appearing in Part II-B of this Report.

RATIO IN NATURAL DIVISIONS

3. Among the two natural divisions of the State, the coastal division contains a higher percentage of non-agricultural classes, the ratio being 248 in the general population of 1,000 while it is 173 only in the inland division. Maximum concentration of non-agricultural population is found in the urban areas of both the divisions where they number 897 in the coastal division and 801 in the inland division out of a proportionate population of 1,000 of each division. In the rural areas, the non-agricultural population is confined in the above proportion to 210 in the coastal division and 155 in the inland division. The urban areas of the coastal division are most highly non-agricultural in character while the rural areas of the inland division show the opposite tendency.

DISTRICTS

4. Among the districts, Ganjam has the highest number of non-agricultural population numbering 339 per 1,000 of general population. Next comes Cuttack with 251, Koraput with 227, Puri with 213 and Phulbani with 210. The lowest ratio is to be found in Keonjhar with 101 and Mayurbhanj with 128. The high non-agricultural character of Ganjam is due to the comparatively high proportion of persons depending on commerce, which commands about one-fifth of the total non-agricultural population. In Cuttack which comes next, persons belonging to miscellaneous services etc., (Class VIII) are high, primarily because

it is the headquarters of the State. But so far as the urban areas are concerned, Puri shows the highest proportion of non-agricultural population recording 926 out of 1,000 of the general population. In the rural areas higher proportion of non-agricultural population are met with in the districts of Ganjam, Cuttack, Phulbani and Koraput.

LIVELIHOOD CLASSES

5. The non-agricultural population is divided into four classes, the details of which are mentioned in Section VI of Chapter I. To sum up, the non-agricultural classes comprise persons (including dependants) who derive their principal means of livelihood from :—

(*a*) Production other than cultivation (Livelihood Class V).

(*b*) Commerce (Livelihood Class VI)

(*c*) Transport (Livelihood Class VII)

(*d*) Other Services and Miscellaneous Sources (Livelihood Class VIII).

It appears from the Subsidiary Table 5·1 that more than half the non-agricultural population derive their means of livelihood from Class VIII—other services and miscellaneous sources. Such people constitute 52·9 per cent of the non-agricultural population. The next main contribution to the earning of livelihood comes from Class V, namely, production other than cultivation which covers 30·5 per cent. A small number, namely, 14·0 per cent derive their sustenance from commerce and lastly, 2·6 per cent from transport. In the inland division, persons engaged in production other than cultivation are higher by about 7 per cent than those in the coastal division. But the coastal division shows a higher percentage of people engaged on commerce and transport. The proportion of persons engaged on other services and miscellaneous sources is almost the same in both the natural divisions.

LIVELIHOOD SUB-CLASSES

6. As in the case of agricultural classes, the non-agricultural classes may be divided into three sub-classes on the basis of the extent of dependence in the matter of livelihood. These sub-classes are known as self-supporting persons, earning dependants and non-earning dependants. The implications of these terms have been given in paragraphs 6 to 10 of Section II of Chapter IV and need not be repeated here.

SELF-SUPPORTING PERSONS AND DEPENDANTS

7. The number of self-supporting persons out of the total population of 10,000 persons of all non-agricultural classes in Orissa is 3,157 only. The remaining 6,843 persons are dependants of whom 5,975 are non-earning and 868 are earning. The following table compares the distribution of 1,000 persons of non-agricultural classes among self-supporting persons and dependants of principal States in India.

State	Self-supporting persons	Non-earning dependants	Earning dependants
INDIA	313	628	59
Orissa	316	597	87
Uttar Pradesh	327	616	57
Bihar	295	663	42
West Bengal	388	593	19
Madras	270	689	41
Bombay	314	614	72
Madhya Pradesh	312	544	144
Punjab	266	648	86
Assam	410	524	66

8. The proportion of self-supporting persons in Orissa is nearly the same as that of India as a whole, and of Bomay and Madhya Pradesh, but it is either high or low in comparison with the figures of the remaining States. Among the States which have a higher percentage of self-supporting persons among non-agricultural classes are Uttar Pradesh,

West Bengal and Assam. The other States, namely, Bihar, Madras and Punjab have got a smaller proportion. In Orissa, the percentage of self-supporting persons among non-agricultural classes being 31·6 is more than that of the agricultural classes, as the latter is limited to 27·8 per cent. Again, with regard to the non-agricultural classes, urban areas have got a higher percentage of self-supporting persons than rural areas, the percentage being 33·0 and 31·3 respectively. As between the two natural divisions, the difference in this respect is but small as the self-supporting persons of the coastal division constitute 31·7 per cent and those of the inland division 31·4 per cent. Similarly, small difference is noticeable among the same class of persons of the rural or urban areas of the two natural divisions.

9. As may be seen from the preceding table 68·4 per cent of the non-agricultural population is dependent, either of earning or non-earning category. This indeed is a high proportion, but the extent of dependency among the non-agricultural classes is somewhat less than that among the agricultural classes. In the previous Chapter it was seen that 72·2 per cent of the agricultural population belongs to the class of dependants, of which 62·3 are non-earning and 9·9 earning. Among the non-agricultural population non-earning dependants form 59·7 per cent and earning dependants 8·7 per cent only. As many as 5,975 persons out of a total population of 10,000 of non-agricultural classes are doing nothing whatsoever towards earning their livelihood, while among the agricultural classes the proportion of such persons is 6,233, which is higher. The proportion of inactive population, namely the non-earning dependants is greater in the coastal division than in the inland division, the figures for the respective divisions being 6,206 and 5,697 out of a total population of 10,000. Taking the urban and rural areas separately, the coastal division shows higher proportion of non-earning dependants than the inland division. This is primarily due to the greater extent of education prevalent among the children of non-agricultural classes of the coastal division.

10. The earning dependants who figure to the extent of 868 only out of the total population of 10,000 persons of non-agricultural classes, are to be found in greater proportion in the inland division than in the coastal division. There are 621 earning dependants in the coastal division and 1,164 in the inland division out of the total population of 10,000. These earning dependants are to be seen mostly in the rural areas rather than in the urban areas. The rural areas have 945 and the urban areas 488 earning dependants out of 10,000 persons of non-agricultural classes in Orissa. Similar difference is noticeable in the urban and rural areas of each of the natural divisions, the details of which may be seen in the Subsidiary Tables appearing at the end of this Chapter. In short, the rural areas have nearly double the proportion of earning dependants living in urban areas. This is natural because young members of a family takes to earning of livelihood in greater number in rural areas rather than in the towns.

11. So far as districts are concerned, the highest number of self-supporting persons is to be found in Sambalpur (3,895) followed by Mayurbhanj (3,586) and Keonjhar (3,449). The lowest number is to be found in Koraput (2,133). For non-earning dependants, Koraput has the highest proportion (6,867) followed by Ganjam (6,516) and Phulbani (6,354). Sambalpur has the lowest proportion of non-earning dependants (4,693). As regards the earning dependants, the highest proportion is to be found in Kalahandi (1,795) and next

in Bolangir (1,591) and Sambalpur (1,412). All these districts are in the inland division. Some more districts of this natural division also show high percentage of earning dependants. But it is interesting to see that two other districts of the same natural division, namely, Keonjhar and Phulbani, record the lowest proportion of earning dependants in Orissa, with 265 and 464 respectively. As to why some districts of the same natural division show the highest trend of earning dependency and others show the least, is a matter requiring study of local conditions. Probably the scope for earning dependency in these districts is limited. Another reason may be that in the general structure of the population, the number of persons who could be employed as earning dependants is limited.

SECONDARY MEANS OF LIVELIHOOD

12. The total population of non-agricultural classes in Orissa is 3,033,578. Of these persons, 498,394 have got secondary means of livelihood. In other words, 16·4 per cent of the non-agricultural population depend upon subsidiary incomes in addition to the principal means of livelihood. The secondary means of livelihood is derived from either of the eight livelihood classes of agricultural and non-agricultural occupations. The number of persons who derive their secondary means of livelihood from agricultural occupations is 240,343 or 7·9 per cent. Similarly, the number of persons who derive their secondary means of livelihood from non-agricultural occupations is 258,051 or 8·5 per cent. In the previous Chapter, the extent of dependence on secondary source of income of the agricultural classes was examined. It was seen that out of the total agricultural population of 116·1 lakhs, nearly 20 lakhs or roughly 17·2 per cent had secondary means of livelihood. On comparison with the non-agricultural population, it appears that the extent of dependency on secondary means of livelihood is somewhat greater among the agricultural classes than among the non-agricultural.

13. Subsidiary Tables 5·2 to 5·5 give the distribution of 10,000 persons of livelihood classes V to VIII who have a secondary means of livelihood also. The percentage of population belonging to the different non-agricultural classes having secondary sources of livelihood derived from agricultural as well as from non-agricultural occupations and derived by self-supporting persons or earning dependants of each livelihood class is summarised below for the sake of convenience. The percentage shown below has been worked out on a proportional population of 10,000, and is a little less than the percentage calculated on the total count of population as shown in the paragraph above.

Percentage of persons having secondary means of livelihood

Livelihood class	Total	From agriculture			From non-agriculture		
		Total	S. S. P.	E. D.	Total	S. S. P.	E. D.
All non-agricultural classes ..	15·7	7·8	5·2	2·6	7·9	2·8	5·1
Livelihood Class V ..	19·9	10·0	6·3	3·7	9·9	3·0	6·9
VI ..	15·8	8·1	5·6	2·5	7·7	3·1	4·6
VII ..	12·0	6·2	4·7	1·5	5·8	2·4	3·4
VIII ..	14·7	6·7	4·0	2·7	8·0	2·6	5·4

14. It will appear from the above statement that 15·7 per cent of the population belonging to the non-agricultural classes have a secondary source of livelihood. Livelihood Class V has the highest percentage of dependants on secondary source of income as nearly one-fifth of the population belonging

to this class or more accurately 19·9 per cent have such source of livelihood. Livelihood class VI is the next highest, as 15·8 per cent of the population have secondary source of income. Livelihood classes VIII and VII have got 14·7 and 12·0 per cent respectively.

LIVELIHOOD CLASS V

15. Out of 19·9 per cent of the people of livelihood class V who have a secondary source of income, 10·0 per cent depend on agriculture and the remaining 9·9 per cent on non-agricultural professions for the subsidiary income. Of those who derive such income from agricultural occupations, 6·3 per cent are self-supporting persons and 3·7 are earning dependants. Similarly, among the persons depending on non-agricultural occupations for their secondary source of livelihood, 3·0 per cent are self-supporting persons and 6·9 per cent are earning dependants.

16. Thus, the extent of secondary income is distributed almost equally between agricultural and non-agricultural sources. But as far as self-supporting persons are concerned, a large number of persons have taken to agriculture than to non-agricultural professions for the additional source of maintenance. The opposite tendency is noticeable among the earning dependants, more of whom in percentage are attached to non-agricultural professions than to agriculture.

LIVELIHOOD CLASS VI

17. The percentage of 15·8 having secondary source of livelihood among the population of class VI is divided between agricultural and non-agricultural occupations in the ratio of 8·1 and 7·7 respectively. Thus, non-agricultural professions supply a little less than agricultural occupations as secondary source of income to the population belonging to livelihood class VI. Among those who depend upon agriculture for the secondary source of income, 5·6 per cent are self-supporting persons and 2·5 are earning dependants. Similarly out of 7·7 per cent of persons depending on non-agricultural occupations as secondary source of livelihood, 3·1 per cent are self-supporting and 4·6 are earning dependants. As in the case of livelihood class V, lesser number of earning dependants derive their secondary source of income from agricultural than from non-agricultural professions.

LIVELIHOOD CLASS VII

18. As many as 12·0 per cent of the population belonging to livelihood class VII have a secondary source of livelihood, 6·2 from agricultural and 5·8 from non-agricultural occupations. Among those who derive their secondary source of income from agricultural sources, 4·7 per cent are self-supporting persons and 1·5 are earning dependants while such percentage for those who depend on non-agricultural occupations is 2·4 and 3·4 respectively.

LIVELIHOOD CLASS VIII

19. The percentage of population belonging to livelihood class VIII who have a secondary source of livelihood is 14·7 divided between agricultural occupations with 6·7 and non-agricultural professions with 8·0 per cent. The percentage of self-supporting persons and earning dependants among those who derive their secondary source of income from agricultural sources is 4·0 and 2·7 and from non-agricultural sources is 2·6 and 5·4 respectively.

COMPARISON OF OCCUPATIONAL DISTRIBUTION IN 1931 AND 1951

20. The basis of statistics relating to classification of total population according to occupations has varied from census to census. In the census of 1951, the occupational distribution covered the entire population while the census of 1941 omitted any classification whatsoever. In 1931, the census gave classifications only for persons following some

occupations, leaving the rest of the population which was numerically very large as unclassified persons. The working population was divided into two classes, namely, 'earner,' and 'working dependant'. An earner was defined as one who 'helps to augment the family's income by permanent and regular work for which a return is obtained in cash or in kind.' A working dependant was one who 'assists in the work of the family and contributes to its support without actually earning wages.' Thus, it was laid down by way of illustration that one who habitually collects and sells firewood or cowdung and is thereby adding to the family income was an earner, while a boy who helps his father in the fields or tends his father's cattle is a dependant. There was no consideration in 1931 if the amount of income derived by the working person was sufficient for his *own* maintenance. In 1951, this was an important factor to decide the classification. In this census (1951),the non-agricultural classes were divided into three sub-classes on the basis of degree of dependence for the source of livelihood of each person. The definition of these sub-classes, namely, self-supporting persons, earning dependants and non-earning dependants has been given in Section II of Chapter IV, and need not be repeated here.

21. If a rough comparison between livelihood sub-classes of different censuses is attempted to be made, the actual workers of 1921 may be taken to correspond to the earners plus working dependants of 1931. The working dependants of 1931 represent either the earning dependants or to some extent the self-supporting persons of 1951. The earners of 1931, roughly correspond to the self-supporting persons of 1951 but there is no complete identity between the two. The unclassified persons of 1931 may roughly be taken to be the non-earning dependants of 1951. In 1931, the percentage of earners was 37·7, that of working dependants 7·3 and the deduced percentage of unclassified persons was 55·0. In the census of 1951, the self-supporting persons constitute 28·6 per cent while the earning dependants are 9·6 and non-earning dependants 61·8 per cent.

22. It is not practicable to make a detailed comparison of the occupations figure of 1931 with those of 1951 because of the fundamental difference in the method of classification as stated above. Tentative comparison on the basis of approximate livelihood classification has however been made in Subsidiary Table 5·6. From a different angle, however, a comparison between the percentage of self-supporting persons plus earning dependants of different livelihood classes to the total number of such persons in the State for the census of 1951 may be made with the percentage of earners plus working dependants of 1931. Such a comparison may be more useful than the single classwise comparison given in the paragraph above, because one particular class of 1931, namely, working dependants, has fused either wholly or partially into two classes of 1951, namely, earning dependants and self-supporting persons. The statement is given below :

Livelihood class	Percentage of S. S. Ps.+ E. Ds. to the total number of S. S. Ps.+ E. Ds. in the State in 1951	Percentage of Earners + W. Ds. to the total number of Earners+ W. Ds. in the State in 1931
Total of all classes	100	100
I. All agricultural classes (I to IV).	73·2	63·6
II. All non-agricultural classes (V to VIII).	21·8	36·4
(*a*) Production other than cultivation (class V).	7·1	13·7
(*b*) Commerce (class VI)	3·0	4·4
(*c*) Transport (class VII)	0·5	0·3
(*d*) Other services and miscellaneous sources (class VIII).	11·2	18·0

23. If the above figures are accepted, it appears that the percentage of self-supporting persons plus earning dependants in 1951 has risen over that of earners and working dependants of 1931 so far as agricultural population is concerned but has undergone a decline in respect of non-agricultural population. This is in conformity with the fall in the percentage of general population of non-agricultural classes between 1931 and 1951. It was seen earlier in this Chapter that the non-agricultural population of the State has fallen from 32·1 per cent to 20·7 per cent between 1931 and 1951. The decline amounts to 11·4 per cent. The fall in the category of self-supporting persons plus earning dependants of the non-agricultural classes is from 36·4 in 1931 to 21·8 in 1951, a decrease of 14·6 per cent. The difference between the two percentages amounting to 3·2 may be accounted for partly by the fact that the two classifications, namely, self-supporting persons plus earning dependants on the one hand and the earners plus working dependants on the other are not completely comparable, and partly by the possibility of change in the economic and age structure of the population during the intervening 20 years.

SECTION III

Employers, Employees and Independent Workers ; and Persons in Unproductive Occupations

1. In the census of 1951, the statistics relating to employers, employees and independent workers were collected for the first time. These statistics were confined to the self-supporting persons of the non-agricultural classes of the population only.

Classification of Economic Activities and Economically Active Persons.

2. Economic activities are defined as including all activities of which the result is the production of useful commodities or the performance of useful services, but not including the performance of domestic or personal services by members of a family household to one another. The most important among all economic activities is the cultivation of land. It stands in a category by itself. All other economic activities may be regarded as falling in another category known as ' Industries and Services '. All these activities have been classified with reference to the nature of commodity produced or service rendered, under the Indian Census Economic Classification Scheme. The classified statistics appear in Table B-III of Part II-B of this Report.

3. Economically active persons engaged in industries and services are classifiable according to the above scheme into 10 Divisions and 88 Subdivisions. All persons included in each subdivision are further divisible into three sections, viz.—

(*i*) *Employer*—An employer is a person who has necessarily to employ other persons in order to carry on the business from which he secures his livelihood. A person who employs a cook or other persons for domestic services is however not recorded as an employer merely for that reason.

(*ii*) *Employee*—A person who ordinarily works under some other person for salary or services either in cash or in kind as means of earning his livelihood is known as an employee.

(*iii*) *Independent worker*—A person who is not employed by any one else or who also does not employ any body else in order to earn his livelihood is known as an independent worker.

Unproductive Occupations

4. In addition to the three divisions mentioned above, namely, employers, employees and independent workers, there is a class of non-agricultural self-supporting persons who are treated as ' Others '. The following groups of self-supporting persons who are included in non-agricultural livelihood class VIII and who derive their principal means of livelihood from miscellaneous sources are treated as ' Others ':—

(*a*) Non-working owners of non-agricultural property ;

(*b*) Pensioners and remittance holders ;

(*c*) Persons living on charity and other persons with unproductive activities ; and

(*d*) Inmates of panal institutions and asylums.

All these sources of livelihood are known as unproductive occupations.

Proportion of Employers, Employees and Independent Workers

5. Subsidiary Table 5·1 gives the figures of employers, employees and independent workers per 10,000 of self-supporting persons of all non-agricultural

classes. It also shows the proportion of 'Others'. It appears that out of 10,000 self-supporting persons as mentioned above, the number of employers is 118, employees 2,702, independent workers 6,766, and others 414. Thus, independent workers are overwhelmingly large constituting more than two-thirds in the structure of the non-agricultural population. The employees are a little above a quarter of such population while employers and others form a low percentage. The distribution of population is represented almost in the same proportion in the two natural divisions of the State. But there is considerable difference in the distribution of such population in the rural and urban areas. The following statement conveniently summarises the position.

State or natural division	Employers	Employees	Independent Workers
ORISSA	118	2,702	6,766
Rural	112	2,376	7,160
Urban	148	4,229	4,921
Inland Division	130	2,611	6,880
Rural	122	2,390	7,157
Urban	180	4,071	5,050
Coastal Division	108	2,778	6,672
Rural	102	2,364	7,163
Urban	132	4,309	4,855

RATIO OF INDEPENDENT WORKERS AND EMPLOYEES

6. An interesting study may be made from the statement given above as regards the ratio of independent workers and employees. While this ratio for the State of Orissa is 68 : 27, it stands at 49 : 42 for the urban Orissa. In the inland division, the ratio is 69 : 26 for the whole division, and 51 : 41 in the urban areas. Similarly, in the coastal division, the ratio is 67 : 28 for the whole division, and 49 : 43 in the urban areas. As regards the rural areas, the ratio stands unchanged at 72 : 24 for either the State as a whole or any of the natural divisions taken separately. In the rural areas, the ratio of independent workers is higher than in the urban areas. This is because in the rural areas industries are hardly organised and workers take to their profession in an independent manner. Reviewing the position of districts it appears that the ratio of independent workers is high in rural Ganjam, while the ratio of employees is high in the urban areas of Cuttack, Puri, Balasore, Mayurbhanj, Sambalpur and Keonjhar. The high proportion of employees in these towns is due to the organized *bidi* and other urban industries or to the location of Government offices and public institutions.

EMPLOYERS, EMPLOYEES AND INDEPENDENT WORKERS IN DIFFERENT CLASSES OF NON-AGRICULTURAL OCCUPATION

7. The ratio of employers, employees and independent workers differs in respect of different classes of non-agricultural population. The position is summarised in the statement given below with separate figures of rural and urban areas of the State.

Livelihood class	Employers		Employees		Independent Workers		Others	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Class V	2·2	3·4	13·7	20·2	84·1	76·4	..	..
Class VI	2·0	3·4	4·3	9·1	93·7	87·5	..	..
Class VII	0·7	0·3	62·8	70·3	36·5	29·4	..	..
Class VIII	0·1	0·5	34·7	56·2	58·2	31·5	7·0	11·8

8. It will appear from the above statement that employers are to be seen in larger proportion in classes V and VI, particularly in the urban areas. So far as employees are concerned the percentage is high under classes VII and

VIII for the obvious reason that under class VII the owners of transports,namely, motor vehicles, trains, etc., have comparatively larger number of employees than in respect of persons belonging to classes V or VI. Similarly, class VIII, in which all public servants, domestic servants, men in fine arts, letters and journalism, hotels, restaurants and services not elsewhere classified are included, comprises a large number of employees. Independent workers, however, are to be seen in overwhelmingly large percentage in all the four livelihood classes of the non-agricultural population and particularly in classes VI and V. These two classes relate to the large number of independent bread earners, such as, retail or wholesale traders, persons engaged in food and textile industries, fishing, stock raising and other primary industries. Finally, the section of population of the category of 'Others' occurs only under livelihood class VIII, which is described in detail below :—

EXTENT OF UNPRODUCTIVE ACTIVITIES

9. In an earlier paragraph, the different classes of unproductive occupations have been mentioned. It appears from Subsidiary Table 5·5 that there are 799 unproductive self-supporting persons in the State out of a proportional population of 10,000 belonging to the non-agricultural livelihood class VIII. These unproductive persons are living mostly in towns, as there are 1,183 such persons in urban areas against 702 persons in rural areas of the State out of 10,000 self-supporting persons of livelihood-class VIII.

In the fly-leaf of Table B-III appearing in Part II-B of this Report, a statement has been given showing the number of different categories of population having unproductive occupations. The number of such persons is 39,600. This overall figure of unproductive persons appears to be quite small but it is partly because this number represents only the self-supporting persons. Actually the total number of persons depending on unproductive occupations may be atleast three times this number. Even this number does not adequately represent the class of population existing in the State. Experience during the enumeration shows that people of unproductive occupations, particularly those who depend upon sources of income which according to conventional standards are not moral or legal in character, are loath to disclose the actual source of livelihood. A beggar, a prostitute, a procurer, a vagrant or a recipient of doles, for example, would not always declare himslef to be so. This is why the number of recorded population under unproductive activities has become small. As, however, the figures stand, the population of 39,600 of self-supporting persons of unproductive activities is divided into the following classes.

Class of persons	No. of self-supporting persons
Persons living principally on income from non-agricultural property.	2,495
Persons living on pensions ..	986
Remittances ..	3,890
Scholarships ..	116
Other funds ..	10
Inmates of Jails ..	3,682
Asylums ..	737
Almshouses ..	1
Recipients of Doles ..	9,480
Beggars and Vagrants ..	18,049
Procurers and Prostitutes, etc. ..	154

SECTION IV

Primary Industries other than Cultivation, Mining and Quarrying

Primary Industries not Specified

1. According to the Indian Census Economic Classification Scheme, industries and services of all categories have been classified under 10 divisions, of which division 0 relates to primary industries not elsewhere specified. This division comprises economic activities such as stock raising, rearing of small animals and insects, plantation industries, forestry and wood cutting, hunting and fishing. The total number of self-supporting persons in the non-agricultural population of the State is 918,249 of which 66,803 belong to division 0. In other words, out of a proportionate population of 10,000 self-supporting persons employed in all industries and services in the State, the number engaged in this division is 728 only. Presuming that the percentage of self-supporting persons in division 0 to the total self-supporting persons in the non-agricultural population of the State corresponds to the percentage of the total population under division 0 to the total non-agricultural population of the State, this division, namely, the primary industries other than cultivation, mining and quarrying comprises 7·3 per cent of the total non-agricultural population of the State.

2. The coastal division offers comparatively better scope for employment in these primary industries rather than the inland division. In the coastal division there are 793 self-supporting persons in the above proportion but in the inland division the number of such persons is limited to 649. Among districts, these industries are most popular in Phulbani, Puri and Dhenkanal, where 1,177, 1,117 and 1,116 out of 10,000 self-supporting persons find employment. In other districts the number of such persons engaged in these industries is lower.

Stock Raising

3. Considering different industries comprised within division 0, it appears that stock raising, namely, employment as herdsmen, shepherds, breeders and keepers of cattle, buffaloes and other large animals, is the most popular industry. Out of 10,000 self-supporting persons employed in division 0, as many as 4,447 are employed in stock raising alone. Generally, rearing of cattle is an industry subservient to agriculture but there are a few favourable localities where there are special facilities of good pasture land enabling cattle breeding to be developed as an independent industry. The total number of self-supporting persons employed in the State in this industry is 29,704 as appears from the District Index of Non-agricultural Occupations. This is a popular industry in Koraput, Phulbani and Keonjhar.

Fishing

4. This industry gives employment proportionately to 3,604 out of 10,000 self-supporting persons of division 0. The actual number of self-supporting persons in the State who derive their principal means of livelihood from fishing is 24,073. This industry is popular in the three coastal districts of Orissa, namely, Balasore, Puri and Ganjam.

5. The fishery wealth of Orissa is enormous as all the three types of fisheries, namely, marine, estuarine and inland fishery have considerable scope in extensive areas in the State. In addition to local consumption, Orissa is able to export nearly one lakh maunds of fish

every year from different localities of the State to Calcutta. The quantity of export of one typical year, namely 1945-46, from different fishing centres is mentioned below :—

Name of fishing centre	Quantity of export in maunds
Kaluparaghat	51,698
Balugaon	26,466
Gangadharpur	16,102
Chatrapur	5,476
Rambha	7,325
Khallikote	6,989
Balasore	5,247
Puri	2,872
Total	122,175

Marine Fishery

6. Orissa has a sea coast of about 300 miles of which about 90 miles are covered by river mouths. Fishing in sea waters is done at present in selected localities within three miles of the beach. While deep-sea fishing is unknown in Orissa, the foreshore fishing is extremely limited in extent. Before fishing is developed on a large scale, it would be necessary to introduce modern technique and appliances, such as, improved fishing nets, boats and trawlers.

Estuarine Fishery

7. There is considerable scope of estuarine fishery in Orissa but as in the case of fishery in sea-waters, the estuarine fishery is limited in extent and is practically confined to the Chilka lake. The major portion of the export of fish from Orissa comes from the Chilka which alone supplies nearly 80 thousand maunds of fish annually.

Inland Fishing

8. There are a number of rivers, streams and canals and innumerable tanks throughout the State which form the chief source of local supplies of fish. The Fishery Department of the local Government is trying to develop inland fishing by pisciculture and other measures.

9. Orissa is thus potentially rich in fishery and the present supply for internal consumption and export is small in comparison with what may be developed if recourse is taken to proper exploitation. Fish being rich in protein contents and being a good source of certain vitamines is important as a supplementary and protective food. People depending on a preponderating cereal diet as in Orissa need fish or similar protein supplements. Apart from its value as an item of wholesome food, fishery may become a source of wealth if properly developed. At present, there are many social groups particularly in the coastal districts, such as, Kaibarta of Ganjam, Nolia of Puri, Gokha of Cuttack and Keuta of Balasore, who depend upon fishing as the main source of livelihood. Moreover, the demand of fish outside Orissa has created a group of middlemen who find lucrative business in purchasing fish from local fishermen and exporting them to distant markets. The development of fishery will provide employment to many more people if conducted on sound lines.

Forestry and Wood Cutting

10. This industry gives employment to 1,722 out of 10,000 self-supporting persons of division 0. This is an important industry in the inland division, particularly in the districts of Mayurbhanj, Ganjam Agency, Sundargarh, Bolangir and Kalahandi. Orissa forests are rich in timber. So localities within or nearby forest areas have a class of persons who derive their principal livelihood from cutting and transporting timber and fuel wood. Moreover, some people are also employed in operations relating to forestry, such as, conservation, planting, demarcating, etc. Collectors of forest products are also included in this class of people.

OTHER INDUSTRIES

11. Other industries included in division 0 are plantation industries employing 141 self-supporting persons, rearing of small animals and insects 77 persons and hunting including trapping and game propagation 9 persons out of 10,000 self-supporting persons belonging to division 0.

SECTION V

Mining and Quarrying

1. An account of the geology and minerals of the State has been given in the Introduction from which it will appear that the State is enormously rich in mineral resources of various kinds. There are extensive stretches of coal-bearing rocks and iron ore deposits in the northern and western parts of the State. Other minerals of great industrial value are, manganese, copper, bauxite, chromite, mica, limestone in addition to the other less important minerals like, Kyanite, wolfram, dolomite, tantalite, pitchblende, asbestos, graphite and clays.

2. Mining and quarrying belongs to division 1 of the Indian Census Economic Classification Scheme. The industry is at present in an undeveloped State in Orissa and gives principal means of livelihood to 11,216 self-supporting persons only. To express it in terms of proportion, there are 122 persons engaged in mining and quarrying out of 10,000 self-supporting persons belonging to all industries and services in the State. This figure is not inclusive of those who derive secondary means of livelihood from this industry or who are of the category of dependants. The industry is more highly developed in the inland division as it gives employment to 210 persons than in the coastal division where only 50 persons in the above proportion are employed. As regards districts, the industry has some importance in Dhenkanal, Mayurbhanj, Sundargarh and Keonjhar.

Coal Mining

3. This industry gives employment to over 40 per cent of the workers under division 1. The actual number of self-supporting persons in this industry is 4,549, constituting a proportion of 4,056 out of 10,000 self-supporting persons in the division. Coal mining is the most important of all mining and quarrying activities in the State. In Sambalpur and Dhenkanal more than 90 per cent of persons engaged in mining and quarrying are working in coal mines. The districts of Dhenkanal, Sambalpur and Sundargarh are important for large reserves of lower gondwana coals, containing good quality of coking coal. At present, coal mines are being worked at Talcher, Rampur, Hemgir and Ib, but the outturn except at Talcher is small. At Talcher, the present production of coal amounts to about 3 lakh tons annually. There is however a much greater scope for mining activity in the north-western districts of the State.

Iron Ore Mining

4. Next to coal mining, iron ore mining is the most important branch of industry under division 1. The number of self-supporting persons deriving principal means of livelihood from this business is 3,404. These workers amount to 30·4 per cent, or a little less than one-third of all the workers engaged in mining and quarrying in the State. The abundance of iron ore deposits in the soil of Orissa is well-known. The rocks of iron ore series in south Singhbhum (in Bihar), 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 Suliapat in Mayurbhanj and at Barbil in Keonjhar are being worked out by different steel manufacturers in India. The prospect of increasing the manufacture of iron and steel within the limits of Orissa is enormous. In fact, the establishment of a major type of Steel and Iron Factory

somewhere between Bonai and Mayurbhanj attracted the attention of foreign and Indian industrialists and if the idea does not materialize, it will be for reasons other than high industrial and technical considerations. The availaability of coal near at hand and the promise of cheap energy from hydroelectric projects are matters which cannot be lightly dismissed. Other metals like manganese, chromium, wolfram and vanadium which are necessary for steel manufacture are found in Orissa. So also are fireclay and refractories, considered essential for the industry.

5. The industry is almost wholly confined to the inland division. In Mayurbhanj and Keonjhar over 90 per cent of the workers in mines and quarries are employed in iron ore mines. Among other localities where iron ores have been found out or are being worked are Hirapur (near Umerkote) in Koraput and Sukinda in Cuttack, where the ores contain high grade iron. In several villages of Sambalpur, namely, Akhradand, Lohakhand, Majhgan, and Kholigan, extensive deposits of low grade iron ore make local iron smelting industry possible. Similarly, in Borasambar, Kolabira and Rampur areas of this district, small local deposits of iron ore are exploited by village blacksmiths. Smelting of iron as a cottage industry is seen in many localities, viz., Kodala, Barada and Bari in Ganjam and in Angul, in Khondmals and in many villages of Koraput.

Metals other than Iron Ore

6. This relates to mining of various metallic minerals other than iron ores. Among such minerals, bauxite, manganese and chromite are of importance to Orissa. Bauxite, which is used for manufacture of aluminium is found in the highlands of Khariar and Koraput and also in Kalahandi and Keonjhar. Manganese deposits are present in Keonjhar, Koraput and Ganjam. Mining of these metals is a minor industry in Orissa. About 922 self-supporting persons derive their principal means of livelihood from this business. The workers constitute about 8 per cent of all the workers under division 1.

Quarrying of Stone, Clay, etc.

7. The number of self-supporting persons depending upon the industry as chief source of income is 1,793, constituting 16 per cent of all workers engaged in mining and quarrying. This is a prosperous industry in Nilgiri in district Balasore where stones of good quality are quarried for manufacture of vessels and pots. Quarrying of laterite stones is done in Puri and to some extent in Cuttack for building purposes. Moreover, stone quarrying is extensively carried on at various places in the district for supplying road metals or for revetment of embankments or for the railways. Limestone industry is of high importance for the district of Sundargarh. There is a modern cement factory at Rajgangpur and other factories elsewhere in the district. Extensive deposits of limestone and dolomite suitable for lime burning and cement making occur in the districts of Sundargarh, Sambalpur and Koraput.

Other Industries

8. Other activities under mining and quarrying are of minor importance. About 3·9 per cent of all workers engaged in mining and quarrying industries are employed in the mining of saline substances like saltpetre. About one per cent of the workers are assigned to non-metallic mining not otherwise classified.

SECTION VI

Processing and Manufacture—Foodstuffs, Textiles, Leather and Products thereof

1. Industries relating to the processing and manufacture of foodstuffs, textiles, leather and products thereof come under division 2 of the Indian Census Economic Classification Scheme. The total number of persons who derive their principal means of livelihood from this industry and who are self-supporting persons, is 130,614. Out of a proportionate population of 10,000 self-supporting persons belonging to all industries and services in the State, 1,422 persons or 14·2 per cent derive their principal means of livelihood from this industry. In the inland division, the industry is more popular as 1,684 persons of self-supporting category derive their livelihood from it. In the coastal division, the number of such persons is 1,206, in the above proportion. Among districts, the industry has received prominence in Bolangir and Sambalpur where over 2,400 out of 10,000 self-supporting persons in the above proportion find employment in it. In Kalahandi this industry is also popular as 1,984 self-supporting persons derive their means of livelihood from it. Other districts have smaller proportion.

Cotton Textiles

2. Industries connected with the processing and manufacture of cotton textiles are highly important for Orissa. Nearly 2 per cent of the total population of the State depend upon these industries for their livelihood. The number of self-supporting persons who derive their principal means of livelihood from these industries is 37,879 only, but this figure does not give a full picture of the entire section of population attached to these industries. Firstly, the above figure excludes all earning and non-earning dependants, who are many times more the number of self-supporting persons. Secondly, the figure relates only to those who derive their principal means of livelihood from this particular business. It is a common experience that many of the weavers and other workers in textile industry are also agriculturists, and if agriculture has been giving them the chief source of maintenance, these men have been classified as agriculturists in the census. This is of course true in respect of any other industrial or non-agricultural worker, as stated in the closing paragraph of the Preliminary Remarks to this Chapter. There are inherent difficulties in the collection of reliable statistics regarding the number of looms and the number of weavers. These difficulties were experienced by the Fact Finding Committee (Handloom and Mills) constituted by the Government of India in the Commerce Department in 1941. This Committee recorded the difficulties in the following words.*

....the condition of the industry is still unorganised, most of them still work in their own homes, and there is no facility for collecting periodical returns as in the case of mills. Further as weaving has been for long connected with certain castes, there is a tendency on the part of those members of the weaving castes who have discarded their traditional occupation to enter themselves as weavers at the census, especially, if the new occupation adopted happens to be considered socially inferior to weaving. Similarly, those who have lately taken up weaving may not enter themselves as weavers, especially those who had formerly been pursuing an occupation considered superior to weaving. Owing to all these factors, a census of weavers cannot bring in accurate results, and all statistics collected whether at a census or separately must be taken *cum grano salis.*

* Report of the Fact Finding Committee (Handloom and Mills), page 35.

3. According to the recorded figures, the workers in cotton textiles constitute, by way of proportion, 2,900 out of 10,000 self-supporting persons engaged in all industries of division 2. Manufacture and processing of textiles is highly popular in the inland division where 3,821 persons in the above proportion derive their source of livelihood from it as against 1,832 persons in the coastal division. Among districts, Bolangir, Mayurbhanj, Sambalpur, Ganjam and Sundargarh attach high importance to this industry where the proportion of self-supporting persons employed in this industry is high. Handloom weaving is the most important activity under this industry. Other branches of the industry of smaller magnitude are cotton dyeing, bleaching, printing, spinning and sizing and also ginning, cleaning and pressing of cotton. These minor branches of the cotton textile industry employ a small number of workers, which may be seen in Appendix III (District Index of Non-agricultural Occupations).

Weaving

4. Weaving is important among all industries connected with processing and manufacture of cotton textiles. It is a flourishing economic activity, particularly in the form of handloom weaving, in many districts of the State, namely, Sambalpur, Bolangir, Mayurbhanj, Ganjam, etc. In the manufacture of handloom textiles, the weavers of Orissa have displayed great skill in design and pattern so as to earn a name outside the State. Besides weaving of dhotis, saris and other items of common use, the making of attractive table cloths, purdahs, newar, tapes and pattis is also done in a considerable scale.

Handloom

5. The ascertainment of the number of handlooms and the number of weavers in Orissa will be useful for organising the industry on improved lines. The Report of the Fact Finding Committee (Handloom and Mills) shows that there were 48 thousand looms in Orissa in 1940 and that the number of weavers was 50 thousand and that of unpaid assistants of weavers was 150 thousand. The Committee did not take any census of the handloom industry. They relied upon the statistics maintained by the Department of Industries and other agencies in the Provincial Government. The Department of Industries on the other hand had no reliable basis for ascertaining the correct number of looms or weavers. So the figures adopted by the Fact Finding Committee were based on approximate departmental estimates. There has been no comprehensive survey in Orissa in this matter, but the Census of Small Scale Industries conducted in November 1950 attempted to collect necessary figures village by village for the whole of Orissa. The results of the census have not been authenticated by the Government of India for reasons mentioned in the Preliminary Remarks to this Chapter. But it is believed that the results obtained in Orissa were much better than elsewhere in India, and given a small margin on account of possible omissions, the figures will be reliable for all practical purposes. It is thus worthwhile to study a summary of the number of textile establishments, number of handlooms and the number of workers in textile establishments in each district of the State, which is given in the following page. For more detailed figures, particularly on village-wise basis, reference should be made to District Census Handbooks.

Name of district	No. of textile establishments	No. of handlooms	No. of workers in handlooms	
			Whole-time	Part-time
Cuttack ..	8,017	10,551	22,103	433
Balasore ..	4,176	4,821	7,633	1,691
Puri ..	3,972	5,127	10,609	944
Sambalpur ..	14,998	17,107	38,190	2,335
Ganjam ..	5,243	6,799	15,681	648
Koraput ..	6,509	7,020	14,545	1,204
Dhenkanal ..	4,270	4,976	10,175	1,185
Keonjhar ..	2,692	3,165	5,761	193
Phulbani ..	3,226	3,792	9,073	301
Bolangir ..	9,594	12,801	28,435	530
Sundargarh ..	2,986	3,385	6,108	772
Kalahandi ..	5,510	5,954	12,894	1,312
Mayurbhanj ..	6,718	7,960	16,791	497
ORISSA ..	77,911	93,458	197,998	12,045

6. It will appear from the above statement that there are 93,458 handlooms and the number of workers in handlooms both whole-time and part-time is 210,043. As mentioned above, there is the possibility of a certain amount of omission in the above figures. But this may be counterbalanced by the fact that in November 1950 when the census was taken, the tendency to exaggerate the number of looms or the number of workers with the hope of obtaining adequate allotment of yarn was not totally absent. Under the circumstances, the number of handlooms and the number of workers as disclosed by the above census may be taken as approximately correct.

7. The handloom industry was undergoing a downward trend for some decades. Conditions became worse, particularly from 1942, when the supply of yarn was restricted due to the war. The Yarn Control Order was however soon promulgated which was greatly responsible for stabilizing the situation. Organizations such as the Weavers' Co-operative Societies, the Handloom Textile Marketing Organisation, etc., did their best in ensuring equitable distribution of yarn and quick disposal of finished products. The services of the latter organization particularly were helpful for improving the quality and design and increasing the quantity and variety of the handloom products during the last decade.

Textile Mills

8. With effective measures to arrest the decay of weaving as cottage industry, the last decade will be a memorable period for initiation of power weaving in Orissa. The first Textile Mills of Orissa was established at Chaudwar (Cuttack) with a capital of Rs. 1·75 crores, which went into full scale production in November 1949. With a total number of 50 thousand spindles and 864 looms, the production capacity of the mills per month is 1,800 bales of cloth and 600 bales of yarn. It is now a well established concern with about 4,000 workers on its roll. Initial measures have already been taken for the establishment of many more textile mills in Orissa, namely, at Kapilas Road (Cuttack), Mayurbhanj and Sambalpur.

Textile Industries otherwise Unclassified

9. There are 17,405 self-supporting persons engaged in this industry in Orissa. Proportionately, 1,333 persons of self-supporting category are employed in this branch of this industry out of 10,000 such persons belonging to the division 2. This industry includes jute pressing, baling, spinning and weaving; wool spinning and weaving, silk reeling, spinning and weaving, hemp spinning and weaving, manufacture of rayon, manufacture of rope, twine, string and other related goods from cocoanut, aloes, straw, linseed and hair, all other (including insufficiently described) textile industries, including artificial leather and cloth.

JUTE

10. Jute industry is increasingly becoming popular in the four districts of the coastal division. This is because the soil and climate of this natural division is suitable for cultivation of jute. There is no jute mill in Orissa, although the establishment of one is under contemplation. But pressing and baling of jute gives employment to a small number of workers, particularly in Cuttack and to some extent in other coastal districts.

SILK

11. Weaving in Orissa is not confined to cotton fabrics alone. A large number of weavers manufacture silk textiles of three varieties, namely, tussar silk, mulberry silk and eri silk. There was a prosperous silk industry in Orissa in the past. Silk saris of Berhampur and the tussar cloth of Sambalpur were highly esteemed as wearing articles. But the import of silk from China and Japan and of artificial silk gave a severe blow to the local industry. At present, however, tussar cloth is manufactured in Barpali and some other villages in Sambalpur and also at Berhampur in Ganjam, Olsing in Puri, Kasipur and Agarpada in Balasore, Kaijanga and Gopalpur in Cuttack and in Angul. Mulberry silk yarn which is imported is woven mostly at Berhampur in Ganjam district and at some places in Puri and Balasore. Eri silk was unknown in Orissa about a quarter of century back but it was introduced and has since spread enabling weavers to manufacture eri silk cloth mostly in Koraput, Sambalpur and Cuttack.

WOOL

12. Although Orissa has a large number of sheep, there is practically no wool industry in the country. This is because people are ignorant in the practice of shearing and spinning of wool. In a crude form however, shearing is done in Ganjam and Koraput and to some extent in Cuttack. This wool, being inferior in quality cannot promote spinning industry, but may be used in the manufacture of coarse blankets or galichas. During the last war, woo yarn was imported for weaving of blankets, but the industry did not thrive.

ROPE MAKING

13. This is a common industry in many villages. The material used for the manufacture of rope is sun-hemp, jute, coir and some large sized grass. Sometimes ropes are also made of bark of trees. In the district of Sambalpur, a settled European family has started the manufacture of ropes from sisal. Jute strings are produced in large quantities in some villages of Kendrapara subdivision and in Balasore district. In villages Bonth and Basudebpur (Balasore) strong and durable gunny bags are manufactured out of jute. Coir rope making is a cottage industry in Cuttack and Puri.

WEARING APPAREL (EXCEPT FOOTWEAR) AND MADE-UP TEXTILE GOODS

14. This industry gives employment to 11,517 self-supporting persons who derive their principal means of livelihood from it. There are 882 self-supporting persons in this industry in a proportion of 10,000 such persons belonging to division 2. Tailoring is gaining a position of importance among the industries of this division. Tailors are found in almost all villages of importance for preparing ready-made or made-to-measure clothing. Some employment is also available in the manufacture of hosiery and hat making. The Hosiery Mill at Mayurbhanj is gradually acquiring a reputation for quality productions. The Hosiery Mill at Cuttack is beginning to do well. Hat making and manufacture of umbrella is done though to a small extent in the district of Cuttack.

LEATHER, LEATHER PRODUCTS AND FOOTWEAR

15. A small number of 3,202 self-supporting persons are engaged in this profession in Orissa. Their number comes, by way of proportion, to 245 out of 10,000 self-supporting persons in division 2. Orissa has a large cattle wealth, as mentioned in Chapter IV. It is thus possible to get a good supply of hides and skins in this country. But the industry has not developed and much of what could bring wealth to the country goes to waste. Orissa is only able to export about one lakh maunds of hides and a few thousand maunds of skins per year either raw or half-tanned. In return, a major part of leather products, such as, footwear, harness, saddlery, belts, straps, bags and cases are imported. A small extent of industry is available to the local people in flaying, curing, salting or tanning the hides. At some places there are cottage tanneries, namely, in Baudh, Russelkonda, Bolangir and Keonjhar. Besides, there are modern, but small sized tanneries at Cuttack and Khariar Road engaging a small number of tanners. Comparatively more employment is found in manufacture of shoes, which is done generally by a class of persons known as ' Mochi' or ' Chamar' . This is also done on cottage industry scale in different parts of the State, particularly in Cuttack.

GRAINS AND PULSES

16. The most important industry in this division is the processing of grains and pulses in which 43,790 persons of self-supporting category are employed. Proportionately, 3,353 self-supporting persons out of 10,000 belonging to all branches of this division are employed in business connected with grains and pulses. This industry is more developed in the coastal division where 4,743 self-supporting persons are employed in it, while in the inland division 2,153 persons are employed in the above proportion. Among districts, Balasore, Puri and Cuttack have the highest importance for this industry. These are the important agricultural districts of the State. Cuttack, particularly grows pulses in large quantity which are fried or otherwise processed fo sale in village markets. In Balasore, there are a large number of rice mills where rice is dehusked for consumption and export. There are about 93 rice mills throughou Orissa employing nearly 20,000 workers. Besides, dehusking of rice is a popular cottage industry in the villages, particularly in districts noted for surplus or sufficient rice production. These districts are Cuttack, Puri ,Balasore, Mayurbhanj, Sambalpur, Koraput and Kalahandi. The manufacture of parched or pressed rice is also a popular village industry throughout the State. Moreover, flour grinding, making of blended and prepared flour, milling of cereals and pulses, making of various cereal and pulse preparations give employment to a good many persons.

Vegetable Oil and Dairy Products

17. The number of self-supporting persons in this industry is 5,500, which amounts to 4·2 per cent of all self-supporting persons in division 2. Oil pressing is a traditional occupation of a particular caste in Orissa. This business relates mostly to mustard oil particularly in the coastal districts. But pressing of groundnut oil, castor oil, till oil, and other vegetable oils is also done in various localities. A few years back, a large scale vegetable ghee factory was established in Chatrapur in the district of Ganjam with a capital of rupees thirty lakhs. Employment in dairy products is also popular in villages of most of the districts of Orissa. There are dairy farms in many places, namely, Cuttack, Sambalpur, Bolangir, Russelkonda and other places.

Unclassified Food Industries

Manufacture of Salt

18. Salt was manufactured from time immemorial along the extensive sea-coast of Orissa. The industry gave employment to thousands of persons living in the coastal districts of Balasore, Cuttack, Puri and Ganjam and also gave part-time employment to many agricultural labourers in the off-season which coincides with the period of salt production. Orissa, besides being self-sufficient in salt, was able to export in large quantities for consumption in Central Provinces (Madhya Pradesh). In 1853-54, there were 24 salt manufacturing centres in Balasore, Cuttack and Puri, besides some more in the district of Ganjam. These centres were 8 in Balasore, namely, Ruttai, Sartha, Chennua, Dasmalang, Panchmalang, Ankura, Churamani and Dhamara; 7 in Cuttack, namely, Mundhamalang, Satbhaya, North Kanpur, South Kanpur, Bahukud, South Dhobai and Harishpur; and 9 in Puri, namely, North Astarang, South Astarang, Bhusandpur, Haridas, Parikud, Gurubai, Malud, Satpara and Gurubai. The East India Company introduced a system of monopoly under which the salt industry thrived well but later on due to import of Liverpool salt and due to the abandonment of Government monopoly in 1863, the industry started to decline quickly. Ultimately it was unable to stand competition not only from foreign salt but also from salt manufactured and imported from Madras. There was a temporary revival but ultimately the Sartha factory in Balasore was closed in 1893 and the Gurubai factory in Puri in 1898. The industry was further revived during the non-co-operation movement in the last years of the British rule in Orissa. As a result, salt manufacture was undertaken in a few villages in the coastal districts, namely, Humma in Ganjam, Astarang, Gurubai and Tua in Puri and Inchudi and Talpada in Balasore. In the middle of the last decade, the production of salt in Orissa was nearly four lakh maunds a year, out of which 1,66,000 maunds were produced in Humma alone.

Other Industries

19. Among other industries of division 2, the sugar industry employs 751, beverages 935 and tobacco 6,853 self-supporting persons in the State, the proportion out of 10,000 self-supporting persons of division 2 being 57, 71 and 525 respectively. In the sugar industry are included industries, such as, manufacture of gur, refined or classified sugar, mostly from sugar cane. Gur is also manufactured from juice of date-palm trees. Besides, there are sugar mills at Rayaghada, Aska and Banki of which the latter is a small one. The tobacco industry is spread over the whole State, mostly in the form of manufacture of bidi for which Sambalpur, Sundargarh, Bolangir, Keonjhar, Cuttack and Balasore are noted. Manufacture of a

kind of tooth paste from tobacco (*gudakhu*) is a prosperous industry of Cuttack. The industries connected with beverages is mostly in the form of distilling country liquor, which is done in large scale in most of the districts of the inland division, particularly in Koraput, Ganjam and Sambalpur. Manufacture of aerated and mineral waters is done in the principal towns, such as, Cuttack, Puri, Berhampur, Balasore and Sambalpur. Manufacture of ice is practically confined to Cuttack where there is an Ice Factory.

SECTION VII

Processing and Manufacture—Metals, Chemicals and Products thereof

1. According to the classification made under the Indian Census Economic Classification Scheme, the industries relating to processing and manufacture of metals, chemicals and products thereof come under division 3. From the point of view of number of persons engaged in this industry, it may be regarded as a minor one, as there are 21,420 self-supporting persons under it, or 233 out of a proportionate population of 10,000 belonging to all industries and services in the State. The inland division has comparatively greater amount of activities in this connection as there are 331 persons in this natural division against 152 in the coastal division in the above proportion.

UNCLASSIFIED METAL PRODUCTS

2. The importance of this branch of industry is apparent from the fact that out of 10,000 self-supporting persons in division 3, as many as 7,458 are employed in the manufacture of metal products otherwise unelassified. The actual number of self-supporting persons in this industry is 15,976. There are various activities under this branch of industry, the principal being smithy and other work in iron which is a widespread source of employment in rural areas of the State. Village blacksmiths supply many of the agricultural implements and other articles of household use for villagers, such as, cutlery, padlocks, nails, door chains and hinges, etc. The industry has declined with the import of foreign articles and the establishment of Iron and Steel Factory at Tatanagar. Brass and bell-metal industry is a prosperous industry in many parts of the State from old times. Centres where varieties of utensils, betel cases, pots, boxes and other bell-metal products are manufactured are Bhagatpur in Cuttack, Balakati and Kantilo in Puri, Remuna, Chandanpur and Irda in Balasore, Remenda, Rampella, and Katapalli in Sambalpur, Berhampur, Parlakimedi and Boirani in Ganjam and Jeypore and Nowrangpur in Koraput.

MANUFACTURE OF IRON AND STEEL

3. There are 2,450 self-supporting persons in this branch of industry which works out to 1,144 out of 10,000 persons belonging to division 3. These persons are mostly to be found in the inland division, particularly in the districts of Koraput, Sundargarh, Mayurbhanj and in Angul where crude process of iron smelting is in practice. There is a re-rolling mill at Cuttack, which in addition to rolling and drawing, manufactures castings, forgings and other basic forms of ferrous metals. The Kalinga Refrigerator Corporation of Cuttack turns out excellent steel furniture and office equipment. In many of the principal towns, manufacture of steel trunks, boxes and cases is undertaken. There are bucket factories in Cuttack and Balasore.

NON-FERROUS METALS

4. This is a very minor industry with only 345 self-supporting persons in the business in Orissa. The business relates to castings, forgings, rolling, drawing and alloying of non-ferrous metals, such as, brass and copper.

TRANSPORT EQUIPMENT

5. The number of self-supporting persons engaged in this work is 1,460 or 682 per 10,000 of the total workers in division 3. This industry relates to building and repairing of boats and vessels, repairing and assembly of cycles, motor vehicles and railway equipments, making of carriages, carts, palki, rickshaw and other transport equipments. Cuttack is most prominent of all districts in this business.

ELECTRICAL MACHINERY, APPARATUS, APPLIANCES AND SUPPLIES

6. 511 self-supporting persons in the State or proportionately 239 persons out of 10,000 for the division 3 are employed in this industry mostly in the supply of electric appliances and machineries, such as, wires, cables, fans and lamps, transmission equipment and household appliances.

MACHINERY (OTHER THAN ELECTRICAL MACHINERY) INCLUDING ENGINEERING WORKSHOPS

7. There are 229 persons in this business, or proportionately 107 out of 10,000 engaged for division 3. There are engineering workshops in Cuttack and Balasore with electrically operated machineries. But there are many private firms where tools and machinery are manufactured and repaired in other towns of the State.

BASIC INDUSTRIAL CHEMICALS, FERTILISER AND POWER ALCOHOL

8. This is a minor industry with 116 self-supporting persons or 54 out of 10,000 self-supporting persons of this division. The industry relates to the manufacture of acids, alkali salts, explosives and fireworks, etc. Manufacture of fireworks has acquired reputation in the principal towns of the State, particularly in Cuttack.

MEDICAL AND PHARMACEUTICAL PREPARATIONS

9. A small number of 44 self-supporting persons or 20 out of 10,000 employed in division 3 are attached to this business. It relates to the preparation of drugs and medicines.

MANUFACTURE OF CHEMICAL PRODUCTS OTHERWISE UNCLASSIFIED

10. Among the minor branches of the industry, this has some importance as 289 self-supporting persons or 135 out of 10,000 self-supporting persons in the division 3 find employment in this business. It relates to the manufacture of ink, soaps and other washing and cleaning compounds, paints and varnishes, and the manufacture of perfumes, cosmetics and other toilet preparations. These industries are mostly confined to the coastal districts of the State. Ink, paints and varnishes are manufactured in Cuttack and soap in Khariar Road in Kalahandi district. Soap manufacture as cottage industry is in existence in many towns of the State.

SECTION VIII

Processing and Manufacture—Not elsewhere specified

1. The industry relating to the processing and manufacture not specified elsewhere comes within division 4 of the Indian Census Economic Classification Scheme. This division relates to unclassified manufacturing industries, such as, working in precious metals, manufacture of petroleum products, coal products, wood products, cement, toys, bricks, tiles, rubber products, etc. Out of a proportion of 10,000 self-supporting persons of all industries and services in the State, 777 persons are engaged in this division. The actual number of self-supporting persons in this industry is 71,376.

Wood and Wood Products other than Furniture and Fixtures

2. This is the most important branch of the industry absorbing 5,031 self-supporting persons out of a proportion of 10,000 self-supporting persons belonging to the division 4. The actual number of self-supporting persons engaged in this industry is 35,909. It includes sawyers, carpenters, turners and joiners, basket makers and other industries of woody materials not including furniture or fixture making. Carpentry is an important industry not only in the towns but also in villages. There are established firms of carpentry in Cuttack, Puri, Balasore, Bolangir, Sambalpur, Ganjam and Phulbani which produce wooden articles, such as, planks, rafters, beams, etc. Manufacture of cart wheels in Tangi in Cuttack district is a prosperous business. Wooden sticks of finest workmanship are manufactured in Jajpur. There are a large number of saw mills, particularly in districts having forest areas.

Furniture and Fixtures

3. This business is in prosperous condition in Cuttack, Balasore, Ganjam, Bolangir and Phulbani and at many other places in the State. While a large number of private firms in Cuttack specialize in high grade furniture and cabinet making, the Industrial School of Balasore has achieved a rare distinction. Other industrial schools, such as, at Phulbani and Bolangir are also doing well. Making of furniture and fixtures taken separately from other products of wood employ a comparatively smaller proportion of 217 out of 10,000 self-supporting persons in division 4.

Non-metallic Mineral Products

4. This is another important branch of the industry employing 2,348 self-supporting persons out of 10,000 belonging to division 4. The actual number of self-supporting persons is 16,759. This includes potters and makers of earthen ware, makers of crockery, glass bangles and beads and other glass ware. The only glass factory of the State is located at Barang in district Cuttack. This has now been organised on modern lines with the help of foreign experts and is turning out attractive and high grade glass and crystal wares. The potters constitute an important class of village artisans supplying pots for cooking and storing of water. The pottery of Kumarpada in Puri which supplies earthen pots for the temple of Puri is a prosperous industry.

Bricks, Tiles and Other Structural Clay Products

5. Tile making is seen in various parts of the State. There are tile factories in Jeypore and at Cuttack which produce tiles in large quantities. Brick laying is widespread throughout Orissa and is a remunerative occupation. 2,177 self-supporting persons or 305 out of 10,000 self-supporting persons in this division are attached to this industry.

CEMENT, CEMENT PIPES AND OTHER CEMENT PRODUCTS

6. Considering the percentage of workers, manufacture of cement appears to be insignificant as 8 persons out of 10,000 self-supporting persons belonging to division 4 are employed in this industry. This industry, however, became an organised and one of the noted industries of Orissa a few months after the last census. The cement factory at Rajgangpur which is approximately producing 5 hundred tons of cement per day, went into production in November 1951.

PAPER AND PAPER PRODUCTS

7. Manufacture of paper is an organised modern industry in Orissa on account of the prosperous paper mill at Brajrajnagar in Sambalpur district. Its capacity of production is 30,000 tons per year. The actual number of self-supporting persons working in this industry in the State is 1,088, or 152 out of 10,000 self-supporting persons of the division.

MANUFACTURING INDUSTRIES OTHERWISE UNCLASSIFIED

8. This relates to manufacture and repair of scientific or professional instruments, photographic and optical goods, watches, clocks, musical instruments, sports goods, toys and other miscellaneous manufacturing industries. The number of self-supporting persons attached to this industry is 13,289, which by way of proportion works to 1,862 out of 10,000 belonging to division 4. An important industry in this division is the manufacture of jewellery and ornaments and filigree works. Cuttack particularly is noted for artistic work in precious metals like gold and silver and for displaying inimitable artistic skill in filigree work. Berhampur is noted for work in precious stones and gold. Another industry of artistic excellence is the work in horns and ivory for which Cuttack and Parlakimedi have earned high reputation. Manufacture of toys made of clay, particularly idols, small as well as life-size, is a special industry of Cuttack.

OTHER INDUSTRIES

9. Other industries of this division, which are less important from the point of view of numbers, are manufacture of petroleum products, rubber products and printing and allied industries. Printing is mostly an urban industry. There is a large printing press belonging to the State Government in Cuttack. Besides, there are a large number of private printing presses in this city which publish several daily or periodical newspapers. In other towns of the State, namely, Berhampur, Puri, Balasore, Sambalpur and Jeypore, the printing business is doing well.

SECTION IX

Construction and Utilities

1. The industries falling under the category of construction and utilities belong to division 5 of the Indian Census Economic Classification Scheme. They give employment to 35,754 self-supporting persons, which in terms of proportion is 389 out of 10,000 self-supporting persons belonging to all industries and services in the State. The industry is more developed in the coastal division where the above proportion is 425 as against 346 for the inland division. Among districts which are noted for activities falling under the category of construction and utility services, Puri shows the highest percentage particularly on account of the present constructional activities at the new capital at Bhubaneswar. Other important districts are Sambalpur, Cuttack, Phulbani and Kalahandi. The latter two districts figure out prominently because of a smaller population and of lesser activity in other directions.

Construction and Maintenance of Buildings

2. The number of self-supporting persons is 12,555. This business includes masons and bricklayers, stone-cutters and dressers, painters and decorators of houses as well as other persons engaged in the construction and maintenance of buildings. Building activities are widespread everywhere particularly in the urban areas.

Sanitary Services

3. This industry absorbs 6,766 self-supporting persons. This is mostly an urban industry although many of the rural areas have scavengers and sweepers.

Construction and Maintenance of Roads, Bridges and Other Transport Works

4. The number of self-supporting persons engaged in this business is 4,200. This work is widespread throughout the State. Construction of National Highways to serve ultimately as portions of the Calcutta-Madras and Calcutta-Bombay roads was in progress during the decade. A large number of important bridges, namely, those over the Mahanadi at Sambalpur, the Kathjuri and the Kuakhai in the districts of Cuttack and Puri were undertaken during the decade. Moveover, many inter-district and rural roads with culverts and bridges were also undertaken.

Construction and Maintenance Operation—Irrigation and Other Agricultural Works

5. The self-supporting persons in this industry number 4,123. During the decade a large number of minor irrigation sources were undertaken extensively throughout the State as a part of the intensive agricultural development. Moreover, some persons are kept engaged in maintenance of old works.

Other Subdivisions

6. Construction and maintenance of telegraph and telephone lines employ 478 self-supporting persons. Similar number for works and services connected with electric power and gas supply is 347 and for works and services of domestic and industrial water supply is 360. The unclassified construction and maintenance work shows a comparatively large number of self-supporting persons, namely 6,925.

SECTION X

Commerce

1. Services and industries connected with commerce which belong to division 6 of the Indian Census Economic Classification Scheme absorb 1,509 self-supporting persons out of a proportion of 10,000 such persons belonging to all services and industries in the State. The actual number of self-supporting persons engaged in this industry is 138,539. This industry is more developed in the coastal division than in the inland division in the proportion of 1,824 to 1,129. The industry covers mainly retail and wholesale trade in foodstuffs, textile and leather goods, financial activities, such as, banking, insurance and money lending.

Retail Trade in Foodstuffs (including Beverages and Narcotics)

2. This is the most important subdivision of the industry comprising 53,317 self-supporting persons. The importance of this industry lies in the fact that a large number of businessmen throughout the State have taken to business as retail dealers in grains and pulses, sweets and dairy products, eggs and poultry, vegetables and fruits. Some persons are also employed as vendors of wine, liquors and aerated waters or as retail dealers or hawkers or street vendors of pan, bidi, drinks, tobacco, opium and ganja.

Retail Trade in Fuel including Petrol

3. The number of self-supporting persons for this subdivision is 14,355. The retail dealers in firewood, charcoal, coal and petroleum are included in this industry.

Retail Trade in Cotton Textiles and Leather Goods

4. This business absorbs 7,249 self-supporting persons. The retail dealers in piece goods, cotton, silk, wool, wearing apparel and made up textile goods, leather and skins are included under this group.

Wholesale Trade in Foodstuffs

5. Although only 6,159 self-supporting persons are attached to this industry, it is considered an important business in the State which is surplus in foodstuffs. A large number of influential persons work as procurement agents in rice. Moreover, there are many wholesale dealers in pulses and other foodstuffs in different districts of the State.

Wholesale Trade in Commodities other than Foodstuffs

6. This is also an important branch of the industry absorbing 9,686 self-supporting persons. Importers and wholesale dealers of stationeries and articles of household use are widespread throughout the State.

Other Industries

7. The business connected with money lending and banking employs 4,168 self-supporting persons. The number of such persons in insurance is 67 and in real estate 352. But a considerable number of self-supporting persons are grouped under unclassified retail trade whose number is 43,186. This unclassified business relates to stationers, booksellers, general store keepers, and unclassified hawkers and vendors who are fairly large in number.

SECTION XI

Transport, Storage and Communications

1. The industry relating to transport, storage and communications constitutes division 7 of the Indian Census Economic Classification Scheme. There are 25,900 self-supporting persons in the State who derive their principal means of livelihood from this industry. Proportionately, the number of persons attached to this industry is 282 out of a total number of 10,000 self-supporting persons employed in all industries and services in the State. It is more developed in the coastal division than in the inland, the proportionate number of self-supporting persons in these two divisions being 329 and 226 respectively.

Railway Transport

2. The most important branch of this industry is the railway transport employing 9,948 self-supporting persons, which proportionately amounts to 3,841 out of 10,000 self-supporting persons engaged in division 7. Railway employees of all categories except those employed on construction works or those connected with manufacture, assembly and repair of railway equipments are included in this industry. Railway lines pass through all the districts of the State except Phulbani where there is no railway and Keonjhar where the railway route is negligible. So railway employees are to be found everywhere except in these two districts. Moreover, there are railway colonies at different localities, namely, Jharsuguda in Sambalpur, Khurda Road in Puri, Titlagarh in Bolangir and Bhadrak in Balasore district, where there are larger number of railway employees.

Inadequacy of Railway Transport

3. The present railway communication in Orissa is inadequate, as only one mile of railway exists for every 71·8 sq. miles of the territory. At present there are 733·6 miles of broad gauge and 104 miles of metre gauge railway lines within Orissa, while the total length of railways in India is about 37,000 miles. Thus, Orissa which comprises 4·7 per cent of India's area contains only 2·1 per cent of the railway mileage of India. The present inadequacy of the railway transport has proved to be a great handicap not only for the general movement of the people but also with regard to the transport of raw materials, agricultural produce, piece and consumer goods and various articles connected with trade and industry. In spite of the limitation of railway mileage and the decrease in the number of train services during the last decade on account of war and post-war conditions, railway transport, both goods and passenger, was on the increase from year to year. Statistics relating to the number of passenger tickets sold per year in five important railway stations of Orissa as given elsewhere* will not only indicate the growth of travel habits among the people but will also help in making out a case for increase in railway services and mileage in Orissa. These figures show that during the last 15 years, or since the creation of Orissa as a separate province, the number of passengers travelling from a particular railway station per year has increased to a very large volume, in spite of limitation in train services during the war time. Railway transport will increase to a considerable extent if some new lines are opened or the present ones extended. Extension of new lines between Rourkela and Talcher and between Sambalpur and Titlagarh has been sanctioned and the latter project is already in progress. But this extension will not adequately meet the increasing transport requirements of the State.

* Vide para. 27, Section III, Chapter I of this Report.

Development of mineral resources require construction of railway lines from areas where mines and factories are likely to be worked in the coming decade to either Chandbali or Paradwip whichever may be selected as the port for Orissa. A railway line from Tatanagar to Chandbali and another from Khurda Road to Kesinga on the Vizianagram-Raipur lines appear to be urgently necessary.

Transport by Road

4. This is the next important branch of the transport industry with 8,851 self-supporting persons or 3,418 out of a proportion of 10,000 persons in division 7. The most extensive means of road transport is the bullock cart which is widespread throughout Orissa. It is used not only for the conveyance of agricultural products but also other commodities and passengers. Secondly, the development of automobile transport particularly during the last 20 years is remarkable. Public buses and trucks have been plying increasingly during these years over new routes all over the State. Some of these transport lines were nationalised during the last few years by the State taking over the running of passenger buses in important routes. Among the districts, Ganjam, Bolangir, Sambalpur, Cuttack and Koraput have got a network of public or State bus services.

Poor Road Communications

5. The poverty of road communications in Orissa cannot escape observation. Proportionate to her superficial area, Orissa has extremely poor extent of roads. The total length of extra municipal roads in Orissa in March, 1948 was 7,397 miles only of which 4,431 miles were unmetalled and 2,966 miles metalled, comprising one mile concrete, 38 miles bituminous and 2,927 miles water bound macadam. The remarkable deficiency in the extent of Orissa's roads may best be illustrated by comparison with a few other States or countries The figures given below relate to 31st March 1948.*

Name of State or Country	Area in sq. m.	Length of roads in m.	Road mileage per 100 sq. m.
Orissa ..	60,136	7,397	12·3
Assam ..	85,012	12,493	14·7
Madras ..	127,790	37,852	29·6
Bihar ..	70,330	30,785	43·8
West Bengal ..	30,775	22,932	74·5
India ..	1,269,640	255,460	20·1
Great Britain ..	89,041	183,659	206·3

6. The above statement is typically illustrative of the poverty of communications in India and of comparatively greater poverty of Orissa within India. Orissa has the greatest deficiency in roads among States named above. Assam might have some excuse in having low road mileage as it is a frontier State, blocked on one side by the uncommunicative Himalayas and on the other by the extreme wilderness of Indo-Burma border. But Orissa, which has better geographical location than Assam and is placed in between two progressive States, viz., West Bengal and Madras, has lower road mileage than Assam. Orissa is also poor with regard to the total number of motor vehicles registered within her bounds. The following statement shows the number of motor vehicles and carts in existence in Orissa and a few other States.

* Basic Road Statistics of India, Second (1951) Supplement, the Ministry of Transport, Government of India pp. 16 and 18.

State	Population in millions	No. of motor vehicles registered	No. of persons per motor vehicle	Carts
India ..	356·8	269,669	1,323	8,569,569
Orissa ..	14·6	3,436	4,263	374,144
West Bengal	24·8	58,818	422	537,768
Madras ..	57·0	33,924	1,681	1,195,494
Bombay ..	35·9	50,394	714	1,056,991
Bihar ..	40·2	13,938	2,886	510,359

In the preceding statement the population given relates to the year 1951 but the number of motor vehicles is for the year 1948 * and carts for the year 1947-48 †. This creates a little amount of discrepancy in the result but it is so small that it may be ignored.

Transport by Water

7. This is not a developed form of transport in Orissa, although the State has a liberal extent of sea-board and a network of rivers. The total number of self-supporting persons deriving their livelihood from this profession is 2,590 which works out to a proportion of 1,000 out of 10,000 in division 7. The industry is developed more in the coastal division where there is a large number of rivers, canals and waterways than in the inland division. Transport by water being cheap, country boats are engaged for carriage of foodstuffs and commodities between places connected by canals or rivers in the coastal districts. Moreover, there is regular passenger services from Cuttack to interior localities in mechanically propelled boats. During the winter season timber and bamboo are floated down the Mahanadi, the Brahmani and other rivers from forest areas to commercial centres. These activities give employment to a section of the people as mentioned above.

8. Computed figures of livelihood classes in 1931 show that the number of persons earning their principal means of livelihood from transport by water in 1931 was 5,728 while the corresponding figure for 1951 is 2,590. Transport by water has thus declined by over 50 per cent during the last 20 years. This decline appears to have resulted from such facts as bridging of rivers and water courses leading to discontinuance of ferry services in those places, abolition or decline in the activity of the two ports of Orissa, namely, Gopalpur and Chandbali, and the replacement of mechanically propelled vessels for country-type cargo and passenger boats which employed larger number of crew.

PORTS

9. Transport by water includes the activities in ports. In Orissa, there are two minor ports, namely, Chandbali and Gopalpur. The volume of business in Gopalpur gradually disappeared particularly due to cessation of traffic with Burma on account of political changes in that country. The port at Chandbali is however slowly developing and there was the proposal sometime back to construct a slipway at a cost of rupees three lakhs and a half. The shipping traffic which was suspended during the war years was resumed and was increasing slowly towards the end of the decade. A hydrographic survey of the port at Dhamra which is 16 miles downstream from Chandbali was also conducted and the locality was found suitable for development of a port. There is also a proposal for the establishment of a major port at Paradwip on the mouth of the Mahanadi, 52 miles from Cuttack. A French Technical Mission was appointed by the Government of India to examine the suitability of Paradwip as a major port. According to their recommendations, a survey of the outer bar and the sea approaches upto a depth of

* Collected from the Basic Road Statistics of India, Second (1951) Supplement issued by the Ministry of Transport, Government of India.

† Indian Live-stock Statistics (1947-48 to 1949-50) by the Ministry of Food and Agriculture.

five fathoms was conducted by Naval Officers. The survey of the inland waters upto the mouth of the Mahanadi has also been completed with encouraging results.

10. It appears that in the present Five Year Plan an insignificant amount of one lakh of rupees out of a total provision of 18 crores has been made for the development of ports in Orissa. This Plan does not envisage the construction of a new port at Paradwip, nor also the much-needed comprehensive development of Chandbali port. Development of these ports are indispensable not only to relieve congestion at Calcutta port, which handles about 10 million tons of cargo a year, a volume which is equal to that handled by all other Indian ports, or to compensate for the loss of Chittagong port in the East but also to be greatly helpful for the mining industry and the forest trade which have a very bright future in Orissa, but which are suffering from great handicaps due to difficulties created by middle-men infesting the port of Calcutta

Other Transport Services

POSTAL AND ALLIED SERVICES

11. The postal service is widespread throughout the country. There are 2,332 self-supporting persons in this service which is equivalent by proportion to 900 out of 10,000 self-supporting persons in division 7. Other services of the allied nature have moderate number of such persons, namely, telegraph services 73, telephone services 151 and wireless services 156 persons.

OTHER SERVICES

12. There are 848 self-supporting persons or proportionately 328 out of 10,000 for division 7 in the storage and warehousing operations. Transport by air which has not developed is Orissa, has only 39 self-supporting persons and unclassified transport and communications have 912 such persons.

SECTION XII

Health, Education and Public Administration

1. Persons deriving their principal source of livelihood from services relating to health, education and public administration come under division 8 of the Indian Census Economic Classification Scheme. The number of such persons in the State is 59,909. It may be noted that this number is not inclusive of persons employed in the above mentioned services who derive a more lucrative income from a different source. For example, a large number of primary school teachers who might be deriving more income from lands rather than from the profession of teaching are automatically excluded from this division on account of the fact that their principal means of livelihood is agriculture, which entitles them to be included in the agricultural population of the State.

2. Out of a proportion of 10,000 self-supporting persons employed in all the services and industries of the State, division 8 comprises 652 persons. The proportion is higher in the coastal division showing 705 than in the inland division with 590 such persons.

Educational Services and Research

3. This is inclusive of professors, lecturers, teachers and research workers employed in the university, colleges and schools as well as such workers who are not attached to educational institutions. Managers, clerks and servants of educational institutions including libraries and museums are also included in this division. The total number of such persons in the State is 14,378. This number is however not inclusive of persons who have *some other* source of livelihood of yielding higher income as mentioned above. Proportionately, the persons deriving their main source of livelihood from these services amount to 2,400 out of 10,000 self-supporting persons in division 8.

Employees of State Government

4. This is similarly not inclusive of persons classifiable under other divisions or subdivisions. The number of persons enumerated under this division in the State is 14,165. Proportionately, such persons amount to 2,364 out of 10,000 self-supporting persons of division 8.

Police (Excluding Village Watchmen)

5. The number of such persons in the State is 10,057. In proportion they number 1,679 out of 10,000 self-supporting persons of the whole division.

Medical and Health Services

6. This includes registered medical practitioners, vaids, hakims and other persons practising in medicine without being registered. This also includes dentists, midwives, vaccinators, compounders, nurses, veterinary officers, and all other persons employed in hospitals or other establishments rendering medical or health services but not including scavangers and sanitary staff. The number of such persons in the State is 6,957 constituting proportionately 1,161 out of 10,000 self-supporting persons of division 8.

Village Officers and Servants including Village Watchmen

7. A considerable number of such persons have been enumerated as agriculturists and not under this subdivision. The remunerations of such persons from land generally exceeds that obtained from the services. Those, however, whose principal means of livelihood is obtained from these services number 8,157 in the State. In proportion they constitute 1,362 out of 10,000 self-supporting persons of the division.

OTHER EMPLOYMENTS

8. Employees of the Union Government (not including persons classifiable under any other division or subdivision) number 3,616. They constitute a proportion of 604 out of 10,000 self-supporting persons in this division. The employees of municipal and local bodies excluding persons classifiable under any other division or subdivision number 2,579. They constitute 430 within a proportionate population of 10,000 self-supporting persons of this division.

SECTION XIII

Services not elsewhere specified and Miscellaneous Means

1. The unspecified services and miscellaneous means of livelihood constitute division 9 of the Indian Census Economic Classification Scheme and comprise domestic services, recreation services, legal and business services, religious, charitable and welfare services and as well as persons engaged in arts, letters, and journalism, in hotels, restaurants or eating houses, in laundries and in barbar and beauty shops. The number of self-supporting persons of this category in the State is 356,718. Out of a population of 10,000 of all self-supporting persons among non-agricultural population, division 9 comprises 3,885 persons. There is a preponderance of such persons in the inland division rather than in the coastal division, the proportionate number being 4,046 and 3,751 respectively.

DOMESTIC SERVICES

2. This includes all persons engaged in household services but does not include services rendered by members of family households to one another. Private motor drivers and cleaners, cooks, gardeners and other domestic servants are included. The number of self-supporting persons in this category is 77,632. They constitute a proportion of 2,176 in the population of 10,000 self-supporting persons of division 9.

LAUNDRIES AND LAUNDRY SERVICES

3. The services relating to washing and cleaning is widespread in the country. In fact, the washermen constitute a professional class by themselves. But as in other services, it is likely that washermen deriving greater income from agriculture or other sources have been classified under the appropriate division of industry or service and not under the service under consideration. The number of self-supporting persons recorded in this service is 21,639, of which 6,359 are females. They constitute a proportion of 607 out of 10,000 under division 9.

RELIGIOUS, CHARITABLE AND WELFARE SERVICES

4. This is inclusive of priests, monks and nuns, sadhus, mendicants and other religious workers, servants in religious edifices, burial and burning grounds, pilgrim conductors, circumcisors and managers and employees of organisations and institutions rendering charitable and other welfare services. The number of such persons is 13,888 or proportionately 389 out of 10,000 self-supporting persons in division 9.

LEGAL AND BUSINESS SERVICES

5. There are 13,408 self-supporting persons in these services, forming 376 out of 10,000 under division 9. The services include lawyers of all kinds including quazis and mukhtars, clerks of lawyers, petition writers, public scribes, auditors, accountants, stenographers, employees of trade associations and labour organizations and architects, surveyors, etc., not being State servants.

RECREATION SERVICES

6. This is a smaller branch of miscellaneous services, employing 3,391 self-supporting persons or proportionately 95 out of 10,000 such persons included under division 9. It includes persons employed in production and distribution of motion pictures, operation of cinemas, radio broadcasting studios and allied services, managers and employees of theatres, opera companies, musicians, actors, dancers, conjurers, acrobats, recitors and exhibitors of curiosities and wild animals.

HOTELS, RESTAURANTS AND EATING HOUSES.

7. These are mostly located in towns but some are to be found in important rural centres. The number of self-supporting persons employed in this business is 3,351, which proportionately is 94 out of 10,000 in division 9.

ARTS, LETTERS AND JOURNALISM

8. This includes authors, editors and journalists as well as artists, sculptors and image makers. Their total number is small, namely 1,723, or 48 in a proportionate population of 10,000 self-supporting persons of division 9.

UNCLASSIFIED SERVICES

9. Persons such as rent collectors employed by zamindars and landlords come under this class. But a large number of population has been included under services otherwise unclassified primarily because of inadequate description of the means of livelihood of such persons. The self-supporting persons of unclassified category number 208,047 of which 150,856 are males and 57,191 are females. Such persons constitute a proportion of 5,832 out of 10,000 self-supporting persons belonging to division 9.

SECTION XIV

Concluding Remarks

NON-AGRICULTURAL POPULATION

1. The population of non-agricultural classes in Orissa is 30·3 lakhs and constitutes 20·7 per cent of the total population of the State. It may be grouped into four livelihood classifications, namely, production (other than cultivation) comprising 9·3 lakhs of persons, commerce 4·2 lakhs, transport 0·8 lakh and other services and miscellaneous sources 16 lakhs. The occupations of non-agricultural classes of population may be roughly divided into two categories, namely industries and services. A broad review of economic activities connected with various industries in the State is made as follows.

COTTAGE INDUSTRIES

2. The survey of non-agricultural population made in course of this Chapter shows that industrial activities in Orissa are mainly confined to handicrafts and cottage industries. In olden days the country was practically self-sufficient through such small scale industries but with the growth of modern system of transport, with an alien power ruling over the land, and with the competition of machine-made goods from outside Orissa, the decay of indigenous industries ensued. Attempts were made in recent decades to revive and develop the old industrial activities and although the extent of result achieved yet is small, the progress is encouraging. The most important of cottage industries, namely, the handloom industry, has been arrested from further decline and thanks to the efforts of the Handloom Marketing Organisation, the Weavers' Co-operative Societies, the general attitude of the public and the interest taken by the Government, improved qualities and patterns of handloom products are now being turned out in large quantity in various centres in the State.

3. The production of salt in the State has been stepped up, the area under salt increasing from 2,151 acres in 1946 to 4,309 acres in 1951. The present production is about 12 lakh maunds compared to 4·9 lakh maunds in 1946. The industry can be considerably developed to yield splendid results and may ultimately be the basis of heavy chemical industries for the manufacture of different kinds of sulphates, clorides and bromides. The existing salt factories of the State do not recover these valuable by-products, which in itself constitutes a big industry. The exploitation of the limitless resources of the sea will bring material prosperity to the people of the Orissa coast. The activities of chief centres of salt production have been mentioned in an appropriate Section of this Chapter.

4. Fishery is another promising cottage industry of Orissa capable of immense development. With 300 miles of seaboard, 500 square miles of lakes and estuaries and the extensive number of tanks, water courses and rivers in the inland area, fishery has a great future to be organized as a large scale industry as well as a lucrative cottage industry throughout the State. The value of this industry rests not only on the economic prosperity which it will bring to those employed in the industry, but also in being the source of an important item of diet with protective and nutritional elements. The extent and importance of the existing industry has been discussed in Section IV.

5. Among other cottage industries of importance are carpentry, blacksmithy, pottery, oil pressing, roap making, gur making, leather, brass and bell-metal-industry, work in precious metals, horns and ivory, manufacture of bidi, soap, mats, bricks, tiles and a vast number of

other industries discussed in earlier Sections of this Chapter.

Medium Industries

6. The last decade is noteworthy for ushering in a number of medium scale industries in Orissa. A cold storage plant was set up by the Government with capacity of 15 thousand maunds, which has proved not only a profitable concern but a useful institution. A re-rolling mill has been established at Cuttack recently for manufacture of structural parts and iron wares. The glass factory at Barang (Cuttack) has now expanded its scope and capacity to manufacture glassware of improved quality and larger quantity. Manufacture of fire bricks, stone wares, pipes, ceramic wares, such as, clossets and washing basins are also being done at Barang.

7. There are nearly 93 rice mills in the State, more than one-third of which are located in district Balasore alone. Other medium-sized industries of importance in the State are engineering workshops at Cuttack and Balasore with electrically operated tools and implements, printing presses mostly at Cuttack, electrical generating stations the largest of which is located in Chaudwar (Cuttack) with production capacity of 5,000 K. Ws., ice factory in Cuttack, sugar factories in Rayaghada and Aska and distilleries n Koraput, Ganjam and Sambalpur districts. The Kalinga Refrigerator Corporation at Cuttack is manufacturing various kinds of steel furniture and office equipments as well as refrigerators.

Heavy Industries

8. The last decade will also be a memorable period for the introduction of heavy industries in the State. In November 1949, the most important heavy industry of the State, namely, the Orissa Textile Mills was established which now has 50 thousand spindles and 864 looms. It is a prosperous and well-established business now and has helped tiding over the country's difficulty in the matter of textile shortage. The Orient Paper Mills at Brajrajnagar (Sambalpur) is another important large scale industry of the State. Recently, it has increased its capacity of production which is now rated at 30 thousand tons per annum. The Orissa Cement Factory at Rajgangpur (Sundargarh) has a capacity of 500 tons of cement per day, which went into production in 1951. The vegetable ghee factory at Chatrapur, established at a cost of Rs. 30 lakhs, has been successfully producing vegetable ghee, refined oil and soap.

9. Although up till now a comparatively small number of concerns of the category of heavy industries has been established in Orissa, there is the prospect of many more such concerns coming to existence in near future. Negotiations are going on for putting up a Steel Corporation, an aluminium plant, 4 cotton textile mills, another paper mill, a jute mill, a tractor factory, a rayon factory, a coal distillation plant, an alloy steel foundry and many more such industries. But the times ahead are uncertain, and it is not known whether a great slump or a great war is coming, so as to influence the course of industrialization in an effective manner.

Mining Industry

10. An industry of potential magnitude is the mining industry of Orissa. The State contains extensive ore deposits of iron, manganese, bauxite, chromite and a number of other minerals of great industrial value. Coal deposits are found in abundance not far from the site of important minerals. Exploitation of minerals has thus a great future in Orissa. Although the present activities in mineral production are limited, prospecting and mining in more extensive scale and under a systematic plan is bound to increase the prosperity of the State. Haphazard

mining of ore bodies with an eye for immediate gains may lead to the rapid depletion and waste of the valuable deposits. The existing leases cover an area of 184 square miles, out of which manganese accounts for nearly 70 square miles. Iron comes next with 20 square miles and iron and manganese together about 45 square miles. Limestone leases cover 18 square miles and coal 15 square miles. Other minerals occupy smaller areas.

LIST OF FACTORIES

11. A rough idea regarding the extent and nature of industries in the State may be formed by glancing over the list of factories existing at present. Appendix IV appearing towards the end of this Volume gives a list of factories registered under the Factories Act and existing towards the close of 1951. This shows that there were 370 factories in Orissa, although, according to departmental figures, the registered factories numbered 349 in 1951, and 410 in 1952. Out of these 370 factories, 93 are rice milling and 125 are bidi-making factories, constituting 25 per cent and 34 per cent respectively of the total number. Thus these two types of factories account for 59 per cent of the total registered factories in Orissa. Rice milling is such an important industry in Balasore that out of 48 registered factories in that district, as many as 40 are rice mills. Equally important for Sambalpur is bidi-making, as there are 99 bidi factories out of the total number of 126 factories in that district. Printing is an important industry of Cuttack. The position with regard to other industries may be seen in Appendix IV.

ELECTRICITY

12. The development of modern industries is dependent on abundant supply of electrical energy. Its multi-purpose character makes it indispensable in the present age not only for household necessities, cottage industries and heavy industries but also for stabilising agriculture even when there may be failure of monsoons. In fact, the quantity of production and consumption of electrical energy serves as an index of the material prosperity of a particular country in these days. On this basis, t will be possible to measure Orissa's glaring backwardness in the material field in comparison with other countries. The per capita annual production of electricity * is as high as 5,257 units in Norway, 4,097 units n Canada, 2,749 units in Sweden, 2,399 units in U. S. A., 1,186 units in United Kingdom and 488 units in Japan. But in India, the annual production of electrical energy is so low as 16 units per head, while in Orissa it is less than one unit ! It is not that Orissa or in fact India has poor limit of potential power resources, for up til: now India has hardly developed 2 per cent of its resources in this direction. The chief source of cheap and abundant electrical power is coal and water, both of which are available in abundance in Orissa. Orissa's total estimated coal reserve of 240 million tons, and her great rivers with extensive catchment areas offer vast scope for the generation of thermal and hydro-electric power of unknown magnitude. The hydro-electric potentiality of Orissa's rivers has not yet been completely surveyed, but it is estimated that the Mahanadi alone, when fully harnessed, may yield the enormous power of 4 million K. Ws.

13. The supply of electrical power in Orissa is being organised under long-term and short-term projects. Under the latter, a few thermal power stations and other minor stations have been established during the last decade. The long-term projects relate to the development of Hirakud hydro-electric scheme and the Machkund scheme which will

* Power Engineer, Vol. 3, No. 2, April 1953, page 97.

supply power to the northern and southern parts of the State respectively. The total ultimate effective capacity of the Hirakud project is estimated to be 2 lakh K.Ws. The Machkund scheme which is a joint enterprise between the Governments of Orissa and Madras will ultimately generate more than 1 lakh K.Ws. of which 30 per cent will be available for Orissa. On the face of these prospects the problem for Orissa is not the availability of cheap and abundant power but of creating sufficient field and load for the utilization of the enormous power to be shortly available. Capital and enterprise, which have always been shy 'n Orissa, will now be encouraged to lead the way to extensive industrialization. Moreover, the prospect of cheap power, coupled with the availability of raw materials, will attract industrialists from outside the State, and industries will tend to come gravitating down to Orissa, just like her great rivers wending their way down to the sea.

Balanced Development of Resources

14. The non-agricultural population of Orissa which constitutes a small fraction, namely, a fifth of the total population, has to play an important role in building up a prosperous State and in solving atleast some of the complicated problems of population. The tradition of the people and the overwhelming preponderance of rural population in Orissa will ensure agriculture as the mainstay of the State's economy but the way to advancement on modern lines and attainment of wealth and power will rest with the non-agricultural population, to be achieved mainly through a process of industrialization on sound lines. Apart from helping to induce the productivity of labour and create a state of abundance, industrialization will lead to the control of the present high birth rate in an atmosphere of new pattern of living. Corresponding decline in mortality will follow suit, and with this, a vital problem of population will be solved. The present industrial backwardness is a challenge to the constructive energy, the efficiency and the statesmanship of the Government and the people as a whole. It is however, encouraging to find the evidence of increasing amount of realization and initiative in various directions of industrial activity. But industrialization has its own limitations, and an indiscreminate and haphazard plan of industrialization may result in mal-adjustment between resources and population, leading ultimately to chaos. The solution lies not only in developing agriculture and industry in correct proportions, but also in striking a balance between large scale industries and development of cottage industries. The goal of Orissa's industrial development should be not only to exploit the colossal wealth of minerals and other raw materials, but to work them into finished goods ready for consumption. Cottage industries may play an effective role in this aspect, as they do in Japan. Thus, the necessity of a balanced development of all the resources, agricultural and non-agricultural, is indispensable.

15. Equally indispensable is the necessity of speeding up the development. Every decade that Orissa tarries in its industrial development, there is the danger that the growth of population will lower by that much the material prosperity or the standard of living of the people. If this is to be averted, development of agriculture and industries of all kinds, cottage, medium and heavy, must proceed at a pace and in volume hitherto unknown. Either an effort must be made on a scale hitherto unthought of, or a state of perpetual backwardness and comparative poverty in relation to other States in India must be helplessly accepted.

Subsidiary Table

5·1—Non-agricultural classes per 1,000 persons of general population; number in each class and employees and independent workers per 10,000 self-supporting

Number per 10,000 persons of all non-agricultural

Natural division and district	Non-agricultural classes per 1,000 persons of general population	Total			V	VI
		Self-supporting persons	Non-earning dependants	Earning dependants	Production (other than cultivation)	Commerce
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA	**207**	**3,157**	**5,975**	**868**	**3,055**	**1,404**
3.33 Orissa Inland Division	**173**	**3,139**	**5,697**	**1,164**	**3,436**	**1,108**
5.11 Orissa Coastal Division	**248**	**3,173**	**6,206**	**621**	**2,737**	**1,651**
Cuttack	251	3,295	6,009	696	2,578	1,411
Balasore	148	3,369	6,065	566	2,473	1,352
Puri	213	3,261	6,164	575	3,402	1,845
Sambalpur	208	3,895	4,693	1,412	4,380	937
Ganjam	339	2,906	6,516	578	2,513	1,983
Agency	*193*	*2,906*	*6,488*	*606*	*1,281*	*3,197*
Plains	*355*	*2,906*	*6,517*	*577*	*2,586*	*1,911*
Koraput	227	2,133	6,867	1,000	1,936	1,075
Dhenkanal	163	3,173	5,848	979	4,592	1,041
Keonjhar	101	3,449	6,286	265	3,891	869
Phulbani	210	3,182	6,354	464	3,509	1,786
Bolangir	173	3,159	5,250	1,591	3,936	987
Sundargarh	132	3,427	5,253	1,320	3,476	1,066
Kalahandi	156	3,006	5,199	1,795	2,895	1,163
Mayurbhanj	128	3,586	5,404	1,010	3,744	838
5·1(a)—Rural						
ORISSA	**180**	**3,129**	**5,926**	**945**	**3,360**	**1,276**
3.33 Orissa Inland Division	**155**	**3,139**	**5,630**	**1,231**	**3,700**	**1,001**
5.11 Orissa Coastal Division	**210**	**3,120**	**6,194**	**686**	**3,053**	**1,524**
Cuttack	215	3,241	5,937	822	2,857	1,264
Balasore	120	3,390	5,990	620	2,711	1,104
Puri	177	3,091	6,262	647	4,024	1,812
Sambalpur	181	3,936	4,469	1,595	4,874	710
Ganjam	297	2,908	6,526	566	2,678	1,887
Agency	*193*	*2,906*	*6,488*	*606*	*1,281*	*3,197*
Plains	*309*	*2,908*	*6,529*	*563*	*2,782*	*1,790*
Koraput	197	2,100	6,923	977	2,106	895
Dhenkanal	146	3,152	5,789	1,059	4,800	971
Keonjhar	94	3,447	6,280	273	4,148	783
Phulbani	203	3,166	6,363	471	3,514	1,813
Bolangir	144	3,208	4,992	1,800	4,449	823
Sundargarh	117	3,297	5,323	1,380	3,888	1,036
Kalahandi	147	2,992	5,142	1,866	3,044	1,123
Mayurbhanj	121	3,587	5,344	1,069	3,926	754
5·1(b)—Urban						
ORISSA	**860**	**3,297**	**6,215**	**488**	**1,549**	**2,036**
3.33 Orissa Inland Division	**801**	**3,138**	**6,141**	**721**	**1,693**	**1,816**
5.11 Orissa Coastal Division	**897**	**3,384**	**6,255**	**361**	**1,470**	**2,156**
Cuttack	893	3,519	6,317	164	1,405	2,029
Balasore	860	3,296	6,330	374	1,626	2,237
Puri	926	3,907	5,792	301	1,041	1,973
Sambalpur	848	3,687	5,844	469	1,834	2,104
Ganjam	894	2,895	6,472	633	1,786	2,406
Agency	..	..	..	..	..	..
Plains	*894*	*2,895*	*6,472*	*633*	*1,786*	*2,406*
Koraput	880	2,299	6,586	1,115	1,088	1,971
Dhenkanal	670	3,309	6,227	464	3,256	1,490
Keonjhar	562	3,468	6,345	187	1,249	1,749
Phulbani	815	3,519	6,157	324	3,405	1,234
Bolangir	809	2,972	6,234	794	1,977	1,614
Sundargarh	661	4,228	4,819	953	938	1,250
Kalahandi	813	3,188	5,936	876	965	1,685
Mayurbhanj	873	3,575	6,304	121	973	2,118

5 Series

sub-class per 10,000 persons of all non-agricultural classes ; and number of employers persons of all non-agricultural classes.

classes		Number per 10, 000 self-supporting persons of all non-agricultural classes				
VII	VIII					
Transport	Other services and miscellaneous sources	Employers	Employees	Independent workers	Others	Natural division and district
(8)	(9)	(10)	(11)	(12)	(13)	(1)
256	**5,285**	**118**	**2,702**	**6,766**	**414**	**ORISSA**
180	**5,276**	**130**	**2,611**	**6,880**	**379**	**3.33 Orissa Inland Division**
318	**5,294**	**108**	**2,778**	**6,672**	**442**	**5.11 Orissa Coastal Division**
302	5,709	178	3,239	6,101	482	Cuttack
402	5,773	149	3,292	5,709	850	Balasore
436	4,317	59	2,749	6,789	403	Puri
264	4,419	152	2,585	7,059	204	Sambalpur
24	5,280	32	1,942	7,767	259	Ganjam
8	*5,514*	*10*	*1,462*	*8,400*	*128*	*Agency*
237	*5,266*	*33*	*1,970*	*7,730*	*267*	*Plains*
106	6,883	40	2,895	6,800	265	Koraput
196	4,171	118	3,225	6,356	301	Dhenkanal
91	5,149	45	2,459	7,086	410	Keonjhar
55	4,650	96	2,151	7,651	102	Phulbani
327	4,750	223	2,163	7,306	308	Bolangir
320	5,138	331	2,760	6,477	432	Sundargarh
75	5,867	145	2,236	7,417	202	Kalahandi
180	5,238	73	3,032	5,494	1,401	Mayurbhanj
						5·1—(a) Rural
176	**5,188**	**112**	**2,376**	**7,160**	**352**	**ORISSA**
106	**5,193**	**122**	**2,390**	**7,157**	**331**	**3.33 Orissa Inland Division**
239	**5,184**	**102**	**2,364**	**7,163**	**371**	**5.11 Orissa Coastal Division**
264	5,615	156	2,820	6,617	407	Cuttack
338	5,847	186	3,039	5,865	910	Balasore
274	3,890	61	2,189	7,453	297	Puri
130	4,286	127	2,237	7,456	180	Sambalpur
145	5,290	25	1,605	8,193	177	Ganjam
8	*5,514*	*10*	*1,462*	*8,400*	*128*	*Agency*
155	*5,273*	*26*	*1,615*	*8,178*	*181*	*Plains*
56	6,943	29	2,689	7,161	121	Koraput
167	4,062	122	3,101	6,554	223	Dhenkanal
79	4,990	44	2,297	7,353	306	Keonjhar
43	4,630	100	2,117	7,690	93	Phulbani
66	4,662	210	1,801	7,721	268	Bolangir
300	4,776	382	2,504	6,793	321	Sundargarh
70	5,763	149	2,092	7,612	147	Kalahandi
166	5,154	67	2,902	5,646	1,385	Mayurbhanj
						5·1—(b) Urban
650	**5,765**	**148**	**4,229**	**4,921**	**702**	**ORISSA**
671	**5,820**	**180**	**4,071**	**5,050**	**699**	**3.33 Orissa Inland Division**
638	**5,736**	**132**	**4,309**	**4,855**	**704**	**5.11 Orissa Coastal Division**
461	6,105	262	4,862	4,103	773	Cuttack
629	5,508	11	4,217	5,142	630	Balasore
1,052	5,934	55	4,432	4,794	719	Puri
958	5,104	286	4,503	4,875	336	Sambalpur
570	5,238	61	3,430	5,888	621	Ganjam
..	..	..	..	..	..	*Agency*
570	*5,238*	*61*	*3,430*	*5,888*	*621*	*Plains*
360	6,581	90	3,833	5,155	922	Koraput
379	4,875	90	3,988	5,141	781	Dhenkanal
213	6,789	49	4,122	4,347	1,482	Keonjhar
304	5,057	38	2,777	6,925	260	Phulbani
1,321	5,088	279	3,656	5,592	473	Bolangir
444	7,368	86	3,994	4,956	964	Sundargarh
143	7,207	85	3,988	5,052	875	Kalahandi
399	6,510	180	5,010	3,177	1,633	Mayurbhanj

5·2—Livelihood class V (Production other than cultivation). Number per 10,000 persons of class V who are employers, employees and independent workers; secondary means of

Natural division and district	Number per 10,000 of livelihood class V			Number per 10,000 self-supporting persons of livelihood class V			Number per 10,000 of livelihood class V					
							Cultivation of owned land		Cultivation of unowned land		Employment as cultivating labourer	
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA	**3,252**	**5,682**	**1,066**	**233**	**1,422**	**8,345**	**371**	**121**	**72**	**33**	**124**	**201**
3.33 Orissa Inland Dn.	**3,220**	**5,380**	**1,400**	**250**	**1,668**	**8,082**	**378**	**143**	**73**	**42**	**108**	**305**
5.11 Orissa Coastal Dn.	**3,287**	**5,997**	**716**	**217**	**1,169**	**8,614**	**364**	**98**	**71**	**24**	**140**	**93**
Cuttack ..	3,545	5,695	760	351	1,345	8,304	308	102	62	30	132	77
Balasore ..	3,877	5,443	680	290	1,622	8,088	672	144	122	23	88	46
Puri ..	3,217	6,081	702	135	1,102	8,763	407	92	98	17	157	100
Sambalpur ..	3,686	4,593	1,721	198	1,121	8,681	495	195	143	57	108	236
Ganjam ..	2,851	6,439	710	63	779	9,158	295	83	43	23	148	138
Agency ..	*2,805*	*5,677*	*1,518*	*63*	*669*	*9,268*	*35*	*10*	*13*	*20*	*28*	*689*
Plains ..	*2,852*	*6,462*	*686*	*63*	*782*	*9,155*	*302*	*85*	*44*	*23*	*152*	*122*
Koraput ..	2,160	6,499	1,341	155	1,341	8,504	60	88	15	110	101	280
Dhenkanal ..	3,049	6,024	927	164	3,283	6,553	705	212	36	8	68	224
Keonjhar ..	3,694	5,996	310	100	1,717	8,183	426	96	16	5	86	26
Phulbani ..	3,335	6,132	533	242	1,621	8,137	579	45	58	9	120	132
Bolangir ..	3,156	4,883	1,961	429	1,019	8,552	205	119	85	49	36	354
Sundargarh ..	3,335	5,122	1,543	748	1,891	7,361	328	249	76	30	28	281
Kalahandi ..	3,076	5,404	1,520	336	849	8,815	70	50	27	38	78	278
Mayurbhanj ..	3,382	5,098	1,520	123	2,796	7,081	525	145	81	20	334	792

5·2 (a)—Livelihood class V (Production other than cultivation). Number per 10,000 persons of livelihood class V in each sub-class ; number per 10,000 self-supporting persons of livelihood class V who are employers, employees and independent workers.

Rural and Urban

State and natural division	Number per 10,000 of livelihood class V			Number per 10,000 self-supporting persons of livelihood class V who are—		
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA—						
Rural	3,267	5,627	1,106	224	1,369	8,407
Urban	3,097	6,262	641	342	2,023	7,635
3.33 Orissa Inland Division—						
Rural	3,233	5,333	1,434	237	1,638	8,125
Urban	3,033	6,050	917	444	2,128	7,428
5.11 Orissa Coastal Division—						
Rural	3,304	5,950	746	210	1,079	8,711
Urban	3,137	6,396	467	280	1,958	7,762

livelihood class V in each sub-class ; number per 10,000 self-supporting persons of livelihood livelihood of 10,000 persons of livelihood class V.

whose secondary means of livelihood is—

Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources		Total self-supporting persons in livelihood class V in 1951 Census	Natural division and district
Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants		
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(1)
63	**16**	**98**	**395**	**68**	**91**	**9**	**4**	**123**	**203**	**301,429**	**ORISSA**
39	**16**	**92**	**527**	**33**	**96**	**6**	**2**	**116**	**269**	**152,573**	**3.33 Orissa Inland Dn.**
88	**16**	**104**	**257**	**105**	**86**	**11**	**7**	**130**	**134**	**148,856**	**5.11 Orissa Coastal Dn.**
109	24	91	241	198	92	18	10	189	185	58,112	Cuttack
111	5	111	179	50	67	7	1	142	215	15,656	Balasore
87	17	116	308	39	111	12	5	53	52	36,724	Puri
32	33	139	850	27	94	5	2	129	254	43,708	Sambalpur
55	12	105	253	67	69	3	7	119	125	39,471	Ganjam
10	*59*	..	*51*	*139*	*337*	..	..	*58*	*352*	*1,107*	*Agency*
57	*10*	*108*	*259*	*65*	*61*	*4*	*7*	*121*	*119*	*38,364*	*Plains*
17	3	109	339	79	115	1	..	128	406	12,049	Koraput
141	9	56	176	15	141	18	2	116	155	19,190	Dhenkanal
93	3	89	91	16	10	9	..	101	79	8,549	Keonjhar
7	73	74	132	66	23	12	1	111	118	11,250	Phulbani
7	3	75	1,096	26	150	6	3	57	187	19,733	Bolangir
10	..	109	458	21	75	3	2	128	448	8,439	Sundargarh
1	..	..	484	30	102	3	2	115	566	11,913	Kalahandi
36	2	111	272	17	27	..	1	158	261	16,635	Mayurbhanj

5·3—Livelihood class VI (Commerce). Number per 10,000 persons of livelihood class VI in each employers, employees and independent workers; secondary means of

Natural division and district	Number per 10,000 of livelihood class VI			Number per 10,000 self-supporting persons of livelihood class VI			Number per 10,000 of livelihood class VI					
							Cultivation of owned land		Cultivation of unowned land		Employment as cultivating labourer	
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning de pu da e
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**3,253**	**6,031**	**716**	**234**	**550**	**9,216**	**260**	**88**	**64**	**33**	**122**	**114**
3.33 Orissa Inland Dn.	**3,079**	**5,993**	**928**	**291**	**704**	**9,005**	**203**	**96**	**45**	**47**	**70**	**153**
5.11 Orissa Coastal Dn.	**3,351**	**6,052**	**597**	**204**	**472**	**9,324**	**292**	**84**	**75**	**26**	**152**	**92**
Cuttack ..	3,596	5,870	534	479	993	8,528	264	74	77	18	134	63
Balasore ..	3,380	6,029	591	394	785	8,821	590	158	63	8	55	29
Puri ..	3,398	6,041	561	10	196	9,794	525	61	89	20	107	70
Sambalpur ..	3,768	5,313	919	549	1,057	8,394	299	101	95	27	75	163
Ganjam ..	3,086	6,247	667	3	35	9,962	212	84	62	36	198	132
Agency ..	*3,014*	*6,420*	*566*	..	*7*	*9,993*	*22*	*15*	*22*	..	*14*	*7*
Plains ..	*3,093*	*6,230*	*677*	*3*	*38*	*9,959*	*231*	*90*	*66*	*40*	*216*	*144*
Koraput ..	2,048	6,781	1,171	35	176	9,789	54	188	17	145	74	144
Dhenkanal ..	3,287	5,872	841	329	689	8,982	449	120	39	20	48	172
Keonjhar ..	3,446	6,144	410	..	292	9,708	441	116	8	4	35	39
Phulbani ..	3,065	6,411	524	27	251	9,722	229	46	44	4	121	86
Bolangir ..	3,344	5,755	901	429	1,169	8,402	142	47	63	26	22	115
Sundargarh ..	3,146	5,945	909	705	1,294	8,001	255	168	58	24	28	151
Kalahandi ..	3,265	5,158	1,577	285	677	9,038	62	34	22	68	70	311
Mayurbhanj ..	3,344	5,943	713	312	1,101	8,587	338	41	52	2	164	250

5·3 (a)—Livelihood class VI (Commerce). Number per 10,000 persons of livelihood class VI in each sub-class; number per 10,000 self-supporting persons of livelihood class VI who are employers, employees and independent workers.

Rural and Urban

State and natural division	Number per 10,000 of livelihood class VI			Number per 10,000 self-supporting persons of livelihood class VI who are—		
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA—						
Rural	3,246	5,986	768	199	432	9,369
Urban	3,277	6,170	553	340	913	8,747
3.33 Orissa Inland Division— ..						
Rural	3,115	5,851	1,034	249	611	9,140
Urban	2,948	6,508	544	456	1,061	8,483
5.11 Orissa Coastal Division— ..						
Rural	3,323	6,066	611	172	333	9,495
Urban	3,429	6,015	556	293	855	8,852

sub-class ; number per 10,000 self-supporting persons of livelihood class VI who are livelihood of 10,000 persons of livelihood class VI.

whose secondary means of livelihood is—

Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources		Total self-supporting persons in livelihood class VI in 1951 Census	Natural division and district
Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants		
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(1)
115	**18**	**80**	**104**	**96**	**206**	**7**	**7**	**130**	**145**	**138,539**	**ORISSA**
67	**10**	**49**	**117**	**69**	**305**	**3**	**5**	**114**	**195**	**47,035**	**3.33 Orissa Inland Dn.**
141	**22**	**97**	**96**	**111**	**151**	**9**	**9**	**139**	**117**	**91,504**	**5.11 Orissa Coastal Dn.**
159	25	157	82	125	122	13	7	172	143	32,254	Cuttack
162	16	39	84	98	117	4	1	112	178	7,462	Balasore
196	21	54	129	110	183	3	5	62	72	21,037	Puri
54	6	70	127	120	339	7	2	90	154	9,552	Sambalpur
80	19	75	84	93	152	10	14	172	146	33,718	Ganjam
12	*3*	*3*	*7*	..	*14*	*1*	—	*249*	*520*	*2,967*	*Agency*
86	*21*	*82*	*92*	*102*	*166*	*11*	*15*	*164*	*109*	*30,751*	*Plains*
42	9	50	172	52	309	3	2	97	202	6,342	Koraput
248	27	55	194	62	137	4	6	97	165	4,687	Dhenkanal
279	8	43	40	106	97	2	11	79	95	1,780	Keonjhar
19	—	48	57	76	165	1	—	228	166	5,261	Phulbani
22	10	32	77	78	487	4	10	54	128	5,244	Bolangir
30	13	66	116	99	321	1	..	93	116	2,441	Sundargarh
12	17	38	130	—	723	1	18	80	276	5,081	Kalahandi
13	9	71	114	106	143	6	1	102	153	3,680	Mayurbhanj

5·4—Livelihood class VII (Transport). Number per 10,000 persons of livelihood class VII in employers, employees and independent workers; secondary means of livelihood

Natural division and district	Number per 10,000 of livelihood class VII			Number per 10,000 self-supporting persons of livelihood class VII			Number per 10,000 of livelihood class VII					
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers	Cultivation of owned land		Cultivation of unowned land		Employment as cultivating labourer	
							Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**2,881**	**6,625**	**494**	**51**	**6,611**	**3,338**	**291**	**54**	**63**	**21**	**28**	**60**
3.33 Orissa Inland Dn.	**3,129**	**6,267**	**604**	**101**	**6,676**	**3,223**	**320**	**58**	**44**	**25**	**16**	**103**
5.11 Orissa Coastal Dn.	**2,764**	**6,795**	**441**	**24**	**6,576**	**3,400**	**277**	**53**	**72**	**19**	**33**	**40**
Cuttack ..	2,892	6,544	564	51	5,955	3,994	225	63	65	10	37	30
Balasore ..	3,437	6,267	296	31	7,042	2,927	405	41	62	6	20	14
Puri ..	2,724	6,883	393	..	7,067	2,933	356	44	67	21	21	35
Sambalpur ..	3,309	6,132	559	122	8,368	1,510	327	48	71	18	17	90
Ganjam ..	2,248	7,367	385	..	6,730	3,270	196	53	94	38	49	77
Agency ..	..	*10,000*	..	..	..	..	..	..	..	..	..	..
Plains ..	*2,253*	*7,362*	*385*	..	*6,730*	*3,270*	*196*	*53*	*94*	*38*	*49*	*77*
Koraput ..	1,923	7,053	1,024	..	6,017	3,983	26	218	20	111	27	85
Dhenkanal ..	4,020	5,462	518	93	7,412	2,495	109	56	63	8	30	71
Keonjhar ..	2,362	7,343	295	156	2,969	6,875	258	37	..	..	55	55
Phulbani ..	2,738	6,502	760	..	903	9,097	228	57	95	..	..	76
Bolangir ..	2,866	6,661	473	114	5,276	4,610	91	12	19	23	2	23
Sundargarh ..	3,603	5,989	408	60	3,842	6,098	172	39	9	4	4	168
Kalahandi ..	3,284	5,635	1,081	332	6,979	2,689	119	..	..	..	20	278
Mayurbhanj ..	3,483	5,905	612	61	8,194	1,745	574	38	80	4	25	258

5·4 (a)—Livelihood class VII (Transport). Number per 10,000 persons of livelihood class VII in each sub-class; number per 10,000 self-supporting persons of livelihood class VII who are employers, employees, and independent workers.

Rural and Urban

State and natural division	Number per 10,000 of livelihood class VII			Number per 10,000 self-supporting persons of livelihood class VII who are—		
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ORISSA—						
Rural	2,821	6,537	642	64	6,283	3,653
Urban	2,961	6,744	295	34	7,028	2,938
3.33 Orissa Inland Division—						
Rural	3,324	5,887	789	106	6,720	3,174
Urban	2,925	6,664	411	96	6,622	3,282
5.11 Orissa Coastal Division—						
Rural	2,619	6,798	583	42	6,059	3,899
Urban	2,982	6,790	228	..	7,257	2,743

each sub-class ; number per 10,000 self-supporting persons of livelihood class VII who are of 10,000 persons of livelihood class VII.

whose secondary means of livelihood is—

Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources		Total self-supporting persons in livelihood class VII in 1951 Census	Natural division and district
Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants		
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(1)
92	**14**	**97**	**104**	**44**	**74**	**20**	**33**	**78**	**132**	**22,340**	**ORISSA**
68	**4**	**115**	**117**	**25**	**64**	**20**	**51**	**24**	**182**	**7,785**	**3.33 Orissa Inland Dn.**
103	**19**	**89**	**98**	**53**	**79**	**19**	**24**	**103**	**109**	**14,555**	**5.11 Orissa Coastal Dn.**
101	19	153	159	64	124	32	33	106	125	5,543	Cuttack
154	11	24	32	29	11	17	18	69	163	2,255	Balasore
114	28	76	78	14	85	8	31	43	71	3,986	Puri
46	3	31	84	15	41	36	73	28	204	2,365	Sambalpur
64	11	40	63	93	38	15	6	190	99	2,771	Ganjam
..	..	..	..	..	..	..	..	..	..	..	*Agency*
64	*11*	*40*	*63*	*94*	*38*	*15*	*6*	*190*	*99*	*2,771*	*Plains*
13	..	3	137	20	69	..	10	23	394	590	Koraput
261	..	254	145	19	104	45	30	34	104	1,078	Dhenkanal
74	55	37	..	240	18	18	18	..	111	128	Keonjhar
..	..	589	399	114	57	19	114	38	57	144	Phulbani
33	2	266	139	12	127	10	21	6	126	1,486	Bolangir
9	13	43	30	9	9	9	21	30	124	838	Sundargarh
60	10	50	129	40	10	..	397	10	258	331	Kalahandi
144	4	34	152	38	30	17	8	42	118	825	Mayurbhanj

5·5—Livelihood class VIII (other services and miscellaneous sources). Number per persons of livelihood class VIII who are employers, employees and independent workers;

Natural division and district	Number per 10,000 of livelihood class VIII			Number per 10,000 of self-supporting persons of livelihood class VIII				Number per 10,000 of livelihood class VIII					
								Cultivation of owned land		Cultivation of unowned land		Employment as cultivating labourer	
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers	Others	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
ORISSA ..	**3,091**	**6,097**	**812**	**19**	**3,906**	**5,276**	**799**	**228**	**82**	**43**	**20**	**56**	**156**
3.33 Orissa Inland Dn.	**3,099**	**5,822**	**1,079**	**16**	**3,506**	**5,751**	**727**	**197**	**71**	**27**	**21**	**36**	**243**
5.11 Orissa Coastal Dn.	**3,083**	**6,327**	**590**	**21**	**4,240**	**4,880**	**859**	**254**	**91**	**56**	**19**	**73**	**85**
Cuttack ..	3,128	6,159	713	10	4,714	4,387	889	257	142	49	21	50	46
Balasore ..	3,145	6,325	530	21	4,521	3,881	1,577	335	58	69	20	41	27
Puri ..	3,291	6,210	499	27	4,784	4,264	925	315	72	85	24	76	83
Sambalpur ..	4,164	4,574	1,262	36	3,889	5,643	432	421	96	58	21	50	251
Ganjam ..	2,892	6,617	491	30	3,094	6,383	493	180	45	45	14	106	152
Agency ..	*2,871*	*6,710*	*419*	*4*	*2,527*	*7,233*	*236*	*27*	*47*	*4*	*5*	*16*	*64*
Plains	*2,893*	*6,612*	*495*	*32*	*3,129*	*6,330*	*509*	*190*	*45*	*47*	*15*	*112*	*158*
Koraput ..	2,141	6,981	878	8	3,698	5,910	384	34	65	11	41	34	151
Dhenkanal ..	3,241	5,666	1,093	18	3,563	5,712	707	611	186	26	7	39	235
Keonjhar ..	3,284	6,510	206	5	3,467	5,691	837	253	38	22	4	80	12
Phulbani ..	3,117	6,497	386	6	3,309	6,461	224	165	31	16	5	51	94
Bolangir ..	3,143	5,351	1,506	13	3,139	6,196	652	107	47	18	13	18	483
Sundararh ..	3,536	5,152	1,312	14	3,517	5,655	814	225	136	19	10	33	236
Kalahandi ..	2,916	5,101	1,983	11	3,235	6,398	356	52	19	14	20	19	472
Mayurbhanj ..	3,774	5,519	707	8	3,293	4,158	2,541	218	45	61	8	66	222

5·5 (a)—Livelihood class VIII (other services and miscellaneous sources). Number per 10,000 persons of livelihood class VIII in each sub-class; number per 10,000 self-supporting persons of livelihood class VIII who are employers, employees and independent workers.

Rural and Urban

State and natural division	Number per 10,000 of livelihood class VIII			Number per 10,000 self-supporting persons of livelihood class VIII who are—			
	Self-supporting persons	Non-earning dependants	Earning dependants	Employers	Employees	Independent workers	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ORISSA—							
Rural ..	3,022	6,084	894	12	3,472	5,814	702
Urban ..	3,396	6,158	446	46	5,624	3,147	1,183
3.33 Orissa Inland Division—							
Rural ..	3,073	5,793	1,134	12	3,206	6,132	650
Urban ..	3,252	5,994	754	39	5,184	3,618	1,159
5.11 Orissa Coastal Division—							
Rural ...	2,975	6,348	677	11	3,721	5,517	751
Urban ...	3,475	6,250	275	50	5,853	2,901	1,196

10,000 persons of livelihood class VIII in each sub-class ; number per 10,000 self-supporting secondary means of livelihood of 10,000 persons of livelihood class VIII.

whose secondary means of livelihood is—

Rent on agricultural land		Production (other than cultivation)		Commerce		Transport		Other services and miscellaneous sources		Total self-supporting persons of livelihood class VIII in 1951 Census	Natural division and district
Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants	Self-supporting persons	Earning dependants		
(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(1)
73	**14**	**61**	**96**	**43**	**51**	**5**	**4**	**155**	**387**	**495,541**	**ORISSA**
45	**12**	**47**	**108**	**28**	**58**	**1**	**4**	**109**	**564**	**225,460**	**3.33 Orissa Inland Dn.**
97	**16**	**72**	**87**	**55**	**46**	**7**	**5**	**193**	**240**	**270,081**	**5.11 Orissa Coastal Dn.**
105	19	91	112	65	66	8	7	210	300	113,537	Cuttack
104	5	73	79	49	27	3	2	179	313	29,637	Balasore
160	34	42	94	41	37	4	2	140	153	47,663	Puri
46	6	82	177	22	41	2	1	144	669	49,811	Sambalpur
51	9	59	51	50	31	9	3	194	185	84,119	Ganjam
26	*20*	*6*	*22*	*10*	*5*	..	..	*67*	*256*	4,875	*Agency*
52	*8*	*62*	*52*	*52*	*32*	*10*	*4*	*202*	*181*	*79,244*	*Plains*
27	32	32	77	34	106	..	11	139	395	42,455	Koraput
192	14	56	200	28	50	3	2	79	399	18,524	Dhenkanal
89	6	33	44	14	3	2	..	93	99	10,034	Keonjhar
24	..	38	34	55	30	1	1	155	191	13,932	Phulbani
12	1	40	130	16	50	1	1	73	781	23,718	Bolangir
14	3	30	85	12	36	1	1	104	805	13,226	Sundargarh
9	1	44	99	30	55	2	2	..	1,315	22,897	Kalahandi
61	4	69	93	28	33	2	..	139	301	25,968	Mayurbhanj

5·6—Comparison of the classification of the population of

Livelihood Class	Classification of Population						
	1951 Census				1931 Census		
	Number per 10,000 of General Population				Number per 10,000 of General Population		
	Total classified population	Self-supporting persons	Non-earning dependants	Earning dependants	Total classified population	Earners	Working dependants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ORISSA							
I	5,953	1,595	3,799	559	253	235	18
II	594	158	367	69	1,407	1,370	37
III	1,231	403	679	149	1,166	917	249
IV	150	45	97	8	39	38	2
V	633	206	360	67	616	522	95
VI	291	95	175	21	200	182	18
VII	53	15	35	3	12	12	...
VIII	1,095	338	668	89	809	497	312
Agricultural Classes ..	7,928	2,201	4,942	785	2,865	2,560	306
Non-Agricultural Classes	2,072	654	1,238	180	1,637	1,213	425
Total ..	10,000	2,855	6,180	965	4,502	3,773	731
3·33 Orissa Inland Division—							
I	6,467	1,762	3,962	743	188	167	21
II	412	111	235	66	1,447	1,397	50
III	1,317	438	685	194	1,485	1,138	347
IV	75	24	44	7	34	33	1
V	594	191	320	83	644	534	110
VI	192	59	115	18	161	147	14
VII	31	10	19	2	9	9	—
VIII	912	283	531	98	747	432	316
Agricultural Classes ..	8,271	2,335	4,926	1,010	3,154	2,735	419
Non-Agricultural Classes	1,729	543	985	201	1,561	1,122	440
Total ..	10,000	2,878	5,911	1,211	4,715	3,857	859
5·11 Orissa Coastal Division—							
I	5,339	1,395	3,605	339	337	322	15
II	811	214	525	72	1,356	1,335	21
III	1,130	363	671	96	751	629	123
IV	240	71	159	10	46	44	2
V	679	223	407	49	580	506	74
VI	409	137	248	24	251	227	24
VII	79	22	54	3	17	16	1
VIII	1,313	405	830	78	889	581	308
Agricultural Classes ..	7,520	2,043	4,960	517	2,490	2,330	161
Non-Agricultural Classes	2,480	787	1,539	154	1,737	1,330	407
Total ..	10,000	2,830	6,499	671	4,227	3,660	568

Orissa by livelihood classes at the 1951 and 1931 Censuses.

Active and Semi-active Workers

1951 Census			1931 Census			
Self-supporting persons	Secondary means of livelihood of self-supporting persons	Secondary means of livelihood of earning dependants	Principal earners	Subsidiary occupation of principal earners	Working dependants	Livelihood Class
(9)	(10)	(11)	(12)	(13)	(14)	(1)
						ORISSA
2,335,636	121,528	222,767	292,983	17,254	22,677	I
231,374	84,260	47,530	1,711,202	98,588	46,829	II
591,074	161,201	416,016	1,144,821	137,657	311,571	III
66,523	35,566	8,763	47,306	14,924	1,925	IV
301,429	225,928	250,126	651,608	198,895	118,262	V
138,539	119,689	98,521	227,030	102,863	22,677	VI
22,340	16,815	7,693	15,128	16,409	368	VII
495,541	319,796	362,070	620,252	220,081	390,018	VIII
3,224,607	402,555	695,076	3,196,312	268,423	383,002	Agricultural Classes
957,849	682,228	718,410	1,514,018	538,248	531,325	Non-Agricultural Classes
4,182,456	1,084,783	1,413,486	4,710,330	806,671	914,327	Total
						3·33 Orissa Inland division
1,404,899	52,404	164,596	117,954	5,100	14,699	I
88,328	24,279	26,455	986,440	58,913	35,536	II
349,260	70,745	317,837	803,435	69,812	245,022	III
19,100	10,679	3,484	23,329	4,452	945	IV
152,573	114,153	165,951	377,061	95,786	77,873	V
47,035	41,202	49,777	103,691	42,239	9,675	VI
7,785	3,600	2,564	6,370	4,391	74	VII
225,460	141,794	234,239	304,727	90,518	222,816	VIII
1,861,587	158,107	512,372	1,931,158	138,277	296,202	Agricultural Classes
432,853	300,749	452,531	791,849	232,934	310,438	Non-Agricultural Classes
2,294,440	458,856	964,903	2,723,007	371,211	606,640	Total
						5·11 Orissa Coastal Division
930,737	69,124	58,171	175,029	12,154	7,978	I
143,046	59,981	21,075	724,762	39,675	11,293	II
241,814	90,456	98,179	341,386	67,845	66,549	III
47,423	24,897	5,279	23,977	10,472	980	IV
148,856	111,775	84,175	274,547	103,109	40,389	V
91,504	78,487	48,744	123,339	60,624	13,002	VI
14,555	13,215	5,129	8,758	12,018	294	VII
270,091	178,002	127,831	315,525	129,563	167,202	VIII
1,363,020	244,448	182,704	1,265,154	130,146	86,800	Agricultural Classes
524,996	381,479	265,879	722,169	305,314	220,887	Non-Agricultural Classes
1,888,016	625,927	448,583	1,987,323	435,460	307,687	Total

5·7 - Territorial distribution of 10,000 self-supporting persons of all industries and services in the State (by divisions).

Natural division and district	All industries and services	0 Primary industries not elsewhere specified	1 Mining and quarrying	2 Processing and manufacture—foodstuffs, textiles, leather and products thereof	3 Processing and manufacture—metals, chemicals and products thereof	4 Processing and manufacture not elsewhere specified	5 Construction and utilities	6 Commerce	7 Transport, storage, and communications	8 Health, Education and public administration	9 Services not elsewhere specified
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA ..	**918,249**	**728**	**122**	**1,423**	**233**	**777**	**389**	**1,509**	**282**	**652**	**3,885**
3·33 Orissa Inland Division ..	**416,458**	**649**	**209**	**1,684**	**331**	**790**	**346**	**1,129**	**226**	**590**	**4,046**
5·11 Orissa Coastal Division ..	**501,791**	**793**	**50**	**1,206**	**152**	**766**	**425**	**1,823**	**329**	**705**	**3,751**
Cuttack ..	199,356	496	56	1,399	143	820	303	1,618	333	833	3,999
Balasore ..	50,336	744	3	1,735	127	501	272	1,482	472	991	3,673
Puri ..	105,002	1,117	89	1,159	170	962	878	2,003	393	651	2,578
Sambalpur ..	103,283	671	22	2,413	286	841	451	925	256	761	3,374
Ganjam ..	155,931	952	27	772	154	626	320	2,162	216	474	4,297
Agency ..	*8,834*	*474*	*14*	*367*	*71*	*326*	*292*	*3,359*	*16*	*503*	*4,578*
Plains ..	*147,097*	*981*	*28*	*796*	*159*	*644*	*321*	*2,091*	*228*	*472*	*4,280*
Koraput ..	59,807	569	..	644	313	487	229	1,061	151	531	6,015
Dhenkanal ..	42,169	1,116	944	1,246	340	905	213	1,111	315	1,012	2,798
Keonjhar ..	19,670	816	312	1,329	409	1,481	261	905	129	399	3,959
Phulbani ..	30,275	1,177	30	1,582	239	688	497	1,738	96	290	3,663
Bolangir ..	48,635	472	2	2,489	267	827	256	1,078	338	387	3,884
Sundargarh ..	23,867	518	367	1,247	559	845	378	1,023	411	640	4,012
Kalahandi ..	39,408	358	..	1,984	244	437	424	1,289	112	340	4,812
Mayurbhanj ..	40,510	356	720	1,347	581	1,102	343	908	225	590	3,828

5·7 (a)—Territorial distribution of 10,000 self-supporting persons of all industries and services in the State (by divisions).

Rural and Urban

State and natural division	All industries and services	0 Primary industries not elsewhere specified	1 Mining and quarrying	2 Processing and manufacture—foodstuffs, textiles, leather and products thereof	3 Processing and manufacture—metals, chemicals and products thereof	4 Processing and manufacture not elsewhere specified	5 Construction and utilities	6 Commerce	7 Transport, storage and communications	8 Health, Education and public administration	9 Services not elsewhere specified
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA—											
Rural ..	766,616	823	144	1,586	246	838	307	1,371	193	468	4,024
Urban ..	156,633	266	14	628	176	481	790	2,176	714	1,549	3,206
3.33 Orissa Inland Division—											
Rural ..	363,642	703	235	1,826	351	826	319	1,027	147	437	4,129
Urban ..	52,816	277	40	707	193	543	532	1,834	769	1,636	3,469
5.11 Orissa Coastal Division—											
Rural ..	397,974	932	62	1,367	148	849	296	1,686	235	497	3,928
Urban ..	103,817	260	..	588	167	450	921	2,350	687	1,505	3,072

5·8—Territorial distribution of 10,000 self-supporting persons in the State, engaged in primary industries not elsewhere specified (by sub-division).

Natural division and district	Total division 0	0.1 Stock raising	0.2 Rearing of small animals and insects	0.3 Plantation industries	0.4 Foresting and woodcutting	0.5 Hunting (including trapping and game propagation)	0.6 Fishing
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ORISSA ..	**728**	**4,447**	**77**	**141**	**1,722**	**9**	**3,604**
3·33 Orissa Inland Division ..	**649**	**4,993**	**145**	**204**	**2,027**	**16**	**2,615**
5·11 Orissa Coastal Division ..	**793**	**4,075**	**31**	**99**	**1,515**	**5**	**4,275**
Cuttack ..	496	4,819	53	105	1,550	..	3,473
Balasore ..	744	918	37	37	195	..	8,813
Puri .	1,117	3,959	26	1	1,049	7	4,958
Sambalpur ..	671	2,967	130	208	1,899	1	4,795
Ganjam ..	952	4,464	19	193	2,238	6	3,080
Agency ..	*474*	*3,842*	*24*	*334*	*3,055*	..	*2,745*
Plains ..	*981*	*4,482*	*19*	*189*	*2,214*	*6*	*3,090*
Koraput ..	569	7,745	120	6	1,727	..	402
Dhenkanal ..	1,116	5,872	113	87	1,664	17	2,247
Keonjhar ..	816	6,910	93	100	1,981	..	916
Phulbani ..	1,177	7,618	90	53	589	..	1,650
Bolangir ..	471	1,788	135	916	2,355	57	4,749
Sundargarh ..	518	4,191	97	202	2,961	81	2,468
Kalahandi ..	358	4,883	517	525	2,601	78	1,396
Mayurbhanj ..	356	2,980	312	48	5,946	..	714

5·8 (a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in primary industries not elsewhere specified (by sub-divisions).

Rural and Urban

State and natural division	Total division 0	0.1 Stock raising	0.2 Rearing of small animals and insects	0.3 Plantation industries	0.4 Foresting and woodcutting	0.5 Hunting (including trapping and game propagation)	0.6 Fishing
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ORISSA—							
Rural ..	822	4,521	82	137	1,740	7	3,513
Urban ..	266	3,330	2	205	1,460	38	4,965
3.33 Orissa Inland Division—							
Rural ..	703	5,121	153	183	1,998	14	2,531
Urban ..	277	2,761	7	581	2,529	55	4,067
5.11 Orissa Coastal Division—							
Rural ..	932	4,107	33	106	1,562	3	4,189
Urban ..	260	3,038	..	..	881	30	5,451

5·9—Territorial distribution of 10,000 self-supporting persons in the State, engaged in mining and quarrying (by sub-divisions).

Natural division and district	Total division 1	1.0 Non-metallic mining and quarrying not otherwise classified	1.1 Coal mining	1.2 Iron ore mining	1.3 Metal mining except iron ore mining	1.4 Crude petroleum and natural gas	1.5 Stone quarrying, clay and sand pits	1.6 Mica	1.7 Salt, saltpetre and saline substances
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA ..	**122**	**100**	**4,056**	**3,035**	**822**	..	**1,598**	..	**389**
3·33 Orissa Inland Division ..	**210**	**13**	**4,913**	**3,886**	**566**	..	**603**	..	**19**
5·11 Orissa Coastal Division ..	**50**	**406**	**1,052**	**52**	**1,719**	..	**5,088**	..	**1,683**
Cuttack ..	56	339	2,282	71	3,743	..	3,565	..	..
Balasore ..	3	..	..	..	5,000	..	4,375	..	625
Puri ..	89	554	..	..	..	..	6,645	..	2,801
Sambalpur ..	22	179	9,643	..	178	..	..	..	..
Ganjam ..	27	282	141	141	..	..	5,704	..	3,732
Agency ..	*14*	*769*	..	*769*	..	..	*5,386*	..	*3,076*
Plains ..	*28*	*266*	*145*	*121*	..	..	*5,714*	..	*3,754*
Koraput ..	..	..	..	..	..	..	..	..	10,000
Dhenkanal ..	944	..	9,945	..	20	..	35	..	..
Keonjhar ..	312	..	..	9,787	147	..	33	..	33
Phulbani ..	30	..	..	..	9,444	..	..	..	556
Bolangir ..	2	5,455	..	1,818	1,818	..	..	..	909
Sundargarh ..	367	..	1,188	..	3,349	..	5,429	..	34
Kalahandi ..	..	..	..	..	..	..	..	..	..
Mayurbhanj ..	720	..	31	9,554	319	..	96	..	..

5·9 (a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in mining and quarrying (by sub-divisions).

Rural and Urban

State and natural division	Total Division 1	1.0 Non-metallic mining and quarrying not otherwise classified	1.1 Coal mining	1.2 Iron ore mining	1.3 Metal mining except iron ore mining	1.4 Crude Petroleum and natural gas	1.5 Stone quarrying, clay and sand pits	1.6 Mica	1.7 Salt, saltpetre and saline substances
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA—									
Rural ..	144	97	4,114	3,093	675	..	1,625	..	396
Urban ..	14	275	1,101	92	8,257	..	275	..	..
3·33 Orissa Inland Division—									
Rural ..	234	6	5,008	3,981	369	..	616	..	20
Urban ..	40	282	1,126	94	8,451	..	47	..	..
5·11 Orissa Coastal Division—									
Rural ..	62	406	1,055	52	1,722	..	5,079	..	1,686
Urban ..	..	..	..	..	..	..	10,000	..	..

5·10—Territorial distribution of 10,000 self-supporting persons in the State, engaged in processing and manufacture of foodstuffs, textiles, leather and products thereof (by sub-divisions).

Natural division and district	Total division 2	2.0 Food industries otherwise unclassified	2.1 Grains and pulses	2.2 Vegetable oil and dairy products	2.3 Sugar industries	2.4 Beverages	2.5 Tobacco	2.6 Cotton textiles	2.7 Wearing apparel (except footwear) and made up textile goods	2.8 Textile industries otherwise unclassified	2.9 Leather, leather products and footwear
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA ..	**1,422**	**213**	**3,353**	**421**	**57**	**71**	**525**	**2,900**	**882**	**1,333**	**245**
3·33 Orissa Inland Division ..	**1,684**	**200**	**2,153**	**434**	**38**	**107**	**660**	**3,821**	**930**	**1,370**	**287**
5·11 Orissa Coastal Division ..	**1,206**	**228**	**4,743**	**408**	**79**	**31**	**367**	**1,832**	**826**	**1,289**	**197**
Cuttack ..	1,399	311	4,729	212	67	42	345	1,441	891	1,799	163
Balasore ..	1,735	234	6,207	126	11	16	527	1,040	689	1,057	93
Puri ..	1,159	98	5,092	601	155	26	33	1,549	1,176	1,060	210
Sambalpur ..	2,413	118	2,421	496	..	166	1,590	2,879	1,889	128	313
Ganjam ..	772	161	3,313	872	81	21	653	3,669	412	480	338
Agency ..	*367*	*123*	*2,932*	*679*	*123*	*62*	*741*	*4,321*	*432*	*309*	*278*
Plains ..	*796*	*162*	*3,323*	*877*	*80*	*20*	*651*	*3,651*	*411*	*485*	*340*
Koraput ..	644	1,271	2,070	309	26	3	135	3,840	693	1,191	462
Dhenkanal ..	1,246	42	3,121	599	232	204	430	3,121	632	1,461	158
Keonjhar ..	1,329	57	1,144	513	80	130	409	3,665	673	1,921	1,408
Phulbani ..	1,582	14	1,526	478	21	19	115	3,951	553	3,273	50
Bolangir ..	2,489	313	2,193	519	75	58	50	6,337	160	88	207
Sundargarh ..	1,247	349	2,970	228	7	252	158	4,837	403	212	584
Kalahandi ..	1,984	40	1,775	266	..	37	32	1,816	224	5,721	89
Mayurbhanj ..	1,347	103	1,045	149	20	11	128	5,456	493	2,454	141

5·10 (a)—Territorial distribution of 10,000 self-supporting persons engaged in processing and manufacture of foodstuffs, textiles, leather and products thereof (by sub-divisions).

Rural and Urban

State and natural division	Total division 2	2.0 Food industries otherwise unclassified	2.1 Grains and pulses	2.2 Vegetable oil and dairy products	2.3 Sugar industries	2.4 Beverages	2.5 Tobacco	2.6 Cotton textiles	2.7 Wearing apparel (except footwear) and made up textile goods	2.8 Textile industries otherwise unclassified	2.9 Leather, leather products and footwear
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA											
Rural ..	1,586	209	3,449	420	58	67	430	2,922	828	1,400	217
Urban ..	628	259	2,171	437	46	134	1,690	2,627	1,538	502	596
3·33 Orissa Inland Division—											
Rural ..	1,825	198	2,183	444	39	102	606	3,826	899	1,434	269
Urban ..	707	228	1,618	236	40	190	1,621	3,742	1,479	238	608
5·11 Orissa Coastal Division—											
Rural ..	1,367	223	4,994	389	83	23	214	1,820	742	1,359	153
Urban ..	588	279	2,508	561	49	100	1,733	1,946	1,574	662	588

5·11—Territorial distribution of 10,000 self-supporting persons in the State, engaged in processing and manufacture—Metals, Chemicals and products thereof (by sub-divisions).

Natural division and district	Total division 3	3.0 Manufacture of metal products otherwise unclassified	3.1 Iron and steel (basic manufacture)	3.2 Non-ferrous metals (basic manufacture	3.3 Transport equipment	3.4 Electrical machinery, apparatus, appliances and supplies	3.5 Machinery (other than electrical machinery) including engineering workshops	3.6 Basic industrial chemicals fertilisers and power alcohol	3.7 Medical and pharmaceutical preparations	3.8 Manufacture of chemical products otherwise unclassified
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA	**233**	**7,458**	**1,144**	**161**	**682**	**239**	**107**	**54**	**20**	**135**
3.33 Orissa Inland Dn.	**331**	**7,692**	**1,518**	**162**	**407**	**95**	**46**	**23**	**9**	**48**
5.11 Orissa Coastal Dn.	**152**	**7,036**	**466**	**160**	**1,178**	**499**	**218**	**110**	**42**	**291**
Cuttack ..	143	5,063	965	262	1,857	1,007	301	189	42	314
Balasore ..	127	6,881	784	548	925	78	125	94	157	408
Puri ..	170	8,492	6	..	257	469	128	61	..	587
Sambalpur ..	286	8,251	75	457	1,071	24	44	34	..	44
Ganjam ..	154	8,410	121	50	1,093	13	213	54	42	4
Agency ..	*171*	*9,524*	*159*	..	..	..	*317*	..	..	..
Plains ..	*159*	*8,380*	*120*	*51*	*1,123*	*13*	*210*	*56*	*43*	/
Koraput ..	313	7,466	2,149	..	59	192	107	11	..	16
Dhenkanal ..	340	8,389	1,172	35	174	..	84	35	7	104
Keonjhar ..	409	9,801	37	..	162	..	..	..	..	..
Phulbani ..	239	9,613	..	..	14	304	..	..	..	69
Bolangir ..	267	4,935	3,741	547	346	177	77	15	46	116
Sundargarh ..	559	5,652	3,463	..	517	232	..	30	38	68
Kalahandi ..	244	9,262	198	73	312	42	10	93	..	10
Mayurbhanj ..	581	7,421	2,256	21	221	34	21	..	..	26

5·11 (a)—Territorial distribution of 10,000 self-supporting persons in the State engaged in processing and manufacture—Metals, Chemicals and products thereof (by sub-divisions).

Rural and Urban

State and natural division	Total division 3	3.0 Manufacture of metal products otherwise unclassified	3.1 Iron and steel (basic manufacture)	3.2 Non-ferrous metals (basic manufacture)	3.3 Transport equipment	3.4 Electrical machinery, apparatus, appliances and supplies	3.5 Machinery (other than electrical machinery) including engineering workshops	3.6 Basic industrial chemicals, fertilisers, and power alcohol	3.7 Medical and pharmaceutical preparations	3.8 Manufacture of chemical products otherwise unclassified
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	10)	(11)
ORISSA—										
Rural ..	245	7,894	1,266	166	315	149	66	35	13	96
Urban ..	176	4,506	316	127	3,170	846	381	185	73	396
3.33 Orissa Inland Division—										
Rural ..	351	7.899	1,620	163	209	35	29	16	9	20
Urban ..	193	5,093	245	147	2,895	844	255	108	10	403
5.11 Orissa Coastal Division—										
Rural ..	148	7,883	498	173	544	396	148	75	22	261
Urban ..	167	4,161	357	115	3,332	847	455	231	110	392

5·12—Territorial distribution of 10,000 self-supporting persons in the State, engaged in processing and manufacture - Not elsewhere specified (by sub-divisions).

Natural division and district	Total division	4.0 Manufacturing industries otherwise unclassified	4.1 Products of petroleum and coal	4.2 Bricks, tiles and other structural clay products	4.3 Cement pipes and other cement products	4.4 Non-metal ic mineral products	4.5 Rubber products	4.6 Wood and wo d products other than furniture and fixtures	4.7 Furniture and fixtures	4.8 Paper and paper products	4.9 Printing and allied industries
	4										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA ..	**777**	**1,862**	..	**305**	**8**	**2,348**	**1**	**5,031**	**217**	**152**	**76**
3.33 Orissa Inland Division ..	**791**	**1,602**	..	**276**	**18**	**2,140**	..	**5,423**	**182**	**330**	**29**
5.11 Orissa Coastal Division ..	**766**	**2,084**	..	**330**	..	**2,526**	**2**	**4,695**	**246**	**1**	**116**
Cuttack ..	820	2,029	..	217	..	3,244	3	3,817	468	1	221
Balasore ..	501	2,691	..	238	..	2,636	..	4,273	150	..	12
Puri ..	962	2,809	..	414	..	1,587	..	5,020	98	2	70
Sambalpur ..	841	1,592	..	153	..	1,444	..	5,215	347	1,248	1
Ganjam ..	626	1,248	..	452	..	2,277	..	5,964	45	..	14
Agency ..	*326*	*1,354*	..	*243*	..	*2,847*	..	*5,556*	..	..	..
Plains ..	*644*	*1,245*	..	*459*	..	*2,259*	..	*5,976*	*46*	..	*15*
Koraput ..	487	1,912	..	151	..	2,660	..	4,758	474	..	45
Dhenkanal ..	905	1,399	..	97	..	2,243	..	6,112	18	..	131
Keonjhar ..	1,481	1,960	..	388	..	1,133	..	6,519	..	..	..
Phulbani ..	688	1,666	..	106	..	2,560	..	5,668	..	..	..
Bolangir ..	827	2,806	..	673	..	2,420	..	4,076	..	5	20
Sundargarh ..	845	580	..	372	223	3,099	..	5,151	575	..	..
Kalahandi ..	437	1,313	..	953	81	2,993	..	4,393	174	..	93
Mayurbhanj ..	1,102	836	..	96	..	2,464	..	6,573	18	..	13

5·12 (a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in processing, manufacture—Not elsewhere specified (by sub-divisions).

Rural and Urban

State and natural division	Total division	4.0 Manufacturing industries otherwise unclassified	4.1 Products of petroleum and coal	4.2 Bricks, tiles and other structural clay products	4.3 Cement pipes and other cement products	4.4 Non-metallic mineral products	4.5 Rubber products	4.6 Wood and wood products other than furniture and fixtures	4.7 Furniture and fixtures	4.8 Paper and paper products	4.9 Printing and allied industries
	4										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA—											
Rural ..	838	1,819	..	241	9	2,418	..	5,163	172	166	12
Urban ..	481	2,224	..	850	..	1,760	8	3,911	533	40	614
3.33 Orissa Inland Division—											
Rural ..	826	1,430	..	238	20	2,212	..	5,642	98	351	9
Urban ..	543	3,415	..	677	..	1,388	..	3,129	1,060	101	230
5.11 Orissa Coastal Division—											
Rural ..	849	2,166	..	243	..	2,600	..	4,737	238	1	15
Urban ..	450	1,494	..	956	..	1,988	13	4,392	306	2	849

5·13—Territorial distribution of 10,000 self-supporting persons in the State, engaged in construction and utilities (by sub-divisions).

Natural division and district	Total division	5.0 Construction and maintenance of works otherwise unclassified	5.1 Construction and maintenance of buildings	5.2 Construction and maintenance—Roads, bridges and other transport works	5.3 Construction and maintenance—Telegraph and telephone lines	5.4 Construction and maintenance operations—Irrigation and other agricultural works	5.5 Works and services—Electric power and gas supply	5.6 Works and services—Domestic and industrial water supply	5.7 Sanitary works and services including scavengers
	5								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	10)
ORISSA ..	**389**	**1,937**	**3,511**	**1,175**	**134**	**1,153**	**97**	**101**	**1,892**
3·33 Orissa Inland Division ..	**346**	**2,229**	**2,082**	**1,689**	**196**	**1,756**	**119**	**121**	**1,808**
5·11 Orissa Coastal Division ..	**425**	**1,740**	**4,476**	**828**	**92**	**746**	**82**	**87**	**1,949**
Cuttack ..	303	2,014	3,720	1,190	179	953	148	138	1,658
Balasore ..	272	380	5,000	1,184	103	2,032	124	227	950
Puri ..	875	2,436	5,264	276	27	276	61	43	1,617
Sambalpur ..	451	1,336	1,534	2,027	77	2,937	103	152	1,834
Ganjam ..	320	439	3,826	1,275	98	1,060	26	62	3,214
Agency ..	*292*	*659*	*5,116*	*116*	..	*1,667*	..	..	*2,442*
Plains ..	*321*	*427*	*3,755*	*1,338*	*103*	*1,027*	*27*	*66*	*3,257*
Koraput ..	229	950	4,686	1,060	110	943	183	146	1,922
Dhenkanal ..	213	956	655	844	689	2,089	311	67	4,389
Keonjhar ..	261	1,615	2,043	992	272	3,521	117	175	1,265
Phulbani ..	497	2,400	4,189	1,077	86	858	20	..	1,370
Bolangir ..	255	3,470	700	2,576	290	886	145	113	1,820
Sundargarh ..	378	3,459	1,186	2,727	122	942	300	200	1,064
Kalahandi ..	424	3,259	2,079	1,390	312	1,168	42	108	1,642
Mayurbhanj ..	343	4,492	1,274	1,822	310	727	72	137	1,166

5·13 (a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in construction and utilities (by sub-divisions).

Rural and Urban

State and natural division	Total division	5.0 Construction and maintenance of works otherwise unclassified	5.1 Construction and maintenance of buildings	5.2 Construction and maintenance—Roads, bridges, and other transport works	5.3 Construction and maintenance—Telegraph and telephone lines	5.4 Construction and maintenance operations—Irrigation and other agricultural works	5.5 Works and services—Electric power and gas supply	5.6 Works and services—Domestic and industrial water supply	5.7 Sanitary works and services including scavengers
	5								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA—									
Rural ..	307	2,802	2,942	1,174	143	1,679	29	22	1,218
Urban ..	790	300	4,588	1,176	135	158	226	249	3,168
3·33 Orissa Inland Division—									
Rural ..	319	2,582	2,152	1,775	153	2,101	28	19	1,190
Urban ..	532	769	1,794	1,331	374	331	498	542	4,361
5·11 Orissa Coastal Division—									
Rural ..	296	3,019	3,720	583	114	1,264	30	25	1,245
Urban ..	921	162	5,409	1,130	65	108	145	163	2,818

5·14—Territorial distribution of 10,000 self-supporting persons in the State, engaged in commerce (by sub-divisions).

Natural division and district	Total division 6	6.0 Retail trade otherwise unclassified	6.1 Retail trade in foodstuffs (including beverages and narcotics)	6.2 Retail trade in fuel (including petrol)	6.3 Retail trade in textile and leather goods	6.4 Wholesale trade in foodstuffs	6.5 Wholesale trade in commodities other than foodstuffs	6.6 Real estate	6·7 Insurance	6·8 Money lending, banking and other financial business
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA	**1,509**	**3,117**	**3,849**	**1,036**	**523**	**445**	**699**	**25**	**5**	**301**
3.33 Orissa Inland Dn.	**1,129**	**3,448**	**3,653**	**820**	**662**	**490**	**777**	**26**	**2**	**122**
5.11 Orissa Coastal Dn.	**1,824**	**2,947**	**3,950**	**1,147**	**452**	**421**	**659**	**25**	**6**	**393**
Cuttack ..	1,618	2,224	3,899	918	589	530	787	56	5	992
Balasore ..	1,482	3,342	4,538	223	401	512	899	21	..	64
Puri ..	2,003	2,482	4,380	1,098	410	628	904	15	8	75
Sambalpur ..	925	3,353	3,253	406	695	1,158	892	70	..	173
Ganjam ..	2,162	3,863	3,440	1,737	382	167	345	..	8	58
Agency ..	*3,359*	*3,188*	*2,154*	*2,690*	*725*	*398*	*822*	..	*3*	*20*
Plains ..	*2,091*	*3,928*	*3,564*	*1,645*	*349*	*144*	*299*	..	*9*	*62*
Koraput ..	1,061	3,420	2,337	2,687	885	192	381	11	..	87
Dhenkanal ..	1,111	3,254	3,441	553	435	510	1,730	4	..	73
Keonjhar ..	905	4,202	3,629	753	933	242	185	..	..	56
Phulbani ..	1,738	2,825	5,622	281	536	340	390	..	..	6
Bolangir ..	1,078	3,118	4,123	242	553	91	1,581	2	..	290
Sundargarh ..	1,023	4,019	4,383	156	541	262	463	8	..	168
Kalahandi ..	1,289	3,779	4,442	354	626	376	252	57	18	96
Mayurbhanj ..	908	4,361	3,386	226	764	527	538	38	..	160

5·14 (a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in commerce (by sub-divisions).

Rural and Urban

State and natural division	Total division 6	6.0 Retail trade otherwise unclassified	6.1 Retail trade in foodstuffs (including beverages and narcotics)	6.2 Retail trade in fuel (including petrol)	6.3 Retail trade in textile and leather goods	6.4 Wholesale trade in foodstuffs	6.5 Wholesale trade in commodities other than foodstuffs	6.6 Real estate	6.7 Insurance	6.8 Money lending, banking and other financial business
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA—										
Rural ..	1,371	3,370	3,816	1,040	474	423	784	6	3	84
Urban ..	2,176	2,343	3,947	1,026	674	511	440	84	11	964
3.33 Orissa Inland Dn.—										
Rural ..	1,027	3,546	3,697	579	650	530	883	3	2	110
Urban ..	1,834	3,071	3,481	1,753	707	333	371	114	4	166
5.11 Orissa Coastal Dn.—										
Rural ..	1,686	3,272	3,883	1,296	376	363	729	8	3	70
Urban ..	2,350	2,054	4,133	737	660	582	468	72	14	1,280

5·15—Territorial distribution of 10,000 self-supporting persons in the State, engaged in transport, storage and communications (by sub-divisions).

Natural division and district	Total division 7	7.0 Transport and communications otherwise unclassified and incidental services	7.1 Transport by road	7.2 Transport by water	7.3 Transport by air	7.4 Railway transport	7.5 storage and warehousing	7.6 Postal services	7.7 Telegraph services	7.8 Telephone services	7.9 Wireless services
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA ..	**282**	**352**	**3,418**	**1,000**	**15**	**3,841**	**328**	**900**	**28**	**58**	**60**
3.33 Orissa Inland Division ..	**226**	**683**	**3,243**	**700**	**5**	**3,641**	**599**	**939**	**20**	**76**	**94**
5.11 Orissa Coastal Division ..	**329**	**163**	**3,517**	**1,171**	**21**	**3,955**	**172**	**878**	**33**	**49**	**41**
Cuttack ..	333	133	3,458	2,196	38	2,529	22	1,450	54	78	42
Balasore ..	472	..	3,499	405	..	5,593	16	391	21	33	42
Puri ..	393	422	2,911	495	10	5,832	17	230	17	34	32
Sambalpur ..	256	23	3,888	529	19	4,486	476	450	15	61	53
Ganjam ..	216	21	4,369	516	15	3,299	780	911	21	18	50
Agency ..	*16*	..	..	..	..	..	*3,571*	*6,429*	..	..	..
Plains ..	*228*	*21*	*4,388*	*518*	*15*	*3,312*	*769*	*887*	*21*	*18*	*51*
Koraput ..	151	..	3,914	244	..	2,383	1,885	1,452	33	..	89
Dhenkanal ..	315	45	2,703	866	..	4,503	603	1,137	15	60	68
Keonjhar ..	129	315	4,567	157	..	..	1,299	2,835	39	512	276
Phulbani ..	96	34	2,089	2,808	..	..	1,952	2,877	34	..	206
Bolangir ..	338	..	2,964	1,661	..	4,419	116	688	12	61	79
Sundargarh ..	411	4,491	3,442	183	..	418	285	988	31	81	81
Kalahandi ..	112	862	2,449	113	..	4,082	816	1,247	23	159	249
Mayurbhanj ..	225	1,571	2,220	..	..	5,275	110	582	11	99	132

5·15(a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in transport, storage and communications (by sub-divisions).

Rural aud urban

State and natural division	Total division 7	7.0 Transport and communications otherwise unclassified and incidental services	7.1 Transport by road	7.2 Transport by water	7.3 Transport by air	7.4 Railway transport	7.5 storage and warehousing	7.6 Postal services	7.7 Telegraph services	7.8 Telephone services	7.9 Wireless services
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ORISSA—											
Rural ..	193	604	2,685	1,364	21	3,827	303	1,149	..	11	36
Urban ..	714	21	4,381	521	7	3,860	359	574	65	120	92
3.33 Orissa Inland Division—											
Rural ..	147	1,172	2,297	639	8	3,794	695	1,312	..	32	51
Urban ..	769	39	4,490	781	3	3,439	473	448	44	133	150
5.11 Orissa Coastal Division—											
Rural ..	235	279	2,906	1,779	29	3,845	79	1,055	..	..	28
Urban ..	687	12	4,318	373	10	4,099	295	645	77	112	59

5·16—Territorial distribution of 10,000 self-supporting persons in the State, engaged in health, education and public administration (by sub-divisions).

Natural division and district	Total division	8.1 Medical and health services	8.2 Educational services and research	8.4 Police (other than village watchmen)	8.5 Village officers and servants including village watchmen	8.6 Employees of municipalities and local boards (but not including persons classifiable under any other division or sub-division)	8.7 Employees of State Governments (but not including persons classifiable under any other division or sub-division)	8.3, 8.8 and 8.9 Employees of the Union Governments (but not including persons classifiable under any other division or subdivision) and employees of non-Indian Government
	8							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA ..	**652**	**1,161**	**2,400**	**1,679**	**1,362**	**430**	**2,346**	**604**
3.33 Orissa Inland Dn.	**590**	**1,079**	**2,175**	**2,445**	**1,644**	**269**	**1,507**	**881**
5.11 Orissa Coastal Dn.	**705**	**1,218**	**2,556**	**1,147**	**1,165**	**543**	**2,960**	**411**
Cuttack ..	833	1,370	2,044	1,236	1,062	396	3,594	298
Balasore ..	911	682	2,658	425	497	467	3,631	1,640
Puri ..	651	1,122	3,681	1,101	1,472	640	1,854	130
Sambalpur ..	761	808	1,497	1,605	1,189	303	2,032	2,566
Ganjam ..	474	1,308	2,650	1,460	1,639	838	2,032	73
Agency ..	*503*	*856*	*3,446*	*878*	*2,387*	*631*	*1,734*	*68*
Plains ..	*472*	*1,337*	*2,599*	*1,497*	*1,590*	*851*	*2,050*	*76*
Koraput ..	531	1,745	2,297	1,941	2,836	202	904	75
Dhenkanal ..	1,012	792	2,231	2,990	1,934	312	1,732	9
Keonjhar ..	390	1,898	3,351	1,668	1,389	459	1,146	89
Phulbani ..	290	1,104	2,696	2,537	2,434	296	876	57
Bolangir ..	387	1,440	3,342	1,955	1,759	228	1,143	133
Sundargarh ..	640	779	1,793	4,535	1,336	196	1,282	79
Kalahandi ..	340	1,440	1,955	3,313	1,172	254	1,560	306
Mayurbhanj ..	589	1,064	2,781	3,982	1,072	117	884	100

5·16(a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in health, education and public administration (by sub-divisions).

Rural and Urban

State and natural division	Total division	8.1 Medical and health services	8.2 Educational services and research	8.4 Police (other than village watchmen)	8.5 Village officers and servants including village watchmen	8.6 Employees of municipalities and local boards (but not including persons classifiable under any other division or sub-division)	8.7 Employees of State Governments (but not including persons classifiable under any other division or sub-division)	8.3, 8.8 and 8.9 Employees of the Union Governments (but not including persons classifiable under any other division or subdivision) and employees of non-Indian Governments
	8							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA—								
Rural ..	468	1,085	2,902	1,303	1,922	236	1,918	634
Urban ..	1,549	1,274	1,663	2,230	539	715	3,021	558
3.33 Orissa Inland Dn.—								
Rural ..	437	1,018	2,647	2,048	2,112	136	750	1,289
Urban ..	1,637	1,191	1,306	3,175	783	514	2,899	132
5·11 Orissa Coastal Dn.—								
Rural ..	496	1,139	3,107	703	1,768	318	2,858	107
Urban ..	1,505	1,319	1,860	1,707	403	828	3,088	795

5·17—Territorial distribution of 10,000 self-supporting persons in the State, engaged in services not elsewhere specified (by sub-divisions).

Natural division and district	Total division 9	Services otherwise unclassified 9.0	Domestic services (but not including services rendered by members of family households to one another) 9.1	Barbers and beauty shops 9.2	Laundries and laundry services 9.3	Hotels, restaurants and eating houses 9.4	Recreation services 9.5	Legal and business services 9.6	Arts, letters and journalism 9.7	Religious, charitable and welfare services 9.8
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA ..	**3,885**	**5,832**	**2,176**	**383**	**607**	**94**	**95**	**376**	**48**	**389**
3·33 Orissa Inland Dn.	**4,046**	**6,570**	**2,005**	**333**	**537**	**64**	**60**	**201**	**14**	**216**
5·11 Orissa Coastal Dn.	**3,751**	**5,172**	**2,329**	**426**	**669**	**121**	**126**	**533**	**79**	**545**
Cuttack ..	3,999	5,317	2,129	317	550	138	220	976	115	238
Balasore ..	3,673	5,910	2,343	331	450	137	88	196	4	541
Puri ..	2,578	2,991	3,080	927	990	115	101	201	178	1,417
Sambalpur ..	3,374	7,751	946	290	530	92	121	103	3	164
Ganjam ..	4,297	5,750	2,230	372	739	96	29	213	11	560
Agency ..	*4,578*	*6,370*	*1,818*	*294*	*628*	*77*	*22*	*210*	*5*	*576*
Plains ..	*4,280*	*5,710*	*2,257*	*377*	*746*	*97*	*29*	*213*	*12*	*559*
Koraput ..	6,015	3,447	4,903	336	576	109	70	172	1	386
Dhenkanal ..	2,798	7,194	857	504	1,005	9	41	81	31	278
Keonjhar ..	3,959	5,131	1,896	1,543	1,052	13	21	68	23	253
Phulbani ..	3,663	8,129	657	193	734	77	23	44	6	137
Bolangir ..	3,884	6,595	1,340	274	504	29	21	1,009	64	164
Sundargarh ..	4,012	8,107	957	164	320	80	124	74	3	171
Kalahandi ..	4,812	8,297	1,314	121	145	22	17	17	12	55
Mayurbhanj ..	3,828	7,254	1,908	231	331	36	35	71	11	123

5·17 (a)—Territorial distribution of 10,000 self-supporting persons in the State, engaged in services not elsewhere specified (by sub-divisions).

Rural and Urban

State and natural division	Total division 9	Services otherwise unclassified 9.0	Domestic services (but not including services rendered by members of family households to one another) 9.1	Barbers and beauty shops 9.2	Laundries and laundry services 9.3	Hotels, restaurants and eating houses 9.4	Recreation services 9.5	Legal, and business services 9.6	Arts, letters and journalism 9.7	Religious, charitable and welfare services 9.8
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA—										
Rural ..	4,024	6,182	1,942	375	605	58	85	391	48	314
Urban ..	3,206	3,699	3,608	428	614	311	157	284	53	346
3·33 Orissa Inland Dn.—										
Rural ..	4,129	6,837	1,877	324	532	40	38	199	13	140
Urban ..	3,469	4,382	3,053	408	570	264	243	213	27	840
5·11 Orissa Coastal Dn.—										
Rural ..	3,928	5,552	2,004	424	675	77	130	575	81	482
Urban ..	3,072	3,306	3,927	440	689	337	108	325	68	850

CHAPTER VI

Families, Sexes and Principal Age Groups

SECTION I

Preliminary Remarks

1. In this Chapter, a review of statistics relating to distribution of houses, composition of family households, ratios relating to sex and marital status, distribution of population under principal age groups, etc., will be made.

INTERPRETATION

2. *House*—There is obvious difficulty in framing the definition of a house. The term house covers a great diversity of dwelling beginning from the flimsy structure of foliage and grass in the hilly tribal areas of the State which hardly conform to the usual notion of a place of dwelling, to the large masonry buildings seen in urban areas. It will therefore be confusing to define a house on the basis of size, structure or material. During the 1951 census operations, the ideas conveyed by the term house were expressed as follows.

3. The term ' house ' means a dwelling with a separate main entrance. The idea is that each group of human beings living together in any sort of dwelling place having independent access to the outer world is treated as residing in a ' house '. If there are two economically independent groups of human beings living together in a dwelling with one main entrance, they are said to be living in one house. But if these two independent groups are living in a dwelling having two separate main entrances, they are regarded as residing in two houses.

4. In police lines, hospitals, hotels and residential clubs, each room allotted to different persons who are economically independent of one another is regarded as one separate house. In residential schools and colleges each separate hostel is treated as a separate house. The quarters of the teaching staff and menial residents are regarded as separate houses.

5. The definition of ' house ' has undergone change from census to census, and this has weakened the absolute comparability of figures. In the censuses of 1921 and 1931 the portion of Orissa which then formed part of the province of Bihar and Orissa adopted the definition of house as the dwelling of a commensal family. But the ex-Madras areas had a separate definition in 1921, namely, " the residence of one or more families possessing a common entrance from the public way ". In 1931, the ex-Madras areas changed the definition to " every dwelling with a separate main entrance ". In the census of 1941, when Orissa was already a separate province, the definition was different for rural and urban areas. In the rural areas of the entire province, the old Bihar and Orissa definition, namely the dwelling of the commensal family still continued. But in the urban areas, a house meant a dwelling with a separate main entrance. In 1951, the latter definition was uniformly applied to the urban as well as the rural areas of the State. It will thus be seen that the present definition of the term was applicable in 1941 to the urban areas only and in 1931 and 1921 to the ex-Madras areas only. The definition in 1941 for rural areas and in 1931 and 1921 for the ex-Bihar and Orissa areas was more liberal in sense than at present.

6. A 'household' consists of persons who are in the habit of living and messing together and includes their resident dependants and resident servants. A person who habitually lives and messes *alone* may with his resident servants, if any, constitute a household. If three families, who cultivate their lands separately and cook separately, are living in a dwelling house having only one main entrance, the dwelling will be regarded as one house, but the inhabitants will constitute three separate households or families. But if such a dwelling has three separate main entrances, it will be regarded as three houses containing three households.

REFERENCE TO STATISTICS

7. The statistics discussed in this Chapter are contained in the C-Series Tables appearing in Part II-B of this Report. Table C-I has been prepared from the Census Abstract of Sample Households which in turn is based on 1 in 1,000 sample of households recorded in the National Register of Citizens. This Table furnishes certain characteristics of the family household compiled for the first time. The remaining four Tables of the C-Series are based on 10 per cent samples extracted during the Tabulation stage in accordance with the procedure explained in the Fly-leaf of Table C-II.

8. A set of 14 Tables known as Subsidiary Tables 6-Series provide additional statistics at the end of this Chapter. Subsidiary Table 6·1 gives the number of persons per 1,000 houses and the number of houses per 100 square miles with comparable figures for past censuses. Subsidiary Table 6·2 gives the number of households per 1,000 houses and distribution by size of 1,000 sample households of rural and urban population. Table 6·3 gives the family composition of 1,000 households of the general population. The Tables 6·4 to 6·6 give the sex ratio of the general, rural and urban population and also of the agricultural and non-agricultural classes and sub-classes. The Tables 6·7 and 6·8 relate to marital status and age distribution of married persons of each sex. Subsidiary Tables 6·9 to 6·14 deal with the proportion of infants (below 1 year), young children (1-4 years), boys and girls (5-14 years), young men and women (15-34 years), middle-aged persons (35-54 years) and elderly persons (aged 55 and over) in the general population.

COMPARABILITY OF STATISTICS OF PREVIOUS CENSUSES

9. The statistics relating to the houses and household population, sex ratio and marital status as given in Subsidiary Tables 6·1, 6·4 and 6·7 have been compared with those of the previous censuses upto 1921. In doing so, necessary adjustments have been made on territorial basis in order to obtain figures comparable with those of 1951. Wherever figures were not available on territorial basis, calculation on *pro rata* basis was made. The statistics are therefore comparable. The Subsidiary Tables 6·8 to 6·14 which relate to age distribution have compared the figures of 1951 with those of 1941. While the figures of 1951 are based on 10 per cent sample, those of 1941 are taken from the 2 per cent 'Y' sample published in Census of India, Paper No. 4, 1949 (Age Tables—Orissa, 1941). This sample may not be regarded as good a basis for study of the age distribution as the 1951 sample, firstly because the two per cent sample slips of 1941 for some areas, namely, Mayurbhanj, Patna and Gangpur could not be traced or otherwise taken into consideration and secondly because these sample slips were not always properly extracted, and sometimes not properly stored after extraction owing largely to the conditions created by the war. It appears however, that adjustments were made at the time of tabulation to eliminate the effects of the latter defect.

SECTION II

Territorial distribution of Houses and Households

HOUSE : INCREASE IN NUMBER

1. The total number of occupied houses in Orissa is 3,008,716, out of which 2,888,490 houses or 96 per cent are spread over 48,398 villages and the remaining 120,226 or 4 per cent are in existence in the 39 towns of the State. The number of houses has been consistently increasing for the last few decades. It was 24·1 lakhs in 1921, and it increased to 26·4 lakhs in 1931, 28·9 lakhs in 1941 and finally to 30·1 lakhs in 1951. The rate of increase in the number of houses for the decade 1921-30 was 9·6 per cent. In the next decade, namely 1931-40, the rate rose to 9·2 per cent but during the last decade it fell down to 4·2 per cent. The number of houses per 100 square miles of the territory in Orissa works out to 4,011 in 1921, 4,395 in 1931, 4,801 in 1941 and 5,004 in 1951. This is a clear indication of growing congestion of houses from decade to decade. During the last 30 years nearly 1,000 houses per 100 square miles have been newly built. In other words, 10 houses per square mile have increased during the period 1921-51.

2. The increase in the number of houses during past decades, as observed above, is noticeable to a great extent in the inland division than in the coastal division. The rate of increase in the inland division is 12·8 per cent in 1921-30, 11·1 per cent in 1931-40 and 6·7 per cent in 1941-50. Such rates for the coastal division are 6·3, 7·2 and 1·4 per cent respectively. Among individual districts Cuttack, Ganjam Agency, Phulbani, Bolangir and Mayurbhanj have actually suffered some amount of decline in the number of houses between 1941-50. Such decline however may be partly unreal in view of the restricted definition of houses adopted in 1951 census as observed in the previous Section. The criterion of determining a house in 1941 and earlier censuses for most part of the State was the dwelling of a commensal family but in 1951, houses were no longer counted as such, but on the basis of separate main entrance. This difference in the difinition has been responsible in making the figures of different censuses incomparable to some extent.

3. There has, however, been a satisfactory increase in the number of houses in Ganjam Plains, Koraput, Dhenkanal, Sundargarh and Kalahandi. The increase in the number of houses in the districts of Balasore, Puri and Sambalpur is moderate.

HOUSEHOLDS IN RURAL AREAS

4. Out of the total number of 3,159,157 households in Orissa, 3,028,550 households forming 95·9 per cent are in existence in the rural areas. Proportionately there are 1,048 households to 1,000 houses in rural Orissa. The proportion of households in respect of the two natural divisions is 1,037 for the inland division and 1,063 for the coastal division. This is indicative of the fact that houses in the coastal division are somewhat bigger than those in the inland division and contain a larger number of household families. Among the districts Cuttack shows the highest proportion of households, namely 1,090 per 1,000 houses.

HOUSEHOLD POPULATION IN RURAL AREAS

5. The household population living in 1,000 houses number 4,716. The average number of persons residing in one house is 4·7. This number is a little higher in the inland division than in the coastal, the respective figures being 4·8 and 4·6. The household population

contains a little larger proportion of females than males. Out of 4,716 persons residing in 1,000 houses as stated above, 2,327 are males and 2,389 are females.

Urban Households and Household Population

6. The total number of households in urban areas is 130,607, which is 4·1 per cent of the total households of the State. Working out proportion, it appears that in the urban areas, there are 1,086 households per 1,000 houses. These households contain 5,396 persons out of whom 2,651 are males and 2,745 are females. There is thus preponderance of females in the urban households as in the rural. But an average urban household contains a larger number of population, namely 5·4 than an average rural household which contains 4·7 persons.

7. In some districts, the number of persons per house in urban areas is less than in rural areas. This is seen in districts of Puri, Koraput, Keonjhar and Bolangir. The reason may be that in the urban areas of these districts comparatively more houses have been built during the past years resulting in lesser number of men per house, while in villages there has been no appreciable improvement in this regard. Another explanation may be offered on the basis of the peculiarity of the definition of the term ' house '. The chief criterion being the main entrance, the houses in urban areas are subject to more liberal counting because of adequacy in the number of entrances.

Overcrowding of Houses in Towns and Villages

8. The density of population in towns does not alone give a correct picture of overcrowding and congestion. Overcrowding is a purely relative term and mere density of population means but little unless correlated with the extent of conglomeration of houses. In the towns of Orissa houses are mostly single and occasionally double storeyed. Tall multi-storeyed buildings as are seen in cities of other countries are non-existent in Orissa. In spite of the absence of such commodious buildings, the density of population in the towns has been fairly good which only shows that small houses must have been located in a congested manner.

9. Although overcrowding and congestion may be a normal feature of town dwelling, it is seen that many villages exhibit an almost equal amount of overcrowding. It is a well observed phenomenon of rural habitation that the occupied lands in villages possess a high density. Even in small villages, houses are closely built one beside the other with a narrow lane or gangway in between or sometimes even without it. If the village density is calculated on the area of the inhabited site by excluding the cultivated and other lands of the village, it will appear that the density of population is very high, perhaps not less than that of towns.

Pressure of Population upon Housing

10. In order to form an idea as regards the extent of overcrowding, it becomes necessary not only to take into account the number of houses per square mile but also the number of persons per house. Subsidiary Table 6·1 shows the number of persons residing in 1,000 houses in rural and urban areas of the State in different decades. This shows that the number of persons residing in 1,000 houses has increased from 4,627 in 1921 to 4,727 in 1931, 4,770 in 1941 and finally to 4,868 in 1951. In the rural areas of the State the population per 1,000 houses has increased from 4,633 in 1921 to 4,865 in 1951 while in the urban areas the number of population for these two census years is 4,415 and

4,941 respectively. Between 1921 and 1951 the number of houses per square mile has increased by about 10 and the number of persons per house has increased from 4·6 to 4·9. The increase in both these aspects is a real indication of growing congestion.

Shortage of Houses

11. The acute shortage of houses in urban areas of the State was felt throughout the last decade, particularly with the outbreak of the last World War. Owners of houses took full advantage of the situation whenever letting out by demanding high rent from tenants. As a safeguard against such tendency, the State Government had to introduce the House-Rent Control Order in most of the districts and the authorities had to take resort to emergency laws for finding accommodation for offices and officers. Building materials and labour being costly, sufficient number of new houses were not built during the last decade, even though there was inflation of currency to an unprecedented extent and money was cheap. This accounts for a notable decline in the rate of growth of houses from 9·2 per cent in 1931-40 to 4·2 per cent in 1941-50. Acute shortage of houses thus continued throughout the period.

Housing Conditions

12. A survey of housing conditions has never been made in this State on a comprehensive basis. In the year 1950 the Agricultural Labour Enquiry set up by the Ministry of Labour conducted a survey on an extremely small scale. The survey extended to 45 sample villages in the State and covered a population of 15,679 belonging to 3,183 families. It is thus smaller than 1 in 1,000 sample. Moreover, it relates to only the rural areas of the State. Its findings are summarized below.

13. The total number of houses occupied by 3,183 families regarding whom the survey was made was 3,035. On the average, 1·04 families lived in one house. This gives an interesting comparison with the results of the Population Census exhibited in the Subsidiary Table 6·2 which shows that 1,048 family households are accommodated in 1,000 houses. This works out to 1·05 families per house. The results of the Agricultural Labour Enquiry further shows that 2,930 families out of 3,183 had separate houses for themselves. 81 houses accommodated two families each and 25 houses had three or more families each. The average number of persons per house is 5·2. The Population Census however shows a smaller figure, namely 4·7 persons per house in the rural areas.

14. Other principal findings of the Agricultural Labour Enquiry regarding the housing conditions in Orissa are as follows :—

(*i*) Of the 3,035 houses in the villages, 17 were *pucca*, 12 partly *pucca* and partly *katcha* and the remaining 3,006 *katcha*. Most of the *pucca* houses were occupied by owners, though three agricultural workers' families and one non-agricultural worker's family also had such houses. Of the total number of houses, 2,558 or 84·3 per cent were occupied by agricultural and 468 or 15·4 per cent by non-agricultural families which had no specific stable occupation. Agricultural workers occupied 1,310 houses or 43·2 per cent of the total.

(*ii*) The *katcha* houses, were built of mud walls plastered with clay and cowdung. The roofs were made of straw and bamboo. In some villages tiles were replacing the traditional thatch rapidly. Neither the living rooms nor the kitchens were provided with windows for light and ventilation. The houses had generally an outer verandah. Small cowsheds were usually erected in front of the house.

(*iii*) The houses were generally owned by the residents. There were 3,056 families which owned the houses occupied by them. Since there were in all 3,055 houses in the sample villages, it follows that more than one family owned some of the houses. Sixty-one families occupied rented houses and 48 rent-free. There were two families which owned the houses but had to pay ground rent. Sites were allowed free of rent to 13 families. The rented or rent-free houses were mostly held by agricultural workers.

SECTION III

Size and Composition of Family Households

SIZE OF HOUSEHOLDS

1. The size of households may be described according to the number of persons attached to them. Households which contain 3 members or less may be described as small, those containing 4 to 6 as medium, 7 to 9 as large and 10 members and above as very large. Out of 1,000 households in the rural areas, there are 371 households of small size, 434 of medium size, 147 of large size and 48 of very large size. In the urban areas, the households of small size number 255, medium size 491, large size 170 and very large size 85.

PREDOMINANCE OF MEDIUM-SIZED HOUSEHOLDS

2. It appears from the figures given above that the largest number of households in the rural areas is the of medium size. They constitute 43·4 per cent of the total households of the rural areas. Among individual districts, this is also the most popular size of household. The same feature is observable in the urban areas of the State where the medium-sized households constitute 49 per cent or nearly half the households.

SMALL-SIZED HOUSEHOLDS

3 Next in mportance to the medium-sized households are the small-sized ones, or those that contain three members or less each. These households constitute 25·5 per cent or nearly one-fourth of the households in the urban areas of the State. The coastal division is noted for a larger percentage of such households where the percentage is nearly 35 but in the inland division, such households are rather scarce, being limited to 10 per cent, which is much less than the percentage of large-sized households in the towns. In the rural areas, the small-sized households are next in importance to medium-sized ones. The percentage of small-sized households is 37·1 in rural areas which is higher than that of the urban areas. The coastal division, again, has larger percentage of these households in the rural areas than the rural areas of the inland division. Small households are generally considered as the natural result of social advancement and progress. In Orissa since these small households have not yet grown to be the top most among all sizes of households, it is indicative of the fact that it will take a good few generations more to attain an advanced standard of family and social life in this country.

HOUSEHOLDS OF LARGER SIZE

4. The large-sized households containing 7 to 9 members cons itute 41.7 per cent of households in the rural areas and 17 per cent of household s in the urban areas of the State. The households of very large size which contain 10 members or more are to be found in comparatively small proportion, namely 4·8 per cent in the rural areas and 8·5 per cent in the urban areas. Both the categories of households, large and very large, are more numerous in the rural areas of the inland division than in the coastal division. As regards the urban areas, the percentage of large households is less and of very large households more in the coastal division than in the inland division. The large and very large households, however, are a peculiarity of the towns, for they are to be found in larger percentage in towns rather than in villages of the State. Shortage of housing in urban areas is mainly responsible for households becoming larger in size.

Distribution of Household Population

5. The medium-sized households constituting 43·4 per cent of households contain 44·9 per cent of the rural population while small-sized households constituting 37·1 per cent of households contain 18·6 per cent of such population. The remaining 36·5 per cent of the rural population live in large and very large-sized households which together constitute 19·5 per cent of the total households of the rural areas. Similarly, in the urban areas the medium-sized households constituting 49 per cent of the households contain 45·5 per cent of the urban population and the small-sized households constituting 25·5 per cent of the households contain 11·0 per cent of the urban population. The remaining 25·5 per cent of households which are of large and very large size contain 43·5 per cent of the urban population. Combining small and medium-sized households in one group and large and very large sizes in another, the percentage of households compares with the percentage of population living therein as follows :—

State or natural division	Small+Medium		Large+Very large	
	Households	Population	Households	Population
Orissa Rural ..	80·5	63·5	19·5	36·5
Orissa Urban ..	74·6	56·5	25·5	43·5
Inland Division Rural	78·2	61·4	21·8	38·6
Inland Division Urban	70·0	52·7	30·0	47·3
Coastal Division Rural	82·9	66·6	17·1	33·4
Coastal Division Urban	77·2	59·3	22·7	40·7

The importance of small and medium-sized households is evident from the above statement. They constitute nearly four-fifths of the total households in the State, while the large and very large-sized households make up the remaining one-fifth. The small and medium-sized households contain a little less than two-thirds the total household population, leaving a little above one-third to the large and very large households.

Sex Ratio in Household Population

6. The sample households comprising a population of 4,742 is constituted of 2,340 males and 2,402 females. This shows that males constitute 49·3 per cent and females 50·7 per cent in household population of the State. This gives an interesting comparison with the sex ratio exhibited in Subsidiary Table 6·4 which is discussed in the next Section of this Chapter. It will appear therefrom that for every 1,000 males there are 1,022 females in the general population. This works out to a ratio of 49·5 to 50·5 which closely supports the sex ratio obtained from the sample household population.

Composition of Families

7. Subsidiary Table 6·3 shows the family composition of 1,000 sample households. This population includes heads of households and their wives numbering 1,786, sons numbering 1,032 and daughters 757. Other relations who are living together with the heads of households number 1,143 of whom 404 are males and 739 are females. In other words the heads of households and their wives constitute 37·7 per cent, sons 21·7 per cent, daughters 16·0 per cent, male relations 8·5 and female relations 15·6 per cent. The remaining 0·4 per cent which has not been shown in the Subsidiary Table may be accounted for by servants and unrelated persons residing in the sample households. This analysis shows that the heads of the families with their wives, sons and daughters constitute 75·4 per cent of the household population, and other relatives, male and female, constitute 24·1 per cent. It is interesting to find that out of ' other relatives ', nearly two-thirds are females. This is so because a son continues to be a son of the head of the household after his marriage, but a daughter loses her status as such after marriage and is classified as ' other relatives ' as soon as she

goes into another family as a daughter-in-law. Moreover, a large number of widows are included in the household of their relatives under the present social conditions in the State. Another interesting feature is that the heads of the households and their wives are exactly equal in percentage to the sons and daughters taken together, each group forming 37·7 per cent of the total household population.

Trend of Family Size

8. Statistics relating to size and composition of family households have been compiled for the first time during the present census. Therefore a picture of the family size in previous decades is not available. If, however, information as regards the rate of fertility were available for the past censuses, it would have thrown some amount of light in the matter. But even this is not forthcoming. In the absence of any statistics, all that can be studied is the general popular tendency now observable. The fall in the birth rate during the last few years would have led to reduction in the size of the family but a nearly corresponding fall in the death rate has counteracted. So a decline in the family size could not have resulted to any appreciable extent in the present decade on account of the very late decline in the rate of births and deaths. It is however noticed that the desire for getting fewer and fewer children is gradually becoming apparent with the present generation of married persons. Forces of disruption are also at work in the joint family system. This tendency will be effective in bringing about a decline in the family size in coming decades.

SECTION IV

Sex Ratio

1. Sex ratio is one of the important factors influencing the growth or decline of population. The immediate increase or decrease of population depends upon the sex ratio of the population in the productive period, while remote influence is exercised by the sex ratio at birth and the rate of survival in each sex.

Sex Ratio in Orissa and Other States

2. The actual population of the State, as enumerated at the present census, comprises 7,242,892 males and 7,403,054 females. That is to say, there are 1,022 females for every thousand males. The figures below show the sex ratio in India and some States, as found in the census of 1951. Among all the Part A States, Orissa leads easily in showing a surplus of females. The only other Part A State in India which has a surplus female population, is Orissa's immediate neighbour, Madras. The range of difference is not small, as Orissa has 22 spare females, as against Madras's 6, per every thousand males in the respective States. If, however, all the States and localities in India are taken into consideration, including the smaller ones, Kutch stands at the peak with 1,079, followed by Manipur with 1,036 females per 1,000 males. Among Part A States, 7 out of 9 are female minority areas, the proportion sinking as low as 863 in Punjab and 859 in West Bengal.

State	Females per 1,000 males
INDIA ..	947
Orissa ..	1,022
Bihar ..	989
West Bengal ..	859
Madras ..	1,006
Assam ..	879
Uttar Pradesh ..	910
Madhya Pradesh ..	993
Punjab ..	863
Bombay ..	932
Manipur ..	1,036
Kutch ..	1,079

Fluctuation in Female Ratio

3. The proportion of females per 1,000 males in the general population of Orissa during the last half a century is shown below.

Year	No. of females per 1,000 males
1901	1,037
1911	1,056
1921	1,086
1931	1,067
1941	1,053
1951	1,022

The proportion of females consistently improved during the first 20 years of the present century. It rose from 1,037 in 1901 to 1,056 in 1911 and finally to 1,086 in 1921. But from the year 1921, a downward curve in the ratio of females to males began, and this has been steadily continuing till the year 1951.

Rising Female Ratio during 1901-21

4. The period of first 20 years of the present century as observed in Chapter I of this Report was noted for bad public health, poor harvests and disastrous epidemics. These conditions were responsible for keeping down the rate of growth of population at a low level. In fact, between 1911 and 1921 the population of Orissa suffered a decline in number. This was primarily due to the deadly incidence of the influenza epidemic of 1918, which carried away lakhs of victims and which was selective in its incidence on women in particular. It may therefore be surprising that in spite of all these unfavourable circumstances and in spite of the decimation caused by a widespread epidemic particularly fatal to women, the proportion of females kept on rising till the year 1921. The real explanation is provided by the trend of

migration in those years. It was seen in an earlier Chapter that emigration from Orissa to Bengal, Assam and Burma was on the increase between 1901 and 1921. A great majority of the emigrants belonged to the male sex so that the inevitable result was to swell the proportion of females in the resident population. Yet another explanation may be found in the selective character of certain natural calamities. It is true that the influenza epidemic of 1918 was most fatal for women. But this unfortunate discrimination was more than offset by the effects of famines and agricultural distress which caused a higher mortality among males. The Census Report of India for the year 1911 (pp. 220 -222) has mentioned with some amount of evidence that conditions of scarcity and famines always lead to great mortality among males than females and promote a higher female ratio. It was observed earlier that for about 20 years from the beginning of the present century, Orissa had far more than her due share of acute distress due to floods, famines and pestilence. The combined effect of these conditions, namely migration and public health may be held responsible, at least to some extent, for raising the female ratio in the general population between the years 1901 and 1921.

DECLINE IN FEMALE RATIO FROM 1921

5. The number of females per 1,000 males for the last four censuses has been shown in the Subsidiary Table 6·4. The ratio which was improving till the year 1921 started to decline thereafter, so that there has been a steady movement of the sex ratio against the female. In 1921, the number of females per 1,000 males was 1,086. Since then it has been declining persistently decade by decade. The number fell down to 1,067 in 1931, 1,053 in 1941 and finally to 1,022 in 1951. This decline is more noticeable in the coastal division than in the inland division. In the coastal division the ratio has fallen by 111 during a period of 30 years. In other words, there are 111 females less per 1,000 males in the general population now than they were in the year 1921. This remarkable decrease raises a serious population problem. In the inland division, there has also been a decline during the last 30 years but it amounts only to 18 per 1,000.

6. Examining the position with regard to individual districts, it appears that there has been a decline in all the districts except one, namely Sundargarh. Three districts, namely, Cuttack, Ganjam Plains and Balasore have a striking decline of female ratio. The proportion of females to 1,000 males has fallen in Cuttack from 1,160 to 1,025, in Ganjam from 1,223 to 1,113 and in Balasore from 1,098 to 989 between the years 1921 and 1951. Thus the decline during the last 30 years amounts to 135 in Cuttack, 110 in Ganjam and 109 in Balasore. The decline in other districts is 67 in Puri, 57 in Dhenkanal, 37 in Keonjhar, 24 in Sambalpur, 18 in Bolangir, 14 in Mayurbhanj, 12 in Kalahandi, 8 in Koraput and 3 in Phulbani. The solitary district which made a gain in female ratio during the last 30 years is Sundargarh, where the proportion has increased from 1,004 in 1921 to 1,012 in 1951, a gain of 8 females in a male population of 1,000.

7. Thus, the position is very serious in all the coastal districts and particularly in Cuttack, Ganjam and Balasore, where the decrease in proportion exceeds one in ten. In Balasore, although the fall in ratio is not as heavy as in Cuttack, the position is still more serious because the district has now been reduced to a female deficiency area. Next to the three districts mentioned above, Puri has suffered, though to a lesser extent. Dhenkanal and Keonjhar being close to the coastal districts have been affected most among the districts of the inland

division. The districts which are away from the coastal region, viz., Sundargarh, Phulbani, Koraput, etc., are comparatively safer.

CAUSES OF DECLINING FEMALE RATIO

8. Several factors are responsible for this steady fall in the proportion of females to males that has been going on since 1921. It has been observed above that the female ratio was increasing between 1901 and 1921 and that emigration of males in increasing extent during this period was mainly responsible for swelling the proportion of females in the resident population. This trend was reversed from the year 1921. It may be seen again that the nature and extent of migration have operated to disturb the sex proportions. The decline in the sex ratio from 1921 is due to an extent to the return of a large number of persons, mostly males, who had emigrated during the earlier decades. From the year 1931 onwards the external flow of migration started drying up by and by, as seen in the opening Chapter of this Report. There was a fall of over two lakhs in the number of emigrants during a period of 20 years preceding the present census. Conditions in Burma became unfavourable for emigration from India, which stopped almost completely by the year 1938 when Burma was separated. The tea plantations of Assam were gradually depending on locally available labour which was steadily increasing. In Bengal, a variety of conditions dimmed the usual attraction to emigrants from Orissa. These were the conditions with regard to migration which resulted in decreasing the flow of outward movement of men from Orissa. Thus, more and more men who in earlier decades had gone out of Orissa stayed at home, automatically reducing the female ratio which has thus shown a steady decline from decade to decade.

9. Although migration has played an effective part in influencing the proportion of sexes in Orissa during the past decades, it does not by any means offer a comprehensive explanation of the ratio variation. There are various other reasons for the decline in female ratio. The old social attitude under which a girl is looked upon as a liability is still at work though unconsciously in most cases. Girls in their infancy are subjected to greater amount of neglect by the parents than in the case of boys, resulting in greater mortality among girls as they grow up. This particular attitude, governing the thought and action of the people through centuries, may result in the survival of those females who are likely to bear a preponderance of male issues. This becomes at once vivid from the vital statistics for the last few decades showing that the birth of female children is less than that of male children in Orissa.

10. Another reason for the decline in the female ratio may be the comparatively greater amount of malnutrition from which the women of Orissa suffer. In poor families whenever food for the day is inadequate for the whole family, it is the woman rather than her husband or children who voluntarily gets a greater amount of cut in her diet. Whenever a small quantity of nutritious or delicious food is available, it is the woman rather than other members of the household who must content herself with the least share out of it, and sometimes with nothing. In times of sickness in the family, while she cannot escape from the usual strain of domestic life, the additional duty of nursing others falls on her, even when herself ill. This results in a perpetual state of undernutrition and low level of health in the woman who is rendered less capable of procreating her own species.

11. Besides the above, there are many theories explaining the decline in female ratio. It is stated, for example, that harder economic struggle and outdoor

life is responsible for the downward trend in female population. The caste system favouring inbreeding leads to increased masculinity which becomes a hereditary trait so long as endogamy is maintained. It is also stated that climate, race, environment and local conditions play an important part in determining the sex of the child to be born. None of these theories, however, can be taken as definitely established, for the result of recent investigations do not conclusively support them and sometimes point in the opposite direction.

POCKETS OF FEMALE MINORITY

12. Looking to the Subsidiary Table 6·4 it appears that while there are 1,022 females in Orissa per 1,000 males there are three districts, namely, Balasore, Koraput and Keonjhar where the ratio of females is below par, i.e., 989, 990 and 995 respectively. This low proportion of females in relation to males has resulted from such causes of general nature as mentioned in the paragraphs above. Moreover, in respect of these three pockets of female minority, there is an additional reason which may be stated as marriage migration. The three districts, Balasore, Keonjhar and Koraput are border districts adjoining other States, where the proportion of females to males is poor. Balasore adjoins West Bengal in which State there are 859 females per 1,000 males. Similarly, Keonjhar adjoins Bihar where the ratio of females to males is 989 : 1,000. Lastly, Koraput adjoins Madhya Pradesh which State has also a deficiency of females, namely 993 per 1,000 males. On account of shortage of females in these bordering States, women are taken in marriage from the districts of Balasore, Koraput and Keonjhar reducing the proportion of females to males below par in these districts of Orissa.

SEX RATIO IN RURAL AREAS

13. The rural areas have generally a liberal proportion of women. The rural population of Orissa numbering 14,051,876 is made up of 6,927,016 males and 7,124,860 females. This shows that per every 1,000 males there are 1,029 females in the villages of Orissa. There has been a steady fall in the proportion of females to males during the last three decades. The number of females per 1,000 males in 1921 was 1,090. It declined to 1,072 in 1931, 1,058 in 1941 and 1,029 in 1951. The decline, as in the case of the general population, is noticeable to a greater extent in the coastal division. The rural areas of three districts, namely, Balasore, Koraput and Keonjhar show deficiency in the proportion of females to males. The remaining ten districts have surplus female population in the rural areas.

SEX RATIO IN URBAN AREAS

14. Urban areas are generally noted for a smaller proportion of females. The population of urban areas of the State is 594,070 of which 315,876 are males and 278,194 are females. In other words, there are only 881 females for every thousand males in the towns of Orissa. The proportion is thus small but even this has undergone consistent decline from decade to decade since 1921. The number of females per 1,000 males in the urban areas of Orissa was 963 in 1921. It was reduced to 930 in 1931, 918 in 1941 and lastly to 881 in 1951. The decline in the proportion of women in urban areas during the last 30 years is 8·2 per cent, which is greater than the extent of decline in the female ratio of the rural population or the general population of the State, amounting to 6·1 and 6·4 per cent respectively.

15. Taking districts individually, the urban areas everywhere show at present lesser number of females than males except in the towns of Ganjam district, where there are 1,002 females per 1,000 males. Though the females are proportionately greater than males in the towns of this district, there has been a decline

in the female ratio to a marked extent during the last 30 years. In 1921, the number of females per 1,000 males in the towns of Ganjam was 1,089 which was reduced to 1,058 in 1931 and to 999 in 1941. A slight mprovement was registered by the year 1951 when the number rose to 1,002. This is just above the par ratio.

Sex Ratio among Agricultural Classes

16. The population of the agricultural classes in Orissa is 11,612,368 comprising 5,745,105 males and 5,867,263 females. The number of females per 1,000 males in agricultural classes is 1,021, which is less than the proportion noticeable not only among the non-agricultural classes, but also among the general population. One would ordinarily expect in a country which is predominantly agricultural in character and which has a surplus population of females, that the ratio of females of the agricultural classes will be higher than that of the non-agricultural classes or of the general population. This is however not the case in Orissa. In 7 out of 13 districts of the State, namely, Cuttack, Balasore Ganjam, Koraput, Phulbani, Bolangir and Kalahandi the proportion of females to males of the agricultural classes is smaller than that of the non-agricultural classes. In the remaining six districts, the proportion of females in the agricultural classes is greater than that of the non-agricultural classes. This peculiarity seems to have resulted from the fact that in the seven districts named above, women of the agricultural classes often take to certain non-agricultural professions, and in such a case if their earnings justify their classification as self-supporting persons, they would automatically be returned as women belonging to non-agricultural classes in spite of living in agricultural households. In the districts of Kalahandi and Bolangir, women belonging to agricultural classes are known to have been returned as self-supporting persons of non-agricultural category by virtue of their deriving the principal means of livelihood from *bidi*-making. In Koraput and Phulbani, women have their own earnings from collections of forest products, while in the coastal districts of Cuttack, Balasore and Ganjam women belonging to agricultural families engage themselves in retail trade and in manufacture of food-stuffs, such as, *mudhi*, *chuda* as well as such industries as husking of paddy, weaving and spinning, stock raising and domestic service. Such a woman is enumerated among non-agricultural population, as soon as it appears that her income from any source of non-agricultural livelihood is sufficient to maintain *herself*. Thus the economic status of the individual is responsible for swelling the number of women of non-agricultural classes, who otherwise on the basis of household connection or social convention, should have been regarded as belonging to agricultural classes.

17. The proportion of females per 1,000 males in the general population, and in agricultural and non-agricultural classes and sub-classes is shown below :—

State or natural division	General population	Agricultural				Non-agricultural			
		Total	S. . P.	N. E. D.	E. D.	Total	S. . P.	N. E. D.	E. D.
ORISSA	1,022	1,021	182	1,936	1,081	1,025	290	1,868	1,135
Inland Division	1,007	1,010	187	1,831	1,476	993	250	1,800	1,473
Coasta lDivision	1,040	1,036	175	2,071	518	1,053	325	1,922	759

18. It appears from the above statement that the non-earning dependants among females are high in the agricultural as well as the non-agricultural classes. The earning dependants are also quite high particularly in the inland division, both among the agricultural and non-agricultural classes. Women in the inland division are more habituated to out-door life than in the coastal division and take to part-time earning in greater proportion. In the coastal division, the women of agricultural classes and also of non-agricultural classes, such as, masons, carpenters, smiths, etc., mostly remain idle at home unlike their counterparts in the inland division. This explains the remarkable difference between the figures of earning dependants of the two divisions.

19. A reference to Subsidiary Table 6·5 shows that among the agricultural classes, women of self-supporting category are largest in proportion in class IV forming 599 against 1,000 males of the same category. Their proportion among cultivators of class III is only 252 and is much less in classes I and II. The proportion of females of the category of earning dependants is highest in class III. This is natural because in the population of livelihood class III, the level of income is low and requires to be supplemented by part-time labour of other members of the household. The proportion of female earning dependants in each of the other three agricultural classes is a little above half that of class III. As regards the non-earning dependants, approximately equal proportion is noticeable in all the four classes, which however is very high, being nearly double of males of the respective category.

Sex Ratio among Non-agricultural Classes

20. The total population belonging to non-agricultural classes is 3,033,578 of which there are 1,497,787 males and 1,535,791 females. For every 1,000 males there are thus 1,025 females among the non-agricultural population of Orissa. Of the four non-agricultural classes, the highest number of self-supporting women per 1,000 self-supporting men of the same class is to be seen in livelihood class VI (Commerce) in which class the proportion is 323. The next highest proportion occurs in class V, numbering 305. In classes VIII and VII, there are 285 and 59 women respectively. With regard to the earning dependants, the proportions are very high, as in the case of agricultural population, with 1,955 for class VI, 1,865 for class VIII, 1,856 for class VII and 1,834 for class V. The earning dependants are high in class V with a proportion of 1,462. The remaining three classes have smaller proportion, namely, 1,040 in class VIII, 844 in class VII and 762 in class VI.

SECTION V

Marital Status Ratios

1. Marriage is a factor of basic importance for the future of population. The proportion of people who marry and the age at which they marry determine for the most part the number and the frequency of births, which in turn effectively influence the trend of population. A reference to the Subsidiary Table 6·7 shows that nearly half the people in the State are married. The remaining half is constituted to a predominant extent by unmarried people and to a small extent by the widowed. It appears that nearly one out of every 8 females and one out of every 25 males in the State is a widowed person.

INTERPRETATION : MARRIED

2. Persons who were recognised by custom as married were entered as such even though they might not have gone through a full ceremony. The criterion was that where persons were accepted by the members of their community as regularly married, such persons were recorded as married. The intention was to widen as far as possible the definition of marriage, since it is in no way the concern of the census whether a couple are legally married or not, so long as they are living together in such a manner as to beget children and to form a family household. There was therefore little scope for uncertainty whether a person should be regarded as married or not. It was however not improbable that wrong statements were made to the enumerators at times. For example, under the instructions given, persons living in unregulated sex relation were not to be returned as married, though some of such persons insisted on being recorded as such with a view to keep up social prestige. A few widowed or divorced persons or even grown up spinsters might have concealed their unwelcome civil condition, but it is presumed that the number of such deliberate misstatements are negligible and does not affect the marital ratios as shown in the statistics.

WIDOWED : DIVORCED

Divorced persons, for purpose of census statistics, are included among the widowed. The question may arise how far the recorded number of widowed persons is affected by such combination. Divorce is not legally recognised under the personal law of the majority of Orissa's population, and although among some small sections particularly of lower social strata, and among certain religious minorities and tribes this is permissible, in actual practice it is rare with all sections of people. Even such rare cases are followed by marriage in many instances, so that the net residual number is insignificant in influence on the statistics of the widowed. A widowed person, as usual, means a man or a woman who has lost the married partner by death. If a person who after being widowed or divorced has again married, he or she was treated as married and not as widowed or divorced.

PAST TREND : MARRIED

3. The following statement gives the number of married persons out of 1,000 of the general population of each sex for the last four censuses.

Sex	Number of married persons			
	1951	1941	1931	1921
Males	490	467	481	439
Females	483	467	478	439

There has been a rise in the number of married persons, males as well as females, from the year 1921 onwards except in the year 1941 when there was a slight decline. This decline was more than compensated by a greater rise in number

in the year 1951, so that the number of married persons in the year 1951 is higher than that of the year 1921. The proportion of married males has been higher than that of married females in the years 1951 and 1931 for reasons discussed in a subsequent paragraph.

UNMARRIED

4. The proportion of unmarried persons out of 1,000 of each sex of the general population for different censuses is mentioned below.

Sex	Number of unmarried persons			
	1951	1941	1931	1921
Males	471	493	484	519
Females	386	362	350	375

While the proportion of unmarried males has been declining from decade to decade with a fluctuation in the year 1941, the proportion of unmarried females has shown slight increase during the last 30 years. The reason why the proportion of unmarried females has been increasing particularly from the year 1931 while the proportion of unmarried males has been going down may be that it is among the females rather than among males that education has made comparatively greater progress during the last few decades. Therefore an increasing proportion of females remain unmarried upto a higher average age. Education has also spread during the last few decades among the boys but in point of proportion boys have been left behind girls. This explains to some extent why the proportion of unmarried females has risen against a background of decline noticeable with regard to males. It is further seen that, the proportion of unmarried males is much higher at every census than the proportion of unmarried females. Social disapproval is stronger against a woman rather than against a man when the marriage is delayed or does not come at all. The males generally marry later than females, and so the proportion of unmarried males has all along remained higher than that of unmarried females.

WIDOWED

5. Out of a proportion of 1,000 persons of each sex, the number of widowed persons among males and females for different censuses is given below.

Sex	Number of widowed persons			
	1951	1941	1931	1921
Males	39	40	35	42
Females	131	171	172	186

The above figures show a remarkable disparity in the number of widowed persons of different sexes in the censuses of the past. This is the natural result of males being permitted to marry after becoming widowers, while the females are debarred from taking a husband second time. The proportion of widowed males has practically remained at a level subject to slight fluctuations since the year 1921. It shows no trend. But as regards the females, there has been a consistent fall from decade to decade since the year 1921. The age-old prejudice against widow remarriage is gradually weakening but in actual practice there has been no appreciable progress in this direction. The remarriage of widows now makes as much a striking item of news these days as it used to make two or three decades ago. Therefore this does not explain the fall in the proportion of widows. The matter seems to be correlated with the decline in the death rate of males. Another reason may be that on account of the rising average age of marriage for girls in recent years there has been a decrease in the number of child widows which in previous decades used to swell the proportion of widows.

DISTRIBUTION OF POPULATION BY MARITAL STATUS

6. The distribution of the 1951 population between the three marital conditions, namely, unmarried, married and widowed

is shown below. The figures relate to 10 per cent samples of the general population. The absolute total population of the State under the three classes may be worked out approximately by multiplying the figures by ten.

Sex	Unmarried	Married	Widowed
Males	347,567	356,533	18,566
Females	283,767	354,968	96,502

It thus appears that the number of married persons among males and females is greater than the number of unmarried persons in the State. Nearly half the total population belong to the category of married persons. There are 490 married males and 483 married females out of every thousand of the general population. This practically means that almost every person of marriagable age has been married and is actually living in married state or has passed into the widowed state. The universality of marriage is the outcome of religious practices and social attitude obtaining in the country, which look upon celibacy with disfavour. These considerations are so strong as to outweigh the lack of economic stability of the bridegroom, which is of minor significance in a joint family system. The percentage of unmarried among the total male population of the State is 47·1 and among the total female population is 38·6. Similarly, out of the total male and female population of the State, 3·9 per cent are widowers and 13·1 per cent are widows. The marked disparity between the males and females in the widowed state is due, as is well known, to the practice of a widowed male getting married again and re-acquiring the status of a married person, which a widowed female belonging to the most sections of the population, is not allowed to do.

Excess of Married Males

7. The figures given above with regard to the married males and females show a striking fact. In a sample population of the dimension of 10 per cent, there are 357 thousand married males as against 355 thousand married females, which presents an apparently impossible position of nearly two thousand married males with non-existent wives. The feature becomes all the more striking when considered against the background of surplus female population in Orissa and when the practice of polygamy, even though existing in an extremely limited form in Orissa, is taken into consideration. It was ordinarily expected that the number of married females should exceed, or at least should not be short of, the number of married males. This is, however, not the first occasion when such reverse position has come to notice. As the Subsidiary Table 6·7 shows, the unexpected feature of surplus of married males over married females was present in Orissa in the year 1931, when there were 481 married men for every 478 married women in the general population. The shortage of married women *vis a vis* married men was also noticed in the all-India figures for the year 1931. In Orissa, the proportion of married women was at par with that of married men in the years 1921 and 1941, but has turned into a higher proportion for married men in the years 1931 and 1951. No explanation is available why there was a larger proportion of married men in the year 1931. The excess cannot of course be imputed to polyandrous conditions as are prevalent among some Buddhists of the Himalayas, for Orissa, a land of surplus females, never took to such a social order. So far as the present census is concerned, the first and foremost reason of the disparity in marital ratio has to be ascribed to the vagaries of sampling procedure under which the figures presented above have been obtained. This however appears at best a partial explanation. Out of every 490 married men, there are seven whose wives has not been accounted for in the statistics.

It is likely that a few of these missing wives are outside the bounds of Orissa, so that they have not been censused and included in the statistics. It is a well known fact that a number of married male refugees, contractors, businessmen and men employed in miscellaneous services and professions have come to Orissa, either on account of political conditions in India or on account of the multi-purpose and industrial developments in the State, and such married men have not brought their wives to Orissa in all cases. This has partly led to the increase in the number of married men over married women. Yet another reason may be found in the contravention of the Child Marriage Restraint Act. Brides are generally younger in age than bridegrooms and the necessity to conceal the marital status of the child-bride is greater and more frequent than in the case of the bridegrooms. A greater number of concealment of the married state of females correspondingly swells up the proportion of married males. Thus the excess of married males is partly unreal.

AGE AND MARITAL RATIO

8. The following statement shows the distribution of 1,000 persons of each sex at different age groups according to their marital status in 1951.

Age	Unmarried		Married		Widowed	
	Males	Females	Males	Females	Males	Females
0	1,000	1,000	..	..	..	..
1—4	1,000	1,000	..	..	..	..
5—14	943	880	55	117	2	3
15—24	537	223	451	743	12	34
25—34	101	37	868	882	31	81
35—44	27	21	919	785	54	194
45 and over	18	15	840	500	142	485

9. The above statement shows that in the age groups 0 and 1—4 years, the entire male and female population is unmarried. In actual practice, however, there are cases of infant marriages taking place here and there occasionally, and by the age of 4 years, there are a good few cases in Orissa not only of marriages solemnized but of widowed status acquired by suckling babies and young children, male and female. Such cases however are insignificantly small, compared to the vast population of the State. On account of this reason, it was held for statistical purposes that persons upto the age of 4 years should be taken, one and all, as unmarried. The statement above thus shows 1,000 out of 1,000 as unmarried in the age groups 0 and 1—4.

10. In the age group 5 to 14 years, as many as 880 out of 1,000 females are unmarried and the remaining 120 have entered into the bonds of marriage, of whom 3 are already widows and the remaining 117 are in married state. Most of these 117 'married' girls may be in pre-puberty age, unfit for consummation. Among males of this age group, 943 are unmarried, 55 are married and 2 are widowed. In the next age group, namely 15 to 24 years, comes the peak of marriages of females, for out of 1,000 females in this age group, 743 are married, 34 are widows and only 223 remain unmarried. Among males, the proportion of married, widowed and unmarried is 451, 12 and 537 respectively. Thus at the age of 24, more than half the

males belonging to the age group 15—24 years remain unmarried, while the proportion of females remaining unmarried at this age is less than one-fourth. Nearly 3½ per cent of the total number of women of the age group 15—24 years are already widows.

11. The rush of marriage which is confined to the age group 15—24 years for females, is spread over almost equally for males in the age groups 15—24 and 25—34. The proportion of married males is 451 out of 1,000 in the age group 15—24 but rises to 868 out of 1,000 in the next age group 25—34 years. In the latter age group there are 101 males and 37 females only who are still unmarried. The figures for the widowed persons have risen to 31 for males and 81 for females out of 1,000 population of the respective sex in this age group. The age groups beyond 34 years are notable for large number of widowed persons, there being 54 widowers and 194 widows in the age group 35—44 and 142 widowers and 485 widows in the age group 45 and over, out of a population of 1,000 persons of each such age group and sex.

Changes since 1941

12. Subsidiary Table 6·8 shows the age distribution of 1,000 married persons of each sex for the censuses of 1951 and 1941. The figures relating to 1951 have been drawn from the 10 per cent samples, while those relating to 1941 are based on a 2 per cent sample technically known as 'Y' sample. The result available from these two sizes of samples, one of which, namely the 1941 sample is too small, does not afford in all cases a sound comparable basis. The figures however are useful for giving an approximate idea of age distribution of married persons during the last two censuses, and are discussed in the following paragraphs.

Extent of Early Marriage

13. As the figures stand, the number of married male persons between 0 and 14 years of age has increased from 18 in 1941 to 28 in 1951. In respect of the females of the same age group the number has declined from 60 to 57. It is understandable that child marriages among females has decreased as the figures show. But it is difficult to explain why child marriage among males has increased during the last 10 years. It appears absurd from common knowledge that marriage in younger age has been increasing among boys during the last few years. The real position may be otherwise. The fact seems to be that the 1941 figures calculated on the basis of the small sample of 2 per cent size are not reliable with regard to this age group, and that the proportion of married males aged 0 to 14 years must have been higher than 18 out of 1,000 in 1941. At any rate, it could not have been lower than the 1951 figures, namely 28 out of 1,000. The figures for the year 1951 show that at least 5·7 per cent of married females and more than 2·8 per cent of married males are breaking the law by contravening the provisions of the Child Marriage Restraint Act by entering into married life at an age ranging from 0 to 14 years. If the married males upto the age of 18 years, which is the age limit under the law prohibiting child marriage, are taken into consideration, the percentage of married male children contracting early marriage will be higher than 2·8 as mentioned above. The country is thus not yet free from the practice of early marriage, in spite of legal provisions to stop it. This practice of child marriage naturally involves child widowhood, a feature of little significance where widow remarriage is permissible, but of grave social and demographic consequences where it is not.

Fertile Age Group

14. The period of maximum fertility is between 15 and 34 years of age. In

this age group, married males and married females both have decreased in proportion between the years 1941 and 1951. The decrease in respect of males is from 445 in 1941 to 424 in 1951, and in respect of females the figures are 618 and 552 respectively. This may be indicative of the fact that the people in general are taking to marriage at late age but it cannot be conclusively established due to statistical weakness of 1941 figures. The decline has been more marked in the case of females than males. In other words, comparatively greater proportion of women than men are marrying late. This is highly significant in explaining the fall in the birth rate as seen in Chapter I of this Report.

Late Reproductive and Old Age Groups

15. In the age group 35--54 years reproductive activities undergo sharp decline. This age group is therefore less potent for population trend than the fertile age group of 15–34 years. The number of married males in the age group 35—54 years has decreased from 423 in 1941 to 412 in 1951, but the number of married females in the group has increased from 284 to 317 during the last ten years. The position with regard to both the sexes is mutually counterbalancing and is not likely to have exercised a pronounced effect on the birth rate of the last decade. Here again, it is not possible to express any confirmed view on account of the suspected defects in the sample age figures of the year 1941.

16. Among the old people aged 55 and over, there has been a tendency both among males and females to gain by increasing proportion of married persons in 1951 as compared with that o' 1941. The increase is more noticeable among females rather than among males but the actual proportion of married females in this age group is very low as compared with males. In the year 1951 out of every 1,000 married males, there were 135 males over the age of 55 years and above, while there were only 73 females of such a category. This is the natural outcome of widowhood which causes depletion in the proportion of married women. Widows greatly outnumber widowers at the advanced age beyond 55 years, so that the proportion of married old persons is favourable for males rather than for females.

Late Marriage

17. It has generally been seen that persons are marrying at a higher average age in the present decade than they used to do before. The tendency is more marked in respect of women than men, for men were already marrying at somewhat later age in previous decades. This change in marriage habit is not without a bearing on the population because delayed marriages tend to lower birth rate not only by shortening the effective child bearing period but also by reducing the most fertile period of reproduction which comes in the earlier years. It is generally held, though there are no statistics in Orissa to support, that the period between 15 and 25 years of age is markedly more fertile than the later ones. There seems to be a fall in the proportion of married persons both amongst males and females in this fertile period. This has partially contributed to the decline of birth rate between the years 1941 and 1951.

Sarda Act

18. The rise in the average age of marriage may be due to the spread of education and other socio-economic conditions of the present day but the effects of legislation are also there. A Bill moved by Dewan Bahadur Harbilas Sarda was passed in its final form as the Child Marriage Restraint Act which came into force in April 1930. This Act

provides penalties for solemnizing marriage of male children under 18 and of female children under 14 years of age. The Act met with wide approval among the educated persons but serious opposition came from the orthodox sections. In spite of infringement now and then, the legislation achieved ts object to some extent by influencing the attitude of persons against marriage at an early age. Its ultimate effect on the population has been good not only from eugenic point of view but also from social and economic considerations. Moreover, the restriction in child marriage led to reforming movements in other directions, viz., remarriage of widows, divorce and inter-caste marriages.

SECTION VI

Infants

DEFINITION

1. The definition of infant has undergone a change in the present census. In the censuses of 1931 and 1941, the age of a person was reckoned from the nearest birth date but in the present census the number of completed years of age has been shown. Persons whose age did not exceed six months were shown as 0 year old in 1931 and 1941 censuses. But on the present occasion, an infant of 11 months was shown as aged 0. Similarly, an infant of 23 months was shown as one year old. It appears that this was the arrangement in the census of 1921 and before. But since the two intervening censuses adopted a change in the basis of determination of age calculated from the nearest birth day, it became necessary to make the recorded age comparable with those of 1921 and previous censuses. This was done at the tabulation stage by including in the age group 0—1 all persons upto six months of age and half the number of persons between 6 and 18 months. On account of such adjustment, the figures of 1941 census are comparable with those of 1951, subject, of course, to the usual shortcomings of the small 2 per cent sampling adopted in 1941.

INCREASE IN NUMBER

2. The number of persons aged 0 years according to the 10 per cent sample is 40,797, of which 19,540 are males and 21,257 are females. They constitute 2·8 per cent of the total sample population of the State. A perusal of Subsidiary Table 6·9 shows that there has been a very large increase in the number of infants in the present census. There were 141 infants per 10,000 persons of the general population in 1941 but in the year 1951 the proportion of infants rose to 279 which is practically double the 1941 figure. This is indicative of the fact that there has been a real fall in infant deaths. It was shown in Chapter I of this Report that the death rate for the year 1950 is the lowest ever recorded in the State. There was thus a large number of survival of babies born in 1950, who being within the age of 12 months when the census was taken in March 1951, have increased the number of infants aged 0 year. These infants will be responsible, if all goes well with them, in raising the birth rate in 1971, when they will have swelled the reproductive age group by their large number.

GREATER SURVIVAL OF FEMALES

3. Out of 279 infants in the general population of 10,000 persons in 1951, there are 134 males and 145 females. The birth statistics show a larger number of births of male than female children. But since at the close of 12 months of age, the male children are lesser in proportion than females, it appears that a larger proportion of male children are v ctims of infantile death. From common experience it appears that male children die in greater percentage than female children by the third month of their life. It is thus not strange that at the end of one year the number of male children is reduced below that of the females.

RURAL AND URBAN

4. In a population of 10,000 persons of rural areas, there are 267 infants of whom 130 are males and 137 are females. In the urban areas however there are 222 males and 343 females There is preponderance of female infants in the rural as well as in the urban areas, the proportion in the urban areas being remarkab y high as compared with the rural areas. The percentage of female

infants in the general, rural and urban population is 1·5, 1·4 and 3·4 respectively. Similarly, the percentage of male children are 1·3, 1·3 and 2·2 respectively. The urban population is remarkable as it not only contains a higher proportion of infants among the total population but there is a strikingly high ratio of female infants.

LIVELIHOOD CLASSES

5. Out of a population of 10,000 persons belonging to the agricultural classes, there are 262 infants of whom 128 are males and 134 are females. Among the non-agricultural classes, there are 342 infants, namely, 154 males and 188 females. The non-agricultural classes are therefore more fortunate in the number of infants both male and female in comparison with the agricultural classes. This is a welcome feature of the population which stands in need of a larger number of industrial hands in the coming decades.

SECTION VII

Young Children

Diminishing Proportion

1. Persons aged 1 to 4 years are classed as young children. The number of such children in the 10 per cent sample population is 144,120 which constitutes 9·8 per cent of the total sample population of the State. In a proportionate population of 10,000 persons of the State, there are 985 persons between 1 and 4 years of age. In the year 1941, the proportion of such children was 780. The proportion of young children has thus increased during the decade 1941-50. In the previous Section it was seen that the proportion of infants has increased considerably, being nearly double in 1951 of what it was in 1941. Adding the two age groups 0 and 1-4, it appears that there are 279 infants and 985 young children, total 1,264 persons of the age 0—4 years in 1951. In the year 1941, the number of such persons of 0—4 years of age was 921. The growth in the number of infants and young children during the last decade is remarkably high.

Sex

2. Of the 985 young children in the population of 10,000 persons of the State, there are 483 males and 502 females. The females have kept up the numerical superiority in this age group as they had in the infant stage. But the gap seems to be narrowing down in favour of males. In the infant stage, there are 134 males against 145 females. Among the young children there are 483 males which, in the infant ratio, requires 523 females but actually there are 502 females among the young children. This is indicative of the fact that among the young children, there has been a lesser number of deaths among the males than among the females so that the males have been proportionately growing in number. The greater amount of infantile death at the infant stage among males is partly compensated by comparatively lesser amount of deaths among them at the age group 1-4 years.

Rural and Urban

3. In the rural areas, out of 10,000 persons, there are 986 young children which is almost the same proportion as in case of general population. The rural population of young children is constituted of 482 males and 504 females. In the urban areas, the proportionate number of young children is 975 which is lower than that of the rural or the general population. This urban population contains 504 males and 471 females. Thus the sex proportion in urban areas is reverse to that of the rural areas or of the State as a whole. In the infant stage, the ratio was in favour of females but in the present stage it has changed. It is difficult to account for this change seen in the urban areas. The only explanation may be that the towns have a comparatively much smaller population than either the rural areas or the State as a whole and as 10 per cent samples were drawn from this small urban population, the results became somewhat unusual.

Proportion in Livelihood Classes

4. The agricultural classes contain 998 young children out of a total population of 10,000 of this class. There are 494 males and 504 females included in this proportion. Among the non-agricultural classes the total number of young children in a population of 10,000 persons is

932 comprising 438 males and 494 females. Thus both among the agricultural and non-agricultural classes the number of male young children is less than that of female children. Female young children are however higher comparatively among the non-agricultural classes than the agricultural classes. The agricultural classes have got a poor proportion of infants but a liberal proportion of young children as compared with the non-agricultural classes.

SECTION VIII

Boys and Girls

Poor Proportion

1. Persons between the age of 5 and 14 years have been classed as boys and girls. The number of such persons according to the 10 per cent sample population is 356,980 which forms 24·4 per cent of the total sample population of the State. Expressing it in terms of proportion, the general population of the State contains 2,440 boys and girls in a total population of 10,000. This is a poor proportion as compared with 1941 composition when there were 2,810 persons in this age group. The fall in the year 1951 is the result of the calamitous years 1943 to 1945, when death rates were generally high and birth rates low. There was considerable devitalization of the people, resulting in impairment of their reproductive powers. This has been reflected in the poor proportion of boys and girls in 1951 as compared with that of 1941.

Sex

2. Out of 2,440 persons belonging to this age group, there are 1,247 boys and 1,193 girls. In this age group the boys have outnumbered the girls for the first time in the age structure. It was seen earlier that the proportion of females was larger than that of males in younger age groups. If the ratio at the infant stage were maintained there should have been 1,349 females in this age group against 1,247 boys. But the girls number only 1,193 which is low indeed. Even if the less favourable ratio of the age group 1-4 years had continued, there should have been 1,296 girls against 1,247 boys. The depletion of females in this age group is therefore notable. The depletion has occurred more between the years 10 and 14 than between the years 5 and 9. In the 10 per cent sample, the actual number of girls of the age group 5 to 9 years is 93,089 and boys is 93,690, while in the age group 10-14, the girls number 81,397 and boys 88,804. Normal death rate should not have caused such large reduction. There must therefore be larger mortality of females during the economic distress and natural calamities which visited the land from the year 1942.

Rural and Urban

3. The rural population contains a larger proportion of boys and girls than either the State as a whole or the urban areas of the State. There are 2,451 boys and girls in the rural areas out of a population of 10,000. Here again the number of boys is greater than the number of girls for their respective number is 1,250 and 1,201 only. In the urban areas of the State the proportionate number of boys and girls is 2,197 only composed of 1,199 males and 998 females. The boys again have outnumbered the girls in the urban population.

Livelihood Classes

4. Among the agricultural classes there are 2,467 boys and girls and among the non-agricultural classes there are 2,337 boys and girls in a population of 10,000 persons of each of these classes. The non-agricultural classes are thus poorer in this respect than the agricultural classes. At a time when the importance of the non-agricultural pursuits is gaining ground, this will lead to abandonment of hereditary occupation of agricultural character by many who will join the fold of non-agricultural classes. The proportion of sex shows a favourable position with regard to boys among both the agricultural and the non-agricultural classes. There are 1,258 boys and 1,209 girls among the agricultural classes while there are 1,208 boys and 1,129 girls among the non-agricultural classes.

SECTION IX

Young Men and Women

1. The age group 15 to 34 years comprises persons who are classed as young men and women. This age group is the most important in the entire age structure. The position in this age group determines the immediate trend of population, for this is the best period of fertility.

Proportion

2. The sample population of the State contains 472,466 persons forming 32·3 per cent, who belong to the age group 15-34 years. Proportionately, in the general population of 10,000 persons there are 3,230 young men and women. In the year 1941, their proportion was 3,389. The number has thus declined in the present decade. As the proportion of women of child bearing age to the rest of the population has declined in the year 1951, this will lead to a decline of population if the fertility remains constant. There is thus no prospect of a favourable influence on the growth rate by the year 1961.

Sex

3. There are 1,582 young men and 1,648 young women included in the total number of 3,230 persons belonging to this age group. Here the ratio of females is higher than that of males. This is one factor which will partially counteract the decline of growth rate which was ordinarily expected from a fall in the proportion of persons belonging to this age group as seen above. The sex ratio in this age group is practically the same as that of the age group 1-4 years which is favourable to females.

Rural and Urban

4. In a population of 10,000 persons living in the rural areas, there are 3,224 young men and women between ages 15 and 34, the young men numbering 1,569 and the young women 1,655. There is thus a clear majority of females in the rural population of this age group. The position is however different in the urban areas. A proportionate population of 10,000 persons living in towns contains 3,354 young men and women of whom 1,871 are males and 1,483 are females. The females are strikingly poor in proportion. The excess of male population is a general feature of the towns. This is because of concentration of non-agricultural workers, students and other sections of the population belonging to male sex, engaged in economic activities of various kinds.

Livelihood Classes

5. Out of a population of 10,000 persons belonging to the agricultural classes, 3,221 belong to the age group 15-34 years. Of them, 1,571 are males and 1,650 are females. The non-agricultural classes contain 3,264 persons in this age group out of a total population of 10,000 persons of this category. Among them 1,623 are males and 1,641 are females. Thus there is a greater ratio of females than males in the agricultural as well as non-agricultural classes of the population. The proportion of females of this age group is however higher in the agricultural classes than in the non-agricultural classes.

SECTION X

Middle aged Persons

1. The middle aged persons are those that are in the age group 35-54 years. Some of them, particularly those between the ages 35-44, are within the fertility period, although the extent of fertility in this age group may not be as high as in the previous one. The proportion of persons in this age group is therefore important for consideration of growth of population in the immediate future.

Proportion

2. The total sample population of the State numbering 1,462,903, contains 187,825 or 12·8 per cent in the sub-group 35 to 44 years and 131,149 or 9·0 per cent in the sub-group 45-54 years. It is the first sub-group, namely 35-44 years which is more important of the two. It is a good feature of the population structure that this sub-group is well represented. Combining both the sub-groups it appears that out of a total population of 10,000 persons of the State, the proportion of persons in the middle age amounts to 2,180. In the year 1941, the number of such persons was 2,139. The proportion of middle aged persons is thus higher in the present decade than it was in the last.

Sex

3. The total number of 2,180 persons belonging to this age group is composed of 1,105 males and 1,075 females. This age group therefore contains a larger number of males than females. The paucity of females in this age group is partly the result of the influenza epidemic of 1918 which was fatal not only to the infants and young children but also to the females in particular. It was the poor female ratio in this age group which was partly responsible in lowering the growth rate in the decade 1941-50. This age group however is gradually passing out of importance and as it is followed by a female majority age group of reproductive period, the position is favourable for growth of population, judged from this point of view.

Rural and Urban

4. The proportion of 10,000 persons of the rural areas contains 2,184 middle aged persons of whom 1,104 are males and 1,080 are females. In the urban areas, the proportion of middle aged persons in a population of 10,000 persons is 2,091, made up of 1,149 males and 942 females. The females are thus everywhere smaller in ratio than the males and the ratio is particularly low in the urban areas. The lower ratio of females in the urban population as compared with the rural population is due to the fact that in this age group people are still employed in economic activities for earning their livelihood and as such there is greater amount of concentration of male population in the towns.

Livelihood Classes

5. The non-agricultural classes contain a larger proportion of middle aged persons than the agricultural classes. In a population of 10,000 there are 2,164 persons of middle age in the agricultural classes and 2,245 persons of similar age in the non-agricultural classes. In the agricultural classes there is a smaller proportion of females than males in the same manner as in the rural, urban or the general population. The proportion of

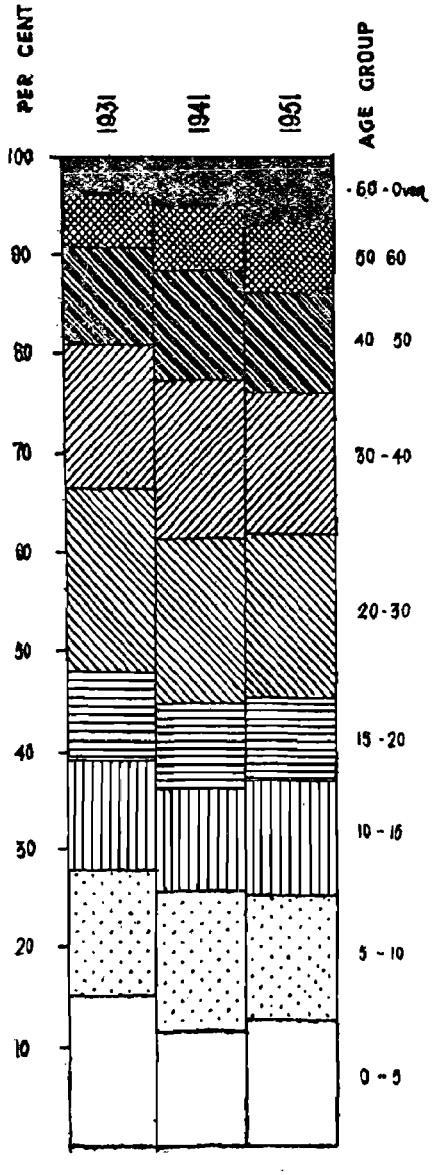
agricultural population of middle age numbering 2,164 consists of 1,103 males and 1,061 females. But the position is reverse in the non-agricultural classes where the females outnumber the males, their respective number being 1,128 and 1,117. In one way this will show that the influenza epidemic of 1918 which was primarily responsible for depletion of the females in this age group was more severe on the agricultural classes than on the non-agricultural. In fact, the influenza epidemic was preceded by agricultural distress and it is not strange that the result of these combined calamities was more disastrous to the females of the agricultural than the non-agricultural classes.

SECTION XI

Elderly Persons

PROPORTION

1. Persons aged 55 and over are classed as elderly persons. Their number in the sample population of the State is 128,082 which constitutes 8 8 per cent of the total population. In other words, the pro-



portion of such persons is 876 out of the general population of 10,000. This is exceedingly poor when compared with the parallel age group of some of the advanced countries of the world. It shows that longivity of the people of this State is poor as compared with that of other countries. But in 1941 the proportion was poorer. It stood at 741 out of the total general population of 10,000 persons. This may show that there has been some improvement in the ongivity of the population during this lecade but the fact may not be accepted dithout caution. The 1941 figures as mentioned earlier were drawn from a poor 2 per cent sample, yielding in many instances less reliable result than has been obtained with a bigger sample of 1951.

SEX

2. The population of 876 of elderly age group is composed of 419 males and 457 females. The females at last outlive. and outnumber the males of Orissa. For every 419 elderly males there are 38 elderly females who are surplus in number. This also shows the corresponding extent of widowhood in the society.

RURAL AND URBAN

3. In the rural areas, for every 10,000 persons there are 879 persons of elderly age of whom 419 are males and 460 are females. In the urban areas, the total number of elderly persons out of 10,000 population is 805 made up of 418 males and 387 females. As in the case of the general population, there is a greater ratio of females in the rural population. But the opposite is seen with regard to the urban population where the males are more in ratio than females. This does not necessarily mean that the females of the rural areas are more long lived than those of the urban areas. The fact is that among the elderly persons there are still some earners of livelihood living in towns who generally

belong to the male sex. They therefore swell the ratio of males in the urban population as compared with that of rural population.

LIVELIHOOD CLASSES

4. Out of a population of 10,000 persons of agricultural classes, the proportion of persons aged 55 and over amounts to 879. Similarly, out of 10,000 non-agricultural population, the number of elderly persons stands at 862. Elderly persons are thus slightly larger among the agricultural classes than among the non-agricultural. Both among the agricultural and non-agricultural classes there is the majority of females among the elderly persons. For every 426 males of the agricultural classes there are 453 females in the age group 55 and over. Among the non-agricultural classes, for every 391 elderly males there are 471 elderly females. The excess of females is however more marked among the non-agricultural classes than among the agricultural.

SECTION XII

Concluding Remarks

Reliability of Age Statistics

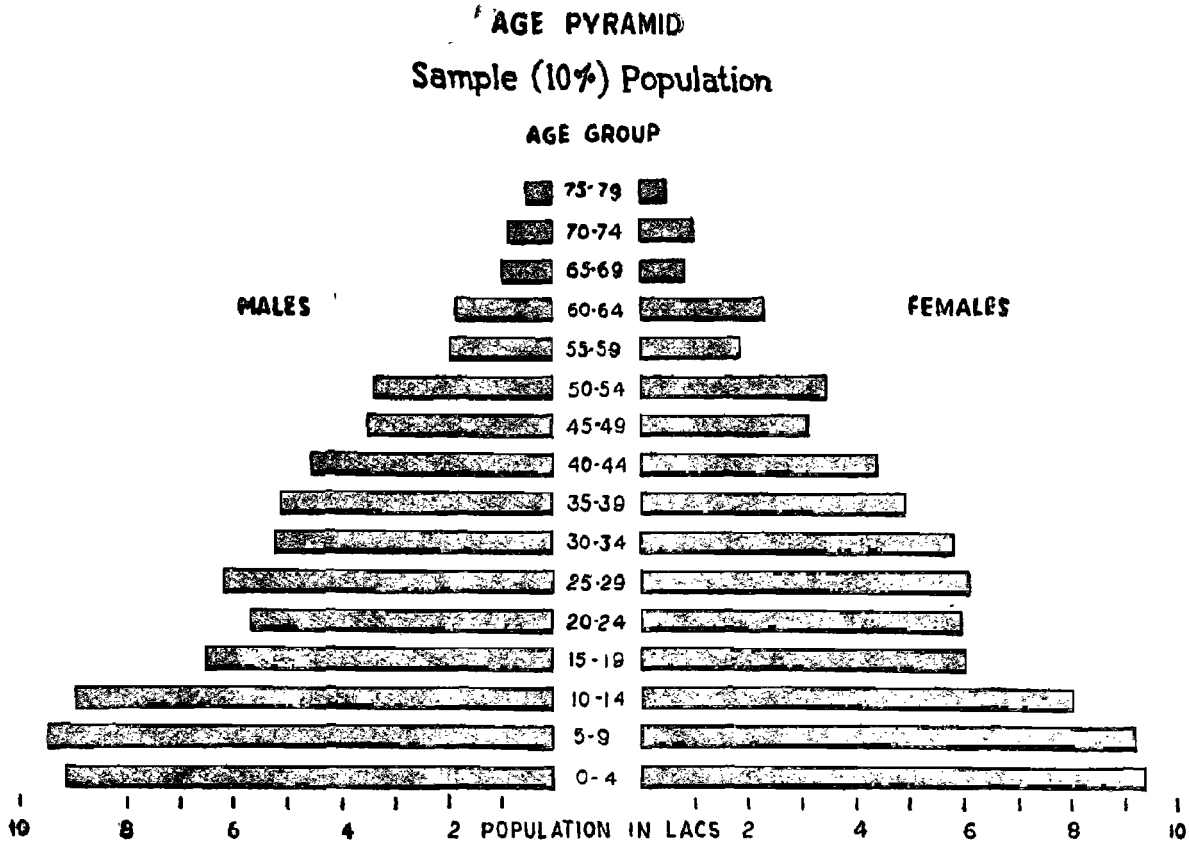
1. The preceding six Sections of this Chapter relate to the distribution of population by age groups. The ascertainment of correct age is one of the most important aspects of the Census Operations. But there are various circumstances which affect the accuracy of age returns. Firstly, large sections of the population, particularly belonging to the rural areas, appear to be ignorant of their correct age. Although their memory was aided with reference to some outstanding event of the past, namely by asking the enumerated person what was his age at the time when the first railway line was built or when the world war I broke out and so on, the answer received was at best approximate. Secondly, as regards the section of people who knew the age correctly, there was often the tendency either to exaggerate or to understate the age. Elderly persons generally were inclined to state higher age with the feeling that enhanced age adds to their dignity and importance in the society. Young men and women, particularly those who were unmarried or widowed generally understated their age so that they may appear more eligible for matrimonial alliance. In consequence, inaccuracy in age figures in some cases crept in. Thirdly, there was the general preference for use of round numbers in making an estimate of age. Whether on account of absence of exact knowledge or on account of the tendency to exaggerate or understate the age, the preference for the nearest round number resulted in swelling up the age structure relating to the years which are multiples of 5. Persons either of 21 or 19 years of age will generally mention 20 as the age. On account of this reason it is more desirable to study the structure of age on the basis of age groups rather than single years. In this way it is possible to minimise the defects in the recorded age of individuals by considering a mass of figures extending over a group of years which ultimately yield a reasonably accurate estimate of the age constitution of the population as a whole. The study of the age structure in the form of a pyramid as given below is interesting and illustrative.

Age Pyramid

2. The pyramid shown in the next page depicts the age structure of the population of Orissa in 1951 in 5-yearly age groups from 0 to 79 years. The outstanding feature of this age structure is that it has got a very broad base, and with some amount of fluctuations, it has reached a quickly attenuated top. This structure is characteristic of countries having high mortality and high fertility. The ideal age structure will be one where every age group is substantially larger than that of the next older group and the whole structure tapers off slowly as the effect of mortality cuts down the generations as they pass through life. The age structure of Orissa is not like this. Its extremely broad foundation shows the dis-proportionate extent of young population which is the natural consequence of high birth rate, while the quickly narrowing top shows the lack of longivity of the general population, which is the result of high death rate. Moreover, there are some fluctuations in the distribution of the population between different age groups in between the top and the bottom on account of the effect of varying birth and death rates, effects of famine and scarcity of food, and of unsteady migration.

3. The first two age groups, namely, 0-4 and 5-9 have built up a heavy foundation for the age pyramid of Orissa. The

next age group 10-14 has substantially reinforced the broad base. The age group 0-4 alone comprises a population of 184,917, out of the total 10 per cent-sample population of 1,462,903 in the State. This age group therefore commands 12·6 per cent of the total population of the State. The next age group 5-9, having a strength of 186,779 out of the abovementioned sample population represents 12·8 per cent of the total population. Adding the two lowest age groups, it appears that infants and young children upto 9 years of age constitute more than one-fourth of the total population of the State. This is indicative of the extremely youngish character of the population. Children between 5-14 years of age number 356,980 in the sample population constituting 24·4 per cent of the total population of the State. The total of infants and children upto 14 years of age is 37 per cent of the whole population.



4. With the 15th year in the age structure starts an abrupt shrinkage. The age groups 15-19 and 20-24 are comparatively small both comprising a sample population of 240,654 constituting 16·5 per cent of the population of the State. Thus, while persons of the first 10 years of age, namely 0 to 9 constitute 25·4 per cent, those of a subsequent 10-year group, namely 15 to 24, constitutes only 16·5 per cent. The importance of this age group in the entire population structure is obvious. It is the most fertile age group and as it is poorly represented, the growth of population in 1951-60 will be correspondingly small. The next age groups 25 to 29 and 30-34 years are however normal as compared with the two immediately preceding age groups, but when considered

against the heavy piling up of infants and children at the foundation of the pyramid, the strength of age groups from 25 to 34 years does not appear adequate. These two age groups constitute 15·8 per cent of the total population with 231,812 individuals.

5. The age groups 35-39 and 40-44 are on the whole normal containing 187,825 persons of the sample population and constituting 12·8 per cent. But the age group 45-49 shows a sudden fall though somewhat counterbalanced by the next higher age group 50-54. Both these age groups contain 9 per cent of the total sample population.

6. There is abrupt shrinkage again in the age group 55-59. The elderly section of the population aged 55 to 79 years have been exhibited in 5 age groups in the diagram above. Persons aged 80 and above have not been shown as they are too small in proportion. All the five age groups from 55 to 79 combined contain a sample population of 119,176, constituting 8·1 per cent of the total. Persons between ages 0-54 form 92·1 per cent while the elderly group of persons of the age 55 and above constitute 8·9 per cent only. This shows that there is a poor proportion of elderly persons in the population of Orissa.

COMPARISON WITH ADVANCED COUNTRIES

7. The following statement compares the distribution of population by suitable age groups of Orissa and a few advanced countries of the world *. The figures shown under each country relate to the percentage of population against each age group.

Age group	Orissa	U. S. A.	England and Wales	Australia
0—14	37·0	24·2	21·8	24·1
15—44	45·1	47·5	45·0	47·4
45—54	9·0	12·2	12·9	12·3
55 and above	8·9	16·1	20·3	16·2

It will appear from the above statement that children upto 14 years of age in Orissa are above one and a half time the number of children in the U. S. A., England or Australia. But the elderly population aged 55 and above is nearly half that of U. S. A., and Australia and is much less than half that of England and Wales. This clearly shows the excess of children population and the shortage of elderly population in Orissa.

SPECIAL FEATURES OF AGE STRUCTURE

8. The most prominent feature of the age structure of Orissa is that the population is greatly child ridden, with a proportion of adults which is poor and of elderly persons which is poorer still. Yet another feature is the predominance of unproductive age groups. It has been seen how children upto the age of 14 are disproportionately large in number. They belong mostly to unproductive category of population. Among the middle aged persons, those who are in the best period of fertility, namely in the age group 15 to 24 years, are comparatively poor than those who belong to the later reproductive span of life. Persons belonging to the age groups 35 to 54 years are on the whole well represented in the age structure. But these groups are less important as regards fertility and reproductive activities.

9. In Western Countries, the age structure generally remains stable, being governed mostly by the fertility rate. But in Orissa, conditions of harvest and public health affect the age structure particularly in the earlier groups to a remarkable extent so that the rate of fertility is by no means the most important factor in determining the structure of population. On account of unstability in the age composition due to fluctuations of birth and death rates, the reproduction rate does not happen to be a reliable index of population growth.

* Figures adopted from Population and Food Planning in India by Baljit Singh (Hind Kitabs, Limited, Bombay, 1947) page 9.

CORRELATION WITH ECONOMIC CONDITION

10. The age structure of Orissa has an important significance. The age composition of the population generally bears a close relationship to the economic condition of the country. Where a large part of the population consists of children, as in Orissa, the economically active population tends to be small in proportion. This is a feature of most of the economically under-developed countries. Korea, with more than 40 per cent of its population under 15 years of age is typical of countries which are economically least advanced. The situation in Korea bears a close resemblance with that of Orissa. England and Wales which are on the other end of the economic scale, have about 22 per cent in this age group, which is nearly half the proportion in Korea or in Orissa. Italy which occupies an intermediate position with regard to the economic development has 27 per cent of its population under 15 years of age.

11. If the proportion of children declines it results in a reduction in the average number of dependants per adult of working age, contributing substantially to the rise in the standard of living. The high proportion of children in the population of Orissa can be regarded as a symptom of inefficient national economy. In such circumstances a large share of income is spent in bringing up a large number of children, many of whom do not survive to lend their helping hand to the agricultural or industrial development of the country. The economic disadvantage of a disproportionately large childhood dependency is obvious.

Subsidiary Table 6 Series

6·1—Persons per 1,000 houses and houses per 100 square miles and comparison with past censuses

Natural division and district	General population: Persons per 1,000 houses				Rural population: Persons per 1,000 houses			
	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA	**4,868**	**4,770**	**4,727**	**4,627**	**4,865**	**4,768**	**4,733**	**4,633**
3.33 Orissa Inland Dn.	**4,864**	**4,798**	**4,716**	**4,591**	**4,886**	**4,802**	**4,728**	**4,598**
5.11 Orissa Coastal Dn.	**4,873**	**4,738**	**4,739**	**4,664**	**4,839**	**4,729**	**4,738**	**4,670**
Cuttack ..	5,188	4,786	4,756	4,642	5,114	4,756	4,744	4,646
Balasore ..	4,367	4,499	4,599	4,870	4,353	4,495	4,605	4,894
Puri ..	5,295	4,960	4,781	4,539	5,303	4,966	4,787	4,546
Sambalpur ..	4,139	4,292	4,391	4,443	4,144	4,282	4,398	4,457
Ganjam ..	4,414	4,614	4,740	4,631	4,381	4,619	4,744	4,623
Agency ..	*4,381*	*4,471*	*4,408*	*4,412*	*4,381*	*4,471*	*4,408*	*4,412*
Plains ..	*4,418*	*4,632*	*4,785*	*4,664*	*4,380*	*4,639*	*4,793*	*4,657*
Koraput ..	4,625	4,632	4,641	3,948	4,644	4,634	4,647	3,891
Dhenkanal ..	4,951	4,912	4,557	5,055	4,965	5,147	4,560	5,072
Keonjhar ..	5,706	5,176	5,094	4,902	5,724	5,185	5,094	4,902
Phulbani ..	4,416	4,195	4,437	4,096	4,415	4,200	4,437	4,096
Bolangir ..	5,398	5,065	4,921	4,865	5,501	5,089	4,938	4,887
Sundargarh ..	4,985	5,060	5,152	5,209	5,049	5,060	5,152	5,209
Kalahandi ..	5,043	5,328	5,038	4,990	5,053	5,334	5,059	4,996
Mayurbhanj ..	5,510	5,116	5,243	5,124	5,494	5,125	5,247	5,133

Natural division and district	Urban population: Persons per 1,000 houses				Houses per 100 square miles			
	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ORISSA ..	**4,941**	**4,821**	**4,518**	**4,415**	**5,004**	**4,801**	**4,395**	**4,011**
3.33 Orissa Inland Dn.	**4,201**	**4,604**	**3,963**	**4,076**	**3,560**	**3,335**	**3,002**	**2,661**
5.11 Orissa Coastal Dn.	**5,541**	**4,947**	**4,752**	**4,532**	**9,730**	**9,597**	**8,954**	**8,426**
Cuttack ..	6,935	5,653	5,061	4,543	11,581	12,152	11,683	11,248
Balasore ..	4,749	4,632	4,435	4,275	10,704	9,775	9,187	8,565
Puri ..	5,131	4,784	4,586	4,339	7,345	7,260	6,967	6,619
Sambalpur ..	4,033	4,630	4,185	3,954	4,649	4,142	3,594	3,179
Ganjam ..	4,918	4,538	4,666	4,778	7,790	7,158	6,211	5,614
Agency ..	..	..	..	..	*2,579*	*2,672*	*2,640*	*2,495*
Plains ..	*4,918*	*4,538*	*4,666*	*4,778*	*10,006*	*9,066*	*7,734*	*6,941*
Koraput ..	4,239	4,524	4,218	8,931	2,780	2,465	2,072	2,066
Dhenkanal ..	4,557	4,905	4,408	4,295	4,011	3,574	3,728	2,759
Keonjhar ..	4,767	4,717	..	..	3,206	3,182	2,811	2,407
Phulbani ..	4,484	3,839	..	..	2,416	2,505	2,167	2,146
Bolangir ..	3,856	4,441	4,267	3,773	4,936	5,051	4,749	4,304
Sundargarh ..	3,458	..	..	..	2,924	2,560	2,239	1,913
Kalahandi ..	4,422	4,893	3,621	4,481	3,367	2,949	2,741	2,325
Mayurbhanj ..	7,990	4,201	4,709	4,227	4,644	4,817	4,220	3,661

C-2—Number of households per 1,000 houses and distribution by size of 1,000 sample households of rural and urban population

Rural

Natural division and district	Households per 1,000 houses	Household population			Small (three members or less)		Medium (Four to six members)		Large (Seven to nine members)		Very large (Ten members or more)	
		Persons	Males	Females	Number	Persons	Number	Persons	Number	Persons	Number	Persons
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**1,048**	**4,716**	**2,327**	**2,389**	**371**	**896**	**434**	**2,114**	**147**	**1,121**	**48**	**585**
3.33 Orissa Inland Dn.	**1,037**	**4,843**	**2,414**	**2,429**	**349**	**840**	**433**	**2,135**	**163**	**1,237**	**55**	**631**
5.11 Orissa Coastal Dn.	**1,063**	**4,571**	**2,229**	**2,342**	**395**	**958**	**434**	**2,090**	**130**	**990**	**41**	**533**
Cuttack ..	1,090	4,450	2,220	2,230	419	1,003	398	1,909	133	1,016	50	522
Balasore ..	1,068	4,767	2,418	2,349	431	1,203	444	2,082	86	659	39	823
Puri ..	1,067	4,839	2,284	2,555	324	753	468	2,277	164	1,261	44	548
Sambalpur ..	1,019	4,192	1,984	2,208	475	1,098	376	1,878	122	934	27	282
Ganjam ..	1,014	4,222	1,977	2,245	426	968	432	2,106	116	877	26	271
Agency ..	*1,027*	*4,031*	*1,891*	*2,140*	*500*	*1,234*	*375*	*1,797*	*94*	*687*	*31*	*313*
Plains ..	*1,013*	*4,272*	*2,000*	*2,272*	*407*	*898*	*447*	*2,187*	*122*	*927*	*24*	*260*
Koraput ..	1,044	4,530	2,325	2,205	372	865	456	2,186	126	949	46	530
Dhenkanal ..	1,020	5,137	2,601	2,536	285	645	478	2,340	167	1,319	72	833
Keonjhar ..	1,076	4,883	2,450	2,433	300	683	500	2,350	100	767	100	1,083
Phulbani ..	1,051	4,552	2,260	2,292	354	833	510	2,625	125	979	11	115
Bolangir ..	1,060	4,977	2,574	2,403	328	836	425	2,097	202	1,537	45	507
Sundargarh ..	1,010	5,271	2,563	2,708	302	750	396	1,937	250	1,938	52	646
Kalahandi ..	1,031	5,496	2,744	2,752	278	684	451	2,195	181	1,384	90	1,233
Mayurbhanj ..	1,043	5,600	2,836	2,764	237	660	418	2,158	248	1,782	97	1,000

Urban

Natural division and district	Households per 1,000 houses	Household population			Small (Three members or less)		Medium (Four to six members)		Large (Seven to nine members)		Very large (ten members or more)	
		Persons	Males	Females	Number	Persons	Number	Persons	Number	Persons	Number	Persons
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
ORISSA ..	**1,086**	**5,396**	**2,651**	**2,745**	**255**	**594**	**491**	**2,453**	**170**	**1,292**	**85**	**1,057**
3.33 Orissa Inland Dn.	**1,039**	**6,075**	**3,050**	**3,025**	**100**	**275**	**600**	**2,925**	**225**	**1,700**	**75**	**1,175**
5.11 Orissa Coastal Dn.	**1,125**	**4,985**	**2,409**	**2,576**	**348**	**788**	**424**	**2,167**	**136**	**1,045**	**91**	**985**
Cuttack ..	1,166	5,241	2,552	2,689	345	793	379	1,965	104	759	172	1,724
Balasore ..	1,015	6,000	2,500	3,500	250	750	375	2,000	375	3,250	..	..
Puri ..	1,224	3,727	1,727	2,000	454	909	546	2,818	..	..	..	..
Sambalpur ..	1,076	6,778	3,667	3,111	333	889	444	2,000	..	..	222	3,889
Ganjam ..	1,068	4,889	2,556	2,333	333	722	445	2,167	167	1,167	55	833
Agency ..	..	..	..	..	..	..	..	..	..	..	..	..
Plains ..	*1,068*	*4,889*	*2,556*	*2,333*	*333*	*722*	*445*	*2,167*	*167*	*1,167*	*55*	*833*
Koraput ..	1,030	6,600	3,200	3,400	..	..	600	3,000	300	2,400	100	1,200
Dhenkanal ..	1,002	6,000	2,333	3,667	..	..	333	1,333	667	4,667	..	..
Keonjhar ..	1,013	4,000	3,000	1,000	500	1,500	500	2,500	..	..	..	..
Phulbani ..	1,018	6,000	3,000	3,000	..	..	1,000	6,000	..	..	..	..
Bolangir ..	1,000	5,111	2,667	2,444	..	..	889	4,222	111	889	..	..
Sundargarh ..	1,000	6,250	3,000	3,250	..	..	500	2,500	500	3,750	..	..
Kalahandi ..	1,000	7,000	2,000	5,000	..	..	..	..	1,000	7,000	..	..
Mayurbhanj ..	1,561	6,000	3,000	3,000	..	..	1,000	6,000	..	..	..	..

6·3—Family composition of 1,000 households of the general population

Natural division and district	Sample Household population			Heads of hous holds and their wives		Sons of Heads of hou eholds	Daughters of Heads of house-holds	Other male relations to Heads of house-holds	Other f m. le relations to i e ds of house holds
	Persons	Males	Females	Males	Females				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ORISSA ..	**4,742**	**2,340**	**2,402**	**889**	**897**	**1,032**	**757**	**404**	**739**
3.33 Orissa Inland Division ..	**4,879**	**2,433**	**2,446**	**921**	**921**	**1,135**	**832**	**378**	**693**
5.11 Orissa Coastal Division ..	**4,593**	**2,239**	**2,354**	**854**	**871**	**920**	**674**	**434**	**790**
Cuttack ..	4,500	2,241	2,259	853	814	873	559	515	886
Balasore ..	4,808	2,421	2,387	904	812	792	571	600	904
Puri ..	4,800	2,265	2,535	842	1,022	1,107	790	316	722
Sambalpur ..	4,280	2,042	2,238	898	894	818	644	326	700
Ganjam ..	4,259	2,009	2,250	835	851	927	805	247	594
Agency ..	*4,031*	*1,891*	*2,140*	*891*	*875*	*891*	*703*	*109*	*562*
Plains ..	*4,314*	*2,038*	*2,276*	*822*	*845*	*936*	*829*	*280*	*602*
Koraput ..	4,622	2,364	2,258	924	902	1,200	840	240	516
Dhenkanal ..	5,156	2,596	2,560	887	936	1,220	844	489	780
Keonjhar ..	4,885	2,468	2,387	903	984	1,178	774	387	629
Phulbani ..	4,567	2,268	2,299	959	1,010	1,093	907	216	381
Bolangir ..	4,986	2,580	2,406	951	930	1,293	832	336	644
Sundargarh ..	5,310	2,580	2,730	910	860	1,150	1,150	520	720
Kalahandi ..	5,507	2,739	2,768	925	948	1,321	865	493	955
Mayurbhanj ..	5,602	2,837	2,765	952	928	1,283	921	602	916

6·4—Females per 1,000 males (General, rural and urban population) and comparison with previous censuses

Natural division and district	General population				Rural population				Urban population			
	1951	1941	1931	1921	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**1,022**	**1,053**	**1,087**	**1,086**	**1,029**	**1,058**	**1,072**	**1,090**	**881**	**918**	**930**	**963**
3.33 Orissa Inland Dn.	**1,007**	**1,019**	**1,026**	**1,025**	**1,011**	**1,020**	**1,028**	**1,026**	**901**	**958** ..	**954**	**970**
5.11 Orissa Coastal Dn.	**1,040**	**1,094**	**1,114**	**1,151**	**1,051**	**1,104**	**1,124**	**1,161**	**869**	**894**	**917**	**955**
Cuttack ..	1,025	1,084	1,112	1,160	1,040	1,097	1,125	1,170	796	836	858	937
Balasore ..	989	1,024	1,058	1,098	993	1,028	1,064	1,103	844	910	894	977
Puri ..	1,029	1,082	1,078	1,096	1,042	1,092	1,088	1,110	810	836	843	808
Sambalpur ..	1,009	1,035	1,044	1,033	1,015	1,037	1,047	1,036	882	964	.. 934	959
Ganjam ..	1,113	1,169	1,191	1,223	1,122	1,180	1,199	1,232	1,002	999	1,058	1,089
Agency ..	*1,043*	*1,046*	*1,043*	*1,016*	*1,043*	*1,046*	*1,043*	*1,016*	..	..	..	..
Plains ..	*1,121*	*1,185*	*1,212*	*1,257*	*1,131*	*1,199*	*1,224*	*1,269*	*1,002*	*999*	*1,058*	*1,089*
Koraput ..	990	994	1,002	998	996	994	1,003	998	872	996	986	1,021
Dhenkanal ..	1,017	1,030	1,053	1,074	1,020	1,033	1,055	1,075	923	939	986	1,009
Keonjhar ..	995	1,011	1,028	1,032	997	1,013	1,030	1,033	925	887	898	956
Phulbani ..	1,015	1,021	1,022	1,018	1,016	1,021	1,022	1,017	961	1,029	1,034	1,034
Bolangir ..	1,010	1,020	1,025	1,028	1,013	1,021	1,027	1,028	957	994	988	1,014
Sundargarh ..	1,012	1,017	1,013	1,004	1,016	1,020	1,017	1,007	903	914	914	913
Kalahandi ..	1,019	1,035	1,035	1,031	1,020	1,035	1,036	1,031	965	1,028	1,014	984
Mayurbhanj ..	1,001	1,005	1,011	1,015	1,004	1,008	1,013	1,017	741	728	763	769

6·5—Females per 1,000 males in

Natural division and district	All agricultural classes				I. Cultivators of land wholly or mainly owned and their dependants				II—Cultivators land unowned	
	Total	Self-supporting persons	Non-earning dependants	Earning dependants	Total	Self supporting persons	Non-earning dependants	Earning dependants	Total	Self supporting persons
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA ..	**1,021**	**182**	**1,936**	**1,081**	**1,024**	**163**	**1,954**	**966**	**987**	**127**
3.33 Orissa Inland Division.	**1,010**	**187**	**1,831**	**1,476**	**1,014**	**175**	**1,851**	**1,318**	**1,003**	**133**
5.11 Orissa Coastal Division.	**1,036**	**175**	**2,071**	**518**	**1,038**	**146**	**2,102**	**408**	**977**	**124**
Cuttack ..	1,022	142	2,157	528	1,030	115	2,224	402	963	140
Balasore ..	981	166	1,882	540	994	160	1,854	479	924	105
Puri ..	1,038	140	2,056	675	1,046	134	2,104	499	999	80
Sambalpur ..	1,018	158	1,965	268	1,037	160	1,963	240	1,003	80
Ganjam ..	1,109	289	2,143	302	1,085	209	2,192	228	1,015	182
Agency ..	*1,032*	*148*	*2,263*	*326*	*1,021*	*134*	*2,336*	*266*	*1,152*	*68*
Plains ..	*1,119*	*310*	*2,128*	*298*	*1,097*	*223*	*2,168*	*219*	*1,010*	*187*
Koraput ..	985	118	1,825	858	979	115	1,828	832	982	131
Dhenkanal ..	1,027	203	1,927	992	1,030	207	1,923	834	1,039	50
Keonjhar	1,004	173	1,995	161	1,008	176	1,924	111	964	130
Phulbani ..	1,014	166	2,316	218	1,020	141	2,342	163	969	144
Bolangir ..	1,004	157	1,674	1,832	1,000	156	1,701	1,543	1,042	123
Sundargarh ..	1,023	183	1,739	1,753	1,034	176	1,767	1,619	987	219
Kalahandi ..	1,012	246	1,634	1,627	1,009	169	1,694	1,547	1,024	128
Mayurbhanj ..	1,014	298	1,640	1,633	1,019	268	1,690	1,574	989	253

6·6—Females per 1,000 males in

Natural division and district	Non-agricultural classes				V—Production other than cultivation				VI—	
	Total	Self-supporting persons	Non-earning dependants	Earning dependants	Total	Self-supporting persons	Non-earning dependants	Earning dependants	Total	Self-supporting persons
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA ..	**1,025**	**290**	**1,868**	**1,135**	**1,028**	**305**	**1,834**	**1,462**	**1,038**	**323**
3.33 Orissa Inland Division.	**993**	**250**	**1,800**	**1,473**	**987**	**241**	**1,769**	**1,834**	**1,052**	**293**
5.11 Orissa Coastal Division.	**1,053**	**325**	**1,922**	**759**	**1,073**	**378**	**1,898**	**940**	**1,031**	**339**
Cuttack ..	1,032	338	1,845	1,003	1,057	437	1,744	1,384	987	376
Balasore ..	1,034	345	1,861	947	1,154	587	1,947	928	971	270
Puri ..	999	229	1,975	1,074	1,065	336	1,878	1,183	1,001	244
Sambalpur ..	977	286	1,788	3,084	1,046	286	1,816	3,407	1,104	443
Ganjam ..	1,121	373	1,994	370	1,071	267	2,066	488	1,102	367
Agency ..	*1,092*	*314*	*1,871*	*952*	*956*	*244*	*1,414*	*2,010*	*1,049*	*152*
Plains ..	*1,123*	*377*	*2,001*	*345*	*1,075*	*209*	*2,087*	*441*	*1,107*	*392*
Koraput ..	1,006	125	1,964	298	922	163	1,712	412	1,052	167
Dhenkanal ..	971	186	1,943	1,373	1,024	187	1,970	1,691	1,098	326
Keonjhar ..	923	228	1,900	186	959	192	2,458	1,470	936	234
Phulbani ..	1,019	235	2,196	197	983	247	2,234	128	1,009	206
Bolangir ..	1,042	266	1,609	3,084	991	188	1,565	3,247	1,117	371
Sundargarh ..	948	224	1,693	2,447	945	226	1,592	2,467	988	256
Kalahandi ..	1,060	305	1,633	2,116	989	254	1,727	1,570	1,151	396
Mayurbhanj ..	919	385	1,409	1,661	919	345	1,349	1,881	848	230

agricultural classes and sub-classes

wholly or mainly and their dep ndants		III—Cultivating labourers and their dependants				IV—Non-cultivating owners of land, agricultural rent receivers and their dependants				
Non-earning depen-dants	Earning depen-dants	Total	Self-support-ing persons	Non-earning depen-dants	Earning depen-dants	Total	Self-support-ing persons	Non-earning depen-dants	Earning depend-dants	Natural division and district
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
1,954	**995**	**998**	**252**	**1,827**	**1,761**	**1,291**	**599**	**1,950**	**852**	**ORISSA**
1,821	**1,691**	**977**	**238**	**1,712**	**2,248**	**1,363**	**657**	**2,089**	**1,306**	**3.33 Orissa Inland Division.**
2,031	**557**	**1,027**	**272**	**1,981**	**1,028**	**1,265**	**577**	**1,907**	**607**	**5.11 Orissa Coastal Division.**
1,963	626	960	194	1,998	1,078	1,250	490	1,951	576	Cuttack
2,098	672	897	180	2,031	832	1,218	845	1,524	1,053	Balasore
2,073	622	1,009	174	1,851	1,586	1,280	483	2,080	861	Puri
2,003	2,745	916	135	1,939	3,863	1,829	1,354	2,325	2,441	Sambalpur
2,019	324	1,234	611	2,074	575	1,301	692	1,918	484	Ganjam
2,005	*811*	*1,073*	*369*	*1,588*	*943*	*1,154*	*350*	*2,475*	*1,311*	*Agency*
2,020	*316*	*1,241*	*620*	*2,110*	*560*	*1,313*	*729*	*1,892*	*326*	*Plains*
1,948	803	1,016	126	1,713	1,099	1,152	153	2,038	795	Koraput
2,074	1,215	944	154	1,851	2,253	1,476	646	2,353	1,073	Dhenkanal
1,942	374	961	133	2,935	392	1,282	811	1,781	128	Keonjhar
2,132	311	984	281	2,215	573	1,407	514	2,362	465	Phulbani
1,679	2,613	994	162	1,571	2,807	1,120	379	1,648	2,477	Bolangir
1,357	2,586	930	206	1,586	2,842	1,400	960	1,868	1,857	Sundargarh
1,595	1,999	1,015	491	1,436	1,733	1,131	378	1,823	1,389	Kalahandi
1,562	1,640	990	433	1,411	1,989	1,180	678	1,515	1,476	Mayurbhanj

non-agricultural classes and sub-classes

Commerce		VII—Transport				VIII—Other services and miscellaneous sources				
Non-earning depen-dants	Earning depen-dants	Total	Self-support-ing persons	Non-earning depen-dants	Earning depen-dants	Total	Self-supoprt-ing persons	Non-earning depen-dants	Earning depen-dants	Natural division and district
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
1,955	**762**	**884**	**59**	**1,856**	**844**	**1,028**	**285**	**1,865**	**1,040**	**ORISSA**
1,961	**979**	**811**	**38**	**1,824**	**1,088**	**992**	**256**	**1,785**	**1,336**	**3.33 Orissa Inland Division.**
1,951	**609**	**920**	**70**	**1,870**	**715**	**1,058**	**310**	**1,929**	**710**	**5.11 Orissa Coastal Division.**
1,751	875	881	104	1,675	1,252	1,041	296	1,923	874	Cuttack
1,861	939	825	93	1,934	481	1,018	284	1,825	983	Balasore
2,112	733	969	31	2,091	873	952	169	1,985	1,179	Puri
1,896	1,992	901	38	2,195	2,603	895	275	1,708	2,931	Sambalpur
2,096	382	985	48	1,902	85	1,159	448	1,932	304	Ganjam
2,416	*470*	*1,500*	..	*1,500*	..	*1,152*	*459*	*1,732*	*879*	*Agency*
2,066	*375*	*983*	*48*	*1,904*	*85*	*1,160*	*447*	*1,945*	*284*	*Plains*
2,022	339	939	9	1,862	303	1,025	110	2,031	246	Koraput
2,100	1,135	475	11	1,206	580	916	166	1,917	1,201	Dhenkanal
2,006	254	783	..	1,355	1,285	898	264	1,605	197	Keonjhar
2,158	286	833	83	1,631	667	1,054	238	2,191	222	Phulbani
1,977	1,567	967	36	2,067	2,223	1,076	336	1,538	3,245	Bolangir
1,709	1,743	667	22	1,684	696	962	232	1,763	2,637	Sundargarh
1,766	2,541	568	28	1,236	627	1,088	320	1,568	2,342	Kalahandi
1,524	1,110	817	124	1,690	1,900	935	450	1,421	1,469	Mayurbhanj

6·7—Marital status of 1,000 of each sex of general

Natural division and district	Males											
	Unmarried				Married				Widowed			
	1951	1941	1931	1921	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**471**	**493**	**484**	**519**	**490**	**467**	**481**	**439**	**39**	**40**	**35**	**42**
3.33 Orissa Inland Dn.	**497**	**480**	**494**	**522**	**467**	**483**	**474**	**436**	**36**	**37**	**32**	**42**
5.11 Orissa Coastal Dn.	**439**	**504**	**473**	**517**	**517**	**453**	**490**	**442**	**44**	**43**	**37**	**41**
Cuttack ..	442	518	514	547	504	435	448	412	54	47	38	41
Balasore ..	365	503	491	517	585	434	459	434	50	63	50	49
Puri ..	450	503	486	533	522	458	480	419	28	39	34	48
Sambalpur ..	434	427	414	446	513	530	541	504	53	43	45	50
Ganjam ..	482	486	430	..	483	484	539	..	35	30	31	..
Agency ..	*490*	..	*516*	..	*481*	..	*447*	..	*29*	..	*37*	..
Plains ..	*481*	..	*414*	*472*	*483*	..	*556*	*494*	*36*	..	*30*	*34*
Koraput ..	529	494	484	512	439	468	481	445	32	38	35	43
Dhenkanal ..	516	495	499	543	458	477	475	416	26	28	26	41
Keonjhar ..	533	522			429	446			38	32		
Phulbani ..	478	432		540	480	524		419	42	44		41
Bolangir ..	477		509		490				33			
Sundargarh ..	448				519		462		33		29	
Kalahandi ..	551	532			421	436			28	32		
Mayurbhanj ..	509				457				34			

Note—(1) Figures for 1951 have been calculated from Table C-III; figures for 1941 from Table prepared by the Indian Statistical
(2) Separate figures for 1921 and 1931 in respect of the merged states not being available consolidated figures have been
(3) Figures for widowed include those of divorced.

6·8—Age distribution of 1,000 married persons of

Natural division and district	Males							
	0—14		15—34		35—54		55 and over	
	1951	1941	1951	1941	1951	1941	1951	1941
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA	**28**	**18**	**424**	**445**	**412**	**423**	**135**	**114**
3.33 Orissa Inland Dn.	**17**	**20**	**435**	**470**	**434**	**413**	**113**	**97**
5.11 Orissa Coastal Dn.	**41**	**17**	**411**	**422**	**387**	**432**	**159**	**129**
Cuttack ..	49	7	412	408	377	438	161	147
Balasore ..	35	8	394	422	366	465	204	105
Puri ..	12	6	400	409	439	449	149	136
Sambalpur ..	14	30	450	495	424	366	112	109
Ganjam ..	58	40	444	447	366	397	125	116
Agency ..	*1*	..	*455*	..	*406*	..	*115*	..
Plains ..	*65*	..	*443*	..	*361*	..	*126*	..
Koraput ..	38	11	409	445	420	462	123	82
Dhenkanal ..	5	12	428	453	448	422	119	113
Keonjhar ..	20	18	422	445	453	432	105	105
Phulbani ..	8	33	423	486	471	389	98	92
Bolangir ..	7	..	451	..	445	..	97	..
Sundargarh ..	38	..	486	..	376	..	100	..
Kalahandi ..	10	7	444	409	433	420	113	74
Mayurbhanj ..	9	..	407	..	450	..	133	..

Note—Figures for 1951 have been calculated rom Table C-III and those for 1941 are based on 'Y' Sample Tables of Orissa.

population and comparison with previous censuses

Females												Natural division and district
Unmarried				Married				Widowed				
1951	1941	1931	1921	1951	1941	1931	1921	1951	1941	1931	1921	
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	24)	(25)	(1)
386	**362**	**350**	**375**	**483**	**467**	**478**	**439**	**131**	**171**	**172**	**186**	**ORISSA**
401	**389**	**398**	**418**	**473**	**473**	**466**	**427**	**126**	**138**	**136**	**155**	**3.33 Orissa Inland Dn.**
368	**341**	**297**	**331**	**495**	**462**	**491**	**451**	**137**	**197**	**212**	**218**	**5.11 Orissa Coastal Dn.**
364	341	328	356	524	447	448	419	112	212	224	225	Cuttack
369	313	283	306	541	450	464	437	90	237	253	257	Balasore
373	350	335	374	474	463	470	415	153	187	195	211	Puri
351	348	331	357	493	509	522	490	156	143	147	153	Sambalpur
379	350	280	..	433	488	541	..	188	162	179	..	Ganjam
498	..	*436*	..	*397*	..	*442*	..	*109*	..	*122*	..	*Agency*
364	..	*255*	*293*	*436*	..	*557*	*512*	*196*	..	*188*	*195*	*Plains*
430	421	405	429	440	473	485	436	130	106	110	135	Koraput
399	371	392	419	469	466	462	405	132	163	146	176	Dhenkanal
439	428			436	436			125	136			Keonjhar
398	342			467	500			135	158			Phulbani
390		407	427	484			412	126		141	161	Bolangir
422				440		452		138				Sundargarh
448	439			441	431			111	130			Kalahandi
363				555				82				Mayurbhanj

Institute from 'Y' Samples; and those for 1931 and 1921 from the Imperial Tables of Bihar and Orissa and Madras.
given in brackets.

each sex and comparison with 1941 census

Females										Natural division and district
0—14		15—34		35—54		55 and over		Age not stated, 1951		
1951	1941	1951	1941	1951	1941	1951	1941	Males	Females	
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(1)
57	**60**	**552**	**618**	**317**	**284**	**73**	**38**	**1**	**1**	**ORISSA**
39	**54**	**583**	**613**	**314**	**293**	**63**	**40**	**1**	**1**	**3.33 Orissa Inland Division.**
78	**66**	**516**	**622**	**321**	**276**	**83**	**36**	**2**	**2**	**5.11 Orissa Coastal Division.**
87	45	464	625	330	288	115	42	1	4	Cuttack
38	66	510	658	351	255	101	21	1	..	Balasore
41	36	601	642	316	285	42	37	..	..	Puri
29	62	593	589	316	293	62	56	..	..	Sambalpur
127	105	535	592	284	268	50	35	7	4	Ganjam
16	..	*601*	..	*311*	..	*42*	..	*23*	*30*	*Agency*
137	..	*530*	..	*281*	..	*50*	..	*5*	*2*	*Plains*
75	30	549	637	308	304	66	29	1	2	Koraput
33	72	585	614	310	281	72	33	..	..	Dhenkanal
32	48	609	622	304	290	49	40	..	6	Keonjhar
45	85	573	585	337	284	45	46	..	..	Phulbani
25	..	591	..	327	..	57	..	..	..	Bolangir
26	..	547	..	346	..	80	..	..	1	Sundargarh
23	18	630	649	304	303	43	30	..	..	Kalahandi
52	..	569	..	297	..	82	..	1	..	Mayurbhanj

6·9—Infants per 10,000 persons

Natural division and district	Infants per 10,000 persons of											
	General population				Rural Population		Urban population		Agricultural classes		Non-agricultural classes	
	1951			1941								
	Persons	Males	Females	Persons	Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**279**	**134**	**145**	**141**	**130**	**137**	**222**	**343**	**128**	**134**	**154**	**188**
3.33 Orissa Inland Dn.	**260**	**128**	**132**		**128**	**130**	**149**	**166**	**128**	**124**	**129**	**166**
5.11 Orissa Coastal Dn.	**302**	**140**	**162**		**133**	**145**	**268**	**454**	**129**	**147**	**176**	**208**
Cuttack ..	225	110	115		112	116	91	86	113	118	103	105
Balasore ..	237	109	127		111	129	61	97	113	128	92	122
Puri ..	297	137	160		139	161	96	128	136	169	139	125
Sambalpur ..	199	95	104		95	104	90	104	96	105	89	100
Ganjam ..	484	228	256		195	183	666	1,231	180	187	324	394
Agency ..	*443*	*328*	*115*		*335*	*117*	..	..	*300*	*114*	*417*	*125*
Plains ..	*488*	*217*	*271*		*180*	*190*	*666*	*1,231*	*167*	*195*	*317*	*417*
Koraput ..	388	181	207		181	201	195	319	183	183	176	287
Dhenkanal ..	237	111	126		110	126	118	148	110	124	111	140
Keonjhar ..	259	141	118		135	120	551	..	141	84	140	431
Phulbani ..	232	115	117		113	117	259	111	113	111	125	138
Bolangir ..	277	132	145		132	146	121	128	137	151	107	120
Sundargarh ..	280	145	135		147	134	110	143	154	137	90	117
Kalahandi ..	250	126	124		127	123	103	206	128	127	116	108
Mayurbhanj ..	167	79	88		79	88	109	22	76	83	102	127

Note—Figures for 1951 have been calculated from Table C-II and those for 1941 are based on ' Y ' Sample Tables of Orissa.

6·10—Young children (Aged 1—4) per 10,000 persons

Natural division and district	Young children per 10,000 persons of											
	General population				Rural population		Urban population		Agricultural population		Non-agricultural population	
	1951			1941								
	Persons	Males	Females	Persons	Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**985**	**483**	**502**	**790**	**482**	**504**	**504**	**471**	**494**	**504**	**438**	**494**
3.33 Orissa Inland Dn.	**1,034**	**513**	**521**		**515**	**523**	**465**	**445**	**525**	**529**	**460**	**481**
5.11 Orissa Coastal Dn.	**926**	**446**	**480**		**441**	**480**	**528**	**488**	**455**	**472**	**419**	**506**
Cuttack ..	908	473	435		474	440	465	361	504	434	380	442
Balasore ..	779	322	457		315	456	505	486	301	453	445	480
Puri ..	995	491	504		487	511	587	354	498	520	465	443
Sambalpur ..	866	408	458		409	460	399	395	411	458	398	455
Ganjam ..	1,003	455	548		448	537	572	727	468	508	436	633
Agency ..	*1,083*	*558*	*525*		*570*	*536*	..	..	*594*	*507*	*513*	*604*
Plains ..	*995*	*445*	*550*		*435*	*537*	*572*	*727*	*454*	*508*	*429*	*636*
Koraput ..	1,221	699	522		711	526	454	463	464	554	476	415
Dhenkanal ..	1,110	544	566		546	567	498	552	551	562	511	589
Keonjhar ..	1,003	524	479		518	483	915	298	539	495	392	348
Phulbani ..	991	482	509		482	510	518	444	516	518	350	472
Bolangir ..	975	471	504		470	507	474	442	470	513	475	462
Sundargarh ..	998	500	498		503	498	407	517	511	501	429	484
Kalahandi ..	1,154	528	626		528	••630	482	387	522	641	557	545
Mayurbhanj ..	963	433	530		434	••532	383	361	424	527	497	550

Note—Figures for 1951 have been calculated from Table C-II and those for 1941 are based on ' Y ' Sample Tables of Orissa.

6·11—Boys and girls (aged 5—14) per 10,000 persons

Natural division and district	Boys and girls per 10,000 persons of: General population 1951 Persons	General population 1951 Males	General population 1951 Females	General population 1941 Persons	Rural population Males	Rural population Females	Urban population Males	Urban population Females	Agricultural population Males	Agricultural population Females	Non-agricultural population Males	Non-agricultural population Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**2,440**	**1,247**	**1,193**	**2,810**	**1,250**	**1,201**	**1,199**	**998**	**1,253**	**1,209**	**1,208**	**1,129**
3.33 Orissa Inland Dn.	**2,568**	**1,324**	**1,244**		**1,327**	**1,250**	**1,219**	**1,052**	**1,342**	**1,258**	**1,240**	**1,178**
5.11 Orissa Coastal Dn.	**2,288**	**1,157**	**1,131**		**1,155**	**1,141**	**1,187**	**964**	**1,148**	**1,145**	**1,181**	**1,088**
Cuttack ..	2,254	1,156	1,098		1,158	1,102	1,167	1,081	1,156	1,115	1,165	1,056
Balasore ..	2,056	1,009	1,047		1,004	1,052	1,159	936	994	1,045	1,108	1,064
Puri ..	2,314	1,171	1,143		1,175	1,162	1,093	749	1,172	1,183	1,170	989
Sambalpur ..	2,339	1,164	1,175		1,159	1,185	1,295	930	1,180	1,204	1,104	1,060
Ganjam ..	2,504	1,253	1,252		1,255	1,277	1,286	980	1,265	1,274	1,242	1,221
Agency ..	*2,649*	*1,271*	*1,378*		*1,298*	*1,407*	..	..	*1,308*	*1,413*	*1,275*	*1,393*
Plains ..	*2,489*	*1,251*	*1,239*		*1,250*	*1,263*	*1,286*	*980*	*1,261*	*1,259*	*1,239*	*1,206*
Koraput ..	2,643	1,432	1,211		1,441	1,217	1,252	1,100	1,477	1,202	1,281	1,250
Dhenkanal ..	2,619	1,325	1,294		1,334	1,297	1,057	1,222	1,352	1,303	1,191	1,252
Keonjhar ..	2,722	1,407	1,315		1,406	1,325	1,632	838	1,413	1,352	1,375	1,007
Phulbani ..	2,481	1,278	1,203		1,277	1,204	1,386	1,164	1,265	1,208	1,328	1,184
Bolangir ..	2,543	1,309	1,235		1,315	1,245	1,173	1,015	1,331	1,250	1,206	1,163
Sundargarh ..	2,588	1,290	1,298		1,299	1,304	1,035	1,128	1,310	1,321	1,171	1,154
Kalahandi ..	2,831	1,448	1,384		1,450	1,387	1,239	1,153	1,464	1,400	1,358	1,293
Mayurbhanj ..	2,461	1,305	1,155		1,307	1,157	1,191	962	1,301	1,161	1,335	1,121

Note—Figures for 1951 have been calculated from Table C-II and those for 1941 are based on 'Y' Sample Tables of Orissa.

6·12—Young men and women (aged 15—34) per 10,000 persons

Natural division and district	Young men and women per 10,000 persons of: General population 1951 Persons	General population 1951 Males	General population 1951 Females	General population 1941 Persons	Rural population Males	Rural population Females	Urban population Males	Urban population Females	Agricultural population Males	Agricultural population Females	Non-agricultural population Males	Non-agricultural population Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**3,230**	**1,582**	**1,648**	**3,389**	**1,569**	**1,655**	**1,871**	**1,483**	**1,571**	**1,650**	**1,623**	**1,641**
3.33 Orissa Inland Dn.	**3,242**	**1,582**	**1,660**		**1,576**	**1,657**	**1,807**	**1,757**	**1,568**	**1,656**	**1,649**	**1,677**
5.11 Orissa Coastal Dn.	**3,215**	**1,580**	**1,635**		**1,561**	**1,653**	**1,911**	**1,311**	**1,574**	**1,643**	**1,600**	**1,610**
Cuttack ..	3,315	1,671	1,644		1,617	1,659	2,631	1,367	1,604	1,655	1,877	1,610
Balasore ..	3,300	1,600	1,700		1,588	1,702	1,907	1,663	1,613	1,706	1,521	1,668
Puri ..	3,154	1,522	1,632		1,499	1,629	1,967	1,700	1,503	1,602	1,591	1,748
Sambalpur ..	3,362	1,610	1,752		1,590	1,748	2,102	1,826	1,578	1,731	1,736	1,831
Ganjam ..	3,033	1,472	1,561		1,506	1,614	1,024	866	1,563	1,592	1,294	1,500
Agency ..	*2,937*	*1,485*	*1,452*		*1,485*	*1,452*	..	..	*1,542*	*1,434*	*1,351*	*1,496*
Plains ..	*3,043*	*1,471*	*1,572*		*1,509*	*1,632*	*1,024*	*866*	*1,565*	*1,609*	*1,289*	*1,501*
Koraput ..	2,937	1,394	1,543		1,392	1,543	1,460	1,538	1,384	1,551	1,430	1,514
Dhenkanal ..	3,115	1,529	1,586		1,523	1,575	1,683	1,875	1,491	1,571	1,717	1,662
Keonjhar ..	3,288	1,645	1,643		1,654	1,646	1,087	1,453	1,612	1,652	1,948	1,564
Phulbani ..	3,233	1,601	1,632		1,603	1,631	1,460	1,682	1,645	1,619	1,433	1,684
Bolangir ..	3,254	1,617	1,637		1,603	1,625	1,916	1,884	1,610	1,615	1,649	1,738
Sundargarh ..	3,156	1,697	1,459		1,682	1,439	2,119	2,047	1,650	1,418	1,986	1,712
Kalahandi ..	3,275	1,654	1,621		1,648	1,620	2,083	1,687	1,668	1,614	1,575	1,665
Mayurbhanj ..	3,599	1,640	1,959		1,635	1,962	2,131	1,617	1,607	1,989	1,869	1,750

Note—Figures for 1951 have been calculated from Table C-II and those for 1941 are based on 'Y' Sample Tables of Orissa.

6·13—Middle aged persons (aged 35—54) per 10,000 persons

Natural division and district	Middle aged persons per 10,000 persons of											
	General population				Rural population		Urban population		Agricultural population		Non-agricultural population	
	1951			1941								
	Persons	Males	Females	Persons	Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**2,180**	**1,105**	**1,075**	**2,139**	**1,104**	**1,080**	**1,149**	**942**	**1,103**	**1,061**	**1,117**	**1,128**
3.33 Orissa Inland Dn.	**2,140**	**1,111**	**1,029**		**1,110**	**1,030**	**1,126**	**1,015**	**1,097**	**1,017**	**1,176**	**1,087**
5.11 Orissa Coastal Dn.	**2,229**	**1,100**	**1,129**		**1,096**	**1,143**	**1,163**	**898**	**1,111**	**1,119**	**1,066**	**1,163**
Cuttack ..	2,211	1,094	1,117		1,086	1,131	1,240	874	1,090	1,111	1,106	1,137
Balasore ..	2,317	1,172	1,145		1,165	1,148	1,336	1,061	1,193	1,120	1,044	1,296
Puri ..	2,361	1,220	1,141		1,208	1,141	1,461	1,155	1,205	1,119	1,275	1,226
Sambalpur ..	2,339	1,186	1,153		1,182	1,160	1,290	959	1,172	1,151	1,240	1,157
Ganjam ..	2,057	951	1,106		961	1,137	817	694	973	1,109	909	1,100
Agency ..	*2,093*	*1,176*	*917*		*1,176*	*917*	..	..	*1,186*	*899*	*1,152*	*962*
Plains ..	*2,054*	*928*	*1,126*		*938*	*1,162*	*817*	*694*	*949*	*1,132*	*887*	*1,112*
Koraput ..	2,055	1,073	982		1,074	981	1,062	1,002	1,053	962	1,144	1,049
Dhenkanal ..	2,129	1,070	1,059		1,073	1,056	993	1,138	1,066	1,059	1,089	1,060
Keonjhar ..	2,039	1,108	931		1,115	932	646	893	1,105	931	1,136	933
Phulbani ..	2,383	1,260	1,123		1,263	1,125	1,054	961	1,218	1,099	1,427	1,215
Bolangir ..	2,235	1,157	1,078		1,156	1,078	1,190	1,067	1,156	1,050	1,166	1,206
Sundargarh ..	2,089	1,093	996		1,092	999	1,106	936	1,079	986	1,179	1,058
Kalahandi ..	1,893	963	930		961	929	1,145	938	932	906	1,139	1,057
Mayurbhanj ..	2,100	1,108	992		1,106	991	1,301	1,202	1,108	996	1,106	967

Note—Figures for 1951 have been calculated from Table C-II and those for 1941 are based on 'Y' Sample Tables of Orissa.

6·14—Elderly persons (aged 55 and over) per 10,000 persons

Natural division and district	Elderly persons per 10,000 persons of											
	General population				Rural population		Urban population		Agricultural population		Non-agricultural population	
	1951			1941								
	Persons	Males	Females	Persons	Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ORISSA ..	**876**	**419**	**457**	**741**	**419**	**460**	**418**	**387**	**426**	**453**	**391**	**471**
3.33 Orissa Inland Dn.	**748**	**333**	**415**		**331**	**416**	**410**	**377**	**333**	**417**	**336**	**406**
5.11 Orissa Coastal Dn.	**1,028**	**521**	**507**		**526**	**514**	**424**	**393**	**547**	**501**	**439**	**528**
Cuttack ..	1,067	529	537		544	550	300	325	563	527	431	572
Balasore ..	1,306	791	515		807	521	407	359	825	509	594	549
Puri ..	878	463	415		471	416	319	391	481	411	400	429
Sambalpur ..	895	373	522		378	529	266	344	386	526	325	505
Ganjam ..	881	362	519		342	524	646	488	332	527	423	509
Agency ..	*538*	*349*	*239*		*350*	*244*	..	..	*348*	*246*	*376*	*240*
Plains ..	*911*	*363*	*548*		*340*	*554*	*646*	*488*	*330*	*558*	*427*	*533*
Koraput ..	745	350	395		329	399	834	321	297	387	540	423
Dhenkanal ..	790	327	463		328	465	286	431	337	475	274	404
Keonjhar ..	670	304	366		304	353	386	1,202	306	360	291	423
Phulbani ..	679	312	367		310	365	425	536	322	366	269	375
Bolangir ..	716	305	411		307	415	257	333	309	409	285	424
Sundargarh ..	887	331	556		336	566	176	275	340	591	273	347
Kalahandi ..	597	274	323		275	322	224	353	283	315	223	364
Mayurbhanj ..	706	365	341		364	342	481	240	380	348	262	298

Note—Figures for 1951 have been calculated from Table C-II and those for 1941 are based on 'Y' Sample Tables of Orissa.

CHAPTER VII

Special Topics

The form and contents of the 1951 Census Report, as approved by the Government of India, do not include the present Chapter. The Government of India intend to issue separate brochures on special topics, such as, Literacy and Education, Language, Religion, Backward Classes and Displaced Persons. But since some of the readers may look for these subjects for supplementing their study on other aspects of the population discussed in this Report brief outlines are given in the following pages for the sake of convenience. The scope for exhaustive treatment of the topics, however, is limited.

SECTION I

Literacy and Education

REFERENCE TO STATISTICS

1. The main statistics relating to literacy may be seen in table D-VII (Livelihood Classes by Educational Standards) and table C-IV (Age and Literacy) published in parts II-A and II-B respectively of this Report. Of these tables, D-VII has been prepared on the basis of full enumeration count while table C-IV has been compiled from 10 per cent sample of enumeration slips. The following Subsidiary Tables appearing at the end of this Chapter have been constructed from the above two tables and from table B-III and the Indices of Non-agricultural occupations.

(*i*) Progress of Literacy—based on sample population of 1941 and 1951.

(*ii*) Literacy Standard of Livelihood Classes—based on table D-VII.

(*iii*) Educational Services and Research—based on table B-III and Indices of Non-agricultural occupations.

INTERPRETATION

2. 'Literacy' at this census has been defined as the ability to read and write. The test for reading is the ability to read a simple letter either in print or in manuscript. One useful innovation at this census is that literacy has been classified also by the standard of examination passed.

The expression 'Partly Literate' refers to a person having the ability to read only. In other words, if a person is able to read but cannot write, he is taken as 'partly literate'. Such persons are not shown in any of the main tables but are exhibited in the Fly-leaf to table D-VII.

3. Following the instructions of the Population Advisory Committee, all children who are of the age 4 years and below have been eliminated for the purpose of calculation of percentage of literacy in respect of tables and statements built up from sample population. For, from the nature of things, a child upto the age of four years cannot be expected to have acquired literacy. In the present census, the mention of age of a person relates to the completed number of years of life and not the months. In consequence, persons of the age, say, 4 years and 11 months have been excluded from calculation of percentage of literacy. In other words, until a person has completed 5 years of age, he is outside the consideration. The desirability of excluding such persons is justified by the fact that the percentage of persons in the first five years of life generally varies from census to census, which will have the effect of exaggerating or obscuring the progress of literacy in the total population. The proportional figures given in this Report are thus exclusive of children below five years of age. This is, however, not the case with table D-VII, the table relating to literacy for the general population, which includes such children.

Extent of Literacy based on total Count of Population

4. The following statement shows the number and percentage of literate males and females out of the total population inclusive of children below five years.

State, natural division or district (1)	Total population (2)	No. of literates			Percentage of literacy		
		Persons (3)	Males (4)	Females (5)	Total (6)	Males (7)	Females (8)
ORISSA ..	14,645,946	2,313,431	1,978,705	334,726	15·8	13·5	2·3
Inland Division ..	7,972,895	864,526	765,445	99,081	10·0	9·6	1·2
Coastal Division ..	6,673,051	1,448,905	1,213,260	235,645	21·7	18·2	3·5
Balasore ..	1,106,012	262,605	224,428	38,177	23·7	20·3	3·4
Cuttack ..	2,529,244	589,541	487,231	102,310	23·3	19·3	4·0
Puri ..	1,572,262	342,842	287,474	55,368	21·8	18·3	3·5
Dhenkanal ..	839,241	156,944	139,006	17,938	18·7	16·6	2·1
Sambalpur ..	1,301,804	211,918	183,975	27,943	16·3	14·1	2·2
Ganjam ..	1,624,829	262,784	222,108	40,676	16·2	13·7	2·5
Agency ..	*159,296*	*8,867*	*7,981*	*886*	*5·6*	*5·0*	*0·6*
Plains	*1,465,533*	*253,917*	*214,127*	*39,790*	*17·3*	*14·6*	*2·7*
Keonjhar ..	588,441	71,146	63,101	8,045	12·1	10·7	1·4
Sundargarh ..	552,203	56,686	48,712	7,974	10·3	8·8	1·5
Bolangir ..	917,875	92,461	83,919	8,542	10·1	9·2	0·9
Phulbani ..	456,895	45,961	42,619	3,342	10·0	9·3	0·7
Mayurbhanj ..	1,028,825	98,611	87,983	10,628	9·6	8·6	1·0
Kalahandi ..	858,781	54,144	49,635	4,509	6·3	5·8	0·5
Koraput ..	1,269,534	67,788	58,514	9,274	5·3	4·6	0·7

5. The total number of persons returned as literate at the present census is 2,313,431 of whom 1,978,705 are males and 334,726 females. The rate of literacy based on the entire population works out to 15·8 per cent. The vast majority of these literate persons are males who form 13·5 per cent while the percentage of female literates is 2·3. In the statement above, the districts have been arranged in order of literacy among the total population. If, however, a list is drawn up on the basis of literacy among the males only, it will mostly correspond to the list of both sexes combined, since the number of female literates is hardly sufficient to exercise a determining influence. But the list will undergo considerable change if drawn up according to the percentage of female literacy.

6. Among the two natural divisions, the coastal division is by far more advanced in point of literacy and education than the inland division. The percentage of literacy in the coastal division is 21·7 which is about two times that of the inland division, which stand-at 10·8. The same proportion is noticeas ble with regard to males and females taken separately. The coastal division which in 1931 formed the most important portion of the Orissa Administrative Division of the old Bihar and Orissa province, was said to have a long-standing pre-eminence in the sphere of literacy over the other Administrative Divisions of Bihar and Orissa. Mr. Lacey in his Census Report of 1931 describes the position as follows. " The Orissa districts occupy the Coastal strip of land which connects Bengal with Madras —and these are, with the exception of Burma, the most highly educated Provinces in India. Moreover, priests are many in Orissa and its traditions are clerkly rather than martial." Dealing with backward areas of Orissa, he says, " the Oriya's love of learning is overshadowed by the aboriginal's neglect of it ; but there are certain States—notably Dhenkanal, Khandpara, Talcher, Narsingpur, Daspalla and Athgarh— where the proportion of literate persons of both sexes is exceptionally high. All

these outstanding States are grouped together in the south-eastern corner, quite close to Cuttack and Puri ". The inland division, being the home of 89·7 per cent of the total number of scheduled tribes of the State, is easily the more backward of the two natural divisions. Taking into consideration all the backward classes of population, namely, scheduled tribes, scheduled castes and other backward classes, the inland division contains 66·6 per cent of the backward population of the State. But it has its bright spots too, and in 1951, the proportion of literacy in district Dhenkanal is above the average for the State and is distinctly higher than that of any district in the State other than Cuttack, Balasore and Puri.

7. Among individual districts, Balasore has the highest extent of literacy; 23·7 per cent followed by Cuttack with 23·3. Puri comes next with 21·8. Ganjam returns an aggregate percentage of 16·2, namely 17·3 for its coastal area (Plains) and 5·6 for the inland area (Agency). Balasore has retained its pre-eminent position in educational sphere among the districts of Orissa for a long time. In the year 1931, when this district formed a part of the province of Bihar and Orissa, it was second only to Patna district in point of literacy. Next in order came Cuttack and Puri. So far as Orissa is concerned, the same order has continued till the year 1951.

8. Among the districts of the inland division, Dhenkanal as stated earlier, stands at the top in point of literacy, having 18·7 per cent literates. It is fol'owed by Samba'pur which has 16·3 per cent literates At the other end is Koraput with 5·3 per cent. Other districts in the reverse order are Kalahandi 6·3 and Mayurbhanj 9·6 per cent. Districts which are mediocre having a percentage less than the State average are Phulbani 10·0, Bolangir 10·1, Sundargarh 10·3 and Keonjhar 12·1.

Comparison with Other States

9. The statement below compares the percentage of literates in different States in India, and shows that this State is comparatively more backward than her immediate neighbours, Madras and West Bengal, though she is ahead of many other States of lesser importance.

State	Percentage of literates in 1951		
	Persons	Males	Female
INDIA ..	16·6	—	—
Orissa ..	15·8	27·3	4·5
West Bengal ..	24·5	34·7	12·7
Madras ..	19·3	28·6	10·0
Madhya Pradesh	13·5	—	—
Bihar ..	12·2	20·6	3·7
Madhya Bharat	10·8	—	—
Assam ..	18·1	27·1	7·8
Uttar Pradesh ..	10·8	17·4	3·6
Punjab ..	16·1	—	—
Pepsu ..	12·0	17·7	5·2
Delhi ..	38·4	43·0	32·3
Tripura ..	15·5	22·3	8·0
Travancore-Cochin	46·4	—	—
Rajasthan ..	8·4	13·7	2·6
Mysore ..	20·3	—	—

Partly Literate

10. The number of persons who are able to read only is shown b low. Cuttack has the highest number of such persons. Puri comes next. Sundargarh district occupies the lowermost place in this respect.

State or district	Persons	Males	Females
ORISSA ..	729,706	544 571	185,135
Inland Division ..	237,538	205,964	31.574
Coastal Division ..	492,168	338 607	153,561
Cuttack ..	180,365	113,862	66,503
Puri ..	151,488	106,987	44,501
Balasore ..	83,858	54,977	28 881
Ganjam ..	81,896	67 258	14,638
Agency ..	*5,439*	*4,477*	*962*
Plains ..	*76,457*	*62,781*	*13.676*
Sambalpur ..	46,366	39,733	6,633
Koraput ..	37,228	33,024	4,204
Mayurbhanj ..	37,041	29,001	8,040
Dhenkanal ..	32,013	27,993	4,020
Bolangir ..	26,534	24,886	1,648
Keonjhar ..	19,893	17 854	2,039
Phulbani ..	15,716	14,097	1,619
Kalahandi ..	10,802	9,602	1,200
Sundargarh ..	6,596	5,297	1,209

EXTENT OF LITERACY AS FOUND ON SAMPLE COUNT

11. The percentage of literacy as shown by the total count of population (table D-VII) in 1951 is 15·8. The percentage of literacy as revealed by the sample population (table C-IV) works out to 12·6. The difference between the two comes to 3·2 per cent but in fact it should be a little more. While the literacy figures given in table D-VII include children below 5 years as stated above, the sample table C-IV excludes such children. The difference in the result of the two tables must be attributed to the behaviour of the sample. Subsidiary Table 7·1 appearing at the end of this Chapter shows the literacy of the sample population distributed according to age groups. It is not necessary to dwell at large on the literacy figures relating to individual districts as available from the sample count as the figures based on full count (table D-VII) are better of the two.

Progress of Literacy between 1941 and 1951

12. There has been an increase of 34 literate persons per thousand of the general population during a period of 10 years from 1941 to 1951, the proportion in 1941 being 92 against 126 in 1951. The proportion of literate males has grown by 40 and of literate females by 24 per thousand during the last ten years. This is not a bad index of progress.

13. Though the absolute increase in the number of literate females is less than that of males, the percentage of increase is by far higher among females than males. The literate males have grown from 166 in 1941 to 206 in 1951 per thousand, which amounts to an increase of 24·1 per cent only, while the literate females have increased from 22 in 1941 to 46 in 1951, an increase of 109·1 per cent.

14. Among the natural divisions, the general growth of literacy during the past decade is greater in the coastal division than in the inland division, the proportion of increase in the coastal division being 50 and in the inland division 24 per thousand. Among males, the increase amounts to 50 per thousand in the coastal division against 38 in the inland division. Amongst females, the increase is 42 in the coastal division and 10 in the inland division.

15. With regard to individual districts, there has been a general increase of literacy from 1941 to 1951. Except in the case of males of Cuttack and Balasore districts, there has been increase in all the districts in varying proportions amongst males and females. As regards the two exceptional cases mentioned above, the following statement shows the extent of decrease.

District	Literacy among males per thousand		Decrease
	1951	1941	
Cuttack	223	227	4
Balasore	217	229	12

16. The decrease in these two cases must be attributed to the behaviour of the samples only and not to the inaccuracy of the returns either on this occasion or in the last. As mentioned elsewhere, the sample taken in the year 1941 was very small, being one out of every fifty persons. In 1951, the size of the sample was one in ten. It was much better than in 1941, though perhaps not as good as might be obtainable from full count figures. Literacy in Cuttack and Balasore has been making rapid strides and there is no doubt that in both the districts literacy amongst males should have increased at least by 10 per every thousand males when compared with the position in 1941.

VARIATION BY AGES

17. At the present census, it is noticed that literacy has increased in the age group up to 9 years amongst males as well as females. The obvious conclusion

is that elementary education is making noticeable progress. The proportion of increase thereafter, i.e., from age 10 to 14 years is comparatively less. Nevertheless, it must be stated that secondary education has also increased between 1941 and 1951 both amongst males and females. An increase of 20 per thousand in the age group 5-9 is noticeable among males between 1941 and 1951, the proportion rising from 56 to 76 per thousand during the period. Puri district has the highest proportion among all districts of the State, namely 152, with regard to the males in this age group. Dhenkanal with 130 and Sambalpur with 110 also show a high proportion of literacy amongst 5-9 years olds. Mayurbhanj and Kalahandi with 14 and 19 are miserably low in point of literate males between ages 5 and 9. Even amongst girls aged 5-9, these two districts along with Bolangir share the demerit of being the last in the list. As regards literacy of males between 10 to 14 years, Puri again occupies the top place. Next comes Dhenkanal followed by Cuttack, Sundargarh, Mayurbhanj, Keonjhar and Balasore.

Literacy Standard of Livelihood Classes

18. Subsidiary Table 7·2 shows the literacy standard of livelihood classes. The figures given in the table represent the number of literates and educated persons per every 1,000 males and 1,000 females shown under different livelihood classes. A perusal of this table shows that the standard of literacy and education is highest among persons of livelihood class IV—Non-cultivating owners of land; agricultural rent receivers and their dependants. 445 out of every 1,000 males under this livelihood class are either literate or educated. Out of them 372 are able to read and write, and the remaining 73 are persons who have passed some recognised examination. Even among females, this livelihood class has a proportion of literates higher than among any other livelihood class.

19. Next comes livelihood class VIII other services and miscellaneous sources, 408 males out of every thousand are literates, 332 of whom are able to read and write, the rest having passed some recognised examination. The other livelihood classes have no special feature to be commented upon. Livelihood class III (agricultural labourers) occupies the lowest place in the matter of literacy. Among the agricultural classes, livelihood class I has higher proportion of literates next to livelihood class IV. Livelihood class V has the lowest number of literates or educated men among the non-agricultural classes.

Educational Services and Research

20. Subsidiary Table 7·3 shows the persons engaged in educational services and researches by their numbers and their proportion per one lakh of population. It may be seen that there are altogether 14,378 persons (12,554 males and 1,824 females) deriving their principal means of livelihood from services in educational and research institutions. Of these, 12,911 persons, namely, 11,198 males and 1,713 females are professors, lecturers and teachers other than those employed in universities, colleges and research institutions. That is to say 76 males and 12 females out of one lakh population of each sex are engaged in this profession. The number of professors, lecturers, teachers and research workers employed in universities, colleges and research institutions is small, being limited to 523. It may appear at first that these figures are too small but the fact is that a considerable number of managers and teachers of aided, private or unrecognized schools have more than one source of livelihood and such persons seem to have returned some other occupation as their principal means of livelihood. Another factor that must have

affected the returns is that some persons have given vague answers regarding their occupations with the result that such cases have been included under ' Sevices unclassified '.

Educational Institutions and Students

21. The total number of recognized educational institutions in Orissa in March 1951 was 11,673 and the total number of students attached to such institutions was 597,388 of which 482,282 were boys and 115,106 were girls. These institutions were of different types, namely, colleges for general education 14, colleges for professional education 4, colleges for special education 3, high schools 172, senior basic school 1, middle schools 501, junior basic schools 136, primary schools 9,666, schools for professional education 53 and schools for special education 1,123. In addition, there were a large number of unrecognised institutions numbering 1,592. Thus the total number of institutions, recognised and unrecognised, in the State of Orissa in March 1951 was 13,265. Of these institutions as many as 277 were specially meant for girls.

Primary Education

22. The number of primary schools existing within the present territorial limits of Orissa showed a progressive decline from the year 1936 to 1945. But thereafter the trend has undergone a favourable change. The number of such schools stood at 7,567 in 1936-37, but it declined to 7,383 in 1940-41 and 6,514 in 1945-46. The decrease, according to official reports, was due to elimination of nominal schools without any student on the roll and closing down of un-aided schools due to financial stringency in course of time. From the year 1946-47, however, the number of schools rose gradually, standing at 6,615 in that year with a total number of 27,476 students on the roll. The extension of primary education was rapid with the merger of ex-state areas in 1948. In 1948-49 the number of schools rose to 9,218 and that of students to 420,410. In 1950-51 the number of schools finally stood at 9,666 when there were 334,735 boys and 101,368 girls or 436,103 students on the roll. In addition, there were nearly 1,550 unrecognised primary schools. The number of school teachers of both sexes working in the primary schools in 1947 was 10,571 and in 1950-51 it was nearly 15,000.

Secondary and Collegiate Education

23. In the year 1950-51 there were 501 middle schools of which 33 were meant specially for girls. The number of high schools stood at 172 of which 7 were girl schools. The total number of students in the middle and high schools according to official report, was 47,923 of which 3,400 were girls. The number of colleges of all types for men and women in 1951 was 21 including 1 Degree College for women. Of these, there were 3 giving professional education, namely, the Radhanath Training College, the Sriram Chandra Bhanj Medical College and the Madhusudan Law College. The total number of boys attending colleges was nearly 4,800 while that of girls was 241. Out of this, there were 32 girls in the Medical College, 6 in the Law College and 3 in the Training College.

Technical and Professional Education

24. In this category may fall 30 institutions, namely, Engineering School 1, Technical and Industrial Schools 26, Commercial School 1, Medical College 1 and Gopabandhu Ayurvedic Institute 1. For higher training in different technical subjects, qualified students were sent to different institutions in India and outside mostly for engineering, poly-technique and technological education.

GENERAL PROGRESS

25. There was satisfactory progress in the spread of education in various direction during the decade. The progress in the field of female education was steady and rapid. Although primary education was declining till the middle of the last decade, it quickly recouped the lost ground and forged ahead in the second half of the decade. The expansion in secondary and collegiate education as well as technical education during the last decade is noteworthy. The general extension of democratic notions and institutions, and the conferment of franchise right on adult section of the population under the new Constitution of India has been a powerful factor behind the desire in the common mind to acquire literacy and education. But so long as the absolute number of illiterates does not show a significant decline, the position can hardly be called satisfactory.

SECTION II
Language

REFERENCE TO STATISTICS

1. Table D-I appearing in Part II-A of this Report shows the statistics of languages in Orissa as ascertained at the census of 1951. The table has two parts; the first, table D-I(*i*) relates to mother tongue and the second, table D-I(*ii*) deals with bilingualism. The first table corresponds with the Mother Tongue Table (Table XV) of the census of 1931 and with the Languages Table (Table XV) of earlier censuses. The record of bilingualism came to be maintained only from 1931.

MOTHERTONGUE

2. Mothertongue at this census has been defined as the language spoken from the cradle. In the case of infants and deaf-mutes, the mother tongue recorded is that of the mother. In 1931, the direction to the enumerator was to enter "The language which each person ordinarily speaks in his home". There is thus some difference in the criterion of determining mother tongue between the censuses of 1931 and 1951.

3. In the past, it was customary to group the dialects with their main languages of origin. At this census, however, the results of the enquiry have been compiled and shown in the table without going into the distinction between languages and dialects. Each language or dialect as the citizen named it, was treated as a distinctive 'mother tongue' for the purpose of the census. So all languages and all dialects which have been returned as mother tongue have been given in table D-I(*i*). Thus, no attempt has been made to effect a classification of the actual returns; only wrong spellings have been corrected and obvious mistakes rectified. The order in which the languages appear follows the number of people speaking the language as mother tongue in the State.

DIFFICULTIES IN PREPARING CORRECT RECORD

4. Difficulties invariably arise in securing an accurate account of the languages at the census. Obscure local terms were entered in the enumeration slips in some cases. Incorrect spellings written by the enumerator and mutilations by the tabulator further added to the difficulties. As stated above, the languages returned by distinctive names, irrespective of whether they are in the recognised list of languages or not, have been tabulated, and shown. For example, Paraja, Koyas Jatapu, Konda, Bhuyan, Dhruva, Bonda, Jharia, Mirdha, Kisan and Pengo are not languages at all, but are the names of castes or tribes. The lanugages spoken by them commonly go by the name of the castes or tribes and so they have been included in the present language table.

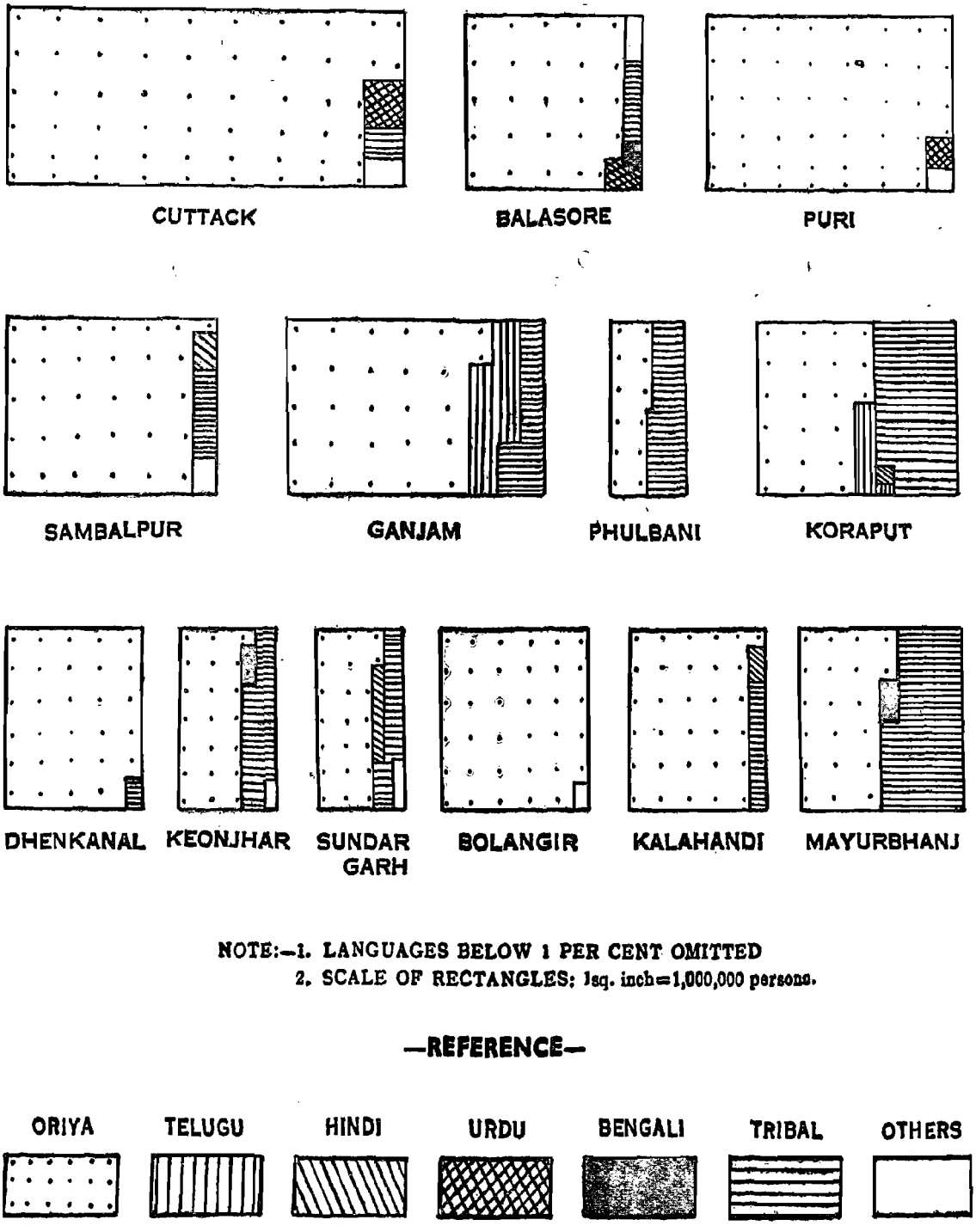
TRIBAL LANGUAGES

5. Below is given a list of languages which are grouped as tribal in 1951. It is possible that some of the languages so treated at this census were treated as dialects of Oriya or other languages in the previous censuses.

List of languages treated as tribal

Santali	Oraon	Jharia
Kondh	Mundari	Halbi
Kui	Gond	Mirdha
Savara	Kharia	Pengo
Ho	Juang	Pareng
Paraja	Konda	Banjari
Bhumij	Jatapu	Turi
Kisan	Karamali	Gharia
Kol	Bhuyan	Mahali
Munda	Koda	Didayi
Koya	Dhruva	Binjhali
Gadaba	Bonda	Benoi.go

PERCENTAGE OF LANGUAGES SPOKEN IN DISTRICTS



NOTE:—1. LANGUAGES BELOW 1 PER CENT OMITTED
2. SCALE OF RECTANGLES: 1sq. inch=1,000,000 persons.

—REFERENCE—

ANALYSIS AND COMPARISON WITH PREVIOUS CENSUSES

6. Altogether 66 languages have been returned as spoken in Orissa at this census, 52 of which are Indian languages and 14 non-Indian. Of the 52 Indian languages, 36 are again tribal languages as mentioned in the paragraph above. The non-Indian languages comprise 8 Asiatic languages, namely, Nepali, Sindhi, Burmese, Chinese, Persian, Malay, Pustu (or Pashtu) and Singhalese and 6 European languages, namely, English, German, Spanish, Italian, French and Swedish. Although so many languages have been returned, the problem of diversity of languages is not as complicated as it appears to be. Only a few languages are of outstanding numerical importance. In the statement below, the population of Orissa has been analysed since 1921 according to the percentage of the total population by certain principal languages used as mother tongue.

Distribution of population by languages

Languages or groups	1921		1931		1941		1951	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
1. Oriya	9,309,494	83·4	10,312,308	82·5	7,356,294	84·3	12, 65,272	82.4
2. Tribal languages	1,243,676	11·2	1,469,886	11·8	805,300	9·2	1,837,732	12·6
3. Telugu	231,565	2·1	269,784	2·2	298,250	3·4	42,523	2·3
4. Hindi	223,414	2·0	162,772	1·3	224,500	1·6	123,971	0·8
5. Urdu	53,082	0·5	187,417	1·5			159,017	1·1
6. Bengali	79,598	0·7	76,231	0·6	38,150	0·4	86,083	0·6
7. Other non-tribal languages	15,770	0·1	10,061	0·1	4,250	0·1	29,190	0·2
8. Non-Indian languages	1,987	0·02	2,597	0·02	1,800	0·02	2,158	0·01

7. In the above statement the figures of 1921, 1931 and 1951 are based on full count tabulation. The figures of 1941 are based on 2 per cent sample tabulation. They are not thoroughly representative of the whole on account of the reason that they are based on a small sample count and that they are available only for the old districts of Orissa and not for the merged states. The figures of 1941 must therefore be accepted with reserve for purpose of comparison.

PERCENTAGE OF SPEAKERS

8. Statements A and B appearing at the end of this Section show the percentage of speakers of different languages in the general population of Orissa and of individual districts. Languages having a small number of speakers have been omitted. Oriya, naturally, has an over-riding position, but the importance of tribal languages is also evident from the statements.

ORIYA

9. It is the most predominant language of Orissa, and is spoken as mother tongue by 12,065,272 persons, or 82·4 per cent of the entire population. In 6 out of 13 districts more than 90 per cent of the population speak Oriya as their mother tongue. In Bolangir the percentage is as high as 98·6 per cent. Dhenkanal comes next with 97·9 per cent and Puri with 96·7 per cent. The other three districts are Cuttack with 94·2 per cent, Sambalpur with 91·1 per cent and Kalahandi with 90·7 per cent. But the average for the State as a whole is brought down by such districts as Koraput, Phulbani and Mayurbhanj, where a little more than half the population speak Oriya as their mother tongue.

10. Generally speaking, Oriya has maintained its stable position all along in the past. There has been a slight loss of 0·1 per cent of speakers between 1931 and 1951 which is due to the fact

that the previous census figures for Oriya included many dialects which have now been shown separately as mother tongues. In 1941 the percentage rose up to 84·3, but this rise may not be real and may have been the result of behaviour of the sample as indicated in para. 7 above.

TRIBAL LANGUAGES

11. Taking all the tribal languages together, the total number of speakers in 1951 is 1,837,732 constituting 12·6 per cent of the population. Speakers of Santali are found in considerable numbers in Mayurbhanj, Keonjhar and Balasore districts. Speakers of Savara in Ganjam and Koraput, of Kui and Khond in Phulbani, Kalahandi and Koraput, and of Ho in Mayurbhanj and Keonjhar. Munda and Oraon languages are prominent in Sundargarh and Paraja in Koraput. On the whole a large element of the tribal languages is seen in Mayurbhanj, Phulbani, Koraput, Keonjhar and Ganjam and to an extent in Sundargarh.

12. The proportion of the speakers of the tribal languages has been very slowly increasing from decade to decade except in 1941 for reasons given in an earlier paragraph. The increase between 1921 and 1951, as the recorded figures show is mostly due to improved enumeration in 1951 as well as to the change in the list of tribes as adopted at the time of different censuses. The speakers of tribal languages have increased to 12·6 per cent in 1951 from 11·2 per cent in 1921. In absolute numbers, they have increased by 594,056 between 1921 and 1951, during which period the increase in the general population of Orissa amounts to 34·9 lakhs.

TELUGU

13. There are 342,523 persons speaking Telugu as their mother tongue. This language has the maximum number of speakers in the districts of Ganjam and Koraput which border the Andhra portion of Madras, where telugu is spoken as the mother tongue. A little less than one-seventh of the population of Ganjam and one-sixteenth of the population of Koraput speak Telugu as their first language. Speakers of Telugu have slightly increased since 1921, the increase in the proportion between each of the periods 1921-31 and 1931-51 being 0·1 per cent.

HINDI AND URDU

14. (*a*) *Hindi*—Hindi is used as mother tongue mostly in Sundargarh and Sambalpur districts. These two districts between themselves contribute about 60 thousand speakers out of the total of 124 thousand in the State. The other major contributors appear from Kalahandi, Cuttack, Koraput and Bolangir. As the recorded figures indicate, there appears to be some confusion in recording the languages Hindi and Urdu in 1941. There was a conspicuious decline of Hindi between 1921 and 1931 and a further decline between 1931 and 1951.

(*b*) *Urdu*—Urdu is used as the mother tongue of 159,017 persons in Orissa. Although there was a perceptible increase in the number of speakers of Urdu during the decade 1921-31 by over a lakh, there has been decline of about 30 thousand between 1931 and 1951. No separate figures are available for 1941. In 1931, this language was spoken by 1·5 per cent of the total population while in 1951 it declined to 1·1 per cent.

(*c*) Taking both Hindi and Urdu together, there is a gradual fall in the proportion of the speakers of these two languages since 1931.

BENGALI

15. Bengali is the mother tongue of 86,083 persons in 1951. This language

has flourished in the districts of Mayurbhanj and Balasore which adjoin West Bengal, as well as in Keonjhar. Cuttack and Puri districts also contribute to an extent. The number of speakers of Bengali in Orissa form 0·6 per cent of the total population.

OTHER INDIAN LANGUAGES

16. All other languages in Orissa are relatively unimportant. There are 66,428 persons who use Kisan as their mother tongue. Kisan is a dialect of Oriya spoken by a class of people called 'Kisan', who are Hindus by religion. They appear in Sambalpur, Sundargarh, Keonjhar and Dhenkanal districts. Laria is spoken by 13,392 persons. It is a dialect of Oriya in some districts and of Hindi in others and is used in Sambalpur, Sundargarh, Kalahandi, Bolangir, Dhenkanal and to a very small extent in Koraput district. The other Indian languages are of minor importance and call for no remarks.

NON-INDIAN LANGUAGES

17. English and Nepali are non-Indian languages of some importance. At the present census, English was returned as the mother tongue of 728 persons and Nepali of 864 persons.

Bilingualism

18. If a person *commonly* spoke an Indian language other than his mother tongue, the name of that language was recorded at this census and the information about bilingualism was abstracted from such record. Similar information was also extracted in 1931. The intention is to ascertain the nature of and the extent to which the members of one particular linguistic fold have found it necessary or expedient without abandoning their own mother tongue, to adopt as a secondary language the tongue of some other group with which they are brought into close contact in day-to-day life. The figures disclose two aspects of a question, firstly, the bilingualism prevalent in the border areas where some languages co-exist and secondly the bilingualism that arises out of necessity of certain persons to employ the regional language as a means of communication. The figures are also of additional interest in that one can know how far the primitive races wherever they exist are acquiring the use of the regional language.

19. The figures obtained in this respect must however be accepted with a certain amount of reserve. For, it is not unlikely that some enumerators have, without proper understanding of the spirit underlying the enquiry, shown the languages other than their mother tongue, irrespective of whether such subsidiary languages were *commonly* used out of necessity in daily life. Nor were some people less anxious to give out the name of some language which they acquired for cultural purposes as a subsidiary language. But on the whole, the recorded figures seem to err, if at all, on the side of deficiency. The returns have however been tabulated, as actually recorded and shown in table D-I(*ii*) without attempting to eliminate even the unimportant items of bilingualism.

20. There are altogether 939,239 persons in the State forming 6·4 per cent of the population who speak a secondary language. The statement given in the following page shows by districts the number of persons who speak a subsidiary language and the percentage they form to the total population. It may be seen from the statement that the element of the subsidiary language is strong in Koraput, Ganjam, Keonjhar, Sundargarh and Phulbani.

Number and percentage of speakers of subsidiary languages in Orissa

State and district	Number of persons who speak subsidiary languages	Percentage of persons speaking subsidiary languages to the total population
(1)	(2)	(3)
ORISSA ..	939,239	6·41
Cuttack ..	40,566	1·60
Balasore ..	19,350	1·75
Puri ..	40,715	2·59
Sambalpur ..	61,865	4·75
Ganjam ..	225,199	13·86
Koraput ..	226,449	17·84
Dhenkanal ..	9,731	1·16
Keonjhar ..	75,415	12·82
Phulbani ..	45,192	9·89
Bolangir ..	9,275	1·01
Sundargarh ..	66,051	11·96
Kalahandi ..	58,659	6·83
Mayurbhanj ..	60,772	5·91

21. As many as 607,363 persons have Oriya as their secondary language. Similarly, 128,401 persons have Telugu, 85,434 Hindi, 24,139 Bengali and 3,705 Urdu as subsidiary languages. Among those who use Oriya as their mother tongue (namely 12,065,272) only 261,458 use a subsidiary language in their daily life. The distribution by mother tongue and subsidiary languages of population of Orissa will be found in Subsidiary Table 7·4 appearing at the end of this Chapter. The extent and the nature of bilingualism prevalent in Orissa may be seen from the figures given therein.

22. The extent to which Oriya is spoken as subsidiary language used by certain principal tribal language groups is shown below. It appears that the acquisition of Oriya as a secondary language has proved an indispensable necessity for a considerable section of the tribal population. It is however interesting to find that bilingualism is extremely rare among Santals and Koyas. Only 3·5 per cent of the Santals and 0·9 per cent of the Koyas speak Oriya as their subsidiary language. This shows that these tribes are living in comparative aloofness. Bilingualism is also low among Parajas, Gonds, Gadabas, Bhumijs, Savaras and Kuis. Only 8·5 per cent of Parajas, 17·9 per cent of Gonds, 18·1 per cent of Gadabas, 11·4 per cent of Bhumijs, 16·4 per cent of Savaras and 15·9 per cent of Kuis speak Oriya as their secondary language.

Mother tongue	Percentage speaking Oriya as subsidiary language
Kondh ..	47·2
Mundari ..	35·9
Kol ..	34·1
Munda ..	33·8
Kharia ..	30·8
Ho ..	30·1
Oraon ..	27·7

STATEMENT A

Percentage of speakers of different languages in Orissa

(The languages below 0·01 per cent have been excluded)

Language	Percentage of speakers	Language	Percentage of speakers
Oriya ..	82·38	Kharia	0·14
Telugu ..	2·34	Laria	0·09
Santali ..	2·28	Juang	0·08
Kondh ..	1·91	Konda	0·06
Kui ..	1·41	Jatapu	0·06
Savara ..	1·31	Karamali	0·05
Ho ..	1·24	Gujarati	0·03
Urdu ..	1·09	Bhuyan	0·03
Paraja ..	1·00	Punjabi	0·03
Hindi ..	0·84	Koda	0·03
Bhumij ..	0·68	Tamili	0·03
Bengali ..	0·59	Dhruva	0·02
Kisan ..	0·45	Bonda	0·02
Kol ..	0·34	Jhoria	0·02
Munda ..	0·31	Halbi	0·01
Kuya ..	0·25	Mirdha	0·01
Gadaba ..	0·22	Pengo	0·01
Oraon ..	0·22	Marwari	0·01
Mundari ..	0·19	English	0·01
Gond ..	0·15	Nepali	0·01

STATEMENT B

Percentage of speakers of important languages by districts

Language	Percentage to total population
(1)	(2)
Cuttack	
Oriya ..	94·20
Urdu ..	2·66
Santali ..	0·86
Bengali ..	0·68
Hindi ..	0·61
Bhumij ..	0·37
Telugu ..	0·30
Ho ..	0·23
Balasore	
Oriya ..	87·79
Urdu ..	3 22
Santali ..	3·14
Bengali ..	1·63
Bhumij ..	1·17
Hindi ..	0·48
Ho ..	0·22
Telugu ..	0·13
Puri	
Oriya ..	96·70
Urdu ..	1·63
Kui ..	0·56
Telugu ..	0·45
Bengali ..	0·39
Hindi ..	0·13
Sambalpur	
O iya ..	91·05
Kisan ..	3·03
Hindi ..	2·03
Munda ..	0·60
Kharia ..	0·59
Laria ..	0·57
Urdu ..	0·37
Oraon ..	0·34
Bengali ..	0·26
Koda ..	0·25
Kol ..	0·19
Punjabi ..	0·17
Telugu ..	0·14
Mirdha ..	0·14
Gujurati ..	0·12

Language	Percentage to total population
(1)	(2)
Ganjam	
Oriya ..	72·40
Telugu ..	14·58
Savara ..	7·22
Kondh ..	3·05
Kui ..	0·99
Kol ..	0·58
Gond ..	0·44
Hindi ..	0·24
Urdu ..	0·24
Tamil ..	0·10
Bengali ..	0·08
Koraput	
Oriya ..	54·81
Kondh ..	12·54
Paraja ..	11·57
Telugu ..	6·27
Savara ..	4·22
Koya ..	2·93
Gadaba ..	2·60
Hindi ..	1·09
Gonda ..	1·04
Konda ..	0·66
Jatapu ..	0·65
Bengali ..	0·29
Dhruva ..	0·25
Urdu ..	0·23
Jharia ..	0·20
Bonda ..	0·20
Halbi ..	0·16
Pengo ..	0·09
Dhenkanal	
Oriya ..	97·89
Ho ..	0·41
Kisan ..	0·24
Urdu ..	0·20
Hindi ..	0·19
Kui ..	0·17
Juang ..	0·17
B ngali ..	0·15
Oraon ..	0·14

Language	Percentage to total population
(1)	(2)
Keonjhar	
Oriya ..	71·15
Ho ..	6·54
Kol ..	6·31
Santali ..	5·15
Munda ..	2·21
Bengali ..	1·88
Juang ..	1·87
Karamali ..	1·24
Mundari ..	1·12
Kisan ..	1·04
Bhuyan ..	0·80
Hindi ..	0·31
Urdu ..	0·29
Phulbani	
Oriya ..	54·61
Kui ..	37·28
Savara ..	4·51
Kondh ..	2·91
Gond ..	0·40
Bolangir	
Oriya ..	98·57
Hindi ..	0·61
Telugu ..	0·23
Urdu ..	0·21
Laria ..	0·12
Sundargarh	
Oriya ..	71·97
Hindi ..	5·55
Oraon ..	4·58
Munda ..	4·28
Kisan ..	3·40
Kharia ..	2·55
Ho ..	2·41
Kui ..	1·77
Urdu ..	0·93
Bengali ..	0·61
Bhumij ..	0·55
Telugu ..	0·43
Laria ..	0·43
Gujurati ..	0·16
Kalahandi	
Oriya ..	90·65
Kondh ..	6·71
Hindi ..	1·75
Telugu ..	0·24
Urdu ..	0·21
Laria ..	0·16
Mayurbhanj	
Oriya ..	52·61
Santali ..	23·96
Ho ..	11·42
Bhumij ..	7·22
Mundari ..	2·03
Bengali ..	1·89
Urdu ..	0·61
Hindi ..	0·21

SECTION III

Religion

1. Table D-II appearing in Part II-A of this Report shows the distribution of population by religion in each district of the State.

Substitution of Economic Classification for Classification based on Religion

2. In the previous censuses, the record did not merely confine itself to show the number of followers of each religion, but religion or community was used also as a basis of classification for other important statistics, namely, those relating to age, sex, literacy, civil condition, etc. At this census, however, classification by religion has been substituted by economic status. The following extract from the Census Report of India, 1921 briefly explains why the substitution of religion by economic classification was felt necessary.

> The value of this basis of classification (religion) has been impugned on the grounds that whatever homogeneity of race, tradition and custom may have been connoted by the term Hindu, Muhammadan, Christian etc., in the past has ceased to exist to a sufficient degree to influence the statistics. It is argued that so far as customs of demological importance are concerned, e.g., early marriage, seclusion of women, treatment of children etc., the divisions of real significance are now not vertical sections of society by difference of religion, but horizontal divisions into strata differentiated from one another by social and economic conditions.

3. Although the classification of statistics by religion was considered not satisfactory as early as 1921, the difficulty lay in finding a suitable basis of classification to take the place of religious differentiation. Now, with the political independence won in 1947 and the emphasis laid on the secular character of the Indian Union, whatever little doubt that existed previously that religious doctrines still influenced the determination of the social custom considered so vital for demological studies up to 1941, has vanished and the focus of attention shifted from religion to economics. In the census of 1951, therefore, the exhibition of statistics for details of sex, age and civil condition has been done with reference to economic classification and not by religion or community, and a separate table (D-II) showing simply the record of the number of followers of each religion by males and females has been prepared.

Classification by Religion and Community

4. For the present purpose it is unnecessary to explain what is meant by religion or community or to expatiate on the definitions of the different religions, viz., Hinduism, Islam,Christianity, etc. It is however worth bearing in mind that the criterion of classification of the population by religion in some cases has undergone change in the past. Upto 1921, the primitive population was classified as ' animist ' but in 1931, they were known as ' tribal '. In 1941, the designation changed to ' tribes ' while in 1951, it finally stood as scheduled tribes. Nor was the change confined to nomenclature alone. The component groups changed from time to time, so that it becomes risky to compare unadjusted census population of different censuses. Moreover, in 1941, the classification was done by communities rather than by religions as was being done before, largely on account of the difficulties in the classification of the tribal population. At the census of 1951, the population has been classified by religions, namely, Hindus, Muslims, Christians, Jains, Budhists, Zoroastrians, Jews and other religions tribal and non-tribal.

5. The determination of an individual's religion in the census of 1951 was more

a matter of choice on the part of the individual concerned, than a ground of investigation for the enumeration agency. The instructions given to the enumerators in the matter of recording the religion was as follows :—

You are particularly cautioned not to have any controversy on religion. Accept the reply as given by the person to be enumerated..... If the person says that he does not believe in any religion or has no religion, record him as Atheist.

If a person gives the name of a caste or sub-caste as his religion, you should enter the religion of which it is a sect. In case of doubt you may record the exact answer as given by the person. If a person is not able to give the name of his religion but appears to be an adherent of some religion, you may ascertain the religion by asking the name of the deities or by making enquiries from co-villagers.

The instructions did not admit of much freedom of discretion being left to the enumerators, and as far as reports go, no difficulty has been experienced nor any controversy raised in recording the religion in the State.

Distribution of Population by Religion

6. Subsidiary Table 7·5 shows the distribution of population by religion at the census of 1951 with corresponding figures of previous censuses for Orissa and for each natural division and district. The following table, however, shows at a glance the numbers as they stood at the past four censuses for each of the various religions in Orissa.

Religion	Population in			
	1951	1941	1931	1921
All religions ..	14,645 946	13,767,988	12,491,956	11,158,586
Hindus ..	14,318,411	13,448,470	12,225,206	10,946,721
Muslims ..	176,338	16 ,661	148,666	13 , 60
Christians ..	141,954	147,979	114,323	69,882
Sikhs ..	4,163	476	276	119
Jains ..	1,248	765	427	397
Jews ..	72	13	3	..
Budhists ..	969	1,889	1,828	,612
Zoroastrians ..	181	24	43	34
Others ..	2,630	2,711	284	1,461

7. The statement below shows the distribution of 10,000 persons between the various religions at each of these censuses. It may be seen that a great majority of the population of Orissa profess the Hindu religion. The next important religions are Islam and Christianity although when compared with the total population, they are numerically very small. The tribal population of the State has largely been assimilated by Hinduism and to a small extent by Christianity. In order to ensure comparability of the data compiled at previous censuses with those of 1951, the population that was classed as tribal or animist in the previous censuses has been treated as Hindu in these statements except in the case of 110,002 tribals who were shown in the Census Report of 1941 as professing Christianity. This number has been included in the figure of Christian population of 1941.

Religion	1951	1941	1931	1921
All religions ..	10,000	10,000	10,000	10,000
Hindus ..	9,776	9,768	9,787	9,810
Muslims ..	120	120	119	124
Christians ..	97	108	92	63
Sikhs ..	3	..	..	..
Jains ..	1	1	1	..
Budhists ..	1	1	1	2
Zoroastrians ..	..	..	..	..
Jews ..	..	..	..	..
Other religions	2	2	..	1

8. It may also be noticed that the quota contributed by each of the religions towards the total population altered but little since 1921. The predominance of Hindus is so marked that at no time were they less than 97 out of 100. In 1951, there are 97·76 Hindus, 1·2 Muslims, 0·97 Christians and 0·07 others per one hundred of the general population.

GROWTH

9. The following statement shows the percentage increase or decrease in the numerical strength of the three main religions of the State decade by decade since 1921. Other religions form an infinitesimal fraction of the population and so the percentage increase with regard to these minor religions is not shown here, but their growth will be discussed at the appropriate place in coming paragraphs.

Religion	1921—31	1931—41	1941—51
General population	11·94	10·22	6·38
Hindus ..	11·68	10·01	6·47
Muslims ..	7·45	11·43	6·45
Christians ..	63·59	29·44	−4·09

HINDUS

10. Orissa is a stronghold of Hinduism. Of the total population of 14,645,946 in the State, as many as 14,318,411 or 97·76 per cent are Hindus. This figure includes a vast multitude of primitive tribes who returned their religion as Hinduism, and also includes such sects as Brahmos and Arya Samajists. Sikhs, Jains and Budhists are however outside the fold. The proportion of this religion to the total population during the last four decades is steady being always in the neighbourhood of 98 per every 100, with nominal variation from decade to decade.

11. The numerical increase in the Hindu community since 1921 closely corresponds with the general increase in population, for with incomparably vast proportion of the general population which it commands, it has always been the determining factor in the overall growth of population in the State. The decennial increase of Hindus between 1931-41 and 1921-31 has been slightly lower than the increase in the general population in these decades, but during 1941-51 it was slightly higher. The loss during the decades 1921-31 and 1931-41 is obviously due to a number of tribal population having returned themselves as Christians.

12. Subsidiary Table 7·6 at the end of this Chapter shows the districtwise distribution of the three principal communities, Hindus, Muslims and Christians per 10,000 persons. The Hindus are predominant in all the districts. They cover more than 99 per cent of the general population in 1951 in the districts of Dhenkanal, Keonjhar, Kalahandi, Bolangir, Mayurbhanj and Ganjam. Sundargarh records the lowest, namely 85·98 per cent Hindus in the total population. Hindus in other districts, viz., Cuttack, Balasore, Puri, Sambalpur, Koraput and Phulbani range between 96·44 to 98·80 per cent.

MUSLIMS

13. The second important religion in Orissa is Islam, although the numerical strength of the followers of this religion is incomparably smaller than that of the leading religion of the State. The number of Muslims at the census of 1951 is 176,338 or 1·2 per cent of the total population. They are at their maximum strength in the three coastal districts. Cuttack district alone contributes 77,264 or about 2/5ths of the total Muslim population of the State. Next comes Balasore with a strength of 37,834. Puri's contribution also is large, being 29,869. They are found in their lowest number (324) in the district of Phulbani.

14. The decennial increase in Orissa of this community during the last three decades 1921-31, 1931-41 and 1941-51 was 7·45, 11·43 and 6·45 respectively against the general population increase of 11·94, 10·22 and 6·38. During the decade 1921-31 the growth of Muslims was lower than the general growth, but it quickly gained during 1931-41. The increase during the last decade was just a little over the general growth. In no district has the community lost ground during the decade 1941-51, but the rate of increase in Balasore has been more rapid than elsewhere, probably due to influx of Muslim cultivators from Midnapur (West Bengal). There was not much of the problem of migration of Muslims from Orissa arising out of the partition of India, and this is confirmed by the growth rate as given above.

Christians

15. Christians in Orissa number 141,934 in 1951, forming 0·97 per cent of the total population. The Christian population has shown unusual fluctuation in the past four censuses. The total strength was only 69,882 in 1921, and within a decade it rose to 114,323 in 1931, a gain of 63·6 per cent which is high indeed. By 1941, the number further rose to 147,979, an increase of 29·4 per cent in ten years. The 1951 census however recorded 141,934 Christians only within the bounds of Orissa, which is a decrease of 4·1 per cent as compared with 1941 figure but which amounts to an increase of 24·2 per cent in 20 years from 1931. The growth of Hindus and Muslims during the last 20 years, between 1931 and 1951 is 17·1 and 18·6 per cent respectively. The growth of Christians during the same 20 years amounting to 24·2 per cent is higher than that of the other principal communities. This larger growth is justified in view of the proselytising activities favoured by Christianity. Similarly the phenomenal increase of Christians between 1921 and 1931, as stated above, may be due to a large number of tribal population declaring Christianity as their religion. But there is no reason to suppose that there was a real fall in the population of Christians between 1941 and 1951. The fall, as shown by the recorded figures, is due to some amount of confusion in 1941 in recording the religion of hill tribes. The Christian population was swelled up in this confusion. In fact, the correct population of Christians in 1941 would be some where between 114 thousand and 141 thousand, which are the recorded population of 1931 and 1951 respectively.

16. More than half the Christian population of the State is found in Sundargarh district, its contribution being 71,943. Koraput district comes next with 23,834. Ganjam, Phulbani and Sambalpur are the other districts which also contribute a significant proportion. The community has its lowest strength in Keonjhar, viz., 245.

Tribal Religions

17. At the census of 1951, a vast majority of the tribal people has declared its religion either as Hindu or as Christian. The total population of scheduled tribes in Orissa numbers 2,967,334 of whom 2,898,349 profess Hinduism and 66,409 Christianity as their religion. The remaining 2,576 have described themselves as not belonging to the fold of any major religion of India, but as adherents of a tribal religion distinct from Hinduism or Christianity, etc. Such persons belonging to the northern portion of the district of Mayurbhanj have named their tribal religion as ' Sarana '.

Sarana

18. As stated above, persons belonging to this religion inhabit the northern portions of Mayurbhanj mostly. The name of the religion is derived, according

to a local report, from the word ' Sarin ' or ' Salgi ' which is an appellation of the Goddess of nature. The members of this religion believe that the Goddess of nature is the mother of the world and has originated this religion for humanity for comfortable and peaceful worldly life and for attainment of salvation. According to this belief, the soul is immortal and it comes to earth to enjoy the body and returns to heaven without the body. The worship is performed under a tree, in the midst of a grove and not in a temple or a building of any kind. There is no priest to conduct the worship, which is done either on a community or individual basis. Drinks, food and occasionally the blood of an individual or of his pet animal are offered for worship.

19. The customary marriage among the Saranas takes the form of the bridegroom taking away the bride to the house of one of his relatives where a few senior persons gather to ascertain the mutual consent of the couple and accord their approval. Thereafter the relatives of the bridegroom wash the feet of the bride and bridegroom and the couple are taken to the house of the bridegroom where turmeric and oil are rubbed on their body and the bride is made to wear an iron bangle on her left hand which is to be removed only on divorce or widowhood. So long as the woman lives with her husband she is entitled to paint vermilion on her forehead. No woman without a patch of vermilion is allowed to take part in any formal worship or religious activity. On such occasions the vermilion is rubbed on the forehead only by the husband and by no other person.

OTHER NON-TRIBAL RELIGION—KUMBHIPATIA

20. This is described * as a sect that originated in the Orissa states in the middle of the last century in revolt against Hinduism, the particular features of it to which objection was taken being idolatry and the caste system. The Kumbhipatias do not worship the Hindu Gods; they do not reverence the Brahmin; they take no account of the caste system and they do not bury their dead. Theoretically therefore they are not Hindus, but the movement is sufficiently recent to maintain its front against Hinduism. Moreover, the community is not a large one and marriage outside the fold is permissible. This practice leaves a side door open and gives scope for fraternization and easy relapse into Hinduism. The number of Kumbhipatias has varied from census to census. It was 755 in 1911 and 1,231 in 1931. In the present census it has reduced itself to 51 only. This shows that complete fusion into Hinduism may not be far off

SIKHS

21. The number of Sikhs in Orissa in 1931 was 276 and in 1941 their number was 476. In 1951, there were 4,163 Sikhs in Orissa forming about 3 out of 10,000 population. They are mostly found in Sambalpur, Cuttack and Mayurbhanj. The attractions of growing industries and the result of partition are the main causes of influx of a large number of Sikhs into this area.

OTHER RELIGIONS

22. At one time in the long past, Orissa was the seat of Jainism and Budhism, but these have almost become extinct now. There are 1,248 Jains and 969 Budhists now against 765 and 1,889 in 1941. Recently, there was consecration of the Jain temple at Khandagiri in the district of Puri, which attracted some members of the community from outside the State. The number of Zoroastrians in Orissa is 181. Most of them are found in Cuttack district.

* Census Report of Bihar and Orissa, 1921, Part I, Page 124.

SECTION IV

Backward Classes

1. The backward classes of people, according to the present definition of the term, constitute nearly two-thirds of the total population of the State. In a population of 146 lakhs, Orissa has over 97 lakhs of people who belong to the category of backward classes.

CLASSIFICATION

2. The term ' Backward Classes ' has not been defined. It is, however, clear from Article 340 and also from Clause 4 of Article 16 of the Constitution of India that the backward classes are such classes of people in the country as are socially and educationally backward. The name and specification of different categories of backward population has undergone change from time to time. The aboriginal section of the backward population has been known by different names at different times, such as, animists, primitive tribes, tribal population and scheduled tribes, while the other section of the backward population has been known as untouchables, depressed classes, harijans or scheduled castes. In 1936 an attempt was made by an Order of the Government of India to define the castes and the tribes treated as backward. This was, however, more systematically done under the Constitution Orders of 1950 specifying the scheduled castes and scheduled tribes for different States in India. As there were sections of backward population other than scheduled castes and scheduled tribes, the State Governments were authorised to draw up a list of such castes. Accordingly, in the census of 1951 the backward classes of people have been divided into three classes, viz :—

(*i*) Scheduled Tribes,

(*ii*) Scheduled Castes,

(*iii*) Other Backward Classes.

TRIBEWISE OR CASTEWISE FIGURES NOT WORKED OUT

3. The population of each tribe or caste in different districts or smaller administrative units in the State is not available for the present census. This is highly regrettable particularly in view of the fact that the backward classes constitute a large percentage of the general population of Orissa, and their problems are of utmost importance from political, administrative or social considerations. The Census of India merely undertook a brief districtwise classification of the scheduled castes and the scheduled tribes as appears in table D-III published in Part II-A of the Report. This table does not show the population of each caste or tribe in each district or parts of a district. Attention of the State Government was drawn to the fact that such castewise and tribewise population may be useful for the Administration and that the organisation under the Superintendent of Census Operations will be glad to undertake the necessary tabulation of castewise and tribewise population, literacy, economic condition, etc., if the State Government were prepared to bear the cost of this particular operation. Perhaps considerations of economy led to unfavourable decision by the State Government, so that the work was not taken up. In the absence of such statistics, much of the valuable information relating to the life and economy of the backward peoples of the State cannot be given in the present Report.

SPECIFICATION OF BACKWARD CLASSES NOT SATISFACTORY

4. The specification of different classes of people under scheduled tribes, scheduled castes and other backward classes are mentioned in coming paragraphs at appropriate places. It was not

unusual during the census operations of 1951 to come across criticisms, sometimes strong and reasonable, from various quarters against such specifications. In paragraph 7 below it has been shown how the composition of the tribes has changed between two censuses and how the section of population treated as tribes in 1941 has been classified in the present occasion partly as scheduled tribes and partly as scheduled castes or as other backward classes and also how a part of the tribal population of 1941 has been completely omitted from either of the three classes of backward population of 1951. It has also been mentioned elsewhere how at least one section of the population known as 'Mahesya' which was one of the 'Other Backward Classes' forced the hands of the State Government to alter the specification by omitting its name from the list. Moveover, there were a large number of cases in which representations or protests were made by the concerned classes of population for revision of the list. The Gonds of Kamakshyanagar subdivision in Dhenkanal district expressed resentment against their classification as a scheduled tribe at present. Of late, they have been declining to accept rewards, scholarships and other facilities granted by the Education and Welfare Departments of the Government to their students. They consider that acceptance of such facilities is derogatory to their social prestige. In the city of Cuttack the Gurias and the Banias similarly raised objection to their being included among other backward classes. The Telis of the district of Cuttack also had similar objection. Some of the backward classes like Gouda, Tanti and Jyotis of Jajpur subdivision strongly objected to their being recorded as backward classes, as in their opinion, their economic and social conditions were in no way inferior to those of the other sections of people in the locality. In Ranpur, persons belonging to the castes Bhandari, Barika and Bania represented against their being shown as backward classes. On the other hand, the Keutas of Ranpur moved the authorities for inclusion of the name of their caste among other backward classes in order to be able to claim special privileges. Some of the backward classes like the Pana and Kandara expressed dissatisfaction as the name of the class to which they belonged was changed from Harijan to scheduled castes. There are many other sections of the scheduled castes who likewise expressed preference for the name Harijan. Other shortcomings in the specifications of the backward classes which came to notice in course of the census operations related to omission of some classes of population from the list of backward classes. The Jharas of Kamakshyanagar, for example, who in the past used to be classed as one of the backward classes have not been included in any of the three lists adopted in the present census. The Jharas are still continuing in the same social and cultural conditions as the members of the scheduled castes of the locality and it appears that their name was not included in the list of scheduled castes through oversight. But in larger number of cases it would appear that sections of people who are socially and economically not more backward than their immediate neighbours have been included in the list of other backward classes. As a result of this the list of other backward classes has become unduly large and requires drastic curtailment.

Scheduled Tribes

List of Tribes

5. The specification of the scheduled tribes as required under Article 342 of the Constitution of India, has been laid down in the Constitution (Scheduled Tribes) Order, 1950. It is not clear

what was the criterion of such specification, but it appears that the following aspects were taken into consideration, viz.—

(*i*) tribal origin,

(*ii*) primitive way of life and habitation in remote and less accessible areas,

(*iii*) general backwardness.

The following tribes are deemed to be scheduled tribes within the State of Orissa.

(1) Bagata
(2) Baiga
(3) Banjara or Banjari
(4) Bathudi
(5) Bhuiya or Bhuyan
(6) Binjhal
(7) Binjhia or Binjhoa
(8) Birhor
(9) Bondo Poraja
(10) Chenchu
(11) Dal
(12) Gadaba
(13) Ghara
(14) Gond
(15) Gorait or Korait
(16) Ho
(17) Jatapu
(18) Juang
(19) Kawar
(20) Kharia or Kharian
(21) Kharwar
(22) Khond (Kond) or Kandha, or Nanguli Kandha or Sitha Kandha.
(23) Kisan
(24) Kolha-Kol-Loharas
(25) Kolha
(26) Koli
(27) Kondadora
(28) Kora
(29) Korua
(30) Koya
(31) Kulis
(32) Mahali
(33) Mankidi
(34) Mankirdia
(35) Mirdhas
(36) Munda (Munda-Lohara and Munda-Mahalis).
(37) Mundari
(38) Oraon
(39) Paroja
(40) Santal
(41) Saora, or Savar, or Saura, or Sahara
(42) Tharua

Distribution of Population

6. The population of the scheduled tribes, according to the census of 1951, is 2,967,334 constituting 20·2 per cent of the total population of the State. The inland division is the real home of the scheduled tribes, for, out of the total number more than 26·6 lakhs live in this division and only 3 lakhs in the coastal division. The largest population of the scheduled tribes is to be found int he district of Koraput (522,841) followed by Mayurbhanj (504,679), Sambalpur (351,788) and Sundargarh (312,639). Other districts where the scheduled tribes are to be found in appreciable number are Kalahandi (243,699), Keonjhar (228,090), Phulbani (195,719), Bolangir (186,147), Ganjam (112,006) and Dhenkanal (104,383). The three coastal districts of Cuttack, Balasore and Puri have got the lowest number of scheduled tribes living therein, with a population of 80,194, 62,975 and 62,714 respectively. The statement below shows the percentage which the scheduled tribes living in each district of the State constitute out of the total population of the respective district.

Sundargarh	56·6
Mayurbhanj	49·1
Phulbani	42·7
Koraput	41·2
Keonjhar	38·8
Kalahandi	28·4
Sambalpur	27·0
Bolangir	20·3
Dhenkanal	12·4
Ganjam	6·9
Balasore	5·7
Puri	4·0
Cuttack	3·2

VARIATION IN THE COMPOSITION AND POPULATION OF TRIBES

7. The population which was held equivalent to the present day scheduled tribes numbered 2,215,237 in 1931 and 2,584,293 in 1941. As stated above the population of the scheduled tribes in 1951 is 2,967,334. The variation in the population is not a true index of the growth of the members of the tribes. The composition of the tribes and even the nomenclature has changed from time to time. The list of tribes on which dependence was made in the census of 1931 was changed under Schedule XIII of the Government of India Order, 1936. The population of the tribes was determined in 1941 according to this new list. Again in the year 1950 the composition was changed under the Constitution (Scheduled Tribes) Order, 1950. The figures of different censuses are not comparable in toto on account of the change in the composition of the tribes from time to time. Comparing the position between 1941 and 1951 it appears that the list of tribes in 1941 included Pano, Panika or Panka, Dombo, Bhumij, Dhanwar, Pradhan and Tamodia, but all of them have been taken over to the list of scheduled castes in 1951. Again there are other sections of the population, namely, Agaria, Bhokta and Lohra which were regarded as tribes in 1941 but which are included in 1951 in the list of other backward classes and not in the list of scheduled tribes or scheduled castes. It also appears that there are many sections of the population, such as, Maria, Baghua, Didayi, Bhuinhar, Malhor and Panguria which were included in the list of tribes in 1941 but which now remain completely unclassified being omitted from the 1951 list of scheduled castes, scheduled tribes or other backward classes. Thus the 1941 list of tribes was very much confused and different from what it is now and as such the population of the tribes in 1941 as mentioned above is not comparable with the present population of the scheduled tribes. Similarly there is no comparable basis between the figures of 1931 and of subsequent censuses.

8. If, however, the total population of the tribes is not comparable between one census and another, the question arises whether the population of a particular tribe which is included in the lists of different censuses is comparable. The reply is in the affirmative with regard to a few tribes only but not all because a few of the small and less known tribes of earlier censuses have been merged into the more notable tribes of the present day. Moreover, there has been no tribewise tabulation of population in 1951 and thus no figures are available with regard to 1951 for comparison with those of earlier censuses. The population of different important tribes in the year 1941 is shown below :—

Kond	690,765	Kisan	96,815
Gond	343,864	Kharia	70,004
Santal	330,114	Munda	63,291
Saora	326,326	Gadaba	34,315
Paroja	145,717	Koya	27,891
Kollah	109,585	Bhuiya	19,685
Oraon	78,998	Juang	17,032

Important Tribes

9. In this short essay, it is not proposed to devote a considerable amount of space for giving a comprehensive picture of the extremely interesting tribal life of Orissa. Little can be stated about the anthropology, racial affinity, language, social life, festivals, religion and clothes and ornaments of the tribes. It is not even possible to give the exact population of each tribe, as it was in 1951, on account of the regrettable position as mentioned in paragraph 3 above. A sketchy account is given below of just a few important tribes living within the

State, in view of the limited scope allowed for the purpose. A more elaborate discourse would be necessary if all has to be told about the facts of the tribal life and about the things of value in the tribal system. On the whole, the tribal life is simple and happy, enriched by natural pleasure, even in the midst of disease, poverty and backwardness in our civilized sense. The tribes have plenty of romance and gaiety and are full of songs of rare beauty and deep simplicity. They have their own set of morals and discipline, and they obey the elders or the heads of clans in an implicit manner. Some of the tribes in Orissa are the most primitive, like the Juangs and the Saoras. Their tribal organizations are still unimpaired to a considerable extent and their artistic traditions unbroken. Some of the tribes are experts in the art of personal ornamentation, decoration of the house, and the arts of recreation and of love, while others are noted for the practice of black art and magic, the diagnosis and cure of disease, and the knowledge of the forests and natural surroundings. Yet evils are rampant. The tribal life is marked by crude superstitions and notions. Some of the tribes are utterly unreclaimed and may be said to be living in a state of nature, in the inaccessible hills and remote forests, free from clothing and living in wicker work huts. Most sections of the tribal community have taken to the devastating and ruinous form of cultivation, known as *podu* or shifting cultivation. A study of the life and history of the tribes of Orissa will be highly interesting and useful.

KOND

10. The largest single scheduled tribe of Orissa is Kond, the approximate population of which may be nearly seven lakhs and a half. They are scattered over the region on the right bank of the Mahanadi nearby Baudh and Daspalla, extending south-west into Khondmals and Ganjam Agency where their concentration is most marked, and further into the hilly regions of Koraput, Kalahandi and Bolangir districts. They are also found in small numbers in Sambalpur district. Outside Orissa, the Konds are to be seen upto the extreme west of Bisakhapatnam district, and in Bastar and south-east portion of Madhya Pradesh.

11. There are four classes of Konds, namely, Kutia, Dungaria, Desia and Jatapu. The Jatapu Konds are the most advanced among them having assimilated to an extent the culture and civilization of the Aryan neighbours. But the Kutia Konds are the most primitive among them, occupying the most inaccessible hills and remotest forests, living on what they can secure with their bows and arrows, which they wield with great skill, and on other forest produce. They are practically naked, the women using a kind of bark which they tie round their waist and turn it between the thighs.

12. Habits and customs are not similar among all the Konds. The Kond women of Phulbani tattoo their face but this is not the practice in Koraput. Some of the Konds eat beef but not the Konds of Balliguda and Koraput. The Konds are generally simple in nature, innocent, truthful and credulous. Their behaviour is pleasant and they are extremely hospitable to guests, giving protection to enemies if they take refuge. They can be won over with good gesture and kindness. The offerings of country cheroots to men and glass beads to women are easily accepted as presents. They are generally kind and cheerful and are lovers of recreation. They were formerly addicted to human sacrifice and infanticide.

13. The Konds appear to have suffered perceptible degeneration during the last one century or so. The Konds of old

were noted for being brave, high spirited, utterly independent, very well-behaved, ready to oblige and having orderly manners of life. The following observations * made by Lieut. Macpherson, Assistant Surveyor General of Madras in the year 1841 will show the characteristic traits of Konds noticeable more than 100 years ago.

Agriculture is practised by the Konds with a degree of skill and energy, which is perhaps no where surpassed in India, and which has produced a degree of rural affluence rarely parallelled.

At the season of labour, the Kond rises at day break. Before quitting his cottage, he eats a full meal consisting of Moong, Ragi or Juar, boiled with a portion of jungle herbs, and flavoured with a piece of goat's or swine's flesh. Then yoking his team or shouldering his axe, he goes out for the day. When employed in ordinary work, as at the plough, he labours without intermission until three o'clock in the afternoon, when he bathes in the nearest stream. But when his toil is more severe, as in felling wood, he rests to eat a mid-day mess which is brought to him to the field. At evening he returns home to a meal similar to that of the morning with the addition of liquor or tobacco. At harvest and seed time, the women share in every form of field labour.

14. The noted historian Hunter has also described the Konds as brave and fighting people. The old collection of papers relating to Jeypore Estate (Published in 1803) also mentions † ' That the Konds of Rayaghada were very industrious—more industrious people it would be impossible to meet with '. But the Kond of to-day is markedly timid and shy, takes life easy, does not think of the morrow and is not worried about crops or food. He is hardly a good agriculturist, and when compared with some other tribesmen, Saora for example, he cuts a sorry figure. It is noticed that while the Saora works hard to grow hill crops, the Kond goes to the field, if at all, with apparent indifference. The Konds are very fond of shifting cultivation which leads to the extensive destruction of valuable forests of the State. Engaged as a cooli for road building or earth work, the Kond easily annoys his employer by his unwillingness or inability to do hard physical labour. Fighting qualities have so completely vanished in a Kond, that he runs away nervously at the sight of a foreigner, sometimes hiding himself behind a tree or a mound of rocks and peeping therefrom with timid eyes in the manner of a *sambar* or a deer living in the forests nearby. This marked degeneration is due to loss of nerve resulting from devastation in various forms wrought by external culture contact which synchronised with the British occupation of the country. The Kond is no longer the master of the hills and forests which he once was. He faced a serious crisis as a result of official and foreign missionary interference, attempting to wean him away from evil practices. He felt greatly frustrated, subdued and vanquished in all walks of life and developed inferiority complex, servility, timidity and indolence which marks his present character. How the problem should be tackled so that the Kond and other tribes may attain real advancement and progress has been discussed elsewhere in this Section.

GOND

15. Numerically the second most important scheduled tribe of Orissa is the Gond, whose principal habitation is to be found in Madhya Pradesh. The Gonds were once a royal tribe, giving the ancient name of Gondwana to their native country. In Orissa, they are found chiefly in Kalahandi, Bolangir, Sambalpur and Koraput districts and also to some extent in Keonjhar and Sundargarh. They are also thinly dispersed over Dhenkanal and Mayurbhanj districts. Their total strength in Orissa may be a little less than 4 lakhs.

* Lieut. Macpherson's Report upon the Khonds of the districts of Ganjam and Cuttack (United Scottish Press Madras, 1863) P. 49.

† Quoted at page 44 of the Hill Tribes of Jeypore by Sri L. N. Sahu.

16. The Gonds have usually a well developed physique, with fine chests and massive shoulders but having scantily grown beards and moustaches. They are good in negotiating steep climbs and narrow hill tracks, carrying heavy burden. They are much more industrious than the Konds, and take physical labour with pleasure. They have a distinct culture of their own and their songs have a rich vocabulary and are emotional and colourful. They possess detailed knowledge of the kinds of trees, qualities of timber, nature of rocks, properties of bark, grass and flowers and habits of birds and animals. But they are a set of highly superstitious people and their social and economic activities are allied with protective and preventive magical rites. Counter magic or defensive magic is also taken resort to frequently.

SANTAL

17. Another important and large tribal community of Orissa is constituted of Santals who are concentrated in the north-east portion of the State. District Mayurbhanj alone contains nearly 85 per cent of the total Santal population of Orissa. In the district of Balasore, they are found mostly in northern part and in Nilgiri and are also seen men and women, working in the large number of rice mills in the district. A small number of Santals also belong to Keonjhar district. Their total number in Orissa may be about 3 lakhs and a half. Outside Orissa, the Santals are found in Bihar, particularly in Santal Parganas and in West Bengal and Assam.

18. The Santal is a good agriculturist but also loves forest surroundings and is an expert hunter. Both men and women work in the field, either their own or on the basis of wages in some body else's lands. They do not worship in temples or other structures but in the midst of a cluster of trees nearby the village. They believe in witches and supernatural powers. The administration of a Santal village is somewhat agreeable to modern democratic notions, with the Majhi as the chosen representative of the village and the Pargana as the head of a number of Majhis, the whole set up being subordinate to the will of the total Santal population of a particular tract. Village disputes are settled by the Majhi and appeals are preferred before the Pargana. Divorce is very frequent among them, and is allowed on the wish of either the husband or the wife. A remarkable feature about the Santals is their habit of cleanliness, of body, of clothing as well as of the place of dwelling. Their other traits display a mixture of opposites, generally simple and timid by nature but at times obstinate and ferocious, hardy at others' fields but lazy in their own.

SAORA

19. The Saoras are one of the most ancient tribes of India. It is not possible to say if they are more primitive than the Juangs, who are found in Pal-Lahara and Keonjhar, and who are generally attired in leaves, living a strongly knit communal life. The Saoras are ment oned in the Ramayana and the Mahabharat as well as in the Puranas and also in the ancient works of Pliny and Ptolemy in the early centuries of the Christian era. The beautiful Eastern Ghats plateau of Koraput district and Ganjam Agency is the home of this great tribe, but members of this tribe are found to some extent in Phulbani, Cuttack, Dhenkanal, Puri and Kalahandi districts. Their total number may be nearly three lakhs and a half. The hill Saoras are simple, straight-forward and truthful and have an inflamable temperament so that they are apt to commit grievous hurt or murder on slight provocation. They are highly skilful in construction of their fields on hill sides and their houses. They are known as adepts in magic and witch-craft. They unquestioningly obey

the headman of their clan. The women folk do not generally cover their breasts which they keep covered with glass beads strung together. The Saoras are addicted to shifting cultivation or *podu* cultivation, which is practised after cutting and burning of tracts of most valuable forests. The products of *podu* cultivation are not sufficient to maintain them all the year round and have to be supplemented by edible roots and fruits from the jungle.

PAROJA

20. This tribe is entirely found in the district of Koraput numbering nearly one lakh and a half. They are divided into 12 clans, each clan being named after the region in which it resides. Among them the Bonda Parojas are the most primitive. Their women as well as men are almost naked. The women do not wear any cloth except a little strip in the middle of the body. The women folk tattoo their whole body from foot to the waist and also the breasts and the cheeks at times. In this matter they can be distinguished from other hill tribes as no other tribe takes to tattooing in such extensive manner. They shave their heads and wear large sized rings of split bamboo round their neck. The Parojas are somewhat more intelligent than the Konds but they are dirty as compared with other tribes, particularly the Santals. They are good mountaineers. Their sex morals are not as high as those of the Konds. Boys and girls after attaining puberty are sent to live in dormitories known respectively as the 'Dhangadaghar' and the 'Dhangadi ghar' where they principally devote time for choosing the life's partner. Geographical conditions have largely protected them from contacts with the plains. The Paroja's favourite form of cultivation is known as *podu* cultivation, the evil effects of which are well known.

OTHER IMPORTANT TRIBES

21. The names of a few other important schedu'ed tribes, their approximate population and the localities in which they reside are given below. On account of the reasons mentioned in paragraph 3 above, it is not possible to give the exact population of each tribe. The figures given below are at best rough indication in round numbers.

Tribe	Rough indication of population (in thousands)	Principal habitation
Kolha	120	Keonjhar, Bonai, Nilgiri and Bamra.
Oraon	85	Gangpur, Bonai and Sambalpur.
Kisan	100	Gangpur, Bamra and Bonai
Kharia	80	Gangpur, Mayurbhanj an Sambalpur.
Munda	75	Gangpur, Bonai and Sambalpur.
Bhuiya	25	Bonai, Bamra, Pal-Lahara and Keonjhar.
Gadaba	35	Koraput
Koya	35	Koraput
Kora	30	Bamra, Athmalik and Keonjhar.
Juang	20	Keonjhar and Pal-Lahara

PROBLEM OF SCHEDULED TRIBES

22. The problem of scheduled tribes is serious and in some respects different from that of other backward population. They have been pushed back for centuries into inaccessible forests and unhealthy regions, cut off from civilization and advancement and consequently left in oblivion. With the British occupation of the country and opening up of lines of communication and spread of missionary activities, contact was gradully established by men from plains, from whom however the innocent and simple-minded aboriginals did not receive a square deal. Several uprisings of the tribal people took place, such as the Kond uprising in 1846 and 1882. The underlying cause of these uprisings was connected with deep dissatisfaction

among the tribal people against exploitation by their more advanced neighbours. The result of such exploitation has been tragic for many tribes. The Juang tribe of Keonjhar, for example, being unable to cope with the growing economic pressure from the people of the surrounding plains and finding it difficult to take to wet cultivation, have been losing zest of life and declining in numbers.

The Government ultimately felt that there should be an end to such exploitation and specified and constituted the tribal areas into 'Scheduled Tracts' under the Government of India Act, 1919. This was just the beginning. More effective provisions for special treatment of tribal areas were laid down in the 1935 Act when the partially excluded areas were defined. Finally in the wake of freedom of India, came the new Constitution which safeguarded the social, economic and educational interests of scheduled tribes and scheduled castes. A Commission was appointed under Article 340 to investigate the conditions of backward classes and to plan and execute welfare schemes. Moreover, constructive activities were undertaken by social service institutions and by eminent and selfless social workers like Shri A. V. Thakkar, whose contribution in the realm of welfare work was of no mean order.

23. Opinion seems to be dangerously divided on the future of the tribes. The views of experienced administrators like Dr. Hutton and Grigson, who spent many years of their lives among the primitive tribes and whose knowledge of the tribal life, traditions and customs and genuine love for them cannot be questioned, are decidedly in favour of complete protection, at least for the time being, against exploitation and encroachment by the so-called civilized races, in the garb of either politicians, social workers or religious preachers. Verrier Elwin, a noted scholar and writer, who spent his life among the aboriginals and finally settled down in an aboriginal village in Madhya Pradesh strongly advocates a policy of temporary isolation and with characteristic emphasis says, *

> It is vital that the future of the Indian aboriginals should not be left either to ignorant politicians or to self-willed administrators who are not prepared to learn from what has happened in other lands.

24. On the other hand, there is another school of thought offering a different solution of the problem, based on the consideration that the tribes have been left neglected for centuries to wallow in utter poverty and backwardness, reacting as a dead handicap to the general prosperity and advancement of the country as a whole. They therefore need most urgent and comprehensive attention in all aspects of their life if they are to be raised to the same level as other sections of the population. There is also the suspicion that foreign missionaries may capture still more of the 'market' unless the tribal areas are quickly covered up by expansion of the regional culture. The advocates of this opinion suggest an all-out measure for the rapid absorption of the tribal people into the educational, cultural, religious and even linguistic standards of the neighbouring region.

25. Thus there are two sharply opposite views one of which may be termed as a policy of isolation and the other a policy of open door. The advocates of both present their respective cases with richness of argument why a particular policy should be preferred to the other. The English writers seem inclined to treat the problem of contact of the tribes with the outside world under an attitude possibly tainted with the concern over the then impending transfer of political control from the

* The Aboriginals (Oxford Pamphlets on Indian Affairs) by Verrier Elwin, page 29.

British to Indian hands. On the other hand, it is also probable that the Indian scholars were actuated by the apprehension of the creation of unabsorbable regions of men and resources, right in our midst, which might later on prove to be highly prejudicial, if not hostile, to our national aspirations. There is however no difficulty in coming to conclusion that the study of and attempt to offer a sound solution of a multisided problem such as the contact of two peoples, is bound to create difference of opinion. There is even difference as regards the origin of the degradation and backwardness of the tribes. But it appears that the initial inroad on the integrity of the tribal life was made by the advent of the British rule. The British methods of collection of revenue and maintenance of law and order directly resulted in the loss of authority of the tribal elders and break up of the tribal solidarity. This automatically brought a revolution in the nature of contact between the men of the plains and of the hills. There was then a gradual flow of traders and money-lenders, land-grabbers and social or religious reformers from the plains to the hills. This feature is a mere corollary of the breaking of sanctity of the tribal life originating from the British occupation of the land.

26. The matter thus requires a comprehensive study before any reform is attempted. This is a subject on which the views of the politicians and administrators, howsoever intelligent and well-wishing, cannot be regarded as the final word. The anthropologist and the sociologist will have to be consulted. A dispassionate study from all the angles of vision may ultimately show that if the contact is sudden and indiscriminate and tends to upset the tribal life by forced measures, the results will be unhappy and perhaps disastrous as shown by rapid depopulation of the primitive tribes in Australia, Newzealand and the U.S. A. On the other hand, a negative policy of segregation or isolation, though essential in early stages, is not conducive to the well-being of the tribes. Isolation generally leads to stagnation and decay and seldom to progress. If, therefore, isolation cannot be the ultimate solution of the problem of the tribes, so cannot be indiscriminate and sudden contact. The correct policy should be to safeguard the social organisations and integrity of tribal life at the same time initiating ways and means so as to give the tribes an opportunity to be gradually integrated into the larger life of the nation.

Scheduled Castes

27. The specification of scheduled castes as required under Article 341 of the Constitution has been laid down in the Constitution (Schedu ed Castes) Order, 1950. As in the case of scheduled tribes, no definite test has been prescribed for the specification of scheduled castes. But it appears that originally the prevailing notion of untouchability, though now abolished and forbidden under Article 17 of the Constitution, was the guiding factor in drawing up the list of untouchables or depressed classes which is more or less equivalent to the present-day scheduled castes. The castes having professions which involve the physical handling of dirty and putrefying matter and other so-called unclean jobs, such as, skinning and tanning of hides, sweeping of streets, scavenging, etc., were grouped under this class of backward population. The objective was to confine the list to the section of population which on account of its traditional position in the society suffered from various religious and social disabilities, such as, prohibition from entry into temples, or drawing water from the village wells or admission of their children into the village schools. It was recognized

that the criterion of classification of such backward population should gradually change from religious or social considerations to the degree of backwardness in economic and educational spheres. But even the 1950 list of scheduled castes is a compromise between the two criteria and it may take some time before the Backward Classes Commission set up under Article 340 (1) of the Constitution investigates thoroughly into the matter and draws up a list purely based on the latter criterion.

List of Scheduled Castes

28. The following castes are deemed to be scheduled castes within the State of Orissa under the Constitution (Scheduled Castes) Order, 1950—

(1) Adi-Andhra
(2) Amant or Amat
(3) Audhelia
(4) Badaik
(5) Bagheti
(6) Bajikar
(7) Bari
(8) Bariki
(9) Basore or Burud
(10) Bauri
(11) Bauti
(12) Bavuri
(13) Bedia or Bejia
(14) Beldar
(15) Bhata
(16) Bhumij
(17) Chachati
(18) Chamar
(19) Chandala or chandal
(20) Cherua or Chhelia
(21) Dandasi
(22) Desuabhumij
(23) Dewar
(24) Dhanwar
(25) Dharua
(26) Dhoba or Dhobi
(27) Dom or Dombo
(28) Dosadha
(29) Ganda
(30) Ghantarghada or Ghantra
(31) Ghasi or Ghasia
(32) Ghogia
(33) Ghusuria
(34) Godagali
(35) Godari
(36) Godra
(37) Gokha
(38) Gunju or Ganju
(39) Haddi or Hadi or Hari
(40) Irika
(41) Jaggali
(42) Kandra or Kandara
(43) Karua
(44) Katia
(45) Kela
(46) Khadala
(47) Kodalo
(48) Kori
(49) Kumbhar
(50) Kurunga
(51) Laban
(52) Laheri
(53) Madari
(54) Madiga
(55) Mahuria
(56) Mala or Jhala
(57) Mang
(58) Mangan
(59) Mehra or Mahar
(60) Mehtar or Bhangi
(61) Mewar
(62) Mochi or Muchi
(63) Mundapotta
(64) Nagarchi
(65) Paidi
(66) Painda
(67) Pamidi
(68) Pan or Pano
(69) Panchama
(70) Panika
(71) Panka
(72) Pantanti
(73) Pap
(74) Pasi
(75) Patial or Patikar or Patratanti or Patua
(76) Pradhan
(77) Rajna
(78) Relli
(79) Sabakhia

(80) Samasi
(81) Sanei
(82) Sapari
(83) Satnami
(84) Sidhria
(85) Sinduria
(86) Siyal
(87) Sukuli
(88) Tamadia
(89) Tamudia
(90) Tiar or Tior
(91) Turi
(92) Valamiki or Valmiki

DISTRIBUTION

29. The scheduled castes of Orissa have a population of 2,630,763 constituting 18·0 per cent of the general population of the State. This population is divided nearly half and half between the inland and the coastal divisions of the State. The scheduled caste population of the inland division is 1,391,455 or 17·5 per cent of the total population of the division and that of the coastal division is 1,239,308 constituting 18·6 per cent of the total population of the division.

30. The scheduled castes are concentrated in the four coastal districts of Orissa, namely, Cuttack (494,460), Ganjam (302,736), Puri (255,276) and Balasore (217,339). Two other districts, namely, Sambalpur (222,976) and Koraput (209,955) have also a good percentage of the scheduled castes. Districts which occupy the middle position with regard to the number of population of scheduled castes are Bolangir (183,032), Kalahandi (176,753), Mayurbhanj (174,228) and Dhenkanal (144,793). Districts having the smallest number of scheduled castes are Keonjhar (90,244), Phulbani (86,380) and Sundargarh (72,591). The percentage of scheduled castes population to the total population of each district is shown below.

Kalahandi	..	20·6
Bolangir	..	19·9
Balasore	..	19·6
Cuttack	..	19·5
Phulbani	..	18·9
Ganjam	..	18·6
Dhenkanal	..	17·3
Sambalpur	..	17·1
Mayurbhanj	..	16·9
Koraput	..	16·5
Puri	..	16·2
Keonjhar	..	15·3
Sundargarh	..	13·2

Other Backward Classes

LIST OF OTHER BACKWARD CLASSES

31. A list of backward classes other than the scheduled tribes and the scheduled castes was published by the Government of Orissa in January 1950.* According to this list, there were 112 classes termed as 'Other Backward Classes'. After publication of this list, representations were made by a number of different classes included therein for removal of their names from the list on the ground that they have attained a degree of advancement in social, educational and economic fields which in their opinion entitled them not to be included in the list of backward classes. Strongest protest however was received from the caste known as Mahesya and it appears that there was an administrative enquiry into their grievances and ultimately the State Government were staisfied about the representation and ordered removal of the name from the list. Therefore the list of other backward classes stood finally with 111 classes of population as named below.

(1) Aghria
(2) Badhai
(3) Baipari
(4) Bania
(5) Banka
(6) Baraji or Barui
(7) Barika
(8) Batakusuda

* Home Department Notification No. 67—Reforms. dated the 26th January 1950.

(9) Bentkars or Bentkar
(10) Bhatua
(11) Bhokta
(12) Betera or Betra
(13) Birjhia
(14) Baruashankar
(15) Bogada
(16) Bolodhia
(17) Bhunjia
(18) Bhandari or Bhandaris
(19) Badasuda
(20) Bhujan
(21) Bhania
(22) Bindhanies
(23) Bhuliya
(24) Chitra
(25) Chik
(26) Churia
(27) Dehuri
(28) Dhaner
(29) Dahalias
(30) Darji
(31) Dumal
(32) Dangua
(33) Deons
(34) Girigiria
(35) Gingra
(36) Gour or Goud or Gou
(37) Gudia or Guria
(38) Gola or Golla
(39) Habra
(40) Hansi
(41) Jogi or Yogi
(42) Jyotish
(43) Jhodia
(44) Kuda
(45) Kanhara
(46) Koda
(47) Khanduals
(48) Kuduma
(49) Kudamatia
(50) Kamar
(51) Khondal
(52) Khati
(53) Kollar
(54) Kapudia
(55) Kulta
(56) Khajirin
(57) Khodra
(58) Khatua
(59) Kandarpa
(60) Luhura
(61) Lohar
(62) Lakhra
(63) Magadhas
(64) Mahuntas
(65) Minka
(66) Maghi or Maghia
(67) Mali
(68) Machhua
(69) Magura
(70) Mangla
(71) Mangli
(72) Magadhi Goral
(73) Nuhra
(74) Nahar
(75) Nolia
(76) Namasudra
(77) Omeyita
(78) Omanatiya
(79) Penguas
(80) Pita
(81) Panjira
(82) Pal
(83) Paiko
(84) Patra or Patara
(85) Padaria or Pamaria
(86) Pathuria
(87) Rona
(88) Radhi or Niari
(89) Routia
(90) Suda
(91) Sithula
(92) Sinkos
(93) Sulia
(94) Situlia
(95) Sundi
(96) Shabar
(97) Sitria
(98) Sutradhar or Badhira
(99) Sagarpesha
(100) Sankhari
(101) Sauntis
(102) Tana
(103) Tanla Gaud
(104) Tiyaro
(105) Telli
(106) Tanti
(107) Tamili
(108) Thuria

(109) Thatari
(110) Vina Tulavina
(111) Yerna Gollas

32. Judging from local conditions and public opinion it appears that the list was unduly elaborate and liberal. The result was that more than 41 lakhs of people or to give the exact number, 4,173,155 were enumerated as other backward classes during the last census. This population constitutes 28·5 per cent of the total population of the State. It is needless to say that many of the classes included among the 'Other Backward Classes' are really not more backward than some sections of the non-backward population of Orissa. The Kultas of Sambalpur, for example, are not more backward than the Chasas of the coastal districts, yet the former has been included in the list of other backward classes while the latter is not. It is however interesting that although the list of other backward classes drawn up by the State Government was very elaborate and liberal, a large number of representations were received by the Census authorities from various classes of popu'ation in the State claiming inclusion in the list of other backward classes. No action on these representations was taken as it appeared that the claim of these classes of people for being included in the list of other backward classes was prompted by a desire to avail of the privileges and protections to which the backward classes are eligible under the Constitution of India.

Total Backward Population

33. The total backward populat'on of the State of Orissa comes to 9,771,252 as follows :—

Name of backward class	Population	Percentage
Scheduled Tribes ..	2,967,334	20·2
Scheduled Castes ..	2,630,763	18·0
Other Backward Classes ..	4,173,155	28·5
Total ..	9,771,252	66.7

The population of the schedule tribes and the scheduled castes in the census of 1941 was—

Scheduled Tribes	..	3,509,458
Scheduled Castes	..	1,864,624
Total	..	5,374,082

34. There was no enumeration of other backward classes in the sense in which this has been done in 1951 census. The population of the scheduled tribes and the scheduled castes together in 1951 comes to 5,598,097 or 38·2 per cent while in 1941 it stood at 5,374,082 or 39 per cent. The difference is small but it will be wrong to compare the figures without entering into greater details, as there was a change in the specification of tribes and castes in between the two censuses.

35. Subsidiary Table 7·7 shows the scheduled tribes, the scheduled castes, other backward classes and non-backward classes by livelihood classification relating to each district of the State.

Proportion of Backward and Non-backward Population

36. The following statement gives the percentage of non-backward and backward classes of population in different districts of the State. It will appear therefrom that Sundargarh and Kalahandi districts have the highest proportion of backward population exceeding 90 per cent. The districts where the percentage of backward population ranges between 80 and 90 are Bolangir, Phulbani, Mayurbhanj, Keonjhar, Sambalpur and Koraput. Thus, 8 out of 13 districts of the State have an overwhelming majority of backward population exceeding 80 per cent. The remaining 5 districts are not so backward. Ganjam and Cuttack, of all the districts in the State, have the least percentage of backward population.

State and district	Non-backward classes	Total backward classes	Scheduled tribes	Scheduled castes	Other backward classes
ORISSA ..	33·3	66·7	20·2	18·0	28·5
Inland Division ..	18·3	81·7	33·4	17·5	30·8
Coastal Division ..	51·1	48·9	4·6	18·6	25·7
Cuttack ..	52·7	47·3	3·2	19·5	24·6
Balasore ..	46·7	53·3	5·7	19·6	28·0
Puri ..	48·8	51·2	4·0	16·2	31·0
Sambalpur ..	17·8	82·2	27·0	17·1	38·1
Ganjam ..	54·1	45·9	6·9	18·6	20·4
Agency ..	*52·0*	*48·0*	*8·4*	*19·2*	*20·4*
Plains ..	*54·3*	*45·7*	*6·7*	*18·6*	*20·4*
Koraput ..	18·1	81·9	41·2	16·5	24·2
Dhenkanal ..	41·2	58·8	12·4	17·3	29·1
Keonjhar ..	16·9	83·1	38·8	15·3	29·0
Phulbani ..	13·4	86·6	42·7	18·9	25·0
Bolangir ..	12·6	87·4	20·3	19·9	47·2
Sundargarh ..	9·4	90·6	56·6	13·2	20·8
Kalahandi ..	9·5	90·5	28·4	20·6	41·5
Mayurbhanj ..	16·0	84·0	49·1	16·9	18·0

AMELIORATIVE MEASURES

37. In order to improve the social and educational conditions of the scheduled tribes and castes, the State Government have taken measures which may broadly fall into 4 divisions, namely—(*i*) educational, (*ii*) health and sanitation, (*iii*) economic and (*iv*) social.

(*i*) *Educational*—A number of Ashram schools were established in the last half of the decade which are residential institutions of six years' course of the middle school standard without English but with special training in carpentry, agriculture, weaving, spinning and crafts. Only tribal students are admitted to these schools. The number of such schools was 30 in the year 1951-52. Moreover, a number of educational institutions known as *Sevashrams* of the standard of primary schools were established for imparting general education of primary standard along with spinning and gardening. Children belonging to scheduled tribes and scheduled castes, and other backward classes are admitted into these institutions. The number of *Sevashrams* in 1951-52 was 540. A special type of training was given to a few boys of the scheduled castes and scheduled tribes in the Harijan Udjyogasala in Delhi with a view to absorb the trainees as teachers and village welfare guides.

(*ii*) *Health and Sanitation*—An annual grant is usually made by the Government for sinking of wells in the backward areas of the State. The amount sanctioned in the year 1951-52 was Rs. 94,000. It is also usual to make a grant every year for distribution of common drugs among the backward classes through touring officers.

(*iii*) *Economic*—A measure to bring about considerable prosperity to the backward classes is to encourage the settlement of scheduled tribes on land. In the year 1951-52, fourteen colonies for the settlement of these tribes were sanctioned in Bamra, Kalahandi, Rairakhol, Bonai, Keonjhar and Pal-Lahara. In the matter of settlement of waste lands preference is generally given to landless members of the tribes. Illigal transfer of land belonging to hill tribes was penalised and action was taken to restore such lands to the original owners. A few muzzle loading guns were given free of cost to tribal head-men for protection of crops from wild animals. The backward classes were encouraged to undertake cottage industries of various types. Bee-keeping centres and poultry units were established in some areas inhabited by the backward classes. Forest shops were opened to afford better marketing facilities to the backward people.

(*iv*) *Social*—Many of the social evils were discouraged by adoption of suitable administrative policies as well as by the patient and praiseworthy work of non-official institutions and workers and of missonaries. Sense of decency and cleanliness and habits of civilized clothings were gradually spreading. The Government helped to break the aloofness of the backward population by providing liberal grants for excursion of aboriginal boys and by holding annual exhibition of tribal arts and handicrafts.

SECTION V

Displaced Persons

1. An unusual type of movement of population began from the year 1946 onwards due to the conditions prevailing in the Punjab and Bengal in the pre-partition and post-partition periods. There was an exodus of lakhs of persons from these areas to different parts of India which was shared to some extent by Orissa. The territories from which these persons migrated are now included in the Dominion of Pakistan. Such migrants are generally known as displaced persons.

DEFINITION

2. All persons who migrated from Pakistan into India, however, are not to be treated as displaced persons, for example, persons who came in usual course from the territories now constituting Pakistan a few years before the partition of India took place cannot be classified as displaced persons. In ascertaining whether a person coming from East or West Pakistan should be treated as a displaced person, there is a reference to a particular date on which such person moved out of Pakistan. If such person left his home in Western Pakistan on or after the 1st of March 1947 or his home in Eastern Pakistan on or after the 15th of October 1946, he was treated as a displaced person on coming into India. Persons who came from Pakistan prior to these dates were not enumerated as displaced persons.

VOLUME OF MIGRATION AND DATE OF ARRIVAL

3. Altogether 20,039 persons (10,801 males and 9,238 females) were enumerated in Orissa on the 1st of March 1951 as displaced persons from Pakistan. Of these, 17,741 persons (9,306 males and 8,435 females) came from East Pakistan and 2,298 persons (1,495 males and 803 females) from West Pakistan. The influx of displaced persons from East Pakistan started as early as the last quarter of 1946 and from West Pakistan in the beginning of 1947 in the pre-partition period. The number of persons who immigrated into Orissa upto the end of 1946 was 333 and a majority of these were from East Pakistan districts. Table D-V (*i*) appearing in Part II-A of the Report shows the trend of migration of displaced persons from Pakistan to Orissa year by year from 1946 to March 1951. The arrivals reached a peak point in August 1947 and continued to be heavy till January 1948. The year 1950 also records a large number of displaced persons coming to Orissa. These arrivals represent the second major wave from Pakistan. The real influx into Orissa seems to have started from the beginning of 1950, reaching its peak point by the middle of the year. But there was more or less a constant stream of in-coming refugees throughout the period. Most of the displaced persons preferred to settle down in the rural areas of Orissa. On the day of census, 16,804 or 83·86 persons were found living in rural areas and the remaining 3,235 or 16·14 per cent were settled in urban localities.

OCCUPATION OF DISPLACED PERSONS

4. It will appear from Table D-V (*ii*) that the persons who were attached to the soil of Pakistan being agriculturists by profession hardly moved out of their country of origin. It also appears that persons who were engaged in transport, industries and commerce in Pakistan came to Orissa in small numbers. A vast majority of the displaced persons belonged to the do-nothing category of persons, as 16,215 out of the total number of 20,039 displaced persons or more than 80 per cent have described their occupation as 'other services and

miscellaneous sources.' Of the persons that arrive in Orissa, only 873 or 4·36 per cent belonged to agricultural classes and the remaining 19,166 persons or 95·64 per cent make their livelihood from non-agricultural professions. The economic composition of these displaced persons as returned at the census is as shown below :—

Livelihood class	Enumerated population	Percentage
I. Cultivators of land wholly or mainly owned and their dependants	658	3·28
II. Cultivators of land wholly or mainly unowned and their dependants	7	0·04
III. Cultivating labourers and their dependants ..	197	0·98
IV. Non-cultivating owners of land; agricultural rent receivers and their dependants	11	0·06
Persons (including dependants) who derive their principal means of livelihood from—		
V. Production (other than cultivation) ..	1,097	5·47
VI. Commerce ..	1,445	7·21
VII. Transport ..	409	2·04
VIII. Other services and miscellaneous sources ..	16,215	80·92

Registration of Displaced Persons

5. In Orissa there was no legislation for compulsory registration of displaced persons, but a system of registration of sponsored and unsponsored displaced persons was introduced by an order of the Government. According to a departmental report, it appears that 99 per cent of the displaced persons who were registered claimed or expected assistance from Government for their rehabilitation.

Initial Relief

6. Soon after their arrival, the displaced persons were taken to the transit camps. There were altogether 6 such camps, namely—

Name of camp	Capacity
Amarda	10,000
Maitapur	2,000
Charbatia	2,000
Barang	500
Nalibar	500
Chandpur	2,000

There was a rehabilitation officer for each camp whose duty was to remain in close touch with the refugees, attend to their personal difficulties and select particular persons for different rehabilitation centres. Each camp was also in charge of a Commandant and a number of officers subordinate to him to look after the inmates of the camp. The displaced persons were given free meals for about two days and medical aid wherever necessary and thereafter they were put on doles. Clothing, bedding and utensils were also supplied according to bare necessity.

Rehabilitation Schemes

7. The displaced persons were removed from the transit camps to the rehabilitation centres as soon as this could be done. After taking a very careful occupational census, the Government of Orissa drew up the following schemes for the rehabilitation of the displaced persons, viz.—

(*i*) Land colonisation scheme (for agriculturists).

(*ii*) Scheme for the rehabilitation of weavers.

(*iii*) Scheme for the rehabilitation of fishermen.

(*iv*) Scheme for the rehabilitation of betel-leaf growers.

(*v*) Scheme for the rehabilitation of petty traders, shopkeepers, etc., in urban and semi-urban areas.

In the rehabilitation centres the displaced persons were provided with semi-permanent houses and other requirements, such as, bullocks, agricultural implements, seeds and land for the agriculturists; loom, yarn, dyes, etc., for the weavers; fishing nets for the fishermen and so on. Those who were rehabilitated as petty traders or businessmen were granted loans varying from Rs. 500 to Rs. 3,000. In all cases maintenance loan was given to the needy families for a certain period during which they were expected to become self-sufficient and earn their living.

SECTION VI

Anglo-Indians

1. Anglo-Indian population in Orissa has always been small. There were altogether 485 Anglo-Indians in Orissa at the census of 1951.

Population

2. The following statement shows the distribution of Anglo-Indians among the districts of Orissa in the censuses of 1951 and 1941.

State, natural division or district		1951	1941
ORISSA	..	485	949
Inland Division	..	111	279
Coastal Division	..	374	670
Cuttack	..	138	352
Balasore	..	32	20
Puri	..	191	285
Sambalpur	..	68	112
Ganjam	..	13	13
Koraput	..	2	11
Dhenkanal	..	11	..
Keonjhar	..	..	21
Phulbani	..	9	..
Bolangir	..	4	21
Sundargarh	..	14	106
Kalahandi	..	..	1
Mayurbhanj	..	3	7

Distribution

3. More than three-fourths of the population of Anglo-Indians in Orissa are to be found in the coastal division. The concentration is highest in the districts of Cuttack and Puri which contain about two-thirds of the total number of Anglo-Indians in the State. The concentration in Puri is due to the location of the Railway colony at Khurda Road. In Cuttack, however, the comparative large number is due to the general importance of Cuttack city. There are some educational institutions established by various Christian organisations to which Anglo-Indians are attached. In Sambalpur, the Anglo-Indians are seen to some extent on account of the location of the Railway colony at Jharsuguda. The distribution of population in other districts is small and calls for no remark.

Decrease since 1941

4. During the decade 1941-51, there was a decline in the number of Anglo-Indians as may be seen from the statement above. There has been a loss of 464 persons in the past ten years. Enquiry reveals that in 1941 there was some amount of inflation in the number of Anglo-Indians, as some Indian Christians claimed to be Anglo-Indians with the hope of better prospect of employment in the Railways. So the real population of Anglo-Indians in 1941 was not as high as recorded in the census. On the other hand, in 1951 the enumerators appear to have been subjected to some amount of confusion, recording dark-complexioned Anglo-Indians as Indian Christians. Some of the District Magistrates have explained the decrease in number on the grounrd of migration to Jamshedpur, Kharagpua, Calcutta and other places outside Orissa. But this must have happened, if at all, to a small extent only. The principal reason, as stated above, may be the confusion in recording Anglo-Indians and Indian Christians.

Subsidary Tabl

7·1—Progress

Sample

State and district	Number of literate persons among 1,000 males who were						
	Aged 5—9 on 1-3-1951	Aged 5—9 on 1-4-1941	Aged 5—14 on 1-3-1951	Aged 5—14 on 1-4-1941	Aged 5 and over on 1-3-1951	Aged 5 and over on 1-4-1941	Aged 15 and over on 1-3-1951
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ORISSA	**76**	**56**	**137**	**94**	**206**	**166**	**234**
3.33 Orissa Inland Division ..	**58**	**40**	**107**	**71**	**161**	**123**	**185**
5.11 Orissa Coastal Division ..	**104**	**70**	**178**	**115**	**260**	**210**	**289**
Cuttack	90	78	168	126	223	227	243
Balasore	91	76	150	130	217	229	235
Puri	152	82	255	127	365	237	405
Sambalpur	110	43	182	75	255	147	281
Ganjam	84	51	133	89	243	158	293
Agency	*95*		*140*		*241*		*283*
Plains	*82*		*132*		*244*		*294*
Koraput	35	11	50	23	95	54	118
Dhenkanal	130	93	216	152	317	257	363
Keonjhar	68	57	129	101	192	158	221
Phulbani	49	29	99	52	146	116	165
Bolangir	34		66		135		164
Sundargarh	69		137		142		143
Kalahandi	19	8	36	16	67	58	83
Mayurbhanj	14		77		86	68	90

Note—Figures for 1951 have been calculated from table C—IV and

7·2—Literacy standard of livelihood classes. Number per 1,000 males and 1,000

Agricultural classes

Educational Standard	I Cultivators of land wholly or mainly owned and their dependants		II Cultivators of land wholly or mainly unowned and their dependants		III Cultivating labourers and their dependants		IV Non-cultivating owners of land; agricultural rent receivers and their dependants	
	Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA	**279**	**35**	**213**	**37**	**109**	**9**	**444**	**156**
Literates ..	252	34	198	37	105	9	372	150
Middle school ..	22	1	13	1	3	..	46	5
Matriculate or S.L.C. Higher Secondary.	3	..	1	..	..	..	15	1
Intermediate in Arts or Science.	1	..	..	..	..	..	4	..
Degrees or Diplomas	*1*	..	*1*	..	..	..	*8*	..
Graduate in Arts or Science.	..	..	..	..	..	..		..
Post-Graduate in Arts or Science.	..	..	..	..	..	..	1	..
Teaching ..	..	..	..	..	..	..	3	..
Engineering ..	..	..	..	..	..	..	..	..
Agriculture ..	..	..	..	..	..	..	..	..
Veterinary ..	..	..	..	..	..	..	..	..
Commerce ..	..	..	..	..	..	..	..	..
Legal ..	..	..	..	..	..	..	..	..
Medical ..	..	..	..	..	..	..	1	..
Others ..	1	..	1	..	..	..	2	..

7 Series

of literacy

population

Number of literate persons among 1,000 females who were							
Aged 5—9 on 1-3-1951	Aged 5—9 on 1-4-1941	Aged 5—14 on 1-3-1951	Aged 5—14 on 1-4-1941	Aged 5 and over on 1-3-1951	Aged 5 and over on 1-4-1941	Aged 15 and over on 1-3-1951	State and district
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(1)
26	**19**	**45**	**27**	**46**	**22**	**46**	**ORISSA**
16	**14**	**24**	**19**	**24**	**14**	**23**	**3.33 Orissa Inland Division**
41	**24**	**72**	**34**	**71**	**29**	**71**	**5.11 Orissa Coastal Division**
42	24	77	36	71	30	69	Cuttack
28	29	58	38	91	30	101	Balasore
44	27	91	38	81	36	77	Puri
31	18	45	22	38	18	36	Sambalpur
45	19	55	27	48	22	46	Ganjam
23		*46*		*50*		*52*	*Agency*
46		*56*		*48*		*45*	*Plains*
10	3	16	5	25	8	29	Koraput
29	28	39	37	32	29	29	Dhenkanal
14	22	25	29	28	20	30	Keonjhar
12	8	16	13	14	10	14	Phulbani
7		9		10		10	Bolangir
35		43		38		36	Sundargarh
5	2	7	4	8	5	8	Kalahandi
9		15		11	6	10	Mayurbhanj

Those for 1941 are based on 'Y' Sample Tables of Orissa.

females of each livelihood class, by literacy and educational standard

Non-agricultural classes								
Persons (including their dependants) who derive their principal means of livelihood from								
V Production other than cultivation		VI Commerce		VII Transport		VIII Other services and miscellaneous sources		Educational Standard
Males	Females	Males	Females	Males	Females	Males	Females	
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(1)
265	**44**	**400**	**87**	**373**	**146**	**408**	**112**	**ORISSA**
233	41	347	78	275	125	332	104	Literates
25	2	35	8	65	17	40	6	Middle school
4	..	13	1	22	2	18	1	Matriculate or S.L.C.
1	..	2	..	4	1	5	..	Higher Secondary. Intermediate in Arts or Science.
2	..	*3*	..	*7*	*1*	*12*	*1*	*Degrees or Diplomas*
..	..	1	..	2	..	3	..	Graduate in Arts or Science.
..	..	..	..	..	..	1	..	Post-Graduate in Arts or Science.
	..	1	..	2	..	3	..	Teaching
..	..	..	..	..	..	1	..	Engineering
..	..	..	..	1	..	..	..	Agriculture
..	..	..	..	..	..	..	..	Veterinary
..	..	..	..	..	..	..	..	Commerce
..	..	..	..	..	..	1	..	Legal
..		..	..	..	..	1	..	Medical
1		1	..	2	..	1	..	Others

7·2—Literacy standard of livelihood classes. Number per 1,000 males and

Educational Standard	Agricultural classes							
	I Cultivators of land wholly or mainly owned and their dependants		II Cultivators of land wholly or mainly unowned and their dependants		III Cultivating labourers and their dependants		IV Non-cultivating owners of land ; agricultural rent receivers and their dependants	
	Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	8)	(9)
3.33 Orissa Inland Division	**181**	**18**	**111**	**11**	**57**	**4**	**402**	**76**
Literates ..	159	17	101	10	54	4	321	69
Middle school ..	19	1	8	..	2	..	63	6
Matriculate or S. L. C. Higher Secondary.	2	..	..	..	..	..	12	1
Intermediate in Arts or Science.	..	..	..	..	..	..	3	..
Degrees or Diplomas	*1*	..	*1*	..	..	..	*4*	..
Graduate in Arts or Science.	..	..	..	..	..	..	1	..
Post-Graduate in Arts or Science.	..	..	..	..	..	..	..	..
Teaching ..	..	..	..	..	..	..	1	..
Engineering ..	..	..	..	..	..	..	..	..
Agriculture ..	..	..	..	..	..	..	..	..
Veterinary ..	..	..	..	..	..	..	..	..
Commerce ..	..	..	..	..	..	..	..	..
Legal ..	..	..	..	..	..	..	..	..
Medical ..	..	..	..	..	..	..	..	..
Others ..	..	..	1	..	..	..	..	..
5.11 Orissa Coastal Division	**422**	**59**	**274**	**54**	**185**	**16**	**459**	**137**
Literates ..	388	58	256	53	179	15	390	131
Middle school ..	27	1	17	1	4	..	40	5
Matriculate or S. L. C. Higher Secondary.	4	..	1	..	1	..	16	1
Intermediate in Arts or Science.	1	..	..	..	..	..	4	..
Degrees or Deplomas	*3*	..	*1*	..	..	..	*9*	..
Graduate in Arts or Science.	..	..	..	..	..	..	1	..
Post-Graduate in Arts or Science.	..	..	..	..	..	..	1	..
Teaching ..	1	..	..	..	..	..	3	..
Engineering ..	..	..	..	..	..	..	..	..
Agriculture ..	..	..	..	..	..	..	..	..
Veterinary ..	..	..	..	..	..	..	..	..
Commerce ..	..	..	..	..	..	..	..	..
Legal ..	..	..	..	..	..	..	..	..
Medical ..	..		..	..	..	..	1	..
Others ..			..	..	..	..	2	..

1,000 females of each livelihood class, by literacy and educational standard—(*contd.*)

Non-agricultural Classes								
Persons (including their dependants) who derive their principal means of livelihood from								Educational Standard
V Production other than cultivation		VI Commerce		VII Transport		VIII Other services and miscellaneous sources		
Males	Females	Males	Females	Males	Females	Males	Females	
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(1)
242	**26**	**369**	**66**	**451**	**189**	**419**	**86**	**3.33 Orissa Inland Division**
212	21	294	54	318	152	345	76	Literates
23	4	49	12	99	36	41	8	Middle school
6	..	21	..	28	1	19	1	Matriculate or S. L. C. Higher Secondary.
1	..	3	..	3	..	4	..	Intermediate in Arts or Science.
2	..	*2*	..	*3*	..	*9*	*1*	*Degrees or Diplomas*
1	..	1	..	1	..	3	..	Graduate in Arts or Science.
..	..	..	..	..	..	1	..	Post-Graduate in Arts or Science.
..	..	1	..	1	..	3	..	Teaching
..	..	..	..	..	..	1	..	Engineering
..	..	..	..	..	..	..	..	Agriculture
..	..	..	..	..	..	..	..	Veterinary
..	..	..	..	..	..	..	..	Commerce
..	..	..	..	..	..	..	..	Legal
..	..	..	..	..	..	1	..	Medical
..	..	..	..	1	..	1	..	Others
290	**62**	**417**	**99**	**334**	**126**	**398**	**133**	**5.11 Orissa Coastal Division**
257	61	376	91	254	113	321	126	Literates
28	1	27	6	48	9	40	4	Middle school
3	..	9	1	18	3	18	2	Matriculate or S. L. C. Higher Secondary.
1	..	..	..	5	1	5	..	Intermediate in Arts or Science.
2	..	*3*	..	*8*	*1*	*14*	*1*	*Degrees or Diplomas*
..	..	..	..	2	..	3	..	Graduate in Arts or Science.
..	..	..	..	..	..	1	..	Post-Graduate in Arts or Science.
..	..	1	..	2	..	3	..	Teaching
..	..	..	..	..	..	1	..	Engineering
..	..	..	..	1	..	1	..	Agriculture
..	..	..	..	..	..	1	..	Veterinary
..	..	..	..	..	..	..	..	Commerce
..	..	..	..	..	..	1	..	Legal
..	..	..	..	..	..	2	..	Medical
1	..	1	..	2	..	1	..	Others

7·3—Educational services

State, natural division and district	Managers, clerks and servants of educational and research institutions including libraries and museums		Professors, lecturers and teachers other than those employed in universities, colleges and research institutions		Professors, lecturers, teachers and research workers employed in universities, colleges and research institutions	
	Males	Females	Males	Females	Males	Females
(1)	(2)	3)	(4)	(5)	(6)	(7)
ORISSA ..	**840**	**88**	**11,198**	**1,713**	**516**	**23**
3.33 Orissa Inland Division ..	**519**	**49**	**4,428**	**263**	**81**	..
5.11 Orissa Coastal Division ..	**321**	**39**	**6,770**	**1,450**	**435**	**23**
Cuttack ..	172	37	1,862	982	320	20
Balasore ..	61	2	1,128	73	62	..
Puri ..	83	..	2,179	230	23	..
Sambalpur ..	27	..	1,029	76	45	..
Ganjam ..	5	..	1,750	169	30	3
Agency ..	..	..	*149*	*4*	..	..
Plains ..	*5*	..	*1,601*	*165*	*30*	*3*
Koraput ..	..	..	700	29	..	..
Dhenkanal ..	24	..	905	23	..	..
Keonjhar ..	71	3	180	9	..	..
Phulbani ..	..	..	203	34	..	..
Bolangir ..	172	20	399	20	18	..
Sundargarh ..	9	..	240	25	..	..
Kalahandi ..	139	8	98	16	1	..
Mayurbhanj ..	77	18	525	27	17	..

7·4—Distribution by mother tongue and

(Mother tongue spoken by less than one per mille of the total

Mother-tongue	Number per 10,000 of population speaking mother-tongue in Col. (1)	Number per 10,000 persons in					
		Mother-tongue only	Oriya as subsidiary language	Hindi as subsidiary language	Telugu as subsidiary language	Bengali as subsidiary language	Kui as subsidiary language
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Oriya ..	**8,238**	9,783	..	50	96	15	26
Telugu ..	**234**	6,480	3,299	193	..	28	..
Santali ..	**228**	9,560	352	..	..	..	1
Kondh ..	**191**	4,801	4,718	..	331	..	57
Kui ..	**141**	8,309	1,588	17	..	..	..
Savara ..	**131**	8,097	1,637	..	23	..	..
Ho ..	**124**	6,824	3,006	24	1	..	1
Paraja ..	**100**	9,111	851	..	29	..	1
Urdu ..	**109**	7,360	2,113	392	10	124	..
Hindi ..	**85**	7,014	2,643	..	29	214	2
Bhumij ..	**68**	8,545	1,140	5	..	..	2
Bengali ..	**59**	6,769	2,755	344	5	..	..
Kisan ..	**45**	6,285	3,487	129	..	..	..
Kol ..	**34**	6,101	3,413	2	..	..	73
Munda ..	**31**	6,309	3,376	220	..	..	..
Koya ..	**25**	9,763	88	149	..	..	..
Gadaba ..	**23**	8,123	1,811	..	66	..	..
Oraon ..	**22**	6,778	2,766	225	..	..	..
Mundari ..	**19**	6,402	3,587	..	..	..	..
Kharia ..	**15**	6,640	3,078	161	..	7	..
Gond ..	**15**	8,132	1,794	..		..	..

and research

Total		Number per lakh of population: Professors, lecturers and teachers other than those employed in universities, colleges and research institutions		Professors, lecturers, teachers and research workers employed in universities, colleges and research institutions		State, natural division and district
Males	Females	Males	Females	Males	Females	
(8)	(9)	(10)	(11)	(12)	(13)	(1)
12,554	**1,824**	**76**	**12**	**3**	..	**ORISSA**
5,028	**312**	**56**	**3**	**1**	..	**3.33 Orissa Inland Division**
7,526	**1,512**	**101**	**22**	**6**	..	**5.11 Orissa Coastal Division**
2,354	1,039	74	39	12	..	Cuttack
1,251	75	102	7	6	..	Balasore
2,285	230	139	15	1	..	Puri
1,101	76	79	6	3	..	Sambalpur
1,785	172	108	10	2	..	Ganjam
149	*4*	*94*	*3*	..	..	*Agency*
1,636	*168*	*109*	*11*	*2*	..	*Plains*
700	29	55	2	..	..	Koraput
929	23	108	3	..	..	Dhenkanal
251	12	31	2	..	..	Keonjhar
203	34	44	7	..	..	Phulbani
589	40	43	2	2	..	Bolangir
249	25	43	5	..	..	Sundargarh
238	24	11	2	..	..	Kalahandi
619	45	51	3	2	..	Mayurbhanj

subsidiary languages of the population of Orissa

population have not been shown in this Table)

column 2 speaking

Bhumij as subsidiary language	Ho as subsidiary language	Santali as subsidiary language	Kol as subsidiary language	Urdu as subsidiary language	Others	Particulars of the languages in column 14	Mother tongue
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(1)
2	3	1	1	1	22	Kondh Kisan, Laria, Mundari Paraja and Oraon.	Oriya
..	..	..	..	..	..	..	Telugu
55	29	..	..	..	3	Kondh and Mundari	Santali
..	..	60	..	..	33	Savara	Kondh
..	..	21	11	..	54	Savara and Koda	Ku
..	..	80	144	..	19	Kondh	Savara
28	..	91	..	..	25	Kisan, Mundari and Laria	Ho
..	..	..	..	..	8	Kondh	Paraja
..	..	..	..	..	..	..	Urdu
..	..	..	..	86	12	Laria	Hindi
..	82	220	..	..	6	Kisan and Mundari	Bhumij
..	..	..	..	127	..	..	Bengali
..	..	..	..	..	99	Mundari, Laria and Oraon	Kisan
..	3	151	..	..	257	Kondh, Savara and Kisan	Kol
8	51	..	..	..	36	Kisan	Munda
..	..	..	..	..	..	..	Koya
..	..	..	..	..	..	..	Gadaba
47	39	..	4	..	141	Kisan, Mundari and Laria	Oraon
..	1	10	..	..	..	..	Mundari
..	..	..	..	..	114	Laria and Mundari	Kharia
..	..	51	..	..	22	Kondh	Gond

7·5—Population according

Natural division and district	Total				Hindus			
	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA ..	**14,645,946**	**13,767,988**	**12,491,056**	**11,158,586**	**14,318,411**	**13,443,470**	**12,225,206**	**10,946,721**
3.33 Orissa Inland Dn.	**7,972,895**	**7,362,365**	**6,519,043**	**5,626,840**	**7,814,177**	**7,195,045**	**6,390,151**	**5,543,667**
5.11 Orissa Coastal Dn.	**6,673,051**	**6,405,623**	**5,972,013**	**5,531,746**	**6,504,234**	**6,253,425**	**5,835,055**	**5,403,054**
Cuttack ..	2,529,244	2,448,772	2,339,243	2,198,195	2,446,324	2,369,730	2,266,976	2,128,394
Balasore ..	1,106,012	1,108,775	1,059,194	1,045,726	1,166,586	1,070,974	1,025,928	1,014,540
Puri ..	1,572,262	1,455,888	1,346,602	1,214,573	1,540,433	1,426,583	1,321,304	1,192,036
Sambalpur ..	1,301,804	1,202,584	1,067,702	955,412	1,286,119	1,189,601	1,058,358	948,310
Ganjam ..	1,624,829	1,560,669	1,391,069	1,228,465	1,608,698	1,537,755	1,380,412	1,223,288
Agency ..	*159,296*	*168,481*	*164,095*	*155,213*	*157,897*	*151,617*	*159,565*	*155,213*
Plains ..	*1,465,533*	*1,392,188*	*1,226,974*	*1,073,252*	*1,450,891*	*1,386,138*	*1,220,847*	*1,068,075*
Koraput ..	1,269,534	1,127,862	949,652	805,583	1,242,448	1,099,171	925,708	790,065
Dhenkanal ..	839,241	741,900	635,628	515,176	936,914	739,736	633,797	512,622
Keonjhar ..	588,441	529,786	460,609	379,496	586,336	527,919	459,157	378,382
Phulbani ..	456,895	450,059	411,669	376,355	445,511	449,456	409,857	375,891
Bolangir ..	917,875	871,804	804,844	721,207	910,332	861,582	795,601	712,375
Sundargarh ..	552,203	490,708	436,860	377,449	474,776	405,278	368,487	336,598
Kalahandi ..	858,781	794,440	698,381	586,635	855,132	791,925	696,238	585,039
Mayurbhanj ..	1,028,825	984,741	889,603	754,314	1,018,802	978,760	883,383	749,172

Natural division and district	Sikhs				Jains				Jews
	1951	1941	1931	1921	1951	1941	1931	1921	1951
(1)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
ORISSA ..	**4,163**	**476**	**16**	..	**1,248**	**765**	..	..	**72**
3.33 Orissa Inland Dn.	**2,923**	**362**	**16**	..	**1,171**	**717**	..	..	**61**
5.11 Orissa Coastal Dn.	**1,240**	**114**	..	..	**77**	**48**	..	..	**11**
Cuttack ..	1,027	59	..	..	58	36	..	..	3
Balasore ..	47	12	..	..	6	..	..	..	2
Puri ..	138	41	..	..	13	12	..	..	6
Sambalpur ..	1,248	89	..	..	211	30	..	..	..
Ganjam ..	30	2	..	..	..	..	..	..	..
Agency ..	*2*	..	..	..	..	..	..	..	..
Plains ..	*28*	*2*	..	..	..	..	..	..	..
Koraput ..	64	28	16	..	56	22	..	..	61
Dhenkanal ..	79	42	..	..	..	..	..	..	..
Keonjhar ..	76	10	..	..	..	..	..	..	..
Phulbani ..	11	..	..	..	2	..	..	..	..
Bolangir ..	89	68	..	..	539	550	..	..	..
Sundargarh ..	271	15	..	..	..	..	..	..	..
Kalahandi ..	348	85	..	..	336	106	..	..	..
Mayurbhanj ..	735	25	..	..	33	..	..	..	

to Religion

Muslims				Christians				Natural division and district
1951	1941	1931	1921	1951	1941	1931	1921	
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(1)
176,338	**165,661**	**148,666**	**138,360**	**141,934**	**147,979**	**114,323**	**69,882**	**ORISSA**
27,706	**24,976**	**21,915**	**18,547**	**123,955**	**139,378**	**105,994**	**62,826**	**3.33 Orissa Inland Dn.**
148,632	**140,685**	**126,751**	**119,813**	**17,979**	**8,601**	**8,329**	**7,056**	**5.11 Orissa Coastal Dn.**
77,264	73,411	67,247	65,351	3,716	3,275	3,200	2,858	Cuttack
37,834	35,978	31,786	29,848	1,534	1,753	1,467	1,281	Balasore
29,869	27,547	23,709	21,045	1,782	1,364	1,568	1,309	Puri
5,011	4,522	4,121	3,825	9,094	8,177	5,027	3,215	Sambalpur
4,002	3,813	4,017	3,569	12,097	19,009	6,616	1,608	Ganjam
337	*64*	*8*	..	*1,150*	*16,800*	*4,522*	..	*Agency*
3,665	*3,749*	*4,009*	*3,569*	*10,947*	*2,209*	*2,094*	*1,608*	*Plains*
3,047	2,545	2,016	1,771	23,834	26,039	21,912	13,747	Koraput
1,818	1,796	1,425	1,319	393	296	378	114	Dhenkanal
1,783	1,639	1,315	1,011	245	195	130	46	Keonjhar
324	302	334	269	11,039	281	1,478	194	Phulbani
1,967	1,872	1,562	1,237	4,896	7,706	7,117	7,145	Bolangir
5,213	4,624	4,164	3,259	71,943	79,260	64,187	37,554	Sundargarh
1,849	1,753	1,660	1,438	1,058	563	358	112	Kalahandi
6,350	5,859	5,310	4,418	303	61	885	699	Mayurbhanj

Budhists				Zoroastrians				Others				Natural division and district
1951	1941	1931	1921	1951	1941	1931	1921	1951	1941	1931	1951	
(27)	28)	(29)	(30)	(31)	(32)	(33)	4)	(35)	(36)	(37)	(38)	(1)
969	..	**24**	..	**181**	..	..	..	**2,630**	**4,637**	**2,821**	**3,623**	**ORISSA**
249	..	..	..	**27**	..	..	..	**2,626**	**1,887**	**967**	**1,800**	**3.33 Orissa Inland Dn.**
720	..	**24**	..	**154**	..	..	..	**4**	**2,750**	**1,854**	**1,823**	**5.11 Orissa Coastal Dn.**
700	..	..	..	152	..	..	..	..	2,261	1,820	1,592	Cuttack
	..	..	..	..	..	..	..	..	2,261	1,820	1,592	Balasore
17	..	..	..	..	..	..	..	4	341	21	183	Puri
83	..	..	..	..	..	..	..	38	156	196	62	Sambalpur
..	..	24	..	2	..	..	..	..	90	..	..	Ganjam
..	..	..	..	..	..	..	..	..	..	..	..	*Agency*
..	..	*24*	..	*2*	..	..	..	..	*90*	..	..	*Plains*
20	..	..	..	..	..	..	..		57	..	..	Koraput
32	..	..	..	..	..	..	..	5	0	28	1,121	Dhenkanal
..	..	..	..	1	..	..	..	..	23	7	57	Keonjhar
5	..	..	..	..	..	..	..	3	20	..	1	Phulbani
51	..	..	..	7	..	..	..	..	26	564	450	Bolangir
..	..	..	..	..	..	..	..	..	1,531	22	38	Sundargarh
54	..	..	..	4	..	..	..	..	8	125	46	Kalahandi
4	..	..	..	15	..	..	..	2,576	36	25	25	Mayurbhanj

7·6—Distribution of 10,000 persons

Name of district	Hindus				Muslims	
	1951	1941	1931	1921	1951	1941
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cuttack ..	9,672	9,677	9,691	9,682	305	300
Balasore ..	9,644	9,659	9,686	9,702	342	324
Puri ..	9,798	9,799	9,812	9,814	190	189
Sambalpur ..	9,880	9,892	9,912	9,926	38	38
Ganjam ..	9,901	9,853	9,923	9,958	25	24
Agency ..	*9,907*	*8,999*	*9,724*	*10,000*	*21*	*4*
Plains ..	*9,900*	*9,957*	*9,950*	*9,952*	*25*	*27*
Koraput ..	9,787	9,746	9,748	9,807	24	23
Dhenkanal ..	9,972	9,971	9,971	9,950	22	24
Keonjhar ..	9,964	9,965	9,968	9,971	30	31
Phulbani ..	9,751	9,987	9,956	9,988	7	7
Bolangir ..	9,918	9,883	9,883	9,878	21	21
Sundargarh ..	8,598	8,259	8,435	8,918	94	94
Kalahandi ..	9,958	9,968	9,969	9,973	22	22
Mayurbhanj ..	9,903	9,939	9,930	9,932	6	59

according to principal religions

Christians						Name of district
1931	1921	1951	1941	1931	1921	
(8)	(9)	(10)	(11)	(12)	(13)	
287	297	15	13	14	13	Cuttack
300	285	14	16	14	12	Balasore
176	173	11	9	12	11	Puri
39	40	70	68	47	34	Sambalpur
29	29	74	122	48	13	Ganjam
..	..	*72*	*997*	276		*Agency*
33	*33*	*75*	*16*	*1*	*15*	*Plains*
21	22	188	231	231	171	Koraput
22	26	5	4	6	2	Dhenkanal
29	27	4	4	3	1	Keonjhar
8	7	242	6	36	5	Phulbani
19	17	53	88	88	99	Bolangir
95	86	1,303	1,615	1,469	995	Sundargarh
24	25	12	7	5	2	Kalahandi
60	59	3	1	10	9	Mayurbhanj

7·7—Scheduled Tribes, Scheduled Castes, Other Backward Classes and

State and district	Total			Agricultural Classes						
				Total			Livelihood class I	Livelihood class II	Livelihood class III	Livelihood class IV
	Persons	Males	Females	Persons	Males	Females				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ORISSA	**14,645,946**	**7,242,892**	**7,403,054**	**11,612,368**	**5,745,105**	**5,867,263**	**8,718,822**	**869,751**	**1,803,968**	**219,827**
cheduled Tribes ..	**2,967,334**	**1,478,062**	**1,489,272**	**2,615,289**	**1,311,601**	**1,303,688**	**1,972,977**	**166,003**	**463,185**	**131,124**
Scheduled Castes ..	**2,630,763**	**1,314,925**	**1,315,838**	**1,925,763**	**971,384**	**954,379**	**1,183,669**	**208,636**	**513,226**	**20,232**
Other Backward Classes	**4,173,155**	**2,080,857**	**2,092,298**	**3,356,607**	**1,665,569**	**1,691,038**	**2,625,635**	**203,482**	**474,559**	**52,931**
Non-Backward Classes ..	**4,874,694**	**2,369,048**	**2,505,646**	**3,714,709**	**1,796,551**	**1,918,158**	**2,936,541**	**291,630**	**352,998**	**133,540**
Cuttack	**2,529,244**	**1,249,178**	**1,280,066**	1,893,529	936,309	957,220	1,376,464	167,612	268,793	80,660
Scheduled Tribes ..	**80,194**	**41,642**	**38,552**	61,371	32,027	29,344	36,518	5,714	17,695	1,444
Scheduled Castes ..	**494,460**	**253,696**	**240,764**	381,595	199,297	182,298	203,000	52,088	120,043	6,464
Other Backward Classes	**621,404**	**314,235**	**307,169**	514,196	258,427	255,769	369,777	40,915	82,965	20,539
Non-Backward Classes ..	**1,333,186**	**639,605**	**693,581**	936,367	446,558	489,809	767,174	68,895	48,090	52,213
Balasore	**1,106,012**	**556,066**	**549,946**	942,743	475,816	466,927	742,239	95,042	93,199	18,263
Scheduled Tribes ..	**62,975**	**33,071**	**29,904**	55,255	29,293	25,962	29,765	11,425	13,517	548
Scheduled Castes ..	**217,339**	**109,410**	**107,929**	185,885	93,006	92,879	119,516	28,053	36,396	1,920
Other Backward Classes	**309,442**	**158,879**	**150,563**	280,183	144,016	136,167	234,650	22,136	18,756	4,641
Non-Backward Classes ..	**516,256**	**254,706**	**261,550**	421,420	209,501	211,919	358,308	27,428	24,530	11,154
Puri	**1,572,262**	**774,830**	**797,432**	1,236,731	606,981	629,750	827,019	172,070	210,986	26,656
Scheduled Tribes ..	**62,714**	**30,691**	**32,023**	50,321	25,232	25,089	26,032	3,358	20,430	501
Scheduled Castes ..	**55,276**	**121,514**	**133,762**	186,203	87,975	98,228	78,696	39,830	65,093	2,589
Other Backward Classes	**487,785**	**244,701**	**243,084**	306,872	153,072	153,088	220,813	34,719	44,014	7,326
Non-Backward Classes ..	**766,487**	**377,924**	**388,563**	693,335	340,702	352,633	501,481	94,165	81,449	16,240
Sambalpur ..	**1,301,804**	**647,858**	**653,946**	1,031,128	510,978	520,150	779,240	56,235	185,627	10,0260
Scheduled Tribes ..	**351,788**	**174,397**	**177,391**	300,307	149,455	150,852	203,001	22,456	73,111	1,739
Scheduled Castes ..	**222,976**	**109,393**	**113,583**	149,724	75,147	74,577	86,701	13,354	48,937	732
Other Backward Classes	**495,782**	**246,282**	**249,500**	420,738	207,363	213,375	354,487	14,623	48,024	3,404
Non-Backward Classes	**231,258**	**117,786**	**113,472**	160,359	79,013	81,346	135,051	5,802	15,355	4,151
Ganjam	**1,624,829**	**769,060**	**855,769**	1,073,930	509,333	564,597	730,163	117,773	188,592	37,402
Scheduled Tribes ..	**112,006**	**52,890**	**59,116**	83,869	38,683	45,186	63,635	7,352	11,915	967
Scheduled Castes ..	**302,736**	**146,872**	**155,864**	176,955	86,494	90,461	101,777	21,103	51,870	2,205
Other Backward Classes	**331,131**	**159,040**	**172,091**	223,461	109,724	113,737	150,382	27,288	40,038	5,753
Non-Backward Classes ..	**878,956**	**410,258**	**468,698**	589,645	274,432	315,213	414,369	62,030	84,769	28,477
Koraput	**1,269,534**	**637,903**	**631,631**	981,496	494,333	487,163	754,358	86,909	131,783	8,446
Scheduled Tribes ..	**522,841**	**261,176**	**261,665**	431,939	222,536	209,403	320,224	46,848	62,666	2,201
Scheduled Castes ..	**209,955**	**112,514**	**97,441**	139,412	74,802	64,610	102,412	13,701	22,233	1,066
Other Backward Classes	**307,420**	**151,801**	**155,619**	236,337	113,193	123,144	192,248	15,241	27,749	1,101
Non-Backward Classes ..	**229,318**	**112,412**	**116,906**	173,808	83,802	90,006	139,476	11,119	19,135	4,078

Non-Backward Classes by livelihood classification

Non-agricultural Classes							
Total			Livelihood class V	Livelihood class VI	Livelihood class VII	Livelihood class VIII	State and district
Persons	Males	Females					
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(1)
3,033,578	**1,497,787**	**1,535,791**	**926,788**	**425,852**	**77,538**	**1,603,400**	**ORISSA**
352,045	**166,461**	**185,584**	**95,483**	**24,009**	**4,591**	**227,962**	**Scheduled Tribes**
705,000	**343,541**	**361,459**	**241,200**	**75,385**	**9,545**	**378,870**	**Scheduled Castes**
816,548	**415,288**	**401,260**	**317,382**	**137,766**	**16,358**	**345,042**	**Other Backward Classes**
1,159,985	**572,497**	**587,488**	**272 723**	**188,692**	**47,044**	**651,526**	**Non-Backward Classes**
635,715	312,869	322. 46	163,915	89,692	19.168	362,940	Cuttack
18,823	9,615	9,208	7,018	2,666	407	8,732	Schedu.ed Tribes
112,685	54,399	58,466	30,669	11,686	2,741	67,769	Scheduled Castes
107,208	55,808	51,400	34,626	25,786	3,448	46,348	Other Backward Classes
396,819	193,047	203,772	94,602	49,554	12,372	240,091	Non-Backward Classes
163,269	80,250	83,019	40,381	22,080	6,560	94,248	Balasore
7,720	3,778	3,942	1,917	265	338	5,200	Scheduled Tribes
31,454	16,404	15,050	8,137	3,657	660	19,000	Scheduled Castes
29,259	14,863	14,396	8,739	6,175	796	13,549	Other Backward Classes
94,836	45,205	49,631	21,588	11,983	4,766	56,499	Non-Backward Classes
335,531	167,849	167,682	114,155	61,913	14,632	144,831	Puri
12,393	5,459	6,934	6,261	2,103	198	3,831	Scheduled Tribes
69,073	33,539	35,534	25,434	7,154	1,449	35,036	Scheduled Castes
180,913	91,629	89,284	71,356	38,488	4,063	67,00	Other Backward Classes
73,152	37,222	35,930	41,104	14,168	8,922	38,958	Non-Backward Classes
270,676	136,880	133,796	118,566	25,354	7,148	119,608	Sambalpur
51,481	24,942	26,539	21,488	2,136	961	26,89	Scheduled Tribes
73,252	34,246	39,006	35,908	2,656	1,322	33,366	Scheduled Castes
75,044	38,919	36,125	40,192	7,426	1,626	25,800	Other Backward Classes
70,899	38,773	32,126	20,978	13,136	3,239	33,546	Non-Backward Classes
550,899	259,727	291,172	138,441	109,256	12,324	290,878	Ganjam
28,137	14,207	13,930	6,257	5,224	609	16,147	Scheduled Tribes
125,781	60,378	65,403	29,128	20,004	1,279	75,370	Scheduled Castes
107,670	49,316	58,354	41,964	22,472	1,861	41,373	Other Backward Classes
289,311	135,826	153,485	61,092	61,556	8,675	157,988	Non-Backward Classes
288,038	143,570	144,468	55,768	30,957	3,068	198,245	Koraput
90,902	38,640	52,262	13,546	4,652	434	72,270	Scheduled Tribes
70,543	37,712	32,831	16,856	8,635	360	44,692	Scheduled Castes
71,083	38,608	32,475	16,270	9,635	482	44,695	Other Backward Classes
55,510	28,610	26,900	9,095	8,035	1,792	36,588	Non-Backward Classes

7·7—Scheduled Tribes, Scheduled Castes, Other Backward Classes and

State and district	Total			Agricultural Classes						
				Total			Liveli-hood class I	Liveli-hood class II	Liveli-hood class III	Liveli-hood class IV
	Persons	Males	Females	Persons	Males	Females				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Dhenkanal	**839,241**	**416,048**	**423,193**	702,200	346,502	355,698	567,522	19,261	97,765	17,652
Scheduled Tribes ..	**104,383**	**49,014**	**55,369**	88,305	42,306	45,999	53,434	3,892	29,374	1,605
Scheduled Castes ..	**144,793**	**70,537**	**74,256**	104,590	52,395	52,195	77,293	4,052	20,897	2,348
Other Backwark Classes	**244,659**	**121,486**	**123,173**	206,787	98,410	108,377	168,744	5,372	28,316	4,415
Non-Backward Classes ..	**345,406**	**175,011**	**170,395**	302,518	153,391	149,127	268,051	5,945	19,238	9,284
Keonjhar	**588,441**	**294,902**	**293,539**	528,972	263,985	264,987	451,647	13,715	58,831	4,779
Scheduled Tribes ..	**228,090**	**114,907**	**113,183**	212,244	106,161	106,083	182,090	5,145	24,368	641
Scheduled Castes ..	**90,244**	**41,296**	**48,948**	76,710	34,652	42,058	57,662	3,562	14,875	611
Other Backward Classes	**170,710**	**86,505**	**84,205**	152,659	77,183	75,476	132,515	3,199	15,575	1,370
Non-Backward Classes ..	**99,397**	**52,194**	**47,203**	87,359	45,989	41,370	79,380	1,809	4,013	2,157
Phulbani	**456,895**	**226,738**	**230,157**	360,770	179,125	181,645	290,900	15,092	53,269	1,509
Scheduled Tribes ..	**195,179**	**97,274**	**97,905**	178,062	88,742	89,320	155,366	4,427	17,889	380
Scheduled Castes ..	**86,380**	**44,423**	**41,957**	49,599	26,428	23,171	31,748	3,850	13,808	193
Other Backward Classes	**114,138**	**57,736**	**56,402**	92,637	46,002	46,635	72,902	4,987	14,185	563
Non-Backward Classes ..	**61,198**	**27,305**	**33,893**	40,472	17,953	22,519	30,884	1,828	7,387	373
Bolangir	**917,875**	**456,606**	**461,269**	759,020	378,818	380,202	562,643	29,876	163,894	2,607
Scheduled Tribes ..	**186,147**	**93,786**	**92,361**	167,944	85,126	82,818	116,044	5,496	45,799	605
Scheduled Castes ..	**183,032**	**91,657**	**91,375**	140,361	70,257	70,104	88,976	9,014	41,928	443
Other Backward Classes	**433,292**	**214,172**	**219,120**	367,751	183,581	184,170	294,859	11,989	60,076	827
Non-Backward Classes ..	**115,404**	**56,991**	**58,413**	82,964	39,854	43,110	62,764	3,377	16,091	732
Sundargarh	**552,203**	**274,401**	**277,802**	479,415	237,032	242,383	415,218	15,051	47,749	1,397
Scheduled Tribes ..	**312,639**	**154,663**	**157,976**	491,698	142,968	148,730	251,002	10,772	29,455	469
Scheduled Castes ..	**72,591**	**39,573**	**33,018**	58,712	33,424	25,288	50,634	1,420	6,498	160
Other Backward Classes	**114,907**	**55,767**	**59,140**	94,231	46,412	47,819	82,605	2,231	9,066	329
Non-Backward Classes ..	**52,066**	**24,398**	**27,668**	34,774	14,228	20,546	30,977	628	2,730	439
Kalahandi	**858,781**	**425,251**	**433,530**	724,969	360,300	364,669	508,533	47,971	165,319	3,146
Scheduled Tribes ..	**243,699**	**122,189**	**121,510**	217,801	111,924	105,877	148,567	22,898	45,756	580
Scheduled Castes ..	**176,753**	**88,773**	**87,980**	133,719	66,726	66,993	85,807	7,907	39,517	488
Other Backward Classes	**356,775**	**176,975**	**179,800**	308,066	151,860	156,208	226,740	14,137	66,070	1,119
Non-Backward Classes ..	**81,554**	**37,314**	**44,240**	65,383	29,790	35,593	47,419	3,029	13,976	959
Mayurbhanj	**1,028,825**	**514,051**	**514,774**	897,465	445,593	451,872	712,876	39,144	138,161	7,284
Scheduled Tribes ..	**504,679**	**252,362**	**252,317**	476,173	237,148	239,025	387,299	16,220	71,210	1,444
Scheduled Castes ..	**174,228**	**85,267**	**88,961**	142,298	70,781	71,517	99,450	10,704	31,131	1,013
Other Backward Classes	**185,710**	**93,278**	**92,432**	152,689	76,326	76,363	124,915	6,655	19,585	1,544
Non-Backward Classes ..	**164,208**	**83,144**	**81,064**	126,305	61,338	64,967	101,212	5,575	16,235	3,283

Non-Backward Classes by livelihood Classification—(*contd.*)

Non-agricultural Classes							
Total			Livelihood class V	Livelihood class VI	Livelihood class VII	Livelihood class VIII	State and district
Persons	Males	Females					
12)	(13)	(14)	(15)	(16)	(17)	(18)	1)
137,041	69,546	67,495	62,938	14,261	2,682	57,160	Dhenkanal
16,078	6,708	9,370	5,652	330	51	10,045	Scheduled Tribes
40,203	18,142	22,061	21,224	1,568	344	17,067	Scheduled Castes
37,872	23,076	14,796	19,205	6,734	928	11,005	Other Backward Classes
42,888	21,620	21,268	16,857	5,629	1,359	19,043	Non-Backward Classes
59,469	30,917	28,552	23,142	5,166	542	30,619	Keonjhar
15,846	8,746	7,100	4,642	1,016	178	10,010	Scheduled Tribes
13,534	6,644	6,890	7,992	1,070	115	4,357	Scheduled Castes
18,051	9,322	8,729	7,697	1,438	93	8,823	Other Backward Classes
12,038	6,205	5,833	2,811	1,642	156	7,429	Non-Backward Classes
96,125	47,613	48,512	33,730	17,167	526	44,702	Phulbani
17,117	8,532	8,585	1,948	1,280	65	13,824	Scheduled Tribes
36,781	17,995	18,786	11,125	8,743	51	16,862	Scheduled Castes
21,501	11,734	9,767	13,110	2,954	94	5,343	Other Backward Classes
20,726	9,352	11,374	7,547	4,190	316	8,673	Non-Backward Classes
158,855	77,788	81,067	62,529	15,680	5,185	75,461	Bolangir
18,203	8,660	9,543	3,013	913	187	14,090	Scheduled Tribes
42,671	21,400	21,271	17,638	1,723	422	22,888	Scheduled Castes
65,541	30,591	34,950	32,961	6,465	1,506	24,609	Other Backward Classes
32,440	17,137	15,303	8,917	6,579	3,070	13,874	Non-Backward Classes
72,788	37,369	35,419	25,305	7,759	2,326	37,398	Sundargarh
20,941	11,695	9,246	5,932	1,060	505	13,444	Scheduled Tribes
13,879	6,149	7,730	5,870	562	269	7,178	Scheduled Castes
20,676	9,355	11,321	10,296	1,712	587	8,081	Other Backward Classes
17,292	10,170	7,122	3,207	4,425	965	8,695	Non-Backward Classes
133,812	64,951	68,861	38,732	15,562	1,008	78,510	Kalahandi
25,898	10,265	15,633	6,559	888	179	18,272	Scheduled Tribes
43,034	22,047	20,987	14,974	5,748	158	22,154	Scheduled Castes
48,709	25,115	23,594	13,797	5,579	437	28,896	Other Backward Classes
16,171	7,524	8,647	3,402	3,347	234	9,188	Non-Backward Classes
131,360	68,458	62,902	49,186	11,005	2,369	68,800	Mayurbhanj
28,506	15,214	13,292	11,250	1,476	579	15,201	Scheduled Tribes
31,930	14,486	17,444	16,245	2,179	275	13,131	Scheduled Castes
33,021	16,952	16,069	10,168	2,902	437	19,514	Other Backward Classes
37,903	21,806	16,097	11,523	4,448	978	20,954	Non-Backward Classes

APPENDIX I

No. 3482-P.H.

FROM

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

To

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, Balasore, 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.

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 :—

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

SHRI D. MISRA. B.Ag. (Nag), DIP.-IN-AGRI. (Cantab.),
DIRECTOR OF AGRICULTURE AND FOOD PRODUCTION, ORISSA.

OFFICE OF THE DIRECTOR OF AGRICULTURE AND FOOD PRODUCTION, ORISSA

D. O. No. 6460/Agri.-9S-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, ESQR.

Superintendent, Census Operations, Orissa.

EXPLANATORY NOTE

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

Table No. I V (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

	Cuttack	Balasore	Puri	Sambalpur	Ganjam	Koraput	Mayurbhanj	Dhenkanal	Keonjhar	Kalahandi	Eastern States
1921	10·5 Mds. per acre.	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	..	..	..	9·5	443 lbs.
1951	6·0	6·6	5·6	5·9	4·4	7·5	6·9	7·3	..	10·5	..

Name	Average net area sown (A1) in acres				Average area sown more than once (A2) in acres			
	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ORISSA ..	12,126,542	11,805,190	12,366,909	12,974,005	1,065,259	679,473	613,433	716,378
3·33 Orissa Inland Division	8,213,202	7,958,462	8,307,755	8,372,004	194,369	129,444	120,311	193,838
5·11 Orissa Coastal Division	3,913,340	3,846,728	4,059,154	4,602,001	870,890	550,029	493,122	522,540
Cuttack ..	1,115,858	1,268,321	1,223,600	1,988,430	550,872	195,830	182,244	230,041
Balasore ..	1,019,834	970,321	993,189	1,031,189	9,199	2,332	10,100	9,500
Puri ..	1,063,534	817,003	854,398	1,101,798	167,681	218,330	179,792	119,592
Sambalpur ..	1,365,240	1,240,461	1,191,266	1,173,566	76,098	29,570	15,816	82,601
Ganjam ..	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*	*36,785*	*3,434*	..	..
Ganjam Plains ..	*714,114*	*791,083*	*987,967*	*1,080,584*	*143,138*	*133,537*	*120,986*	*163,407*
Koraput ..	1,419,370	1,416,261	1,460,501	1,511,549	2,694	2,694	10,222	17,749
Keonjhar ..	592,768	508,625	508,625	508,625	7,000	11,720	11 720	11,720
Dhenkanal ..	702,371	764,430	764,430	792,230	14,496	34,300	34,300	34,100
Bolangir ..	1,171,056	1,209,111	1,209,111	1,209,111	38,378	38,378	38,378	38,378
Sundargarh ..	751,669	734,849	734,849	734,849	11,717	..	..	..
Phulbani ..	481,425	363,821	452,110	447,111	1,136 (Baudh)	9,348	9,875	9,290
Kalahandi ..	874,712	874,712	874,712	874,712	Not available	..	..	..
Mayurbhanj ..	797,840	..	1,031,681	..	7,065	Not available		..

Name	Average net area irrigated (A3) in acres				Average area irrigated more than once (A4) in acres			
	1951	1941	1931	1921	1951	1941	1931	1921
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ORISSA ..	1,889,320	1,553,337	1,607,922	2,405,640	7,131	115,238	1,343	78,280
3·33 Orissa Inland Division	981,646	674,950	663,600	1,366,115	5,024	..	..	552
5·11 Orissa Coastal Division	907,674	878,387	944,322	1,039,525	2,107	115,238	1,343	77,728
Cuttack ..	319,244	274,627	348,805	408,000	1,640	111,603	..	74,489
Balasore ..	6,084	12,882	14,450	73,635	..	470	..	..
Puri ..	257,993	216,903	367,074	366,884	..	..	..	..
Sambalpur ..	295,330	48,490	319,223	397,977	5,024	..	..	..
Ganjam ..	324,353	373,975	213,993	191,006	467	3,165	1,343	3,239
Ganjam Agency ..	..	..	..	..	..	..	..	..
Ganjam Plains ..	*324,353*	*373,975*	*213,993*	*191,006*	*467*	*3,165*	*1,343*	*3,239*
Koraput ..	473,366	471,655	236,140	1,055	..	..	..	552
Keonjhar ..	Figures	not	available	..	Figures	not		available
Dhenkanal ..	Figures	not	available	34,100	Figures	not		available
Bolangir ..	Figures	not	available	781,482	Figures	not		available
Sundargarh ..	Figures	not	available	12,950	Figures	not		available
Phulbani ..	116,595	95,630	47,632	22,001	..	..	..	..
Kalahandi ..	52,219	59,175	..	..	..	..	..	..
Mayurbhanj ..	44,136	..	60,605	..	..	..	..	..

District Indices of

Group Code Number	Occupation	ORISSA			3·33 Orissa Inland Division			5·11 Orissa Coastal Division		
		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*	*29,704*	*23,769*	*5,935*	*13,488*	*11,473*	*2,015*	*16,216*	*12,296*	*3,920*
0·11	Herdsmen and shepherds	20,720	16,298	4,422	6,908	5,905	1,003	13,812	10,393	3,419
0·12	Breeders and keepers of cattle and buffaloes	8,983	7,470	1,513	6,579	5,567	1,012	2,404	1,903	501
0·10	Breeders and keepers of other large animals including transport animals.	1	1	..	1	1	..	..	..	..
0·2	*Rearing of small animals and insects* ..	*516*	*424*	*92*	*393*	*305*	*88*	*123*	*119*	*4*
0·21	Poultry farmers	315	251	64	204	144	60	111	107	4
0·22	Beekeepers	105	89	16	98	82	16	7	7	..
0·23	Silkworm rearers	34	34	..	29	29	..	5	5	..
0·24	Cultivators of lac	62	50	12	62	50	12	..	..	..
0·3	*Plantation Industries*	*944*	*794*	*150*	*552*	*440*	*112*	*392*	*354*	*38*
0·31	Tea plantation	193	158	35	157	122	35	36	36	..
0·30	All other plantations but not including the cultivation of special crops in conjuction with ordinary cultivation of field crops.	751	636	115	395	318	77	356	318	38
0.4	*Forestry and woodcutting*	*11,505*	*7,967*	*3,538*	*5,475*	*4,296*	*1,179*	*6,030*	*3,671*	*2,359*
0·40	Planting, replanting and conservation of forests (including forest officers, rangers, and guards).	1,393	1,385	8	1,158	1,150	8	235	235	..
0·41	Charcoal burners	204	137	67	172	112	60	32	25	7
0·42	Collectors of forest produce and lac ..	2,044	1,388	656	1,529	1,137	392	515	251	264
0·43	Woodcutters	7,864	5,057	2,807	2,616	1,897	719	5,248	3,160	2,088
0.5	*Hunting (including trapping and game propagation).*	*61*	*57*	*4*	*43*	*39*	*4*	*18*	*18*	..
0.6	*Fishing*	*24,073*	*22,629*	*1,444*	*7,063*	*6,678*	*385*	*17,010*	*15,951*	*1,059*
0·60	Fishing in sea and inland waters including the operation of fish farms and fish hatcheries.	23,843	22,400	1,443	7,054	6,669	385	16,789	15,731	1,058
0·61	Gatherers of chanks and pearls ..	1	1	..	..	..	..	1	1	..
0·62	Gatherers of sea weeds, sea shells, sponges and other water products.	229	228	1	9	9	..	220	219	1
Division 1.	**Mining and quarrying**	**11,216**	**8,803**	**2,413**	**8,726**	**6,395**	**2,331**	**2,490**	**2,408**	**82**
1·0	*Non-metallic mining and quarrying not otherwise classified—including* mining and quarrying of such materials as precious and semi-precious stones, asbestos, gypsum, sulphur, asphalt, bitumen.	*112*	*96*	*16*	*11*	*9*	*2*	*101*	*87*	*14*
1·1	*Coal mining*—Mines primarily engaged in the extraction of anthracite and of soft coals such as bituminous, sub-bituminous a d legnite.	*4,549*	*3,730*	*819*	*4,287*	*3,484*	*803*	*262*	*246*	*16*
1·2	*Iron ore mining*	*3,404*	*2,192*	*1,212*	*3,391*	*2,187*	*1,204*	*13*	*5*	*8*
1·3	*Metal mining except iron ore mining* ..	*922*	*739*	*183*	*494*	*311*	*183*	*428*	*428*	..
1·32	Lead, silver and zinc	*8*	*8*	..	..	..	..	*8*	*8*	..
1·33	Manganese	502	319	183	485	302	183	17	17	..
1·30	Other metallic minerals	412	412	..	9	9	..	403	403	..
1·5	*Stone-quarrying, clay and sand pits.* Extraction from the earth of stone, clay, sand and other materials used in building or manufacture of cement.	*1,793*	*1,615*	*178*	*526*	*389*	*137*	*1,267*	*1,226*	*41*
1·7	*Salt, saltpetre and saline substances* ..	*436*	*431*	*5*	*17*	*15*	*2*	*419*	*416*	*3*
Division 2.	**Processing and manufacture—Foodstuffs, textiles, leather and products thereof.**	**130,614**	**87,965**	**42,649**	**70,114**	**53,928**	**16,186**	**60,500**	**34,037**	**26,463**
2·0	*Food Industries otherwise unclassified* ..	*2,782*	*2,123*	*659*	*1,401*	*1,257*	*144*	*1,381*	*866*	*515*
2·01	Canning and preservation of fruits and vegetables.	2,100	1,489	611	1,064	960	104	1,036	529	507
2·03	Slaughter, preparation and preservation of meat.	444	438	6	190	190	..	254	248	6
2·00	Other food industries	238	196	42	147	107	40	91	89	2

Non-agricultural Occupations

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code Number
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(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*	*3,407*	*1,238*	*1,856*	*201*	*5,145*	*1,482*	*0·1*
3,250	975	107	73	2,708	1,235	1 788	201	4,453	1,172	0·11
410	126	102	62	699	3	67	..	692	310	0·12
..	..	..	..	..	..	1	..	..	..	0·10
52	..	*14*	..	*30*	..	*59*	*31*	*24*	*4*	*0·2*
47	..	10	..	30	..	59	31	20	4	0·21
..	..	4	..	..	..	..	..	4	..	0·22
5	..	..	..	..	..	..	..	..	..	0·23
..	..	..	..	..	..	..	..	..	..	0·24
74	*30*	*14*	..	..	*1*	*118*	*26*	*280*	*7*	*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*	*6·4*
42	..	8	..	63	..	154	..	112	..	0·40
21	4	..	..	4	3	2	11	..	..	0·41
150	263	5	..	42	1	259	129	54	7	0·42
816	235	37	23	661	457	370	392	1,732	1,408	0·43
..	..	..	..	*9*	..	*1*	..	*9*	..	*0·5*
2,765	*667*	*3,028*	*275*	*5.700*	*117*	*3,177*	*148*	*4,573*	..	*0·6*
2,762	666	3,027	275	5,484	117	3,177	148	4,573	..	0·60
..	..	1	..	..	..	..	..	..	..	0·61
3	1	..	..	216	..	..	..	..	..	0·62
1,079	**43**	**13**	**3**	**938**	**1**	**75**	**149**	**390**	**36**	**Divn. 1**
25	*13*	..	..	*52*	..	*4*	..	*11*	*1*	*1·0*
240	*16*	..	..	..	..	*69*	*147*	*6*	..	*1·1*
..	*8*	..	..	..	..	..	..	*6*	..	*1·2*
420	..	*8*	..	..	..	*2*	*2*	..	..	*1·3*
..	..	8	..	..	..	..	..	..	..	1·32
17	..	..	..	..	..	2	2	..	..	1·33
403	..	..	..	..	..	..	..	..	..	1·30
394	*6*	*4*	*3*	*624*	..	..	..	*210*	*33*	*1·5*
..	..	*1*	..	*262*	*1*	..	..	*157*	*2*	*1·7*
16,156	**11,737**	**3,809**	**4,922**	**6,202**	**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	90	..	29	..	18	..	21	..	2·03
10	..	70	2	..	..	..	..	..	..	2·00

Group Code Number	Occupation	Agency		Plains		Koraput		Dhenkanal	
		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*	*1,446*	*2,277*	*360*	*2,655*	*107*
0·11	Herdsmen and shepherds	125	36	4,328	1,136	185	30	1,286	80
0·12	Breeders and keepers of cattle and buffaloes	..	..	692	310	2,092	330	1,369	27
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	17	..	..
0·22	Beekeepers	1	..	3	..	..	..	41	6
0·23	Silkworm rearers	..	..	..	..	..	..	..	..
0·24	Cultivators of lac	..	..	..	..	..	..	6	..
0·3	*Plantation Industries*	*14*	..	*266*	*7*	*2*	..	*34*	*7*
0·31	Tea plantation	11	..	11	..	..	..	1	..
0·30	All other plantations but not including the cultivation of special crops in conjuction with ordinary cultivation of field crops.	3	..	255	7	2	..	33	7
0·4	*Forestry and woodcutting*	*86*	*42*	*1,822*	*1,373*	*485*	*103*	*730*	*53*
0·40	Planting, replanting and conservation of forests (including forest officers, rangers, and guards).	..	..	112	..	87	..	201	..
0·41	Charcoal burners	..	..	..	..	..	..	89	18
0·42	Collectors of forest produce and lac	..	7	54	..	39	47	354	34
0·43	Woodcutters	86	35	1,646	1,373	359	56	136	1
0·5	*Hunting (including trapping and game propagation).*	..	..	*9*	..	..	..	*8*	..
0·6	*Fishing*	*115*	..	*4,458*	..	*137*	..	*956*	*101*
0·60	Fishing in sea and inland waters including the operation of fish farms and fish hatcheries.	115	..	4,458	..	137	..	956	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	*Non-metallic mining and quarrying not otherwise classified—including* mining and quarrying of such meterials as precious and semi-precious stones, asbestos, gypsum, sulphur, asphalt, bitumen.	*1*	..	*10*	*1*	..	..	..	..
1·1	*Coal mining*—Mines primarily engaged in the extraction of anthracite and of soft coals such as bitumenous, sub-bitumenous legnite.	..	..	*6*	..	..	..	*3,314*	*644*
1·2	*Iron ore mining*	*1*	..	*5*	..	..	..	..	..
1·3	*Metal mining except iron ore mining*	..	..	..	..	..	..	*8*	..
1·32	Lead, silver and zinc	..	..	..	..	..	..	..	..
1·33	Manganese	..	..	..	..	..	..	4	..
1·30	Other metallic minerals	..	..	..	..	..	..	4	..
1·5	*Stone-quarrying, clay and sand pits.* Extraction from the earth of stone, clay, sand and other materials used in building or manufacture of cement.	*6*	*1*	*204*	*32*	..	..	*12*	*2*
1·7	*Salt, saltpetre and saline substances*	*4*	..	*153*	*2*	*2*	..	..	..
Division 2.	**Processing and manufacture—Foodstuffs, textiles, leather and products thereof.**	**233**	**91**	**7,870**	**3,839**	**3,061**	**783**	**3,814**	**1,441**
2·0	*Food Industries otherwise unclassified*	*4*	..	*176*	*14*	*471*	*19*	*17*	*5*
2·01	Canning and preservation of fruits and vegetables.	4	..	155	14	447	19	2	3
2·03	Slaughter, preparation and preservation of meat.	..	..	21	..	24	..	..	..
2·00	Other food industries	..	..	..	..	..	..	15	2

Non-agricultural Occupations

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code Number	
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)	
16,155	**3,515**	**24,547**	**5,728**	**38,689**	**9,946**	**19,630**	**4,237**	**30,242**	**9,166**	**30,533**	**9,977**		
1,208	**397**	**2,824**	**740**	**2,103**	**190**	**1,108**	**130**	**1,098**	**313**	**1,200**	**243**	**Divn. 0**	
742	*367*	*2,086*	*629*	*358*	*52*	*477*	*41*	*546*	*143*	*351*	*79*	*0·1*	
..	..	1,495	521	180	3	470	41	104	36	272	55	0·11	
742	367	591	108	178	49	7	..	442	107	79	26	0·12	
..	..	..	..	..	..	..	..	..	..	..	..	0·10	
15	..	*21*	*11*	*31*	..	*11*	*1*	*51*	*22*	*45*	..	*0·2*	
1	..	21	11	23	..	10	1	4	..	2	..	0·21	
..	..	..	..	5	..	..	..	24	10	11	..	0·22	
5	..	..	..	3	..	1	..	..	..	20	..	0·23	
9	..	..	..	..	..	..	..	23	12	12	..	0·24	
3	*13*	*17*	*2*	*175*	*35*	*23*	*2*	*53*	*21*	*1*	*6*	*0·3*	
3	13	..	..	53	1	..	..	53	21	1	..	0·31	
..	..	17	2	122	34	23	2	..	..	..	6	0·30	
301	*17*	*112*	*98*	*502*	*38*	*319*	*47*	*273*	*94*	*703*	*155*	*0·4*	
93	..	32	..	102	..	20	..	117	8	344	..	0·40	
..	..	..	..	7	..	9	8	12	5	43	18	0·41	
99	7	19	17	91	7	60	12	81	48	135	84	0·42	
109	10	61	81	302	31	230	27	63	33	181	53	0·43	
..	..	..	..	*13*	..	*10*	..	*7*	*4*	..	..	*0·5*	
147	..	*588*	..	*1,024*	*65*	*266*	*39*	*168*	*29*	*100*	*3*	*0·6*	
147	..	588	..	1,024	65	266	39	168	29	91	3	0·60	
..	..	..	..	..	..	..	..	..	..	..	..	0·61	
..	..	..	..	..	..	..	..	..	..	9	..	0·62	
445	**168**	**90**	..	**7**	**4**	**580**	**295**	..	..	**1,850**	**1,068**	**Divn. 1**	
..	..	..	..	*4*	*3*	..	..	..	..	..	..	*1·0*	
..	..	..	..	..	..	*95*	*9*	..	..	*6*	*3*	*1·1*	
433	*167*	..	..	*2*	..	..	..	..	..	*1,751*	*1,037*	*1·2*	
9	..	*85*	..	*1*	*1*	*113*	*180*	..	..	*93*	..	*1·3*	
..	..	..	..	..	..	..	..	..	..	..	..	1·32	
4	..	85	..	1	1	113	180	..	..	93	..	1·33	
5	..	..	..	..	..	..	..	..	..	..	..	1·30	
2	..	..	..	..	..	*369*	*106*	..	..	..	*28*	*1·5*	
1	*1*	*5*	..	..	*1*	*3*	..	..	..	..	..	*1·7*	
2,108	**506**	**3,607**	**1,184**	**9,714**	**2,392**	**2,288**	**689**	**6,609**	**1,210**	**4,204**	**1,252**	**Divn. 2**	
15	..	*7*	..	*359*	*20*	*72*	*32*	*13*	*18*	*56*	..	*2·0*	
..	..	..	..	239	14	..	..	3	18	40	..	2·01	
15	..	3	..	100	..	13	..	10	..	7	..	2·03	
...	..	4	..	20	6	59	32	..	..	9	..	2·00	

Group Code No.	Occupation	ORISSA			3·33 Orissa Inland Division			5·11 Orissa Coastal Division		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2·1	*Grains and pulses*	*43,790*	*14,585*	*29,205*	*15,093*	*6,846*	*8,247*	*28,697*	*7,739*	*20,958*
2·11	Hand pounders of rice and other persons engaged in manual dehusking and flour grinding.	20,650	1,916	18,734	5,887	1,201	4,686	14,763	715	14,048
2·12	Millers of cereals and pulses	2,352	1,583	769	502	420	82	1,850	1,163	687
2·13	Grain parchers and makers of blended and prepared flour and other cereal and pulse preparations.	20,788	11,086	9,702	8,704	5,225	3,479	12,084	5,861	6,223
2·2	*Vegetable and dairy products* ..	*5,500*	*4,613*	*887*	*3,040*	*2,550*	*490*	*2,460*	*2,063*	*397*
2·21	Vegetable oil pressers and refiners ..	4,321	4,064	257	2,403	2,254	149	1,918	1,810	108
2·22	Manufacturers of hydrogenated oils ..	22	21	1	..	..	..	22	21	1
2·23	Makers of butter, cheese, ghee and other dairy products.	1,157	528	629	637	296	341	520	232	288
2·3	*Sugar Industries*	*751*	*692*	*59*	*271*	*231*	*40*	*480*	*461*	*19*
2·31	Gur manufacture	577	549	28	183	159	24	394	390	4
2·30	Other manufactures and refining of raw sugar, syrup and granulated or clarified sugar from sugarcane or from sugar beets.	174	143	31	88	72	16	86	71	15
2·4	*Beverages*	*935*	*894*	*41*	*748*	*715*	*33*	*187*	*179*	*8*
2·41	Brewers and distillers	257	242	15	226	211	15	31	31	..
2·42	Toddy drawers	596	578	18	505	487	18	91	91	..
2·43	Ice-manufacturers	29	25	4	15	15	..	14	10	4
2·40	Manufacture of aerated and mineral waters and other beverages.	53	49	4	2	2	..	51	47	4
2·5	*Tobacco*	*6,853*	*4,803*	*2,050*	*4,630*	*2,973*	*1,657*	*2,223*	*1,830*	*393*
2·51	Manufacture of bidis	6,411	4,521	1,890	4,530	2,874	1,656	1,881	1,647	234
2·50	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 manufacturing are also included.	442	282	160	100	99	1	342	183	159
2·6	*Cotton textiles*	*37,879*	*32,020*	*5,859*	*26,793*	*22,642*	*4,151*	*11,086*	*9,378*	*1,708*
2·61	Cotton ginning, cleaning and pressing ..	1,251	1,033	218	834	707	127	417	326	91
2·62	Cotton spinning, sizing and weaving ..	36,186	30,606	5,580	25,618	21,630	3,988	10,568	8,976	1,592
2·63	Cotton dyeing, bleaching, printing, preparation and sponging.	442	381	61	341	305	36	101	76	25
2·7	*Wearing apparel (except footwear) and made-up textile goods.*	*11,517*	*10,631*	*886*	*6,518*	*6,280*	*238*	*4,999*	*4,351*	*648*
2·71	Tailors, milliners, dress makers and darners	5,208	4,798	410	1,608	1,565	43	3,600	3,233	367
2·72	Manufacturers of hosiery, embroiderers, makers of crepe, lace and fringes.	195	126	69	118	87	31	77	39	38
2·73	Fur dressers and dyers	570	544	26	529	522	7	41	22	19
2·74	Hat-makers and makers of other articles of wear from textiles.	2,101	2,028	73	2,054	2,019	35	47	9	38
2·75	Manufacture of house furnishing of textiles	2,466	2,222	244	1,919	1,845	74	547	377	170
2·70	Makers of other made-up textile goods including umbrellas.	977	913	64	290	242	48	687	671	16
2·8	*Textile Industries otherwise unclassified* ..	*17,405*	*14,729*	*2,676*	*9,607*	*8,589*	*1,018*	*7,798*	*6,140*	*1,658*
2·81	Jute pressing, baling, spinning and weaving.	4,272	3,640	632	2,461	2,237	224	1,811	1,403	408
2·83	Silk reeling, spinning, twisting and weaving	2,191	1,913	278	1,201	966	235	990	947	43
2·84	Hemp and flax spinning and weaving ..	394	163	231	157	101	56	237	62	175
2·86	Manufacture of rope, twine, string and other related goods from cocoanut, aloes, straw, linseed and hair.	10,535	9,000	1,535	5,787	5,284	503	4,748	3,716	1,032
2·80	All other (including insufficiently described) textile industries, including artificial leather and cloth.	13	13	..	1	1	..	12	12	..
2·9	*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	38	107	73	34	52	48	4
2·92	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	..

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code No.
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
4,352	*8,839*	*958*	*4,461*	*1,573*	*4,623*	*2,731*	*3,302*	*876*	*3,110*	*2·1*
205	5,813	223	3,307	130	2,572	174	1,984	171	2,427	2·11
521	35	543	652	14	..	17	..	85	..	2·12
3,626	2,991	192	502	1,429	2,051	2,540	1,318	620	683	2·13
483	*109*	*109*	*1*	*511*	*220*	*1,073*	*163*	*980*	*69*	*2.2*
475	..	23	..	478	63	1,049	..	854	46	2·21
..	..	..	..	..	..	..	..	21	1	2·22
8	109	86	1	33	157	24	163	105	22	2·23
171	*17*	*8*	*2*	*188*	..	..	..	*98*	..	*2·3*
105	2	6	2	188	..	..	..	95	..	2·31
66	15	2	..	..	..	..	..	3	..	2·30
110	*8*	*14*	..	*32*	..	*402*	*13*	*25*	..	*2·4*
9	..	..	..	10	..	104	13	14	..	2·41
53	..	5	..	22	..	293	..	11	..	2·42
10	4	..	..	..	..	5	..	..	..	2·43
38	4	9	..	..	..	..	..	..	..	2·40
777	*184*	*397*	*63*	*40*	..	*2,337*	*1,626*	*636*	*150*	*2·5*
652	64	397	63	40	..	2,333	1,626	578	111	2·51
125	120	..	..	..	..	4	..	58	39	2·50
3,393	*625*	*717*	*191*	*1,526*	*359*	*5,912*	*1,262*	*3,874*	*541*	*2·6*
306	91	..	..	..	..	9	..	20	..	2·61
3,023	517	712	183	1,526	359	5,783	1,242	3,847	541	2·62
64	17	5	8	..	..	120	20	7	..	2·63
2,124	*361*	*515*	*87*	*1,231*	*200*	*4,670*	*36*	*495*	..	*2·7*
1,701	315	453	51	609	1	314	..	484	..	2·71
9	9	30	29	..	..	39	3	..	..	2·72
22	19	..	..	..	..	522	7	..	..	2·73
4	18	..	..	5	20	1,949	17	..	..	2·74
..	..	..	7	377	163	1,841	9	..	..	2·75
388	..	32	..	240	16	5	..	11	..	2·70
4,061	*956*	*822*	*101*	*732*	*558*	*234*	*84*	*533*	*45*	*2·8*
1,139	377	67	9	123	16	41	29	74	6	2·81
..	..	552	34	51	9	51	27	344	..	2·83
41	164	21	11	..	..	19	..	..	..	2·84
2,881	415	170	47	558	533	123	28	115	39	2·86
..	..	12	..	..	..	..	..	..	..	2·80
304	*151*	*74*	*7*	*255*	..	*688*	*92*	*406*	*1*	*2·9*
28	..	20	4	..	..	..	..	..	..	2·91
276	151	54	3	255	..	688	92	316	1	2·92
..	..	..	..	..	..	..	..	90	..	2·90

Group Code No.	Occupation	Agency		Plains		Koraput		Dhenkanal	
		Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
2·1	*Grains and pulses*	*20*	*75*	*356*	*3,035*	*518*	*280*	*500*	*1,140*
2·11	Hand pounders of rice and other persons engaged in manual dehusking and flour grinding.	14	71	157	2,356	21	165	196	970
2·12	Millers of cereals and pulses	..	..	85	..	64	3	..	..
2·13	Grain parchers and makers of blended and prepared flour and other cereal and pulse preparations.	6	4	614	679	433	112	304	170
2·2	*Vegetable and dairy products* ..	*20*	*2*	*960*	*67*	*102*	*17*	*292*	*23*
2·21	Vegetable oil pressers and refiners ..	20	1	834	45	102	9	245	1
2·22	Manufacturers of hydrogenated oils ..	..	..	21	1	..	..	..	..
2·23	Makers of butter, cheese, ghee and other dairy products.	..	1	105	21	..	8	47	22
2·3	*Sugar Industries*	*4*	..	*94*	..	*10*	..	*120*	*2*
2·31	Gur manufacture	4	..	91	..	10	..	86	..
2·30	Other manufactures and refining of raw sugar, syrup and granulated or clarified sugar from sugarcane or from sugar beets.	..	..	3	..	..	..	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	Ice-manufacturers	..	..	..	..	..	..	1	..
2·40	Manufacture of aerated and mineral waters and other beverages.	..	..	..	..	..	..	..	..
2·5	*Tobacco*	*20*	*4*	*616*	*146*	*44*	*8*	*225*	*1*
2·51	Manufacture of bidis	20	4	558	107	44	8	225	1
2·50	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 manufacturing are also included.	..	..	58	39	..	..	..	..
2·6	*Cotton textiles*	*132*	*8*	*3,742*	*533*	*1,011*	*469*	*1,471*	*169*
2·61	Cotton ginning, cleaning and pressing ..	..	..	20	..	10	..	..	..
2·62	Cotton spinning, sizing and weaving ..	132	8	3,715	533	997	469	1,471	169
2·63	Cotton dyeing, bleaching, printing, preparation and sponging.	..	..	7	..	4	..	..	..
2·7	*Wearing apparel (except footwear) and made-up textile goods.*	*14*	..	*481*	..	*267*	..	*321*	*11*
2·71	Tailors, milliners, dress makers and darners	14	..	470	..	262	..	143	10
2·72	Manufacturers of hosiery, embroiderers, makers of crepe, lace and fringes.	..	..	..	..	..	..	..	..
2·73	Fur dressers and dyers	..	..	..	..	..	..	..	..
2·74	Hat-makers and makers of other articles of wear from textiles.	..	..	..	..	..	..	3	1
2·75	Manufacture of house furnishing of textiles	..	..	..	..	..	..	..	..
2·70	Makers of other made-up textile goods *including umbrellas.*	..	..	11	..	5	..	175	..
2·8	*Textile Industries otherwise unclassified* ..	*8*	*2*	*525*	*43*	*459*	..	*698*	*70*
2·81	Jute pressing, baling, spinning and weaving.	..	..	74	6	..	..	594	4
2·83	Silk reeling, spinning, twisting and weaving	..	..	344	..	..	..	61	1
2·84	Hemp and flax spinning and weaving ..	..	..	..	..	49	..	33	56
2·86	Manufacture of rope, twine, string and other related goods from cocoanut, aloes, straw, linseed and hair.	8	2	107	37	410	..	10	9
2·80	All other (including insufficiently described) textile industries, including artificial leather and cloth.	..	..	..	..	..	..	..	..
2·9	*Leather, leather products and footwear* ..	*9*	..	*397*	*1*	*178*	..	*70*	*13*
2·91	Tanners and all other workers in leather	..	..	..	..	..	..	16	7
2·92	Cobblers and all other makers and repairers of boots, shoes, sandles and clogs.	9	..	307	1	178	..	54	6
2·90	Makers and repairers of all other leather products.	..	..	90	..	..	..	..	..

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code No.
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)
180	*119*	*163*	*568*	*1,412*	*1,243*	*443*	*441*	*709*	*679*	*170*	*400*	*2·1*
65	44	..	289	420	484	82	257	184	224	45	198	2·11
..	..	..	..	4	..	..	..	295	74	40	5	2·12
115	75	163	279	988	759	361	184	230	381	85	197	2·13
127	*7*	*191*	*38*	*477*	*151*	*55*	*13*	*147*	*61*	*66*	*15*	*2·2*
99	4	177	5	393	105	40	..	83	20	46	4	2·21
..	..	..	..	..	..	..	..	..	..	..	..	2·22
28	3	14	33	84	46	15	13	64	41	20	11	2·23
4	*17*	*10*	..	*72*	*19*	..	*2*	..	..	*11*	..	*2·3*
4	17	10	..	34	5	..	2	..	..	11	..	2·31
..	..	..	..	38	14	..	..	..	..	..	..	2·30
34	..	*9*	..	*68*	*2*	*73*	*2*	*21*	*8*	*5*	1	*2·4*
26	..	..	..	28	..	24	2	..	..	..	..	2·41
6	..	9	..	37	2	49	..	17	8	3	1	2·42
2	..	..	..	3	..	..	..	2	..	2	..	2·43
..	..	..	..	..	..	..	..	2	..	..	..	2·40
107	..	*55*	..	*58*	*3*	*35*	*12*	*22*	*3*	*70*	..	*2·5*
37	..	55	..	33	2	35	12	22	3	70	..	2·51
70	..	..	..	25	1	..	..	..	..	..	..	2·50
781	*177*	*1,570*	*323*	*6,779*	*892*	*1,306*	*134*	*1,307*	*113*	*2,373*	*604*	*2·61*
25	7	170	84	43	17	59	..	391	19	..	..	2·61
756	170	1,385	239	6,736	875	1,224	134	914	94	2,232	588	2·62
..	..	15	..	..	..	23	..	2	..	141	16	2·63
135	*41*	*245*	*20*	*187*	*7*	*106*	*14*	*92*	*83*	*243*	*26*	*2·7*
119	5	239	20	150	..	48	..	77	2	199	6	2·71
10	21	..	..	37	7	..	..	..	..	1	..	2·72
..	..	..	..	..	..	..	..	..	..	..	..	2·73
6	3	..	..	..	..	58	14	3	..	..	..	2·74
..	12	..	..	..	..	..	..	4	53	..	..	2·75
..	..	6	..	..	..	..	..	8	28	43	20	2·70
357	*145*	*1,333*	*235*	*71*	*36*	*29*	*34*	*4,254*	*219*	*1,146*	*193*	*2·8*
132	80	97	85	45	16	..	16	1,328	44	..	..	2·81
..	..	107	14	..	..	..	..	..	..	747	193	2·83
..	..	..	..	..	..	..	..	..	..	..	..	2·84
225	65	1,129	186	26	20	29	18	2,926	175	398	..	2·86
..	..	..	..	..	..	..	..	..	..	1	..	2·80
868	..	*24*	..	*231*	*19*	*169*	*5*	*44*	*26*	*64*	*13*	*2·9*
..	..	2	..	29	5	..	..	21	9	5	13	2·91
868	..	22	..	181	12	169	5	8	14	59	..	2·92
..	..	..	..	21	2	..	..	15	3	..	..	2·90

Group Code No.	Occupation	ORISSA			3·33 Orissa Inland Division			5·11 Orissa Coastal Division		
		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, otherwise unclassified.*	*15,976*	*14,349*	*1,627*	*10,614*	*9,404*	*1,210*	*5,362*	*4,945*	*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	Workers in copper, brass and bell metal	4,552	4,070	482	2,910	2,548	362	1,642	1,522	120
3·03	Workers in other metals	55	29	26	49	23	26	6	6	..
3·1	*Iron 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.	*2,450*	*2,114*	*336*	*2,095*	*1,778*	*317*	*355*	*336*	*19*
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.	*345*	*339*	*6*	*223*	*218*	*5*	*122*	*121*	*1*
3·3	*Transport equipment*	*1,460*	*1,310*	*150*	*562*	*542*	*20*	*898*	*768*	*130*
3·31	Building and repairing of ships and boats	241	110	131	71	63	8	170	47	123
3·32	Manufacture, assembly and repair of railway equipment, motor vehicles and bicycles. (Railway fitters are included in this group).	928	921	7	311	311	..	617	610	7
3·34	Coach builders and makers of carriages, palki, rickshaw, etc. and wheel wrights	291	279	12	180	168	12	111	111	..
3·4	*Electrical machinery, apparatus, appliances and supplies.*	*511*	*489*	*22*	*131*	*126*	*5*	*380*	*363*	*17*
3·43	Manufacture of electric wire and cable	68	68	..	58	58	..	10	10	..
3·40	Manufacture of electrical generating, transmission and distribution apparatus ; 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, phonographs, electric batteries, X-Ray and therapeutic apparatus ; electronic tubes, etc.	443	421	22	73	68	5	370	353	17
3·5	*Machinery (other than electrical machinery) including Engineering Workshops,* Engineering Workshops engaged in producing machine and equipment parts. Mechanics unspecified.	*229*	*221*	*8*	*63*	*63*	..	*166*	*158*	*8*
3.6	*Basic industrial chemicals, fertiliser and power alchohol.*	*116*	*113*	*3*	*32*	*32*	..	*84*	*81*	*3*
3·62	Dyes, explosives and fireworks ..	116	113	3	32	32	..	84	81	3
3·7	*Medical and pharmaceutical preparations*	*44*	*44*	..	*12*	*12*	..	*32*	*32*	..
3·8	*Manufacture of chemical products otherwise unclassified.*	*289*	*278*	*11*	*67*	*67*	..	*222*	*211*	*11*
3.81	Manufacture of perfumes, cosmetic and other toilet preparations.	9	8	1	..	..		9	8	1
3·82	Soaps and other washing and cleaning compounds	127	117	10	31	31	..	96	86	10
3·83	Paints, varnishes and lacquers and polishes.	12	12	..	12	12	..	..	..	..
3·85	Matches	19	19	..	7	7	..	12	12	..
3·86	Candle	88	88	..	..	..	..	88	88	..
3·87	Starch	29	29	..	12	12	..	17	17	..
3·80	Other chemical products	5	5	..	5	5	..	..	..	..

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code No.
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
2,292	**568**	**605**	**33**	**1,788**	**2**	**2,640**	**311**	**2,392**	**4**	**Dn. 3**
1,060	*388*	*415*	*24*	*1,518*	*2*	*2,144*	*291*	*2,011*	*4*	*3·0*
742	277	179	18	1,112	..	1,247	45	1,443	3	3·01
318	111	236	6	400	2	897	246	568	1	3·02
..	..	..	..	6	..	..	..	..	—	3·03
265	*11*	*42*	*8*	*1*	..	*6*	*17*	*29*	—	*3·1*
1	..	*34*	*1*	..	—	*135*	—	*12*	—	*3·2*
401	*130*	*59*	..	*46*	—	*314*	*2*	*262*	..	*3·3*
47	123	..	..	..	..	39	1	..	..	3·31
264	7	46	..	38	..	188	..	262	..	3·32
90	..	13	..	8	..	87	1	—	..	3·34
271	*17*	*5*	..	*84*	..	*6*	*1*	*3*	..	*3·4*
..	..	5	..	5	..	..	..	..	..	3·43
271	17	..	..	79	..	6	1	3	..	3·40
78	*8*	*8*	..	*23*	—	*13*	—	*51*	—	*3·5*
51	*3*	*6*	..	*11*	—	*10*	—	*13*	—	*3·6*
51	3	6	..	11	..	10	..	13	—	3·62
12	..	*10*	—	..	..	..	..	*10*	..	*3·7*
79	*11*	*26*	—	*105*	..	*13*	..	*1*	..	*3·8*
6	1	2	..	..	..	..	..	—	..	3·81
73	10	12	..	..	..	10	..	1	—	3·82
..	..	—	..	..	..	—	—	—	—	3·83
—	..	12	..	..	..	3	..	..	..	3·85
—	..	..	..	88	..	..	..	..	..	3·86
—	..	..	..	17	..	..	..	..	..	3·87
—	..	..	..	..	..	..	..	..	..	3·80

Group Code No.	Occupation	Agency		Plains		Koraput		Dhenkanal	
		Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
Dn. 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*	*3*	*1,400*	..	*1,103*	*100*
3·01	Blacksmiths and other workers in iron and makers of implements.	59	1	1,384	2	1,140	..	683	13
3·02	Workers in copper, brass and bell metal	..	..	568	1	260	..	413	61
3·03	Workers in other metals	..	..	..	..	..	..	7	26
3·1	*Iron 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.	..	..	*12*	..	..	..	..	*5*
3·3	*Transport equipment*	..	..	*262*	..	*11*	..	*25*	..
3·31	Building and repairing of ships and boats	..	..	..	..	..	..	..	..
3·32	Manufacture, assembly and repair of railway equipment, motor vehicles and bicycles. (Railway fitters are included in this group).	..	..	262	..	11	..	24	..
3·34	Coach builders and makers of carriages, palki, rickshaw, etc. and wheel wrights	..	..	..	..	..	..	1	..
3·4	*Electrical machinery, apparatus, appliances and supplies*	..	..	*3*	..	*36*	..	..	..
3·43	Manufacture of electric wire and cable	..	..	..	..	36	..	..	..
3·40	Manufacture of electrical generating, transmission and distribution apparatus; 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, phonographs, electric batteries, X-Ray and therapeutic apparatus, electronic tubes, etc.	..	..	3	..	..	..	..	..
3·5	*Machinery (other than electrical mechinery) including Engineering Workshops.* Engineering Workshops engaged in producing machine and equipment parts, Mechanics unspecified.	*2*	..	*49*	..	*20*	..	*12*	..
3.6	*Basic industrial chemicals, fertiliser and power alchohol.*	..	..	*13*	..	*2*	..	*5*	..
3·62	Dyes, explosives and fireworks ..	..	..	13	..	2	..	5	..
3·7	*Medical and pharmaceutical preparations*	..	..	*10*	..	..	..	*1*	..
3·8	*Manufacture of chemical products otherwise unclassified.*	..	..	*1*	..	*3*	..	*15*	..
3.81	Manufacture of perfumes, cosmetic and other toilet preparations.	..	..	..	..	..	..	..	..
3·82	Soaps and other washing and cleaning compounds.	..	..	1	..	..	..	11	..
3·83	Paints, varnishes and lacquers and polishes.	..	..	..	..	..	..	..	..
3·85	Matches	..	..	..	..	..	..	4	..
3·86	Candle	..	..	..	..	..	..	..	..
3·87	Starch	..	..	..	..	3	..	..	..
3·80	Other chemical products	..	..	..	..	..	..	..	..

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code No.
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)
803	**1**	**723**	..	**1,189**	**110**	**1,188**	**146**	**638**	**274**	**1,745**	**609**	**On. 3**
788	..	*695*	..	*552*	*89*	*692*	*62*	*647*	*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	..	..	..	..	..	..	..	13	..	..	..	3·03
2	*1*	..	..	*466*	*20*	*379*	*33*	*8*	*11*	*346*	*185*	*3·1*
—	..	..	..	*71*	..	..	..	*7*	..	*5*	—	*3·2*
13	..	*1*	..	*44*	*1*	*68*	*1*	*15*	*15*	*51*	*1*	*3.3*
7	..	..	..	..	..	7	1	10	6	..	—	3·31
6	..	1	..	43	..	6	..	..	..	32	—	3·32
.	..	..	..	1	1	55	..	5	9	19	1	3·34
..	..	*22*	..	*23*	..	*31*	..	..	*4*	*8*	..	*3·4*
.	..	22	..	..	..	..	..	..	..	..	..	3·43
.	..	..	..	23	..	31	..	..	4	8	..	3·40
.	..	..	..	*10*	..	..	..	*1*	..	*5*	..	*3·5*
.	..	..	..	*2*	..	*4*	..	*9*	..	..	..	*3·6*
..	..	..	..	2	..	4	..	9	..	..	..	3·62
..	..	..	..	*6*	..	*5*	..	..	..	..	..	*3·7*
.	..	*5*	..	*15*	..	*9*	..	*1*	..	*6*	..	*3·8*
..	.	..	..	..	..	..	..	..	..	..	..	3·81
..	..	..	..	9	..	..	..	1	..	..	..	3·82
..	..	..	..	6	..	..	..	..	..	6	..	3·83
..	..	..	..	..	..	..	..	..	..	..	..	3·85
..	..	..	..	..	..	..	..	..	..	..	..	3·86
..	..	..	..	..	..	9	..	..	..	..	..	3·87
..	..	5	..	..	..	..	..	..	..	..	..	3·80

Group Code Number	Occupation	ORISSA			3·33 Orissa Inland Division			5·11 Orissa Coastal Division		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Division 4.	**Processing and Manufacture—Not elsewhere specified.**	**71,376**	**59,345**	**12,031**	**32,920**	**27,176**	**5,744**	**38,456**	**32,169**	**6,287**
4·0	*Manufacturing industries otherwise unclassified.*	*13,289*	*12,009*	*1,280*	*5,275*	*4,789*	*486*	*8,014*	*7,220*	*794*
4·02	Photographic and optical goods ..	21	21	..	11	11	..	10	10	..
4·03	Repair and manufacture of watches and clocks.	258	258	..	118	118	..	140	140	..
4·04	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	48	..	..	..	176	128	48
4·09	Toy makers	1,139	635	504	715	512	203	424	123	301
4·00	Other miscellaneous manufacturing industries, including bone, ivory, horn, shell, etc.	1,845	1,459	386	531	399	132	1,314	1,060	254
4·2	*Bricks, tiles and other structural clay products.*									
	Structural clay products such as bricks tiles, etc.	*2,177*	*1,920*	*257*	*909*	*769*	*140*	*1,268*	*1,151*	*117*
4·3	*Cement—Cement pipes and other cement products.*									
	Manufacture of cement, cement pipes and cement concrete products.	*59*	*50*	*9*	*59*	*50*	*9*	..	..	..
4·4	*Non-metallic mineral products* ..	*16,759*	*14,153*	*2,606*	*7,044*	*6,095*	*949*	*9,715*	*8,058*	*1,657*
4·41	Potters and makers of earthen ware ..	15,589	13,079	2,510	6,680	5,785	895	8,909	7,294	1,615
4·43	Glass bangles, glass beads, glass necklaces, etc.	350	308	42	206	188	18	144	120	24
4·44	Makers of other glass and crystal ware ..	657	639	18	19	19	..	638	620	18
4·40	Makers of other miscellaneous non-metallic mineral products and lime burners.	163	127	36	139	103	36	24	24	..
4·5	*Rubber products*	*6*	*6*	..	..	..	..	*6*	*6*	..
4·6	*Wood and wood products other than furniture and fixtures.*	*35,909*	*28,644*	*7,265*	*17,854*	*13,941*	*3,913*	*18,055*	*14,703*	*3,352*
4·61	Sawyers	2,244	2,240	4	1,161	1,157	4	1,083	1,083	..
4·62	Carpenters, turners and joiners ..	15,444	15,338	106	5,009	5,008	1	10,435	10,330	105
4·64	Basket makers	16,285	10,197	6,088	10,586	7,187	3,399	5,699	3,010	2,689
4·60	Other industries of woody meterial, including leaves, but not including furniture or fixtures.	1,936	869	1,067	1,098	589	509	838	280	558
4·7	*Furniture and fixtures*	*1,547*	*1,177*	*370*	*600*	*570*	*30*	*947*	*607*	*340*
	Manufacture of household, office, public building, professional and restaurant furniture; office and store fixtures, screens, shades, etc., regardless of meterial used.									
4·8	*Paper and paper products*	*1,088*	*887*	*201*	*1,085*	*884*	*201*	*3*	*3*	..
	Manufacture of paper and paper board and articles of pulp, paper and paper board.									
4·9	*Printing and allied industries* ..	*542*	*499*	*43*	*94*	*78*	*16*	*448*	*421*	*27*
4·91	Printers, lithographers, and engravers ..	63	63	..	20	20	..	43	43	..
4·92	Book binders and stitchers	479	436	43	74	58	16	405	378	27
vision	**5. Construction and Utilities**	**35,754**	**27,529**	**8,225**	**14,408**	**10,600**	**3,808**	**21,346**	**16,929**	**4,417**
5·0	*Construction and maintenance of works—otherwise unclassified.*	*6,925*	*5,972*	*953*	*3,211*	*2,710*	*501*	*3,714*	*3,262*	*452*
5·1	*Construction and maintenance—buildings*	*12,555*	*9,897*	*2,658*	*3,000*	*2,073*	*927*	*9,555*	*7,824*	*1,731*
5·11	Masons and bricklayers	1,679	1,679	..	568	568	..	1,111	1,111	..
5·12	Stone-cutters and dressers	1,570	1,497	73	537	489	48	1,033	1,008	25
5·13	Painters and decorators of house ..	142	122	20	129	109	20	13	13	..
5·10	Other persons engaged in the construction or maintenance of buildings other than buildings made of bamboo or similar materials.	9,164	6,599	2,565	1,766	907	859	7,398	5,692	1,706

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code Number
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(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	..	..	..	..	..	6	..	7	..	4·02
97	..	1	..	38	..	2	..	4	..	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	213	5	66	20	11	35	21	28	11	4·09
776	133	23	42	261	79	113	41	..	..	4·00
276	*79*	*34*	*26*	*406*	*12*	*82*	*51*	*442*	..	*4·2*
..	..	..	..	..	..	..	..	..	..	*4·3*
4,096	*1,210*	*599*	*66*	*1,597*	*5*	*1,090*	*164*	*1,835*	*389*	*4·4*
3,429	1,177	531	57	1,572	5	994	160	1,831	389	4·41
72	15	44	9	..	..	96	4	4	..	4·43
595	18	..	..	25	..	..	..	..	..	4·44
..	..	24	..	..	..	..	..	..	..	4·40
6	..	..	..	..	..	..	..	..	..	*4·5*
5,253	*990*	*961*	*117*	*3,802*	*1,266*	*3,369*	*1,158*	*4,817*	*1,009*	*4·6*
348	..	190	..	252	..	136	..	298	..	4·61
4,684	73	384	11	2,127	..	1,355	..	3,143	21	4·62
170	661	288	88	1,324	1,106	1,715	1,098	1,339	845	4·64
51	256	99	18	99	160	163	60	37	143	4·60
448	*318*	*38*	..	*99*	..	*299*	*2*	*22*	*22*	*4·7*
1	..	..	..	2	..	*884*	*199*	..	..	*4·8*
351	*10*	*3*	..	*53*	*17*	*1*	..	*14*	..	*4·9*
29	..	3	..	10	..	..	..	1	..	4·91
322	10	..	..	43	17	1	..	13	..	4·92
4,235	**1,797**	**1,292**	**76**	**7,915**	**1,299**	**3,073**	**1,589**	**3,675**	**1,315**	**Divn. 5**
1,058	*157*	*52*	..	*2,001*	*244*	*558*	*65*	*164*	*55*	*5·0*
1,147	*1,097*	*669*	*15*	*4,375*	*475*	*120*	*595*	*1,754*	*155*	*5·1*
102	..	174	..	233	..	44	..	617	..	5·11
88	..	28	..	466	..	54	..	474	25	5·12
13	..	..	..	..	..	..	..	..	..	5·13
944	1,097	467	15	3,676	475	22	595	663	130	5·10

Group or Code Number	Occupation	Agency		Plains		Koraput		Dhenkanal	
		Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
Division 4.	**Processing and Manufacture—Not elsewhere specified.**	**242**	**46**	**8,084**	**1,397**	**2,497**	**416**	**3,258**	**559**
4·0	*Manufacturing industries otherwise unclassified.*	*36*	*3*	*1,160*	*20*	*480*	*77*	*469*	*65*
4·02	Photographic and optical goods ..	..	..	7	..	..	..	3	..
4·03	Repair and manufacture of watches and clocks.	..	..	4	..	19	..	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	Toy makers	..	..	28	11	120	68	8	30
4·00	Other miscellaneous manufacturing industries, including bone, ivory, horn, shell, etc.	..	..	..	..	4	1	68	24
4·2	*Bricks, tiles and other structural clay products.*								
	Structural clay products such as bricks, tiles, etc.	*7*	..	*435*	..	*44*	..	*35*	*2*
4·3	*Cement—Cement pipes and other cement products.*								
	Manufacture of cement, cement pipes and cement concrete products.	..	..	..	..	..	..	..	..
4·4	*Non-metallic mineral products* ..	*69*	*13*	*1,766*	*376*	*613*	*162*	*812*	*44*
4·41	Potters and makers of earthen ware ..	69	13	1,762	376	613	162	777	44
4·43	Glass bangles, glass beads, glass necklaces, etc.	..	..	4	..	..	..	3	..
4·44	Makers of other glass and crystal ware ..	..	..	..	..	..	..	..	..
4·40	Makers of other miscellaneous non-metallic mineral products	..	..	..	..	..	..	32	..
4·5	*Rubber products*	..	..	..	..	..	..	..	..
4·6	*Wood and wood products other than furniture and fixtures.*	*130*	*30*	*4,687*	*979*	*1,209*	*177*	*1,885*	*448*
4·61	Sawyers	5	..	293	..	21	..	63	..
4·62	Carpenters, turners and joiners ..	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*	..
	Manufacture of household, office, public building, professional and restaurant furniture ; office and store fixtures, screens, shades etc., regardless of meterial used.								
4·8	*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	Printers, lithographers, and engravers ..	..	..	1	..	1	..	15	..
4·92	Book binders and stitchers	..	..	13	..	12	..	35	..
Division 5.	**Construction and Utilities**	**188**	**70**	**3,487**	**1,245**	**1,153**	**215**	**672**	**228**
5·0	*Construction and maintenance of works—otherwise unclassified*	*13*	*4*	*151*	*51*	*130*	..	*86*	..
5·1	*Construction and maintenance—buildings*	*121*	*11*	*1,633*	*144*	*528*	*113*	*55*	*4*
5·11	Masons and bricklayers	15	..	602	..	251	..	38	..
5·12	Stone-cutters and dressers	48	..	426	25	58	..	5	..
5·13	Painters and decorators of house ..	..	..	..	..	..	..	..	..
5·10	Other persons engaged in the construction or maintenance of buildings other than buildings made of bamboo or similar meterials.	58	11	605	119	219	113	12	4

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code Number
Males	Females	Males	Females	Males	Femnles	Males	Females	Males	Females	Males	Females	
(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	..	..	..	4·02
..	..	2	..	46	..	8	..	4	..	13	..	4·03
286	..	267	..	846	3	54	3	77	5	222	14	4·04
7	..	28	..	..	..	12	11	14	2	85	39	4·05
..	..	..	..	..	..	..	..	..	..	..	..	4·06
162	20	23	..	145	21	..	4	19	39	..	..	4·09
96	..	27	..	66	2	11	14	14	50	..	..	4·00
96	*17*	*15*	*7*	*248*	*23*	*64*	*11*	*156*	*8*	*22*	*21*	*4·2*
..	..	..	..	..	..	*36*	*9*	*14*	..	..	..	*4·3*
330	..	*533*	..	*834*	*140*	*530*	*95*	*369*	*146*	*915*	*185*	*4·4*
327	..	531	..	750	126	530	95	298	110	896	185	4·41
3	..	2	..	84	14	..	..	..	..	..	..	4·43
..	..	..	..	..	..	..	..	..	..	19	..	4·44
..	..	..	..	..	..	..	..	71	36	..	..	4·40
..	..	..	..	..	..	..	..	..	..	..	..	*4·5*
1,631	*268*	*886*	*294*	*1,409*	*231*	*919*	*120*	*407*	*349*	*2,096*	*838*	*4·6*
217	4	98	..	85	..	82	..	76	..	374	..	4·61
370	..	409	..	565	..	585	..	184	..	736	..	4·62
1,044	264	379	294	759	231	229	107	147	331	889	525	4·64
..	..	..	..	..	..	23	13	..	18	97	313	4·60
..	..	..	..	..	..	*89*	*27*	*30*	..	*7*	*1*	*4·7*
..	..	..	..	..	*2*	..	..	..	..	..	..	*4·8*
..	..	..	..	*6*	*2*	..	..	*2*	*14*	*6*	..	*4·9*
..	..	..	..	2	..	..	..	..	..	2	..	4·91
..	..	..	..	4	2	..	..	2	14	4	..	4·92
337	**177**	**1,124**	**380**	**996**	**246**	**728**	**174**	**1,229**	**440**	**1,100**	**289**	**Divn.5**
52	*31*	*289*	*72*	*375*	*56*	*299*	*13*	*410*	*134*	*498*	*126*	*5·0*
62	*43*	*604*	*26*	*85*	*2*	*88*	*19*	*254*	*93*	*156*	*21*	*5·1*
3	..	53	..	41	..	20	..	40	..	63	..	5·11
25	21	196	..	26	2	14	..	51	25	12	..	5·12
13	7	23	..	18	..	..	..	24	1	31	12	5·13
21	15	332	26	..	..	54	19	139	67	50	9	5·10

Group Code No.	Occupation	ORISSA			3·33 Orissa Inland Division			5·11 Orissa Coastal Division		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
5·2	*Construction and maintenance—Roads, bridges and other transport works.*	*4,200*	*3,903*	*297*	*2,433*	*2,262*	*171*	*1,767*	*1,641*	*126*
5·3	*Construction and maintenance—Telegraph and telephone lines.*	*478*	*478*	..	*282*	*282*	..	*196*	*196*	..
5·4	*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*	*402*
5·5	*Works and services—Electric power and gas supply.*	*347*	*343*	*4*	*172*	*172*	..	*175*	*171*	*4*
5·51	Electric supply	347	343	4	172	172	..	175	171	4
5·6	*Works and Service—Domestic and industrial water-supply.*	*360*	*274*	*86*	*175*	*112*	*63*	*185*	*162*	*23*
5·7	*Sanitary works and services*—Including scavengers.	*6,766*	*4,003*	*2,763*	*2,605*	*1,521*	*1,084*	*4,161*	*2,482*	*1,679*
Division 6.	**Commerce .. .. ..**	**138,539**	**104,694**	**33,845**	**47,035**	**36,373**	**10,662**	**91,504**	**68,321**	**23,183**
6·0	*Retail trade otherwise unclassified* ..	*43,186*	*32,791*	*10,395*	*16,218*	*13,079*	*3,139*	*26,968*	*19,712*	*7,256*
6·01	Hawkers and street-venders otherwise unclassified.	6,248	3,536	2,712	2,499	1,528	971	3,749	2,008	1,741
6·02	Dealers in drugs and other chemical stores	756	748	8	317	312	5	439	436	3
6·03	Publishers, booksellers and stationers ..	3,523	3,163	360	1,476	1,384	92	2,047	1,779	268
6·00	General storekeepers, shopkeepers and persons employed in shops otherwise unclassified.	32,659	25,344	7,315	11,926	9,855	2,071	20,733	15,489	5,244
6·1	*Retail trade in foodstuffs (including beverages and narcotics).*	*53,317*	*40,162*	*13,155*	*17,180*	*12,790*	*4,390*	*36,137*	*27,372*	*8,765*
6·11	Retail dealers in grain and pulses; sweetmeats, sugar and spices, dairy products, eggs and poultry; animals for food; fodder for animals; other foodstuffs, vegetables and fruits.	38,939	28,510	10,429	12,066	8,671	3,395	26,873	19,839	7,034
6·12	Venders of wine, liquors, aerated water and ice in shops.	1,004	978	26	402	389	13	602	589	13
6·13	Retail dealers in tobacco, opium and ganja	1,158	1,114	44	604	573	31	554	541	13
6·14	Hawkers and street-venders of drink and foodstuffs.	4,098	2,873	1,225	827	612	215	3,271	2,261	1,010
6·15	Retail dealers in pan, bidis and cigarettes	8,118	6,687	1,431	3,281	2,545	736	4,837	4,142	695
6·2	*Retail trade in fuel (including petrol)* ..	*14,355*	*8,154*	*6,201*	*3,859*	*2,684*	*1,175*	*10,496*	*5,470*	*5,026*
6·21	Petroleum distributors	454	449	5	92	87	5	362	362	..
6·20	Retail dealers (including hawkers and street-venders) in firewood charcoal, coal, cow dung and all other fuel except petroleum.	13,901	7,705	6,196	3,767	2,597	1,170	10,134	5,108	5,026
6·3	*Retail trade in textile and leather goods* ..									
	Retail trade (including hawkers and street venders) in piece goods, woll, cotton, silk, hair, wearing apparel, made-up textile goods, skin, leather, furs, feathers, etc.	*7,249*	*6,757*	*492*	*3,113*	*2,913*	*200*	*4,136*	*3,844*	*292*
6·4	*Wholesale trade in foodstuffs.*	*6,159*	*4,334*	*1,825*	*2,304*	*1,252*	*1,052*	*3,855*	*3,082*	*773*
	Wholesale dealers in grains and pulses, sweetmeats, sugar and spices dairy products, eggs and poultry animal for food, fodder for animals, other foodstuffs, wholesale dealer in tobacco, opium and ganja.									
6·5	*Wholesale trade in commodities other than foodstuffs*	*9,686*	*8,447*	*1,239*	*3,655*	*3,117*	*538*	*6,031*	*5,330*	*701*
6·6	*Real Estate*									
	House and estate agents and rent collector except agricultural land.	*352*	*236*	*116*	*122*	*71*	*51*	*230*	*165*	*65*
6·7	*Insurance*									
	Insurance carriers and all kinds of insurance agents and other persons connected with nsurance business.	*67*	*62*	*5*	*10*	*10*	..	*57*	*52*	*5*

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code No.
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
592	*126*	*162*	..	*254*	..	*918*	*27*	*636*	..	*5·2*
108	..	*14*	..	*25*	..	*36*	..	*49*	..	*5·3*
455	*120*	*242*	*36*	*196*	*58*	*872*	*497*	*313*	*216*	*5·4*
85	*4*	*17*	..	*56*	..	*48*	..	*13*	..	*5·5*
85	4	17	..	56	..	48	..	13	..	5·51
77	*6*	*25*	*6*	*36*	*4*	*41*	*30*	*24*	*7*	*5·6*
713	*287*	*111*	*19*	*972*	*518*	*480*	*375*	*722*	*382*	*5·7*
23,447	**8,807**	**5,875**	**1,587**	**16,913**	**4,124**	**6,621**	**2,931**	**24,662**	**9,056**	**Division.6**
5,257	*1,915*	*2,057*	*437*	*3,980*	*1,243*	*2,513*	*690*	*9,172*	*3,853*	*6·0*
948	866	233	216	515	568	150	221	343	133	6·01
47	..	168	..	86	..	74	..	135	3	6·02
234	..	242	55	904	140	419	22	399	73	6·03
4,028	1,049	1,414	166	2,475	535	1,870	447	8,295	3,644	6·00
8,516	*4,061*	*2,594*	*792*	*7,858*	*1,356*	*2,224*	*883*	*8,952*	*2,647*	*6·1*
5,072	3,349	2,041	702	6,173	881	1,312	596	7,021	2,184	6·11
27	..	92	5	154	..	90	..	316	8	6.12
171	..	19	..	176	..	218	18	175	13	6·13
1,451	530	29	..	437	329	120	36	357	155	6·14
1,795	182	413	85	918	146	484	233	1,083	287	6·15
1,582	*1,379*	*81*	*85*	*971*	*1,339*	*236*	*152*	*3,526*	*2,331*	*6·2*
341	..	2	..	5	..	13	..	14	..	6·21
1,241	1,379	79	95	966	1,339	223	152	3,512	2,331	6·20
1,746	*155*	*280*	*19*	*863*	..	*570*	*94*	*1,170*	*118*	*6·3*
1,187	*521*	*222*	*160*	*1,265*	*56*	*371*	*735*	*526*	*36*	*6·4*
2,066	*472*	*610*	*61*	*1,786*	*116*	*570*	*282*	*1,112*	*52*	*6r5*
132	*50*	*1*	*15*	*31*	..	*35*	*32*	*1*	..	*6·6*
15	..	..	..	*12*	*4*	..	..	*26*		*6·7*

Group Code No.	Occupation	Agency		Plains		Koraput		Dhenkanal	
		Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
5·2	*Construction and maintenance—Roads, bridges and other transport works*	*3*	..	*633*	..	*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.*	*15*	*28*	*298*	*188*	*75*	*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 industrial water-supply.*	..	..	*24*	*7*	*20*	..	*4*	*2*
5·7	*Sanitary works and services*—Including scavengers.	*36*	*27*	*686*	*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*
6·01	Hawkers and street venders otherwise unclassified.	31	42	312	91	34	5	25	27
6·02	Dealers in drugs and other chemical stores	..	..	135	3	18	..	44	..
6·03	Publishers, booksellers and stationers ..	..	..	399	73	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*	*91*	*8,404*	*2,556*	*1,247*	*235*	*1,069*	*544*
6·11	Retail dealers in grain and pulses; sweetmeats, sugar and spices, dairy products, eggs and poultry; animals for food; fodder for animals; other foodstuffs, vegetables and fruits.	468	82	6,553	2,102	1,015	199	723	505
6·12	Venders of wine, liquors, aerated water and ice in shops.	..	..	316	8	50	..	109	4
6·13	Retail dealers in tobacco, opium and ganja	..	..	175	13	80	3	24	1
6·14	Hawkers and street-venders of drink and foodstuffs.	13	4	344	151	..	..	3	..
6·15	Retail dealers in pan, bidis and cigarettes	67	5	1,016	282	102	33	210	34
6·2	*Retail trade in fuel (including petrol)* ..	*690*	*108*	*2,836*	*2,223*	*1,257*	*447*	*65*	*194*
6·21	Petroleum distributors	..	..	14	..	11	..	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	2,223	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, feathers, etc.	*215*	..	*955*	*118*	*559*	*2*	*192*	*12*
6·4	*Wholesale trade in foodstuffs* ..								
	Wholesale dealers in grains and pulses, sweetmeats, sugar and spices dairy products, eggs and poultry animal for food, fodder for animals, other foodstuffs, wholesale dealer in tobacco, opium and ganja.	*118*	..	*408*	*36*	*122*	..	*120*	*119*
6·5	*Wholesale trade in commodities other than foodstuffs*	*244*	..	*868*	*52*	*236*	*6*	*727*	*84*
6·6	*Real Estate*								
	House and estate agents and rent collectors except agricultural land.	..	..	*1*	..	*7*	..	*2*	..
6·7	*Insurance*								
	Insurance carriers and all kinds of insurance agents and other persons connected with insurance business.	*1*	..	*25*	*1*	..	..	..	..

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code No.
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*	*48*	*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	..	18	..	27	..	7	..	10	..	5·51
3	*6*	..	..	*6*	*8*	*10*	*8*	*13*	*5*	*15*	*4*	*5·6*
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	*131*	*1,236*	*250*	*1,137*	*498*	*868*	*113*	*1,401*	*519*	*1,275*	*330*	*6·0*
337	120	43	58	662	316	38	44	117	69	69	91	6·01
105	5	8	..	..	..	14	..	23	..	26	..	6·02
104	..	38	12	29	17	114	11	108	2	113	..	6·03
71	6	1,147	180	446	165	702	58	1,153	448	1,045	261	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
14	..	23	..	7	..	17	..	64	3	15	6	6·12
21	7	120	..	14	..	48	..	19	2	29	..	6·13
..	..	415	125	..	..	8	42	..	..	53	8	6·14
71	9	228	13	137	50	156	38	702	271	388	50	6·15
73	*61*	*102*	*46*	*80*	*47*	*23*	*15*	*85*	*95*	*73*	*10*	*6·2*
..	..	..	..	7	..	..	..	24	5	31	..	*6·21*
73	61	102	46	73	47	23	15	61	90	42	10	*6·20*
166	..	*281*	*1*	*262*	*28*	*127*	*5*	*281*	*37*	*260*	*21*	*6·3*
43	..	*179*	..	*21*	*27*	*18*	*46*	*100*	*91*	*160*	*34*	*6·4*
33	.	*205*	..	*746*	*83*	*81*	*32*	*103*	*25*	*172*	*26*	*6·5*
.	..	..	..	*1*	...	*2*	..	*19*	*10*	*5*	*9*	*6·6*
..	..	..	..	..	..	..	..	9	..	..	..	*6·7*

Group Code Number	Occupation	ORISSA			3·33 Orissa Inland Division			5·11 Orissa Coastal Division		
		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 lenders, exchangers and exchange agents, money changers and brokers and their agents.									
Divn. 7.	**Transport, Storage and Communications ..**	**25,900**	**24,508**	**1,392**	**9,410**	**9,037**	**373**	**16,490**	**15,471**	**1,019**
7·0	*Transport and communications otherwise unclassified and incidental services.*	*912*	*864*	*48*	*643*	*621*	*22*	*269*	*243*	*26*
7·1	*Transport by road*									
	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, porters and messengers, persons engaged 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.	*8,851*	*8,420*	*431*	*3,052*	*2,974*	*78*	*5,799*	*5,446*	*353*
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.	*2,590*	*2,438*	*152*	*659*	*621*	*38*	*1,931*	*1,817*	*114*
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*	*34*	..
7·4	*Railway transport*									
	Railway employees of all kinds exceept those employed in manufacture, assembly or repair of railway equipment and those employed on construction works.	*9,948*	*9,338*	*610*	*3,426*	*3,279*	*147*	*6,522*	*6,059*	*463*
7·41	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
7·42	Railway porters	3,163	3,153	10	1,090	1,089	1	2,073	2,064	9
7·5	*Storage and warehousing*									
	The operation of storage facilities such as warehouse, cold storage, safe deposits when such storage is offered as an independent service.	*848*	*704*	*144*	*564*	*476*	*88*	*284*	*228*	*56*
7·6	*Postal services .. .. ..*	*2,332*	*2,330*	*2*	*884*	*884*	..	*1,448*	*1,446*	*2*
7·7	*Telegraph Services .. .. ..*	*73*	*73*	..	*18*	*18*	..	*55*	*55*	..
7·8	*Telephone Services .. .. ..*	*151*	*146*	*5*	*71*	*71*	..	*80*	*75*	*5*
7·9	*Wireless Services .. .. ..*	*156*	*156*	..	*88*	*88*	..	*68*	*68*	..
Division 8.	**Health, Education and Public Administration**	**59,909**	**55,458**	**4,451**	**24,552**	**23,667**	**885**	**35,357**	**31,791**	**3,566**
8·1	*Medical and other health services .. .. ..*	*6,957*	*5,864*	*1,093*	*2,649*	*2,343*	*306*	*4,308*	*3,521*	*787*
8·11	Registered medical practitioners ..	1,421	1,418	3	655	654	1	766	764	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
8·13	Dentists	10	10	..	4	4	..	6	6	..
8·14	Midwives	389	..	389	140	..	140	249	..	249
8·15	Vaccinators	220	220	..	94	94	..	126	126	..
8·16	Compounders	1,160	1,160	..	368	368	..	792	792	..
8·17	Nurses	555	24	531	124	9	115	431	15	4
8·18	Veterinary Services	76	76	..	36	36	..	40	40	..

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code Number
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
2,946	*254*	*30*	*18*	*147*	*10*	*102*	*63*	*177*	*18*	*6·8*
6,110	**526**	**2,183**	**192**	**4,003**	**119**	**2,550**	**94**	**3,189**	**182**	**Dn. 7**
62	*26*	..	..	*174*	..	*1*	*5*	*7*	..	*7·0*
2,184	*111*	*734*	*97*	*1,117*	*83*	*1,011*	*17*	*1,411*	*62*	*7·1*
1,344	*113*	*96*	..	*203*	*1*	*125*	*5*	*174*	..	*7·2*
25	..	..	..	*4*	..	*5*	..	*5*	..	*7·3*
1,408	*270*	*1,233*	*95*	*2,370*	*34*	*1,126*	*60*	*1,048*	*64*	*7·4*
708	270	745	95	1,737	34	549	60	805	55	7·41
700	..	488	..	633	..	577	..	243	9	7·42
15	..	*4*	..	*7*	..	*119*	*7*	*207*	*56*	*7·5*
960	*2*	*93*	..	*95*	..	*119*	..	*307*	..	*7·6*
36	..	*5*	..	*7*	..	*4*	..	*7*	..	*7·7*
48	*4*	*8*	..	*13*	*1*	*16*	..	*6*	..	*7·8*
28	..	*10*	..	*13*	..	*14*	..	*17*	..	*7·9*
14,412	**2,185**	**4,635**	**353**	**6,341**	**492**	**7,578**	**287**	**6,830**	**554**	**Dn. 8**
1,840	*433*	*288*	*52*	*643*	*124*	*569*	*67*	*783*	*183*	*8·1*
256	..	112	..	113	..	150	..	290	2	8·11
571	..	89	..	140	..	119	..	343	5	8·12
4	..	1	..	1	..	..	..	..	..	8·13
..	102	..	30	..	25	..	23	..	97	8·14
20	..	26	..	16	..	9	..	64	..	8·15
514	..	41	..	152	..	83	..	85	..	8·16
8	261	6	21	..	55	..	22	1	79	8·17
23	..	3	..	14	..	10	..	..	..	8·18

Group Code Number	Occupation	Agency		Plains		Koraput		Dhenkanal	
		Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
6·8	*Moneylending, banking and other financial business.*								
	Officers, employees of joint stock banks and co-operative banks, munims, agents or employees of indigenous banking firms, individual moneylenders, exchangers 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	*Transport and communications otherwise unclassified and incidental services.*	..	..	*7*	..	..	..	*6*	..
7·1	*Transport by road*								
	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, porters and messengers, 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*	*62*	*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.	..	..	*174*	..	*20*	*2*	*113*	*2*
7·3	*Transport by Air*								
	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 equipment and those employed on construction works.	..	..	*1,048*	*64*	*215*	..	*596*	*2*
7·41	Railway employees of all kinds except those employed on construction work.	..	..	805	55	215	..	263	1
7·42	Railway porters	..	..	243	9	..	..	333	1
7·5	*Storage and warehousing*								
	The operation of storage facilities such as warehouses, cold storage, safe deposits when such storage is offered as an independent service.	*5*	..	*202*	*56*	*148*	*22*	*68*	*12*
7·6	*Postal services*	*9*	..	*298*	..	*131*	..	*151*	..
7·7	*Telegraph Services*	..	..	*7*	..	*3*	..	*2*	..
7·8	*Telephone Services*	..	..	*6*	..	..	..	*8*	..
7·9	*Wireless Services*	..	..	*17*	..	*8*	..	*9*	..
Divn. 8.	**Health, Education and Public Administration**	**427**	**17**	**6,403**	**537**	**3,117**	**57**	**4,141**	**126**
8·1	*Medical and other health services* ..	*33*	*5*	*750*	*178*	*526*	*28*	*282*	*56*
8·11	Registered medical practitioners ..	7	..	283	2	78	..	93	..
8·12	Vaids, Hakims and other persons practising medicines without being registered.	26	..	317	5	343	..	38	..
8·13	Dentists	..	..	..	..	..	..	..	..
8·14	Midwives	..	5	..	92	..	27	..	21
8·15	Vaccinators	..	..	64	..	6	..	25	..
8·16	Compounders	..	..	85	..	94	..	61	..
8·17	Nurses	..	..	1	79	..	1	..	31
8·18	Veterinary Services	..	..	..	..	5	..	7	..

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code Number
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)
10	..	*3*	..	*145*	*7*	*1*	*40*	*48*	*1*	*53*	*6*	*6·8*
247	**7**	**272**	**20**	**1,585**	**58**	**954**	**28**	**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*
4	..	*82*	..	*245*	*28*	*17*	*1*	*5*	..	..	..	*7·2*
..	..	..	..	..	..	..	..	..	..	..	..	*7·3*
..	..	..	..	*709*	*17*	*41*	..	*178*	*2*	*414*	*66*	*7·4*
..	..	..	..	709	17	27	..	178	2	325	66	7·41
..	..	..	..	..	..	14	..	20	..	145	..	7·42
26	*7*	*48*	*9*	*13*	*6*	*18*	*10*	*25*	*11*	*6*	*4*	*7·5*
72	..	*84*	..	*113*	..	*97*	..	*55*	..	*53*	..	*7·6*
1	..	*1*	..	*2*	..	*3*	..	*1*	..	*1*	..	*7·7*
13	..	..	..	*10*	..	*8*	..	*7*	..	*9*	..	*7·8*
7	..	*6*	..	*13*	..	*8*	..	*11*	..	*12*	..	*7·9*
757	**28**	**828**	**51**	**1,792**	**90**	**1,456**	**72**	**1,273**	**67**	**2,298**	**90**	**Dn. 8**
133	*16*	*80*	*17*	*232*	*39*	*92*	*27*	*168*	*25*	*228*	*26*	*8·1*
39	..	30	..	41	..	33	..	50	..	83	1	*8·11*
82	..	33	..	88	..	14	..	34	..	59	..	8·12
—	..	..	..	..	..	..	..	1	..	3	..	8·13
—	7	..	17	..	24	..	6	..	3	..	7	8·14
8	..	7	..	7	..	1	..	16	..	15	..	8·15
4	..	10	..	41	..	25	..	12	..	38	..	8·16
—	9	..	..	..	15	..	5	4	14	5	18	8·17
	..	..	..	5	..	2	..	..	..	7	..	8·18

Group Code No. (1)	Occupation (2)	ORISSA Persons (3)	ORISSA Males (4)	ORISSA Females (5)	3·33 Orissa Inland Division Persons (6)	3·33 Orissa Inland Division Males (7)	3·33 Orissa Inland Division Females (8)	5·11 Orissa Coastal Division Persons (9)	5·11 Orissa Coastal Division Males (10)	5·11 Orissa Coastal Division Females (11)
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 other sanitary staff.	1,168	1,003	165	392	342	50	776	661	115
8·2	*Educational Services and Research* ..	*14,378*	*12,554*	*1,824*	*5,340*	*5,028*	*312*	*9,038*	*7,526*	*1,512*
8·21	Professors, lecturers, teachers and research workers employed in universities, colleges and Research Institutions.	539	516	23	81	81	..	458	435	23
8·22	All other professors, lecturers and teachers	12,911	11,198	1,713	4,691	4,428	263	8,220	6,770	1,450
8·20	Managers, clerks and servants of educational and research institutions, including libraries and museums, etc.	928	840	88	568	519	49	360	321	39
8·4	*Police (other than village watchmen)* ..	*10,057*	*10,057*	..	*6,003*	*6,003*	..	*4,054*	*4,054*	..
8·5	*Village Officers and servants, including village watchmen.*	*8,157*	*7,907*	*250*	*4,037*	*3,989*	*48*	*4,120*	*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*	*899*	*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*	*40*	*1,452*	*1,440*	*12*
Division 9.	**Services not elsewhere specified** ..	**356,718**	**273,259**	**83,459**	**168,480**	**133,498**	**34,982**	**188,238**	**139,761**	**48,477**
9·0	*Services otherwise unclassified (Palmists, astrologers, zamindar's rent collection staff, home guards, etc., all under this subdivision).*	*208,047*	*150,856*	*57,191*	*110,690*	*86,025*	*24,665*	*97,357*	*64,831*	*32,526*
9·1	*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	Private motor drivers and cleaners ..	1,133	1,133	..	678	678	..	455	455	..
9·12	Cooks	15,279	12,771	2,508	2,927	2,325	602	12,352	10,446	1,906
9·13	Gardeners	1,841	1,404	437	1,059	679	380	782	725	57
9·10	Other domestic servants	59,379	44,460	14,919	29,118	22,220	6,898	30,261	22,240	8,021
9·2	*Barbers and beauty shops* Barbers, hair dressers and wig makers, tatooers, shampooers, bath houses.	*13,639*	*12,797*	*842*	*5,613*	*5,425*	*188*	*8,026*	*7,372*	*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	*Hotels, restaurants and eating houses* ..	*3,351*	*3,027*	*324*	*1,078*	*1,057*	*21*	*2,273*	*1,970*	*303*
9·5	*Recreation Services* Production and distribution of motion pictures and the operation of cinemas and allied services, managers and employees of theatres, opera companies, etc., musicians, actors, dancers, etc., conjurers, acrobats, wrestlers, pahalwans, recitors, exhibitors of curiosities and wild animals, radio broadcasting studios.	*3,391*	*2,517*	*874*	*1,018*	*933*	*85*	*2,373*	*1,584*	*789*
9·6	*Legal and business services*	*13,408*	*13,405*	*3*	*3,380*	*3,380*	..	*10,028*	*10,025*	*3*
9·61	Lawyers of all kinds, including qazis, law agents and mukhtiars.	4,427	4,427	..	974	974	..	3,453	3,453	..
9·62	Clerks of lawyers, petition writers, etc. ..	6,969	6,966	3	1,786	1,786	..	5,183	5,180	3
9.63	Architects, Surveyors, Engineers and their employees (not being State servants).	1,310	1,310	..	200	200	..	1,110	1,110	..
9·64	Public Scribes, Stenographers, Accountants, 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 of employers and employees.	404	404	..	222	222	..	182	182	..
9·7	*Arts, letters and journalism*	*1,723*	*1,723*	..	*240*	*240*	..	*1,483*	*1,483*	..
9·71	Artists, sculptors and image makers ..	1,575	1,575	..	221	221	..	1,354	1,354	..
9·72	Authors, editors and journalists ..	68	68	..	12	12	..	56	56	..

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code No.
Males (12)	Females (13)	Males (14)	Females (15)	Males (16)	Females (17)	Males (18)	Females (19)	Males (20)	Females (21)	(1)
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	982	1,128	73	21	230	1,029	76	1,750	169	8·22
172	37	61	2	83	..	27	..	5	..	8·20
2,051	..	*212*	..	*752*	..	*1,262*	..	*1,078*	..	*8·4*
1,563	*199*	*245*	*3*	*1,006*	..	*935*	..	*1,210*	..	*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*	*7*	*8·7*
483	*11*	*817*	*1*	*89*	..	*1,979*	*40*	*54*	..	*8·8*
60,668	**19,058**	**13,884**	**4,603**	**23,728**	**3,344**	**26,600**	**8,252**	**44,132**	**22,865**	**Divn. 9**
27,312	*15,077*	*8,024*	*2,902*	*7,189*	*908*	*20,094*	*6,918*	*23,875*	*14,646*	*9·0*
15,105	*1,867*	*3,010*	*1,321*	*6,916*	*1,423*	*2,671*	*624*	*9,312*	*5,631*	*9·1*
194	..	113	..	82	..	204	..	68	..	9·11
6,237	878	290	45	3,421	..	263	9	599	1,078	9·12
345	..	72	25	230	32	48	..	85	..	9·13
8,329	989	2,535	1,251	3,183	1,391	2,156	615	8,560	4,553	9·10
2,385	*145*	*539*	*73*	*2,073*	*436*	*979*	*32*	*2,494*	..	*9·2*
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*	*57*	*101*	*92*	*9·5*
7,782	..	*360*	*3*	*543*	..	*360*	..	*1,425*	..	*9·6*
3,095	..	73	..	126	..	90	..	181	..	9·61
4,465	..	260	3	330	..	154	..	167	..	9·62
93	..	18	..	87	..	49	..	927	..	9·63
83	..	..	..	..	..	..	..	23	..	9·64
46	..	9	..	..	..	67	..	127	..	9·65
922	..	*7*	..	*482*	..	*10*	..	*74*	..	*9·7*
855	..	1	..	459	..	10	..	39	..	9·71
21	..	6	..	22	..	..	..	7	..	9·72

Group Code No. (1)	Occupation (2)	Agency Males (22)	Agency Females (23)	Plains Males (24)	Plains Females (25)	Koraput Males (26)	Koraput Females (27)	Dhenkanal Males (28)	Dhenkanal 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 other sanitary staff.	..	..	..	..	..	..	58	4
8·2	*Educational Services and Research* ..	149	4	1,636	168	700	29	929	23
8·21	Professors, lecturers, teachers and research workers employed in universities, colleges and Research Institutions.	..	..	30	3	..	..	..	..
8·22	All other professors, lecturers and teachers	149	4	1,601	165	700	29	905	23
8·20	Managers, clerks and servants of educational and research institutions, including libraries and museums, etc.	..	..	5	..	..	..	24	..
8·4	*Police (other than village watchmen)* ..	*39*	..	*1,039*	..	*616*	..	*1,276*	..
8·5	*Village Officers and servants, including village watchmen.*	*106*	..	*1,104*	..	*900*	..	*821*	*4*
8·6	*Employees of municipalities and local bodies* (but not including persons classifiable under any other division or subdivision).	*20*	*8*	*407*	*184*	*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 any other division or subdivision).	*3*	..	*51*	..	*24*	..	*4*	..
Division 9.	**Services not elsewhere specified** ..	**2,651**	**1,393**	**41,481**	**21,472**	**32,446**	**3,526**	**9,986**	**1,811**
9·0	*Services otherwise unclassified (Palmists, astrologers, zamindar's rent collection staff, home guards, etc., fall under this subdivision).*	*1,569*	*1,007*	*22,306*	*13,639*	*11,389*	*1,011*	*7,206*	*1,280*
9·1	*Domestic services (but not including services rendered by members of family households to one another).*	*477*	*258*	*8,835*	*5,373*	*15,528*	*2,109*	*766*	*245*
9.11	Private motor drivers and cleaners ..	2	..	66	..	20	..	66	—
9.12	Cooks	*101*	*95*	*498*	*983*	*668*	*50*	*95*	—
9.13	Gardeners	7	..	78	..	13	..	13	..
9.10	Other domestic servants	367	163	8,193	4,390	14,827	2,059	592	245
9·2	*Barbers and beauty shops.* Barbers, hair dressers and wig makers, tatooers, shampoors, both houses.	*119*	..	*2,375*	..	*1,210*	..	*586*	*9*
9·3	*Laundries and laundry services* Laundries and lanndry services, washing and cleaning.	*129*	*125*	*2,328*	*2,371*	*1,672*	*402*	*912*	*273*
9·4	*Hotels, restaurants and eating houses* ..	*31*	..	*613*	..	*389*	*3*	*10*	*1*
9·5	*Recreation Services* Production and distribution of motion pictnres and the operation of cinemas and allied services, managers, and employees of theatres, apera companies, etc., musicians, actors, dancers, etc., conjurers, acrobats, wrestlers, pahalwans, recitors, exhibitors of curiosities and wild animals, radio broadcasting studios.	*6*	*3*	*95*	*89*	*250*	*1*	*45*	*3*
9·6	*Legal and business services*	*85*	..	*1,340*	—	*619*	—	*96*	—
9·61	Lawyers of all kinds, including qazis, law agents and mukhtiars.	22	..	159	..	116	..	22	—
9·62	Clerks of lawyers, petition writers, etc. ..	42	..	125	..	158	..	39	—
9.63	Architects, Surveyers, Engineers and their employees (not being State servants).	15	..	912	..	73	..	13	—
9·64	Public Scribes, Stenographers, Accountants, Auditors.	6	..	17	..	163	..	..	—
9·65	Managers, clerks, servants and employees of Trade Associations, Chamber of Commerce, Board of Trade, Labour Organisation and similar organisation of employers and employees.	..	..	127	..	109	..	22	—
9·7	*Arts, letters and journalism*	*2*	..	*72*	..	*2*	..	*37*	—
9·71	Artists, sculptors and image makers ..	..	..	39	..	1	..	34	—
9·72	Authors, editors and journalists. —	—	—	7	—	1	—	—	—

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code No.
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*	*589*	*40*	*249*	*25*	*238*	*24*	*619*	*45*	*8·2*
..	..	..	..	18	..	..	..	1	..	17	..	8·21
180	9	203	34	399	20	240	25	98	16	525	27	8·22
71	3	..	..	172	20	9	..	139	8	77	18	8·20
131	..	*223*	..	*368*	..	*693*	..	*444*	..	*951*	..	*8·4*
109	..	*214*	..	*328*	*3*	*188*	*16*	*144*	*13*	*244*	*12*	*8·5*
36	..	*26*	..	*35*	*8*	*26*	*4*	*29*	*5*	*21*	*7*	*8·6*
90	..	*77*	..	*215*	..	*196*	..	*209*	..	*211*	..	*8·7*
7	..	*5*	..	*25*	..	*12*	..	*41*	..	*24*	..	*8·8*
6,199	**1,589**	**8,936**	**2,153**	**13,877**	**5,014**	**7,664**	**1,911**	**14,177**	**4,787**	**10,962**	**4,546**	**Divn. 9**
2,948	*1,043*	*7,135*	*1,879*	*9,618*	*2,841*	*6,105*	*1,657*	*12,225*	*3,510*	*7,736*	*3,514*	*9·0*
1,051	*426*	*570*	*159*	*609*	*1,922*	*752*	*164*	*1,350*	*1,142*	*2,128*	*831*	*9·1*
22	..	10	..	16	..	20	..	146	..	172	..	9·11
151	42	92	91	127	93	265	..	150	210	413	12	9·12
152	52	10	..	96	202	52	..	232	95	56	31	9·13
726	332	458	68	370	1,627	415	164	822	837	1,487	788	9·10
1,199	*3*	*208*	*6*	*500*	*17*	*150*	*7*	*169*	*61*	*305*	*53*	*9·2*
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*
53	..	*49*	..	*1,906*	..	*71*	..	*31*	..	*110*	..	*9·6*
23	..	33	..	608	..	20	..	10	..	30	..	*9·61*
24	..	15	..	1,233	..	26	..	15	..	80	..	9·62
2	..	..	..	43	..	1	..	4	..	..	..	9·63
4	..	1	..	22	..	..	..	2	..	..	..	9·64
..	..	..	..	..	..	24	..	..	..	..	..	9·65
18	..	*7*	..	*121*	..	*3*	..	*23*	..	*17*	..	*9·7*
16	..	4	..	116	..	3	..	23	..	14	..	9·71
2	..	3	..	5	..	..	..	..	..	1	..	9·72

Group Code Number	Occupations	ORISSA			3·33 Orissa Inland Division			5·11 Orissa Coastal Division		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
9·73	Photographers, emloyees of Newspaper Press other than authors, editors journalists, lithographers and engravers.	80	80	..	7	7	..	73	73	..
9·8	*Religious, Charitable and Welfare Services*	13,888	13,886	2	3,638	3,638	..	10,250	10,248	2
9·81	Priests, Ministers, monks, Nuns, Sadhus, Religious mendicants and other religious workers.	12,187	12,185	2	3,057	3,057	..	9,130	9,128	2
9·82	Servants in religious edifices, burial and burning grounds, pilgrim conductors and circumcisors, etc.	1,411	1,411	..	318	318	..	1,093	1,093	..
9·83	Managers and employees of organisations and institutions rendering charitable and other welfare services.	290	290	..	263	263	..	27	27	..
	Unproductive occupations	**39,600**	**26,046**	**13,554**	**16,395**	**10,213**	**6,182**	**23,205**	**15,833**	**7,372**
	Persons living principally on income from non-agricultural property.	2,495	1,985	510	390	289	101	2,105	1,696	409
	Pensions	986	864	122	141	126	15	845	738	107
	Remittances	3,890	3,472	418	393	236	157	3,497	3,236	261
	Scholarships	116	94	22	..	..	..	116	94	22
	Other funds	10	7	3	..	..	..	10	7	3
	Jails	3,682	3,607	75	1,969	1,931	38	1,713	1,676	37
	Asylums	737	442	295	528	313	215	209	129	80
	Alm houses	1	1	..	..	..	..	1	1	..
	Recipients of doles	9,480	4,550	4,930	5,561	2,861	2,700	3,919	1,689	2,230
	Beggars and vagrants	18,049	11,024	7,025	7,393	4,457	2,936	10,656	6,567	4,089
	All other persons living principally on income derived from non-productive activities, procurers and prostitutes.	154	..	154	20	..	20	134	..	134

Group Code Number	Occupation	Agency		Plains		Koraput		Dhenkanal	
		Males	Females	Males	Females	Males	Females	Males	Females
(1)	(2)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
9·73	Photographers employees of Newspaper Press other than authors, editors, journalists, lithographers and engravers.	2	..	26	..	..	..	3	..
9·8	*Religious, Charitable and Welfare Services*	*233*	..	*3,517*	..	*1,387*	..	*328*	..
9·81	Priests, Ministers, Monks, Nuns, Sadhus, Religious Mendicants and other religious workers.	233	..	3,362	..	925	..	315	..
9·82	Servants in religious edifices, burial and burning grounds, pilgrim conductors and circumcisors, etc.	..	..	155	..	216	..	..	..
9·83	Managers and employees of organisations and institutions rendering charitable and other welfare services.	..	..	..	..	246	..	13	..
	Unproductive occupations	*62*	*53*	*2,857*	*1,176*	**1,250**	**379**	**851**	**459**
	Persons living principally on income from non-agricultural property	..	..	..	*17*	52	4	26	5
	Pensions	..	..	*18*	*2*	7	..	7	1
	Remittances	*24*	*20*	*104*	*91*	..	..	50	62
	Scholarships	..	..	..	..	..	..	..	..
	Other funds	..	..	..	..	..	..	..	..
	Jails	..	..	*631*	*8*	406	2	183	..
	Asylums	..	..	*25*	*16*	40	27	15	12
	Alm houses	..	..	*1*	..	..	..	..	..
	Recipients of doles	..	..	..	..	..	..	..	..
	Beggars and Vagrants	*33*	*33*	*2,078*	*1,008*	745	346	570	379
	All other persons living principally on income derived from non-productive activities, procurers and prostitutes.	..	..	..	*34*	..	..	..	..

Cuttack		Balasore		Puri		Sambalpur		Ganjam		Group Code Number
Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(1)
46	..	..	..	1	..	..	..	28	..	9·73
1,895	..	*999*	*2*	*3,837*	..	*573*	..	*3,750*	..	*9·8*
1,644	..	992	2	3,130	..	573	..	3,595	..	9·81
237	..	..	..	701	..	..	..	155	..	9·82
14	..	7	..	6	..	..	..	..	..	9·83
7,181	**2,909**	**3,154**	**1,520**	**2,641**	**1,767**	**1,540**	**613**	**2,919**	**1,229**	
1,048	295	648	97	..	..	47	34	..	17	
545	67	98	15	77	23	93	12	18	2	
2,507	118	128	21	497	31	96	17	128	111	
94	22	..	..	..	..	..	..	..	..	
..	..	..	..	7	3	..	..	..	..	
568	15	218	7	259	7	363	9	631	8	
57	28	17	25	30	11	47	33	25	16	
..	..	..	..	..	..	..	..	1	..	
236	887	867	728	586	615	120	..	..	..	
2,126	1,461	1,178	604	1,185	1,016	774	508	2,116	1,041	
..	16	..	23	..	61	..	..	..	34	

Keonjhar		Phulbani		Bolangir		Sundargarh		Kalahandi		Mayurbhanj		Group Code Number
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)
..	..	..	..	..	..	..	..	..	..	2	..	9·73
197	..	*152*	..	*310*	..	*164*	..	*104*	..	*190*	..	*9·8*
189	..	107	..	310	..	164	..	89	..	152	..	9·81
8	..	43	..	..	..	..	..	15	..	36	..	9·82
..	..	..	..	..	..	..	..	..	..	..	..	9·83
541	**300**	**225**	**87**	**942**	**604**	**756**	**321**	**574**	**240**	**3,472**	**3,126**	
..	..	..	..	84	32	17	12	37	..	26	14	
..	..	3	..	..	..	..	..	11	..	5	2	
17	20	19	13	15	25	6	..	4	..	5	..	
..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	
99	1	83	..	169	11	135	4	152	1	341	10	
21	9	25	17	65	25	20	22	63	52	17	18	
..	..	..	..	..	..	..	..	..	..	..	..	
37	..	..	..	..	..	..	..	..	..	2,704	2,700	
367	270	95	57	609	511	578	283	307	187	374	362	
..	..	..	..	..	..	..	..	..	..	..	20	

APPENDIX IV

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 ..	1
			Ceramics ..	1
	3. Cuttack ..	45	Rice Milling ..	2
			Biscuit ..	2
			Ply-Wood ..	1
			Iron and Steel ..	1
			General Engineering ..	3
			Lime ..	1
			Bidi ..	3
			Tobacco ..	1
			Saw Milling ..	8
			Bobbin ..	1
			Printing ..	14
			Dyeing ..	1
			Automobiles ..	2
			B.-N. R. Workshop ..	1
			Spray Painting ..	1
			Hume Pipe ..	1
			Ice ..	2
	4. Jagatsingpur ..	1	Textile ..	1
	5. Kendrapara ..	6	Bidi ..	6
	6. Chaudwar ..	1	Textile ..	1
	7. Byree ..	1	Rice Milling ..	1
	8. Baitarani Road ..	1	Rice Milling ..	1
	9. Narsingpur ..	1	Bidi ..	1
BALASORE (48 Factories)	1. Bhadrak ..	3	Rice Milling ..	2
			Oil Crushing ..	1
	2. Chandbali ..	5	Rice Milling ..	5
	3. Markona ..	2	Rice Milling ..	2
	4. Soro ..	3	Rice Milling ..	2
			Iron and Steel ..	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
			Arms and Ammunitions ..	1
	8. Rupsa ..	5	Rice Milling ..	5
	9. Basta ..	6	Rice Milling ..	6
	10. Jaleswar ..	6	Rice Milling ..	5
			Hosiery ..	1
	11. Lakhannath Road ..	1	Rice Milling ..	1

District	Centre of location	Total number of Factories	Type of Factories	Number
(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 ..	1
			Ice ..	2
	5. Kaluparaghat ..	1	Ice ..	1
	6. Tangi ..	1	Rice Milling ..	1
	7. Bhubaneswar ..	5	Saw Milling ..	5
	8. Khandpara ..	1	Printing ..	1
SAMBALPUR (126 Factories)	1. Sambalpur ..	99	Rice Milling ..	2
			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 (28 Factories)	1. Ramtha ..	3	Rice Milling ..	2
			Ice ..	1
	2. Chatrapur ..	1	Oil Crushing ..	1
	3. Aska ..	5	Sugar ..	1
			Distillery ..	1
			Saw Milling ..	1
			Aurvedic Pharmacy ..	1
			Automobiles ..	1
	4. Berhampur ..	14	Rice Milling ..	5
			Distillery ..	1
			Oil Crushing ..	1
			General Engineering ..	1
			Saw Milling ..	2
			Hosiery ..	1
			Electricity ..	1
			Metal Works ..	1
			Jewellery Workshop ..	1
	5. Parlakimedi ..	1	Rice Milling ..	1
	6. Russelkonda ..	4	Saw Milling ..	4

District	Centre of location	Total number of Factories	Type of Factories	Number
(1)	(2)	(3)	(4)	(5)
KORAPUT (31 Factories)	1. Gunupur ..	2	Rice Milling ..	1
			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 ..	1
			Tile ..	1
			Automobiles ..	1
	5. Machkund ..	2	General Engineering ..	1
			Electricity ..	1
	6. Boriguma ..	2	Rice Milling ..	2
	7. Kotpad ..	4	Rice Milling ..	4
	8. Nowrangpur ..	4	Rice Milling ..	4
	9. Boipariguda ..	1	Saw Milling ..	1
DHENKANAL (17 Factories)	1. Dhenkanal ..	1	Saw Milling ..	1
	2. Meramundali ..	1	Saw Milling ..	1
	3. Angul ..	15	Bidi ..	13
			Saw Milling ..	1
			Automobiles ..	1
KEONJHAR (1 Factory)	1. Keonjhar ..	1	Printing ..	1
PHULBANI (1 Factory)	1. Baudh ..	1	Tanning ..	1
BOLANGIR (11 Factories)	1. Titlagarh ..	8	Rice Milling ..	1
			Tannery ..	1
			Weaving ..	1
			Tile ..	1
			Saw Milling ..	1
			Printing ..	1
			B. N. R. Workshop ..	1
			Graphite Mining	1
	2. Bolangir ..	2	Bidi ..	2
	3. Kantabanji ..	1	Saw Milling ..	1
SUNDARGARH (8 Factories)	1. Birmitrapur ..	3	Lime ..	1
			Lac ..	2
	2. Hemgir Road ..	1	Saw Milling ..	1
	3. Bisra ..	2	Saw Milling ..	2
	4. Jaraikella ..	1	Saw Milling ..	1
	5. Rajgangpur ..	1	Cement ..	1

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 ..	4
			Soap ..	1
			Saw Milling ..	1
			Ice ..	1
	2. Nawapara Road ..	2	Rice Milling ..	1
			Saw Milling ..	1
	3. Kesinga ..	1	Rice Milling ..	1
MAYURBHANJ (10 Factories)	1. Baisinga ..	1	Rice Milling ..	1
	2. Betnoti ..	3	Rice Milling ..	3
	3. Baripada ..	3	Rice Milling ..	1
			Oil Crushing ..	1
			Textile ..	1
	4. Rairangpur ..	2	Potteries ..	1
			Iron and Steel ..	1
	5. Bahalda ..	1	Glass ..	1

INDEX

(References are to page numbers)

A

Active—workers 247-249, 295.

Activities—unproductive 295, 297; economic 295.

Age—age and marital ratio 369; reliability of age statistics 383; age pyramid 383-385; literacy by age 401-402.

Age group—fertile age group 370-371; late reproductive and old age group 371.

Age structure—unfavourable 101; special features 385; correlation with economic condition 386.

Agrarian—reforms 216-217.

Agricultural—expansion 123-124; development 216; reforms 216; backwardness 267; problem surveyed 269-270; pressure on agricultural land 212.

Agricultural classes—Chapter IV; classification 113-114; percentage in rural areas 163; percentage in urban areas 199; ratio of agricultural population 220; livelihood classification 220; working population among agricultural classes; their secondary m/l 226; proportion of different classes 227, 228; agricultural classes of 1931 and 1951, 227; correlation with holdings of different sizes 231; population classified 267.

Agricultural holdings—source of information 229; definition 229; distribution 229-233; size of holdings 230-231, 233; *See* Holdings.

Agricultural Labour Enquiry—classification of population 222-223; findings of the Enquiry regarding holdings 230.

Agricultural labourers—percentage 118; rural percentage 163; population, dependency and secondary m/l 243; shortage of labour 243-244; under employment 268.

Agriculture—importance of 211; abnormal dependence on 226, 267; dependence on 257-258; difficulties in system 268.

Anglo-Indian—population 437.

Angul—annexation of 4.

Area—of England and Orissa 6; change in Orissa's area 7; Table 132; area of forest, cultivated and uncultivated lands, fallows 250; sown area 250-252.

B

Backward classes—Section IV, Chapter VII (418-433); other backward classes 429-431; backward population 431; ameliorative measures 432-433.

Balasore—formation of district 4; spread of Burdwan fever 37; low standrad of health 38; history of population since 1872, 52-56; condition of health 161; growth of town 187.

Bauxite—deposits 13; mining 302.

Bengali—language 408-409.

Berhampur—growth of town 186.

Bhag tenants—119.

Bhudan Yajna—merits and demerits 268.

Bilingualism—definition and percentage of speakers 409-410.

Birth control—126-127.

Birth rate—of Orissa compared with other countries and States 100-104; of rural areas 157-159; of urban areas 193-194; wrong basis of calculation 97; absence of estimates 99; causes of high rate 100; decline in rate and causes 100-103; trend 103; decline through improved way of life 127.

Bolangir—history of population since 1872, 76-78.

Boys—boys and girls 377.

British rule—termination of 5.

Buildings—construction 314.

C

Car—*See* Motor Vehicle.

Cart—Census 318.

Castes—scheduled 427-429.

Cattle—census 213.

Cement—manufacture 313; factory 325.

Census—first decennial census 34; census of 1881, 34; of 1891, 34; of 1901, 35; summary of censuses 1872-1901, 36; census of 1911, 36; of 1921, 37; of 1931, 38; of 1941, 39; of the last decade 40-45.

Chemicals—manufacture 311.

Children—young children 375-376 ; *See* Boys.

Christian—religion 416.

Chromite—mining 14, 302.

City—definition 175 ; growth of Cuttack 183-185 ; Indian cities compared 185.

Climate—of Orissa 17-20.

Coal—occurrence and fields 13 ; mining 301.

Coastal Division—geology and minerals 12 ; climate and rainfall 18-19 ; distribution and density of population 31 ; *See* Natural Division.

Commerce—percentage of population 120, 163 ; services and industries 315.

Communications—*See* Transport.

Condition—in pre-census days 33 ; material condition in last decade 40-44 ; health condition in rural areas 161-162 ; health condition in urban areas 195-198, 202 ; condition of cultivators of class II, 241 ; of housing 355 ; correlation between age structure and economic condition 386.

Construction—of buildings, roads, bridges, irrigation works, etc., 314.

Consumer—ratio of workers and consumers 248.

Consumption—*per capita* 261 ; actual food consumption 261-263.

Contraceptive measure—secondary importance 127.

Cottage Industries—census of 285 ; summary 324 ; *See* Handicrafts.

Cotton—*See* Textiles.

Crop—rotation of 213 ; acreage of all crops 256 ; cash crops 257 ; preference for food crops 266.

Cross Section—of Orissa 3-4

Cultivating labourers—*See* Agricultural labourers.

Cultivation—progress of 250-266, 269-270 ; area of cultivated and uncultivated land 250 ; extension of 265.

Cultivators of land owned—percentage of population 118 ; percentage in rural areas 163 ; population, sub-classes, dependency and secondary m/l 237-239.

Cultivators of land unowned—percentage of population 119 ; percentage in rural areas 163 ; population, sub-classes, general condition and secondary m/l 240-241.

Cuttack—formation of district 4 ; history of population since 1872, 49-52 ; condition of health 162 ; growth of city 183-185.

D

Dairy—products 308.

Death—from different diseases 107 ; fight against 123 ; causes of 160.

Death rates—of Orissa compared with other countries and States 104-106 ; of rural areas 159-161 ; of urban areas 194-195 ; wrong basis of calculation 97 ; absence of estimates 99 ; annual rate 105 ; high rate 105 ; decline in rate 106 ; trend 109.

Deficit—districts 249.

Density—general population 28-32 ; of States in India 28 ; of foreign countries 28 ; Tables 132-133, 169, 205 ; rural density 147, 166 ; urban density 176-177 ; of cities in India 177.

Dependants—causes of high incidence of dependency 238 ; dependence on agriculture 257-258, 267 ; non-agricultural population 289 ; *See* Earning dependants, Non-earning dependants.

Development—of towns 203.

Dhenkanal—history of population since 1901, 69-71.

Diet—composition 263.

Displaced Persons—number and period of arrival 90-91 ; definition, volume of arrival, occupations, etc. 434-436.

Distillation—industry 309.

Distribution—general population 28-32 ; rural population 144-147, 166 ; urban population 176-180, 202 ; of sex in towns 179-180 ; of non-agricultural population 288.

District—density of population 32 ; distribution of rural population 145-146,149, immigration from other districts 155 ; rural birth rate 158 ; condition of health 161-162 ; rural livelihood pattern 165 ; rural population 149 ; urban population 183 ; movement of urban population 190-191 ; percentage of agricultural and non-agricultural population in urban areas 200 ; proportion of agricultural classes 228 ; distribution of holdings 231-233 ; ratio of non-agricultural population 288 ; deficit districts 249.

District Census Handbook—description and distribution 143.

Divorced—persons 366.

E

Earning dependant—definition 221 ; secondary m/l 224-225 ; cultivators of land owned 237-238 ; *See* Dependant.

Economic—crisis 42-43 ; outlook in rural areas 167 ; holdings 235-236 ; activities 295.

Education—Section I, Chapter VII ; services 320, 402 ; institutions 403.

Elderly—persons 381-382.

Electricity—development and schemes 326-327 ; supply and manufacture of machineries 311.

Emigration—from Orissa 91-95 ; decline in number 91-92 ; occupation of emigrants 92-94 ; of Muslims 94-95 ; Tables 137.

Employees—definition, proportion, ratio, etc. 295-297.

Employers—definition and proportion of population 295-297.

Employment—under-employment of agriculturists 268.

Engineering—workshops 311.

England—area compared with Orissa 6.

Epidemic—influenza of 1918, 37 ; epidemics in 1931-1941 , 39-40 ; outbreak in different districts from time to time 49-85.

Estates—Abolition Act 216.

Extension—of cultivation 265.

F

Factory—list of 326 ; Appendix IV.

Fallow land—area 250 ; figures for different years 265.

Family—composition 358-359 ; trend of family size 359.

Famine—of past centuries 33 ; Na-anka famine of 1866, 33, 34; Ganjam famine of 1889, 35 ; Sambalpur famine of 1900, 35 ; famine or scarcity conditions in different districts from time to time 49-85.

Farming—collective : co-operative 236.

Female—pockets of female minority 363 ; greater survival of infants 373; *See* Sex Ratio.

Fertility—loss of 213 ; fertile age group 370-371

Feudatory States—area 7; *See* Tributary Mahals.

Fever—high death rate from 107-108.

Fishing—industry 298, 324 ; marine, estuarine and inland 299.

Flood—of 1886, 35 ; of 1896, 35 ; of 1931-41,39; occurrence of flood in different districts from time to time 49-85.

Food—position precarious 41-42 ; effects of food scarcity 101 ; habit of the people 263-264 ; production to be increased 264 ; preference for food crops 266 ; production difficulties 266.

Foodstuff—processing and manufacture 303-309 ; retail and wholesale trade in 315.

Footwear—industry 307.

Forestry—industry 299.

Forests—of Orissa 21-23 ; area 250.

Fragmentation—of the holdings 235.

Fuel—retail trade 315.

Furniture—manufacture 312.

G

Gangpur—transfer from Chotanagpur 4.

Ganjam—transfer from Madras 4 ; history of population since 1901, 62-66.

Geographical setting —of Orissa 1.

Geology—of Orissa 9.

Girls—boys and girls 377.

Glass—occurrence of glass sand 14 ; factory 325

Gond—tribe 423-424.

Grain—industry 307.

Growth—of population 33-85 ; during last 50 years 45-46 ; in other States in India 46 ; in foreign countries 46 ; in districts of Orissa 49-85 ; rural population growth 148-152 ; of villages 150 ; urban population growth 181-188, 202 ; growth of city 183-185 ; growth of tonws 186-188 ; progress of cultivation in relation to growth of population 250-266.

Growth rate—mean decennial 44-45 ; of Orissa and India 122 ; inter-census 134-135, 170-171, 206-207 ; rural rate decreasing 148 ; causes of decline 148 ; decennial rural growth rate 148-149 ; of rural population 166 ; urban growth rate slow 181.

H

Handicraft—decline of 282-284.

Handloom—industry 304-305.

Health—of pulbic in last decade 41 ; unsatisfactory public health 106-107 a matter of concern 121 ; of rural public 166-167.

Health condition—in rural areas 161-162 ; in urban areas 195-198, 202.

Health services—in Orissa 320.

Hindi—language 408.

Hindu—religion 415.

History—of Orissa, 4-6.

Holdings—fragmentation 235 ; economic holdings 235 ; *See* Agricultural Holdings.

Home-born proportion—87.

House—definition 351 ; increase in number 353 ; overcrowding 354 ; pressure of population 354 ; shortage in number 355 ; housing condition 354.

Household—definition 352 ; in rural areas 353; in urban areas 354 ; sizes 357 ; distribution 358 ; sex ratio 358.

I

Immigration—into Orissa, natural divisions and districts 88-91, 155-156 ; Tables 136 , 172 , 210 ; from other districts 155.

Immobility—of population 86; extent of 154-155.

Implements—antiquated agricultural implements 213.

Improvement—qualitative improvement of population 127-128.

Independent Workers—definition, proportion, etc. 295-297.

India—population zones 8 ; 1951 population 25 ; density and distribution of population 28-30 ; birth rate 100 ; death rate 104 ; low rate of population growth 122 ; percentage of rural population compared with foreign countries 144-145.

Industrial—resources 284 ; population : *See* Non-agricultural classes.

Industrialization—in 1921-31, 38-39; consequence of 103 ; arguments in favour and against 125.

Industry—importance and limitations of industrial occupations 281-282 ; rise of modern industries 282-284 ; primary industries 298-300; cottage, medium and heavy industries 324-325 ; mining 325-326.

Infant—definition and number 373-374.

Infantile mortality—decline 103.

Inflation—of currency 42-43.

Influenza—epidemic of 1918, 37, 102.

Inland division—geology and minerals 11-12 ; climate and rainfall 17-18 ; distribution and density of population 31 ; *See* Natural Division.

Internal movement—89-90.

Irrigation—insufficiency of 212, 253-255 ; irrigated more than once 255 ; construction and maintenance of irrigation works 314.

Iron—deposits 12-13 ; ore mining 301-302 ; manufacture 310.

J

Japan—example in agricultural prosperity 214-216 ; example in industrial advancement 284-285.

Jewellery—manufacture 313.

Jute—industry 306.

K

Kalahandi—transfer from C. P. 4 ; history of population since 1901, 80-82.

Keonjhar—history of population since 1872, 71-73.

Khondmals—ceded 4.

Kond—tribe 422-423.

Koraput—transfer from Madras 4 ; history of population since 1891, 66-69.

Kumbhipatia—religion 417.

L

Labour—system 243 ; shortage of agricultural labour 243-244.

Labourers—*See* Agricultural Labourers.

Land—reforms 216 ; *per capita* 252-253.

Land area—of forests, cultivated and uncultivated lands, fallows 250.

Language—Section II, Chapter VII (405-412) ; tribal languages 405, 408.

Leather—industry 307 ; retail trade 315.

Limestone—deposits 14.

Literacy—Section I, Chapter VII (398—404) ; definition 398 ; comparison with other States 400.

Livelihood—pattern 113-120, 163-165, 199-201 ; classes 113-115, 289 ; principal means 115 ; comparison with other States 116-117 ; distribution of population by livelihood classes 118-120 ; Tables 172, 209 ; livelihood classes of agricultural population 220 ; livelihood sub-classes 221-222 ; secondary means of livelihood of agricultural classes 224-226 ; literacy by livelihood classes 402.

M

Machinery—manufacture 311.

Mahanadi—description of course 2-3.

Malaria—high death rate 107.

Male—excess of married males 368-369 ; *See* Sex Ratio.

Manganese—mines 13 ; mining 302.

Manufacture—of foodstuffs, textiles, leather, etc. 303-309 ; of metals, chemicals and products 310-311 ; of wood, non-metals, bricks, cement, paper, etc. 312-313.

Manuring—255-256.

Marriage—marital status ratios 366-372 ; early marriage 370 ; late marriage 371.

Material condition—in the last decade 40-44.

Mayurbhanj—merger with Orissa 5 ; history of population since 1872, 83-85.

Means of livelihood—principal 115.

Median—size of agricultural holdings 233-235.

Medical—preparations 311.

Merger—of states 5.

Metal—mining 302 ; processing and manufacture 310-311 ; non-ferrous 310.

Mica—occurrence 14.

Middle aged—; ersons 379-380.

Migration—earlier accounts 86 ; types of 87-88 ; net migration 95-96 ; Tables 138 ; limitation of migration statistics 153 ; rural-urban migration 153-154 ; extra-State migration 154 ; from beyond India 155, 191 ; from other parts of India 155, 191 ; from rural areas 189 ; migrants from other districts 190-191 ; *See* Movement ; Immobility ; Immigration ; Emigration .

Mill—textile 305.

Mineral—of Orissa 9-15 ; early history of mining 9 ; unmethodical development 10 ; resources 10 ; economic 12.

Mining—industry 301-302, 325-326.

Mother tongue—*See* Language.

Motor vehicle—census of 318.

Movement—of general population 86-96 ; of rural population 153-156 ; of urban population 189-191 ; inter-village movement 154 ; classification of figures 154 ; *See* Migration.

Muslim—religion 415-416.

N

Natural Division—description of 7-9 ; growth of population 47-48 ; livelihood pattern 117 ; rural distribution 145 ; growth of rural population 149 ; immigration into 155-156 ; rural birth rate 158 ; rural death rate 159 ; rural livelihood pattern 164-165; distribution of urban population 179 ; growth of urban population 182 ; movement of urban population 189-190 ; livelihood classes in urban areas 200 ; proportion of agricultural classes 228 ; ratio of non-agricultural population 288.

Natural increase—of general population 97-112 of rural population 157-162 ; of urban population 192-198 ; calculated figures 109-110.

Natural population—variation 96 ; Tables 138.

Nawapara—transfer from C. P. 4.

Net area—*See* Area.

Nilgiri—national movement 5.

Non-agricultural occupations—immportance of 281 ; limitations of 281 ; index of 287.

Non-agricultural population —Chapter V ; classification 114-115 ; percentage in rural areas 163-164 ; percentage in urban areas 199 ; percentage of population in difierent census 282 ; ratio of population 288 ; distribution 288 ; summary 324.

Non-cultivating owners of land—percentage of population 119 ; rural percentage 163 ; population, dependency and secondary m/l 245-246.

Non-earning dependant—definition 221 ; cultivators of land owned 238 ; *See* Dependant.

Non-tribal—Religion 417.

O

Occupation—unproductive 295, 297.

Occupational—Distribution in 1931 and 1951 censuses 292-294.

Oil—vegetable 308.

Old persons—*See* Middle aged and Elderly persons.

Optimum population—129-130.

Orissa—geographical setting 1 ; physical features 1-2 ; cross section 3-4 ; history 4-6 ; formation into separate province 4, 39 ; resources 5-6, 284 ; comparison of areas 6 ; population 25 ; over populated ? 129 ; ability to support larger population 130 ; future trend 130-131 ; development of resources 327.

Oriya—language 407.

Other services and miscellaneous sources—percentage of population 119-120, 163.

Over population—129.

Ownership of land—definition 223 ; *See* Cultivators of land owned.

P

Paper—manufacture 313 ; mill 325.

Paroja—tribe 425.

Partly literate—definition 398 ; actual number 400.

Patna—transfer from C. P. 4.

Per capita—land 252-253 ; consumption of food 261, 269.

Pharmaceutical—preparations 311.

Phulbani—history of population since 1901, 73-76.

Physical features—of Orissa 1-4.

Police-station—small and large 32.

Population—Chapter I ; zones 7 ; of Orissa 25 ; of other States in India 25 ; distribution and density of 28-32 ; growth of 33-85 ; of Orissa in 19th century 33 ; trend 46-47 ; movement of 86-96 ; world population 121 ; qualitative improvement 127-128 ; optimum 129-130 ; over population 129 ; growth of population in relation to progress of cultivation 250-266.

Population problem—primary 122 ; complexity of 123 ; ultimate solution 128-129.

Ports—in Orissa 318-319.

Postal—services 319.

Post Office—remittances and deposits in last decade 43.

Poverty—in plenty 130.

Pressure—on agricultural land 212.

Price—of commodities 37 ; of common rice 42 ; rise in 43.

Primary—industries 298-300.

Processing—of foodstuffs, textiles, leather, etc. 303-309 ; of metals, chemicals and products 310-311 ; of wood, non-metals, structural products such as, bricks, tiles, etc., cement, paper 312-313.

Production—actual production of food 261-263 ; food to be increased 264 ; difficulties in food production 266.

Production other than cultivation—percentage of population 120, 163.

Productivity—causes of low productivity 212-214.

Progress—of cultivation 250-266, 269-270.

Public health—in last decade 41 ; unsatisfactory 106-107 ; a matter of concern 122 ; in rural areas 166-167.

Pulses—industry 307.

Puri—formation of district 4 ; history of population since 1872, 56-59 ; growth of town 186

Pyramid—age pyramid 383-385.

R

Railway—increase in traffic 43-44 ; inadequacy need for extension 316-317.

Rainfall—of Orissa 17-20.

Rairakhol—transfer from C. P. 4.

Rate—*See* Growth rate.

Registration area—of vital statistics : not extensive 97-98 ; rural registration area 157 ; urban registration area 192-193.

Registration system—of vital statistics : defects, omissions, procedure, deterioration in system 97-100 ; extent of error 111-112.

Religion—Section III, Chapter VII (413-417).

Research—services 402.

Resources—of Orissa 5-6, 284 ; mineral 10 development of 327.

Rice—price of 42 ; *Vs.* wheat 264 ; mills 325, 326.

Rivers—of Orisra 2-3.

Road—transport 120, 317-318 ; construction. 314 ; road mileage 317.

Rope-making—industry 306.

Rotation—of crops 213.

Rural—Chapter II ; rural-urban proportion 144 ; rural percentage in India and other countries 144 ; population of districts 149 ; uplift 167-168 ; rural character of towns 173 ; *See* Village.

S

Salt—manufacture 308, 324.

Sambalpur—transfer from C. P. 4; history of population since 1872, 59-62; growth of town 187.

Sanitary—services 314.

Santal—tribe 424.

Saora—tribe 424-425.

Sarada—Act, 371-372.

Sarana—religion 416-417.

Scheduled castes—*See* Castes.

Scheduled tribes—*See* Tribes.

Secondary means of livelihood—of agricultural classes 224-226; of cultivators of land owned 238-239; of cultivators of land unowned 241; of cultivating labourers 242-243; of non-cultivating owners 245-246; of non-agricultural population 291-292.

Self-sufficient—districts 249.

Self-supporting person—definition 221; having secondary m/l 225; cultivators of land owned 237; non-agricultural population 289-290.

Semi-active worker—*See* Worker.

Services—miscellaneous 322-323; village 320.

Sex ratio—In Orissa and other States 360; in rural and urban areas 363; among agricultural and non-agricultural classes 364-365; fluctuation in female ratio 360-361; causes of decline 362; of young children 375; of boys and girls 377; of young men and women 378; of middle aged persons 379; of elderly persons 381.

Sikh—religion 417.

Silk—industry 306.

Small scale industries—*See* Cottage Industries.

Smallpox—incidence 109; recorded number of deaths 107.

Soil—description 15-17; erosion 17.

Sonepur—transfer from C. P. 4.

Statistics—*General population*: references 25-26; area, population and density 132; variation and density 133; inter-census growth rate 134-135; immigration 136; emigration 137; migration 138; natural population 138. *Rural population*: references 142-143; distribution 169; variation and density 169; inter-census growth rate 170-171; livelihood pattern 172; immigration 172. *Urban population*: references 175; distribution 204; variation and density 205; inter-census growth rate 206-207; towns classified and city 208; livelihood 209; immigration 210. *Vital statistics*: of general population 134-135; of rural population 170-171; of urban population 206-207. *Agricultural*: deficiency of statistics 217; Subsidiary Tables 218-219, 271-279. *Industrial*: reliability of non-agricultural statistics 286; Subsidiary Tables 328-350. *Non-census statistics*: inadequate erroneous 26; statistics dispensable 26-27, 141. *Families, sexes and age*: reference 352; comparability 352; Subsidiary Tables 387—396; reliability of age statistics 383. *Literacy and education, religion and backward classes*—Subsidiary Table 7 series 438-451.

Steel—*See* Iron.

Stock raising—population 298.

Stone—quarrying 302.

Storage—services 319.

Students—number 403.

Sub-classes—livelihood 221; proportion 223-224; cultivators of land owned 237; cultivators of land unowned 240-241; non-agricultural population 289.

Sugar—industry 308.

Sundargarh—history of population since 1872, 78-80.

Surplus—districts 249; food 261; exportable 263; real cause of food surplus 269.

T

Telugu—language 408.

Terminology—115.

Textile—processing and manufacture 303-306; retail trade 315; industry 324; mills 325.

Tobacco—industry 308.

Town—emergence of 173; definition 174; classification 177-178; distribution of population 178-179 revision of list of towns 183; future towns 183; growth of towns 186-188.

Trade—retail trade in foodstuffs, fuel, textiles, etc. 315; wholesale trade in commodities 315; *See* Commerce.

Transport—percentage of population 120; transport by road, railway and water 120, 316-319; manufacture of equipment 310.

Trend—change since 1921, 46-47 ; future 130-131.

Tribal—religion 416 ; language 405, 408.

Tribes—scheduled 419-427 ; problem of tribes 425-427.

Tributary Mahals—4 ; *See* Feudatory States.

U

Unmarried persons—*See* Marriage.

Unproductive—occupations 295 ; activities 297.

Urban—Chapter III ; rural-urban proportion 144 ; percentage of population 176 ; density 176 ; composition of urban population 189.

Urbanization—causes of slow urbanization 173-174 ; increasing tendency 174 ; extent of 178.

Urdu—language 408.

Utility—services 314.

V

Vanadium—occurrence 14.

Vegetable oil—industry 308 ; factory 325.

Village—stability of life 141 ; definition 141-142 ; uninhabited village 142 ; average population 146 ; actual number in different districts 150 ; growth 150-151 ; large villages 151 ; watchmen and servants 320 ; *See* Rural.

Vital statistics—wrong basis of calculation 97 ; procedure of registration 98-99 ; deterioration in system 99 ; value of 100 ; *See* Statistics.

W

Waste lands—area 265.

Water—Transport 318-319.

Wearing apparel—industry 307.

Weaving—industry 304.

Wheat— *Vs.* rice 264

Widowed—persons 366, 367.

Wood—wood cutting industry 299 ; manufacture of wood products 312.

Wool—industry 306.

Worker—active and semi-active workers in cultivation 247-249 , livelihood class 247 ; ratio of workers and consumers 248 ; independent workers 295-297.

Working population—among cultivating labourers 242 ; among non-cultivating owners 245.

Workshop—engineering 311.

World population—fast growth 121.

World War II—effects 40.

Y

Year—1921 a turning point 121 ; importance of 1921, 148.

Yield—low yield of crops 211 ; improvement of yield 264-265.

Young—children 375-376 ; men and women 378.

Z

Zamindary—abolition 216.

Zones—of population 7.

OGP (Census) 13—800—10-12-1953