Government of Orissa

Economic Survey 2010-11

Planning and Coordination Department

Economic Survey

2010-11

ORISSA

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Directorate of Economics & Statistics
Government of Orissa

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Foreword

I am glad to learn that the Planning & Co-ordination Department has brought out the Orissa Economic Survey, 2010-11 with a view to providing a clear idea of past performance of Orissa's economy and its outlook for the future.

The Orissa Economic Survey, 2010-11 takes note of the efforts of the State Government to bring visible improvements in the State finances, to reduce Debt-GSDP ratio from 55.92% in 2002-2003 to the sustainable level of 23.24% in 2009-10, to create fiscal space for higher plan and capital outlays to propel growth in the economy, and to accelerate the pace of development. The analysis presented in the Survey, 2010-11 clearly brings out that there is a perceptible structural change in Orissa's economy which has been following a high growth trajectory in recent years. Orissa's real per capita incomes are rising and the gap with national averages has been narrowing. The State economy has grown, in real terms at 2004-2005 prices, at an annual average rate of 9.57% during the first three years of the 11th Five Year Plan. A tentative analysis of NSS data has indicated that there has been 11.73 percentage point reduction in poverty between 2004-05 to 2007-08. This is an impressive achievement. The Survey, 2010-11, inter alia, highlights challenges faced by, and opportunities available to, Orissa.

I sincerely hope that the Orissa Economic Survey, 2010-11 will be useful to policy makers, academics and general public.

(NAVEEN PATNAIK)

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Preface

The Orissa Economic Survey is a very useful document and attracts attention of legislators, policy makers, academics, researchers and others. The Planning & Co-ordination Department has prepared the Orissa Economic Survey, 2010-11 with a view to providing a clear idea of past performance of Orissa's economy and its outlook for the future.

Orissa's economy has been undergoing a structural change, with the service sector becoming more and more pronounced. As per "quick estimates" for 2009-10, the service sector accounts for 53.73% of the real Gross State Domestic Product (GSDP) for Orissa, followed by industry sector (27.82%) and agriculture sector (18.44%). This has significant implications for those who depend on these sectors for their employment and livelihoods.

The State economy has followed a high growth trajectory in recent years. In the first three years of the 11th Five Year Plan, Orissa's economy has grown, in real terms at 2004-05 prices, at an average rate of 9.57% per annum. The real per capita income has been rising and the gap with the national average has been declining. A tentative analysis of NSS data has indicated that there has been 11.73 percentage point reduction in poverty between 2004-05 and 2007-08. With a view to improving the quality and extent of productive infrastructure, the Government has focused on Bijli, Sadak and Pani.

There are, however, acute regional, social and gender disparities. This is a matter of serious concern and has attracted attention of the Government. The Social sectors including education, health, drinking water, nutrition, sanitation as well as development of the marginalised groups and backward regions have gained importance with the emergence of the concept of human development index. The State's achievements in social sectors have been impressive in the recent years.

Several scholars including Dr. Manoj Panda, Director, CESS, Hyderabad, Dr. Iteeshree Pattnaik, Assistant Professor, Gujarat Institute of Development Research, Dr. Tapas Kumar Sen, Professor, National Institute of Public Finance & Policy, New Delhi, and Professor A.K. Mohanty of RICOR have contributed to the richness of this Survey. The officers of Planning & Co-ordination Department, Finance Department and Directorate of Economics & Statistics have added their efforts to this Survey.

It is hoped that the Orissa's Economy Survey, 2010-11 will be more useful to various stakeholders including legislators, policy makers, academics, researchers and others.

(A. U. Singh Deo)

Acknowledgement

Several organisations and individuals have contributed to the revision of the Orissa Economic Survey, 2010-11. We are grateful to Sj. Naveen Patnaik, Hon'ble Chief Minister, Orissa who inspired us to undertake the task of revision of the survey. We are also grateful to Sj. A. U. Singh Deo, Hon'ble Minister, Planning & Coordination and Public Enterprises, who lent his support and authorised the task of revision of the survey.

Shri B. K. Patnaik, Chief Secretary and Chief Development Commissioner, guided us through the tedious process of revision of the survey. This revision would not have been possible without full support and guidance from Shri R. N. Senapati, Development Commissioner. Their efforts and support are gratefully acknowledged.

Shri J. K. Mohapatra, Principal Secretary, Finance lent his support to this undertaking. He provided considerable intellectual inputs to improve the quality and content and readily spared the services of Shri D. K. Jena, Joint Secretary and Shri S. Rath, Under Secretary, both of Finance Department, who reviewed the Chapter on Public Finance. They provided us desired data for different components of the survey. We are grateful to them for their support.

Dr. Tapas Kumar Sen of NIPFP, New Delhi, Dr. Manoj Panda, Director and his team from CESS, Hyderabad, Professor Itishree Pattanaik of GIDR, Ahemdabad and Prof. A. K. Mohanty of RICOR have contributed to the richness of this survey. Their contributions are gratefully acknowledged.

This work would not have been possible without the active cooperation of my colleagues in Planning & Coordination Department. Shri Panchanan Dash, Special Secretary (Coordination) has contributed his efforts to improve this survey. Shri G. C. Paul, Director-cum-Additional Secretary (Plan), Shri R.C. Kar, Director (DFC)-cum-Additional Secretary, Shri G. C. Dash, Shri J. K. Mishra, Dr. N. K. Panda and Smt. J. Mohapatra, all Joint Directors, Shri D. Das Mohapatra, Shri A.C. sarangi, Shri B. N. Dash and Smt. Maitri Patnaik, all Deputy Directors and others from Planning & Coordination Department did most of editing of the draft survey. Dr. Dillip Ray, Deputy Director and Shri P. K. Dash, SI both of Directorate of Economics & Statistics took great pains and made untiring efforts from beginning to the end of the process of revision of the survey. Shri M. K. Nanda, Director, Shri S. S. Mishra, Joint Director and other officers of DES also assisted us at various stages. Shri C. R. Satapathy, Deputy Director, Shri B. K. Sahu, Specialist (MIS) and others from Poverty and Human Development Monitoring Agency (PHDMA) assisted us at different stages of this task. PHDMA funded the entire exercise and shared other responsibilities for completion of the task. Their efforts and contribution are sincerely appreciated. M/s New Concept Information Systems Pvt. Ltd. helped us in cover design & layout design, typesetting and printing of this document. We sincerely thank them for their cooperation in finalising this document in a time bound manner.

The process of preparation of this report has been an interactive and enriching experience. We hope this report will be helpful to all those, who intend to use it. We welcome suggestions for further improvement in this document.

3/2/11

(R. V. Singh)
Special Secretary to Government
Planning & Coordination Department, Orissa

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Abbreviation

ANPM	Atma Nijukti Paramarsha Melas
APICOL	Agriculture Promotion Investment Corporation Ltd
ART	Anti Retro viral Therapy
ASCAD	Assistance to State for Control of Livestock Deseases
AWC	Anganwadi Centre
B.Ed	Bachelor in Education
BALCO	Bharat Aluminium Company
BCP	Boundary Change Proceeding
BRGF	Backward Region Grant Fund
BW	Bore Well
CARD	Coperative Agricultural and Rural Development Bank
CBSE	Central Board Secord of Secondary Education
CC	Credit Cooperatives
CCTN	Crime & Criminal Cracing Network & System
C-D Ratio	Credit-Deposit Ratio
CDM	Clean Development Mechanism
CES	Centre for Environment Studies
CESCO	Central Electricity Coporation Ltd
CESU	Cenral Electricity Supply Unit
CGP	Captive Generating Plants
CIFA	Central Institute of Freshwater Aquaculture
CMR	Colossal Magneto Resistance
CPI	Consumer Price Index
CPP	Captive Power Plant
CPSU	Central Public Sector Undertaking
CRRI	Central Rice Research Institute
CSC	Common Services Centre
CSO	Cetral Statistical Organisation
CVRC	Central Variety Release Committee
DCCB	District Cooperative Central Bank
DFID	Department for International Development
DGFT	Director General Foreign Trade
DIC	District Industry Centre
DLCC	District Level Coordination Committee
DPAP	Drought Prone Area Programme

DS	Debt Stock
DSR	District Sub Register
DW	Dug Well
DWCRA	Development of Women & Children in Rural Areas
DWCUA	Development of Women & Children in Urban Areas
EDC	Eco Development Committee
EIA	Environment Impact Assessment
ENVIS	Environment Information System
EPIP	Export Promotion Industrial Park
ER	Elephant Reserve
EWS	Economically Weaker Section
FCAL	IDCOL Ferro Chrome & Alloys Ltd
FCI	Food Corporation of India
FFDA	Fish Farmers Development Agengy
FSAI	Frozen Seimen Artificial Inseminatrion
FSCS	Farmers Service Cooperative Society
FSRE	Farming System Research Education
GDDP	Gross District Domestic Product
GDP	Gross Domestic Product
GFR	General Fertility Rate
GGY	Gopabandhu Gramin Yojana
GRIDCO	Grid Corporation of Orissa
GSDP	Gross State Domestic Product
HCFC	High Carbon Ferro Chrome
HDI	Human Development Index
HUDCO	Housing & Urban Development Corporation
HYV	High Yeilding Variety
IAY	Indira Awas Yojana
ICDS	Integrated Child Development Scheme
ICSE	Indian Council of Secondary Education
ICT	Information & Communication Technology
ICTC	Integrated Counselling & Testing Centre
IDCO	Infrastructure Development Corpoaration
IDCOL	Industrial Development Corporation of Orissa Ltd
IDDP	Integrated Diary Development Programme
IEC	Onformation Education & Communiocation
IGNOAP	Indira Gandhi National Old Age Pension
IID	Industrial Infrastructure Development

IIT	Indian Institute of Technology
IKIWL	IDCOL Kalinga Iron Works Ltd
IMIS	Integrated Management Informatiopn System
IMR	Infant Mortality Rate
IMS	Institute of Material Science
IPICOL	Industrial Promotion & Investment Corporation Ltd
IPM	Integrated Pest Management
IRDP	Integrated Rural Development Programme
ISBEID	Indian State level Basic Environment Information Database
ISOPOM	Integrated Scheme of Oilseeds, Pulses, Oilpalm & Maize
IT	Iformation Technology
ITB	International Tourism Bureau
ITDAs	Integrated Tribal Development Agency
ITI	Industrial Training Institute
IVLP	Institute of Village Linkage Programme
IWDP	Integrated Watershed Development Programme
JFM	Joint Forest Management
JNNURM	Jawaharla Nehru Urban Renewal Mission
KBK	Kalandi Bolangir Koraput
KCC	Kissan Credit Card
KKGC	Kalinga Kissan Gold Card
KSY	Kishori Sakti Yojana
KVIB	Khadi & Village Industry Board
KVIC	Khadi & Village Industry Commission
KVK	Krishi Vigyan Kendra
KW	Kili Watt
LAC	Live Stock Aid Centre
LAMPS	Large Sized Adivasi Multi Purpose Cooperative Society
LIG	Lower Income Group
LSG	Low Spending Group
LT	Luxury Tax
MARKFED	Marketing Federation
MCL	Mahanadi Coal field LTD
MDF	Medium Dense Forest
MHU	Mobile Health Units
MIC	Multipupose Identity Card
MIS	Management Information System
MMR	Maternal Mortality Rate

MOEF	Ministry of Environment & Forest
MoU	Memorandum of Understanding
MPCE	Monthly Per Capita Expenditure
MPCS	Milk Producer's Cooperative Society
MPEDA	Marine Product Export Development Agency
MR	Mandated Revenue
MRP	Mixed Recall Period
MSE	Micro & Small Enterprises
MSG	Middle Spending Group
MSME	Micro,Small & Medium Enterprises
MSW	Municpal Solid Waste
MT	Metric Ton
MTPA	Million Ton Per Annum
MTW	Medium Tube Well
MWSA	Mean Water Spread Area
NABARD	National Bank for Agriculture & Rural Development
NACP	National Aids Control Programme
NAFED	National Federation
NAIS	National Agriculture Insurance Scheme
NALCO	National Aluminium Company
NBFC	Non Banking Finance Companies
NBMMP	National Bio Gas & Manure Management Programme
NCLP	Natioal Child Labour Project
NDDP	Net District Domestic Product
NDP	Net Domestic Product
NEAC	National Environment Awareness Campaign
NESCO	Northern Electricity Corporation Ltd
NFSM	National Food Security Mission
NH	National Highway
NHFDC	National Handicapped Finance Development Corporation
NHM	National Horticulture Mission
NIC	National Informatic Centre
NICRE	Non Interest Committed Expenditure
NOAP	National Old Age Pension
NPA	Non Performing Assets
NPCBB	National Project for Cattle & Buffalo Breeding
NREGA	National Rural Employment Guarentee Act
NRHM	National Rural Health Mission

NRSE	New & bRenewable Source of Energy
NSDP	Net State Domestic Product
NSS	National Sample Survey
NTPC	National Thermal Power Corporation
NWDPRA	National Watershed Development Programme for Rural Areas
NWFF	National Welfare for Fishermen
OAIC	Orissa Agro Industries Corporation
OCAC	Orissa Computer Application Centre
OCT&SF	Orissa Cooperative Tasar & Silk Federation Ltd
OERC	Orissa Electricity Regulatory Commission
OF	Open Forest
OFDC	Orissa Forest Development Corporation
OHPC	Orissa Hydro Power Corporation Ltd
OMC	Orissa Mining Corporation
OMFED	Orissa State Cooperative Milk Producer's Federation Ltd
OPERP	Orissa Public Enterprises Reform Programme
OPGC	Orissa Power Generation Corporation
OPOLFED	Orissa State Poultry Producer's Coperative Marketing Federation ltd
OPTCL	Orissa Power Transmission Corporation Ltd
OREDA	Orissa Renewable Energy Development Agency
ORHDC	Orissa Rural Housing Development Corporation
ORMAS	Orissa Rural Development & Marketing Society
ORSAC	Orissa Space Application Centrwe
OSCARD	Orissa Cooperative Agriculture & Research Development
OSCHC	Orissa State Cooperative Handicraft Corporation
OSEMS	Orissa State Employment Mission Society
OSFC	Orissa State Finance Corporation
OSFDC	Orissa State Finance Development Corporation
OSWAB	Orissa State Welfare Advisory Board
OSWAN	Orissa State wide Area Network
OTDC	Orissa Tourism Development Corporation
OTIDA	Orissa Transport Infrastructure Development Authority
OTR	Own Tax Revenue
OTRAC	Orissa Transport Regulatory & Advisory Council
OUAT	Orissa University of Agriculture & Technology
OWDM	Orissa Watershed Development Mission
PACS	Primary Agricultural Cooperative Society
PCCF	Principal Chief Conservator of Forest

PDD	Project Design Document
PDS	Public Distribution System
PFCS	Primary Fisherman Coperative Society
PGCIL	Power Generation Corporation of India Ltd
PHC	Public Health Care
PHDMA	Poverty & Human Development Monitoring Agency
PLF	Plant Load Factor
PLI	Postal Life Insurance
PMEGP	Prime Minister Employment Generation Programme
PMGSY	Pradhan Mantri Gram Sadak Yojana
PMRY	Prime Minister Rojgar Yojana
PPP	Public Private Partnership
PSES	Public Sector Enterprises
PSU	Public Sector Undertaking
PTG	Primitive Tribal Group
PTS	Public Telephone Services
PWCS	Primary Weavers Cooperative Society
RBI	Reserve Bank of India
RD	Revenue Deficit
REC	Rural Elrctrification Corporation
REGP	Rural Employment Generation Programme
RGGVY	Rajiv Gandhi Viduitkaran Yojana
RHA	Rehabilitation of Handicraft Artisans
RIDF	Rural Infrastructure Development Fund
RLIP	River Lift Irrigation Points
RLTAP	Revised Long Term Action Plan
RMC	Regional Cooperative Marketing Society
ROR	Record of Right
RPLI	Rural Postal Life Insurance
RPRC	Regional Plant Resource Centre
RRB	Regional Rural Banks
RVEP	Remote Village Electrification Programme
RVP	River Valley Project
RWSS	Rural Water Supply & Sanitation
SAMS	Student Academic Management System
SC	Scheduled Caste
SCA	Special Central Assistance
SCST	State Council on Science & Technology

SDC	State Dat Centre
SEZ	Special Economic Zone
SGSY	Swarna Jayanti Gram Swarojgar Yojana
SHG	Self Helf Group
SIDBI	Small Industry Development Bank of India
SJSRY	Swarna Jayanti Sahari Rojgar Yojana
SLSWCA	State Level Single Window Clearance Authority
SOAP	State Old Age Pension
SOUTHCO	Southern Electricity Corporation Ltd
SPCB	State Pollution Control Board
SR	Sub Register
SSI	Small Scale Industries
SSNP	Social Safety Net Programme
ST	Scheduled Tribe
STA	State Transport Authority
STD	Sexually Transmitted Disease
STD	Subscriber's Trunk Dialing
STEP	Support to Training & Employment Programme
STPI	Software Technology Park of India
STW	Shallow Tube Well
SVRC	State Variety Release Committee
T&D	Transmission & Distribution
TED	Turtle Extruder Devises
TFG	Tenant Farmers Group
TISCO	Tata Iron & Steel Company
TMT	Thousand Metric Ton
TOF	Trees Outside Forest
TPS	Thermal Powr Station
TRYSEM	Training for Rural Youth for self Employment
TSC	Total Sanitation Campaign
TTF	Travel & Tourism Fair
UEE	Universal elementary Education
ULB	Urban Local Body
UNDP	United Nation Development Programme
URP	Uniform Recall Period
USEP	Urban Self Employment Programme
UWEP	Urban Wage Employment Programme
VAL	Vedanta Aluminium Ltd

VAT	Value Added Tax
VCTC	Voluntary Counselling & Testing Centre
VDF	Very Dense Forest
VRS	Voluntary Retirement Scheme
VSS	Vana Sarankshan Samiti
VSS	Voluntary Separation Scheme
WDF	Watershed Development Fund
WESCO	Western Electricity Supply Corporation Ltd
WODC	Western Orissa Development Council
WORLP	Western Orissa Rural Livelihood Project
WPR	Worker Population Ratio
WSHG	Women Self Help Groups
WTM	World Tourism Mart
WTO	World Trade Organisation

CHAPTER 1

Overview

Landmass; 1,55,707 sq. km.
Districts: 30
Subdivisions: 58
Tehsils: 316
Community Development Blocks: 314
Urban Local Bodies: 103
Gram Panchayats: 6,234
Villages (Inhabited): 47,529
Villages (Un-inhabited): 3,820
Villages (total): 51,349

1.1 Executive Summary

Orissa's economy has been following a high growth trajectory in recent years. In real terms at 1999-2000 prices, Orissa reported an average annual growth rate of 9.51 percent for the 10th Five Year Plan against a target of 6.20 percent and achievement of 5.30 percent for the 9th Plan. "Quick estimates" put Orissa's real growth rate in 2009-10 at 10.57 percent at 2004-05 prices. The State economy has grown, in real terms at 2004-05 prices, at an average annual rate of 9.57 percent during the first three years of the 11th Plan. This bounce-back is remarkable and is in line with national trends. India's economy has also achieved high growth in 2009-10 after growth recession in 2008-09.

In terms of real per capita income, the State has lagged behind the national average ever since independence. In 1950-51, Orissa's real per capita income was about 90 percent of the national average, but in 2002-03 it came down to about 61 percent of the national average. This long-term falling trend in real per capita income since 2004-05 has not only been arrested, but reversed as well. The State per capita income has started rising and the gap with the average national per capita income is reducing steadily. In relative terms, if the per capita net domestic product of India is one rupee,

Orissa's per capita net state domestic product in 2009-10 was 72 paise.

Similar to other states, Orissa's economy has been undergoing a structural change, with the service sector becoming more and more pronounced. In 2009-10 (quick estimates), the service sector accounted for about 54 percent of the Gross State Domestic Product (GSDP) followed by industry (28%) and agriculture (18%). The high growth rate recorded by the State in the first decade of this century comes mainly from that in the industrial sector. The growth in the agriculture sector continues to be highly volatile due mainly to adverse impacts of natural shocks such as cyclones, droughts and floods. The service sector has been growing in a comparatively stable manner.

Among the districts, over the period 1999-2000 to 2006-07, the average annual growth rate of Jajpur was the highest (11.7%) followed by Keonjhar (11.1%) and Sundargarh (10.2%). The lowest average growth rate was witnessed in Malkanagiri (2.6%) for the same period. In 2006-07, the real per capita net district domestic product at 1999-2000 prices was highest for Angul district and lowest for Nabarangpur.

As Census data shows, the workers' participation rate in Orissa at 38.79 percent was slightly lower than 39.1 percent at the national level in 2001. Compared to the 1991 census, in 2001 the share of marginal workers in the total workforce increased substantially from 14 percent to 33 percent, while the share of main workers declined from 87 percent to 67 percent. The share of main workers in the agricultural sector (cultivators and agricultural workers) declined from 73 percent in 1991 to 58 percent in 2001. This indicates that, although the majority of population in the State still depend on agriculture directly or indirectly, the level of dependence has declined.

As per the NSS data, the rate of unemployment in the State has fallen lately - from the 61st round (July 2004-June 2005) to the 64th round (July 2007-June 2008). This stands true for both rural and urban areas and among casual workers and those who have full time jobs. But the State's unemployment rate is higher than the national rate of unemployment. The share of employment in the public sector continues to be higher than that in the private sector, although the latter has shown steady increase. It is, however, heartening to note that the share of women employees in the organised sector has been steadily increasing and stood at 16 percent in 2008.

The cost of living in rural Orissa is one of the lowest in the country. The cost of living in urban Orissa also used to be lower than the rest of India in the past. This is, however, no longer the case.

1.2 The Agriculture Sector

Although this sector includes agriculture, animal husbandry, fisheries and forestry sub-sectors, it contributes less than 20 percent towards the State's Gross Domestic Product. However, it still provides employment and sustenance, directly or indirectly, to more than 60 percent of the State's total work-force. In this sense, the agriculture sector is still the "mainstay" of Orissa's economy. It suffers from frequent natural shocks like cyclones, droughts and flash floods. Despite wide annual variations in its growth, the agriculture sector has grown, in real terms at 2004-05 prices, at an average annual rate of 4.80 percent in the first three years of the 11th Five Year Plan.

The total food-grains production has generally been fluctuating. It was 75.51 lakh tonnes in 2009-10 as compared to 73.93 lakh tonnes in 2008-09. Paddy still constitutes about 90 percent of total production of food-grains and continues to be a dominant crop in Orissa, though in terms of acreage, there has been a gradual shift from paddy to cash crops. Though paddy productivity has been slowly increasing and is of the order of 15.85 quintals / ha in 2009-10, it is much less than the national average.

It is heartening to note that the coverage of area under High-Yield-Variety (HYV) paddy has increased over time and the average yield rate of HYV paddy is much higher at 26.11 quintals per ha in 2009-10. Some districts such as Sonepur have reported much higher yield rates of HYV paddy in the order of 35 quintal per ha. It is also a matter of some satisfaction that cropping intensity in Orissa for

2007-08, the latest year for which data are available both for Orissa and India, is much higher at 160 percent than the national average of 139 percent. These positive developments auger well for overall improvement of the agriculture sub-sector and increase in production in Orissa.

Inadequate and erratic irrigation still remains a major constraint for improving agriculture and agricultural productivity. Irrigation intensity in the State was only 31 percent in 2006-07 in comparison to the all-India average of 44 percent. However, the situation in this regard has been gradually improving. With a view to assuring more irrigation facilities as quickly as possible, the State Government launched in 2009-10 two innovative irrigation schemes, i.e., (i) construction of check dams and (ii) sustainable harvesting of groundwater through installation of bore wells at massive scales. Although there is considerable improvement in the use of fertilisers and other inputs, the rate of fertiliser use and other inputs in the State still remains lower than the national average.

1.3 The Industrial Sector

The high growth rate of the State's economy in recent years has been led by high growth in the industrial sector. This sector has averaged a real annual growth rate of 12.56 percent, at 2004-05 prices, during the first three years of the 11th Five Year Plan. In this survey, the industrial sector has been defined to include manufacturing, mining and quarrying and electricity- gas-water supply. The manufacturing sub-sector contributes about 60 percent of real GSDP within the industrial sector. Within manufacturing, the share of registered manufacturing is high (86%) and increasing over time.

Most large-scale industries in Orissa are mineral-based. In producing steel, Orissa retains 10 percent of the total capacity of the nation, while it has 25 percent of total iron ore reserves in the country. Orissa has been receiving heavy investments in the industrial sector in recent years. There are new potential entrants such as Vedant, Jindal and Posco into this sector in Orissa. If and when these investments fully materialise, the steel producing capacity of the State will improve substantially and Orissa will grow at a much faster rate.

It is not so widely known that Orissa occupies the first place in the country in aluminum, both in terms of production capacity and actual output. This has happened after NALCO and Vedanta Aluminum Limited (VAL) have started to produce aluminum. Aluminum production in India is concentrated within four big plants, two of which are in Orissa. In January 2010, total aluminium production in Orissa was 48 percent of total production by all the four big plants.

The number of "Micro, Small and Medium Enterprises (MSME)" has been increasing over time. During 2009-10, the maximum number of SMEs was set up in Sundargarh followed by Cuttack, Khorda and Ganjam. Among manufacturing units, the largest number of MSMEs belong to the food and allied sector. Industrial sickness continues to be a problem among MSMEs, but during 2009-10, no new sick unit was reported. The cottage industry in Orissa exhibits a declining trend in terms of the number of units as well as employment generation.

The mining sector contributes about 7.5 percent of real GSDP of Orissa. Being a favourite investment destination of global investors, this sector seems poised for rapid growth. In terms of total value of mineral output, Orissa ranks highest in the country and its share is increasing. Exports of minerals and ores from the State have been rising. This sub-sector has been increasingly employing capital intensive and labour saving technologies with a view to enhancing its global competitiveness.

1.4 The Service Sector

This sector dominates the State's economy, its share in real GSDP being about 54 percent in recent years and has been growing at higher rates in a comparatively stable manner. This sector recorded an average annual growth rate of 9.95 percent, in real terms at 2004-05 prices, in the first three years of the 11th Plan. The sector comprises of sub-sectors such as banking and insurance, real estate, public administration, trade, hotels and restaurants, construction, transport and communications and other services.

As per quick estimates 2009-10, the trade, hotels and restaurants sub-sector contributed about 23

percent, followed by "other services" (21%) and "transport, storage and communication" (18%) in the State's GSDP of service sector. The banking and insurance sub-sector constitutes about 6 percent of the service sector. However, it provides invaluable indirect benefits to the economy in the form of financial infrastructure. The average population serviced by a bank branch is roughly equal to 15,000, which is better than that in many states in India. It is a fact worth mentioning that 59 percent of all bank branches are located in rural and semi-urban areas.

It is heartening to note that the growth rate of total bank deposits in the State is rising. Orissa is catching up with the nation in terms of per capita bank deposits in commercial banks. Co-operative banks focus on rural areas and the agriculture sector. For all types of banks operating in the State, the recovery rate stands at about 50 percent. Recovery position of bank loans needs to be improved.

The activity in the construction sector is a symbol of capacity and infrastructure-building in a region. The share of the "construction sub-sector" in Orissa's GSDP in 2009-10 was about 7 percent. Its share within the service sector is about 13 percent. However, despite the high growth of Orissa's economy in recent years, this sector recorded a modest growth rate of 5.35 percent per annum in comparison to 9.08 percent at the national level. This sub-sector is also important from the employment perspective. It absorbs a lot of casual workers.

Tourism has a huge growth potential in Orissa, and, being a labour-intensive activity, it has the capacity to generate employment on a large scale. Yet, it remains less developed in comparison to other states. The absolute number of tourists to the State has been growing and it is heartening to note that the growth rate is highest for tourists from within the State.

It is worth noting that the hotel industry – in terms of its contribution to the State's GSDP - has grown consistently since independence and, its growth rate has improved in the last decade. However, its capacity measured by the number of rooms and beds has not kept pace with the growth rate of tourists in the State. It implies that the growth of this sector stems from a higher rate of utilisation.

1.5 Infrastructure

Theimportanceofgoodinfrastructureforaccelerated development and higher economic growth is well recognised. Orissa is deficient in infrastructure and there is a felt need for substantially improving the extent and quality of infrastructure in the State. The State Government has rightly focused on Bijli, Sadak and Pani.

Orissa's pioneering power sector reforms are well known. In comparison to other states, the availability of power in Orissa is better and continues to improve. However, transmission and distribution losses are a major concern in Orissa. This aspect needs immediate attention. It is heartening to note that the State has embarked upon an ambitious CAPEX programme to substantially improve its grid infrastructure.

The demand for power in Orissa has been rising at a faster rate. Over 60 percent of villages in Orissa are now electrified. This situation is likely to further improve soon through project works under the Rajiv Gandhi Grameen Vidyutikaran Yojana, Biju Gram Jyoti and Biju Saharanchal Vidyutikaran Yojana. Many alternative energy programmes and incentive schemes are in progress.

In the transport sub-sector, road density in Orissa is better than the all-India average. But the State lags in surface-road density. This is again likely to change soon, as the Pradhan Mantri Gram Sadak Yojana and Bharat Nirman projects build all-weather surface roads. The State has also taken several initiatives to extend the spread of good quality roads and to improve the road surface quality throughout the state. An ambitious programme for increasing the number of bridges and cross drainage works has been undertaken to ensure all weather connectivity for remote habitations. Railway density in the State is 15 km per thousand square km of area, which is below the national average of 20 km. Yet, rail connectivity has significantly improved through the introduction of new train services. The cargo shipment activity at Paradeep port has

shown consistent growth despite the recent global recession.

In the field of postal and tele-communications, tele-density (equal to the number of telephone connections per 100 population) has grown rapidly, but it is yet to catch up with the national average. Cell phones constitute about 75 percent of total telephone connections in the State. The postal density in the State is higher than the national average.

The State has undertaken massive steps to improve the use of information technology, especially in public administration. E-governance is encouraged and enforced at various levels. Two software technology parks are in operation: one in Bhubaneswar and the other in Rourkela. Their presence results in more efficient use of information technology in the private sector,

1.6 Poverty

Poverty has been viewed in this report as a multi-dimensional concept. Though there was hardly any poverty reduction in the State in 1990s, Orissa has been able to reduce poverty at faster rates in recent years. As per estimates made by the Planning Commission, poverty reduced by 7.25 percentage points from 1999-2000 (55th round of NSS) to 2004-05 (61st round of NSS, mixed recall method). This was in line with the State's development strategies that targeted a 7 percentage point reduction in poverty during the 10th Plan.

It is heartening to note that a tentative analysis of NSS data of the 64th round suggests a further reduction in poverty by 11.73 percentage points from 39.90 percent in 2004-05 to 28.17 percent in 2007-08. The sample size of the 64th NSS round is smaller as compared to the 61st and other quinquennial rounds. Therefore, the results of this analysis might be taken as indicative. Given the large change between 2004-05 and 2007-08, even this indicative figure reinforces the declining trend noticed earlier between 1999-2000 and 2004-05.

The rural-urban poverty gap remains larger than the all-India average. As per the 61st round of NSS, poverty declined in all NSS regions of Orissa However, the coastal region registered the sharpest decline. The extent of poverty in southern and northern regions is still very high and remains a matter of serious concern.

The State witnesses wide regional and social disparities in development. All regions have not developed uniformly. With a view to addressing the problem of regional disparities and expediting development of interior tribal dominated districts, the Government has implemented a series of development programmes such as Revised Long Term Action Plan (RLTAP), Biju KBK Plan, Biju Kandhamal O Gajpati Yojana, Gopabandhu Gramin Yojana (GGY), Backward Regions Grant Fund (BRGF) and Western Orissa Developed Council (WODC). With support from Government of India, the State has launched a new initiative, called "Integrated Action Plan (IAP)" for 15 tribal and backward districts of Orissa in 2010-11. These development initiatives aim at faster development of the backward regions of the State.

1.7 Social Sectors

Social sectors have gained importance as the world development community has paid greater attention to the concept of human development and attainment of Millennium Development Goals (MDG). These sectors include education, health, safe drinking water, sanitation as well as development of the marginalised groups and backward regions.

The State's achievements in social sectors have been impressive in recent years. In 2001, the overall literacy rate (63.08%) in Orissa was close to the national average (65.38%). An analysis of NSS data of the 64th round indicated that the literacy rate in Orissa had increased to 68.3 percent in 2007-08 in comparison to 71.7 percent at the national level. Of late, enrollment ratio in elementary (primary and upper primary) schools has substantially increased. The dropout rates at the primary level have come down sharply from 41.8 percent in 2000-01 to 2.83 percent in 2009-10 at primary level and at upper primary level from about 57 percent in 2000-01 to 8 percent in 2009-10. The school infrastructure has also been substantially improved during the recent years.

Several initiatives have been taken by the Government to improve literacy levels and quality of education. With a view to improving literacy levels among ST and SC communities, particularly among girls, the State has been annually establishing 1,000 hostels with 100 seats each for ST and SC students. This means at least one lakh ST and SC girls are additionally enrolled in schools at various levels.

A large number of vocational and technical institutions have come up during the last few years and helped equip the youth with employable technical and soft skills. This has been possible through encouragement and support from the Government. National level institutes like IIT Bhubaneswar, National Institute of Science Education and Research, Central University at Koraput and National Law University at Cuttack have been set up in the mean time.

In the healthcare sector, the Government has taken steps to bring about considerable improvement in health infrastructure and delivery and accessibility of healthcare services in the State. Still there is a lot to be done. The basic demographic variables present a mixed picture. The crude birth rate in the State is 21.4 against the national average of 22.8 in 2008. But, the crude death rate stood at 9 compared to 7.4 for the country. Life expectancy at birth in the State was 63.5 years during 2006-10 and lower than the national average. The State is expected to narrow down this gap in the next projection period of 2011-15.

People of Orissa suffer from multiple diseases. The Government has focused attention on the panchvyadhi, i.e., five most prevalent diseases: malaria, leprosy, diarrhoea, acute respiratory infections and scabies that contribute about 70 percent of patient load. The Panchvyadhi chikitsa scheme is in operation since 2001 to provide free treatment and medicines for these diseases. The scheme has also prescribed clinical protocols to be followed by all doctors and public health institutions. In KBK and other tribal districts, mobile health units have been placed in service to provide health services to the people in outreach mode in remote areas where connectivity is poor and the posts of doctors and other health personnel remain vacant.

Improvement in people's health and hygiene awareness, in their general health condition and better availability of healthcare services account for improvements in several health indicators including infant mortality rates, maternal mortality rates, institutional deliveries and immunisation services.

Maternal Mortality Ratio (MMR) during 2004-06 in Orissa was 303 per 100,000 live births in Orissa, compared to 301 in India. There has been an improvement in women's health in recent times. Increasingly more pregnant women are receiving ante-natal and post-natal care. Institutional deliveries have increased from about 37 percent in 2004-05 to 71 percent in 2008-09. The pregnancy burden of women in the State is lower than that of their counterparts in the country. The General Fertility Rate (GFR) in Orissa stood at 79.3 percent compared to 88.0 percent at the all India level. Though the Infant Mortality Rate (IMR) in the State declined from 97 in 1999 to 69 in 2008, it is still very high.

National Rural Health Mission (NRHM) initiatives and achievements are to be credited. Various government health programmes have brought down the disease burden in the State. Leprosy has declined to less than 1 percent per 10,000 population and filaria has been controlled. Malaria is endemic in some parts of the State, but malaria positive cases have declined by 7.6 percent between 2008 and 2010. HIV positive cases have increased alarmingly from 312 in 2002 to 16,733 in 2009-10. This is a matter of concern.

Orissa's performance has been satisfactory in respect of access to safe drinking water and sanitation. The coverage of households having access to safe drinking water was 92.7 percent as per the 2001 census. The Integrated Management Information System (IMIS) reports that 2.7 percent rural habitations in Orissa were not covered under drinking water supply programmes in 2009.
The Total Sanitation Campaign (TSC) has been implemented to install toilets in rural areas and encourage people to improve sanitation conditions. Physical achievements under this programme have, however, not been encouraging. By 2009-10, only 37 percent households, 90 percent schools and

76 percent anganwadis were covered under the programme.

Malnutrition among children, mothers and old, infirm and destitute persons is a serious problem in the State. The Government has implemented various welfare programmes for them. These include the Integrated Child Development Scheme (ICDS), rehabilitation of cured leprosy patients, emergency feeding programme and heavily subsidised rice at the rate of Rs. 2 per kg. Besides, pension schemes like the National Old Age Pension (NOAP), Madhu Babu Pension and National Family Benefit schemes are in operation to provide social security to the poor, old and destitute.

Like elsewhere in India, there are gender disparities in Orissa in respect of several human development indicators. Only half of the female population is literate in comparison to about three-fourth of the male population in Orissa. The female literacy in Orissa is also less than that at the national level. Women constitute about 45 percent of the total workforce in Orissa. The employment of women in the organised sector has been rising in recent years. The present strategy of the State to empower and develop women is a step in the right direction. About 4.15 lakh Women Self-Help Groups (WSHGs) have been organised with support from the Mission Shakti programme. Besides, the Kishori Shakti Yojana (KSY) has been implemented to improve the health and skills of girls through appropriate interventions. During 2009-10, 2,014,600 adolescent girls were covered under this scheme.

The State Commission for Women works towards protecting the interests of women and preventing violence against them. The Orissa State Social Welfare Advisory Board (OSWAB) provides grants for welfare of women and children through voluntary organisations.

The ST and SC communities are a large marginalised section of the society. Their development has received focused attention by the Central as well as the State governments. The Tribal Sub-Plan is operating in tribal dominated 118 blocks of the State. Under this, all developmental programmes, irrespective of their sources of funding, are to operate in unison for integrated development of tribals in the scheduled areas. Special Central Assistance (SCA) is provided for accelerated development of tribal communities including Particularly Vulnerable Tribal Groups.

1.8 Public Finance

After about two decades of serious fiscal imbalance, the State has made an impressive turnaround in its finances. Most monitorable fiscal indicators have turned favourable. Revenue deficit has been eliminated since 2005-06. Fiscal deficit has been reduced below the prescribed limit. A fiscal space has been created to finance development programmes.

However, two factors have impacted the State's fiscal scenario in 2009-10. The first was the worldwide recession, which adversely affected the Indian economy as well as the State's economy in many ways including reductions in the State's own revenues and central transfers. The second factor impacted materially on the expenditure side of the budget. The State implemented revision of salaries and pensions of its employees as per the recommendations of the 6th Pay Commission effective from 1st January 2006. The combination of the constrained revenues and significantly higher revenue expenditures resulted in a substantial reduction in the revenue surplus that dropped to 0.7 percent of GSDP and fiscal deficit increased to 1.4 percent. However, despite adverse fiscal impacts during 2009-10 on revenue and expenditure sides, the State has been able to manage its finances well and to keep broad fiscal indicators at judicious levels.

The capital expenditure has been on the rise over the period. The capital expenditure increased from Rs.5,121 crore in 2007-08 to Rs.5,733 crore in 2008-09 and to Rs.5,249 crore in 2009-10. The capital outlays have also increased from Rs.2,843 crore in 2007-08 to Rs.3,648 crore in 2009-10. The debt burden has been substantially reduced in recent years. The debt-GSDP ratio has been brought down from 55.92 percent at the end of 2002-03 to a more sustainable level of 23.24 percent at the end of 2009-10. This has become possible for two main reasons. First, the State has not resorted to market borrowings since 2006-07.

Second, fiscal reforms and debt write-off mandated by the Finance Commission as a reward for fiscal prudence have also helped.

The State has also taken several steps to strengthen appropriate institutional measures for more efficient management of public finances. These measures include maintenance of capital assets through a well conceived annual management plan, cash management system to reduce inefficient and ineffective expenditures and to avoid rush of expenditure in the last quarter of the financial year, improved classification of revenue and capital expenditures, grants meant for creation of capital assets to be treated as capital expenditure, promotion of outcome budgets in select departments in a phased manner, zero-based budgeting with focus on completion of projects and other measures.

CHAPTER 2

Orissa's Economy: A Macro Glance

2.1 Aggregate Income

Quick estimates put Orissa's real growth rate in 2009-10 at 10.57 percent at 2004-05 prices. This bounce-back is remarkable and higher than the previous year's growth rate by 3.33 percentage points. Orissa reported an average real annual growth rate of 9.44 percent during the last five years (2005-06 to 2009-10). In the first three years of the 11th plan, the State's average real annual growth rate is of the order of 9.57 percent. Figure 2.1 graphs the real growth rates of the State during the last 5 years from 2005-06 to 2009-10 based on Annexure 2.4.

Figure 2.2 is an extension of Figure 2.1, by juxtaposing the real national growth rate with the real growth rates in the State's economy from 2005-06 to 2009-10. As per the latest estimates at 2004-05 prices for India and Orissa, out of five years, the real growth rate of the State exceeded the national growth rate for four years with the exception of 2005-06.

Figure 2.1: Growth Rates of Real GSDP of Orissa (2005-06 to 2009-10)

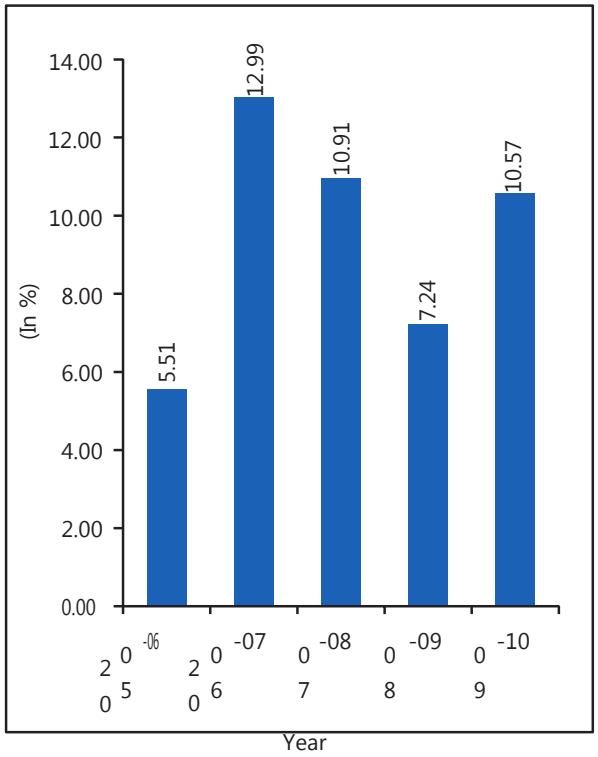
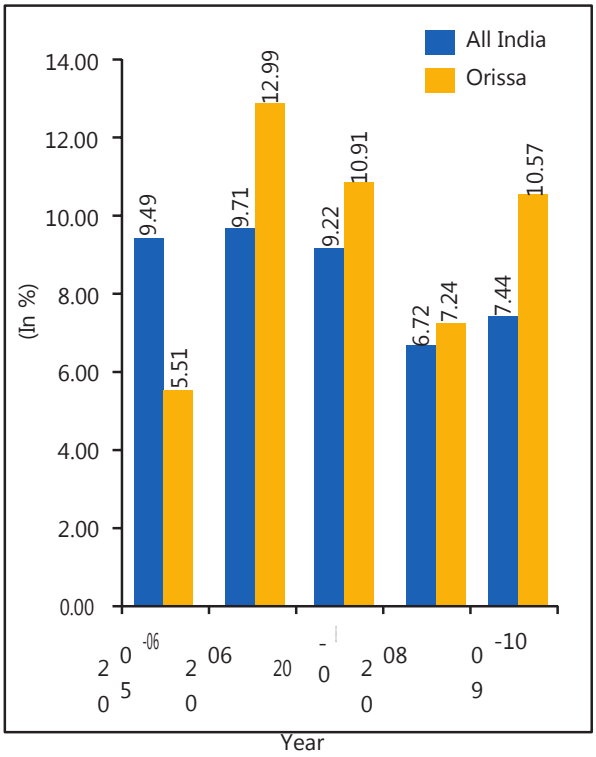
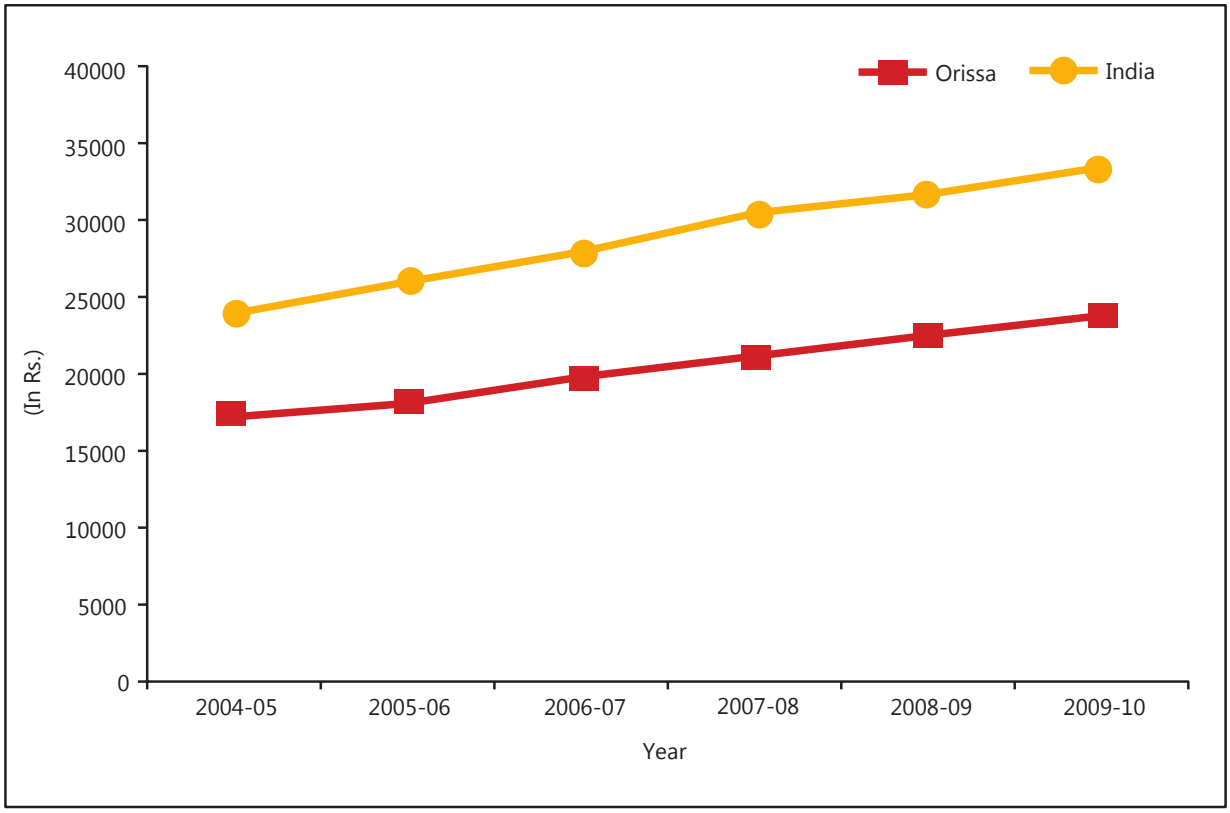


Figure 2.2: Real Growth Rates of GSDP of Orissa vis-à-vis GDP of India (2005-06 to 2009-10)



Source: Directorate of Economics and Statistics, Orissa

Figure 2.3: Per Capita NSDP of Orissa and NNP of India



The rising trends of per capita real NSDP for Orissa and per capita real NNP for India from 2004-05 to 2009-10 at 2004-05 prices are presented in Figure 2.3. There is, however, a need to put in extra effort so that Orissa's economy continues to grow at a rate higher than the national average over a long period of time to catch up fast with the rest of India. Higher growth of the State economy is desirable to avoid stagnation in Orissa's standard of living relative to the national average.

2.2 Relative Standards of Living

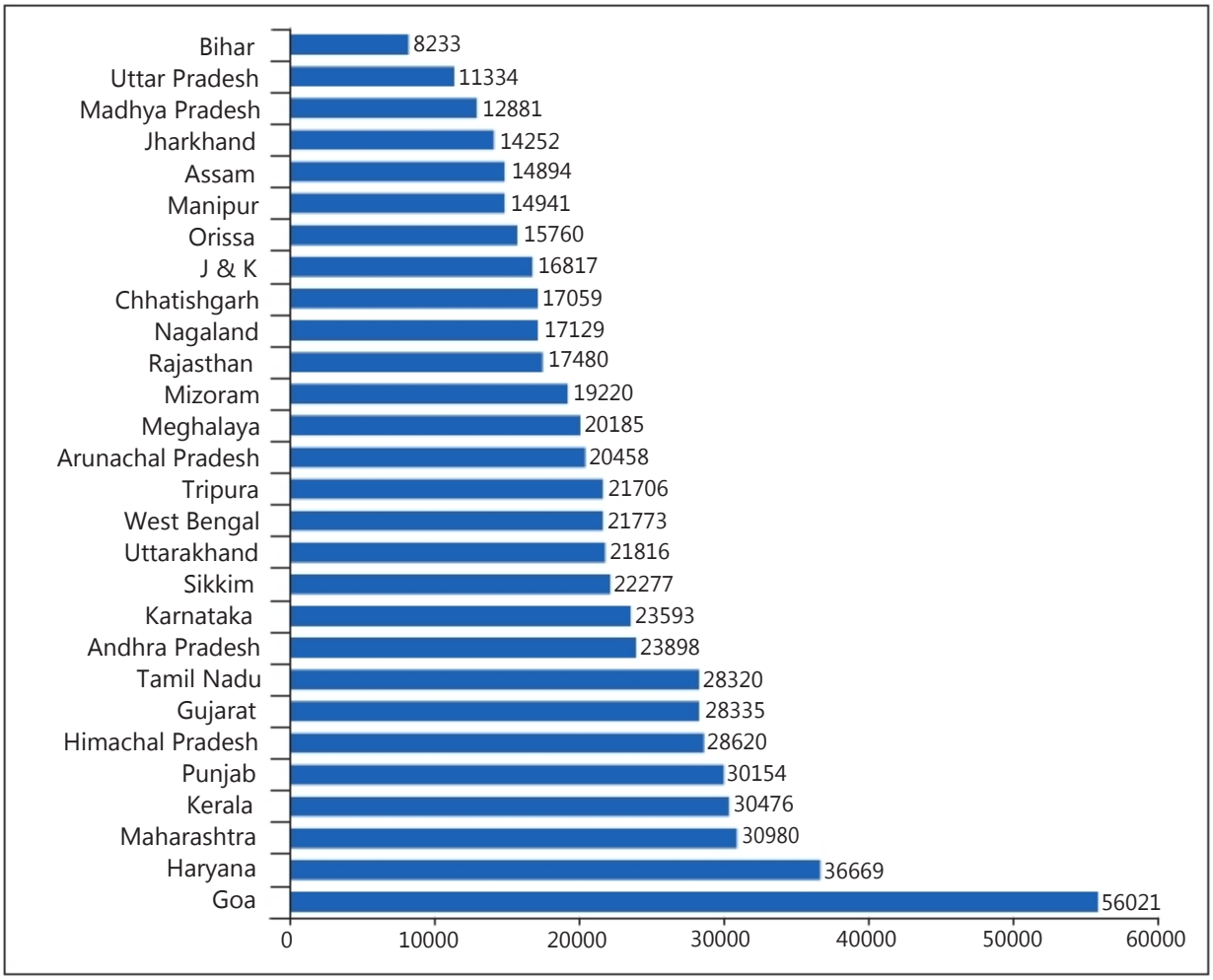
The standard of living in the State has been below the national average since 1950-51 when Orissa's real per capita income was about 90 percent of the national average. However, the State's real per capita income had begun to slide thereafter and came down to about 61 percent of the national average in 2002-03. This long-term falling trend in real per capita income has not only been arrested since 2004-05, but reversed as well. The State's per capita income has started rising and the gap with the average national per capita income has been reducing steadily. Orissa's per capita income for 2006-07 was higher than that of Bihar, UP, M.P., Jharkhand, Assam and Manipur. Figure 2.4 compares real per capita incomes of different states for 2006-07.

2.3 Broad Sectoral Decomposition

Typically, economic activities are grouped into three broad sectors in India namely - primary, secondary and tertiary. The primary sector includes agriculture and allied sectors like agriculture and animal husbandry, forestry, fisheries, mining and quarrying. Manufacturing, electricity, gas, water supply and construction sectors come under the secondary sector, while the tertiary sector includes various services including public administration.

In this report, Orissa's economy has been classified as Agriculture, Industry and Services instead of the traditional classification of primary, secondary and tertiary. The Agriculture Sector includes agriculture and allied sectors including

Figure 2.4: Per Capita NSDP at 1999-2000 Prices (2006-07)

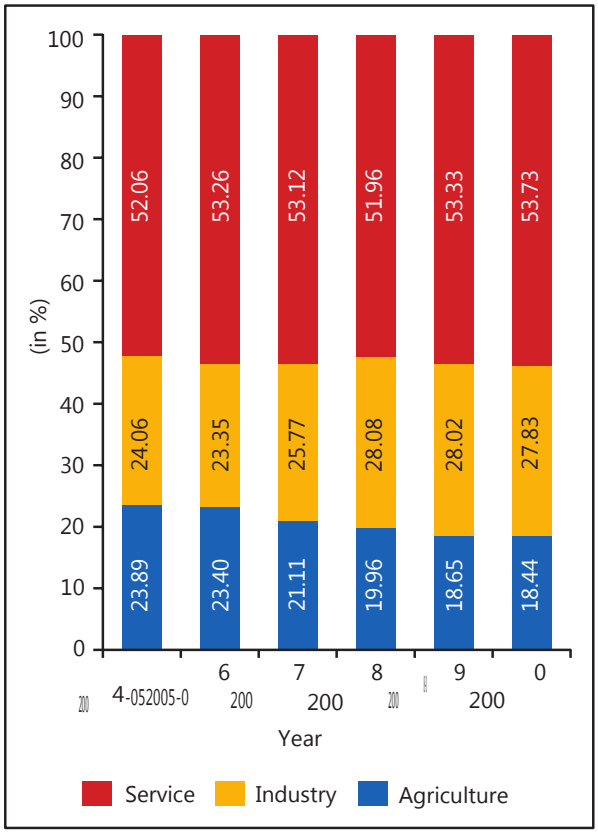


agriculture and animal husbandry, forestry and fisheries. The Industry Sector includes mining and quarrying, manufacturing, electricity, gas and water supply. The Service Sector includes construction, trade, hotels and restaurants, transport, storage, communication, banking and insurance, real estate, other services and public administration. The revised classification is more consistent with international practices. Depending on the context, it should be clear whether Agriculture includes allied sectors or refers to the agriculture sub-sector only.

Figure 2.5 gives the dynamics of the composition of Orissa's economy. It is clearly becoming less agricultural, more industrial and more service-oriented over time. In 2009-10, agriculture represents only 18.44 percent of Orissa's GSDP. The service sector and industry sector represent 53.72 percent and 27.82 percent respectively. This pattern is similar to the experience of the Indian economy and is indeed a global phenomenon. As is true for the Indian economy, in recent years the service sector dominates the State economy, constituting more than half the State's GSDP.

There is, however, a significant quantitative difference. Compared to the Indian economy, the economy of Orissa is more agricultural, less industrial and less service-oriented. The service sector at the national level accounted for about 65 percent of GDP in 2009-10 against only 53.73 percent for Orissa. Agriculture represented only 14.6 percent of the national GDP against 18.4 percent in Orissa's GDP in 2009-10. Figure 2.6 compares the broad sectoral decompositions of Orissa's and Indian economies for the year 2009-10.

Figure 2.5: Dynamics of Composition of Orissa's Economy (2004-05 to 2009-10)



2.4 Performance of Districts

Orissa also reports district incomes by way of apportioning GSDP among different districts. The Gross and Net District Domestic Products (GSDP / NDDP) for all districts for the period from 1999-2000 to 2006-07 are given in Annexure 2.10 through 2.15.

Figure 2.7 depicts average annual growth rates achieved by different districts from 2000-01 to 2006-07. Jajpur district has reported the highest annual average growth rate of 11.7 percent and Malkanagiri the lowest of just 2.6 percent during the reference period. The top five districts in terms of average annual growth rates are: Jajpur, Keonjhar, Sundargarh, Angul and Khordha. Angul also reports the highest per capita district income. Figure 2.8 graphs index of real per capita NDDP and compares districts in terms of their per capita real incomes for the year, 2006-07.

2.5 Employment

Unlike national or state domestic products and related measures, employment data is not collected annually in India, except for the organised sector. Employment changes are inferred from census data which is revised at an interval of every ten

Figure 2.6: Composition of Orissa's Economy vis-à-vis India's Economy (2009-10) in (%)

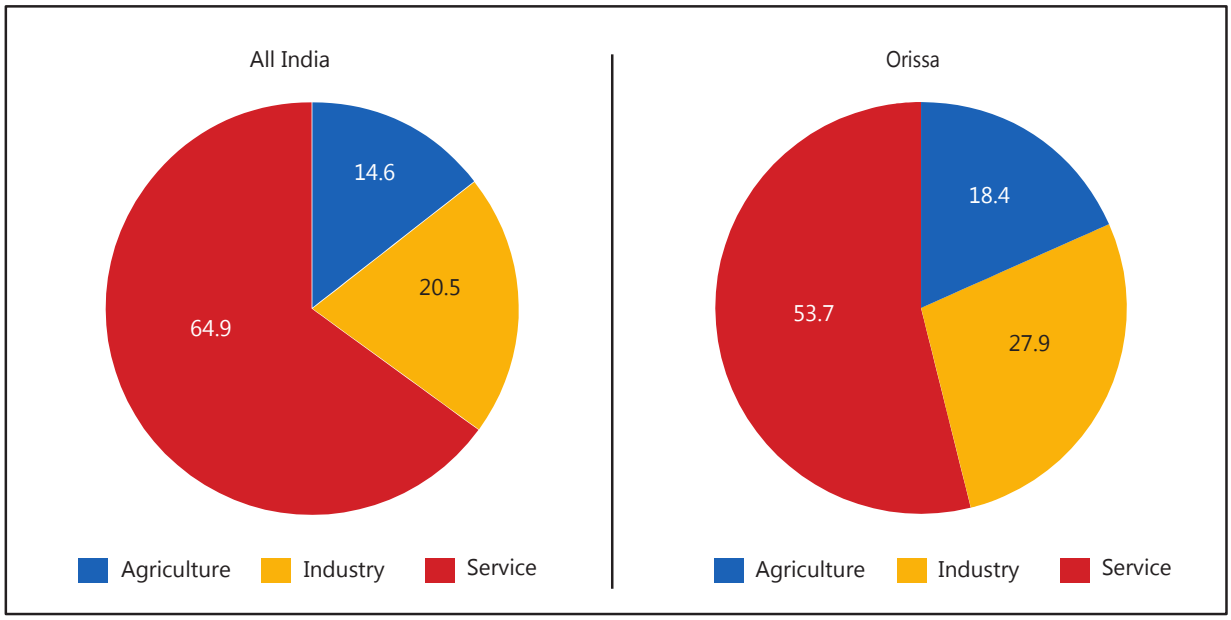
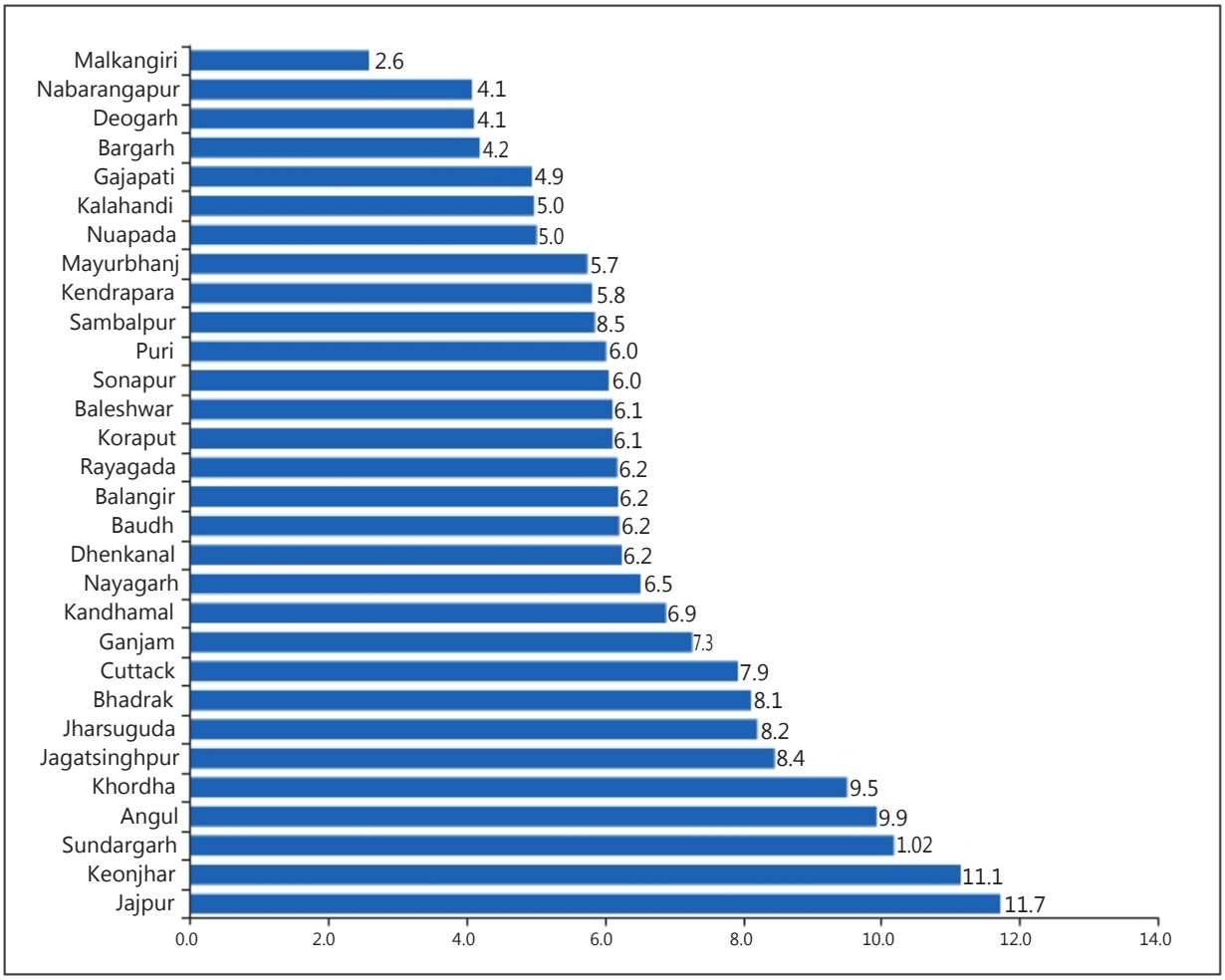


Figure 2.7: Average Annual Growth Rates Across Districts (2000-01 to 2006-07) in (%)



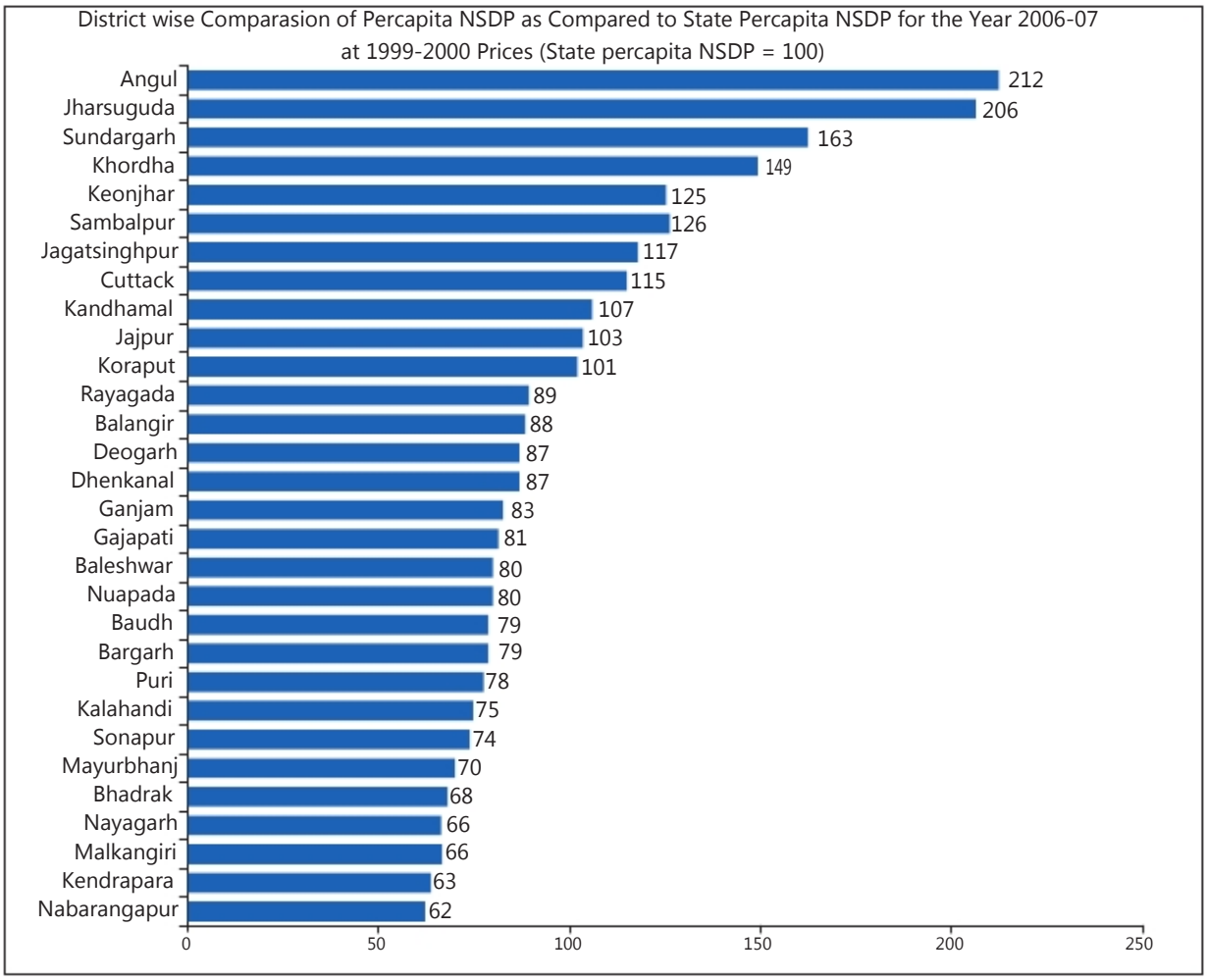
years. The second source of employment data is from household surveys conducted by the National Sample Survey Organisation (NSSO) from time to time. Major NSS surveys are quinquennial. In some other years, there are "mini" surveys. All surveys are serially numbered by their respective 'rounds'. For instance, NSS 55th round refers to the survey conducted during the period from July 1999 to June 2000. The periods of some recent rounds are shown in Box 2.1.

There are no fully satisfactory measures of employment or unemployment in India or elsewhere. It is due to the difficulty in judging whether a person

Box 2.1: Periods of Some Recent NSS Rounds

55th	July 1999 – June 2000	56th	July 2000 – June 2001
57th	July 2001 – June 2002	58th	July 2002 – Dec 2002
59th	Jan 2003 – Dec 2003	60th	Jan 2004 – June 2004
61st	July 2004 – June 2005	62nd	July 2005 – June 2006
63rd	July 2006 – June 2007	64th	July 2007 – June 2008
65th	July 2008 – June 2009	66th	July 2009 – June 2010
67th	July 2010 – June 2011		

Figure 2.8: Index of Real Per Capita NDDP



who is not currently working should be counted as "unemployed". Yet, there are various measures of employment or unemployment and they are all indicative.

2.5.1 State of Employment: Census Data

The Census of India is a rich source of data. It not only estimates the population, but also workers, defined as those who have participated in any economically productive activity at any time during the reference period. Census classifies workers as main and marginal workers. Main workers are those who participated in any economically productive activity for no less than six months during the year preceding the date of enumeration, and marginal workers are those who participated in any economically productive activity for less than six months during the reference period. In the 2001 Census, the population of Orissa was 3.68 crore – about 3.58 percent of the population of the country. The total number of main and marginal workers was respectively 96 lakh and 47 lakh.

Workers as percentage of population in 1981, 1991, and 2001 censuses, relatively to the all India level, are exhibited in Figure 2.9. These are not employment rates per se for reasons discussed above and that population includes young children and old people who are not in the workforce. Appropriately, the Census India itself calls it the workers' participation rate. However, the dynamics of this rate is indicative of the dynamics of employment. Compared to the beginning of the reforms era (and 1981), the workers' participation rate in 2001 was higher for the State and for India.

The percentage break-up of total workers in the State into total main and marginal workers is

shown in Figure 2.10. Compared to the 1981 and 1991 censuses, the share of marginal workers in the total number of workers was appreciably higher in 2001. This does not necessarily imply a higher rate of under-employment, because part-time work may be more paying in some sectors than full time work in, say, agriculture. But it was higher than the all-India rate of 22 percent in the 2001 census. Figure 2.11 indicates that the share of cultivators and agricultural workers has sharply declined between 1991 and 2001. There appears to be a shift of main workers away from agriculture and allied activities.

2.5.2 State of Employment: NSS Data

The National Sample Survey has a more detailed classification of employment: (a) by usual status, (b) by current weekly status and (c) by current daily status. A person is employed by usual status if he or she were regularly employed in a regular principal status or subsidiary-status job. The sum of the two defines the usual status. There is also a separate subcategory: usual principal status. By the current weekly status, a person is counted as employed if he or she were employed a week prior to the date of the survey. In measures (a) and (b), employment is measured by head counts. In measuring employment by current daily status, a day is divided into two units (i.e., morning and afternoon), so that a whole week has fourteen units. A person is asked about the number of units in which he or she was employed over the week preceding the date of survey. In category (c), employment is measured in person-days, not persons. This is useful for measuring employment or unemployment among casual workers.

At any given point of time, the labor force is the sum of those working (i.e., engaged in economic activity) and those who are available for, or seeking work. The Worker Population Ratio (WPR) is defined as the number of employed persons (or person-days in case of current daily status) per 1000 that are in the workforce (or per 1000 workforce days). So there are three measures of WPR, depending on which way employment is measured. Unemployment rate is defined as the ratio of persons (or person-hours) not employed to the workforce (or workforce hours). Accordingly, there are also three measures of the unemployment rate.

Figure 2.9: Participation Ratio, Orissa and India, in Census Years

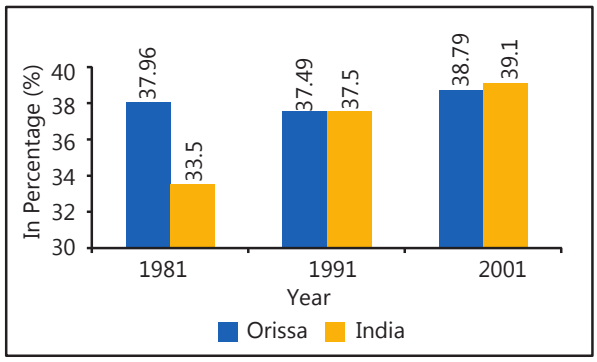


Figure 2.10: Proportions of Main and Marginal Workers in Orissa in Census Years

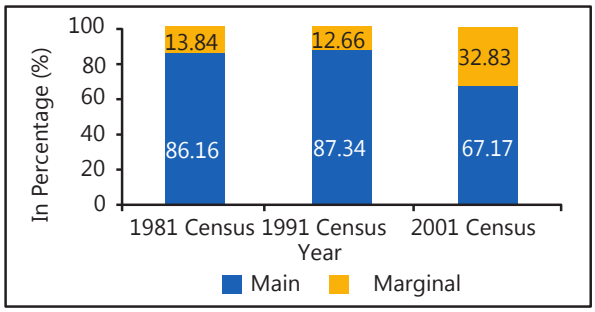
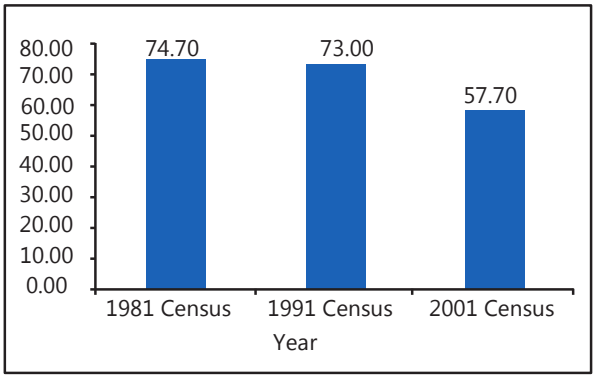


Figure 2.11: Percentage of Cultivators and Agricultural Labourers among Main Workers



Estimating employment or unemployment is not the focus of all rounds of NSS. Among the ones listed in Box 2.1, the 55th, 61st and 64th rounds (shown in bold) have collected detailed information on the employment status of households. The results from these rounds are illustrated in Figures 2.12 through 2.14. It is heartening to note that WPR by usual principal status in both rural and urban areas has improved from the 55th round to the 64th round. In particular, in case of rural areas, Orissa levels the national average, while urban WPR continues to lag behind the national average of urban areas.

Figure 2.12: WPR (Usual Principal Status), Orissa and India

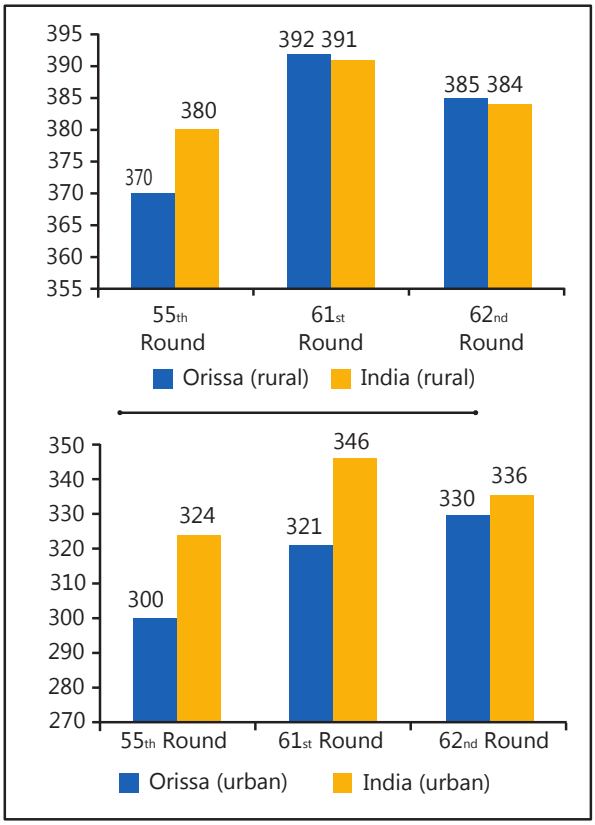
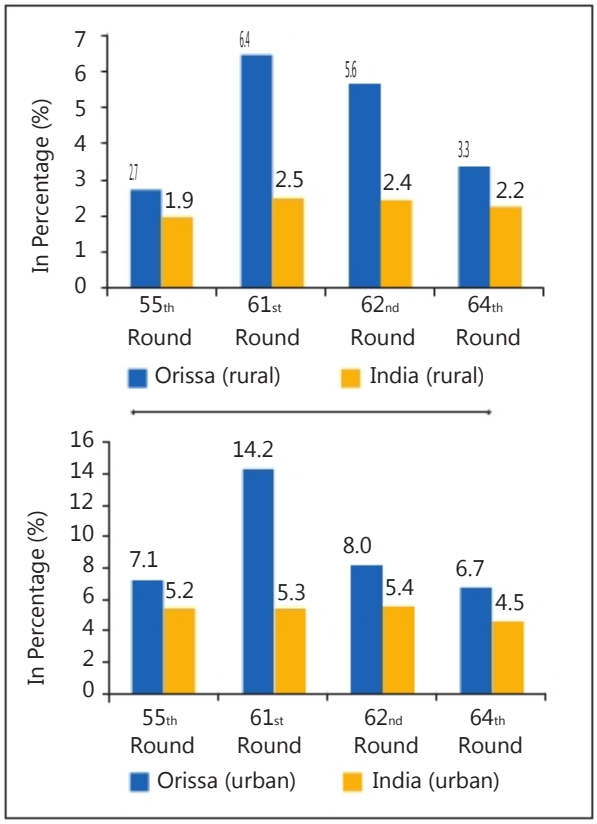


Figure 2.13: Unemployment Rate by Usual Principal Status, Orissa and India



However, irrespective of the categories of workers, (a) the State's unemployment rate has always remained higher than the national rate, (b) the urban unemployment rate is higher than the rural unemployment rate, and (c) in the 61st and 62nd rounds, the unemployment rate has generally shot up and the difference between that in the State and the country has widened and the same has stepped down in 64th round.

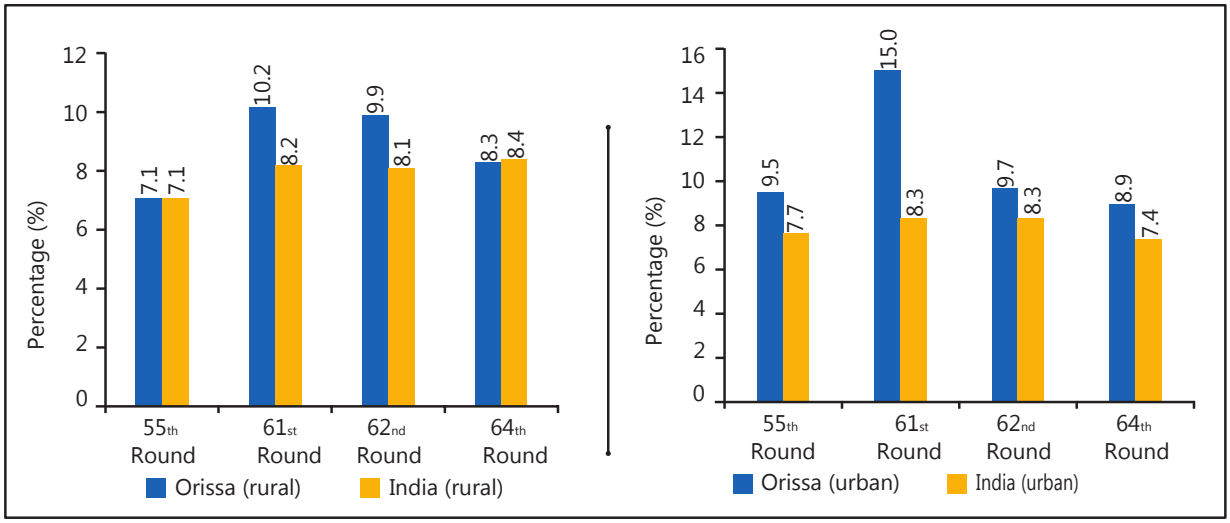
2.5.3 Employment-Unemployment Projections for the 11th 5-Year Plan Period

As per the recommendations of the Planning Commission, fresh estimates of the labour force, work force and the unemployed (on the basis of current daily status) in the State have been prepared by the Planning and Coordination Department. These are reported in Annexure 2.18. Unemployment has been estimated at 14.13 lakh person years at the beginning of the 11th Five-Year Plan period, i.e., at the beginning of 2007-08. The annual growth rates of the labour-force and the work-force have been estimated as 1.38 percent and 1.55 percent respectively and the projected end-of-the-year unemployment rates have been estimated as 8.76 percent to 9.37 percent.

2.5.4 Employment in the Organised Sector

Calendaryear-wise annual data on employment is available for the organised public and private sectors. As Figures 2.15 and 2.16 show, the total employment in these sectors has declined slightly over the period 2000-2009. While the share of private sector employment has been steadily increasing, this sector still absorbs less than 1/4th of employment in the public sector. These figures are based on Annexure-2.19, which also provides the break-up among men and women in each sector. In both sectors together, the share of women in total employment has been steadily increasing and has reached 16 percent by the end of 2008. During 2009, though the number of

Figure 2.14: Unemployment Rate by Current Daily Status, Orissa and India



women employees had increased, the percentage of women employees to total employees had decreased to 15.5 percent.

2.5.5 Employment Exchange Activities

Eighty employment exchanges function in the State under the Directorate of Employment. Details on activities in these employment exchanges are provided in Annexure 2.20 through 2.22.

Employment Exchanges undertake registration of eligible unemployed persons with an aim to provide them possible placements in public sector establishments. However, registration is voluntary and many such exchanges are located in urban areas. Hence, it is difficult to assess patterns of aggregate employment changes from their rosters. On an average, eleven vacancies are filled per year through employment exchanges. This is a negligible

Figure 2.15: Total Employment in the Organised Sectors

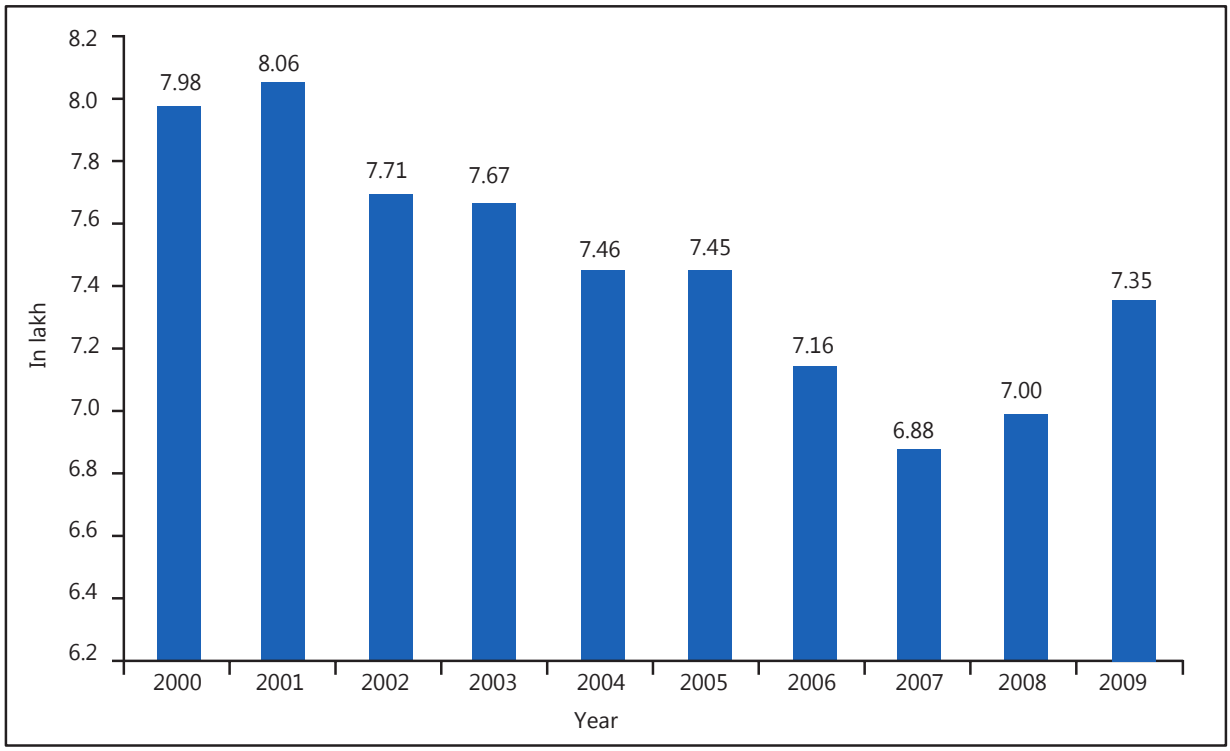
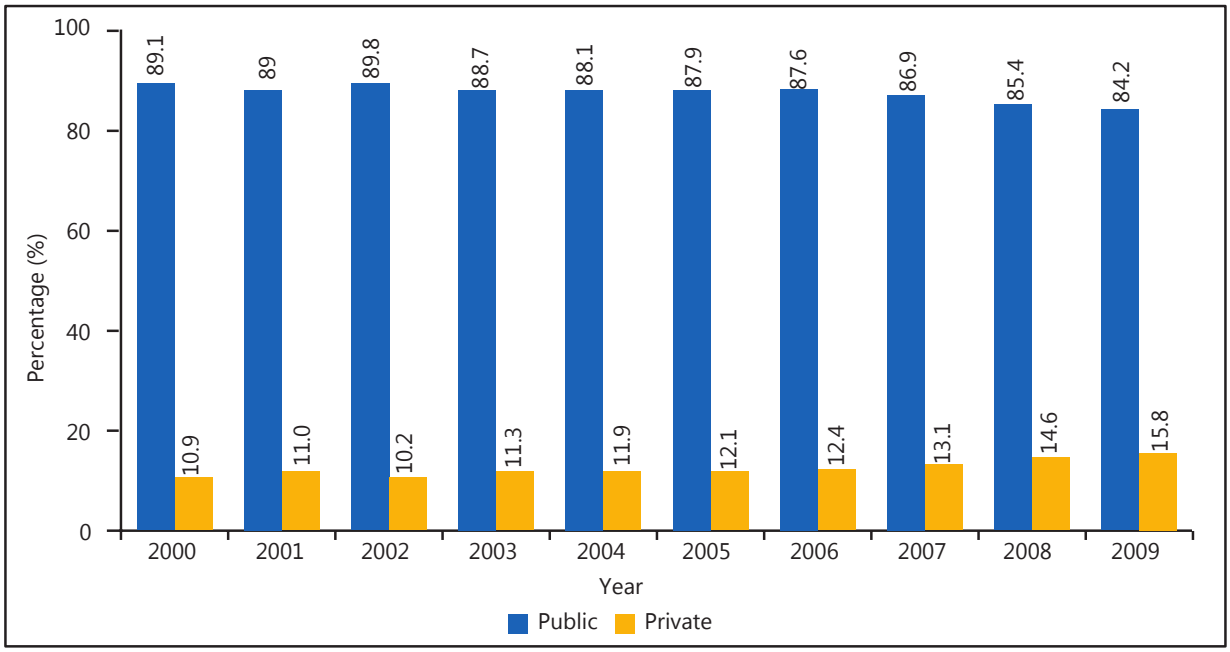


Figure 2.16: Organised Employment Share in the Public and Private Sectors



fraction of the live register strength or even the number of fresh registrations.

2.6 Child Labour and Bonded Labour

By the end of October 2010, 44,508 child labourers were admitted into 944 special schools under the National Child Labour Project (NCLP). This project has mainstreamed 109,391 children after completion of their education in NCLP schools. By the end of 2009-10, bonded labourers numbering 50,792, (of which 41 percent belonged to the undivided KBK districts) and 13,904 SC and 20,424 ST, were identified in the State. Of these, 49,013 were released, and 47,056 including 13,121 SC and 18,369 ST, were rehabilitated in various economic activities. Rs. 18.26 crore was spent for these activities.

2.7 Employment Programmes

In order to improve the employment situation, various programmes sponsored by the Central Government and the State Government are in operation. Some flagship programmes are discussed below.

2.7.1 Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

The National Rural Employment Guarantee Act (NREGA), 2005 is a pathbreaking legislation that entitles guaranteed employment of 100 days to rural poor households as a means of sustenance. Up to 2009-10, 59.21 lakh households have been registered and given job cards. Out of these, 13.36 lakh households demanded wage employment, and 13.35 lakh households were provided employment worth 513.65 lakh person-days. The share of SC and ST labourers was 97.24 lakh and 165.19 lakh person-days respectively.

Out of 293,714 employment-generating projects taken up, 19,714 have been completed by the end of 2009-10. In the process, funds to the extent of Rs.648.19 crore have been utilized out of the total available funds amounting to Rs.1,202.69 crore. One hundred days employment was provided to only 47,000 households and the average number of days for which employment was provided to each household was only 38 days in a year. District-wise data on employment generation under NREGA for the year, 2009-10 is given in Annexure 2.23A.

In 2010-11, about 55.81 lakh households were issued job cards out of which 14.13 lakh households demanded employment and 13.94 lakh households were provided employment equivalent to 551.59 lakh person-days. The share of employment of SC and ST households amounted

to 19.19 percent and 36.27 percent respectively. About 82,000 households were provided 100 days of employment during the year. On an average, 40 days of employment were provided to willing households. Funds to the tune of Rs.993.68 crore were available during the year. Of the total available funds, Rs.932.58 crore have been utilised. This works out to 93.57 percent utilisation of available funds. District-wise data on employment under NREGS for 2010-11 is given in Annexure 2.23B.

2.7.2 Swarna Jayanti Gram Swarozgar Yojana (SGSY)

This is an old programme, which amalgamated earlier schemes like the Integrated Rural Development Programme (IRDP), Training of Rural Youth for Self-Employment (TRYSEM) and Development of Women and Children in Rural Areas (DWCRA). It is a centrally sponsored scheme, with 75:25 fund-sharing pattern between the Central and State Governments. The objective of SGSY is to bring assisted poor families above the poverty line by helping them establish micro enterprises in rural areas. Beneficiaries, known as Swarozgaries, may be individual families organized into Self-Help Groups (SHGs). During 2009-10, 131,334 swarozgaries were assisted with an expenditure of Rs.181.84 crore. 33,025 and 36,903 swarozagaries belonged to SC and ST communities respectively,. There were 113,367 women beneficiaries. The scale of this programme in 2009-10 was higher than in 2008-09 when 106,276 swarozagaries were assisted with an expenditure of Rs.148.34 crore. Annexure 2.24 presents the overall physical and financial achievements under SGSY from 1999-00 to 2009-10, while the district-wise break-up of the same during 2009-10 is recorded in Annexure 2.25.

2.7.3 Swarna Jayanti Sahari Rozgar Yojana (SJSRY)

This is a centrally sponsored scheme funded on a 75:25 basis by the Centre and States. It was launched in 1997 by subsuming the earlier urban poverty alleviation programmes. It aims at providing employment to the urban poor through self-employment ventures and wage employment. The target groups are the urban poor having monthly per capita income below Rs.490, with special focus on women, SC, ST, minorities and disabled persons. This programme has sub-schemes, namely, Urban Self-Employment Programme (USEP) and Urban Wage Employment Programme (UWEP).

The Urban Self-Employment Programme (USEP) aims at providing self employment to the urban poor through setting up micro enterprises relating to servicing, manufacturing and small business. Under this programme, skills up-gradation training relating to servicing, manufacturing as well as in local crafts is also imparted. The Development of Women & Children in Urban Areas (DWCUA) programme is focused on unemployed women and children. The Urban Wage Employment Programme (UWEP) aims at creating opportunities for wage employment for unskilled urban poor beneficiaries, by engaging them in public works. The progress of SJSRY for 2009-10 is outlined in Annexure 2.26.

2.7.4 Prime Minister's Employment Generation Programme (PMEGP)

This is a new programme, which has merged two earlier programmes, namely, Prime Minister Rojagar Yojana (PMRY) and Rural Employment Generation Programme (REGP). This programme has been in operation in Orissa since 2008-09 and aims to generate employment opportunities through establishment of micro enterprises. During 2009-10, Rs.22.78 crore was sanctioned for establishment of 1,341 units under PMEGP, out of which Rs.15.42 crore have been disbursed in favour of 928 units.

2.7.5 Self-Employment Schemes

The State Government has accorded very high priority to self-employment programmes. Financial as well as marketing support is provided for the purpose. In 2005-06, the State Government established the State Employment Mission and the State Employment Mission Society (OSEMS) in order to assist skill development. During 2007-08 and 2008-09, self-employment opportunities including associated wage employment for others were created for 9.34 lakh persons. Women are brought into the ambit of these opportunities via Self Help Groups (SHGs) under the Mission Shakti Programme. From 2007-08 to 2008-09, 39,379 SHGs were formed and about 4.73 lakh women beneficiaries were covered. Since its inception till the end of 2008-09, Rs.62.55 crore

has been provided for this programme and 74,740 unemployed youths have been imparted skills up-gradation training.

Atma Nijukti Paramarsha Melas (ANPMs) have been organised in all blocks in the State. In all, 185,358 candidates participated in the ANPMs conducted from 2006-07 to 2008-09 and out of these, 45,965 candidates participated in ANPMs in 2008-09. In 2007-08, special ANPMs were organised for physically handicapped people in all blocks of the State, and 149,774 disabled persons participated in them. Various organisations conducted training programmes to create self-employment opportunities for unemployed youth. The training programmes undertaken in 2008-09 included the following:

- Pre-recruitment training was given for employment in defense and para-military forces.
- The College of Engineering and Technology undertook skill up-gradation training for SC/ ST degree engineers during 2008-09 and 44 candidates were enrolled.
- Apparel manufacturing training was given by Textile and Handloom Department, while medical attendant training to 100 ST girls was given by ST & SC Development Department.
- Computer training to 62,200 educated and unemployed youth was given by the Orissa Computer Application Centre.
- Different banks have extended credit support amounting to Rs.4,305 crore and 699,870 persons have been provided with self-employment opportunities.

2.8 Consumption Expenditure

The standard of living of a region can be gauged from income measures such as gross and net domestic products as well as from the levels and patterns of consumer expenditures. As households get richer, their expenditures increase, and, furthermore, (a) the share of food expenditure in total expenditure declines, and (b) within the food category, the share of expenditure on raw cereals or staple foods like rice and wheat falls and that of processed foods, meat and other items increases. There are two concepts on the consumption expenditure side that are often used to shed light on the standard of living. The first concept is that of monthly per capita consumer expenditure (MPCE) and the second is called Engel's ratio.

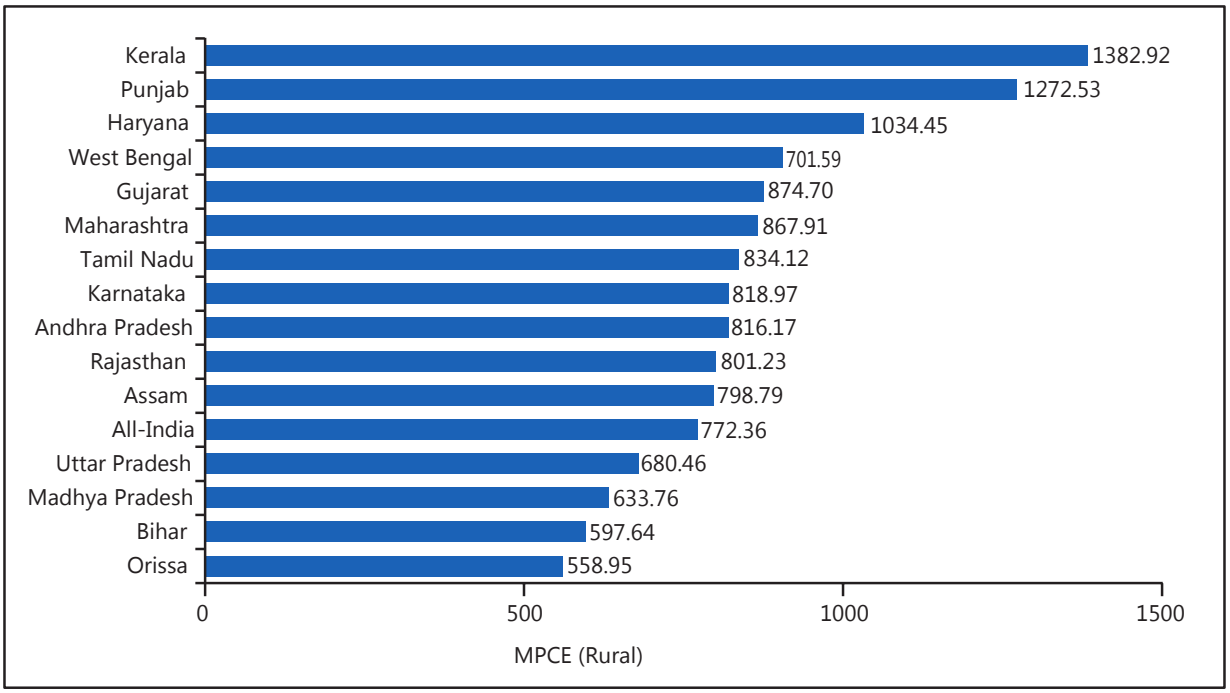
2.8.1 Monthly Per Capita Consumer Expenditure (MPCE) and Engel's Ratio

MPCE is an important socio-economic indicator that is used to compare the standard of living and calculate the extent of poverty. Figures 2.17 and 2.18 graph the average per capita monthly expenditure on the select basket of consumption items during the 64th round of NSS for the period from July 2007 to June 2008 for Orissa vis-à-vis other major states and India for rural and urban population respectively. It is seen that the MPCE for rural Orissa and urban Orissa are below the respective national averages. As mentioned earlier, the breakdown of total expenditure into food and non-food items is also indicative of the standard of living. This breakdown in the 64th round of NSS for various states is given in Annexure 2.29 and the same for Orissa vis-à-vis all-India over different rounds of NSS is listed in Annexure 2.30.

Engel's Ratio, the share of food expenditure in total expenditure, has been widely used as an indicator of the standard of living. Annexure 2.31 reports this ratio for fifteen major states in different rounds of NSS. Figure 2.19 that is based on Annexure 2.31 reveals that the Engel's ratio for Orissa, both in rural and urban areas, is generally higher than the all-India level. Within the staple-cereal category (i.e., rice and wheat), the consumption of rice in both rural and urban Orissa declined distinctly between 1993 and 2008 from 15.20 kg and 11.30 kg to 13.13 kg and 10.35 kg respectively, while wheat consumption increased marginally. At the all-India level, the consumption of rice and wheat declined marginally between 1993 and 2007. Urbanites consume less rice and more wheat than rural people in Orissa.

Annexure 2.33 shows consumption expenditure on various sub-categories under both food and non-food items for Orissa as well as India. There are two sharp contrasts between Orissa and India: (a) in the food category, an average Indian spends more than double the amount an average person in Orissa spends on milk and milk products, and (b) in the non-food category, an average Indian

Figure 2.17: The State-wise MPCE (Rural) as Per 64th Round of NSS



spends considerable more on consumer services than does an average person in Orissa. Figure 2.20 compares average MPCE on milk and milk products for Orissa and India as per the 64th NSS round. These are true for the rural and urban populations. These substantial differences assume special significance in the light of the fact that milk has been found to be a principal factor in gaining height for children in pubertal years because of its calcium content as well as bioactive components, and, higher spending on consumer services indicates a higher standard of living in middle and upper class populations.

Per-capita expenditure on cereals and cereal substitutes is not much different for rural and urban households in Orissa. For other items, the urban figures have been higher than the rural figures. This difference is found to be highest for house rent followed by education and consumer services. The per-capita urban consumption is about double of per-capita rural consumption. These findings are also observed between rural and urban India. Figure 2.19 illustrates this for the urban population in the 64th round of NSS.

The monthly per-capita consumption of cereals in rural Orissa was 13.3 kg, out of which rice constituted 94 percent and wheat 4 percent, as against 11.7 kg at the all-India level, out of which rice constituted 56 percent and wheat 34 percent. In urban areas, the monthly per-capita consumption of cereals in Orissa stood at 11.8 kg, of which, rice constituted 82 percent and wheat 18 percent, as compared to per-capita consumption of 9.6 kg at the all-India level, constituting 50 percent rice and 46 percent wheat. It may be observed from Figure 2.19 that, except for the 55th round, in other rounds the Engel's ratio is more than 50 percent for the rural and less than 50 percent for the urban population in Orissa. It means that the rural population spends more on food than on non-food items, whereas the urban population spends less on food than on non-food items. The same is qualitatively true for India.

2.8.2 Rural-Urban Gap

Figure 2.21 graphs the ratio of rural to urban MPCE for Orissa and all-India. It may be observed that while for India, the rural-urban gap has increased slightly, it is much more pronounced for Orissa.

2.9 Cost of Living

How costly is living in Orissa, compared to other states or India? In other words, what is the cost

Figure 2.18: The State-wise MPCE (Urban) as per 64 Round of NSS

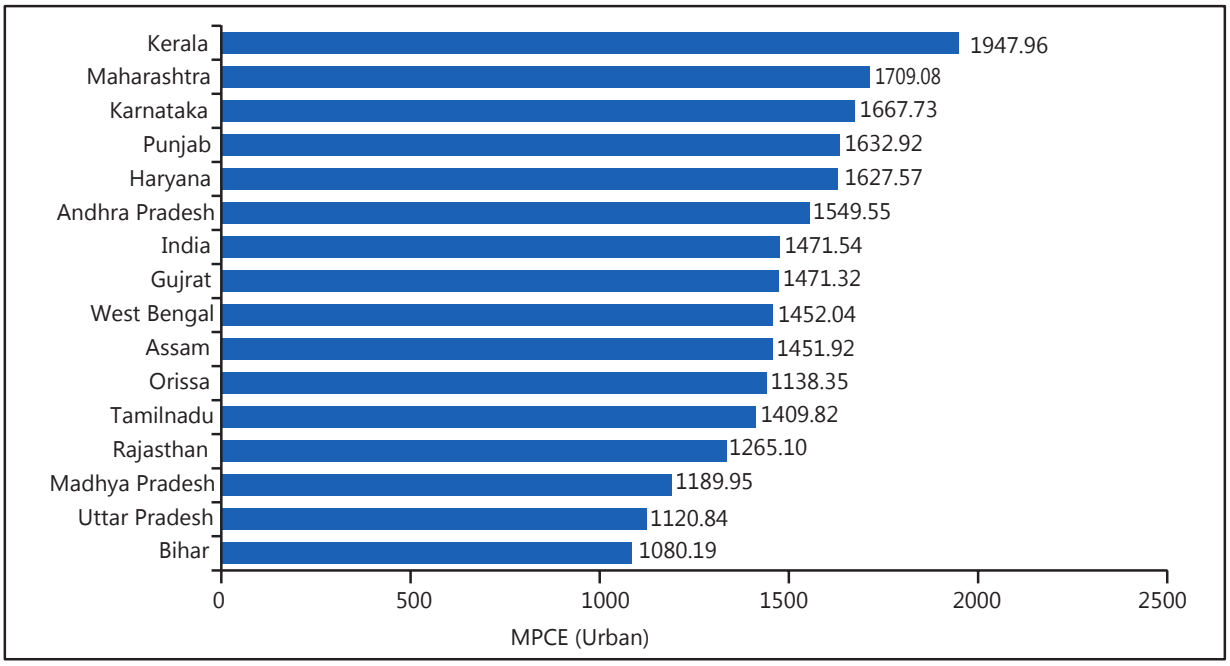
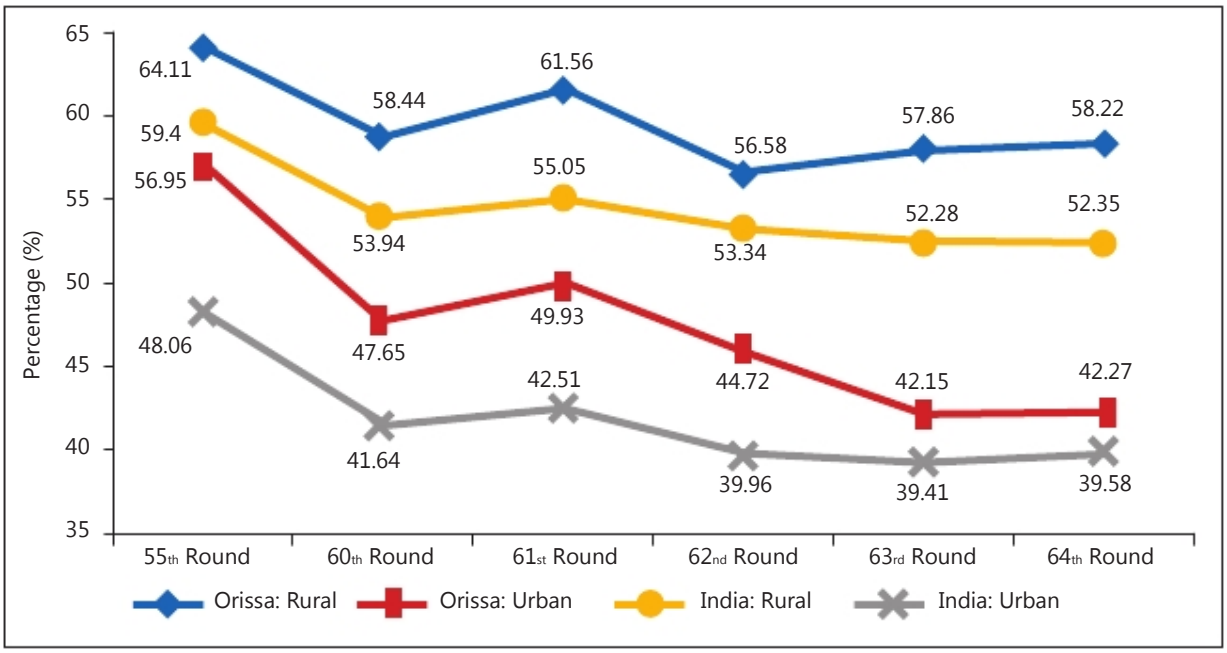


Figure 2.19: Engel's Ratio, Orissa Versus All-India

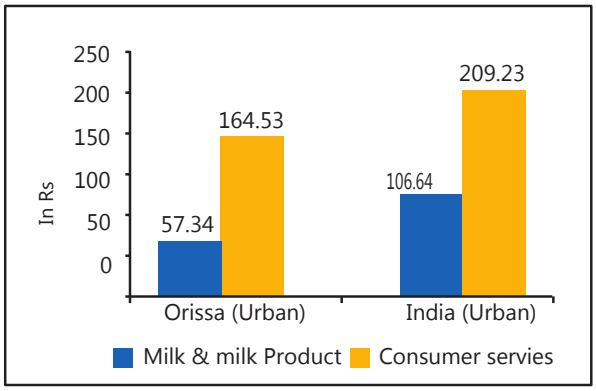


of living in Orissa in relative terms? The Labour Bureau in the Ministry of Labour, Government of India publishes data on Consumer Price Index (CPI) for two categories of population: agricultural labourers and industrial workers.

Figure 2.22 shows that, as of May 2010, among sixteen major states, the CPI for agricultural labourers in Orissa is the second lowest, higher than only Bihar. This indicates that the cost of living for agricultural labourers in Orissa is one of the lowest in the country. As Figure 2.23 shows, the same holds for CPI of food also.

It is noteworthy that for industrial workers there has been a reversal. The Labour Bureau constructs the CPI for industrial workers by taking data from selected centres in the country. For Orissa,

Figure 2.20: Average MPCE (Milk & Milk Products), and Consumer Service, Orissa and All-India



Source: Labour Bureau, Ministry of Labour, Government of India

Figure 2.21: Rural-Urban Per Capita Expenditure Ratio

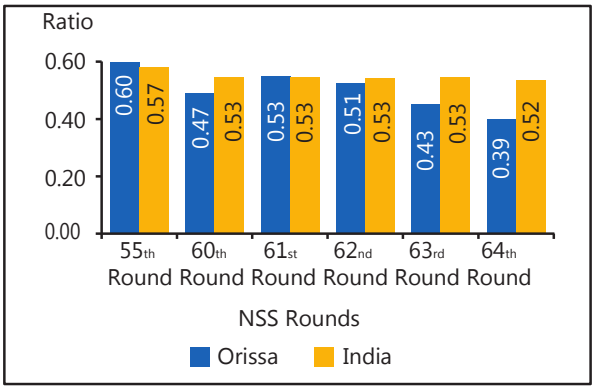


Figure 2.22: Consumer Price Index for Agricultural Labourers in Select States (May 2010)

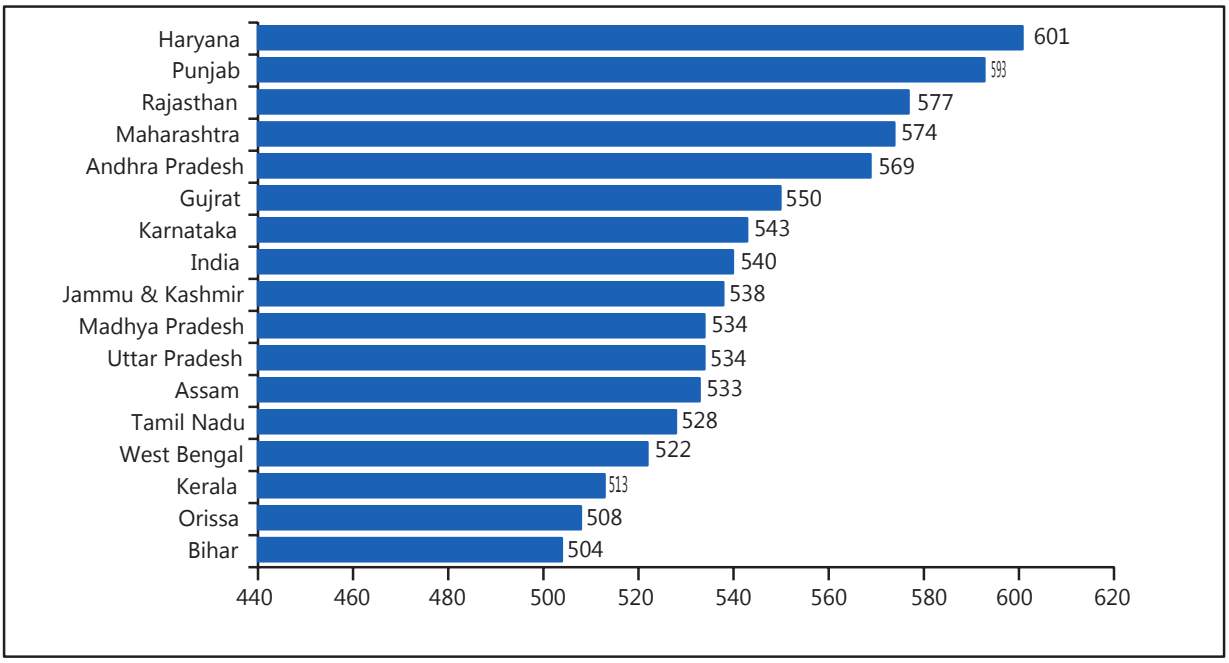


Figure 2.23: CPI (Food) for Agricultural Labourers for Orissa and India (Base year: 1986-87=100)

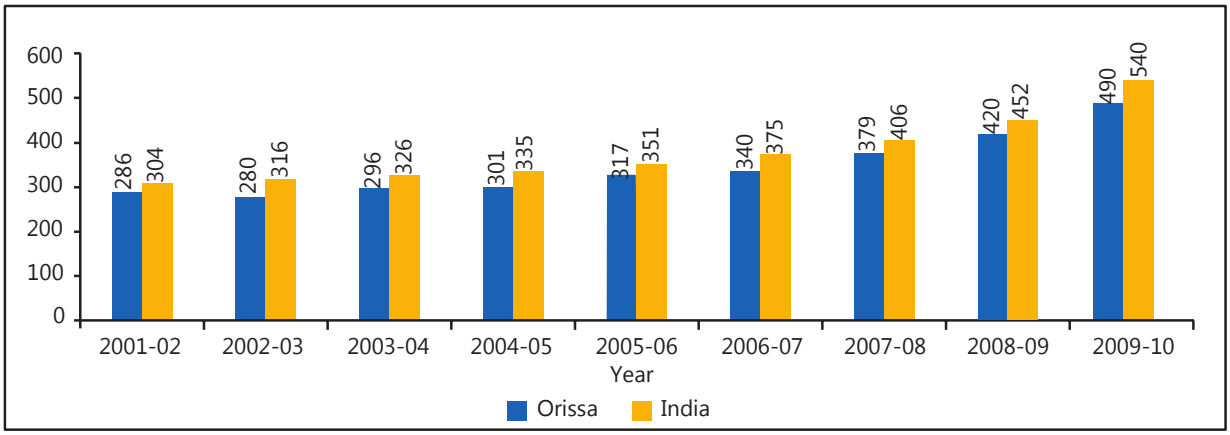


Figure 2.24: CPI for Industrial Workers, Orissa and India, 1995 - 2005 (Base Year: 1982=100)

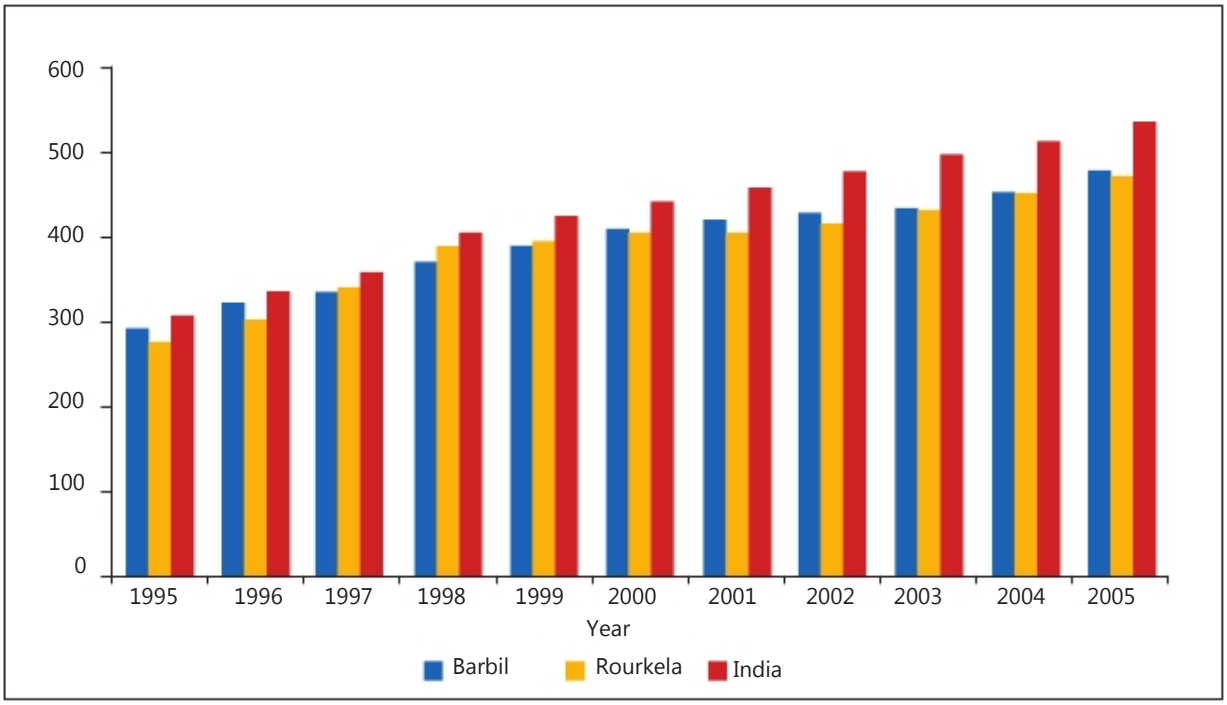
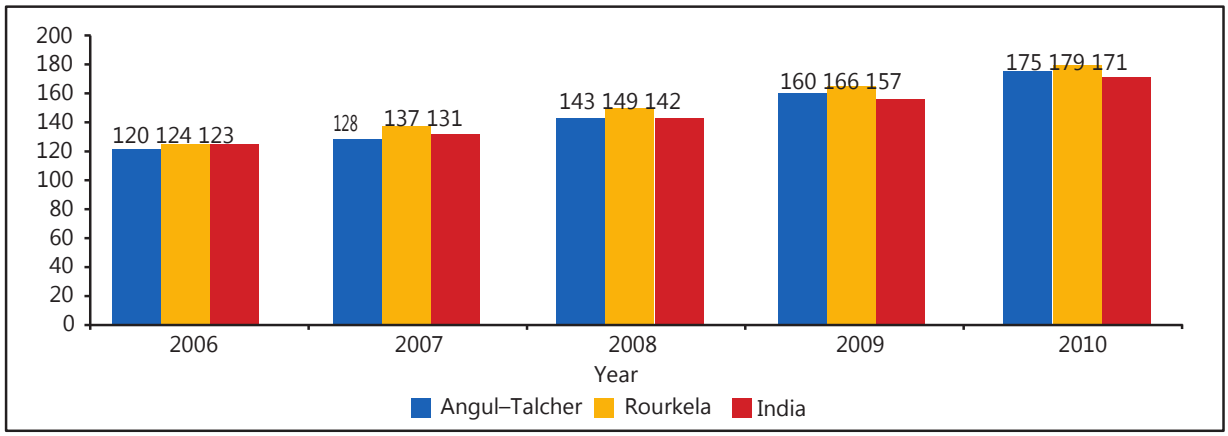


Figure 2.25: CPI for Industrial Workers, Orissa and India, 2006 - 2010 (Base Year: 2001=100)



these centres were Barbil and Rourkela and in recent years they are Angul-Talcher and Rourkela. Comparing data for Barbil, Rourkela and Angul-Talcher, it is seen that till 2005 the State's CPI for industrial workers was less than that of India, but since then it is higher. This is brought out in Figure 2.24 and 2.25. In the last couple of years, India and Orissa have experienced substantial price increases. Recently, food inflation has been rather severe. Compared to All-India, food inflation has hit the State harder in 2008-09 and 2009-10.

ANNEXURE 2

Annexure 2.1: Gross/Net State Domestic Product (GSDP & NSDP): (a) Total and Per Capita, (b) at Current and Constant Prices and (c) from 1950-51 to 2009-10

			1999-2000 Base				
1950-51	30012	909006	28830	734315	143.560	201	5115
1951-52	35721	1000846	34372	814507	146.460	235	5561
1952-53	37159	1040121	35703	833683	149.360	239	5582
1953-54	39037	1055980	37542	879345	152.260	247	5775
1954-55	40014	1058789	37858	881297	155.160	244	5680
1955-56	41445	1089050	38960	920640	158.060	246	5825
1956-57	43493	1103187	41093	933611	160.960	255	5800
1957-58	41156	993987	38598	823238	163.860	236	5024
1958-59	46925	1112393	44222	940558	166.760	265	5640
1959-60	48805	1166928	45917	993826	169.660	271	5858
1960-61	53791	1219597	50534	1045562	172.800	292	6051
1961-62	58563	1295396	55099	1120084	177.200	311	6321
1962-63	71569	1419351	67739	1242727	181.600	373	6843
1963-64	82053	1569795	78154	1334727	186.000	420	7176
1964-65	90359	1661201	86222	1433165	190.400	453	7527
1965-66	90748	1494686	86181	1305864	194.800	442	6704
1966-67	109999	1613955	104795	1376108	199.200	526	6908
1967-68	121670	1581764	115839	1377952	203.600	569	6768
1968-69	136106	1791500	130506	1543653	208.000	627	7421
1969-70	141580	1732207	135285	1536535	212.400	637	7234
1970-71	146635	1789768	139488	1603432	216.970	643	7390
1971-72	149497	1651208	141602	1462364	221.920	638	6590
1972-73	181460	1801483	172544	1609892	226.670	761	7102
1973-74	222039	1913585	211711	1719209	231.150	916	7438
1974-75	236738	1699705	223455	1502469	236.130	946	6363
1975-76	247323	1950432	232023	1750529	240.770	964	7271
1976-77	244357	1867160	227752	1664155	245.320	928	6784
1977-78	296298	2143083	277875	1936547	249.770	1113	7753
1978-79	315125	2280061	294296	2069949	254.070	1158	8147
1979-80	335345	2004308	309989	1790629	258.190	1201	6935

(Contd...)

1980-81	461129	2260357	431649	2043096	262.100	1647	7795
1981-82	513975	2276428	478614	2054966	266.460	1796	7712
1982-83	548813	2169437	507548	1943255	271.250	1871	7164
1983-84	689070	2569935	641885	2338772	276.160	2324	8469
1984-85	692725	2441369	637986	2204532	281.120	2269	7842
1985-86	821784	2729779	756692	2486841	286.230	2644	8688
1987-88	918687	2688838	833761	2431661	296.870	2809	8191
1988-89	1140395	3154749	1040915	2889096	302.420	3442	9553
1989-90	1305409	3394600	1188102	3119145	308.150	3856	10122
1990-91	1296907	2906626	1164212	2625936	314.080	3707	8361
1991-92	1636341	3191559	1475957	2899899	319.720	4616	9070
1992-93	1765792	3135096	1579279	2831591	325.150	4857	8709
1993-94	2024669	3365764	1816044	3052733	330.550	5494	9235
1994-95	2432311	3539370	2190148	3206917	335.840	6521	9549
1995-96	2950982	3685364	266399	3331265	341.050	7818	9768
1996-97	2916419	3506572	2588444	3130429	346.180	7477	9043
1997-98	3531691	3976114	3164741	3576036	351.180	9012	10183
1998-99	3923662	4089148	3510939	3662694	356.060	9861	10287
1999-00	4298608	4298608	3839889	3839889	361.510	10622	10622
2000-01	4335095	4227269	3828047	3738597	366.230	10453	10208
2001-02	4675574	4493161	4100580	3966184	370.780	11059	10697
2002-03	4971261	4464098	4383476	3937689	375.030	11688	10500
2003-04	6100793	5140346	5373318	4512717	379.220	14169	11900
			2004-05 Base				
2004-05(P)	7657856	7657857	6661368	6661369	383.280	17380	17380
2005-06(P)	8389120	8079799	7210342	6956907	387.280	18618	17964
2006-07(P)	10022119	9129424	8598670	7827557	391.210	21980	20009
2007-08(P)	12723377	10125016	10887421	8514900	395.050	27560	21554
2008-09(P)	14272818	10858421	12033440	8974966	399.500	30121	22465
2009-10(Q)	16232736	12005669	13424166	9735913	404.020	33226	24098

Source: Directorate of Economics and Statistics

Annexure 2.2: GSDP at Current Prices by Detailed Categories (Rs. In lakh)

Year	Agriculture & Animal Husbandry	Forestry & Logging	Fishing	Mining & Qurrying	Manufacturing Regd.	Manufacturing Un-Regd.	Electricity, Gas & Water supply	Construction	Trade, Hotel & Restaurant
1	2	3	4	5	6	7	8	9	10
1999-2000 Base									
1950-51	14695	1984	538	318	272	2056	14	376	1456
1951-52	18294	1801	511	385	434	2573	20	554	1570
1952-53	19036	1261	494	460	499	2739	23	780	1741
1953-54	19863	1374	421	425	575	2898	27	992	1870
1954-55	19374	1124	414	411	614	3048	31	1217	2177
1955-56	18916	1278	277	471	724	3220	40	1465	2356
1956-57	19764	1275	331	574	771	3324	47	1704	2652
1957-58	15815	1640	276	575	872	3467	57	1942	2916
1958-59	19471	2396	300	503	966	3579	63	2196	3155
1959-60	21293	1532	274	525	899	4104	69	2458	3351
1960-61	22997	1928	225	718	1315	4599	91	2743	3644
1961-62	23737	2616	250	690	1911	4733	165	3568	3905
1962-63	29892	3401	301	864	2489	4888	302	4868	4904
1963-64	35665	3817	326	919	3430	5084	313	5070	5799
1964-65	39732	3258	391	1033	4663	5373	436	5231	6544
1965-66	36473	3069	414	1185	5441	5843	364	5300	6666
1966-67	48577	4347	581	1255	5105	6819	339	4914	8373
1967-68	56909	2826	891	1400	4125	8024	523	4664	9747
1968-69	59702	9345	904	1656	5973	7707	581	4237	10647
1969-70	66239	4140	859	1825	7756	7363	650	3995	11789
1970-71	67272	5072	973	1966	7993	7250	738	3919	12221
1971-72	66981	4950	929	2165	6850	7958	1024	5007	12230
1972-73	87203	4501	1080	2279	7070	9170	1126	7182	15247
1973-74	109374	5269	1389	2749	10588	11341	1423	7248	19026
1974-75	106582	6055	1627	3705	14860	13712	2003	8040	19436
1975-76	108008	6470	1977	5399	12952	14098	2381	8657	19440
1976-77	89152	7582	2094	6147	19835	15141	2796	11403	18089
1977-78	125637	8578	2287	5613	19041	16632	3189	9938	23331
1978-79	127458	10538	3172	6070	22782	17446	3777	11295	24377

(Contd...)

Year	Agriculture & Animal Husbandry	Forestry & Logging	Fishing	Mining & Qurrying	Manufacturing Regd.	Manufacturing Un-Regd.	Electricity, Gas & Water supply	Construction	Trade, Hotel & Restaurant
1	2	3	4	5	6	7	8	9	10
1979-80	113374	15522	3513	7809	27887	22381	4949	17288	23840
1980-81	188577	17967	4513	9532	24318	20362	6319	14653	34999
1981-82	219920	20559	5487	10812	21285	19848	6934	14727	39769
1982-83	218819	21201	7608	12245	22041	21569	8314	22764	41337
1983-84	310288	22997	9379	14887	24351	27827	10344	28063	52365
1984-85	272534	21800	9685	15544	46701	25459	9711	27646	54182
1985-86	341424	28862	10527	18888	46612	27887	11862	34858	62211
1986-87	334567	39633	12834	23276	52987	30559	14532	42184	67187
1987-88	313220	41524	12328	27875	58681	35090	13262	42116	70722
1988-89	377323	45498	13300	38797	116986	41258	16201	56368	94562
1989-90	447367	48560	19545	45590	125121	44065	25469	59186	102922
1990-91	373069	55303	19816	51563	104713	45862	29092	90714	98390
1991-92	526508	57289	24245	56725	140351	52329	34606	90485	154146
1992-93	503938	62563	31769	77288	160930	57463	36406	102728	169425
1993-94	627322	64493	40834	94726	152195	59501	51848	111774	193461
1994-95	734750	70181	49526	114511	194405	75672	82545	126063	229242
1995-96	976147	72171	51099	146144	238759	84612	80849	145637	285529
1996-97	847184	83674	64813	145490	198282	94109	73759	152023	292395
1997-98	1116993	92872	70097	185297	205480	111544	102172	174101	363204
1998-99	1180864	91878	69499	203511	284533	113097	115671	190007	377468
1999-00	1136464	110394	67721	203293	327920	113140	156398	274576	378592
2000-01	1000046	117787	86550	234092	309399	118038	160293	269709	419220
2001-02	1157689	119398	94209	250344	283266	115521	182144	263257	461403
2002-03	1172256	106606	98524	301273	347608	125758	134052	277287	499557
2003-04	1555016	144785	105040	430050	445701	143290	245017	263669	626728
2004-05 Base									
2004-05(P)	1463757	257677	107694	586024	743886	192835	319651	634372	829279
2005-06(P)	1577190	242151	118525	712497	779307	208296	302027	667317	994225
2006-07(P)	1796496	275007	126759	866035	1076460	247774	388461	821564	1287075
2007-08(P)	2668917	327552	139992	1224451	1557562	290668	458158	959671	1484176
2008-09(P)	2603508	329140	169523	1293155	1909044	308741	443132	1062576	1760290
2009-10(Q)	2896032	341027	168430	1200199	2245501	346523	447471	1158590	1987076

(Contd...)

Year	Railways	Transport by Other means	Storage	Communication	Banking Insurance	Real Estate, Ownership of Dwelling	Public Administration	Other services	Total GSDP
1	11	12	13	14	15	16	17	18	19
1999-2000 Base									
1950-51	490	360	5	92	48	11167	538	2001	30012
1951-52	511	401	5	107	54	11454	599	3090	35721
1952-53	523	429	7	118	61	12028	646	3316	37159
1953-54	537	455	7	125	71	12303	706	3452	39037
1954-55	555	486	7	133	85	14365	728	3636	40014
1955-56	594	509	8	142	99	16555	797	3823	41445
1956-57	642	556	8	146	108	16022	809	3959	43493
1957-58	729	615	9	174	122	15789	929	4143	41156
1958-59	809	663	9	187	141	15544	1013	4276	46925
1959-60	872	687	9	251	149	13369	1183	4458	48805
1960-61	942	806	10	249	172	14324	1346	4633	53791
1961-62	1046	905	11	243	187	15251	1536	5023	58563
1962-63	1176	941	10	296	277	16197	2080	5416	71569
1963-64	1353	1150	13	348	366	17118	2338	5480	82053
1964-65	1519	1461	19	378	415	18142	2516	6069	90359
1965-66	1644	1636	21	494	508	21825	2942	6428	90748
1966-67	1880	1932	25	470	496	23740	3309	7270	109999
1967-68	1835	2261	30	623	658	24743	3770	8087	121670
1968-69	2035	2516	34	515	689	26422	3860	8344	136106
1969-70	2121	2686	35	586	807	28171	4130	8846	141580
1970-71	2198	2966	39	659	804	29845	4882	9152	146635
1971-72	2392	3240	42	771	994	31748	5130	9826	149497
1972-73	2387	3690	49	769	1107	33477	5729	10525	181460
1973-74	2438	4298	57	1099	1488	36764	6077	11585	222039
1974-75	2725	5092	61	1490	1737	41949	7223	13884	236738
1975-76	3005	5995	72	1823	2285	46838	9112	16280	247323
1976-77	3426	6494	81	2022	2676	49775	9948	17636	244357
1977-78	3537	7194	95	2177	3219	56014	10957	19596	296298
1978-79	3433	7944	102	2606	3373	60220	11999	21122	315125
1979-80	3810	9431	112	2748	3868	65692	13777	24157	335345

(Contd...)

Year	Railways	Transport by Other means	Storage	Communication	Banking Insurance	Real Estate, Ownership of Dwelling	Public Administration	Other services	Total GSDP
1	11	12	13	14	15	16	17	18	19
1980-81	3914	10216	110	3300	5111	74051	16075	27109	461129
1981-82	6819	11306	148	3207	6575	78333	18826	29420	513975
1982-83	8618	11419	155	3933	8861	83426	23040	33461	548813
1983-84	9920	11995	252	4577	9835	88103	27068	36820	689070
1984-85	9882	15223	307	5674	12681	91453	28669	45574	692725
1985-86	13464	18016	461	5872	14786	95847	34577	55631	821784
1986-87	15738	21631	495	7651	19245	100865	44208	64440	892031
1987-88	17837	25871	673	8486	19189	105718	50388	75705	918687
1988-89	19798	33407	727	11689	19064	114617	56400	84400	1140395
1989-90	25924	38918	643	13443	24642	120236	61520	102256	1305409
1990-91	32095	41020	556	16814	31366	125554	67775	113204	1296907
1991-92	37976	48711	730	19285	37438	136208	79629	139679	1636341
1992-93	44174	56255	977	22962	42719	147636	94607	153950	1765792
1993-94	52078	68513	1051	27432	50009	152443	100946	176044	2024669
1994-95	67728	79728	1342	35397	60310	167155	112811	230945	2432311
1995-96	83377	91648	1576	37531	75393	179340	134677	266494	2950982
1996-97	76629	99976	1982	45485	97127	198969	150506	294015	2916419
1997-98	83011	125174	2969	54555	108718	221966	169596	343941	3531691
1998-99	61003	143488	2476	64012	107425	241399	227148	450183	3923662
1999-00	72683	152929	2738	67612	136393	262177	258684	576894	4298608
2000-01	72703	180665	3360	64155	152006	288260	267511	591301	4335095
2001-02	74970	205263	3838	63070	185934	324956	280945	609367	4675574
2002-03	84866	229774	4019	66125	222793	355330	277059	668374	4971261
2003-04	95384	286660	4723	83254	241685	391984	312017	725790	6100793
2004-05 Base									
2004-05(P)	103015	443835	7421	93225	251808	505831	369534	748011	7657856
2005-06(P)	106040	542361	8617	103366	269320	551171	362116	844594	8389120
2006-07(P)	134853	651570	9975	110205	313386	603918	398602	913978	10022119
2007-08(P)	153531	764935	11739	119037	365366	666000	453438	1078184	12723377
2008-09(P)	169406	950830	14094	136784	447467	754117	574273	1346738	14272818
2009-10(Q)	197018	1196103	16993	153833	498579	820796	731731	1826836	16232736

Annexure 2.3: GSDP at Constant Prices by Detailed Categories (Rs. In lakh)

Year	Agriculture & Animal Husbandry	Rorestry & Logging	Fishing	Mining & Qurrying	Manufac-turing Regd.	Manufacturing Un-Regd.	Electricity, Gas & Water supply	Construction	Trade, Hotel & Restaurant
1	2	3	4	5	6	7	8	9	10
1999-2000 Base									
1950-51	564858	94587	13547	4376	10576	38659	5919	14725	41730
1951-52	667587	91706	13192	5661	11828	39677	6014	21310	45246
1952-53	669564	66277	12581	7091	12165	49022	5527	29274	48731
1953-54	657608	70950	10736	8477	12303	52155	5402	36488	52307
1954-55	623463	58051	10732	7759	13614	56572	6067	43813	55839
1955-56	603988	61973	7718	9087	15262	61544	6954	51577	59541
1956-57	626399	57495	9734	9311	17019	58187	7618	59358	63219
1957-58	477206	71269	7131	8847	18585	59595	7638	66892	66909
1958-59	581656	102893	6444	9395	19646	57787	7996	74592	70790
1959-60	651206	53668	5021	10498	21537	66277	8589	82354	74716
1960-61	658449	81103	4119	12704	23983	70031	9642	90445	78572
1961-62	664127	106797	4127	13695	35388	73149	12100	113791	82982
1962-63	706998	134931	4710	16823	44848	71805	12851	144616	90395
1963-64	813074	147610	5081	14061	56646	72459	16732	149635	102321
1964-65	884627	129798	5976	15426	71692	71897	19171	143590	112163
1965-66	733539	117154	5868	17673	73647	72952	16902	120737	100829
1966-67	833254	157965	7071	18061	58881	81154	13546	100443	112975
1967-68	835740	98024	8930	18155	46911	92168	21881	86403	114377
1968-69	881702	305779	9860	19671	65677	80808	26491	78544	125986
1969-70	916611	132616	9051	21283	80656	75075	27642	73971	130288
1970-71	940223	162445	10178	21856	82028	69997	32792	74829	135840
1971-72	824932	147310	9563	21627	64828	72749	34457	90262	121175
1972-73	948106	125097	10131	21910	60603	76246	35903	120744	133911
1973-74	1012950	137255	11802	21947	79990	78602	39172	113259	142795
1974-75	801993	134710	12506	22636	91629	75978	48289	110030	119233
1975-76	1017944	129921	12842	27902	73496	78620	57161	117498	140839
1976-77	843316	135293	13640	29778	110642	82745	59336	136446	128489
1977-78	1095899	139976	13893	27862	109153	86510	58902	119535	156454
1978-79	1159860	139808	15871	29393	128351	90434	61065	129629	167256

(Contd...)

Year	Agriculture & Animal Husbandry	Rorestry & Logging	Fishing	Mining & Qurrying	Manufac-turing Regd.	Manufacturing Un-Regd.	Electricity, Gas & Water supply	Construction	Trade, Hotel & Restaurant
1	2	3	4	5	6	7	8	9	10
1979-80	844968	158425	16740	30061	128420	99144	57731	164105	132585
1980-81	1069624	155271	16548	32071	94887	76431	63915	117045	153317
1981-82	1097511	157188	17477	32035	74226	69800	71975	106242	158790
1982-83	952942	155483	17402	31712	71930	70647	67955	137456	150942
1983-84	1271744	153654	21207	35587	76215	90750	80035	146970	172941
1984-85	1095134	134383	21586	36045	134539	75919	87971	118922	176576
1985-86	1294313	138421	23914	39597	120980	77422	83010	141863	189822
1986-87	1233946	134348	24908	44685	134362	80552	96326	141386	194881
1987-88	1110328	121244	27105	50618	137193	86232	107742	137973	192105
1988-89	1315307	128462	28491	63878	237647	95726	107455	171120	247577
1989-90	1478976	135196	34514	72144	226319	93974	113216	163207	249386
1990-91	993123	110650	36295	81938	178822	88423	126595	240669	209315
1991-92	1168370	99279	39779	78338	222259	92652	142505	197888	272068
1992-93	1040022	102644	46326	97280	227406	89790	139477	201754	271731
1993-94	1216605	98006	52238	111930	203927	86470	152316	213296	288055
1994-95	1186246	100587	59329	128793	238173	100004	163254	226453	304007
1995-96	1216502	92684	60498	154224	269525	102336	137650	222546	330879
1996-97	1042397	93476	65982	163856	215681	107643	132087	209120	330099
1997-98	1266945	106471	74359	183762	214584	119616	146177	238435	381609
1998-99	1261888	95833	71157	194692	273560	116131	149469	224544	383411
1999-00	1136464	110394	67721	203293	327920	113140	156398	274576	378592
2000-01	1038689	113021	65597	218510	299464	118975	138023	260897	393132
2001-02	1226310	113063	74007	221779	269413	115250	141297	245597	418753
2002-03	976048	120280	75108	282865	322088	119459	99125	249484	438492
2003-04	1241283	114735	82679	334524	390745	128395	170571	229130	524177
2004-05 Base									
2004-05(P)	1463757	257677	107694	586024	743886	192835	319651	634372	829279
2005-06(P)	1514587	264540	111262	636865	754725	201000	293700	629309	949421
2006-07(P)	1539156	273003	115291	764053	996061	224982	367150	725716	1154469
2007-08(P)	1621345	277347	122457	794125	1369745	252318	426635	785872	1264668
2008-09(P)	1613752	282505	128469	830124	1553777	249769	409203	780962	1388663
2009-10(Q)	1808946	278005	127421	868067	1791913	276525	403947	816570	1510516

(Contd...)

Annexure 2.3: GSDP at Constant Prices by Detailed Categories (Contd.)

GSDP at Constant Price by Detailed Catagories (Rs. In lakh), continued									
Year	Railways	Transport by Other means	Storage	Communi-Banking In Real Estate, Ownership of Dwelling cation surance Business services etc.			Public Administration	Other services	Total GSDP
1	11	12	13	14	15	16	17	18	19
1999-2000 Base									
1950-51	9174	5868	88	2211	837	112334	13350	73557	909006
1951-52	9182	6189	93	2395	844	86801	14294	76803	1000846
1952-53	9150	6565	98	2618	1105	103685	15498	95593	1040121
1953-54	9150	6941	102	2802	1311	106938	16707	100456	1055980
1954-55	9362	7269	107	3088	1576	127434	18380	108782	1058789
1955-56	9924	7815	112	3421	1862	150130	20609	117721	1089050
1956-57	10046	8205	118	3135	1905	133735	18875	111898	1103187
1957-58	11147	8785	127	3513	2106	129226	20801	114754	993987
1958-59	11800	9264	123	3635	2270	120202	21591	111440	1112393
1959-60	12664	9625	127	4707	2416	103579	24254	116173	1166928
1960-61	13284	10521	132	4595	2605	104537	27302	113802	1219597
1961-62	14377	12071	151	4282	2661	104946	30307	114459	1295396
1962-63	15167	12810	156	4883	3731	105424	39699	117142	1419351
1963-64	16717	14135	172	5326	4562	105764	42746	117773	1569795
1964-65	18143	16383	200	5243	4699	106060	40443	118934	1661201
1965-66	18804	16984	200	6556	5455	106442	44002	118977	1494686
1966-67	20313	18841	225	5742	4913	107426	43943	120241	1613955
1967-68	19171	20037	234	7130	6098	107714	45142	119298	1581764
1968-69	20582	21793	264	5742	6275	108105	46269	119697	1791500
1969-70	21063	22798	274	6426	7251	108366	48578	120130	1732207
1970-71	21096	24697	302	6862	6946	109044	54260	119072	1789768
1971-72	21553	25530	302	7379	7851	112753	55115	122630	1651208
1972-73	21422	27183	327	8101	7936	116477	57138	125164	1801483
1973-74	21210	29650	362	8794	9486	120542	50602	126213	1913585
1974-75	22694	29560	332	8997	8626	124701	47950	128602	1699705
1975-76	24130	32314	381	9496	10279	128983	60295	132332	1950432
1976-77	24513	34636	415	9820	11299	134049	67924	132504	1867160
1977-78	24733	35976	445	10348	12497	138877	69954	133069	2143083
1978-79	24733	37274	445	11133	14882	143890	74880	134892	2280061
1979-80	28035	38742	450	11808	16545	149199	78956	136503	2004308

(Contd...)

GSDP at Constant Price by Detailed Catagories (Rs. In lakh), continued									
Year	Railways	Transport by Other means	Storage	Communi-cation	Banking In Real Estate, Ownership of Dwelling surance	Business services etc.	Public Administration	Other services	Total GSDP
1	11	12	13	14	15	16	17	18	19
1980-81	28908	40957	483	12780	18804	154734	82973	141610	2260357
1981-82	32235	42104	611	13104	20919	158719	86480	137014	2276428
1982-83	30620	40464	650	13585	23998	162924	97680	143046	2169437
1983-84	30122	40185	801	14813	24244	168468	102476	139723	2569935
1984-85	30645	46921	1035	16516	28448	173133	101547	162052	2441369
1985-86	36238	56642	1124	17181	33191	177893	113839	184329	2729779
1986-87	38383	68140	1163	18670	41154	182731	133959	195986	2765580
1987-88	40716	70407	1017	20638	46457	186761	139873	212432	2688838
1988-89	41303	81100	1056	22231	51086	192940	146666	222704	3154749
1989-90	45690	83245	1197	25254	64927	197526	152387	257444	3394600
1990-91	46978	86345	864	27797	67141	203138	152212	256320	2906626
1991-92	52148	90062	1485	25373	66909	209074	155527	277843	3191559
1992-93	58965	94326	1896	25652	74563	215183	168704	279377	3135096
1993-94	53192	103002	1871	28740	70478	221536	167459	296643	3365764
1994-95	56985	112111	2079	34282	77522	227254	170007	352284	3539370
1995-96	70803	122069	2327	35699	81608	233330	184153	368531	3685364
1996-97	65733	124817	2736	41960	111433	239669	188348	371536	3506572
1997-98	70080	141014	3699	49769	128865	246638	198325	405766	3976114
1998-99	51338	146400	2631	49540	111561	254105	234820	468067	4089148
1999-00	72683	152929	2738	67612	136393	262177	258684	576894	4298608
2000-01	74578	174375	3247	70050	148924	274984	257594	577209	4227269
2001-02	78741	196903	3527	68185	168120	286478	268873	596865	4493161
2002-03	85506	213311	3635	82360	193627	297966	258789	645955	4464098
2003-04	93318	256369	4281	108223	191960	312270	281909	675777	5140346
2004-05 Base									
2004-05(P)	103015	443835	7421	93225	251808	505831	369534	748011	7657857
2005-06(P)	107835	517802	8382	112451	290097	537848	345201	804775	8079799
2006-07(P)	125305	586628	9563	138513	346440	574018	364253	824823	9129424
2007-08(P)	134414	622003	9675	162113	408039	608005	378875	887380	10125016
2008-09(P)	145912	709803	10646	183652	477092	650020	436079	1007993	10858421
2009-10(Q)	160936	803382	11793	218264	561663	665335	491623	1210763	12005669

Annexure 2.4: Annual % Growth Rate of GSDP/NSDP: (a) Total and Per Capita, (b) at Current and Constant prices (c) from 1950-51 to 2090-10

Year	GSDP		NSDP		Population	Per Capita NSDP	
	At Current Prices	At constant Prices	At Current Prices	At constant Prices		At Current Prices	At constant Prices
1999-2000 Base							
1	2	3	4	5	6	7	8
1951-52	19.02	10.10	19.22	10.92	2.02	16.86	8.72
1952-53	4.03	3.92	3.87	2.35	1.98	1.86	0.37
1953-54	5.05	1.52	5.15	5.48	1.94	3.15	3.47
1954-55	2.50	0.27	0.84	0.22	1.90	-1.04	-1.65
1955-56	3.58	2.86	2.91	4.46	1.87	1.02	2.55
1956-57	4.94	1.30	5.47	1.41	1.83	3.57	-0.42
1957-58	-5.37	-9.90	-6.07	-11.82	1.80	-7.73	-13.38
1958-59	14.02	11.91	14.57	14.25	1.77	12.58	12.26
1959-60	4.01	4.90	3.83	5.66	1.74	2.06	3.86
1960-61	10.22	4.51	10.05	5.21	1.85	8.05	3.29
1961-62	8.87	6.22	9.03	7.13	2.55	6.33	4.47
1962-63	22.21	9.57	22.94	10.95	2.48	19.96	8.26
1963-64	14.65	10.60	15.37	7.40	2.42	12.65	4.86
1964-65	10.12	5.82	10.32	7.38	2.37	7.77	4.89
1965-66	0.43	-10.02	-0.05	-8.88	2.31	-2.31	-10.94
1966-67	21.21	7.98	21.60	5.38	2.26	18.91	3.05
1967-68	10.61	-1.99	10.54	0.13	2.21	8.15	-2.03
1968-69	11.86	13.26	12.66	12.03	2.16	10.28	9.66
1969-70	4.02	-3.31	3.66	-0.46	2.12	1.51	-2.52
1970-71	3.57	3.32	3.11	4.35	2.15	0.94	2.16
1971-72	1.95	-7.74	1.52	-8.80	2.28	-0.75	-10.83
1972-73	21.38	9.10	21.85	10.09	2.14	19.30	7.78
1973-74	22.36	6.22	22.70	6.79	1.98	20.32	4.72
1974-75	6.62	-11.18	5.55	-12.61	2.15	3.32	-14.45
1975-76	4.47	14.75	3.83	16.51	1.97	1.83	14.26
1976-77	-1.20	-4.27	-1.84	-4.93	1.89	-3.66	-6.70
1977-78	21.26	14.78	22.01	16.37	1.81	19.83	14.29
1978-79	6.35	6.39	5.91	6.89	1.72	4.12	5.08
1979-80	6.42	-12.09	5.33	-13.49	1.62	3.65	-14.87

(Contd...)

Year	GSDP		NSDP		Population	Per Capita NSDP	
	At Current Prices	At constant Prices	At Current Prices	At constant Prices		At Current Prices	At constant Prices
1999-2000 Base							
1	2	3	4	5	6	7	8
1980-81	37.51	12.77	39.25	14.10	1.51	37.17	12.40
1981-82	11.46	0.71	10.88	0.58	1.66	9.07	-1.06
1982-83	6.78	-4.70	6.05	-5.44	1.80	4.17	-7.11
1983-84	25.56	18.46	26.47	20.35	1.81	24.22	18.21
1984-85	0.53	-5.00	-0.61	-5.74	1.80	-2.36	-7.40
1985-86	18.63	11.81	18.61	12.81	1.82	16.49	10.79
1986-87	8.55	1.31	8.05	1.18	1.83	6.11	-0.65
1987-88	2.99	-2.77	1.97	-3.36	1.85	0.12	-5.11
1988-89	24.13	17.33	24.85	18.81	1.87	22.55	16.63
1989-90	14.47	7.60	14.14	7.96	1.89	12.02	5.96
1990-91	-0.65	-14.38	-2.01	-15.81	1.92	-3.86	-17.40
1991-92	26.17	9.80	26.78	10.43	1.80	24.54	8.48
1992-93	7.91	-1.77	7.00	-2.36	1.70	5.21	-3.99
1993-94	14.66	7.36	14.99	7.81	1.66	13.11	6.05
1994-95	20.13	5.16	20.60	5.05	1.60	18.70	3.40
1995-96	21.32	4.12	21.75	3.88	1.55	19.89	2.29
1996-97	-1.17	-4.85	-2.92	-6.03	1.50	-4.36	-7.42
1997-98	21.10	13.39	22.26	14.23	1.44	20.52	12.61
1998-99	11.10	2.84	10.94	2.42	1.39	9.42	1.02
1999-00	9.56	5.12	9.37	4.84	1.53	7.72	3.26
2000-01	0.85	-1.66	-0.31	-2.64	1.31	-1.59	-3.89
2001-02	7.85	6.29	7.12	6.09	1.24	5.80	4.79
2002-03	6.32	-0.65	6.90	-0.72	1.15	5.69	-1.84
2003-04	22.72	15.15	22.58	14.6	1.12	21.23	13.34
2004-05 Base							
2005-06(P)	9.55	5.51	8.24	4.44	1.04	7.12	3.36
2006-07(P)	19.47	12.99	19.25	12.51	1.01	18.06	11.38
2007-08(P)	26.95	10.91	26.62	8.78	0.98	25.39	7.72
2008-09(P)	12.18	7.24	10.53	5.40	1.13	9.30	4.23
2009-10(Q)	13.73	10.57	11.56	8.48	1.13	10.31	7.27

Annexure 2.5: Plan-Wise Annual % Growth Rate of GSDP/NSDP: (a) Total and Per Capita NSDP

			1999-2000 Base			
1st Plan (1951-56)	6.84	3.73	6.40	4.69	4.37	2.69
2nd Plan (1956-61)	5.56	2.54	5.57	2.94	3.71	1.12
3rd Plan (1961-66)	11.26	4.44	11.52	4.80	8.88	2.31
Three Annual Plans (1966-69)	14.56	6.42	14.93	5.85	12.45	3.56
4th Plan (1969-74)	10.66	1.52	10.57	2.39	8.26	0.26
5th Plan (1974-79)	7.50	4.09	7.09	4.45	5.09	2.50
Annual Plan (1979-80)	6.42	-12.09	5.33	-13.49	3.65	-14.87
6th Plan (1980-85)	16.37	4.45	16.41	4.77	14.45	3.01
7th Plan (1985-90)	13.75	7.06	13.52	7.48	11.46	5.52
Two Annual Plan (1990-92)	12.76	-2.29	12.39	-2.69	10.34	-4.46
8th Plan (1992-97)	12.57	2.00	12.28	1.67	10.51	0.07
9th Plan (1997-2002)	10.09	5.20	9.88	4.99	8.37	3.56
10th Plan (2002-07)	15.43	9.51	15.41	9.40	14.18	8.23
11th Plan: Three years (2007-10)	16.81	8.73	17.05	8.53	15.72	7.29
			2004-05 Base			
Last two years of 10th Plan	14.51	9.25	13.75	8.48	12.59	7.37
First three years of 11th Plan	17.62	9.57	16.24	7.55	15.00	6.41

Annexure 2.6: Composition of GSDP (In %) at Current Prices by Broad Categories

			1999-2000 Base		
1950-51	48.16	7.46	6.60	37.77	100.00
1951-52	49.55	8.45	6.12	35.87	100.00
1952-53	48.12	9.15	6.38	36.35	100.00
1953-54	47.90	9.75	6.49	35.86	100.00
1954-55	44.05	10.14	6.94	38.87	100.00
1955-56	40.84	10.63	7.04	41.49	100.00
1956-57	41.65	11.10	7.60	39.66	100.00
1957-58	36.56	12.66	8.87	41.91	100.00
1958-59	41.02	12.31	8.73	37.95	100.00
1959-60	42.58	13.57	9.32	34.53	100.00
1960-61	42.59	14.40	9.30	33.71	100.00
1961-62	41.49	15.78	9.29	33.44	100.00
1962-63	44.01	16.02	9.36	30.61	100.00
1963-64	45.97	15.69	9.78	28.56	100.00
1964-65	45.70	16.16	10.21	27.93	100.00
1965-66	41.04	16.91	10.43	31.62	100.00
1966-67	45.85	14.38	10.62	29.15	100.00
1967-68	47.31	13.22	11.06	28.42	100.00
1968-69	49.33	12.74	10.85	27.08	100.00
1969-70	48.07	13.00	11.33	27.60	100.00
1970-71	47.66	12.60	11.45	28.29	100.00
1971-72	46.22	12.85	11.51	29.41	100.00
1972-73	49.36	12.75	11.50	26.40	100.00
1973-74	51.15	13.18	11.59	24.08	100.00
1974-75	47.15	15.43	11.51	25.90	100.00
1975-76	46.02	14.38	11.46	28.14	100.00
1976-77	39.72	18.61	11.39	30.28	100.00
1977-78	44.83	15.39	11.46	28.32	100.00
1978-79	43.60	16.38	11.39	28.64	100.00
1979-80	38.93	20.13	11.09	29.85	100.00
1980-81	47.84	14.24	11.39	26.53	100.00
1981-82	49.96	12.22	11.92	25.91	100.00
1982-83	47.35	13.61	11.93	27.11	100.00
1983-84	51.89	13.15	11.48	23.48	100.00
1984-85	46.13	15.81	12.31	25.75	100.00
1985-86	48.64	14.75	12.17	24.44	100.00
1986-87	46.00	15.72	12.63	25.64	100.00
1987-88	42.99	16.24	13.45	27.32	100.00
1988-89	41.65	20.24	14.05	24.07	100.00
1989-90	42.98	19.45	13.93	23.64	100.00
1990-91	38.53	20.85	14.56	26.05	100.00

(Contd...)

1991-92	40.63	19.42	15.94	24.01	100.00
1992-93	38.26	20.25	16.64	24.86	100.00
1993-94	40.86	18.54	16.92	23.68	100.00
1994-95	39.84	19.68	17.00	23.48	100.00
1995-96	42.21	18.63	16.93	22.23	100.00
1996-97	39.13	17.77	17.71	25.39	100.00
1997-98	41.49	16.80	17.81	23.90	100.00
1998-99	39.40	17.92	16.53	26.15	100.00
1999-00	35.31	20.29	15.69	28.71	100.00
2000-01	33.18	19.78	17.07	29.97	100.00
2001-02	34.68	18.06	17.29	29.97	100.00
2002-03	33.77	17.80	17.79	30.65	100.00
2003-04	36.63	17.99	17.98	27.40	100.00
			2004-05 Base		
2004-05(P)	31.54	24.69	19.28	24.49	100.00
2005-06(P)	31.59	23.33	20.92	24.16	100.00
2006-07(P)	30.58	25.29	21.89	22.25	100.00
2007-08(P)	34.27	25.67	19.91	20.14	100.00
2008-09(P)	30.8	26.09	21.24	21.88	100.00
2009-10(Q)	28.37	25.86	21.88	23.89	100.00

Annexure 2.7: Composition of GSDP (In %) at Constant Prices by Broad Categories

			1999-2000 Base		
1950-51	67.31	6.94	5.87	19.88	100.00
1951-52	70.82	7.17	5.74	16.27	100.00
1952-53	66.59	8.46	5.92	19.03	100.00
1953-54	64.98	9.24	6.20	19.59	100.00
1954-55	60.77	10.42	6.57	22.24	100.00
1955-56	57.41	11.38	6.80	24.41	100.00
1956-57	58.76	11.89	7.08	22.27	100.00
1957-58	52.53	14.21	8.42	24.84	100.00
1958-59	57.81	13.21	7.89	21.09	100.00
1959-60	57.75	14.33	8.16	19.75	100.00
1960-61	57.92	14.86	8.20	19.01	100.00
1961-62	56.77	16.87	8.20	18.16	100.00
1962-63	56.55	17.95	8.08	17.42	100.00
1963-64	58.16	17.54	8.23	16.08	100.00
1964-65	58.71	17.36	8.62	15.31	100.00
1965-66	55.45	18.03	9.09	17.43	100.00
1966-67	59.61	14.90	9.27	16.22	100.00
1967-68	58.32	15.02	9.77	16.89	100.00
1968-69	63.28	13.08	9.07	14.58	100.00
1969-70	59.91	14.28	10.04	15.78	100.00
1970-71	60.60	13.87	10.08	15.45	100.00
1971-72	57.67	15.07	10.11	17.15	100.00
1972-73	58.28	15.48	10.07	16.17	100.00
1973-74	59.06	15.52	10.12	15.31	100.00
1974-75	54.34	18.22	10.11	17.33	100.00
1975-76	57.86	15.91	10.08	16.15	100.00
1976-77	52.28	19.91	10.12	17.69	100.00
1977-78	57.19	16.75	10.20	15.86	100.00
1978-79	56.90	17.32	10.19	15.59	100.00
1979-80	50.19	21.48	10.11	18.22	100.00
1980-81	56.34	15.59	10.46	17.61	100.00
1981-82	57.29	14.16	10.84	17.71	100.00
1982-83	53.36	16.04	10.89	19.71	100.00
1983-84	57.67	15.33	10.07	16.92	100.00
1984-85	52.72	17.10	11.13	19.05	100.00
1985-86	54.81	15.51	11.03	18.66	100.00
1986-87	51.99	16.37	11.62	20.03	100.00
1987-88	48.69	17.45	12.08	21.78	100.00

(Contd...)

1988-89	48.69	19.40	12.47	19.44	100.00
1989-90	50.69	17.58	11.92	19.80	100.00
1990-91	42.04	21.83	12.77	23.35	100.00
1991-92	43.42	20.53	13.82	22.23	100.00
1992-93	41.03	21.00	14.44	23.53	100.00
1993-94	43.94	19.49	14.11	22.47	100.00
1994-95	41.67	20.57	14.39	23.37	100.00
1995-96	41.35	19.86	15.24	23.54	100.00
1996-97	38.95	18.95	16.12	25.98	100.00
1997-98	41.03	18.08	16.25	24.64	100.00
1998-99	39.70	18.68	15.49	26.13	100.00
1999-00	35.31	20.29	15.69	28.71	100.00
2000-01	33.97	19.34	16.92	29.78	100.00
2001-02	36.39	17.17	17.05	29.39	100.00
2002-03	32.58	17.70	18.44	31.28	100.00
2003-04	34.50	17.88	19.19	28.44	100.00
			2004-05 Base		
2004-05(P)	31.54	24.69	19.28	24.49	100.00
2005-06(P)	31.28	23.25	20.99	24.48	100.00
2006-07(P)	29.48	25.35	22.07	23.11	100.00
2007-08(P)	27.81	28	21.66	22.54	100.00
2008-09(P)	26.29	27.57	22.46	23.68	100.00
2009-10(Q)	25.67	27.4	22.53	24.4	100.00

Annexure 2.8: Composition of NSDP (In %) at Current Prices by Broad Categories

			1999-2000 Base		
1950-51	49.10	7.46	6.04	37.40	100.00
1951-52	50.51	8.43	5.52	35.55	100.00
1952-53	49.07	9.09	5.75	36.09	100.00
1953-54	48.81	9.69	5.88	35.62	100.00
1954-55	45.29	9.64	6.26	38.81	100.00
1955-56	42.09	10.17	6.34	41.40	100.00
1956-57	42.79	10.57	7.06	39.58	100.00
1957-58	37.61	12.11	8.30	41.98	100.00
1958-59	42.20	11.79	8.14	37.87	100.00
1959-60	43.91	13.08	8.71	34.30	100.00
1960-61	44.00	13.98	8.72	33.30	100.00
1961-62	42.77	15.43	8.70	33.10	100.00
1962-63	45.34	15.74	8.69	30.22	100.00
1963-64	47.42	15.34	9.16	28.08	100.00
1964-65	47.01	15.82	9.68	27.49	100.00
1965-66	42.17	16.60	9.85	31.38	100.00
1966-67	47.11	13.90	10.07	28.92	100.00
1967-68	48.63	12.62	10.52	28.23	100.00
1968-69	50.52	12.04	10.62	26.82	100.00
1969-70	49.26	12.23	11.11	27.40	100.00
1970-71	48.91	11.67	11.22	28.20	100.00
1971-72	47.45	11.81	11.24	29.50	100.00
1972-73	50.67	11.73	11.23	26.38	100.00
1973-74	52.39	12.18	11.31	24.12	100.00
1974-75	48.48	14.28	11.18	26.06	100.00
1975-76	47.41	13.00	11.10	28.48	100.00
1976-77	40.75	17.41	11.02	30.82	100.00
1977-78	46.05	14.11	11.14	28.71	100.00
1978-79	44.84	15.04	11.05	29.08	100.00
1979-80	40.02	18.84	10.68	30.46	100.00
1980-81	49.42	12.64	11.10	26.85	100.00
1981-82	51.86	10.35	11.61	26.19	100.00
1982-83	49.21	11.71	11.57	27.50	100.00
1983-84	53.88	11.40	11.17	23.56	100.00
1984-85	47.93	14.01	12.03	26.03	100.00
1985-86	50.61	12.86	11.90	24.63	100.00
1986-87	47.84	13.79	12.44	25.94	100.00
1987-88	44.70	14.11	13.37	27.82	100.00
1988-89	43.14	18.57	14.02	24.28	100.00
1989-90	44.66	17.59	13.88	23.87	100.00
1990-91	39.88	18.71	14.59	26.82	100.00

(Contd...)

1991-92	42.18	17.12	16.17	24.53	100.00
1992-93	39.71	17.76	17.00	25.54	100.00
1993-94	42.60	15.93	17.29	24.19	100.00
1994-95	41.34	17.32	17.38	23.96	100.00
1995-96	43.96	16.21	17.32	22.51	100.00
1996-97	40.85	14.69	18.30	26.16	100.00
1997-98	43.34	13.83	18.40	24.44	100.00
1998-99	41.05	14.98	17.02	26.95	100.00
1999-00	36.52	17.59	16.10	29.79	100.00
2000-01	34.25	16.64	17.75	31.35	100.00
2001-02	36.10	14.33	18.20	31.36	100.00
2002-03	34.88	14.67	18.58	31.87	100.00
2003-04	38.27	14.56	18.77	28.40	100.00
			2004-05 Base		
2004-05(P)	32.85	21.04	20.58	25.53	100.00
2005-06(P)	33.00	18.85	22.68	25.47	100.00
2006-07(P)	31.94	20.67	23.95	23.44	100.00
2007-08(P)	36.36	20.47	21.92	21.25	100.00
2008-09(P)	32.50	20.06	23.81	23.64	100.00
2009-10(Q)	29.85	18.55	25.05	26.55	100.00

Annexure 2.9: Composition of NSDP (In %) at Constant Prices by Broad Categories

			1999-2000 Base		
1950-51	67.30	6.95	5.87	19.88	100.00
1951-52	70.82	7.17	5.74	16.27	100.00
1952-53	66.59	8.46	5.92	19.03	100.00
1953-54	64.98	9.24	6.20	19.59	100.00
1954-55	60.77	10.42	6.57	22.24	100.00
1955-56	57.42	11.37	6.80	24.42	100.00
1956-57	58.77	11.88	7.08	22.27	100.00
1957-58	52.54	14.20	8.42	24.84	100.00
1958-59	57.82	13.20	7.89	21.09	100.00
1959-60	57.76	14.32	8.17	19.76	100.00
1960-61	57.93	14.85	8.20	19.01	100.00
1961-62	56.78	16.86	8.20	18.17	100.00
1962-63	56.56	17.94	8.08	17.42	100.00
1963-64	58.17	17.52	8.23	16.08	100.00
1964-65	58.71	17.35	8.62	15.31	100.00
1965-66	55.45	18.02	9.09	17.44	100.00
1966-67	59.62	14.89	9.27	16.22	100.00
1967-68	58.33	15.01	9.77	16.89	100.00
1968-69	63.28	13.08	9.07	14.58	100.00
1969-70	59.90	14.28	10.04	15.78	100.00
1970-71	60.60	13.87	10.08	15.45	100.00
1971-72	61.42	11.96	9.82	16.80	100.00
1972-73	61.81	12.65	9.79	15.75	100.00
1973-74	62.52	12.82	9.86	14.81	100.00
1974-75	57.75	15.45	9.81	17.00	100.00
1975-76	61.20	13.24	9.82	15.74	100.00
1976-77	55.23	17.51	9.84	17.42	100.00
1977-78	60.28	14.31	9.97	15.44	100.00
1978-79	59.83	15.05	9.96	15.16	100.00
1979-80	52.84	19.30	9.84	18.02	100.00
1980-81	59.48	12.92	10.24	17.36	100.00
1981-82	60.57	11.30	10.66	17.46	100.00
1982-83	56.44	13.18	10.70	19.68	100.00
1983-84	60.72	12.83	9.83	16.62	100.00
1984-85	55.50	14.57	10.98	18.95	100.00
1985-86	57.54	13.05	10.88	18.53	100.00
1986-87	54.48	13.96	11.52	20.03	100.00
1987-88	51.00	15.00	12.03	21.97	100.00
1988-89	50.70	17.45	12.46	19.39	100.00
1989-90	52.80	15.54	11.87	19.79	100.00
1990-91	43.66	19.82	12.80	23.71	100.00

(Contd...)

1991-92	45.09	18.51	13.95	22.45	100.00
1992-93	42.55	18.90	14.64	23.92	100.00
1993-94	45.51	17.58	14.25	22.67	100.00
1994-95	43.04	18.73	14.56	23.67	100.00
1995-96	42.78	17.81	15.51	23.90	100.00
1996-97	40.38	16.38	16.54	26.70	100.00
1997-98	42.68	15.46	16.68	25.19	100.00
1998-99	41.34	15.90	15.86	26.89	100.00
1999-00	36.52	17.59	16.10	29.79	100.00
2000-01	35.07	16.23	17.58	31.11	100.00
2001-02	37.91	13.58	17.86	30.64	100.00
2002-03	33.49	14.60	19.30	32.61	100.00
2003-04	35.83	14.33	20.19	29.65	100.00
			2004-05 Base		
2004-05(P)	32.85	21.04	20.58	25.53	100.00
2005-06(P)	32.62	18.81	22.75	25.82	100.00
2006-07(P)	30.70	20.67	24.15	24.47	100.00
2007-08(P)	28.97	22.50	24.23	24.30	100.00
2008-09(P)	27.36	20.91	25.60	26.13	100.00
2009-10(Q)	26.83	19.36	26.21	27.60	100.00

Annexure 2.10: Gross District Domestic Product (GDDP)

Rs. In lakh

1	Angul	271626	283008	305854	332996	428300	547635	573167	677284
2	Balasore	209593	209248	212672	229335	268909	310381	332825	403089
3	Bargarh	152830	135135	154563	149325	170488	193016	209362	246821
4	Bhadrak	99630	110714	114499	132701	159044	180855	196397	227966
5	Bolangir	143410	130712	150079	152666	194311	216774	231648	279362
6	Boudh	36330	34599	41932	45938	58264	56669	64362	77776
7	Cuttack	300589	312773	341946	368815	427635	529274	550514	658589
8	Deogarh	35197	32497	36159	31418	40246	40130	47786	59430
9	Dhenkanal	115410	114820	123841	132896	166144	184152	205215	244828
10	Gajapati	54546	54858	58168	63423	77197	80366	88621	103545
11	Ganjam	303388	318891	353287	363181	434392	487565	532071	647211
12	Jagatsinghpur	130160	152830	149818	175228	190949	235139	247787	307547
13	Jajpur	152429	157837	161560	182029	223807	315789	359502	437767
14	Jharsuguda	120919	122302	135010	136481	165762	203048	223626	257201
15	Kalahandi	135322	136365	140039	135995	172031	186686	212121	237075
16	Kandhamal	80744	79917	89932	103761	124581	134897	146269	180015
17	Kendrapara	101752	106213	111933	120397	143098	166652	180082	202755
18	Kendujhar	185073	181217	203309	236154	373687	467179	554243	686580
19	Khordha	296833	317547	345983	365074	432705	510688	570964	702110
20	Koraput	150859	154969	175315	175273	212308	220827	243824	315390
21	Malkangiri	53249	50160	52201	53583	66942	70015	71830	89778
22	Mayurbhanj	201348	203691	215790	230646	283291	305823	327937	391305
23	Nabarangpur	90998	87394	91703	93882	105255	122709	132474	164911
24	Nayagarh	66800	67301	76102	78798	98329	103944	115354	137254
25	Nuapada	55901	55331	61441	56342	70840	73497	79860	97041
26	Puri	144256	144621	158082	174964	210295	234108	257420	270472
27	Rayagada	92126	94505	100882	107630	132171	135589	152368	196090
28	Sambalpur	155327	143816	160486	157258	188666	218877	249205	294435
29	Sonepur	49426	44780	49286	52576	61799	71450	80088	97508
30	Sundargarh	312539	297046	303704	332497	419350	563671	607538	815416
Orissa		4298608	4335097	4675576	4971260	6100796	7167409	7844461	9506550

(Contd...)

1	Angul	271626	262777	272460	292433	348738	433718	446382	513991
2	Balasore	209593	204791	209257	207756	230105	259087	271064	312438
3	Bargarh	152830	132694	150582	132555	155771	163904	173028	194710
4	Bhadrak	99630	107538	112101	113619	131818	149873	155067	170521
5	Bolangir	143410	126770	144795	133980	161239	173768	186368	210226
6	Boudh	36330	34119	38780	38251	44816	46447	49430	54323
7	Cuttack	300589	306360	327827	335414	372988	438968	448273	506794
8	Deogarh	35197	32031	36286	29398	34094	34626	38712	44148
9	Dhenkanal	115410	109831	119136	112883	134110	144705	157934	172622
10	Gajapati	54546	55479	58036	57465	63186	66847	68372	75893
11	Ganjam	303388	311373	340183	322402	366942	399774	422557	489340
12	Jagatsinghpur	130160	141883	137955	148732	157377	188085	194585	226331
13	Jajpur	152429	154392	157742	178005	207847	261280	277900	324779
14	Jharsuguda	120919	115588	124401	123619	139476	165098	180292	206384
15	Kalahandi	135322	132938	137513	127469	152191	160642	172939	186272
16	Kandhamal	80744	79239	84610	90771	96794	105720	112775	127790
17	Kendrapara	101752	105017	109247	106921	120297	133199	143023	150223
18	Kendujhar	185073	182613	199475	212206	265001	319407	332102	379692
19	Khordha	296833	309745	332864	337499	386422	434645	476995	555337
20	Koraput	150859	152394	163724	158371	179236	177512	193253	225398
21	Malkangiri	53249	48461	51208	47697	53029	56020	57595	62538
22	Mayurbhanj	201348	200437	212212	197855	230774	248927	261729	292804
23	Nabarangpur	90998	85674	88223	84373	94100	101178	106112	118547
24	Nayagarh	66800	67072	74728	71417	83693	85679	93648	102173
25	Nuapada	55901	54704	62144	53115	60735	61102	66791	76057
26	Puri	144256	143640	155310	158861	180511	198793	212445	215426
27	Rayagada	92126	92419	95462	96046	108352	106748	118200	138172
28	Sambalpur	155327	140656	155654	145039	163577	185117	202735	225172
29	Sonepur	49426	47877	53228	45591	51121	57805	62703	71956
30	Sundargarh	312539	288758	288017	304354	366002	459531	476411	591569
Orissa		4298608	4227268	4493162	4464096	5140342	5818205	6159417	7021626

Annexure 2.11: Percentage Distribution of GDDP

1	Angul	6.32	6.53	6.54	6.70	7.02	7.64	7.31	7.12
2	Balasore	4.88	4.83	4.55	4.61	4.41	4.33	4.24	4.24
3	Bargarh	3.56	3.12	3.31	3.00	2.79	2.69	2.67	2.60
4	Bhadrak	2.32	2.55	2.45	2.67	2.61	2.52	2.50	2.40
5	Bolangir	3.34	3.02	3.21	3.07	3.19	3.02	2.95	2.94
6	Boudh	0.85	0.80	0.90	0.92	0.96	0.79	0.82	0.82
7	Cuttack	6.99	7.22	7.31	7.42	7.01	7.38	7.02	6.93
8	Deogarh	0.82	0.75	0.77	0.63	0.66	0.56	0.61	0.63
9	Dhenkanal	2.68	2.65	2.65	2.67	2.72	2.57	2.62	2.58
10	Gajapati	1.27	1.27	1.24	1.28	1.27	1.12	1.13	1.09
11	Ganjam	7.06	7.36	7.56	7.31	7.12	6.80	6.78	6.81
12	Jagatsinghpur	3.03	3.53	3.20	3.52	3.13	3.28	3.16	3.24
13	Jajpur	3.55	3.64	3.46	3.66	3.67	4.41	4.58	4.60
14	Jharsuguda	2.81	2.82	2.89	2.75	2.72	2.83	2.85	2.71
15	Kalahandi	3.15	3.15	3.00	2.74	2.82	2.60	2.70	2.49
16	Kandhamal	1.88	1.84	1.92	2.09	2.04	1.88	1.86	1.89
17	Kendrapara	2.37	2.45	2.39	2.42	2.35	2.33	2.30	2.13
18	Kendujhar	4.31	4.18	4.35	4.75	6.13	6.52	7.07	7.22
19	Khordha	6.91	7.33	7.40	7.34	7.09	7.13	7.28	7.39
20	Koraput	3.51	3.57	3.75	3.53	3.48	3.08	3.11	3.32
21	Malkangiri	1.24	1.16	1.12	1.08	1.10	0.98	0.92	0.94
22	Mayurbhanj	4.68	4.70	4.62	4.64	4.64	4.27	4.18	4.12
23	Nabarangpur	2.12	2.02	1.96	1.89	1.73	1.71	1.69	1.73
24	Nayagarh	1.55	1.55	1.63	1.59	1.61	1.45	1.47	1.44
25	Nuapada	1.30	1.28	1.31	1.13	1.16	1.03	1.02	1.02
26	Puri	3.36	3.34	3.38	3.52	3.45	3.27	3.28	2.85
27	Rayagada	2.14	2.18	2.16	2.17	2.17	1.89	1.94	2.06
28	Sambalpur	3.61	3.32	3.43	3.16	3.09	3.05	3.18	3.10
29	Sonepur	1.15	1.03	1.05	1.06	1.01	1.00	1.02	1.03
30	Sundargarh	7.27	6.85	6.50	6.69	6.87	7.86	7.74	8.58
Orissa		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(Contd...)

1	Angul	6.32	6.22	6.06	6.55	6.78	7.45	7.25	7.32
2	Balasore	4.88	4.84	4.66	4.65	4.48	4.45	4.40	4.45
3	Bargarh	3.56	3.14	3.35	2.97	3.03	2.82	2.81	2.77
4	Bhadrak	2.32	2.54	2.50	2.55	2.56	2.58	2.52	2.43
5	Bolangir	3.34	3.00	3.22	3.00	3.14	2.99	3.03	2.99
6	Boudh	0.85	0.81	0.86	0.86	0.87	0.80	0.80	0.77
7	Cuttack	6.99	7.25	7.30	7.51	7.26	7.54	7.28	7.22
8	Deogarh	0.82	0.76	0.81	0.66	0.66	0.60	0.63	0.63
9	Dhenkanal	2.68	2.60	2.65	2.53	2.61	2.49	2.56	2.46
10	Gajapati	1.27	1.31	1.29	1.29	1.23	1.15	1.11	1.08
11	Ganjam	7.06	7.37	7.57	7.22	7.14	6.87	6.86	6.97
12	Jagatsinghpur	3.03	3.36	3.07	3.33	3.06	3.23	3.16	3.22
13	Jajpur	3.55	3.65	3.51	3.99	4.04	4.49	4.51	4.63
14	Jharsuguda	2.81	2.73	2.77	2.77	2.71	2.84	2.93	2.94
15	Kalahandi	3.15	3.14	3.06	2.86	2.96	2.76	2.81	2.65
16	Kandhamal	1.88	1.87	1.88	2.03	1.88	1.82	1.83	1.82
17	Kendrapara	2.37	2.48	2.43	2.40	2.34	2.29	2.32	2.14
18	Kendujhar	4.31	4.32	4.44	4.75	5.16	5.49	5.39	5.41
19	Khordha	6.91	7.33	7.41	7.56	7.52	7.47	7.74	7.91
20	Koraput	3.51	3.61	3.64	3.55	3.49	3.05	3.14	3.21
21	Malkangiri	1.24	1.15	1.14	1.07	1.03	0.96	0.94	0.89
22	Mayurbhanj	4.68	4.74	4.72	4.43	4.49	4.28	4.25	4.17
23	Nabarangpur	2.12	2.03	1.96	1.89	1.83	1.74	1.72	1.69
24	Nayagarh	1.55	1.59	1.66	1.60	1.63	1.47	1.52	1.46
25	Nuapada	1.30	1.29	1.38	1.19	1.18	1.05	1.08	1.08
26	Puri	3.36	3.40	3.46	3.56	3.51	3.42	3.45	3.07
27	Rayagada	2.14	2.19	2.12	2.15	2.11	1.83	1.92	1.97
28	Sambalpur	3.61	3.33	3.46	3.25	3.18	3.18	3.29	3.21
29	Sonepur	1.15	1.13	1.18	1.02	0.99	0.99	1.02	1.02
30	Sundargarh	7.27	6.83	6.41	6.82	7.12	7.90	7.73	8.43
Orissa		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Annexure 2.12: Net District Domestic Product (NDDP)

Rs. in Lakh

1	Angul	220088	225271	240139	271092	347251	442242	451562	545268
2	Balasore	182423	182909	183676	197227	234953	272149	288566	352127
3	Bargarh	139245	121091	138173	133083	153174	171818	184744	219418
4	Bhadrak	90945	100414	103413	120201	144644	162876	176513	205773
5	Bolangir	131017	117892	135304	137538	175613	194274	206982	251439
6	Boudh	33915	31981	38632	42279	53961	51956	58878	71451
7	Cuttack	272797	282084	306891	333378	382321	470371	486777	585754
8	Deogarh	32635	29837	33098	28710	36737	36050	42882	53851
9	Dhenkanal	104823	103256	111210	119281	148790	163004	180070	216097
10	Gajapati	50998	50954	53817	58726	71543	73697	80960	95008
11	Ganjam	278995	291326	321095	330785	393833	436541	473248	579959
12	Jagatsinghpur	112358	127415	124089	146354	163751	202568	211252	264512
13	Jajpur	137095	141160	144751	163382	197891	275550	311376	383309
14	Jharsuguda	102338	102225	112308	115625	140508	172046	187675	219425
15	Kalahandi	124706	124487	126824	123314	156774	167636	189595	213024
16	Kandhamal	75180	73934	82938	95651	115144	123528	133265	164952
17	Kendrapara	93855	97353	101751	110056	130309	150415	161943	183192
18	Kendujhar	164712	158853	177106	206510	326049	404217	474819	594304
19	Khordha	263196	279276	300468	321168	375014	439624	489825	610932
20	Koraput	134550	135927	149556	152424	184413	195093	213323	277951
21	Malkangiri	49536	46158	47848	49147	61333	63318	64590	81348
22	Mayurbhanj	183840	184391	194074	207689	255255	272322	289869	347733
23	Nabarangpur	84868	80767	84734	86376	97014	112134	119940	150728
24	Nayagarh	61950	61986	69827	72219	90216	94206	104229	124616
25	Nuapada	52035	50995	56323	51564	65168	67105	72333	88601
26	Puri	132528	131827	143352	158942	190787	210437	230482	242762
27	Rayagada	82161	82808	87951	94070	116646	121673	134416	174853
28	Sambalpur	137986	125790	138584	136476	163766	188143	211726	253287
29	Sonepur	46172	41406	45463	48329	56992	65482	73455	89764
30	Sundargarh	262943	244275	247187	271878	343472	469489	501417	684242
Orissa		3839890	3828048	4100580	4383475	5373321	6269965	6806713	8325683

(Contd...)

1	Angul	220088	208243	213894	238368	277656	345458	346270	408750
2	Balasore	182423	179172	182062	178220	200177	227751	236569	274404
3	Bargarh	139245	119189	135565	117869	139908	146440	153816	174047
4	Bhadrak	90945	97561	101706	102473	119344	135317	140027	154445
5	Bolangir	131017	114472	131266	120589	145336	156254	167851	190029
6	Boudh	33915	31580	35895	35130	41275	42693	45414	49899
7	Cuttack	272797	276629	295543	303462	333671	391891	399997	453983
8	Deogarh	32635	29441	33418	26870	31017	31245	34935	40042
9	Dhenkanal	104823	98821	107569	101114	119427	128247	139315	152429
10	Gajapati	50998	51595	53947	53219	58366	61474	62741	69796
11	Ganjam	278995	284691	310540	293532	332079	359097	378307	440391
12	Jagatsinghpu	112358	118192	115274	124184	134362	162401	167206	195573
13	Jajpur	137095	137643	141303	159256	181917	227000	240031	282484
14	Jharsuguda	102338	96618	104126	105267	117291	138886	149490	174307
15	Kalahandi	124706	121535	125338	115595	138508	144965	155668	168221
16	Kandhamal	75180	73405	78345	83703	88999	96847	103069	117007
17	Kendrapara	93855	96367	99977	97739	109484	120608	129430	136326
18	Kendujhar	164712	160320	174794	186379	231007	277267	285874	328871
19	Khordha	263196	272769	290776	297618	336210	378080	415660	488932
20	Koraput	134550	134180	140605	137777	155044	157052	170108	198752
21	Malkangiri	49536	44641	47186	43686	48255	50709	52070	56590
22	Mayurbhanj	183840	181783	192189	177976	207171	222591	233353	261628
23	Nabarangpur	84868	79299	81905	77525	86541	92632	96527	108382
24	Nayagarh	61950	61862	68891	65438	76576	77884	85149	93046
25	Nuapada	52035	50511	57339	48619	55719	55955	60900	69675
26	Puri	132528	131005	141462	143902	163310	179328	191508	194295
27	Rayagada	82161	81202	83757	83978	95128	95996	104909	123266
28	Sambalpur	137986	123302	135551	126226	141894	160287	174158	195068
29	Sonepur	46172	44379	49447	41808	46976	53068	57723	66306
30	Sundargarh	262943	238188	236515	250172	300072	384564	396299	498369
Orissa		3839890	3738598	3966185	3937691	4512719	5101987	5374373	6165313

Annexure 2.13: Percentage Distributtion of NDDP

1	Angul	5.73	5.88	5.86	6.18	6.46	7.05	6.63	6.55
2	Balasore	4.75	4.78	4.48	4.50	4.37	4.34	4.24	4.23
3	Bargarh	3.63	3.16	3.37	3.04	2.85	2.74	2.71	2.64
4	Bhadrak	2.37	2.62	2.52	2.74	2.69	2.60	2.59	2.47
5	Bolangir	3.41	3.08	3.30	3.14	3.27	3.10	3.04	3.02
6	Boudh	0.88	0.84	0.94	0.96	1.00	0.83	0.87	0.86
7	Cuttack	7.10	7.37	7.48	7.61	7.12	7.50	7.15	7.04
8	Deogarh	0.85	0.78	0.81	0.66	0.68	0.58	0.63	0.65
9	Dhenkanal	2.73	2.70	2.71	2.72	2.77	2.60	2.65	2.60
10	Gajapati	1.33	1.33	1.31	1.34	1.33	1.18	1.19	1.14
11	Ganjam	7.27	7.61	7.83	7.55	7.33	6.96	6.95	6.97
12	Jagatsinghpur	2.93	3.33	3.03	3.34	3.05	3.23	3.10	3.18
13	Jajpur	3.57	3.69	3.53	3.73	3.68	4.39	4.57	4.60
14	Jharsuguda	2.67	2.67	2.74	2.64	2.62	2.74	2.76	2.64
15	Kalahandi	3.25	3.25	3.09	2.81	2.92	2.67	2.79	2.56
16	Kandhamal	1.96	1.93	2.02	2.18	2.14	1.97	1.96	1.98
17	Kendrapara	2.44	2.54	2.48	2.51	2.43	2.40	2.38	2.20
18	Kendujhar	4.29	4.15	4.32	4.71	6.07	6.45	6.98	7.14
19	Khordha	6.85	7.30	7.33	7.33	6.98	7.01	7.20	7.34
20	Koraput	3.50	3.55	3.65	3.48	3.43	3.11	3.13	3.34
21	Malkangiri	1.29	1.21	1.17	1.12	1.14	1.01	0.95	0.98
22	Mayurbhanj	4.79	4.82	4.73	4.74	4.75	4.34	4.26	4.18
23	Nabarangpur	2.21	2.11	2.07	1.97	1.81	1.79	1.76	1.81
24	Nayagarh	1.61	1.62	1.70	1.65	1.68	1.50	1.53	1.50
25	Nuapada	1.36	1.33	1.37	1.18	1.21	1.07	1.06	1.06
26	Puri	3.45	3.44	3.50	3.63	3.55	3.36	3.39	2.92
27	Rayagada	2.14	2.16	2.14	2.15	2.17	1.94	1.97	2.10
28	Sambalpur	3.59	3.29	3.38	3.11	3.05	3.00	3.11	3.04
29	Sonepur	1.20	1.08	1.11	1.10	1.06	1.04	1.08	1.08
30	Sundargarh	6.85	6.38	6.03	6.20	6.39	7.49	7.37	8.22
Orissa		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(Contd...)

1	Angul	5.73	5.57	5.39	6.05	6.15	6.77	6.44	6.63
2	Balasore	4.75	4.79	4.59	4.53	4.44	4.46	4.40	4.45
3	Bargarh	3.63	3.19	3.42	2.99	3.10	2.87	2.86	2.82
4	Bhadrak	2.37	2.61	2.56	2.60	2.64	2.65	2.61	2.51
5	Bolangir	3.41	3.06	3.31	3.06	3.22	3.06	3.12	3.08
6	Boudh	0.88	0.84	0.91	0.89	0.91	0.84	0.85	0.81
7	Cuttack	7.10	7.40	7.45	7.71	7.39	7.68	7.44	7.36
8	Deogarh	0.85	0.79	0.84	0.68	0.69	0.61	0.65	0.65
9	Dhenkanal	2.73	2.64	2.71	2.57	2.65	2.51	2.59	2.47
10	Gajapati	1.33	1.38	1.36	1.35	1.29	1.21	1.17	1.13
11	Ganjam	7.27	7.62	7.83	7.45	7.36	7.04	7.04	7.14
12	Jagatsinghpur	2.93	3.16	2.91	3.15	2.98	3.18	3.11	3.17
13	Jajpur	3.57	3.68	3.56	4.04	4.03	4.45	4.47	4.58
14	Jharsuguda	2.67	2.58	2.63	2.67	2.60	2.72	2.78	2.83
15	Kalahandi	3.25	3.25	3.16	2.94	3.07	2.84	2.90	2.73
16	Kandhamal	1.96	1.96	1.98	2.13	1.97	1.90	1.92	1.90
17	Kendrapara	2.44	2.58	2.52	2.48	2.43	2.36	2.41	2.21
18	Kendujhar	4.29	4.29	4.41	4.73	5.12	5.43	5.32	5.33
19	Khordha	6.85	7.30	7.33	7.56	7.45	7.41	7.73	7.93
20	Koraput	3.50	3.59	3.55	3.50	3.44	3.08	3.17	3.22
21	Malkangiri	1.29	1.19	1.19	1.11	1.07	0.99	0.97	0.92
22	Mayurbhanj	4.79	4.86	4.85	4.52	4.59	4.36	4.34	4.24
23	Nabarangpur	2.21	2.12	2.07	1.97	1.92	1.82	1.80	1.76
24	Nayagarh	1.61	1.65	1.74	1.66	1.70	1.53	1.58	1.51
25	Nuapada	1.36	1.35	1.45	1.23	1.23	1.10	1.13	1.13
26	Puri	3.45	3.50	3.57	3.65	3.62	3.51	3.56	3.15
27	Rayagada	2.14	2.17	2.11	2.13	2.11	1.88	1.95	2.00
28	Sambalpur	3.59	3.30	3.42	3.21	3.14	3.14	3.24	3.16
29	Sonepur	1.20	1.19	1.25	1.06	1.04	1.04	1.07	1.08
30	Sundargarh	6.85	6.37	5.96	6.35	6.65	7.54	7.37	8.08
Orissa		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Annexure 2.14: Per Capita NDDP

In Rupees

1	Angul	19713	19878	20889	23269	29420	37000	37318	44524
2	Balasore	9209	9091	8994	9524	11192	12795	13393	16138
3	Bargarh	10463	9020	10209	9762	11159	12437	13291	15694
4	Bhadrak	6980	7580	7682	8797	10431	11580	12375	14231
5	Bolangir	9873	8830	10078	10198	12966	14290	15172	18372
6	Boudh	9262	8613	10265	11095	13990	13314	14917	17903
7	Cuttack	11899	12121	12999	13933	15771	19160	19585	23286
8	Deogarh	12132	10942	11982	10270	12989	12603	14829	18425
9	Dhenkanal	9954	9710	10364	11027	13648	14842	16281	19407
10	Gajapati	9978	9860	10306	11140	13448	13733	14960	17414
11	Ganjam	8993	9265	10082	10264	12079	13241	14200	17220
12	Jagatsinghpur	10640	12041	11710	13805	15443	19110	19942	24992
13	Jajpur	8602	8737	8842	9860	11803	16249	18159	22115
14	Jharsuguda	20382	20135	21892	22327	26884	32634	35300	40939
15	Kalahandi	9528	9375	9419	9041	11351	11991	13402	14885
16	Kandhamal	11843	11474	12688	14439	17155	18174	19367	23685
17	Kendrapara	7310	7504	7768	8329	9779	11198	11964	13435
18	Kendujhar	10743	10223	11252	12967	20238	24814	28836	35717
19	Khordha	14428	15003	15830	16609	19042	21929	24009	29433
20	Koraput	11577	11562	12583	12698	15216	15951	17287	22332
21	Malkangiri	10043	9213	9407	9528	11727	11947	12029	14958
22	Mayurbhanj	8436	8340	8658	9148	11103	11704	12312	14602
23	Nabarangpur	8475	7929	8183	8214	9086	10350	10912	13521
24	Nayagarh	7239	7187	8038	8262	10260	10656	11729	13955
25	Nuapada	9940	9643	10550	9577	12004	12266	13123	15959
26	Puri	8965	8812	9474	10397	12355	13498	14647	15289
27	Rayagada	10066	10013	10504	11107	13620	14056	15367	19789
28	Sambalpur	15002	13507	14707	14328	17013	19351	21565	25555
29	Sonepur	8645	7671	8338	8784	10269	11701	13021	15790
30	Sundargarh	14623	13410	13403	14575	18209	24627	26031	35168
Orissa		10622	10453	11059	11688	14169	16359	17576	21282

(Contd...)

1	Angul	19713	18375	18606	20460	23524	28902	28616	33377
2	Balasore	9209	8905	8915	8606	9536	10707	10979	12576
3	Bargarh	10463	8878	10016	8646	10193	10600	11066	12449
4	Bhadrak	6980	7364	7556	7499	8606	9620	9817	10681
5	Bolangir	9873	8574	9778	8942	10731	11493	12303	13885
6	Boudh	9262	8505	9538	9219	10701	10940	11506	12503
7	Cuttack	11899	11887	12519	12683	13764	15963	16094	18047
8	Deogarh	12132	10797	12098	9612	10966	10924	12081	13700
9	Dhenkanal	9954	9293	10025	9347	10954	11678	12596	13689
10	Gajapati	9978	9984	10331	10096	10971	11455	11593	12793
11	Ganjam	8993	9054	9750	9108	10185	10892	11352	13076
12	Jagatsinghpur	10640	11169	10878	11714	12672	15321	15784	18478
13	Jajpur	8602	8519	8632	9611	10850	13386	13999	16298
14	Jharsuguda	20382	19031	20297	20326	22442	26344	28118	32521
15	Kalahandi	9528	9152	9309	8475	10028	10369	11004	11754
16	Kandhamal	11843	11392	11986	12635	13260	14249	14978	16801
17	Kendrapara	7310	7428	7632	7397	8216	8979	9562	9998
18	Kendujhar	10743	10317	11106	11703	14339	17021	17361	19765
19	Khordha	14428	14654	15319	15391	17072	18859	20373	23556
20	Koraput	11577	11413	11830	11478	12793	12840	13785	15969
21	Malkangiri	10043	8910	9277	8469	9227	9568	9697	10406
22	Mayurbhanj	8436	8222	8574	7839	9011	9566	9912	10986
23	Nabarangpur	8475	7785	7910	7372	8106	8550	8782	9722
24	Nayagarh	7239	7173	7930	7486	8709	8810	9582	10419
25	Nuapada	9940	9551	10740	9030	10264	10227	11049	12550
26	Puri	8965	8757	9349	9413	10576	11502	12170	12236
27	Rayagada	10066	9819	10003	9915	11107	11089	11994	13950
28	Sambalpur	15002	13240	14385	13252	14741	16486	17738	19681
29	Sonepur	8645	8222	9069	7599	8464	9483	10232	11664
30	Sundargarh	14623	13076	12824	13411	15909	20172	20574	25614
Orissa		10622	10208	10697	10500	11900	13311	13877	15760

Annexure 2.15: Comparison of Per Capita NDDP

Orissa = 100

1	Angul	186	190	189	199	208	226	212	209
2	Balasore	87	87	81	81	79	78	76	76
3	Bargarh	99	86	92	84	79	76	76	74
4	Bhadrak	66	73	69	75	74	71	70	67
5	Bolangir	93	84	91	87	92	87	86	86
6	Boudh	87	82	93	95	99	81	85	84
7	Cuttack	112	116	118	119	111	117	111	109
8	Deogarh	114	105	108	88	92	77	84	87
9	Dhenkanal	94	93	94	94	96	91	93	91
10	Gajapati	94	94	93	95	95	84	85	82
11	Ganjam	85	89	91	88	85	81	81	81
12	Jagatsinghpur	100	115	106	118	109	117	113	117
13	Jajpur	81	84	80	84	83	99	103	104
14	Jharsuguda	192	193	198	191	190	199	201	192
15	Kalahandi	90	90	85	77	80	73	76	70
16	Kandhamal	112	110	115	124	121	111	110	111
17	Kendrapara	69	72	70	71	69	68	68	63
18	Kendujhar	101	98	102	111	143	152	164	168
19	Khordha	136	144	143	142	134	134	137	138
20	Koraput	109	111	114	109	107	98	98	105
21	Malkangiri	95	88	85	82	83	73	68	70
22	Mayurbhanj	79	80	78	78	78	72	70	69
23	Nabarangpur	80	76	74	70	64	63	62	64
24	Nayagarh	68	69	73	71	72	65	67	66
25	Nuapada	94	92	95	82	85	75	75	75
26	Puri	84	84	86	89	87	83	83	72
27	Rayagada	95	96	95	95	96	86	87	93
28	Sambalpur	141	129	133	123	120	118	123	120
29	Sonepur	81	73	75	75	72	72	74	74
30	Sundargarh	138	128	121	125	129	151	148	165
Orissa		100	100	100	100	100	100	100	100

(Contd...)

1	Angul	186	180	174	195	198	217	206	212
2	Balasore	87	87	83	82	80	80	79	80
3	Bargarh	99	87	94	82	86	80	80	79
4	Bhadrak	66	72	71	71	72	72	71	68
5	Bolangir	93	84	91	85	90	86	89	88
6	Boudh	87	83	89	88	90	82	83	79
7	Cuttack	112	116	117	121	116	120	116	115
8	Deogarh	114	106	113	92	92	82	87	87
9	Dhenkanal	94	91	94	89	92	88	91	87
10	Gajapati	94	98	97	96	92	86	84	81
11	Ganjam	85	89	91	87	86	82	82	83
12	Jagatsinghpur	100	109	102	112	106	115	114	117
13	Jajpur	81	83	81	92	91	101	101	103
14	Jharsuguda	192	186	190	194	189	198	203	206
15	Kalahandi	90	90	87	81	84	78	79	75
16	Kandhamal	112	112	112	120	111	107	108	107
17	Kendrapara	69	73	71	70	69	67	69	63
18	Kendujhar	101	101	104	111	120	128	125	125
19	Khordha	136	144	143	147	143	142	147	149
20	Koraput	109	112	111	109	108	96	99	101
21	Malkangiri	95	87	87	81	78	72	70	66
22	Mayurbhanj	79	81	80	75	76	72	71	70
23	Nabarangpur	80	76	74	70	68	64	63	62
24	Nayagarh	68	70	74	71	73	66	69	66
25	Nuapada	94	94	100	86	86	77	80	80
26	Puri	84	86	87	90	89	86	88	78
27	Rayagada	95	96	94	94	93	83	86	89
28	Sambalpur	141	130	134	126	124	124	128	125
29	Sonepur	81	81	85	72	71	71	74	74
30	Sundargarh	138	128	120	128	134	152	148	163
Orissa		100	100	100	100	100	100	100	100

Annexure 2.16: Economic Classification of Workers in Orissa

In thousands

MAIN WORKERS						
Cultivators	4053	40.4	4599	38.7	3435	24.1
Agricultural Labourers	2397	23.9	2977	25.1	2098	14.7
Live stock, forest, fisheries etc.	207	2.1	193	1.6	N.C.	N.C.
Mining and quarrying	72	0.7	101	0.8	N.C.	N.C.
Manufacturing and processing						
i. Household industries	285	2.8	324	2.7	404	208
ii. Other than household industries	313	3.1	364	3.1	N.C.	N.C.
Construction	96	1	90	0.8	N.C.	N.C.
Trade and commerce	355	3.5	558	4.7	N.C.	N.C.
Transport, storage and communication	136	1.4	181	1.5	N.C.	N.C.
Other services/ other workers	721	7.2	991	8.3	3652	25.6
A. TOTAL MAIN WORKERS	8635	86.1	10378	87.3	9589	67.2
B. MARGINAL WORKERS	1387	13.9	1505	12.7	4687	32.8
TOTAL WORKERS (A+B)	10022	100	11883	100	14276	100
TOTAL NON-WORKERS	16348		19777		22528	
POPULATION (in crores)	2.64		3.17		3.68	

N.C.= Not Compiled

Annexure 2.17: District-Wise Occupational Classification of Main Workers, Marginal Workers and Total Workers in Orissa, 2001 Census

Angul	100,506	46,222	16,849	135,475	299,052	154,518	453,570
Balasore	185,433	122,304	12,457	163,151	483,345	161,788	645,133
Bargarh	159,094	106,090	30,173	89,353	384,710	208,820	593,530
Bhadrak	129,463	68,238	6,180	97,689	301,570	83,549	385,119
Bolangir	142,73	78,449	17,427	113,083	351,689	208,061	559,750
Boudh	52,451	24,048	7,794	21,501	105,794	64,967	170,761
Cuttack	131,976	104,244	25,421	352,242	613,883	180,151	794,034
Deogarh	31,416	16,930	3,445	17,957	69,848	56,412	126,260
Dhenkanal	77,45	67,009	9,012	108,404	261,875	94,638	356,513
Gajapati	76,595	55,101	3,719	44,577	179,992	95,542	275,534
Ganjam	261,069	171,651	31,659	355,347	819,726	486,206	1,305,932
Jagatsinghpur	80,272	46,382	7,217	113,855	247,726	82,247	329,973
Jajpur	102,134	81,907	9,458	153,829	347,328	99,197	446,525
Jharsuguda	32,568	18,562	8,232	73,786	133,148	56,445	189,593
Kalahandi	152,795	126,538	11,533	91,184	382,050	238,900	620,950

(Contd...)

Kandhamal	75,686	39,424	6,053	54,965	176,128	130,081	306,209
Kendrapara	129,062	60,866	5,700	97,937	293,565	94,731	388,296
Kendujhar	161,200	80,459	13,020	140,481	395,160	226,066	621,226
Khordha	68,357	50,966	11,985	348,939	480,247	94,816	575,063
Koraput	148,578	79,975	7,464	117,350	353,367	217,068	570,435
Malkangiri	107,507	19,610	2,590	24,472	154,179	93,445	247,624
Mayurbhanj	230,742	165,423	60,631	161,661	618,457	409,340	1,027,797
Nuapada	65,134	29,363	5,197	31,867	131,561	112,799	244,360
Nayagarh	72,588	49,465	11,555	72,068	205,676	82,377	288,053
Nabarangpur	127,204	74,554	7,194	55,848	264,800	242,595	507,395
Puri	143,560	73,574	9,897	146,450	373,181	77,059	450,540
Rayagada	95,383	76,428	4,666	73,432	249,909	149,275	399,184
Sambalpur	72,775	57,547	35,149	116,703	282,174	139,172	421,346
Sonepur	64,286	42,032	11,655	30,722	148,695	88,285	236,980
Sundargarh	157,056	64,797	10,876	247,405	480,134	258,669	738,803
Orissa	3,435,170	2,098,158	404,208	3,651,733	9,589,269	4,687,219	14,276,488

Annexure 2.18: Employment-Unemployment Projections for the 11th Five year Plan

In lakh person years

1. Estimated Labour Force at the beginning of the year	148.41	150.46	152.54	154.65	156.78
2. Projected Annual Growth Rate in Labour Force (in %)	1.38	1.38	1.38	1.38	1.38
3. Addition to Labour Force during the year	2.05	2.08	2.11	2.13	2.16
4. Labour Force at the end of the year	150.46	152.54	154.65	156.78	158.94
5. Total work Force at the beginning of the year	134.28	136.36	138.47	140.78	142.8
6. Projected Annual Growth Rate in Work Force (in %)	1.55	1.55	1.55	1.55	1.55
7. Additional to Work Force / Employment Generation during the year	2.08	2.11.	2.15	2.18	2.21
8. Total Work Force at the end of the year	136.36	138.47	140.62	142.8	145.01
9. Magnitude of unemployment at the beginning of the year.	14.13	14.1	14.07	14.03	13.98
10. Magnitude of unemployment at the end of the year	14.1	14.07	14.03	13.98	13.93
11. End of the year Rate of Unemployment (%)	9.37	9.22	9.07	8.92	8.76

Annexure 2.19: Employment in the Organised Sector 2000 to 2009

In lakh

2000	7.11	0.89	0.87	0.1	7.98	0.99	12.4
2001	7.17	0.92	0.89	0.1	8.06	1.02	12.7
2002	6.92	0.93	0.79	0.1	7.71	1.03	13.4
2003	6.8	0.96	0.87	0.1	7.67	1.06	13.8
2004	6.57	0.96	0.89	0.11	7.46	1.07	14.3
2005	6.55	1	0.9	0.11	7.45	1.11	14.9
2006	6.27	1	0.89	0.11	7.16	1.11	14.9
2007	5.98	0.92	0.9	0.1	6.88	1.02	14.8
2008	5.98	1.03	1.02	0.09	7	1.12	16
2009	6.19	1.03	1.16	0.11	7.35	1.14	15.5

Annexure 2.20: Registration, Notification of Vacancies and Placement Through Employment Exchanges

2000	164,577	3,171	2,421	407	422	403	1.93	1.47
2001	130,586	2,620	2,412	445	336	583	2.01	1.85
2002	141,234	2,239	2,601	393	338	615	1.59	1.84
2003	168,824	2,325	1,529	231	293	443	1.38	0.91
2004	267,337	1,760	1,760	238	266	420	0.66	0.66
2005	143,323	1,876	1,908	203	267	275	1.31	1.33
2006	240,963	2,103	586	106	118	111	0.87	0.24
2007	146,503	3,526	4,189	768	983	880	2.41	2.86
2008	189,830	1,792	3,638	543	839	1,104	0.91	1.92
2009	230,746	1,924	6,034	886	1,020	1,845	0.83	2.61
2010 (up to June)	167,251	1,133	2,505	573	657	755	0.68	1.5

Annexure 2.21: Live Register Position 2000 to 2009

In '000

1990	870	350	387	120	6	7	520
2000	968	187	587	175	5	14	781
2001	906	169	559	160	5	13	737
2002	762	146	462	133	8	15	618
2003	737	127	454	107	34	15	610
2004	859	114	552	138	39	16	745
2005	834	117	523	163	6	25	717
2006	907	151	559	171	5	21	756
2007	797	124	498	142	5	28	673
2008	833	136	510	152	5	30	697
2009	864	115	533	172	5	39	749

Annexure 2.22: Live Register Position of Technical Graduates and Post-Graduates (in actual numbers)

1. Technical Graduates									
a) Engineering									
i. Civil	364	359	392	396	424	366	332	281	233
ii. Electrical	938	830	873	912	687	715	654	549	511
iii. Mechanical	430	458	672	823	907	881	778	630	472
iv. Electronic	334	306	373	499	445	474	432	412	507
v. Chemical	36	43	42	54	57	51	41	22	14
vi. Metallugical	25	19	19	18	15	12	13	7	4
vii. Agril. Engineering	93	73	58	71	80	72	49	72	64
viii. Computers	52	81	188	281	323	346	278	250	356
ix. Others	169	229	174	185	162	134	195	157	88
Total (a)	2441	2398	2791	3239	3100	3051	2772	2380	2249
b) Medical	1829	2145	2233	1937	1523	1227	1443	1550	1490
c) Veterinary	43	47	53	11	19	77	37	77	100
d) Agriculture	529	440	393	413	422	515	514	510	409
Total (1)	4842	5030	5470	5600	5064	4870	4766	4517	4248
2. Technical Post-graduates									
a) Engineering	12	16	28	30	28	112	19	16	33
b) Medical	10	20	20	15	133	150	60	51	47
c) Veterinary	4	3	3	3	3	3	2	2	4
d) Agriculture	247	303	327	372	323	308	280	250	227
Total (2)	273	342	378	420	487	573	361	319	311
Grand Total (1+2)	5115	5372	5848	6020	5551	5443	5127	4836	4559

Annexure 2.23 (A): District-Wise Employment Generation under NREGA during 2008-09

1	Angul	32.08	13.69	1.64	1.66	3.99	7.29
2	Bolangir	39.87	32.81	3.39	4.94	9.53	17.86
3	Balasore	31.48	17.39	2.57	1.86	7.15	11.58
4	Baragarh	31.25	14.34	1.26	1.96	2.71	5.93
5	Bhadrak	30.64	21.65	3.47	0.2	9.93	13.6
6	Boudh	22.67	11.64	1.95	0.83	3.31	6.09
7	Cuttack	3.65	4	1.17	0.26	1.7	3.13
8	Deogarh	18.88	10.31	0.8	1.76	1.94	4.5
9	Dhenkanal	50.33	13.31	1.73	1.48	4.7	7.91
10	Gajapati	37.55	24.13	1.29	12.38	4.16	17.83
11	Ganjam	86.75	80.24	24.98	5.66	65.51	96.15
12	Jagatsinghpur	2.76	1.95	0.49	0.01	0.99	1.49
13	Jajpur	59.77	21.19	4.71	1.35	6.22	12.28
14	Jharsuguda	23.28	11.46	0.93	2.23	0.87	4.03
15	Kalahandi	79.32	28.06	2.57	5.19	5.3	13.06
16	Kandhamal	43.97	23.86	3.42	8.88	3.12	15.42
17	Kendrapara	2.8	1.12	0.17	0	0.37	0.54
18	Kendujhar	56.53	25.58	1.53	5.4	3.79	10.72
19	Khordha	2.88	0.93	0.1	0.14	0.56	0.8
20	Koraput	79.82	33.05	2.44	12.66	4.38	19.48
21	Malkangiri	29.93	20.46	3.51	9.86	1.78	15.15
22	Mayurbhanj	134.17	83.28	7.4	26.54	16.87	50.81
23	Nabarangpur	64.77	27.06	1.92	9.9	3.72	15.54
24	Nuapada	32.85	24.35	1.58	5.22	4.51	11.31
25	Nayagarh	2.5	1.21	0.12	0.08	0.56	0.76
26	Puri	3.08	0.5	0.13	0	0.39	0.52
27	Rayagada	53.96	41.69	4.87	16.7	6.5	28.07
28	Sambalpur	38.38	19.69	1.5	2.81	2.9	7.21
29	Sonepur	25.96	19	2.14	1.07	5.32	8.53
30	Sundargarh	19.94	28.19	1.48	9.8	1.77	13.05
State	Total	1141.82	656.14	85.26	150.83	184.55	420.64

Annexure 2.23 (B): District-Wise Employment Generation under NREGA during 2009-10

1	Angul	27.23	28.2	3.06	2.93	9.18	15.17
2	Balasore	18.68	12.53	1.13	1.11	4.08	6.32
3	Bargarh	24.24	25.35	2.4	4.01	5.81	12.22
4	Bhadrak	21.51	19.76	2	0.18	6.02	8.2
5	Bolangir	45.34	40.38	4.9	7.72	13.54	26.16
6	Boudh	14.63	11.63	1.55	0.75	3.16	5.46
7	Cuttack	17.45	24.36	4.49	1.41	11.77	17.67
8	Beogarh	11.93	11.25	0.96	1.89	2.46	5.31
9	Dhenkanal	35.88	36.66	4.73	3.66	14.8	23.19
10	Gajapati	40.91	34.66	2.14	18.88	6.99	28.01
11	Ganjam	79.2	81.41	19.91	4.77	54.32	79
12	Jagatsinghpur	12.23	10.86	1.59	0.05	4.33	5.97
13	Jajpur	47.18	50.32	9.62	2.52	17.92	30.07
14	Jharsuguda	23.31	18.47	1.49	3.38	1.52	6.39
15	Kalahandi	31.42	29.49	2.8	5.45	6	14.25
16	Kandhamal	60.2	64.21	7.16	20.61	6.76	34.53
17	Kendrapara	7.33	7.47	1.46	0.04	2.95	4.44
18	Kendujhar	43.29	46.57	2.59	9.09	7.06	18.74
19	Khordha	7.33	4.19	0.58	0.39	2.07	3.04
20	Koraput	45.38	40.35	3.01	14.72	5.46	23.19
21	Malkangiri	17.62	20.06	2.45	6.12	1.38	9.95
22	Mayurbhanj	84.69	75.68	7.26	26.22	17.9	51.37
23	Nabarangpur	55.32	57.2	3.84	19.81	7.36	31.01
24	Nayagarh	15.76	15.41	1.29	0.78	5.55	7.62
25	Nuapada	21.04	13.5	0.66	2.02	2.08	4.77
26	Puri	6.62	5.56	0.82	0.03	3.47	4.32
27	Rayagada	50.68	46.45	4.87	18.24	7.38	30.49
28	Sambalpur	24.55	23.18	2.45	4.2	4.43	11.07
29	Sonepur	25.89	20.34	2.48	1.27	6.91	10.66
30	Sundargarh	59.62	57.1	2.13	17.84	3.04	23.01
State	Total	976.46	932.6	105.83	200.08	245.68	551.59

Annexure 2.24: Trend of Assistance under the SGSY Programme

1999-00	7457.65	19880	1.1.75	99583	74633
2000-01	9780.81	22004	1.1.86	99094	86171
2001-02	6138.55	21885	1.1.78	53755	59233
2002-03	5499.02	22396	1.1.69	45293	48925
2003-04	6699.2	21437	1.1.58	54348	59289
2004-05	8281.82	23878	1.1.64	58229	65712
2005-06	8073.92	26048	1.1.80	58229	63904
2006-07	8611.11	29448	1.2.25	66250	68687
2007-08	11763.61	29362	1.2.26	81656	87171
2008-09	14833.85	28730	1.2.20	107051	106271
2009-10	18184.11	29942	1.2.37	124522	131334

Annexure 2.25: District wise Physical & Financial Achievement under SGSY during, 2009-10

Angul	3306	3567	892	539	3018	3.07	9.4	12.47
Bolangir	5483	5309	1359	1097	4487	4.77	12.26	17.03
Balasore	7217	9257	3240	2314	8957	8.06	22.04	30.1
Baragarh	4935	3957	792	764	3520	3.45	11.35	14.8
Bhadrak	3230	3346	1015	47	2931	3.21	6.71	9.92
Boudh	2014	2319	832	225	2023	2.06	5.25	7.31
Cuttack	4760	5381	2384	187	4597	4.8	7.84	12.64
Deogarh	1206	1104	220	323	1045	1.01	3.58	4.59
Dhenkanal	3865	4493	1076	720	4220	3.32	6.23	9.55
Gajhapati	1908	1929	182	1023	1721	1.45	2.84	4.29
Ganjam	8221	8746	2553	571	8746	8.65	17.82	26.47
Jagatsinghpur	2533	2603	1374	0	2187	1.92	5.25	7.17
Jajpur	4749	6649	2526	798	5401	4.51	14.3	18.81
Jharsuguda	847	845	219	385	697	0.78	1.97	2.75
Kalahandi	5436	5822	1602	1536	4744	4.83	16.69	21.52
Kandhamal	3192	3332	881	1732	3675	3.11	6.76	9.87
Kendrapara	3472	3861	805	12	2847	3.05	6.02	9.07
Keonjhar	6028	6458	766	3323	5659	6.24	14.48	20.72
Khurda	3701	3795	813	489	3340	3.71	8.25	11.96
Koraput	6277	6414	825	3629	4936	5.3	11.54	16.84
Malkangiri	2496	2157	895	1113	2157	2.11	3.17	5.28
Mayurbhanj	10512	10914	893	5498	9947	10.62	19.47	30.09

(Contd.)

Nawarangpur	4446	4344	790	2534	3491	3.79	9.29	13.08
Nuapada	2932	2897	527	812	2541	2.58	7.82	10.4
Nayagarh	3276	3428	435	230	2932	3.15	7.53	10.68
Puri	4720	4193	1319	0	3545	3.91	5.8	9.71
Rayagada	3804	4445	1019	2709	3765	3.99	8.15	12.14
Sambalpur	2565	2343	470	988	1905	2.19	7.92	10.11
Sonepur	2182	2001	1100	398	1056	1.75	4.81	6.56
Sundargarh	8209	5425	1221	2907	4277	5.2	11.78	16.98
Total	124522	131334	33025	36903	113367	116.6	276.34	392.94

Annexure 2.26: District wise Employment Generated under SGRY for the Year, 2008-09 upto the End of August 2008 (Merged with NREGA from the Beginning of 2008-09)

Annexure 2.27: Progress of SJSRY in Orissa, 2009-10

1	Urban self Employment Programme	827	6503	677.67	No. of Beneficiari
2	STEP-UP	6620	8252	110.35	No. of Beneficiari
3	Urban Women Self-Help Programme (UCDN)	827	2801	248.38	459 Groups (Women)
4	Thrift & Credit Societies/Revolving fund	1655	12809	153.3	708 Groups (Women
5	Urban Community Development Network (UCDN)	-		73.84	Social Activities
6	Urban Wage Employment Programme (UWEP)		114461	264.28	Person days generated.

Cuttack	3.69	3.65	0.45	0.13	1.97	2.55
Jagatsinghpur	1.47	1.47	1.08	0.00	0.98	2.06
Kendrapara	1.86	1.86	0.43	0.00	1.16	1.59
Khurda	0.18	0.18	0.07	0.00	0.08	0.15
Nayagarh	1.15	1.15	0.16	0.09	0.09	0.34
Puri	2.18	2.18	0.66	0	1.64	2.3
Total	10.52	10.49	2.85	0.22	5.92	8.99

Annexure 2.28: Average MPCE in Orissa vis-à-vis some other Major States as per 55th, 60th to 64th Rounds of NSS

Average Monthly Per Capita Consumer Expenditure (Rs.)												
State	55th Round (July, 99 - June, 00)		60th Round (Jan, 04-June-2004)		61st Round (July, 04 - June, 05)		62nd Round (July, 05 - June, 06)		63rd Round (July, 06 - June, 07)		64th Round (July, 07 - June, 08)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11	12	13
Punjab	742.82	898.82	946.86	1058.82	846.75	1326.09	1009.79	1520.08	1198.13	1609.16	1272.53	1632.92
Haryana	714.38	912.08	878.68	1050.27	962.89	1142.35	742.65	1156.02	1012.73	1336.09	1034.45	1627.57
Maharashtra	496.77	973.33	568.85	1258.92	567.76	1148.27	696.78	1341.84	776.09	1673.48	867.91	1700.08
Tamil Nadu	514.07	971.63	603.4	1130.53	602.17	1079.65	687.91	1170.64	728.78	1227.19	834.12	1409.82
Karnataka	499.78	910.99	501.6	937.06	508.46	1033.21	573.18	1154.49	624.27	1160.16	818.97	1667.73
Andhra Pradesh	453.61	773.52	557.11	1101.71	585.55	1018.55	704.17	1303.95	727.14	1360.68	816.17	1549.55
Kerala	765.71	932.62	990.22	1371.51	1013.15	1290.89	1055.61	1565.59	1250.35	1681.48	1382.92	1947.96
Uttar Pradesh	466.63	690.33	538.18	826.96	532.63	857.05	569.64	907.87	653.18	996.38	680.46	1120.84
West Bengal	454.8	866.59	580.18	1133.4	562.11	1123.61	582.62	1232.82	629.86	1371.26	701.59	1452.04
ORISSA	373.17	618.49	414.08	872.09	398.89	757.31	460.32	900.2	458.56	1072.13	558.95	1438.35
Rajasthan	548.88	795.81	580.47	994.81	590.83	964.02	700.68	1004.46	767.39	1184.7	801.23	1265.1
Madhya Pradesh	401.5	693.56	437.34	793.36	439.06	903.68	487.12	982.41	514.93	1001.7	633.76	1189.95
Gujurat	551.33	891.68	613.21	1092	596.09	1115.2	683.57	1105.35	796.58	1421.96	874.7	1471.32
Bihar	385.1	601.9	422.49	784.02	417.11	696.27	465.48	683.6	541.33	864.96	597.64	1080.19
Assam	426.13	814.12	531.69	1019.47	543.18	1057.99	625.99	1351.69	721.37	1368.88	798.79	1451.92
ALL-INDIA	486.16	854.92	564.7	1060.16	558.78	1052.36	624.53	1170.6	695.16	1312.5	772.36	1471.54

Annexure 2.29: Average MPCE of Major States in 64th Round NSS

In Rs.

1	Punjab	555.22	717.31	1272.53	600.85	1032.08	1632.92
2	Haryana	517.68	516.76	1034.45	639.73	987.85	1627.57
3	Maharashtra	415.56	452.36	867.91	630.9	1078.18	1709.08
4	Tamil Nadu	419.63	414.49	834.12	548.29	861.53	1409.82
5	Karnataka	413.62	405.35	818.97	611.69	1056.04	1667.73
6	Andhra Pradesh	424.58	391.59	816.17	571.08	978.47	1549.55
7	Kerala	564.14	818.77	1382.92	703.19	1244.77	1947.96
8	Uttar Pradesh	360.75	319.72	680.46	483.98	636.86	1120.84
9	West Bengal	406.04	295.55	701.59	618.12	833.92	1452.04
10	ORISSA	325.42	233.53	558.95	607.99	830.36	1138.35
11	Rajasthan	432.15	369.09	801.23	536.23	728.87	1265.1
12	Madhya Pradesh	323.13	310.63	633.76	473.65	716.3	1189.95
13	Gujurat	471.9	402.8	874.7	627.07	844.26	1471.32
14	Bihar	356.56	241.08	597.64	526.42	573.77	1080.19
15	Assam	478.63	320.16	798.79	677.46	774.46	1451.92
ALL-INDIA		404.33	368.03	772.36	582.43	889.11	1471.54

Annexure 2.30: Value of Consumption of Food and Non-Food Items of a Person for a Period of 30 Days in Rural & Urban Areas over different Rounds of NSS for Orissa and All-India Level

In Rs.

NSS Round & Period	ORISSA						ALL-INDIA						Per capita expenditure for Orissa as percentage to all-India average	
	Rural			Urban			Rural			Urban				
	Food	Non Food	Total	Food	Non Food	Total	Food	Non	Total	Food	Non	Total	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
55 th Round (July,1999-June,2000)	239.25	133.92	373.17	352.24	266.25	618.49	288.8	197.36	486.16	410.84	444.08	854.92	76.76	72.34
%	64.11	35.89	100	56.95	43.05	100	59.04	40.6	100	48.06	51.94	100		
56th Round (July,2000 - June,2001)	246.66	145.82	392.48	372.67	400	772.67	278.6	216.33	494.9	400.57	514	914.57	79.3	84.48
%	62.85	37.15	100	48.23	51.77	100	56.29	43.71	100	43.8	56.2	100		
57 th Round (July,2001-June,2002)	193.95	113.71	307.69	359.47	376.64	736.11	276.4	221.92	498.27	402.31	530.48	932.79	61.75	78.91
%	63.04	36.96	100	48.83	51.17	100	55.46	44.54	100	43.13	56.87	100		
58th Round (July,2002-Dec.,2002)	229.27	161.21	390.48	385.47	483.21	868.68	292.3	239.2	531.49	429.79	582.18	1012	73.47	85.84
%	58.71	41.29	100	44.37	55.63	100	54.99	45.01	100	42.47	57.53	100		
59 th Round (January,2003-Dec,2003)	230.93	166.26	397.89	392.24	439.4	831.64	298.6	255.59	554.15	429.01	592.88	1021.9	71.8	81.38
%	58.04	41.96	100	47.16	52.84	100	53.88	46.12	100	41.98	58.02	100		

(Contd...)

NSS Round & Period	ORISSA						ALL-INDIA						Per capita expenditure for Orissa as percentage to all-India average	
	Rural			Urban			Rural			Urban				
	Food	Non Food	Total	Food	Non Food	Total	Food	Non Food	Total	Food	Non Food	Total	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
60 th Round (January-June,2004	241.98	172.11	414.08	415.53	456.56	872.09	304.6	260.1	564.7	441.48	618.68	1060.2	73.32	82.26
%	58.44	41.56	100	47.65	52.35	100	53.94	46.06	100	41.64	58.36	100		
61 st Round (July,2004-June,2005)	245.56	153.33	398.89	378.13	379.18	757.31	307.59	251.19	558.78	447.42	604.94	1052.36	71.39	71.96
%	61.57	38.43	100	49.93	50.07	100	55.05	44.95	100	42.52	57.48	100		
62 nd Round (July,05-June,06)	260.45	199.87	460.32	402.57	497.63	900.2	333.15	291.38	624.53	467.82	702.78	1170.6	73.71	76.9
%	56.58	43.42	100	44.72	55.28	100	53.34	46.66	100	39.96	60.04	100		
63 rd Round (July,06-June,07)	265.3	193.27	458.56	451.85	620.29	1072.13	363.42	331.75	695.16	517.25	795.25	1312.5	65.96	81.69
%	57.85	42.15	100	42.15	57.85	100	52.28	47.72	100	39.41	60.59	100		
64 th Round (July,07-June,08)	325.42	233.53	558.95	607.99	830.36	1438.35	404.33	368.03	772.36	582.43	889.11	1471.54	72.37	97.74
%	58.22	41.78	100	42.27	57.73	100	52.35	47.65	100	39.58	60.42	100		

Annexure 2.31: State-Wise Engel's Ratio for Major States in 55th and 60th to 64th Round of NSS

State	55th Round		60th Round		61st Round		62nd Round		63rd Round		64th Round	
	(July, 99 - June, 00)		(Jan, 04 - June, 04)		(July, 04 - June, 05)		(July, 05 - June, 06)		(July, 06 - June, 07)		(July, 07 - June, 08)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11	12	13
Punjab	52.27	47.12	45.6	39.44	49.18	37.63	43.8	35.53	42.67	37.06	43.63	36.8
Haryana	55.51	45.87	49.98	41.71	48.6	41.38	50.91	39.78	47.4	39.37	50.04	39.31
Maharashtra	54.71	45.31	50.97	39.26	51.66	40.43	47.86	37.31	47.88	35.13	47.88	36.91
Tamil Nadu	58.73	45.61	52.42	38.67	52.39	42.69	50.35	39.95	50.5	39.64	50.31	38.89
Karnataka	59.08	46.32	54.39	43.47	55.67	43.21	51.29	38.95	52.37	39.68	50.5	36.68
Andhra Pradesh	60.5	47.44	55.89	37.81	55.19	41.55	55.31	36.4	52.34	37.31	52.02	36.85
Kerala	53.7	49.04	46.54	40.76	44.97	39.97	43.95	37.38	40.43	34.43	40.79	36.1
Uttar Pradesh	57.42	50.49	52.07	44.05	53.45	47.13	54.03	43.94	52.19	43.88	53.02	43.18
West Bengal	65.86	52.28	59.75	45.51	58.69	43.4	59.29	39.76	58.91	40.21	57.87	42.57
ORISSA	64.11	56.95	58.44	47.65	61.56	49.93	56.58	44.72	57.86	42.15	58.22	42.27
Rajasthan	59.5	50.85	54.42	43.34	54.83	41.61	52.71	43.2	52.83	42.88	53.94	42.37
Madhya Pradesh	58.09	47.6	43.6	42.36	52.88	38.9	51.34	38.23	51.24	40.84	50.99	39.8
Gujurat	59.82	49.58	54.48	43.65	57.95	44.87	55.72	42.93	54.27	39.63	53.95	42.62
Bihar	66.47	57.24	58.89	47.89	64.79	51.13	61	50.99	59.68	50.36	59.66	46.88
Assam	67.63	55.38	62.4	46.8	65.99	49.5	60.13	43.99	56.76	46.23	59.92	46.66
ALL-INDIA	59.4	48.06	53.94	41.64	55.05	42.51	53.34	39.96	52.28	39.41	52.35	39.58

Annexure 2.32: Rice and Wheat Consumption in Orissa and India

In kg.

50th July 93 - June 94	15.2	0.4	11.3	2	7	4.4	5.3	4.7
55th July 99 - June 2000	14.16	0.59	12.18	2.25	6.78	4.55	5.22	4.77
60th Jan 03 - June 04	13.78	0.61	11.59	1.93	8.8	4.25	4.88	4.67
61th July 04 - June 05	13.29	0.53	11.05	2.03	6.55	4.29	4.85	4.65
62nd July 05 - June 06	13.03	0.58	10.06	2.26	6.54	4.35	4.79	4.53
63rd July 06 - June 07	12.57	0.48	9.6	2.17	6.56	3.97	4.8	4.43
64th July 06 - June 08	13.13	0.49	10.35	2.17	6.36	4.2	4.75	4.51

Annexure 2.33: Average MPCE on Groups of Items of Consumption, Orissa and all India

In Rs.

1	Cereals	136.57	163.88	124.08	130.62	116.26	132.25	114.8	118.8
2	Gram	0.44	0.18	1.14	1.75	0.45	0.48	1.18	1.68
3	Cereal substitutes	0	0	0.48	0.51	0.01	0.01	0.46	0.5
4	Pulses and their products	16.13	30.09	23.7	31.2	13.56	23.26	22.67	30.06
5	Milk and milk products	10.5	57.34	60.18	106.64	11.7	44.74	56.23	97.49
6	Edible oil	21.49	37.46	33.29	46.43	16.84	27.84	27.22	37.52
7	Meat, fish and eggs	25.34	53.14	26.31	39.47	19.56	36.07	24.32	34.2
8	Vegetables	49.95	84.57	48.53	64.34	41.74	63.42	43.06	56.87
9	Fruits (fresh)	6.37	20.79	10.69	24.32	5.63	14.82	10.02	21.97
10	Fruits (dry)	0.34	2.21	2.87	6.7	0.35	1.55	2.45	6.03
11	Sugar	7.47	11.6	12.35	14.67	6.85	11.35	14.04	17.25
12	Salt	1.77	2.5	1.48	1.83	1.47	1.86	1.34	1.66
13	Spices	11.25	18.26	16.34	20.38	9.61	13.35	14.96	18.82
14	Beverage etc.	37.8	125.97	42.89	93.57	21.26	80.84	30.67	74.42
Food Total		325.42	607.99	404.33	582.43	265.3	451.85	363.42	517.25
Non-food Items									
15	Pan	4.64	6.78	2.85	3.11	3.29	6.74	2.64	3.12
16	Tobacco	4.03	5.12	9.85	9.94	5.29	5.22	8.7	9.22
17	Intoxicants	4.81	4.4	6.26	6.63	7.67	2.96	6.36	6.24
18	Fuel and Light	62.19	106.9	75.05	125.71	52.89	96.5	66.07	117.44
19	Clothing	37.29	80.02	49	30.12	32.58	67.06	42.42	40.25
20	Footwear	3.54	12.09	7.3	14.65	2.77	8.4	6.53	13.07
21	Education	11.87	129.62	28.53	104.83	9.3	65.66	22.16	91.6
22	Medical(institutional)	5.48	13.73	13.75	19.4	5.04	18.74	15.55	24.35
23	Medical (non-institutional)	26.33	46.58	34.92	56.87	19.43	45.57	36.74	58.23
24	Conveyance, entertainment & others	27.44	80.12	43.51	96.76	22.45	73.84	38.89	84.84

(Contd...)

25	Consumer Services	23.23	164.53	64.65	209.23	16.83	108.28	54.86	180.2
26	Rent	1.18	91.56	3.06	86.39	0.56	68.62	3	66.96
27	Taxes & Cesses	0.43	4.74	1.79	13.23	0.11	3.18	1.65	10.52
28	Durable goods	21.07	84.16	27.73	62.23	15.06	49.53	26.18	59.21
29	Non-food Total	233.53	530.36	368.03	889.11	193.27	620.29	331.75	795.25
TOTAL CONSUMER EXPENDITURE		558.95	1438.35	772.36	1471.54	458.56	1072.13	695.16	1312.5

Annexure 2.34: Consumer Price Index for Agricultural Labourers of Selected States (Base 1986-87=100), May, 2008 and May, 2010

Andhra Pradesh	497	569	14.5
Assam	462	533	15.4
Bihar	458	504	10
Gujurat	476	550	15.5
Haryana	518	601	16
Jammu & Kashmir	475	538	13.3
Karnataka	476	543	14.1
Kerala	463	513	10.8
Madhya Pradesh	480	534	11.3
Maharashtra	485	574	18.4
Orissa	452	508	12.4
Punjab	523	593	13.4
Rajasthan	515	577	12
Tamil Nadu	465	528	13.5
Uttar Pradesh	483	534	10.6
West Bengal	445	522	17.3
All-India	475	540	13.7

Annexure 2.35: Consumer Price Index for Agricultural Labourers, Orissa and India (base 1986-87=100)

2001-02	286	300	304	311
2002-03	280	298	316	323
2003-04	296	314	326	332
2004-05	301	320	335	342
2005-06	317	335	351	352
2006-07	340	356	375	380
2007-08	379	389	406	408
2008-09	420	428	452	450

Annexure 2.36: CPI for Industrial Workers as All India Level and Selected Centress in Orissa

Average over the months

1995	306	294	275
1996	334	324	303
1997	358	336	341
1998	405	371	390
1999	424	390	396
2000	441	411	406
2001	458	420	407
2002	477	429	416
2003	496	434	432
2004	514	452	453
2005	536	479	473
2006	123	120	124
2007	131	128	137
2008	142	143	149
2009	157	160	166

Annexure 2.37: CPI for Different Categories of items for Industrial Workers in Orissa

Base Year 2001=100

1	Food	182	159	14.5	176	163	8.0	188	168	11.9
2	Pan,Supari, Tabacco, intoxicants	160	143	11.9	138	123	12.2	134	134	0.0
3	Fuel & Light	152	145	4.8	156	140	11.4	132	132	0
4	Housing	189	142	33.1	236	146	61.6	248	163	52.1
5	Clothing, Bedding and food wears	131	125	4.8	164	161	1.9	141	138	2.2
6	Miscellaneous	153	145	5.5	140	133	5.3	144	134	7.5
7	General	170	150	13.3	173	151	14.6	177	157	12.7

Annexure 2.38: Average Retail Prices of Some Essential Commodities in Orissa

Rs./Kg./Ltrs.

Rice (Common)	8.47	8.93	9.11	10.73	11.34	13.62
wheat	9.31	9.72	11.51	13.85	12.67	13.7
Mung Dal	24.08	29.14	39.35	38.78	36.17	41.60
Arthar Dal	28.42	27.46	27.95	36.05	36.72	44.21
Mustard Oil	55.53	50.60	50.70	60.15	62.5	75.99
Palm Oil	50.79	45.13	48.54	54.08	58.1	53.77
Vanaspati	51.10	43.27	48.48	53.95	56.18	50.74
Sugar(free sale)	17.23	20.03	21.01	16.33	16.39	20.47
Gur (local)	17.17	18.62	18.00	14.87	15.09	21.62
Salt	2.43	2.62	2.38	2.92	2.79	3.77
Potato	6.82	7.12	8.19	8.95	9.07	6.88
Orion (Ulli)	8.44	9.75	7.51	13.29	11.93	12.77
Atta	10.50	10.83	13.05	14.07	14.16	15.03
Maida	11.50	12.16	14.39	15.67	15.8	16.44
Suji	11.99	11.87	14.95	16.48	16.52	17.69

Annexure 2.39: Average Wholesale Prices of Some Essential Commodities in the State

Rs. Per quintal

Paddy (common	430.31	453.92	490	515	547	820	891	932.52
Wheat	822.47	774.08	805	954	1046	1087	1260	1285.14
Ragi	525.8	505.02	548	567	1029	1003	891	1126.56
Maize	603.23	406.99	453	479	960	779	950	989.92
Mung	2123.04	2035.98	1968	2498	2927	2857	3140	3922.8
Biri	1621.86	1443.71	1558	2542	3123	2626	3087	3755.51
Gram	1911.89	1807.1	1694	1945	2561	2868	2974	3025.77
Kulthy	966.99	971.75	966	1090	1265	1498	1610	1871.86
Til	1866.41	2035.54	2126	2139	2229	2878	3575	3470.69
Mustard seeds	2121.81	2181.74	2297	2688	2426	3028	3109	3191.72
Groundnut	1641.16	1721.39	1715	1751	1946	1904	2357	2602.65
Potato	519.58	499.12	595	670	859	585	748	691.93
Jute	952.33	971.01	1019	1410	N.A.	N.R.	1400	1525
Gur	1338.39	1310.76	1507	1600	1672	1866	2178	2516.75
Dry Chilies	4534.15	4874.29	4306	4595	5640	5832	6062	5980.71

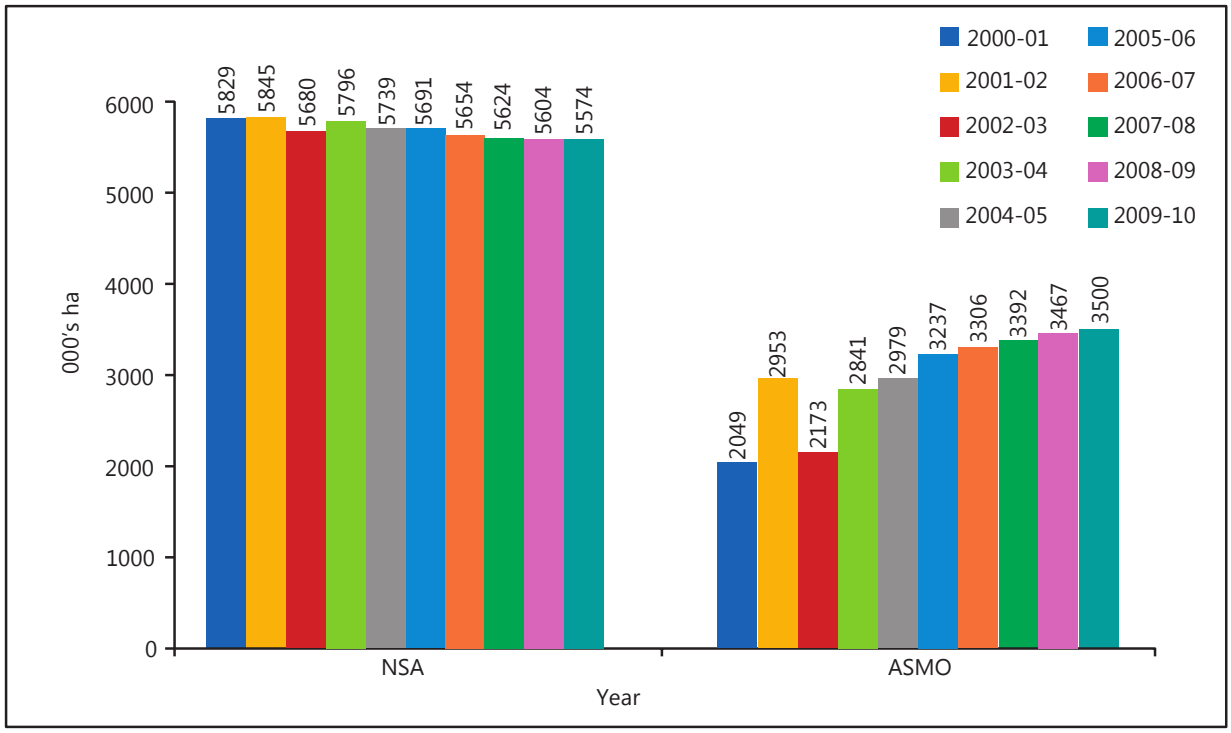
CHAPTER 3

Agriculture Sector

Orissa's economy has remained mainly agrarian, dominated by agriculture and allied sub-sectors that contributed more than 70 percent of the Gross State Domestic Product (GSDP) in the 1950s. The State economy has been diversifying at a slow pace. As per "Quick Estimates", this sector, which includes agriculture, animal husbandry, fisheries and forestry, contributed 18.44 percent of GSDP as against 14.60 percent at national level in 2009-10. However, this sector provides employment and sustenance, directly or indirectly, to more than 60 percent of the State's total work-force. In this sense, the agriculture sector is still the "mainstay" of Orissa's economy. It is, therefore, important to understand structural changes in the growth patterns of the sector so that appropriate strategies may be devised to divert a substantial proportion of the agricultural workforce from farm to non-farm sectors and in turn help the economy to grow at faster and higher rates. This would also help reduce poverty at a faster rate. This chapter reviews the performance of agriculture, animal resources, fisheries and forestry sub-sectors.

This sector suffers from frequent natural shocks like cyclones, droughts and flash floods. As a result of this, its annual growth varies widely. Despite wide annual variations in its growth, the agriculture sector has grown, in real terms at 2004-05 prices, at a rate of 4.80 percent per annum in the first three years of the 11th Five Year Plan.

Figure 3.1: Trend of Net Sown Area and Area Sown More than Once in Orissa (2000-2010)



3.1 Agriculture

In the Global economy, there is a decreasing trend of land area used for agriculture and a slowdown in the growth rate of this sub-sector's output. These trends are witnessed for Orissa as well. Relevant statistics about the agriculture sub-sector are given in Annexure 3.1 through 3.23. The State Government has constituted the State Farmers' Commission to review the current status of agriculture, its performance, strengths and weaknesses, to assess conditions of different categories of farmers in various agro-climatic zones and to work out a comprehensive strategy for achieving sustainable and equitable agricultural development. The status of the agriculture sub-sector and various promotional programmes is briefly discussed below.

3.1.1 Land Use Patterns and Net Sown Area

Annexure 3.1 summarises land-use patterns in Orissa. Land cannot be expanded endlessly. As multiple demands for land increase, less land is devoted to agriculture and allied sub-sectors. Therefore, intensive cultivation of available cultivable lands, wherever feasible, seems a viable strategy for increasing the gross area under cultivation and augmenting food production. These trends are discernible in Orissa as well. Figure 3.1 suggests that there has been a decline in the net sown area in the State. The total net sown area (NSA) in Orissa that was 5,829 thousand hectares (ha) in 2000-01 declined to 5,574 thousand ha in 2009-10. In contrast, the area sown more than once (ASMO) has increased over this period.

The area under food-grains has declined from 5,428 thousand ha in 2008-09 to 5,406 thousand ha in 2009-10 in Orissa. The area under paddy constitutes more than 70 percent of the total cultivated area and has declined from 4,434 thousand ha in 2000-01 to 4,365 thousand ha in 2009-10. Out of the total area under foodgrains, the area under cereals has declined and that under pulses has increased. Areas under oilseeds, fibres and other crops are comparatively less. Figure 3.2 graphs major cropping patterns in Orissa from 2002-03 to 2009-10. Annexure 3.2 classifies area by principal crop types.

3.1.2 Production of Major Crops

The production of food-grains depends, amongst other factors, upon rainfall and its temporal and spatial distribution and rainfall varies over time.

Figure 3.2: Area under Different Category of Crops in Orissa (2002-03 to 2009-10)

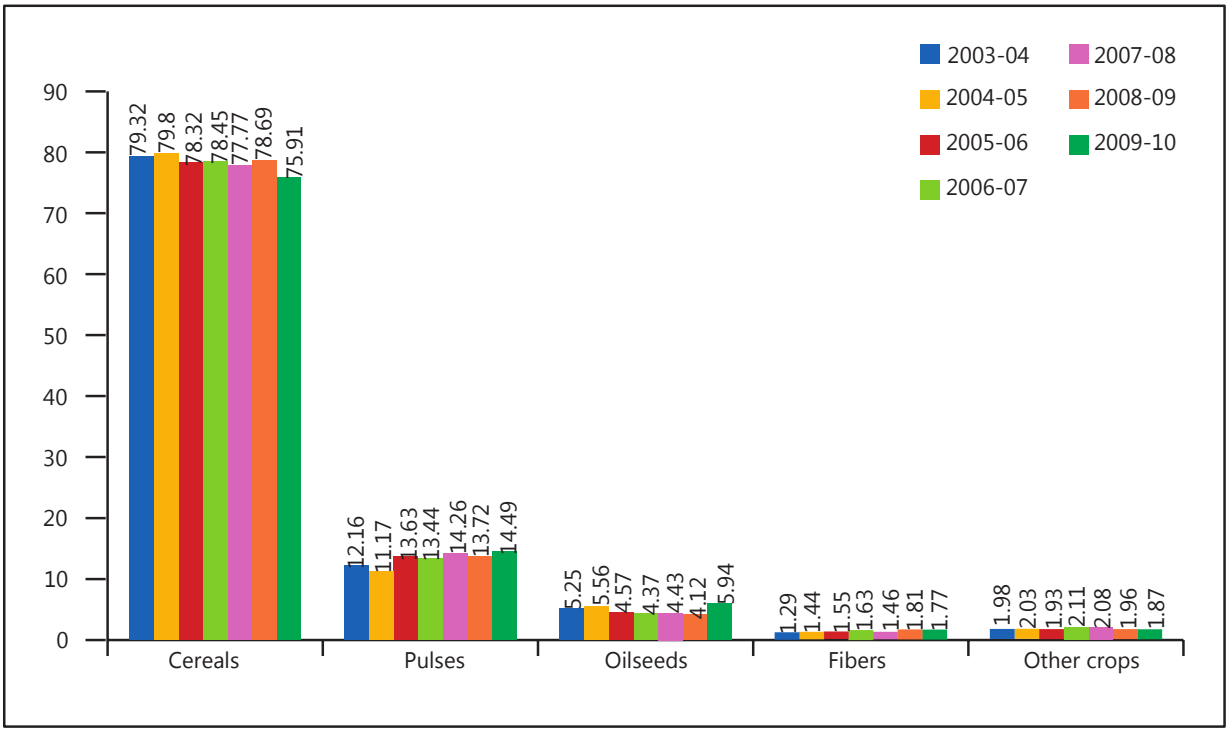
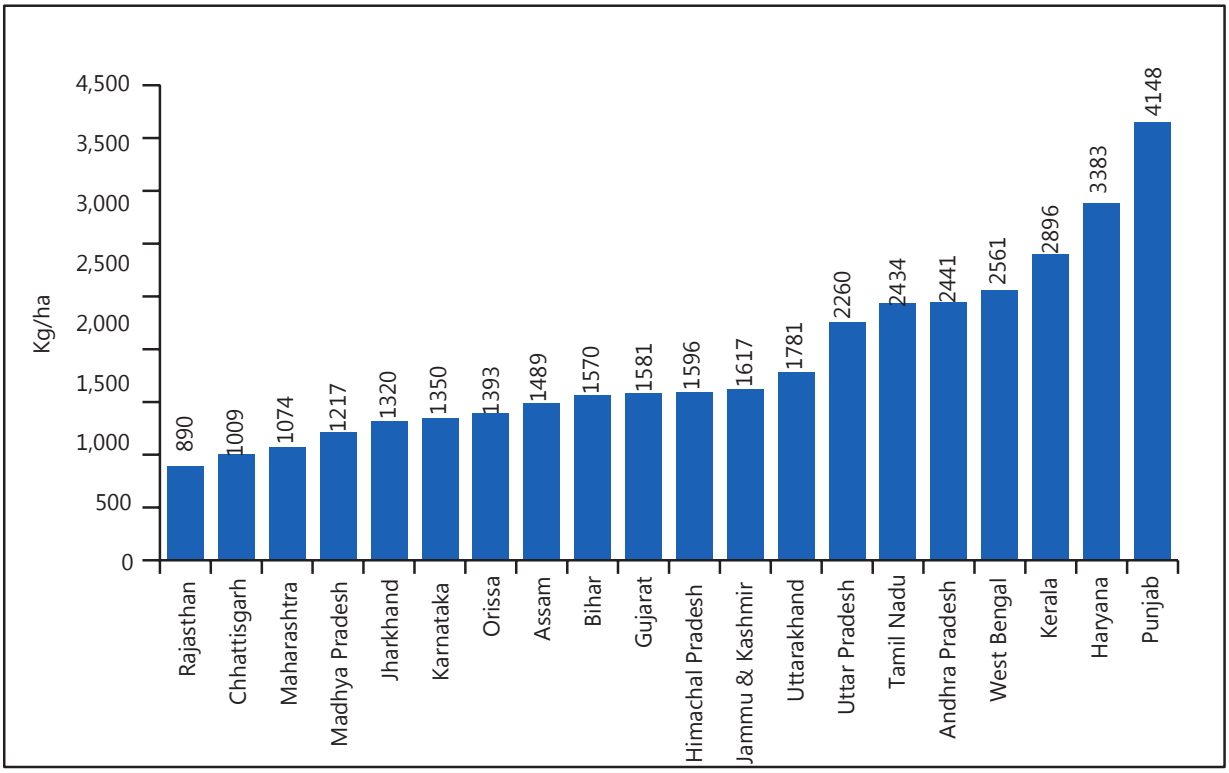


Figure 3.3: Yield Rate of Foodgrains in Different States of India



However, food-grain production in Orissa has shown a secular increasing trend since 2002-03 with some year to year variations. In 2009-10, the production of food-grains was 7,551 thousand metric tons (TMT) as indicated in Annexure.3.3. There was an increase of 2.08 percent in 2009-10 over 2008-09. Paddy production increased from 6,813 TMT in 2008-09 to 6,917 TMT in 2009-10, which is about 90 percent of total production of food-grains. Season-wise production of paddy in all districts is presented in Annexure 3.4.

The production of oilseeds marginally declined from 152 TMT in 2008-09 to 150 TMT in 2009-10. The production of groundnuts and castor has declined and that of linseed and sesamum increased in recent years. The area under cultivation of fibres increased from 89 thousand ha in 2008-09 to 106 thousand ha in 2009-10. The production of fibers decreased from 288 TMT in 2008-09 to 275 TMT in 2009-10. Cotton, jute and mesta are main fibre crops in Orissa. The production of cotton and jute increased in 2009-10 to 147 and 6 TMT respectively compared to 146 and 4 TMT in 2008-09. Cotton is a major commercial crop in KBK districts in the kharif season. The area under cultivation, and production, of cotton has witnessed an increasing trend. Other crops include potato and sugarcane. Potato cultivation is gaining acceptance in the coastal belt. Farmers are encouraged to use certified potato seeds and other improved planting materials. Sugarcane is cultivated mainly in Cuttack, Sambalpur, Bolangir, Kalahandi and Puri districts. The main constraints in cultivating sugarcane include lack of marketing facilities and the problem of pests.

3.1.3 Productivity of Major Crops

The yield rates of the total food-grains in major states of India for the year 2009-10 are presented in the Figure 3.3. The yield rate of food-grains in Orissa is below the average yield rates in major states and at an all India level. There is, therefore, need for greater efforts and appropriate policy interventions to increase the productivity of major crops.

The average yield rates of major crops in Orissa are given in Annexure 3.5. The average yield rate of paddy increased in 2009-10 to 15.85 quintal per ha as compared to 15.29 quintal per ha in 2008-09.

The yield rate for groundnuts has marginally increased to 11.69 quintals per ha in 2009-10. The yield rates of jute, cotton, sugarcane and potato also increased in recent years.

3.1.4 Cropping Intensity

There are mainly two ways to meet the increasing demand for food and other farm products. One way is to expand the net area under cultivation and the second is to intensify cropping over the existing area. The net sown area of the country has reached a point where it is not possible to make any appreciable increase. Thus, raising the cropping intensity seems a more viable strategy to increase production of farm products and farmers' incomes. Cropping intensity refers to raising a number of crops from the same field during one agricultural year. Higher cropping intensity means more one crop from the same area in an agricultural year. Cropping intensity in Punjab, Haryana and West Bengal is highest in the country as may be seen from Annexure.3.6. The cropping intensity in Orissa has, however, also increased from 135 percent in 2000-01 to 163 percent in 2009-10 as may be seen from Annexure 3.7. The district-wise analysis shows that the cropping intensity is generally higher in coastal districts than other districts.

Area under HYV Paddy

There has been an increase in area brought under cultivation of HYV paddy in Orissa. About 79 percent of the total area under paddy is under cultivation of HYV paddy in 2009-10 as compared to 76 percent in 2008-09. The area under cultivation of HYV paddy in different seasons and districts is given in Annexures 3.8 and 3.9.

3.1.5 Horticultural Crops

The agro-climatic conditions of Orissa are favourable for the production of different types of vegetables, fruits and spices. The KBK districts, Gajapati, Kandhamal, Keonjhar and other districts are conducive to intensive horticultural activity. Among long duration fruits, mango, coconut, cashew nut, sapota, jackfruit, orange, lime and litchi are most favourable in Orissa. The area under cultivation of fruit was 354.56 thousand ha and production of different fruits including mango and coconut was 1,873 TMT and 31.19 lakh nuts of coconut in 2009-10. The production and productivity of important fruits in Orissa is given in Annexure 3.10.

Orissa ranked fourth in terms of production of vegetables in 2009-10. The total production of vegetables was 8,937 TMT in 2009-10 compared to 8,437 TMT in 2008-09. The per capita consumption of vegetables in Orissa has been increasing. Orissa contributed about 4 percent of spice production in India in 2009-10. There was a significant increase in the production of spices to 713.60 MT in 2009-10 as compared to 482.98 MT in 2008-09 as indicated in Annexure 3.11. The production of ginger and turmeric has increased significantly. The total area under spices covers around 1.98 percent of the total gross crop area in the State. Orissa contributed about 3 percent of total flower production in the country. Rose, gladioli, marigold and tuberose are the main flowers grown in Orissa. Annexure 3.12 provides data on area and production of different flowers in Orissa. The trend shows that the area and production of these crops has been increasing over the period.

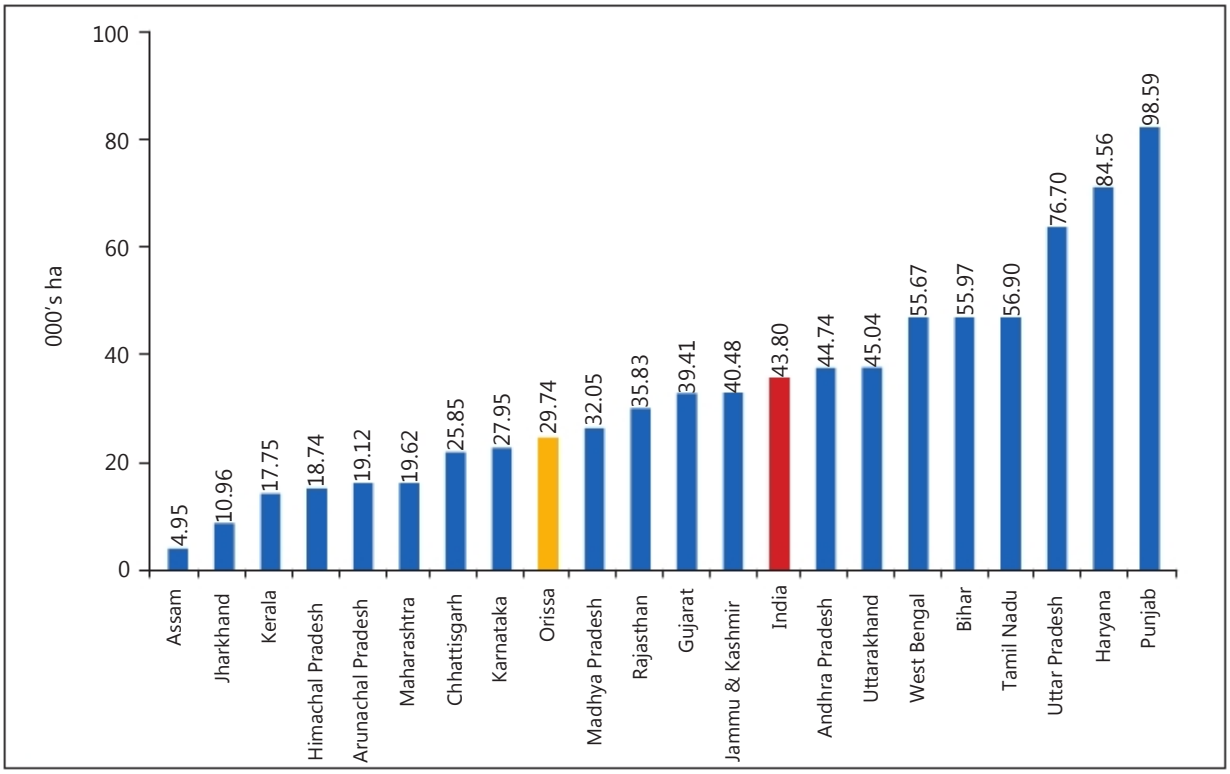
3.1.6 Agricultural Inputs

Improvements in farm yield depends upon a set of factors like technology, utilisation of quality seeds, fertilizers, pesticides and irrigation. Each of these factors plays an important role in augmenting production of farm crops and crop productivity. Quality seeds are considered a critical input for improving agricultural yields and yield rates.

Seed replacement ratio in Orissa is very low. It implies traditional cultivation practices in which farmers rely on farm-saved seeds. Only 6.64 lakh quintals of certified seeds were available in Orissa in 2009-10. Annexure 3.13 presents total supply of certified seeds in Orissa.

Irrigation is also crucially important for enhancing agricultural productivity and is required at different critical stages of plant growth of various crops for their optimum production. Irrigation development not only correlates to agriculture but also to other socio-economic aspects like industry, navigation, hydropower, pisiculture and water supply. Figure 3.4 depicts irrigation intensity in different states in India. Irrigation intensity in the State was only

Figure 3.4: State-wise Share of Net Area Irrigated (%)



31 percent in 2006-07 in comparison to the all-India average of 44 percent. Punjab has the highest irrigation intensity of 98 percent. However, the situation is this regard has been gradually improving in Orissa. With a view to assuring more irrigation facilities as quickly as possible, the State Government launched in 2009-10 two innovative irrigation schemes, i.e., (i) construction of check dams and (ii) installation of bore wells at massive scales. Annexure.3.14 presents source wise net irrigated area in Orissa. Paddy uses the major share, i.e. 62 percent, of total irrigated area as shown in Annexure 3.15.

Chemical fertilizers play a significant role in the development of the agricultural sector. Though there has been considerable improvement in the use of fertilizers and other inputs, the rate of fertiliser use in the State still remains lower than the national average (see Annexure 3.16). The use of fertilizers in the State has increased from 26.51 kg/ha in 1995-96 to 60 kg/ha in 2009-10 (see Annexure 3.17). This suggests a phenomenal increase of almost 130 percent over 15 years. Nevertheless, the present level of fertilizer use in Orissa is almost half of that observed at the all India level (128.6 kg in 2008-09). The use of fertilizers differs widely across districts. The high consuming districts include Bargarh, Balasore, Ganjam, Kalahandi and Bhadrak and low consuming districts are Kandhamal, Deogarh and Gajapati (see Annexure 3.18). Total consumption of pesticides in Orissa increased to 2.29 TMT in 2009-10 as compared to 1.16 TMT in 2008-09. On the other hand, per ha consumption of pesticide has declined in 2009-10 to 140.06 gm/ha from 149.10 gm/ha in 2008-09 (see Annexure 3.19).

Land holding patterns are an important determinant of the production structure and socio-economic conditions in a society. Operational land holdings are classified as marginal, small, semi-medium, medium and large land holdings depending upon the area controlled in a single land holding. Distribution of operational holdings in 2005-06 indicates that their total number has been increasing over the years but the area under holdings has been declining (see Annexures 3.20 and 3.21). The number of marginal and small land holdings has been increasing because of frequent partitions of land holdings.

Credit is also a critical non-land input and has two-dimensions from the viewpoint of its contribution to the augmentation of agricultural growth. First is the availability of credit and the second, distribution of credit. In all, agricultural loans to the extent of Rs. 5,363 crore were advanced during 2009-10. This was significantly higher than the loans of Rs. 3,450 crore in 2008-09. These aspects have also been dealt with in chapter 5. Annexure 3.22 presents the amount of agricultural credit advanced in Orissa by different financial institutions from 2001-02 to 2009-10.

Provision of implements at subsidised rates to farmers helps to improve farm mechanisation and raise farm productivity. Annexure 3.23 gives data regarding farm machineries supplied in the State during 2009-10. In this year, Rs. 81.64 crore was spent by the State to subsidise farm equipments.

3.1.7 Policies and Institutional Support for Development of Agricultural Sector

Several policies and programmes are in place to improve the agriculture sector in the State. Some of them are discussed below.

(i) Agriculture Policy, 2008

In 2008, the State Government brought out a "New Agricultural Policy", which is futuristic, flexible enough to anticipate and address emerging trends, identify potential areas, and chalk out a clear agenda, for agricultural improvement for at least the next ten years. It aims, inter alia, to enhance productivity of major crops, shift the emphasis from "subsistence" agriculture to profitable commercial agriculture and facilitate long term investment in agriculture by public and private sectors and by public-private partnership ventures, particularly for post harvest management, marketing, agro-processing and value addition.

(ii) Macro Management of Agriculture (MMA)

The centrally sponsored scheme, started in 2001-02, aims at the strategic interventions for technology up-gradation in different crops. The Annual Work Plan for 2008-09 included the promotion and technology up-gradation of three major crops, that is, rice, ragi and sugarcane. During 2009-10, 178 farmers' field schools were organised for training 7,120 paddy growers and 400 farmers were sent on exposure visits within the State and 120 farmers outside the State. With a view to encourage promotion of new HYV and replacement of certified seeds, 51,364 quintals of certified paddy seed was distributed and subsidy was given to farmers for the use of certified paddy seeds at a rate of Rs.500 per quintal during 2009-10. Krushak Sampark Melas were organised in each block during 2009-10 to create awareness among farmers about various schemes and improved cultural practices. To promote ragi cultivation, 250 quintals of ragi seeds was distributed to farmers at a subsidized rate. Exposure visits were organised for 150 farmers inside and outside the State. Efforts were also made to promote sugarcane cultivation. Subsidy of Rs.10 lakh was extended to sugarcane farmers at the rate of Rs.400 per acre in 2009-10. Three 'Farmers-Scientists-Extension Workers Interface Programmes' were organised to enhance sugarcane production in Orissa.

(iii) Integrated Schemes of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM)

ISOPOM is a centrally sponsored scheme started in 2004-05 with a funding pattern of 75:25 between the Centre and the State. To enhance oilseeds production, particularly groundnuts, mustard, sesamum, niger, 61,700 quintals of various certified seeds were provided at subsidized rates under this scheme. Input subsidy was provided to farmers on use of gypsum and rhyzobium culture to boost the productivity of groundnut. Total area of 10,000 ha was treated with gypsum and 925 block demonstration were organised to promote improved cultivation and tending practices. One hundred-eighty Integrated Pest management (IPM) and 600 block demonstrations were organised to demonstrate improved methods of pulse production. Fifty sprinkler sets were provided to farmers to improve production of pulses. A maize development programme was also undertaken and 100 block demonstrations were conducted in 2009-10. In all, 1,500 sprayers were supplied to maize farmers and 25 pump sets were provided at subsidized rates in 2009-10.

(iv) Intensive Cotton Development Programme (ICDP)

Cotton cultivation has been growing in Bolangir, Ganjam,KalahandiandRayagada. Topromotecotton

cultivation, 7 training and extension programmes and 133 farmers' field schools were organised in 2009-10. Fifty awareness camps for fibre quality management and 22 Front Line Demonstration (FLD) on integrated pest management technology were organised. About 5,000 manually operated sprayers and 89 power operated sprayers were supplied at subsidized rate to cotton growers.

(v) National Project on Organic Farming

This is a central scheme that aims at promoting organic farming. Organic farm products attract better pricing and higher incomes for producers. The scheme focuses on establishing model organic farms, training of farmers and making them aware of marketing facilities within and outside the country. There is also provision for field demonstrations for establishing vermi-culture hatcheries and bio-gas slurry preparation.

(vi) Farm Mechanisation

Farm mechanisation has great significance in improving agricultural productivity. In Orissa, the level of mechanisation is low. The Government aims at promoting easy availability of appropriate farm machineries at substantially subsidized rates. During 2009-10, 3,311 power-tillers, 51 paddy reapers, 32 paddy transplanters, 20 power operated implements, 68 specialised power driven implements, 22 rotavators, 2,000 sets of manual and bullock drawn implements, 2,670 tractors, 100 power threshers and 381 tractor drawn hydraulic trainers were supplied. An amount of Rs. 42.75 crore was spent.

(vii) Agricultural Promotion and Investment Corporation Ltd (APICOL)

APICOL was established in 1995-96 as a promotional organisation for promoting commercial agri-enterprises, agro-based and food processing industries in the State. In 2009-10, 100 commercial agri-enterprises were promoted by APICOL.

(viii) Orissa Agro Industries Corporation (OAIC)

OAIC aims at marketing various agricultural inputs and farm machineries through a wide network of offices at district and sub-district levels. The Corporation also executes tube wells, bore wells, lift irrigation points for individuals and communities. It provides inputs such as fertilizers, pesticides, cattle and poultry feeds to farmers. During 2009-10, the Corporation had a turnover of Rs. 212.46 crore, sold 2,469 tractors, 341 power tillers, 622 power reapers, 15,908 diesel pump sets and 10 sprinkler sets, energised 181 shallow tube wells and executed 133 direct lift projects.

(ix) Orissa Integrated Irrigated Agriculture & Water Management Investment Project (OIIAWMIP)

OIIAWMIP was implemented with the support of the Asian Development Bank (ADB) for the optimal use of irrigation potential in the State. The main aim of the project is to increase the efficiency and sustainability of the existing irrigation projects. The project stabilised 2.18 lakh ha of existing ayacut and created 6,000 ha additional irrigation potential by modernising 15 existing major, medium projects and rehabilitating 1,400 lift irrigation projects.

(x) Command Area Development & Water Management (CAD&WM)

The main aim of this project is to enhance agricultural production and productivity through better management of irrigation water and active involvement of farmers in participatory irrigation water management. The main components of the programme include construction of field channels, field drains, reclamation of water logged areas, topographical survey and farmers' training. Funding for execution of the projects is being made through central assistance and the State Plan. Twenty-one major and medium projects having catchment and command areas (CCA) of 995,861 ha have been taken up under this scheme. By end of March 2010, field channels covering 499,071 ha and field drains covering 148,445 ha have been completed. In the meantime, 7 projects have been completed and 14 projects are under progress. During 2010-11, budget provision of Rs.66.43 crore has been made for constructing field channels over 28,922 ha and field drains covering 9,330 ha.

(xi) Micro Irrigation Programmes

Micro irrigation programmes are in operation since 2006-07 with a funding pattern of 40:30:30 (centre: state: beneficiary). It subsidises drip and sprinkler irrigation, which is suitable for growing horticultural crops. Farmers are encouraged to

create captive irrigation sources through shallow tubewells, medium tubewells, bore wells, dug wells and river lift irrigation projects through a NABARD assisted project. A budget provision of Rs.50 crore is generally made every year. In 2008-09, 17,085 shallow tube wells, 1,517 bore wells, 476 dug wells and 7 river lift irrigation points were established. In 2010-11, the State Government launched its own schemes for undertaking massive programmes for creating bore wells and check dams. A budget provision of Rs.200 crore was made in 2010-11.

(xii) Watershed Mission

The State Government has mounted a Watershed Mission with a view to undertake soil and water conservation measures in areas where irrigation facilities are inadequate and soils are generally degraded due to poor resource management practices. The Mission undertakes development programmes at micro watershed level through active participations of local people. The programme has a strong component for improving soils and moisture regimes and developing additional livelihood opportunities for farmers and others under the Jeebika scheme. A number of schemes including Integrated Waste Development Programme, Western Orissa Rural Livelihood Project, RLTAP, NWDPRA, DPAP and RVP have been brought under the Mission.

(xiii) National Watershed Development Projects for Rainfed Area (NWDPRA)

This project is a component of the Macro Management to Agriculture (MMA) programme and is implemented in watershed development mode. During 2009-10, the project treated 221 micro watersheds in Orissa.

(xiv) Drought Prone Area Programme (DPAP)

DPAP is operational in eight districts including Bolangir, Subarnapur, Kalahandi, Nuapada, Baragarh, Boudh, Dhenknal and Khandhamal. An area of 26,178 sq km has been treated under the scheme through 1,127 micro watershed projects. During 2009-10, 40,602 ha area was treated.

(xv) River Valley Project (RVP)

RVP is also implemented under the MMA program in watershed development mode. It aims at treating degraded catchments of multipurpose interstate reservoirs with appropriate soil and water conservation measures to check silt into reservoirs and to enhance the productivity of degraded lands. The scheme is operational in Hirakud, Rengali-Mandira, Upper Kolab and Upper Indravati catchments in Sundargarh, Deogarh and Koraput over 17 watersheds with 3,546 ha of treatable area.

(xvi) National Horticultural Mission (NHM)

This is a centrally sponsored scheme launched in 2005-06 which operates in 24 districts of Orissa. The main objective of the programme is to promote horticultural crops including fruits, flowers, vegetables and other crops. The scheme also supports post harvesting practices and marketing of horticultural crops to improve incomes of farmers. The crops selected under the scheme include mango, citrus, litchi and banana in fruits, cashew in plantation crops, ginger and turmeric in spices, betel vine and floriculture. In order to encourage farmers to establish fruit orchards, assistance up to 75 percent of cost of cultivation is provided. In 2009-10, 10,000 ha was covered under mango, 3,000 ha under cashew, 1,000 ha under litchi, 400 ha under banana using both suckers and tissue culture with an outlay of Rs.14.64 crore. There is an increase in the demand for flowers like rose, gladioli, marigold and tuberose in the State. With a view to promoting floriculture, 2,050 ha area was with a financial outlay of Rs. 5.98 crore during 2009-10.

(xvii) National Food Security Mission (NFSM)

NFSM was lunched in 2007-08 with the objective of increasing production of rice and pulses through expansion of area and enhancement of productivity in a sustainable manner in the identified districts.

3.1.8 Agricultural Marketing

Proper marketing facilities for agricultural produce are necessary to help farmers to get remunerative returns for their produce. Lack of marketing infrastructure leads to distress sales of farm produce and works as a disincentive for farmers' efforts. A scheme called "Establishment of Krushak Bazar" has been introduced under the Work Plan. It aims at creating primary rural markets, training of farmers and launching of awareness campaigns. Several marketing initiatives have been institutionalised through cooperative societies. The Orissa State

Marketing Federation has been functioning as the apex organisation with 51 regional cooperative marketing societies (RMC). Orissa has amended the RMC Act with a view to involve private sector in promoting agricultural marketing. The private sector can play a major role through contract farming and other initiatives. Several other agencies including the Orissa State Tribal Development Co-operative Corporation (TDCC), the Orissa State Oilseeds Growers' Federation, 213 Large-sized Agricultural and Multi-purpose Societies (LAMPS) are also functional to cater to the needs of different stakeholders.

3.2 Animal Husbandry

Animal husbandry is an important source of livelihood for people. In the periods of distress, livestock works as an insurance. Around 80 percent of rural households depend on livestock and draw about 30 percent of their annual incomes or sustenance from livestock in Orissa. About 85 percent of livestock are owned by the landless, marginal and small landholding families. Relevant statistics about the animal husbandry sub-sector are given in Annexures 3.34 to 3.47.

The livestock census for all states is presented in Annexure. 3.34 and is depicted in Figure 3.5. Uttar Pradesh returned highest livestock population in 2003-04. Orissa contributed about 4.82 percent population of livestock in the country compared to 12.06 percent in Utter Pradesh, 10.13 percent in Rajasthan and 8.58 percent in West Bengal.

According to the Quick Round Report of the 18th Livestock Census, 2007, the total livestock population in Orissa stood at 230.57 lakh including 123.09 lakh cattle. The State also returned 205.96 lakh poultry. Out of the total livestock population, about 60 percent are cattle, 32 percent small ruminants and 2.5 percent pigs. Out of the total poultry, 70 percent are local backyard breeds. Annexure.3.35 and 3.36 presents the livestock population in Orissa under different census. Figure 3.6 depicts the total livestock population in Orissa.

3.2.1 Production and Availability of Milk, Eggs and Meat in Orissa

Orissa contributes about 2 percent to total production of milk in India (see Annexure Annexure.3.37). The egg production is about 3 percent of all India

Figure 3.5: State-wise Livestock Population, 2003 Census

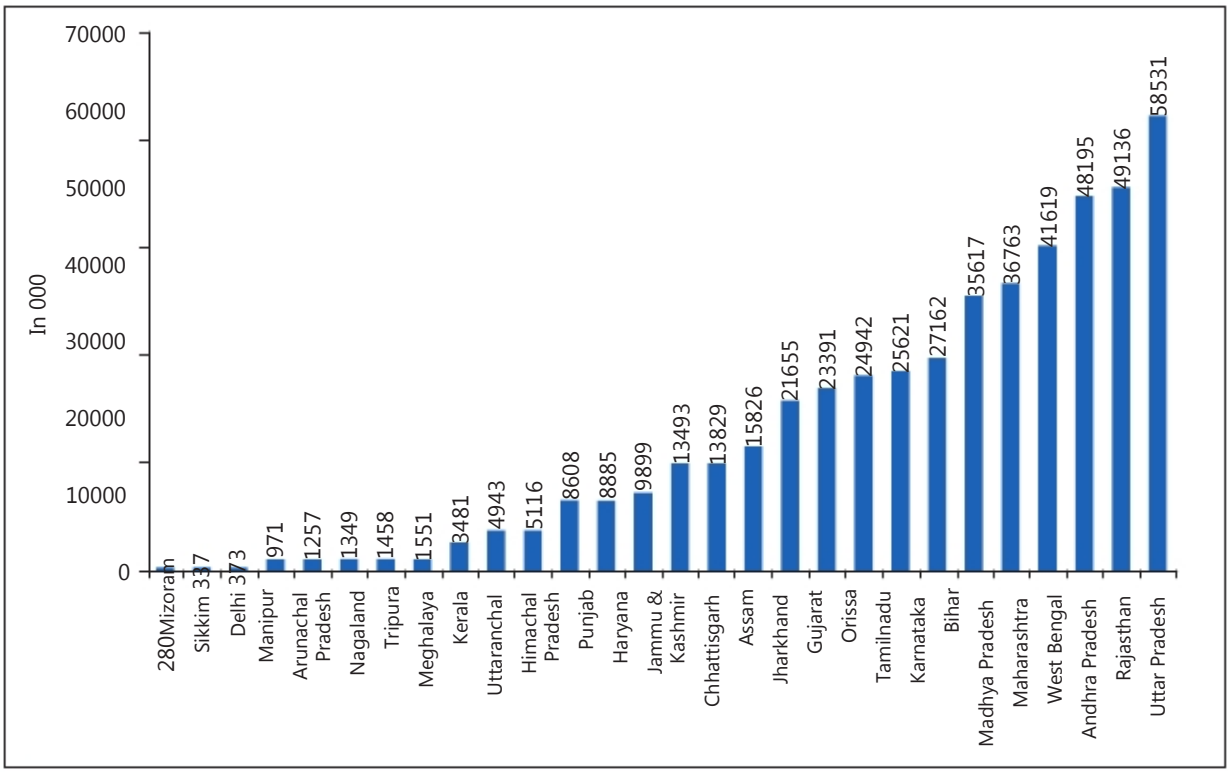
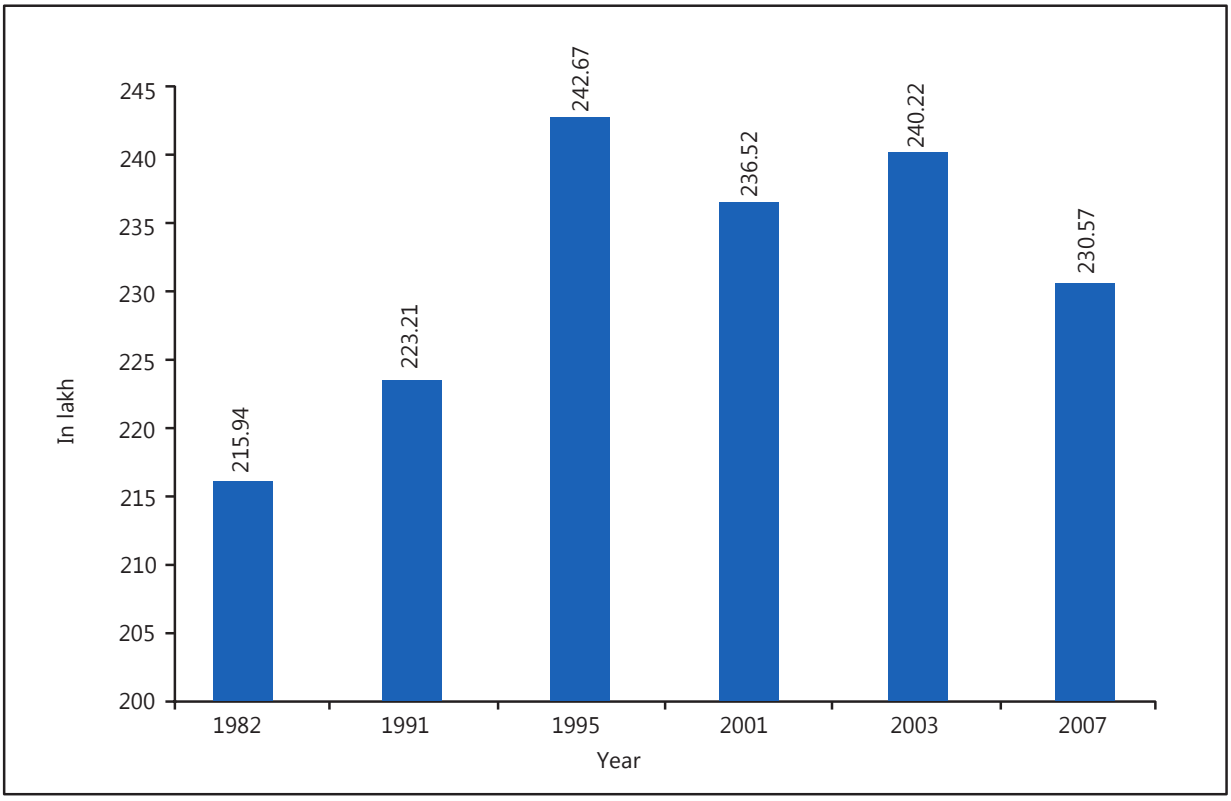


Figure 3.6: Livestock Population in Orissa



Source: Directorate of Animal Husbandry and Veterinary Services, Orissa.

production. Figure 3.7 shows time series data on production of milk, eggs and meat in Orissa from 2000-01 to 2009-10. The production of milk increased from 1,598 TMT in 2008-09 to 1,651 TMT in 2009-10. The production of eggs increased from 1,993 million in 2008-09 to 2,319 million in 2009-10. Figure 3.8 gives per capita availability of milk, eggs and meat in Orissa from 2000-01 to 2009-10 and suggests that per capita consumption of milk, eggs and meat is increasing over time (see also Annexure 3.38). Annexure.3.39 gives targets and achievements of production of milk and eggs by districts.

Orissa State Cooperative Milk Producer Federation Ltd (OMFED)

OMFED was established in 1980 as the apex body for milk procurement and marketing in Orissa. The main objective of OMFED is to promote, produce, procure, process and market milk and milk products. There are 3,609 Milk Producers' Cooperative Societies (MPCS) under OMFED. In 2009-10, OMFED produced 1,090.23 lakh kilolitres (kl), and marketed 1,247.56 lakh kl, of milk worth Rs. 313.05 crore. An Integrated Dairy Development Programme (IDDP), designed for hilly and backward areas, has been put in place since 1994-95 in fourteen non-Operation Flood districts with the aim to increase milk production and generate self employment opportunities for rural people. Further details on activities of OMFED are given in Annexure.3.40. OMFED has started "clean and quality milk production program" in Cuttack, Puri, Balasore, Sambulpur, Gajapati and Keonjhar districts with a projected outlay of Rs.7 crore. Under this programme, 283 bulk milk cooperatives have been established and 521 farmers have been trained.

Orissa State Poultry Producers' Co-operative Marketing Federation Ltd (OPOLFED)

OPOLFED, an autonomous body, functions at Bhubaneswar to popularise poultry products and develop a market for them. OPOLFED has undertaken marketing of eggs and chicken meat and production of chicks and balanced premixed poultry. In 2009-10, 398.96 lakh eggs were sold at Rs. 11.73 crore. Chicken weighing 13,603 kg and

Figure 3.7: Production of Milk, Eggs and Meat in Orissa (2000-01 to 2009-10)

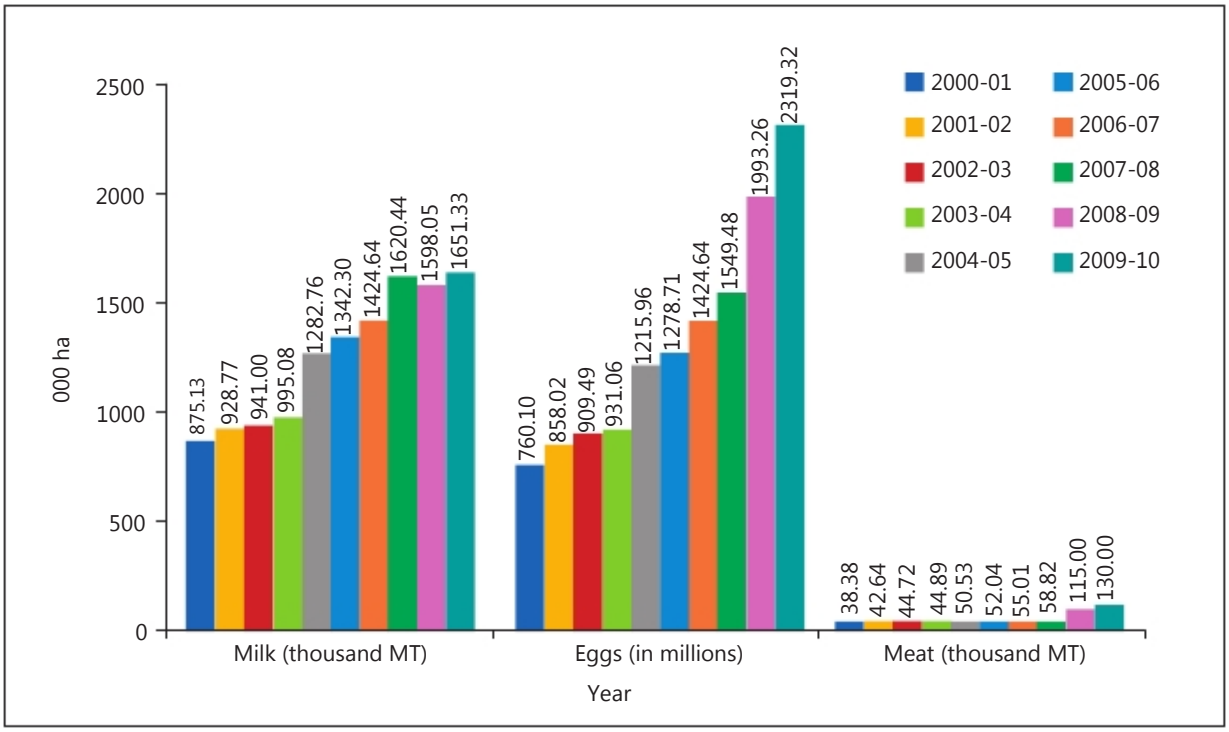
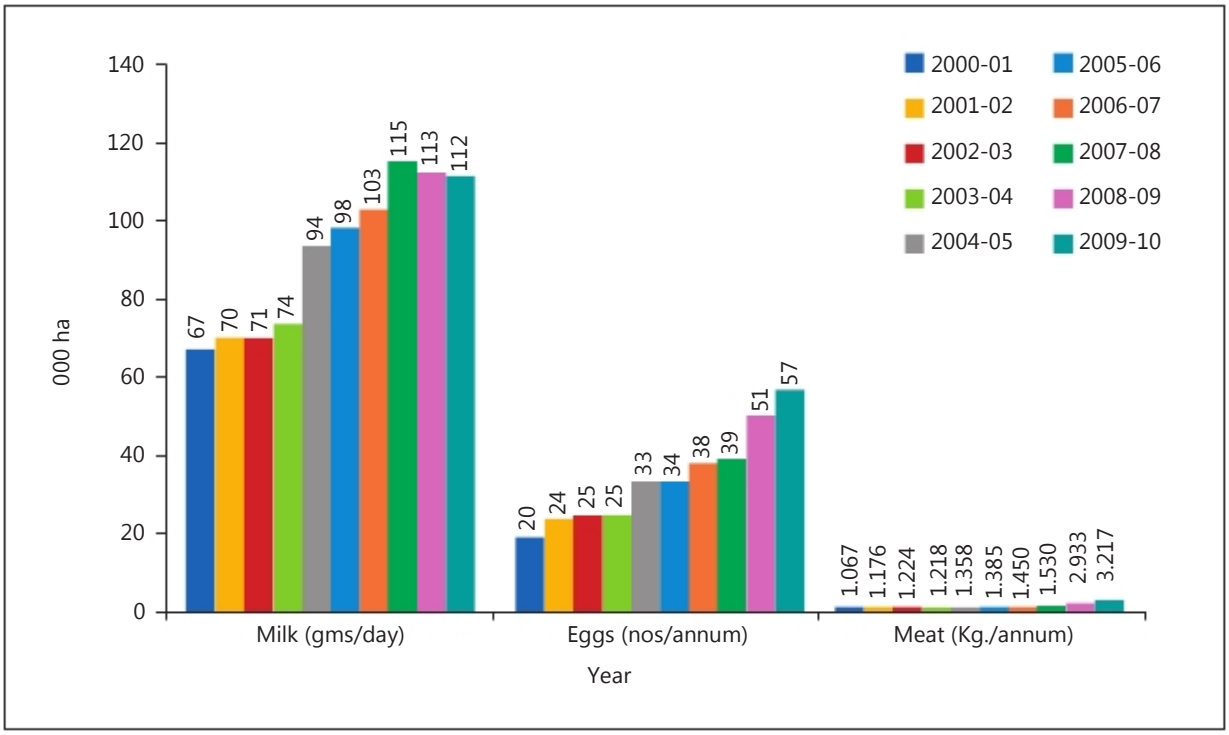


Figure 3.8: Per Capita Availability of Milk, Eggs and Meat (2000-01 to 2009-10)



valued at Rs14.39 lakh was marketed. OPELFED supplies eggs to schools under the mid-day meal programme.

3.2.2 Government Initiatives for Livestock Development

The State has devised several strategies for the 11th Plan for development of animal resources and dairy programme with the following objectives: (i) producing livestock vaccines under GMP compatible conditions to meet the local requirement, (ii) monitoring the implementation of the Livestock Disease Control programme at district level, (iii) providing livestock disease diagnostic services at DDL through information and communication technologies, (iv) sharing knowledge and technology appropriate for development of animal husbandry and dairying, (v) establishing Livestock Aid Centres at GP level, and (vi) improving cattle breeds and undertaking fodder development programmes.

(i) Network of Veterinary Hospital and Dispensaries

Aminal health care is provided through a network of 540 veterinary hospitals and dispensaries with 827 veterinary doctors and 2,939 Livestock Aid Centres (LACs) with 2,550 livestock inspectors' labaratories (see Annesure 3.41). The Disease Control Programmes are monitored by Deputy Directors. Two Biological Products Institutes function at Bhubaneswar and Berhampur to prepare adequate quantity of different vaccines needed for the State Disease Control Programme.. During 2009-10, 55.69 lakh animals were treated, 276.34 lakh animals were vaccinated, 8.84 lakh animals de-wormed, 4.92 lakh animals castrated and 3,118 infertility camps organised in Orissa (see also Annexure 3.42).

(ii) Livestock Breeding Farms

There are eight ECB/LBD farms in the State. These farms produce high pedigree bull calves to improve breeding and productivity of local animals through natural services / artificial insemination. The farms also produce and supply fodder and root slips to local farmers and propagate fodder cultivation programmes. In 2009-10, there were 118 milk producing cows, 66 dry cows, 87 heifers, 18 bull calves and 96 sucking calves in these farms which produced 2.73 lakh litres of (see also Annexure 3.43).

(iii) Poultry Development

Forty-eight poultry hatcheries have been established at different locations with twin objectives: to supply day old chicks to farmers at affordable prices, and to enhance production of chicken, meat and eggs through backyard poultry farming. Under the Rashtriya Krishi Vikash Yojana (RKVY), a programme to induct 4,000 more layer birds at eight poultry farms has been taken up. A Layer Poultry Estate with the participation of about 100 SC and ST farmers with two lakh layer bird strength is being established at Gobardhansula near Baripada. This programme is expected to benefit 30,000 BPL families, mostly SC and ST women.

(iv) Fodder Development

There are seven fodder seed development farms, which supply fodder seeds to farmers at subsidised rates under the fodder mini-kits programme. In 2009-10, 24.3 thousand quintal of green fodder was produced (see Annexure 3.45) and 63,506 mini-kits were distributed to farmers. In addition, 24.06 lakh root slips and 1,485 quintal fodder were sold to farmers. Two new programmes, "Training and Demonstration on Fodder Cultivation" and "Fodder Seed Distribution" have been launched under the State Plan. Grass Land and Grass Reserve (GLGR) programme was taken up through Gram Panchayats. Govt. of India has released Rs.272.00 lakh towards establishment of 32 units since 2007.

(v) National Project on Cattle and Buffalo Breeding (NPCBB):

The National Project on Cattle and Buffalo Breeding Programme (NPCBB) has been launched by the Government of India to improve breeding of cattle and buffaloes. This project is aimed at improving incomes and employment opportunities in rural areas. Orissa has established the "Orissa Livestock Resources Development Society (OLRDS)" to implement this programme in the State. Go-Mitras have been engaged under a self-employment program to provide doorstep A.I. facilities to farmers. Ninety-nine buffalo bulls have been supplied to different districts for natural breeding. In 2009-10, 300 VASs, 700 LIs and 1,000 Go-Mitras received refresher training under this programme.

(vi) Small Animal Development

There are two sheep breeding farms, two goat

breeding farms and one piggery breeding farm in the State to supply graded progenies to farmers for up-gradation of local breeds. These farms are being strengthened in a phased manner. There are 195 sheep, 139 goats and 40 pigs in these farms.

(vii) Assistance to States for Control of Livestock Diseases (ASCAD)

ASCAD is a centrally sponsored scheme with a funding pattern of 75:25 (centre: state) that has been implemented in the State with a provision of outlay of Rs.14.43 crore out of which Rs.785.00 lakh was spent in 2009-10. It conducts mass vaccinations and diagnosis of diseases in the newly established DDLs.

3.3 Fisheries

Orissa, being a maritime State, has considerable scope for the development of inland, brackish water and marine fisheries. The State is endowed with a long coast line of 480 km and fresh water resources that include ponds and tanks having surface area of 1.16 lakh ha, reservoirs of 2.56 lakh ha, lakes, swamps and jheels of 1.80 lakh ha, and rivers and canals of 1.55 lakh ha. The State's brackish water resources include 2.98 lakh ha estuaries, 32,587 ha cultivable brackish water, 8,100 ha of backwater area and the Chilika, a brackish water lagoon, extending over an area of 79,000 ha. According to the Fishery Survey in India (FSI), the fisheries potential of Orissa is 513,667 MT. About 2.95 percent population depends upon fisheries for their livelihoods, their number being about 10.84 lakh. Of them, 7.51 lakh depend on inland fisheries and 3.33 lakh on marine fisheries. The fisheries sub-sector contributes a little above 1 percent of real GSDP and has grown, in real terms at 2004-05 prices, at an average rate of 3.44 percent per annum in the first three years of the 11th Plan. Relevant statistics about this sub-sector are given in Annexure 3.24 to 3.33.

3.3.1 Fish Production and Consumption in Orissa

Orissa ranks seventh in terms of production of fish in India. Annexure 3.27 compares fish production in different states. During 2009-10, Orissa produced 371 TMT of fish, which was about 4.58 percent of the national production. Out of the total fish produced in Orissa, about 241 TMT came from inland sources and 129 TMT from marine sources. The inland production included 215 TMT from fresh waters and 26 TMT from brackish waters. Crab production has also been increasing over the years. The fish production from Chilika lake increased from 10.70 TMT in 2008-09 to 11.96 TMT in 2009-10. Per capita consumption of fish has appreciably increased from 7.3 kg in 1999-2000 to 13.27 kg in 2009-10. This implies improvement in the standard of living, and change in dietary patterns, of the people.

3.3.2 Export and Import of Fish

As fish production increases in the State, so do the export and import in this sector. This trend(from 1999-2000 to 2009-10) is shown in Figure 3.9. It may be observed that exports of fish are rising over the years as may be seen from Annexures 3.32 and 3.33. The trend as regards import of fish is not clear. Imports varied from about 34 TMT to 47 TMT from 1999-2000 to 2007-08. However, imports jumped to 170.42 TMT in 2008-09 and 92.07 TMT in 2009-10 (see also Annexure 3.32). The seafood export sector has been reporting impressive growth during the last few years. The sector reported exports of value Rs. 411 crore during 2009-10.

3.3.3 State Initiatives for Fishery Development

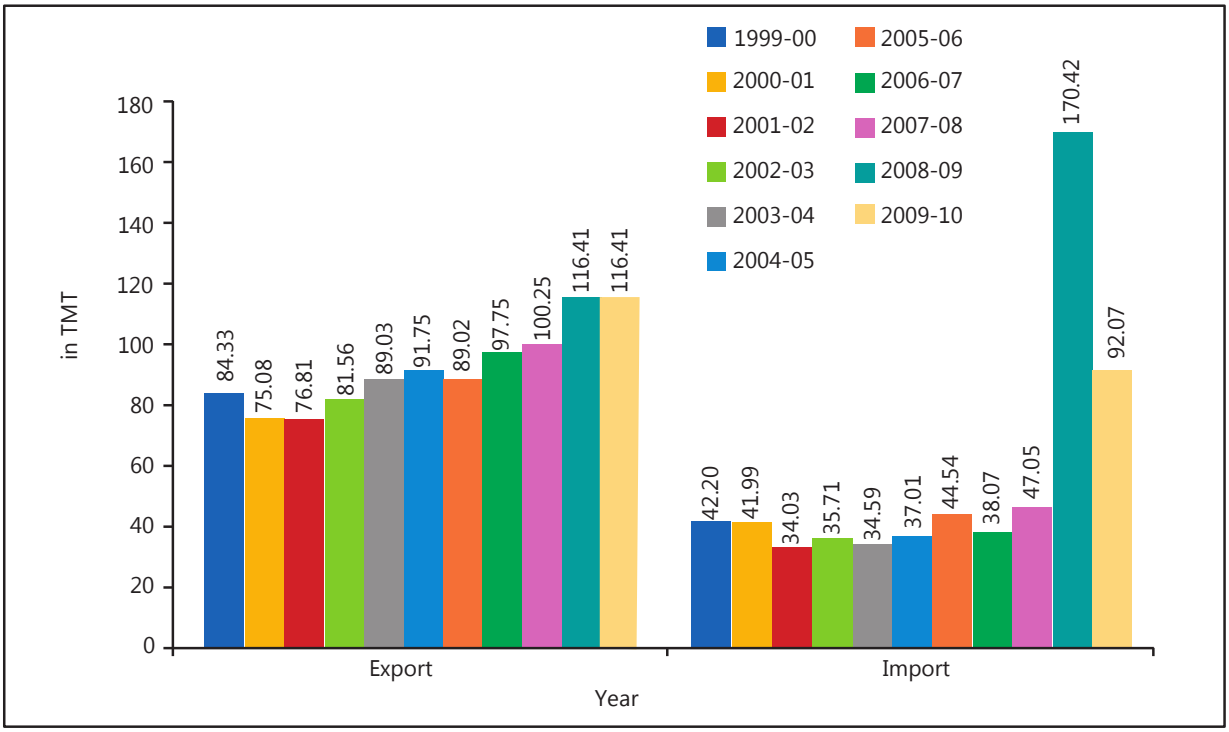
(i) Fishery Development Policy

The fishery development policy has been formulated as a part of the Agriculture Policy 2008. The 11th Plan aims to double fish production and triple exports and export earnings. Fisheries development programmes are funded through various sources. The State Government has undertaken a massive drive to promote pisciculture through the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). Multipurpose tanks have been set up in rural areas to promote fisheries and meet other needs. Other development programmes of the sub-sector are briefly discussed below.

(ii) Fish Farmers' Development Agency (FFDA)

This centrally sponsored scheme is implemented to develop ponds and train fish farmers in modern pisiculture techniques. There are 30 FFDAs at the rate of one in each district. In 2009-10, 69.7 thousand ha tank area has been developed.

Figure 3.9: Fish Export and Import (1999-2000 to 2009-10)



(iii) The State Reservoir Fishery Policy

The State Reservoir Fishery Policy has been formulated with a view to introducing systematic and remunerative pisiculture in reservoirs. The policy aims at substituting traditional methods by advance technologies and techniques. It permits the transfer of reservoirs with an area of 100 acres and above to the Fisheries and Animal Resources Department.

(iv) Brackish-Water Fisheries Development Agencies (BWFDA)

BWFDA have been set up in seven coastal districts, which abound in brackish water resources. Out of a total potential area of 38.6 thousand ha, 32.6 thousand ha have been found suitable for Brackish Water Aquaculture. In 2009-10, BWFDA developed 15.50 thousand ha water area for prawn culture. Brackish water prawn culture was undertaken over 6.94 thousand ha and 10,979.49 MT shrimps were produced.

(v) Fishermen Welfare Schemes

a. Accident Insurance Scheme

This scheme which was launched in 1983-84 aims at insuring the lives of fishermen. An amount of Rs. 50,000 is provided in the event of accidental death or permanent disability and up to Rs. 25,000 is given in the event of partial disability. The cost of this programme is shared by the State and the Centre in equal proportion. In 2009-10, eight lakh fishermen were covered under this scheme and Rs. 37.75 lakh was disbursed in cases of disabilities and death.

b. Saving-cum-Relief Fund

The State Government provides financial assistance to poor marine fishermen during lean periods. In 2007-08, 14,166 fishermen were covered under this programme.

c. Safety to Marine Fishermen

This scheme is aimed at providing life saving jackets to traditional marine fishermen at a unit cost of Rs. 3,000 per jacket. Fishermen are expected to meet 20 percent of the cost and 80 percent is shared by the Centre and State on a 50:50 basis.

d. Low Cost Housing Scheme under the National Welfare Fund for Fishermen (NWFF)

This is a centrally sponsored scheme that envisages better living amenities for poor fishermen. Under this scheme, model fishermen's villages are created and low cost housing and drinking water facilities

are provided. Since its inception in 1987-88, funds have been allotted for construction of 2,332 houses and 1,989 units have been completed. Besides, two community halls and 32 tube wells have been completed.

(vi) Motorization of Traditional Crafts

The State Government provides a subsidy to marine fishermen for installation of outboard and inboard engines in their traditional country crafts. It was targeted to provide Rs. 40 lakh as subsidy to motorize 200 traditional crafts during 2007-08. 119 fishermen benefited from this programme in 2007-08.

(vii) 'STEP' for Women's Programme

An innovative project, namely, 'Support to Training and Employment Programme' (STEP), for women is implemented in the marine sector in four coastal districts: Balasore, Bhadrak, Puri and Ganjam. It involves 3,000 fisherwomen from lower income groups organised into cooperatives. They are provided with facilities for training to prepare hygienic dry fish and prawn along with value added fish products. Out of 3,000 fisherwomen, 1,559 were trained in these techniques. This programme benefitted 2,031 women beneficiaries under the FFDA scheme in 2009-10.

(viii) Orissa Pisciculture Development Corporation

This is the only public sector undertaking in the fishery sub-sector. OPDC aims at carrying on business in pisciculture in brackish water areas and freshwater ponds and other water sources. It has five hatcheries at Bhanjanagar, Saramanga, Chiplima, Binka and Bayasagar over an area of 103 ha land and has established 10 million capacity fish-seed hatchery at Kausalyaganga near Bhubaneswar. In 2009-10, it produced 20.08 crore quality fry worth Rs 2 crore and sold to fish farmers.

(ix) FISHFED

FISHFED is an apex body of all Primary Fishermen's Cooperative Societies (PFCS) in the State and serves the socio-economic interest and welfare of member fishermen. 333 PFCSs comprising of 70,000 fishermen and women members are affiliated to it. The Federation has several businesses including marketing of fish products, providing fishery inputs, leasing fishery sairats in Chilika and procuring fish seed.

3.4 Forestry and Environment

Forests play a vital role in maintaining ecological stability and contribute significantly to the State economy, especially to livelihoods of forest-dependent communities which are mostly scheduled tribes. The share of the forestry sub-sector is 2.55 percent in real GSDP and the sub-sector has grown, in real terms at 2004-05 prices, at an average rate of only 0.62 percent per annum during the first three years of the 11th Plan. Some important statistics about the forestry sub-sector are given in Annexures 3.48 through 3.54.

In 2009, the 11th India State of Forest Report 2009 was released by the Forest Survey of India under the Ministry of Environment & Forests. The report highlighted: (a) the forest cover and forest mapping in states and India in 2007 and the changes compared to the previous assessment in 2005 and (b) decadal changes. From 2005 to 2007, there was an increase in forest area by 100 sq km. However, "very dense forest (VDF)" declined by 4 sq km and "moderately dense forest (MDF)" by 27 sq km. Open forests increased by 131 sq km. Salient aspects of the 2009 report pertaining to Orissa are summarised in Box 3.1.

3.4.1 Forest Cover and Deforestation

Orissa is rich in forest cover and has recorded forest land of about 58,136 sq km. Forest cover in Orissa is unevenly distributed. Forests are generally located in the districts situated in the Eastern ghats, Central Table Land and Northern Plateau. The coastal districts with high population density have comparatively smaller areas of forests. The actual forest cover in 2007 was highest in Kandhamal district (6837%) followed by Gajapati (57.46%), Sambalpur (49.68%), Deogarh (45.61%), Rayagada (44.20%), Nayagarh (42.83%), Angul (41.87%) and Sundargarh (41.83%). Coastal districts such as Balasore, Bhadrak, Jagatsinghpur, Jajpur, Kendrapara and Puri have less than 10 percent of forest areas. Detailed classification of forest area by districts in 2008-09 is given in Annexure 3.48.

Box 3.1: 11th State of the Forest Report 2009: Orissa Forest Status

(a) Out of a total of sixteen major forest type groups in India, four are in Orissa: : Tropical Dry Deciduous Forest (57.87%), Tropical Moist Deciduous Forest (39.88%), Tropical Semi Evergreen Forest (0.68%) and Littoral & Swamp Forest (0.48%).

(b) Plantations / trees outside the forest (TOF) constitute 1.09 percent of the total area of the State.

(c) The State has a recorded forest area measuring 58,136 sq km. This includes 26,329 sq km (45.29%) of reserve forests, 15,525 sq km (26.70%) of protected forests and 16,282 sq km (28.01%) of un-classed forests. The total recorded forest area of Orissa was 37.34 percent of its total geographical area.

(d) The actual forest cover of Orissa in 2007 was 48,855 sq km, which constitutes 31.38 percent of the State's geographical area in terms of forest canopy density classes. The corresponding figure for 2005 was 48,755 sq km. Thus, the actual forest cover increased by 100 sq km from 2005 to 2007.

(e) The State has 7,073 sq km of 'Very Dense Forest' (VDF) with crown density above 70 percent, 21,394 sq km 'Moderately Dense Forest' (MDF) with crown density in the range of 40-70 percent and 20,388 sq km of 'Open Forest' (OF) with crown density range of 10-40 percent. Tree cover outside forest (TOF), assessed separately, is 4,435 sq km. The VDF, MDF, OF, TOF, Scrub and Non-forest areas constitute respectively 4.54 percent, 13.74 percent, 13.09 percent, 2.85 percent, 3.12 percent and 65.51 percent of the total geographical area of Orissa.

There are a number of factors including biotic interference and diversion of forest lands for non-forestry purposes that have contributed to forest degradation and deforestation. Figure 3.10 illustrates the extent of diversion of forest lands for non-forestry purposes. Figure 3.11 analyses the diversion of forest lands for non-forestry purposes by activities for 2009-10.

Figure 3.10: Forest Area Diverted to Non-forest Use (2000-01 to 2009-10)

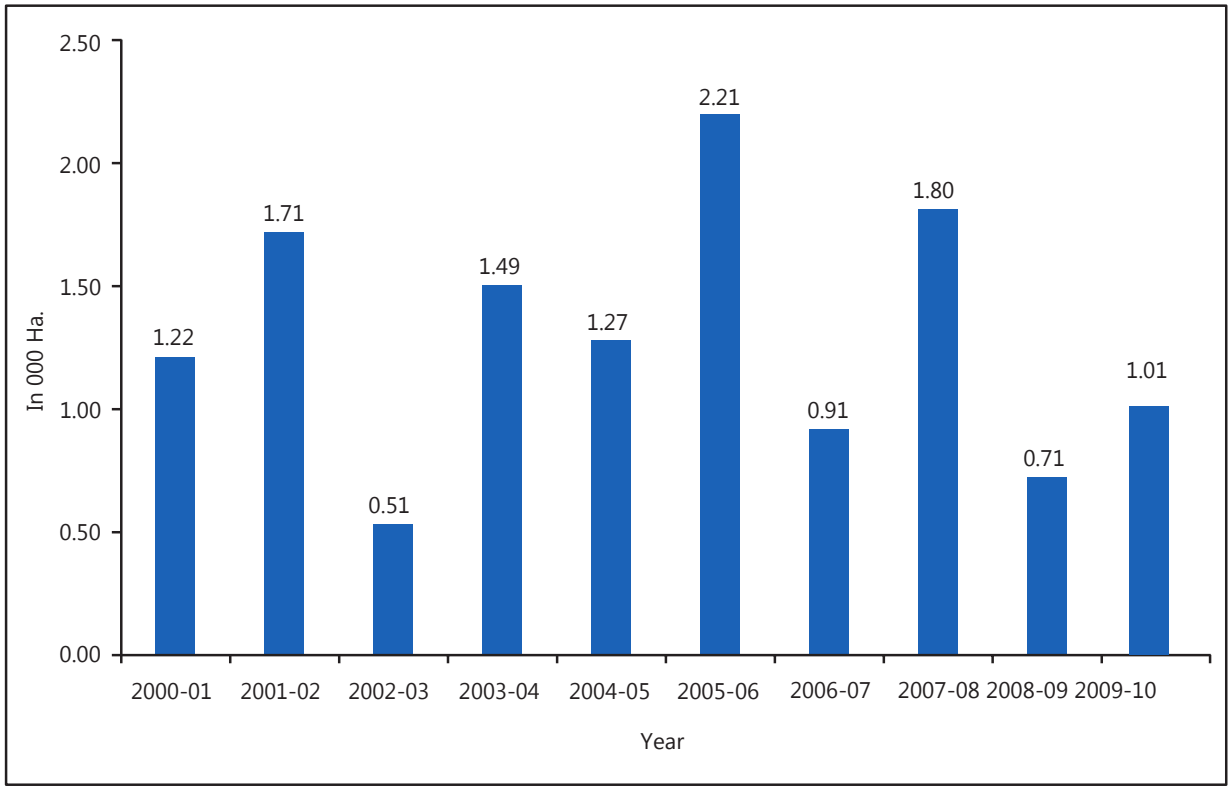
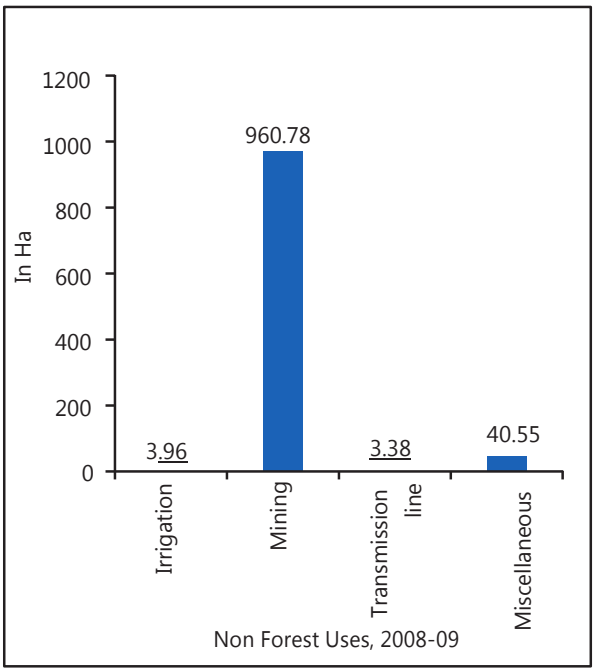


Figure 3.11: Diversion of forest area to non forest use by activity



3.4.2 Production and Revenue Collection

Orissa is the third largest producer of kendu leaf next to Madhya Pradesh and Chhattisgarh. The annual production of kendu leaf in the State is around 4.5 to 5 lakh quintals. Sundergarh, Angul, Deogarh, Kalahandi, Keonjhar, Kandhamal, Malkanagri, Nabarangpur, Koraput, Dhenkanal, Jharsuguda, Sambalpur, Baragarh, Bolangir, Sonepur, Boudh and Nuapada are main kendu leaf producing districts. During 2009-10, 4.41 lakh quintals of kendu leaves were produced and employment equivalent to 16 million person days was generated. The procurement price of green kendu leaves was enhanced from 27 paise to 29 paise per kerry (i.e., a bundle comprising 20 leaves) for 2009-10. The wages of seasonal staff were also enhanced by 40 percent.

Orissa has 9 percent of the country's total bamboo forest cover and 7 percent of total growing stock of bamboo. Bamboo in forest areas of Orissa grows as a mixed crop associated with Sal and other species. The mixed bamboo forest area is spread over 17,795 sq km and pure bamboo forest, occurring mostly as bamboo brakes, is about 375 sq km. The production of bamboo is approximately 2 lakh MT annually of which about 50,000 MT is produced from private lands. The cultivated species (i.e., Bambusa vulgaris and Bambusa nutans) are grown mainly in Mayurbhanj, Balasore and Bhadrak districts. The major timber species that occur in Orissa are Sal, Teak, Bija and Sissoo. Total revenue receipts from different sources were of Rs. 191.19 crore in 2009-10.

The Orissa Forest Development Corporation Limited (OFDC), a fully owned State company, operates as the commercial arm of the Forest Department. Annexure 3.51 reports production and revenue collection from different forest sources in 2008-09 and 2009-10. Kendu leaves are the most important forest produce that generate more than 80 percent of all revenues from forest products (see Annexure 3.52). OFDC was a loss-making organisations till the end of 2005-06. But since then, it has earned profits. In 2008-09, it recorded a profit of Rs. 2.80 crore as compared to profits of Rs. 94.20 lakh in 2006-07 and Rs. 68.65 lakh in 2007-08.

OFDC trades mainly in timber, kendu leaf, bamboo, sal seeds and other non-timber forest produce. In 2009-10, production of timber and firewood from forests by OFDC was 21,396 cum of round timber and 23,163 MT of round firewood. The Corporation has sold 26,001 cum of timber and 23,065 MT of round firewood during 2009-10. It earned Rs. 40.68 crore and paid Rs. 14.14 crore as timber royalty to the State Government.

It has undertaken extraction of harvestable bamboo through Raw Material Procurers (RMP) appointed by the Government. Bamboo production during 2009-10 stood at 61,915 sale units, a decline of 20.12 percent from the previous year's production of 77,510.12 sale units. The Corporation earned Rs. 5.62 crore from bamboo trading and deposited Rs. 3.50 crore towards royalties during 2009-10.

3.4.3 Government Initiatives for Forest Development

(I) National Forest Policy 1988 and Afforestation Programmes

This policy mandates that 33 percent of the geographical area should be under forest cover. The State is well placed in this regard and is above the national average. The Government has, however, taken several steps to maintain and develop good forest cover. Some development initiatives include

afforestation, development of village forests and introduction of social and farm forestry. During 2008-09, 98,738 ha was targeted for plantations of 4.45 crore seedlings. In 2009-10, 91,003 ha block plantations and 133 kilometres (RKM) of avenue plantations were created.

(ii) Forestry Vision 2020

The State Forest and Environment Department has finalised its Forestry Vision 2020, the salient features of which are summarized below:

- Increased flow of NTFPs and wood
- Biodiversity conservation strategies
- Higher allocations, investment, insurance and incentives for better forest management.

(iii) Forest Development Strategies in the 11th Five Year Plan

The forestry sector objectives of the 11th Five Year Plan are to promote sustainable forest management in the State, with a larger goal of supporting rural livelihoods. The plans support development of forest resources with a focus on:

- Conserving, protecting and developing 27,882 sq km of dense forests
- Regenerating and developing 20,196 sq km of open forests
- Afforesting and reforesting 5,782 sq km of scrub forests
- Promoting Eco-tourism and Eco-development in protected areas and
- Building capacity of the Forest Department and Village Level Institutions to protect and manage the assigned forests.

(iv) Orissa Forestry Sector Development Project (OFSDP)

OFSDP has been implemented since 2006-07 in 14 forest divisions of 10 districts with the project outlay of Rs.659.8 crore and financial support from JICA. The project aims at restoring the degraded forests and improving livelihoods of local communities by promoting sustainable forest management. The project has undertaken restoration of 1.58 lakh ha degraded forests based on comprehensive area-specific micro plans through 2,024 VSS. The project has four types of block plantation activities: economic plantations, fuel and fodder plantations, bamboo plantations and NTFP plantations. In 2009-10, 9,469 ha of teak plantations and 1,900 ha mangrove plantations were taken up. Up to 2009-10, the project has restored 92,077.5 ha degraded forests out of a total target of 196,650 ha.

(v) Medicinal Plants

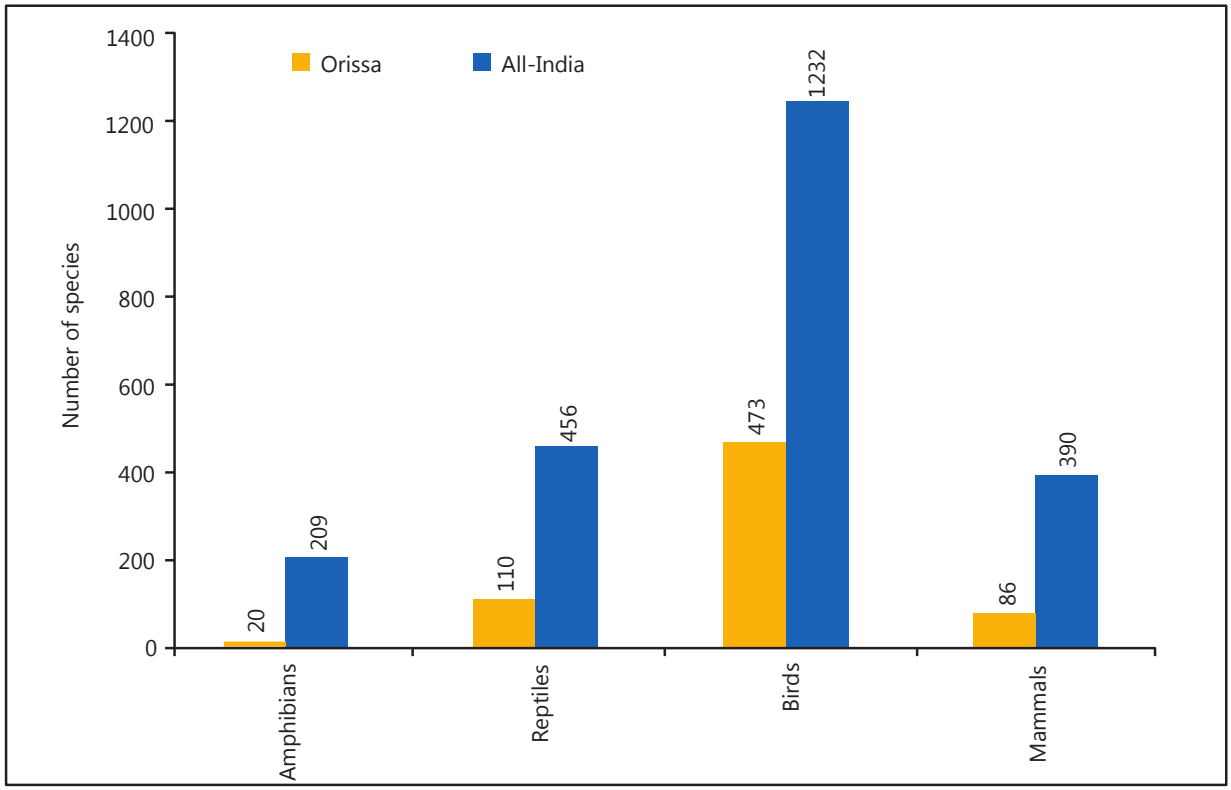
A scheme, Vanaspati Van Project, has been set up by the Ministry of Health, Government of India, at Gandhamardan Reserve Forest in Bolangir district and Bargarh Forest Division. The project area comprises 200 ha of core area where rich floral diversity of medicinal plants is preserved. The project was for a period of five years from 2003-04 with a financial outlay of Rs.5 crore. Twenty-five villages situated in this area are actively involved in the project implementation.

Since 2002, the State Medicinal Plants Board (SMPB) functions in close association with the National Medicinal Plants Board (NMPB). During 2008-09, it sanctioned two major projects viz. conservation of Saraca Ashoka and observation of Dasmool species with an outlay of Rs. 6.38 crore. Besides, SMPB has implemented the medicinal plant service programme in seven districts as a livelihood improvement programme. Kalinga Herbal Fair was organised at Berhampur and Bhubaneswar in 2009 to provide trade linkages. Ekamra Vana, a unique medicinal plant garden, has been developed on the western bank of Bindu Sagar at Bhubaneswar. About 15,000 plants and 186 medicinal plants have been planted in this garden.

(vi) Joint Forest Management (JFM)

One of the salient features of the National Forest Policy, 1988 is to associate people actively in protection, conservation and management of forests. Orissa has been the first State to issue a resolution in regard to joint forest management (JFM) in 1988 for protection of peripheral reserve and protected forests with participation of local people from adjoining villages. The resolution on JFM has been revised from time to time keeping emerging situations in view. There were about 9,778 JFM committees in 2005, managing about 14 percent forest area. Nearly 17 million families were involved in this programme of which around 0.7 million families belonged to tribal communities. By the end of 2009-10, 11,511 Vana Samrankhyan

Figure 3.12: Distribution of Diverse Species, Orissa and India



Samities (VSS) and 379 Eco-Development Committees (EDC) have been formed in the State for protecting and regenerating forest areas. All families of 10,334 villages where VSS and EDC have been formed are their members.

3.4.4 Wildlife, Ecology and Environment

Orissa with its diversified topography and climate has been the abode of rich bio-diversity and a variety of wildlife species. Figure 3.12 compares rich of biodiversity in Orissa vis-à-vis India.

Wildlife Sanctuaries and National Parks

In Orissa, there are eighteen wildlife sanctuaries and two national parks (Similipal in Mayurbhanj district and Bhitarakanika in Kendrapara district). They are spread over 6,677 sq km, which is about 4.29 percent of total geographical area and 10.37 percent of the forest area of the State. Both are exquisite, yet very different from each other. Similipal has dense forests and hills and is home to a wide variety of wild animals, reptiles and birds. Bhitarakanika is a wetland, one of India's finest coastal ecosystems. It has a rich mangrove area on the deltaic region of the river Brahmani and Baitarani and is criss-crossed by creeks and creeklets. After Sundarbans, it is home to the second largest mangrove "forest" in India. The World Heritage Status has been awarded to it by UNESCO. The Sun Temple at Konark is the only other site in Orissa to have claimed this distinction.

Tigers and Elephants

Orissa has two "notified" tiger reserves: the Similipal Tiger Reserve in Mayurbhanj district and the Satakoshia Tiger Reserve in Angul district. As per the tiger census conducted in 2004, there were 192 tigers and 487 leopards in the State as against 173 tigers and 457 leopards counted in the 2002 census. The elephant census of 2009-10 notified the elephant population in the State at 1,886 as against 1,862 recorded during 2007-08 census. In order to provide better habitations to them, water bodies and fodder plantation programmes have been undertaken. On the other hand, to protect crops and lives of villagers, the following measures have been taken up:

- 54 anti-poaching and anti-depredation squads have been formed to reach the affected spots quickly and tackle the situation;

- 46 elephant trackers have been engaged to keep regular watch on the movement of elephants;
- In the elephant depredation areas, villagers have been provided with searchlights, crackers, loud speakers and the like to drive away elephants
- To prevent elephants from entering human habitations, trench fencing / stone walls and solar electric fencing at sensitive points have been erected.
- To address the man-animal conflict in the State, a five year Elephant Management Plan is underway from 2009-10.

Three Elephant Reserves (ERs) namely Mayurbhanj ER, Mahanadi ER and Sambalpur ER were "notified" in 2001 and 2002 respectively. These reserves are meant to define prime elephant habitats and launch various management interventions for conserving elephants. The extent of notified and proposed forest blocks in these three reserves is 4,129 sq km and the geographical area covered by these three reserves is 8,509 sq km.

Crocodile

As per the wildlife census conducted in 2009-10, there were 1,627 saltwater crocodiles, 194 mugger crocodiles and three gharials found in Mahanadi river system of Orissa. Bhitarakanika national park is home to India's biggest salt-water crocodiles.

Turtles

Bhitarakanika national park has the largest nesting ground (Gahiramatha) for Olive Ridley Turtles. The Gahiramatha Marine Sanctuary covers an area of 1,435 sq km and was accorded a Ramsar site status in 2002. Every winter, lakhs of turtles visit nesting sites at Gahiramatha and also at Rushikulya and Devi sea beaches to lay eggs. During 2009-10, there was a mass nesting 5.13 lakh Olive Ridley Sea Turtles at Gahiramatha and Rushikulya river mouths.

Migratory Birds

The winter welcomes many avian guests to Chilika, Bhitarakanika and other water spread areas in the state. Chilika lagoon receives over 7.5 lakh birds every year. Nalabana, a notified sanctuary of Chilika, is a major attraction for the winged visitors. Avian species like pintail, gull-billed tern, common sand pipers, bar headed geese, greylag geese, spotted eagle and osprey are some of the species of migratory birds. It is estimated that during 2009-10 winter, 9.04 lakh birds of 114 species and 1.05 lakh birds of 74 species visited Chilika lagoon and Bhitarakanika mangrove wetlands respectively. Increased awareness, improved protection measures and surveillance have reduced the hunting of these birds.

Anti-Encroachment and Poaching Measures

Like elsewhere, encroachment and poaching remain a threat to wildlife in the State. The State Government has taken several steps to address these problems. Some such measures are as follows:

- During 2009-10, 98 anti-poaching camps involving 167 Sabuja Vahinee Volunteers were organised and seven striking force units consisting of 44 ex-army personnel were deployed in Similipal for preventing 'Akhanda Sikar'.
- There is a threat to the turtle population and their movement due to uncontrolled trawler traffic. The casualty of turtles in 2009-10 was 5,003. The State Government has made Turtle Extruder Devices (TED) mandatory aboard trawlers. The law against illegal fishing in turtle congregation areas was vigorously enforced.
- In order to provide safety to migratory birds, protection camps have been set up comprising villagers, volunteers and wildlife officials in and around Chilika lagoon, and boating activity has been regulated at Nalabana.

It is heartening to note that in general, wildlife offenses have shown a declining trend. During 2009-10, 66 wildlife offence cases were booked, out of which 17 cases were found undetected. Forty-nine cases were filed and 210 offenders were arrested and sent to court. Annexure 3.54 furnishes information on wildlife offences.

3.4.4.1 Policy Initiatives

Protecting the environment and maintaining ecological stability are most challenging issues facing almost all regions of the world. Major policy initiatives and actions undertaken by the State in this regard are summarized below.

(i) Orissa Climate Change Action Plan

Orissa has formulated the State Climate Change Action Plan. The scoping study was undertaken to understand the range of issues. An ambitious undertaking, it covered several sectors including agriculture, fisheries, animal husbandry, energy, forestry, health, industry, mining, transport, urban planning and others.

(ii) Orissa Pollution Control Board (OPCB)

It functions under the administrative control of the State Forest and Environment Department and ensures the implementation of the Environment Act, particularly the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986. In addition, the Board implements Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, implementation of the Batteries (Management & Handling) Rules, 2001 and other pollution controlling rules and regulations.

(iii) Appellate Authority

The Appellate authority to hear appeals preferred against orders made by the Orissa Pollution Control Board rests in the Environment Wing of the Forest and Environment Department. During 2009-10, 13 cases were disposed of.

(iv) The Orissa State Coastal Zone Management Authority

This authority has been constituted by the Government of India to enforce the Coastal Zone Management Plan and monitor violations of coastal zone regulations. It has recommended six project proposals to the Ministry of Environment and Forests, Government of India, for environmental clearance; namely fishing harbours at Bahabalpur (Balasore) and Chudamani (Bhadrak), fish landing centres at Pehthakata (Puri) and Keshpur (Ganjam), a landing centre at Berhampur and a lighthouse at Chandinipal (Bhadrak). Besides, the Authority has recommended a proposal to develop an all weather berthing port at Gopalpur to MOEF, Government of India to grant environmental clearance.

(v) Orissa Environment Management Fund

This Trust has been constituted to take steps for the rehabilitation of a degraded environment. It has released Rs. 9.0 lakh for the development of green cover in Rani Park area in Talcher-Angul and Rs. 7.66 lakh for nursery development in and around Jharsuguda industrial area.

(vi) Centre for Environmental Studies (CES)

This registered society, aims to promote environmental awareness in the State. It is the regional resource agency for the National Environment Awareness Campaign (NEAC) and nodal agency for the National Green Crops Programme. Between 2001-02 to 2005-06, CES released grants to 2,764 organizations working in the area of environmental conservation. Since 2006-07, it is working as the regional resource agency for fifteen districts. During 2006-07 to 2008-09, it has released grants to 1,022 organizations. During 2009-10, 591 organisations were selected to undertake promotional activities.

Under the National Green Crops Programme, Eco Clubs were established in 4,500 schools in all districts of Orissa. CES provides resource material for dissemination of environmental knowledge and facilitates activities such as seminars, talks, camps, field visits, plantations, coastal eco-registration and turtle conservation awareness. As a part of the ENVIS programme, CES has created a database on the state of environment in Orissa. It also maintains a website. It has been selected by the Ministry of Environment and Forests (MOEF) to prepare the Indian State Level Basic Environmental Information Database (ISBEID) in association with the National Informatics Centre (NIC), New Delhi.

(vii) Awards

In order to encourage environmental protection, the State Government has awarded 173 Prakruti Mitra and 152 Prakruti Bandhu awards to voluntary organisations/villages/national institutions and individuals.

ANNEXURE 3

Annexure 3.1: Land Utilisation Pattern in Orissa (area in 000 ha)

1990-91	15571	5476	859	726	597	746	499	150	214	6304
1991-92	15571	5482	855	726	572	748	499	168	184	6337
1992-93	15571	5478	857	663	538	781	532	215	203	6304
1993-94	15571	5534	867	635	487	781	541	180	243	6303
1994-95	15571	5722	715	514	435	858	553	197	298	6279
1995-96	15571	5722	715	514	435	858	553	241	323	6210
1996-97	15571	5606	764	534	445	858	570	483	343	5968
1997-98	15571	5606	774	534	445	866	590	298	336	6122
1998-99	15571	5606	774	534	445	866	590	372	336	6048
1999-00	15571	5606	774	534	445	838	618	345	336	6075
2000-01	15571	5813	482	443	392	999	843	430	340	5829
2001-02	15571	5813	482	443	392	999	843	320	434	5845
2002-03	15571	5813	482	443	392	999	843	485	434	5680
2003-04	15571	5813	482	443	392	999	843	369	434	5796
2004-05	15571	5813	482	443	392	999	843	426	434	5739
2005-06	15571	5813	482	443	392	999	843	474	434	5691
2006-07	15571	5813	342	499	375	1298	840	526	229	5654
2007-08	15571	5813	342	494	375	1298	840	556	229	5624
2008-09	15571	5813	342	494	375	1298	840	576	229	5604
2009-10	15571	5813	342	494	375	1298	840	606	229	5574

Source: Directorate of Agriculture and Food Production, Orissa

Annexure 3.2: Cropping Pattern of Principal Crops

(Area in 000 ha)

Crops	2002-03		2003-04		2004-05		2005-06		2006-07		2007-08		2008-09		2009-10	
	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
(A) Cereals																
Rice	4,273	77.71	4,501	76.40	4,492	76.92	4,479	75.47	4,451	75.70	4,452	74.76	4,455	75.84	4,365	73.00
Wheat	5	0.09	5	0.08	4	0.07	3	0.05	4	0.06	6	0.10	5	0.09	4	0.07
Maize	43	0.78	56	y	62	1.06	64	1.08	61	1.04	74	1.25	67	1.14	81	1.35
Ragi	77	1.40	70	1.19	64	1.10	66	1.11	65	1.11	68	1.14	66	1.12	59	0.99
Others	47	0.85	41	0.70	38	0.65	36	0.61	32	0.54	31	0.52	29	0.50	30	0.50
Total (A)	4,445	80.83	4,673	79.32	4,660	79.80	4,648	78.32	4,613	78.45	4,631	77.77	4,622	78.69	4,539	75.91
(B) Pulses																
Gram	21	0.38	29	0.49	33	0.57	35	0.59	37	0.63	39	0.66	38	0.65	45	0.75
Arhar	115	2.09	137	2.33	129	2.21	133	2.24	132	2.25	137	2.30	139	2.36	133	2.22
Other pulses	465	8.46	550	9.34	490	8.39	641	10.80	621	10.56	673	11.30	629	10.71	689	11.52
Total (B)	601	10.93	716	12.16	652	11.17	809	13.63	790	13.44	849	14.26	806	13.72	867	14.49
Total Food grains (A+B)	5,046	91.76	5,389	91.48	5,312	90.97	5,457	91.95	5,403	91.89	5,480	92.03	5,428	92.41	5,406	90.40
(C) Oil Seeds																
Groundnut	56	1.02	77	1.31	88	1.50	91	1.53	79	1.34	84	1.41	83	1.41	76	1.27
Sesamum	44	0.80	38	0.65	49	0.84	55	0.93	50	0.85	48	0.81	38	0.65	46	0.77
Rape seed and mustard	12	0.22	16	0.27	16	0.27	17	0.29	15	0.26	16	0.27	14	0.24	13	0.22
Caster seeds	N	-	21	0.36	18	0.31	16	0.27	17	0.29	18	0.30	17	0.29	16	0.27
Others	156	2.83	157	2.66	154	2.64	92	1.55	96	1.63	98	1.64	90	1.53	204	3.41
Total (C)	268	4.87	309	5.25	325	5.56	271	4.57	257	4.37	264	4.43	242	4.12	355	5.94
(D) Fibres																
Cotto	29	0.53	37	0.63	46	0.79	57	0.96	59	1.00	50	0.84	58	0.99	54	0.9
Jute	6	0.11	3	0.05	3	0.05	3	0.05	5	0.09	6	0.10	2	0.33	3	0.05
Other fibers	35	0.64	36	0.61	35	0.60	32	0.54	32	0.54	31	0.52	29	0.49	49	0.82
Total (D)	70	1.28	76	1.29	84	1.44	92	1.55	96	1.63	87	1.46	89	1.81	106	1.77

(Contd...)

Crops	2002-03		2003-04		2004-05		2005-06		2006-07		2007-08		2008-09		2009-10	
	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total	Area	% total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
(E) Other Crops																
Sugarcane	14	0.26	15	0.25	14	0.24	16	0.27	20	0.34	20	0.33	11	0.19	8	0.13
Tobacco	4	0.07	5	0.09	5	0.09	-	-	4	0.07	4	0.07	4	0.07	3	0.05
Potato	7	0.13	7	0.12	9	0.15	8	0.13	9	0.15	9	0.15	7	0.12	8	0.13
Chillies	75	1.36	75	1.27	75	1.28	75	1.26	75	1.28	75	1.26	76	1.29	76	1.27
Ginger	15	0.27	15	0.25	16	0.27	116	0.27	16	0.27	16	0.27	17	0.29	17	0.29
Total (E)	115	2.09	117	1.98	119	2.03	215	1.93	124	2.11	124	2.08	115	1.96	112	1.87
Grand Total (A+B+C+D+E)	5,499	100	5,891	100	5,840	100	6,035	100	5,880	100	5,955	100	5,874	100	5,979	100

Source: (a) Directoriat of Agriculture and Food Production, Orissa.
(b) Directorate of Economics & Statistics, Orissa
(c) Directorate of Horticulture, Orissa

Annexure 3.3: Production of different crops in Orissa

In 000 MT

(A) Cereals								
Rice	3,244	6,734	6,537	6,859	6,825	7,541	6,813	6,917
Jowar	7	6	6	6	6	6	6	6
Bajra	2	2	2	2	1	2	2	2
Maize	42	79	102	102	103	147	135	175
Ragi	35	45	41	40	43	47	41	37
Wheat	6	7	5	4	6	9	7	6
Other Cereals	14	13	11	10	9	9	8	10
Total (A)	3,350	6,886	6,704	7,023	6,993	7,761	7,012	7,153
(B) Pulses								
Gram	12	18	20	23	24	26	25	34
Tur	72	89	88	98	106	113	119	112
Other pulses	121	159	153	216	221	245	237	252
Total (B)	205	266	261	337	351	384	381	398
Total Food grains (A+B)	3,555	7,152	6,965	7,360	7,344	8,145	7,393	7,551
(C) Oil Seeds								
Groundnut	49	93	103	106	88	103	96	89
Sesamum	7	8	11	13	11	10	7	10
Rape seed and mustard	1	3	3	3	3	3	3	3
Lineseeds	6	7	8	10	11	12	11	12
Caster seeds	6	11	10	9	11	11	11	10
Other oil seeds	46	37	40	22	26	33	24	26
Total (C)	115	159	175	163	150	172	152	150
(D) Fibers								
Cotton	8	84	111	145	108	125	146	147
Jute	9	3	4	4	9	9	4	6
Mesta	19	107	105	97	94	101	95	82
Other fibres	8	36	41	43	46	43	43	40
Total (D)	44	230	261	289	257	278	288	275
(E) Other Crops								
Sugarcane	753	858	926	1,073	1,274	1,069	646	490
Tobacco	2	3	3	-	3	3	3	2
Potato	70	76	81	75	79	94	76	97
Chillies	63	63	63	63	64	64	64	64
Ginger	30	30	31	31	32	32	33	118
Total (E)	918	1,030	1,104	1,242	1,452	1,262	822	771
Grand Total (A+B+C+D+E)	4,632	8,571	8,505	9,054	9,203	9,857	8,655	8,747

Source: (a) Directoriat of Agriculture and Food Production, Orissa.
(b) Directoriat of Economics & Statistics, Orissa
(c) Directoriat of Horticulture, Orissa

Annexure 3.4: District-wise Area and Production of Autumn, Winter and Summer Paddy (2009-10)

Area in 000' hectare
Production in 000' MT

Angul	21	19	83	136	1	1
Balangir	76	119	139	380	6	15
Balasore	-	1	211	457	30	120
Bargarh	58	99	186	586	68	347
Bhadrak	-	-	165	472	8	18
Boudh	7	13	57	165	-	1
Cuttack	10	23	128	405	3	11
Deogarh	16	20	27	51	-	-
Dhenkanal	10	15	99	238	1	3
Gajapati	1	1	32	72	-	-
Ganjam	1	3	276	846	1	4
Jagatsinghpur	2	6	80	240	1	3
Jajpur	20	39	122	345	1	4
Jharsuguda	19	5	29	26	-	1
Kalahandi	72	133	165	346	43	165
Kandhamal	11	17	37	80	-	1
Kendrapara	3	7	138	348	2	7
Keonjhar	46	70	147	345	2	6
Khurda	-	1	112	311	2	6
Koraput	23	27	85	184	9	26
Malkangiri	13	15	81	151	-	1
Mayurbhanj	46	65	279	611	4	8
Nuapara	37	42	62	135	1	3
Nayagarh	1	2	101	232	-	1
Nawarangpur	42	41	118	283	1	2
Puri	1	1	110	257	31	107
Rayagada	7	9	60	173	4	10
Sambalpur	40	42	82	148	18	84
Sonepur	16	25	84	290	28	132
Sundergarh	88	77	118	143	-	1
Orissa	687	937	3413	8456	265	1088

Source: Directorate of Economics & Statistics, Orissa

Annexure 3.5: Yield Rate of Principal Crops in Orissa (in quintal/ha)

Rice (total)	7.59	14.96	14.55	15.34	15.34	16.94	15.29	15.85
Autumn rice	3.66	9.82	8.22	8.72	10.11	10.97	10.40	9.00
Winter rice	7.70	15.81	15.43	16.23	15.80	17.50	15.41	16.35
Summer rice	23.52	21.12	22.30	21.60	22.93	24.47	24.51	27.13
Ragi	4.60	6.32	6.40	6.15	6.63	6.93	6.24	6.38
Gram	5.71	6.50	6.07	6.45	6.51	6.59	6.63	7.48
Mung	2.28	2.34	2.64	2.57	2.43	2.45	2.60	2.71
Biri	2.31	2.71	2.63	2.52	2.91	3.11	2.88	3.02
Sugarcane	531.28	589.15	639.12	657.00	634.17	539.50	600.43	614.88
Mustard	1.32	1.93	1.91	1.91	1.70	2.03	1.84	2.13
Jute	16.43	12.63	17.66	16.28	17.72	15.42	14.74	18.62
Cotton	2.76	3.86	24.21	4.35	3.07	4.23	4.30	4.64
Potato	99.37	103.86	94.91	90.40	97.01	110.70	103.32	123.14
Groundnut	8.70	12.07	11.71	11.71	11.11	12.20	11.56	11.69

Source: a) Directorate of Agriculture and Food Production, Orissa
b) Directorate of Economics & Statistics, Orissa

Annexure 3.6: Cropping Intensity Across States

Punjab	187.9	188.0
West Bengal	181.9	184.1
Harayana	179.8	179.7
Himachal Pradesh	174.9	179.0
Tripura	108.1	104.4
Uttar Pradesh	155.7	151.8
Jammu & Kashmir	151.9	154.5
Orissa	158.5	160.3
Kerala	138.8	132.2
Bihar	136.3	139.6
Madhya Pradesh	136.5	139.0
Arunachal Pradesh	126.3	129.8
Maharastra	129.2	129.7
Assam	135.7	139.4
Rajasthan	128.5	129.9
Andhra Pradesh	126.3	126.1
Nagaland	125.9	126.6
Goa	125.6	126.3
Meghalaya	115.7	120.4
Gujarat	124.9	125.4
Jharkhand	107.0	155.7
Chhtisgarh	121.4	121.6
Tamil Nadu	114.0	114.9
Manipur	100.0	100.0
Mizoram	100.0	103.5
Karnataka	123.1	123.7
Sikkim	109.8	109.8
Uttar Khanda	158.1	164.8
All-India	138.1	139.0

Source: Agricultural Statistics at a Glance 2009. Ministry of Agriculture.

Annexure 3.7: Cropping Intensity in Orissa

2000-01	5,829	7,878	135
2001-02	5,845	8,798	151
2002-03	5,680	7,853	138
2003-04	5,796	8,637	149
2004-05	5,739	8,718	152
2005-06	5,691	8,928	157
2006-07	5,654	8,960	158
2007-08	5,624	9,016	160
2008-09	5,604	9,071	162
2009-10	5,574	9,074	163

Source: Directoriat of Agriculture and Food Production, Orissa

Annexure 3.8: Area under HYV Paddy

In 000'ha

2000-01	32.03	367.48	866.08	1155.97	206.74	-	1104.85	1523.45
2001-02	30.00	395.00	852.00	1301.00	272.00	-	1154.00	1696.00
2002-03	20.99	382.66	859.63	1225.75	177.55	-	1058.17	1608.41
2003-04	15.22	434.64	839.09	1345.94	253.47	-	1107.78	1780.58
2004-05	28.00	406.00	925.00	1351.00	293.00	-	1246.00	1757.00
2005-06	24.05	411.57	913.31	1427.90	325.49	-	1262.85	1839.47
2006-07	28.28	411.34	941.75	1466.62	314.60	-	1284.63	1877.96
2007-08	30.05	420.55	969.18	1518.62	333.74	-	1332.97	1939.17
2008-09	27.77	437.15	1039.71	1594.81	330.97	-	1398.45	2031.96
2009-10	25.87	449.11	1099.86	1611.82	264.81	-	1390.54	2060.93

Source: Directoriat of Economics and Statistics.

Annexure 3.9: District-wise Estimates of Area, Production and Yield Rate of HYV Paddy (2009-10)

(Contd...)

Angul	99661	1510576	15.16
Balangir	194709	4792101	24.61
Balasore	191223	4992325	26.11
Bargarh	309489	10296677	33.27
Bhadrak	138508	4388428	31.68
Boudh	55184	163441	29.62
Cuttack	103582	3532614	34.1

Deogarh	41870	686559	16.4
Dhenkanal	90591	2216736	24.47
Gajapati	32722	725645	22.18
Ganjam	278282	8527657	30.64
Jagatsinghpur	67472	2224128	32.96
Jajpur	97625	2966439	30.39
Jharsuguda	45310	302620	6.68
Kalahandi	269461	6306715	23.4
Kandhamal	11519	269020	23.35
Kendrapara	91932	2762760	30.05
Keonjhar	158980	3638115	22.88
Khurda	74236	2288154	30.82
Koraput	90851	1986998	21.87
Malkangiri	54636	1116555	20.44
Mayurbhanj	183035	4259975	23.27
Nuapara	83660	1602493	19.15
Nayagarh	70082	1751053	24.99
Nawarangpur	84388	1883547	22.32
Puri	109533	3278977	29.94
Rayagada	65221	1852992	28.41
Sambalpur	135631	2701528	19.92
Sonepur	127512	4463620	35.01
Sundergarh	94557	1162424	12.29
Orissa	3451462	90121872	26.11

Source: Directoriat of Economics & Statistics, Orissa

Annexure 3.10: Area, Production and Yield Rate of Fruits

Area in thousand hectare; production in thousand MT; Yield rate in Qtl per hectare									
Fruits	2007-08			2008-09			2009-10		
	Area	Production	Yield Rate	Area	Production	Yield Rate	Area	Production	Yield Rate
1	2	3	4	5	6	7	8	9	10
Mango	148.2	251.8	17	164.2	479.8	29.2	177.63	577.48	32.5
Banana	23.1	297.1	12.9	24.1	307.3	127.5	24.59	429.16	174.5
Citrus	26.8	211.7	79	27.1	318.9	117.7	27.41	258.8	94.4
Pine apple	0.7	7.5	107.2	0.7	7.9	112.9	0.73	8.39	114.9
Papaya	0.8	14.7	183.7	1.5	28.8	192	2.09	45.73	218.8
Coconut	51.6	2824*	5473**	52.2	2939*	5630**	52.49	319.60*	6080**
Others	65.7	492.9	75	72.0	518.6	72.0	69.62	554.37	79.6
Total	316.9	1275.7 & 2824mts	48.1	341.8	1661.3&29.39 lakh nuts	57.4	354.56	1873.93& 31.19 lakh nuts	

* in lakh numbers/** numbers/ hectare

Source: Directoriat of Horticulture, Orissa

Annexure 3.11: Area and Production of Spices in Orissa (in Area: 000ha, Production: MT)

Spice	2007-08		2008-09		2009-10	
	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7
Onio	28.77	262.37	31.64	278.87	32.08	297.05
Garlic	11.04	35.56	11.08	35.80	11.05	35.71
Coriander	19.07	9.60	19.10	9.14	19.06	9.45
Chilly	75.13	63.92	75.50	64.3	75.53	64.32
Ginger	16.34	32.44	16.53	33.37	16.84	117.72
Turmeric	24.82	60.34	25.11	61.50	25.32	189.35
Total	175.17	464.23	178.96	482.98	179.88	713.60

Source: Directorate of Horticulture, Orissa

Annexure 3.12: Area and Production of Floricultural Crops

2003-04	194.64	14,581	41.62	92.19	11.37	11.37	33.62	540
2004-05	221.05	16,599	46.14	98.63	12.07	12.06	34.92	555
2005-06	243.05	17,514	111.55	245.55	129.65	129.64	107.50	1515
2006-07	333.00	26,640	246.25	505.86	311.70	311.70	196.00	1960
2007-08	791.00	65,340	556.00	1188	705	3296	344	3480
2008-09	1060	88,026	1006	1223	1210	1089	450	6390
2009-10	2625	240031	1750	3174	2245	2182	491	12908

Source: Directorate of Horticulture, Orissa

Annexure 3.13: Share of Government and Public Sector Agencies in Making Availability/Supply of Certified/ Quality Seed in Orissa

(in Lakh Qtls)

Orissa	5.19	0	5.19	6.64	0	6.64
India	150.73	99.62	250.35	170.81	108.92	279.72

Source : Lok Sabha Unstarred Question No. 3174, dated on 16.03.2010.

Annexure 3.14: Net Area Irrigated in Orissa

In 000' ha

Orissa								
1995-96	949	-	949	305	299	537	-	2090
1996-97	950	-	950	105	76	64	194	1366
1997-98	950	-	950	108	78	66	199	1401
1998-99	939	-	939	107	77	65	196	1384
1999-00	943	-	943	107	78	65	197	1390
2000-01	905	-	905	103	75	63	189	1334
2001-02	-	-	-	-	-	-	1752	1752
2002-03	-	-	-	-	-	-	1247	1247
2003-04	-	-	-	-	-	-	1737	1737
2004-05	-	-	-	-	-	-	1846	1846
2005-06	1370	-	1370	-	274	90	296	2030
2006-07	1370	-	1370	-	277	90	314	2051
2007-08	1420	-	1420	-	306	101	331	2158

Annexure 3.15: Crop-wise Area Irrigated in Orissa

In 000'ha

Year	Rice	Total Ceraels	Total Foodgrains	Total Food Crops	Total Non-food crops	Sugarcane	Spices	Fruits and Vegetables	Total irrigated area under all Crop
1	2	3	4	5	6	7	8	9	10
1995-96	1771	1837	1964	2511	118	49	80	418	2629
1996-97	1652	1705	1789	2155	108	51	54	261	2263
1997-98	1629	1682	1766	2198	120	44	57	331	2318
1998-99	1692	1756	1845	2244	114	47	63	289	2358
1999-00	1874	1925	2031	2386	126	31	68	255	2512
2000-01	1676	1713	1777	2068	58	31	50	210	2126
2001-02	1817.00	1877.00	1982.00	2428.00	118.00	30.00	75.00	342.00	2546.00
2002-03	1264.00	1314.00	1418.00	1655.00	57.00	25.00	41.00	172.00	1712.00
2003-04	1769.00	1826.00	1953.00	2403.00	116.00	29.00	62.00	358.00	2518.00
2004-05	1914.00	1971.00	2108.00	2565.00	126.00	34.00	66.00	357.00	2691.00
2005-06	1967.00	2031.00	2169.00	2876.00	120.00	37.00	97.00	573.00	2996.00
2006-07	2091.00	2152.00	2363.00	3024.00	181.00	41.00	95.00	526.00	3205.00
2007-08	2068.00	2131.00	2413.00	3088.00	220.00	38.00	96.00	541.00	3308.00

Annexure 3.16: State-wise Fertilizer Consumption

(kg/ha)

Andhra Pradesh	143.47	128.44	145.30	155.80	203.61
Assam	38.81	42.73	47.50	41.60	49.26
Bihar	87.39	87.15	81.00	85.70	152.32
Gujarat	85.52	77.76	94.70	106.80	111.07
Haryana	155.69	152.79	161.70	166.20	166.72
Karnataka	101.48	90.91	78.80	110.80	117.34
Kerala	60.72	68.17	64.20	67.40	57.00
Madhya Pradesh	39.96	36.40	51.60	56.00	47.13
Maharashtra	78.24	73.80	64.20	77.70	84.52
Orissa	41.00	39.00	39.00	43.00	47.00
Punjab	173.38	174.99	190.10	192.50	210.06
Tamil Nadu	141.55	114.00	114.50	152.90	183.67
Uttar Pradesh	130.44	126.51	125.70	125.50	140.37
West Bengal	126.82	122.23	114.10	129.00	127.50
Rajasthan	38.88	28.54	67.40	36.60	36.29
All India	90.12	84.82	88.20	96.60	104.50

Annexure 3.17: Fertilizer Consumption in Orissa

In thousand MT

1961-62	4.38	0.49	-	4.87	0.76
1971-72	37.43	8.38	4.01	49.82	7.25
1981-82	54.16	17.92	9.91	81.99	9.68
1991-92	126.22	41.52	28.29	196.03	19.96
2001-02	221.17	71.94	51.55	344.66	41.00
2002-03	185.41	62.86	42.29	290.56	39.00
2003-04	210.07	66.64	40.5	317.21	39.00
2004-05	223.54	77.99	53.77	355.3	43.00
2005-06	243.21	91.05	60.63	394.89	46.00
2006-07	256.54	92.77	53.57	402.88	47.00
2007-08	272.1	116.77	63.03	451.9	53.20
2008-09	297.77	147.93	89.17	534.87	62.00
2009-10	292.29	148.59	78.46	519.34	60.00

Source: Directoriat of Agriculture and Food Production, Orissa

Annexure 3.18: District-wise Consumption of Fertilizers (2009-10)

Angul	5715	2511	1218	9244
Balangir	12919	5855	3756	22530
Balasore	21080	13900	7076	42056
Bargarh	24525	16072	9208	49805
Bhadrak	16770	10551	5069	32390
Boudh	4218	1814	1018	7050
Cuttack	11069	5406	3717	20192
Deogarh	2050	1069	465	3584
Dhenkanal	5047	2599	1397	9043
Gajapati	3657	1647	462	5766
Ganjam	27567	7075	4286	38928
Jagatsinghpur	5201	2824	1549	9574
Jajpur	10330	6764	3428	20522
Jharsuguda	3818	1990	713	6521
Kalahandi	18106	10563	6076	34745
Kandhamal	1031	452	262	1745
Kendrapara	4339	2652	1226	8217
Keonjhar	7286	4506	1205	12997
Khurda	7613	3083	1853	12549
Koraput	7331	4090	2945	14366
Malkangiri	4456	2341	656	7453
Mayurbhanj	12053	7650	2669	22372
Nuapada	4272	2607	827	7706
Nayagarh	5093	1579	1076	7748
Nabrangpur	20741	5332	4613	30686
Puri	9254	5032	3246	17532
Rayagada	6420	2439	935	9794
Sambalpur	15083	8407	4399	27889
Sonepur	6078	2750	1438	10266
Sundargarh	9168	5029	1668	15865
Orissa	292290	148589	78456	519335

Annexure 3.19: Pesticide Consumption in Orissa

2000-01	1.00	157.00
2001-02	1.02	159.00
2002-03	1.03	139.00
2003-04	1.03	138.00
2004-05	0.99	148.68
2005-06	1.04	138.53
2006-07	1.10	148.94
2007-08	1.09	143.28
2008-09	1.16	149.10
2009-10	2.29	140.06

Source: Directoriat of Agriculture and Food Production, Orissa

Annexure 3.20: District-wise Estimates of Area of Operational Holdings for all Social Groups in Orissa (2000-01)

Area in ha.

Angul	141041	152548	19785	15803	19165	19582
Balasore	248021	208968	52213	34922	27479	19073
Bargarh	186738	279305	27098	23809	39833	51562
Baudh	59798	75448	13316	10708	6854	11158
Bhadrak	165991	147091	37042	26012	1188	608
Bolangir	210934	286818	20329	19491	95454	131386
Cuttack	162366	148650	33530	23848	7469	6323
Deogarh	38155	51232	3414	3278	15441	20612
Dhenkanal	100939	134781	15351	17191	15707	20238
Gajapati	63724	60916	2776	2165	47339	45711
Ganjam	317182	306744	46871	31878	16367	18392
Jagatsinghpur	115517	101845	27550	20474	357	211
Jajpur	135485	151070	36634	33191	9260	9413
Jharsuguda	44837	60844	4651	4525	27484	33389
Kalahandi	187238	285028	29335	33540	62940	103845
Kendrapara	144226	131634	23561	18615	16692	13491
Keonjhar	219572	228552	21674	15838	113254	110773
Khurda	115071	113129	15284	11886	7091	6865
Koraput	162880	249833	19376	24227	105539	157271
Malkangiri	85960	112993	18547	20037	59387	83223
Mayurbhanj	340800	368885	16480	12167	222599	241239
Nabrangpur	159780	199918	22236	24467	104439	134092
Nayagarh	102135	107907	10261	7993	11932	18585
Nuapada	93643	128540	12435	12820	34686	50643

Contd...

Source: Agricultural Census,2000-01

Annexure 3.21: District-wise & Group-wise Distribution of the Number of Operational Holdings for all Social Groups in Orissa (2000-01)

All Social Group							
2000-01	No.	2294520	1113599	500531	145110	13375	4067135
	Area	1155145	1543709	1344201	817591	220387	5081033
2005-06	No.	2597164	1156162	472129	119529	11408	4356392
	Area	1341668	1587713	1250650	658208	181237	5019476
Schedules Caste							
2000-01	No.	393318	124640	42526	8183	329	568996
	Area	181294	170626	112469	44748	4768	513905
2005-06	No.	453408	133304	38482	5654	318	631166
	Area	214727	178387	99273	29659	4470	526515
Scheduled Tribes							
2000-01	No.	638669	370169	170573	47276	3247	1229934
	Area	346508	516790	457778	264796	44913	1630785
2005-06	No.	771153	416540	175356	71399	2956	1407404
	Area	432988	580545	468877	227056	38785	1748251

Annexure 3.22: Agricultural Credit Advanced

(in core)

2001-02	266.40	532.25	0.54	799.19
2002-03	281.40	609.00	0.26	890.66
2003-04	434.90	724.03	0.31	1159.24
2004-05	627.90	971.26	0.22	1599.38
2005-06	842.30	1443.06	0	2285.36
2006-07	1224.93	1576.87	0	2801.80
2007-08	1513.87	1624.67	0	3138.54
2008-09	2006.43	1443.62	0	3450.05
2009-10	2746.83	2616.66	0	5363.49

Note: *Commercial Banks include RRBs

Source: State Level Bankers Committee, Orissa

Phulbani	90979	99918	15146	9660	56874	72938
Puri	169747	131666	31144	16389	321	186
Rayagada	113616	160058	10519	11631	82404	108822
Sambalpur	86125	163659	9776	12157	46108	68717
Sonepur	81367	90182	17364	11381	9057	9711
Sundargarh	212525	281310	17468	16415	144684	180194
State Total	4356392	5019476	631166	526515	1407404	1748251

Annexure 3.23: Subsidies for Agricultural Equipment (2009-10)

Tractor	2325	20.93
Power Tiller	7615	45.68
Pump Sets	8186	5.73
Reaper/Transplanter/Rotavtor	516	1.97
Hydraulic Trailer	451	1.13
Combined harvester	72	2.20
Power thresher	1412	1.27
Others	4226	2.73
Total		81.64

Annexure 3.24: Marine Fisheries Resources of India

Andhra Pradesh	974	33	271	498
Goa	104	10	34	39
Gujarat	1600	184	123	263
Karnataka	300	27	88	156
Kerala	590	40	178	222
Maharastra	720	112	152	406
Orissa	480	26	57	641
Tamilnadu	1076	41	352	581
West Bengal	158	17	44	346
A & N	1912	35	25	100
Daman & Diu	27	-	7	22
Lakshadweep	132	4	19	20
Pondicherry	45	1	26	28
Total	8118	530	1376	3322

Source: Annual Report 2009-10, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, GoO

Annexure 3.25: Inland Fisherman Population (2000-01)

Mayurbhanj	18	1261	3342	3036	1210	7588
Balasore	121	8337	13248	12892	11022	37162
Bhadrak	-	2667	6018	5338	1989	13345
Cuttack	493	12755	21854	19491	23966	65311
Jagatsinghpur	250	3622	7732	6658	6536	20926
Jajpur	267	8549	16703	13582	17530	47815
Kendrapara	-	-	18598	16868	15806	51272
Khurda	287	13032	18098	15957	27714	61769
Nayagarh	171	4204	8357	7267	6551	22175
Puri	132	8882	19571	16201	9100	44872
Ganjam	444	17866	27635	24952	41099	93686
Gajapati	97	1086	2569	2502	3098	8169
Kandhamal	10	193	216	215	396	827
Boudh	158	1655	2466	2473	2710	7649
Koraput	159	3016	2874	2889	5299	11062
Malkangiri	98	294	721	762	370	1853
Rayagada	40	208	239	203	220	662
Nawarangpur	24	186	194	182	525	901
Kalahandi	19	412	754	504	-	1258
Nuapara	231	488	1030	812	110	1952
Sambalpur	-	2778	4512	2456	6729	13697
Deogarh	82	973	1305	1135	1215	3655
Jharsuguda	2	8432	7051	2460	17943	27454
Bargarh	22	1599	3169	2657	2682	8508
Keonjhar	152	983	2685	2204	2219	7108
Sonepur	-	-	5600	4908	4812	15320
Bolangir	-	3148	7072	6803	-	13875
Sundargarh	-	1714	2607	2539	2975	8121
Dhenkanal	173	3681	6925	6679	9879	23483
Angul	96	1881	2938	2661	1943	7542
Total	3546	113902	216083	187286	225648	629017
Chilika	132	22032	36540	31588	54211	122339
G.TOTAL	3678	135934	252623	218874	279859	751356

Annexure 3.26: Marine Fisherman Population (2000-01)

Balasore	213	14489	24923	23938	53961	102822
Bhadrak	109	6980	14362	12503	19916	46781
Jagatsinghpur	75	6915	11377	10239	16309	37925
Kendrapara	85	6216	12299	11353	16721	40373
Ganjam	28	7088	10641	10020	17049	37710
Puri	79	11332	20889	18087	28185	67161
TOTAL	589	53020	94491	86140	152141	332772

Annexure 3.27: Fish Production by States and Union Territories

In thousand MT

Andhra Pradesh	827.90	944.64	853.05	891.09	856.93
Arunachal Pradesh	2.60	2.65	2.70	2.75	2.77
Assam	165.52	181.00	186.31	188.01	181.48
Bihar	261.00	266.49	267.51	279.53	267.04
Goa	76.53	87.36	99.04	104.95	102.40
Gujarat	777.90	654.62	635.21	733.82	747.33
Haryana	35.18	39.13	42.05	48.20	60.08
Himachal Pradesh	7.24	6.53	6.90	7.30	6.89
Jammu & Kashmir	19.75	19.75	19.10	19.15	19.20
Karnataka	266.42	257.00	251.23	297.57	292.46
Kerala	678.32	684.70	678.31	636.89	677.63
Madhya Pradesh	42.17	50.82	62.06	61.08	65.04
Maharashtra	514.10	545.13	548.20	580.55	595.94
Manipur	16.60	17.60	17.80	18.22	18.61
Meghalaya	5.37	5.15	5.64	4.12	5.49
Mizoram	3.25	3.38	3.68	3.75	3.76
Nagaland	5.50	5.56	4.90	5.50	5.80
Orissa	287.53	306.95	315.80	325.45	342.72
Panjab	66.00	83.65	77.70	85.64	86.70
Rajasthan	25.60	14.30	16.39	18.50	22.20
Sikkim	0.14	0.14	0.14	0.15	0.15
Tamil Nadu	473.50	474.14	459.43	463.03	542.28
Tripura	22.52	17.98	19.84	23.87	28.63
Uttar Pradesh	249.84	267.00	277.07	289.58	306.73
West Bengal	1120.00	1169.60	1215.00	1250.00	1359.10
A&N Island	28.30	31.15	32.68	12.10	28.68
Chandigarh	0.08	0.08	0.08	0.09	0.17
D&N Haveli	0.05	0.05	0.05	0.05	0.05
Daman & Diu	11.26	13.77	12.51	17.79	16.41
Delhi	2.25	2.10	1.41	0.70	0.61
Lakshadweep	7.50	10.03	11.96	11.96	11.75
Pondicherry	45.02	48.00	36.75	21.45	39.67
Chhatisgarh	99.80	111.05	120.07	131.75	137.75
Uttaranchal	2.55	2.56	2.57	2.79	3.00
Jharkhanda	45.38	75.38	22.00	34.27	34.27
India	6199.68	6399.44	6305.14	6571.65	6869.72

Source: Directoriat of Fisheries.

Annexure 3.28: Production of Fish and Crab in Orissa

In thousand MT

1995-96	121.94	12.90	123.19	258.03		
1996-97	127.29	16.21	133.46	276.96		
1997-98	135.63	16.78	156.08	308.49		
1998-99	145.01	14.89	124.32	284.22		
1999-00	124.90	10.40	125.90	261.20	7.30	0.50
2000-01	125.10	13.40	121.10	259.60	7.70	1.40
2001-02	147.40	20.70	113.90	282.00	8.10	1.20
2002-03	154.20	20.00	115.00	289.20	8.30	2.20
2003-04	165.60	24.50	116.90	307.00	8.40	2.20
2004-05	170.10	23.80	121.90	315.80	8.70	1.70
2005-06	179.70	23.50	122.20	325.40	9.50	1.40
2006-07	191.60	23.00	128.10	342.70	8.99	1.70
2007-08	195.70	23.00	130.80	349.50	9.29	1.80
2008-09	213.00	26.30	135.50	374.80	13.27	2.10
2009-10(P)	215.80	25.50	129.30	370.60	13.27	2.40

Note: (P) provisional

Source: Directoriat of Fisheries, Orissa

Annexure 3.29: Fresh Water Fish Production from Different Sources

In thousand MT

1999-00	88.11	13.81	2.07	20.87	124.86
2000-01	92.44	8.01	2.73	21.93	125.11
2001-02	112.85	7.09	4.00	23.46	147.40
2002-03	119.80	8.50	2.67	23.27	154.24
2003-04	133.62	10.14	2.76	19.08	165.59
2004-05	140.46	11.53	1.79	16.31	169.88
2005-06	153.45	10.75	2.34	13.20	179.74
2006-07	164.49	11.94	2.33	12.41	191.27
2007-08	169.64	12.45	1.54	12.12	195.75
2008-09	185.40	12.53	1.60	13.47	213.00
2009-10(P)	190.37	12.33	1.85	11.25	215.80

Note: (P) provisional

Source: Directorate of Fisheries, Orissa

Annexure 3.30: Source-wise Brackish Water Fish/Shrimp & Crab Production in Orissa

In thousand MT

1999-00	1.75	3.08	5.62	10.44
2000-01	4.98	6.43	2.03	13.44
2001-02	11.99	7.20	1.47	20.56
2002-03	10.89	7.17	1.90	19.96
2003-04	14.05	8.11	2.31	24.48
2004-05	13.26	7.88	2.64	23.78
2005-06	12.23	8.39	2.88	23.50
2006-07	9.96	9.65	3.34	22.95
2007-08	10.05	10.19	2.74	22.97
2008-09	10.70	11.66	3.97	26.33
2009-10(P)	11.96	10.98	2.57	25.51

Note: (P) provisional
Source: Directorate of Fisheries, Orissa

Annexure 3.31: Source-wise Crab Production

In MT

1997-98	10.40	136.00	146.40
1998-99	9.68	464.00	473.68
1999-00	9.03	526.00	535.03
2000-01	93.60	1255.54	1349.14
2001-02	111.07	1039.96	1151.03
2002-03	149.81	2083.81	2233.62
2003-04	155.51	2043.31	2198.82
2004-05	161.89	1555.26	1717.15
2005-06	154.08	1291.68	1445.76
2006-07	122.94	1613.99	1736.93
2007-08	139.12	1648.91	1788.03
2008-09	237.50	1854.15	2091.65
2009-10(P)	210.89	2216.10	2426.99

Note: (P) provisional
Source: Directorate of Fisheries, Orissa

Annexure 3.32: Export and Import of Fish

In 000 MT

1999-00	69.91	9.98	4.44	84.33	42.20
2000-01	61.75	6.26	7.07	75.08	41.99
2001-02	60.52	7.57	8.72	76.81	34.03
2002-03	61.29	7.69	12.58	81.56	35.71
2003-04	62.96	11.34	14.73	89.03	34.59
2004-05	65.72	11.72	14.31	91.75	37.01
2005-06	60.98	13.19	14.85	89.02	44.54
2006-07	68.00	14.76	14.99	97.75	38.07
2007-08	71.90	13.18	15.17	100.25	47.05
2008-09	78.02	21.57	16.82	116.41	170.42
2009-10	78.02	21.57	16.82	116.41	92.07

Source: Directoriat of Fisheries, Orissa

Annexure 3.33: Export of Marine Products to Foreign Countries

2004-05	9.54	241.20
2005-06	9.80	259.39
2006-07	10.52	304.46
2007-08	14.16	351.52
2008-09	14.13	357.88
2009-10	14.53	428.28

Source: Directoriat of Fisheries, Orissa

Annexure 3.34: State wise Total Number of Livestock and Poultry– 2003

(000' number)

States/UTs	Cattle	Buffaloes	Sheep	Goats	Pigs	Horses & Ponies	Mules	Donkeys	Camel	Yaks	Mithun	Total Livestock	Total Poultry
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Andhra Pradesh	9300	10630	21376	6277	570	9	-	33	-	0	0	48195	102278
Arunachal Pradesh	458	11	19	231	330	7	-	0	0	9	192	1257	1743
Assam	8440	678	170	2987	1543	12	-	0	0	0	0	13830	21664
Bihar	10729	5743	382	9490	672	117	4	23	1	0	0	27161	13911
Chhatisgarh	8882	1598	121	2336	552	4	-	-	-	0	0	13492	8181
Goa	76	37	0	11	87	-	-	0	-	0	0	212	566
Gujarat	7424	7140	2062	4541	351	18	1	65	53	0	0	21655	8153
Haryana	1540	6035	633	460	120	25	14	8	50	0	0	8885	13619
Himachal Pradesh	2236	774	926	1125	3	18	24	9	0	2	0	5117	767
Jammu & Kashmir	3084	1039	3411	2055	2	172	40	24	2	47	24	9900	5568
Jharkhand	7659	1343	680	5031	1108	5	-	-	-	0	0	15826	14429
Karnataka	9539	3991	7256	4484	312	14	-	25	-	0	0	25621	25593
Kerala	2122	65	4	1213	76	-	-	-	-	0	0	3480	12216
Madhya Pradesh	18913	7575	546	8142	358	32	4	39	8	0	0	35617	11705
Maharashtra	16303	6145	3094	10684	439	40	1	57	-	0	0	36763	37968
Manipur	418	77	6	33	415	2	0	0	0	0	20	971	2941
Meghalaya	767	18	18	327	419	2	0	0	0	0	0	1552	2821
Mizoram	36	6	1	17	218	2	-	0	0	0	2	281	1125
Nagaland	451	34	4	175	644	1	-	0	0	0	40	1349	2789
Orissa	14281	1439	1759	5974	569	-	-	9	-	0	0	24022	17611
Punjab	2039	5995	220	278	29	29	9	5	3	0	0	8607	10779
Rajasthan	10854	10414	10054	16809	338	25	3	143	498	-	0	49138	6192
Sikkim	159	2	6	124	38	2	0	0	0	7	0	337	322

(Contd...)

States/UTs	Cattle	Buffaloes	Sheep	Goats	Pigs	Horses & Ponies	Mules	Donkeys	Camel	Yaks	Mithun	Total Livestock	Total Poultry
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tamilnadu	9141	1658	5593	8177	321	25	0	26	0	0	0	24941	86591
Tripura	759	14	3	472	209	-	0	0	0	0	0	1457	3057
Uttar Pradesh	18551	22914	1437	12941	2284	154	52	182	16	0	0	58531	11718
Uttaranchal	2188	1228	296	1158	33	17	22	1	0	0	0	4943	1984
West Bengal	18913	1086	1525	18774	1301	18	-	-	0	0	0	41617	60656
A&	64	16	0	64	52	0	0	0	0	0	0	196	931
Chandigarh	6	23	0	1	0	-	-	-	-	0	0	30	152
D & Nagar Haveli	50	4	0	21	3	-	0	0	0	0	0	78	106
Daman & Diu	4	1	0	4	0	-	0	0	-	0	0	10	29
Delhi	92	231	3	17	28	1	1	1	0	0	0	374	459
Lakshadweep	4	0	0	47	0	0	0	0	0	0	0	51	146
Pondicherry	78	4	3	48	1	-	0	-	0	0	0	134	244
All India	185181	97922	61469	124358	13519	751	176	650	632	65	278	485002	489012

Source: 17th Indian Livestock Census, All India Summary Report

Annexure 3.35: Livestock Population in Orissa

In lakh number

Census year	Cattle		Buffaloes	Goats	Sheep	Pigs	Total
	Total	Cross bred					
1	2	3	4	5	6	7	8
1982	129.3	N.A.	13.33	49.31	19.9	4.1	215.94
1991	135.77	5.63	15.09	48.04	18.41	5.9	223.21
1995	147.66	7.44	16.52	54.12	18.65	5.72	242.67
2001	140.03	8.71	13.88	58.8	17.79	6.02	236.52
2003	142.81	10.43	14.39	59.74	17.59	5.69	240.22
2007	123.09	17.03	11.9	71.27	18.18	6.12	230.57

Source: Directorate of Animal Husbandry and Veterinary Services, Orissa.

Annexure 3.36: Cattle and Buffalo Population 2007 Animal Census

In lakh number

Cattle	123.09	17.03	58.53	8.25	27.1	3.32	31.72	4.47
Buffaloes	11.9	NA	5.88	NA	2.81	NA	3.35	NA
Total	134.99	NA	64.41	NA	29.91	NA	35.07	NA

Source: Directorate of Animal Husbandry and Veterinary Services, Orissa.

Annexure 3.37: State-wise Milk Production

(000 tones)

Andhra Pradesh	5122	5521	5814	6584	6959	7257	7624	7939	8925	9570
Arunachal Pradesh	46	42	42	46	46	48	48	49	50	24
Assam	667	683	682	705	727	739	747	751	752	753
Bihar	3454	2489	2664	2869	3180	4743	5060	5450	5783	5934
Goa	44	45	45	46	48	57	56	57	58	59
Gujarat	5269	5312	5862	6089	6421	6745	6960	7533	7911	8386
Haryana	4679	4850	4978	5124	5221	5222	5299	5367	5442	5745
Himachal Pradesh	742	761	756	773	786	870	869	872	874	884
J & K	1286	1321	1360	1389	1414	1422	1400	1400	1498	1498
Karnataka	4471	4599	4797	4539	3857	3917	4022	4124	4244	4538
Kerala	2532	2605	2718	2419	2111	2025	2063	2119	2253	2441
Madhya Pradesh	5519	4761	5283	5343	5388	5506	6283	6375	6572	6855
Maharashtra	5707	5849	6094	6238	6379	6567	6769	6978	7210	7455
Manipur	68	66	68	69	71	75	77	77	78	78
Meghalaya	62	64	66	68	69	71	73	75	77	77
Mizoram	18	14	14	15	15	16	15	16	17	17
Nagaland	48	51	57	58	63	69	74	67	45	53
Orissa	850	876	929	941	997	1283	1342	1431	1625	1672
Punjab	7706	7777	7932	8173	8391	8554	8909	9168	9282	9387
Rajasthan	7280	7455	7758	7789	8054	8310	8713	9375	9536	9491
Sikkim	35	35	37	45	48	46	48	49	49	49
Tamil Nadu	4586	4910	4988	4622	4752	4784	5474	5560	5586	5673
Tripura	77	77	90	79	84	86	87	89	91	96
Uttar Pradesh	14152	13857	14648	15288	15943	16512	17356	18095	18861	19537
West Bengal	3465	3471	3515	3600	3686	3790	3891	3982	4087	4176
A&N Islands	23	22	23	26	25	24	20	23	24	26
Chandigarh	42	43	43	43	44	43	46	46	47	47
D&N Haveli	8	8	8	8	8	4	5	5	5	4
Daman & Diu	1	1	1	1	1	1	1	1	1	1

(Contd...)

Delhi	290	291	294	296	299	303	310	289	282	285
Lakshadweep	1	2	2	2	1	1	2	2	2	2
Pondicherry	37	37	37	37	40	41	43	45	46	46
Chhattisgarh	-	777	795	804	812	831	839	849	866	908
Uttaranchal	-	1025	1066	1079	1188	1195	1206	1213	1221	1230
Jharkhand	-	910	940	952	954	1330	1335	1401	1442	1466
All India	78286	80607	84406	86159	88082	92484	97066	100869	104840	108463

Source: Department of Animal Husbandry, Dairying and Fishing, Ministry of Agriculture, GOI

Annexure 3.38: Year-wise Production and Per Capita Availability of Milk, Meat & Eggs.

1999-00	847.78	65	36.67	1.029	648.31	18
2000-01	875.13	67	38.38	1.067	760.10	20
2001-02	928.77	70	42.64	1.176	858.02	24
2002-03	941.00	71	44.72	1.224	909.49	25
2003-04	995.08	74	44.89	1.218	931.06	25
2004-05	1282.76	94	50.53	1.358	1215.96	33
2005-06	1342.30	98	52.04	1.385	1278.71	34
2006-07	1424.64	103	55.01	1.450	1424.64	38
2007-08	1620.44	115	58.82	1.530	1549.48	39
2008-09	1598.05	113	115.00*	2.933	1993.26**	51
2009-10	1651.33	112	130.00*	3.217	2319.32**	57

Source: Directorate of Animal Husbandry and Veterinary Services, Orissa.
*include poultry meat.
** include private sector production.

Annexure 3.39: Milk and Egg Production in Districts (2009-10)

Balasore	72	90	60.28	91.29
Bhadrak	56	60	51.15	22.71
Balangir	55	145	44.61	172.30
Sonepur	30	30	29.14	28.16
Cuttack	142	60	145.08	46.31
Jajpur	60	60	62.12	62.47
Kendrapara	45	45	48.70	23.33
Jagatsingpur	100	24	100.30	24.19
Dhenknal	50	65	52.67	62.92
Anugul	40	22	44.22	4.99
Ganjam	105	415	113.94	474.66
Gajapati	20	30	19.64	35.73
Kalahandi	46	72	43.47	80.29
Nawapara	15	15	10.21	11.16
Keonjhar	49	81	43.36	62.21
Koraput	50	59	55.70	71.28
Rayagada	45	50	35.77	38.65
Nawarangpur	22	38	15.54	17.91
Malkangiri	48	51	16.61	39.09
Mayurbhanja	85	190	76.23	158.88
Phulabani	22	36	13.76	31.00
Boudh	22	14	16.48	13.77
Puri	115	50	112.09	54.02
Khordha	109	510	203.24	387.58
Nayagarh	25	30	20.70	14.54
Sambalpur	40	50	39.41	43.88
Deogarh	11	15	5.13	6.10
Jharsuguda	20	30	11.54	9.92
Bargarh	90	70	89.16	64.08
Sundargarh	50	75	45.75	64.58
TOTAL	1651	2319	1626.00	2218.00

Annexure 3.40: Activities of OMFED under IDDP (2009-10)

Project cost (Rs. In Cr.)	7.85	5.56	5.64	N.A.
No.of societies organised	325	376	262	600
Members	15334	20572	9548	41010
Milk procurement(Kgs./day)	24610	37675	16148	100810

Source: OMFED, Orissa

Annexure 3.41: District-wise Number of Veterinary Institutions and Personnel in Orissa, 2009-10

Angul	16	81	81	145	32
Balasore	21	124	124	223	0
Bargarh	19	119	119	162	183
Bhadrak	13	98	98	164	203
Balangir	21	118	118	162	0
Boudh	7	28	28	44	11
Cuttack	26	172	172	272	0
Deogarh	4	20	20	30	0
Dhenkanal	18	86	86	153	0
Gajapati	11	54	54	64	41
Ganjam	38	246	246	331	0
Jagatsinghpur	12	92	92	151	540
Jajpur	18	102	102	216	0
Jharsuguda	9	35	35	55	0
Kalahandi	21	129	129	178	0
Kandhamal	20	87	87	85	0
Kendrapara	14	88	88	158	0
Keonjhar	22	113	113	174	80
Khurda	20	98	98	170	0
Koraput	25	129	129	140	0
Malkangiri	13	50	50	50	32
Mayurbhanj	42	167	167	319	0
Nabrangpur	17	72	72	95	0
Nayagarh	16	72	72	113	197
Nuapada	8	47	47	81	0
Puri	15	145	145	183	0
Rayagada	16	101	101	95	0
Sambalpur	18	113	113	148	0
Sonepur	10	38	38	65	41
Sundargarh	30	115	115	191	0
ORISSA	540	2939	2939	4417	1360

Source: Directorate of Animal Husbandry and Veterinary Services, Orissa.

Annexure 3.42: Animal Health Care

Item	2004-2005	2005-06	2006-07	2007-08	2008-09	2009-10
1	2	3	4	5	6	7
Treatment of animals (in lakh nos.)	49.66	47.89	47.81	51.29	55.48	55.69
Vaccine production (in lakh doses)	105.55	92.17	136.73	184.65	193.78	210.11
Vaccination done (in lakh nos.)	114.02	115.98	148.18	202.35	242.70	276.34
Infertility camp organised	4587	3785	4197	3229	3508	3118
De-worming of animals (in lakh nos.)	2.13	2.30	2.49	3.07	7.28	8.84
Animal castrated (in lakh nos.)	4.66	4.74	4.55	4.53	4.41	4.92

Source: Directorate of Animal Husbandry and Veterinary Services, Orissa.

Annexure 3.43: Animal Breeding in the LBD/ECB Farms, 2009-10

Name of the LBD Farms	Animal Strength							Progressive Progeny Born	Progressive Heifers / Cows Supplied	Progressive .Bull Calves Supplied	Milk prodn. (in Ltrs.)
	In milk	Dry	Heifers	Bull Calfs	Calfs	Others	Total				
1	2	3	4	5	6	7	8	9	10	11	12
ECB Farm, Chiplima	18	18	11	7	13	0	67	34	46	23	49947
LBD arm,Bhanjanagar	8	5	12	1	8	0	35	15	6	4	24651
LBD Farm, Boudh	6	6	7	1	4	0	24	7	6	4	14630
LBD Farm, Keonjhar	14	6	9	3	12	4	48	16	2	9	33107
LBD Farm,Kuarmunda	20	9	15	2	20	1	67	26	17	17	32041
LBD Farm, Khapuria	22	9	8	0	15	1	55	26	6	14	58001
LBD Farm, Remuna	18	5	15	1	15	0	54	19	8	0	31291
LBD Farm, Sundargarh	12	8	10	2	9	0	41	12	3	7	32539
ORISSA	118	66	87	18	96	6	51	155	94	84	273828

Annexure 3.44: Production of Departmental Poultry Farms

Item	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	2	3	4	5	6	7
Birds maintained (in nos.)	2709	12468	3663	2656	10588	13163
Egg production (in lakh nos.)	1.66	1.77	1.94	2.83	2.33	7.16
Eggs used for hatching (in lakh nos.)	0.55	0.51	0.91	1.90	4.56	7.66
Chick produced (in lakh nos.)	0.43	0.38	0.75	1.05	2.81	4.72

Annexure 3.45: Fodder Production in the Departmental L.B.D Farms, 2009-10

DLB Farm, Cuttack	6.00	6.00	3000.00	3408.45
SLB Farm, Chiplima	43.00	43.00	10700.00	5141.00
DLB Farm, Keonjhar	27.50	27.50	3285.00	2001.30
DLB Farm, Remuna	30.00	21.00	3500.00	3223.80
DLB Farm, Bhanjanagar	20.00	14.00	2800.00	2703.80
DLB Farm, Boudh	3.50	3.50	700.00	468.03
DLB Farm, Sundargarh	25.00	23.50	2956.00	2770.00
DLB Farm, Kuarmunda	35.00	35.25	4900.00	4568.63
STATE	190.00	173.75	31841.00	24285.01

Annexure 3.46: Distribution of Minikits, 2009-10

Balasore	1720	1770	700	700	307500
Bhadrak	400	1720	600	600	152000
Balangir	655	655	450	450	
Sonepur	1025	1025	400	400	10000
Cuttack	2100	4065	1150	1150	440000
Jajpur	1315	1315	800	800	
Kendrapara	100	1720	800	800	86500
Jagatsingpur	3130	3130	900	900	187000
Dhenkanal	1125	1125	600	600	9480
Anugul	1390	1390	550	550	5200
Ganjam	2860	3015	950	950	166133
Gajapati	995	995	600	600	35000
Kalahandi	760	760	450	450	
Nawapara	690	690	400	400	150000
Keonjhar	1720	1790	750	750	700
Koraput	650	650	550	545	1000
Rayagada	650	650	450	450	
Nawarangpur	265	260	300	100	42000
Malkangiri	225	220	400	400	
Mayurbhanja	1705	1705	800	800	10500
Kandhamal	265	265	400	400	
Boudh	350	665	450	450	20000
Puri	3386	3386	1000	1000	352750
Khordha	2425	2425	900	900	125000
Nayagarh	690	695	400	400	4000
Sambalpur	1980	1980	900	900	150000
Deogarh	360	360	400	415	35000
Jharsuguda	605	605	650	625	12880
Bargarh	3610	3780	1450	1450	103000
Sundargarh	1010	1010	750	750	1000
STATE	38161	43821	19900	19685	2406643

Annexure 3.47: Milk and Egg Production in KBK districts in Orissa, 2009-10

Koraput	50.00	55.70	59.00	71.28
Malkangiri	48.00	16.61	51.00	39.09
Nawarangpur	22.00	15.54	38.00	17.91
Rayagada	45.00	35.77	50.00	38.65
Kalahandi	46.00	43.47	72.00	80.29
Nuapada	15.00	10.21	15.00	11.16
Balangir	55.00	44.61	145.00	172.30
Sonepur	30.00	29.14	30.00	28.16
TOTAL	311.00	251.05	460.00	458.84

Annexure 3.48: District-wise Classification of Forest Area, 2009-10

Area in Sq. KM

1	Angul	6375	2716.82	1760.76	1.15	273.21	11.99	669.71
2	Balangir	6575	1543.85	1105.68	0.14	3.63	0	434.40
3	Balasore	3806	332.21	202.69	0.19	21.54	0	107.79
4	Bargarh	5837	1216.13	583.52	0.13	451.19	0	181.29
5	Bhadrak	2505	97.07	0.00	0.01	3.96	32.98	60.12
6	Boudh	3098	1277.17	983.33	1.02	43.48	0	249.34
7	Cuttack	3932	787.90	522.39	0.45	101.41	0	163.65
8	Deogarh	2940	1560.22	578.40	0.04	243.86	0	737.92
9	Dhenkanal	4452	1737.62	1141.02	0.04	13.78	0	582.78
10	Gajapati	4325	2468.98	416.89	0.13	108.15	1149.41	794.40
11	Ganjam	8206	3149.90	1485.69	0.86	143.54	1167.36	352.45
12	Jagatsinghpur	1668	132.92	1.23	0.02	4.77	83.06	43.84
13	Jajpur	2899	725.27	6.35	0.01	299.32	0	419.59
14	Jharsuguda	2081	202.44	35.53	0.04	109.97	0	56.90
15	Kalahandi	7920	2538.01	1449.03	0.54	488.51	313.37	286.56
16	Kandhamal	8021	5709.83	2010.06	2.00	1783.30	0	1914.47
17	Kendrapara	2644	248.05	14.49	4.50	127.57	62.32	39.17
18	Keonjhar	8303	3097.18	1834.09	0.26	273.64	220.79	768.40
19	Khurda	2813	618.67	298.81	0.68	209.87	0	109.31
20	Koraput	8807	1879.53	478.86	0.68	984.58	0	415.41
21	Malkangiri	5791	3355.88	352.44	0.30	940.61	661.92	1400.61
22	Mayurbhanj	10418	4392.13	3330.14	2.20	245.06	0	814.73
23	Nuapada	3852	1849.69	0.00	0.44	1504.00	0	345.25

(Contd...)

24	Nayagarh	3890	2080.97	1301.99	0.25	188.03	135.58	455.12
25	Nabrangpur	5291	2462.73	535.34	0.07	685.77	0	1241.55
26	Puri	3479	137.10	15.66	0.51	85.88	0	35.05
27	Rayagada	7073	2812.33	771.62	0.96	1147.19	0	892.56
28	Sambalpur	6657	3631.77	2151.71	1.18	363.01	0	1115.87
29	Sonepur	2337	415.78	309.52	0.03	0.00	0	106.23
30	Sundargarh	9712	4957.32	2651.88	1.72	836.85	0	1466.87
	Orissa	155707	58166.68	26329.12	20.55	11722.89	3838.78	16261.34

Source: Principal Chief Conservator of Forests, Orissa

Annexure 3.49: Forest Area Diverted to Non-forest Use (2000-01 to 2009-10)

Source: PCCF, Orissa

Annexure 3.50: Forest Area Diverted to Non forest Use by Activities (2008-09 to 2009-10)

2008-09		
Irrigation	5	438.86
Mining	6	280.94
Transmission lines(Railway)	1	3.38
Misc	2	0.56
Total	14	723.74
2009-10		
Irrigation	1	3.96
Mining	9	960.79
Transmission lines(Railway)	1	3.38
Misc	2	40.55
Total	13	1,008.68

2000-01	27	1219.06
2001-02	20	1711.74
2002-03	15	508.18
2003-04	23	1493.71
2004-05	9	1274.39
2005-06	28	2207.23
2006-07	17	911.83
2007-08	20	1802.58
2008-09	14	723.74
2009-10	13	1008.68

Annexure 3.51: Production & Revenue Collection from Forest Products by OFDC

Timber & Timber Product	Cum	29101	24160	29.62	21396	26001	40.68
Fire wood	MT	20352	23118	3.60	23163	23065	4.45
Bamboo	SU	77510	77510	5.81	61915	61878	5.62
Kendu Leaf	Qtls.	418868	427979	304.76	NA	NA	NA

Source: Orissa Forest Development Corporation

Annexure 3.52: Kenduleaf Trading in Orissa

Annexure 3.53: Achievements of Different Afforestation Programmes

Economic Plantation	3903
RLTAP in KBK Districts	3491
Compaensatory Afforation	2898
National Afforestation Programme through FDA,s	14980
Orissa Forestry Sector Development Project (JICA)	51735
Industrial Plantation	295
Support to VSS	611
National Bamboo Mission	774
NREGS and Other Schemes	12316
Avenue Plantation (Running Kilometers RKMs)	133
Total	91,003 Ha and 133 RKMs

Annexure 3.54: Wildlife Offences (Poaching, Poisoning, Trapping etc.)

Source: Chief Wildlife Warden, Orissa

2005	3.73	142.05
2006	3.87	248.55
2007	4.45	264.29
2008	4.16	301.96
2009	4.41	326.49

No. of incidents occurred	193	104	99	71	66
Cases found undetected	72	26	21	22	17
Cases filed in the court	121	78	78	51	49
Accused forwarded to the court	232	181	169	99	210

CHAPTER 4

The Industrial Sector

The Industrial sector, as described in the Index Number of Industrial Production, published by the Reserve Bank of India (RBI), consists of (a) manufacturing, (b) mining and quarrying and (c) electricity, gas and water supply. However, the classification of various sectors and sub-sectors of the economy as followed by the Central Statistical Organisation (CSO) is somewhat different from the RBI classification. This chapter surveys manufacturing, mining and quarrying only, which respectively constitute in real terms about 62 percent and 26 percent of the Industrial sector. The electricity-gas-water supply sub-sector is excluded from this Chapter for two reasons. First, its contribution in the overall Industrial Sector is less than 15 percent and second, electricity supply being an important component of infrastructure has been discussed at length in Chapter 6 under "infrastructure". Annexures 4.1 through 4.32 provide detailed information on manufacturing and mining sub-sectors.

It has been already noted in Chapter 2 that the high growth of Orissa's economy in recent years has been led by high growth in the Industrial sector. This sector has averaged real annual growth rate of 12.56 percent, at 2004-05 prices, during the first three years of the 11th Five Year Plan. Figure 4.1 graphs real annual growth rates of industrial sub-sectors from 2005-06 to 2009-10.

4.1 Manufacturing

The manufacturing sector itself is divided into two sub-sectors: registered and unregistered, or, formal and informal manufacturing. The share of registered manufacturing in the total manufacturing sector has been high and is increasing over time, as may be seen from Figure 4.2. However the unregistered manufacturing sub-sector is employment-intensive and, therefore, important as well. Annexure 4.1 records the number of registered factories, total employment, value of outputs, value of inputs and

Figure 4.1: Real Growth Rates of Industrial Sub-sectors in Orissa (2005-06 to 2009-10)

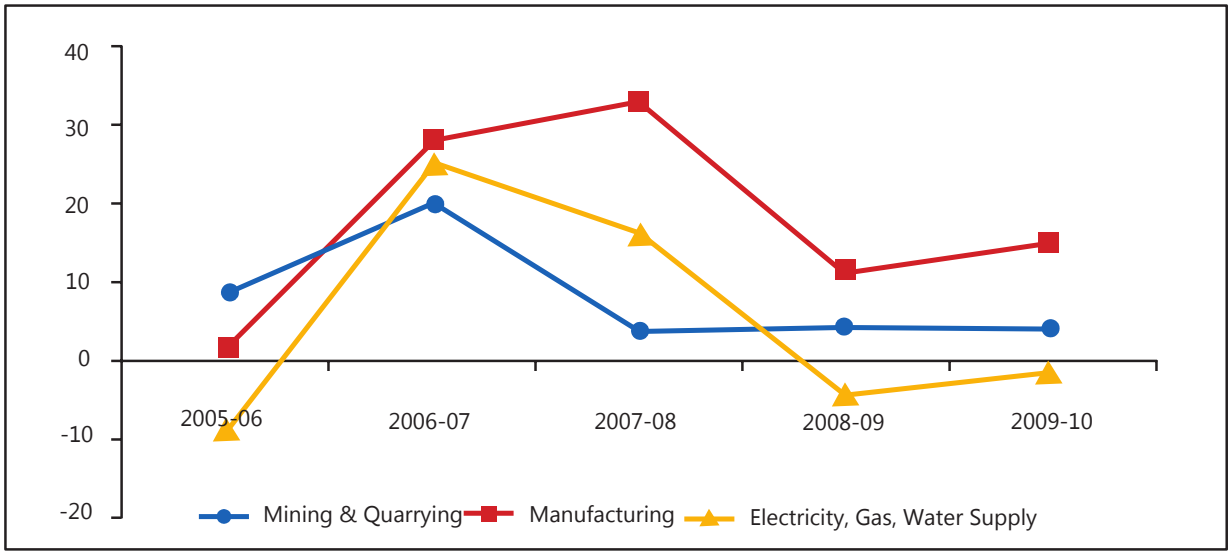
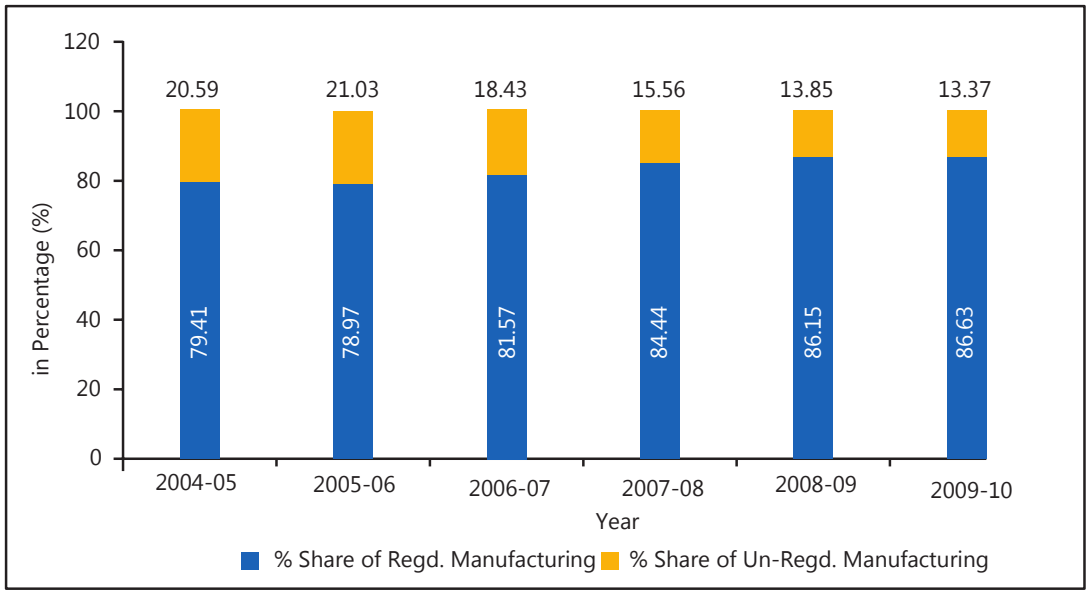


Figure 4.2: Share of Registered and Unregistered Sub-sectors within Manufacturing, 1999-2000 to 2009-10



net value added in Orissa from 1985-86 onwards. While the number of registered factories is increasing consistently, the fraction of those who report to the Government has decreased. This is analysed in Figure 4.3.

4.1.1 Large Scale Industries

The Central Government's portal, Know India, notes that industries in Orissa are classified into five categories on the basis of investment: large scale heavy industries, large scale industries, small and medium scale industries, handicraft and cottage industries, khadi and village industries. Large scale industries, heavy or otherwise, include firms that produce iron and steel, cement, aluminium, ferro-manganese, fertilisers, chemicals, aeronautical, heavy water, textiles, refractory, ceramic glass and paper. Most large-scale industries in Orissa are mineral-based.

Steel can be called the backbone of industry in the State. Until recently, Orissa has had about 10

Figure 4.3: Fraction of Registered Factories Reporting to the Government

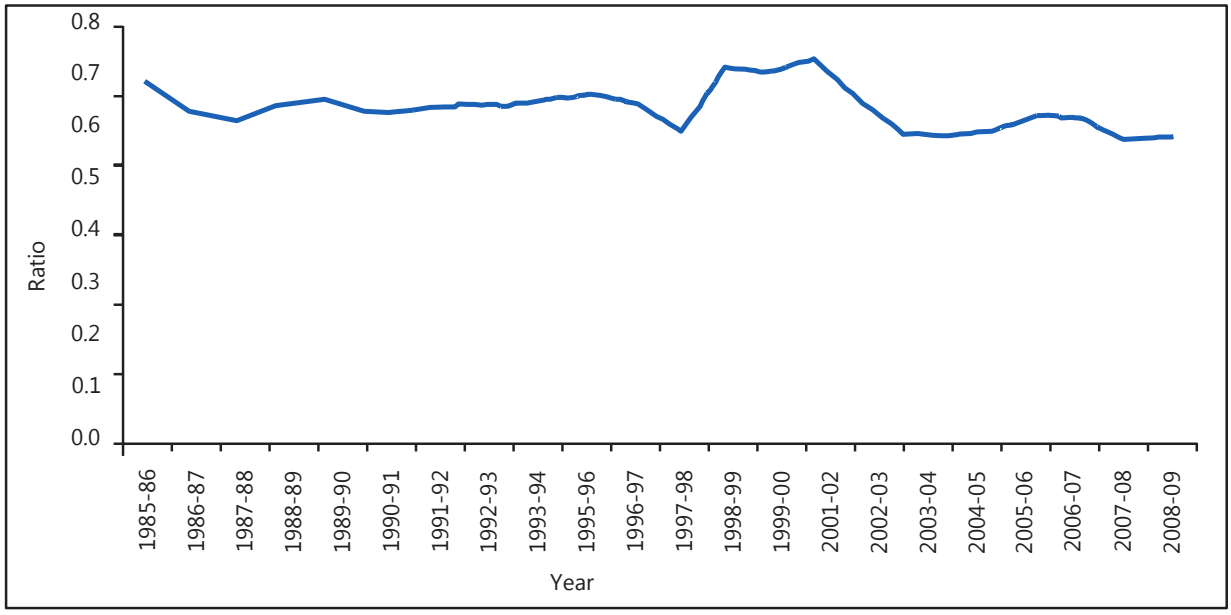
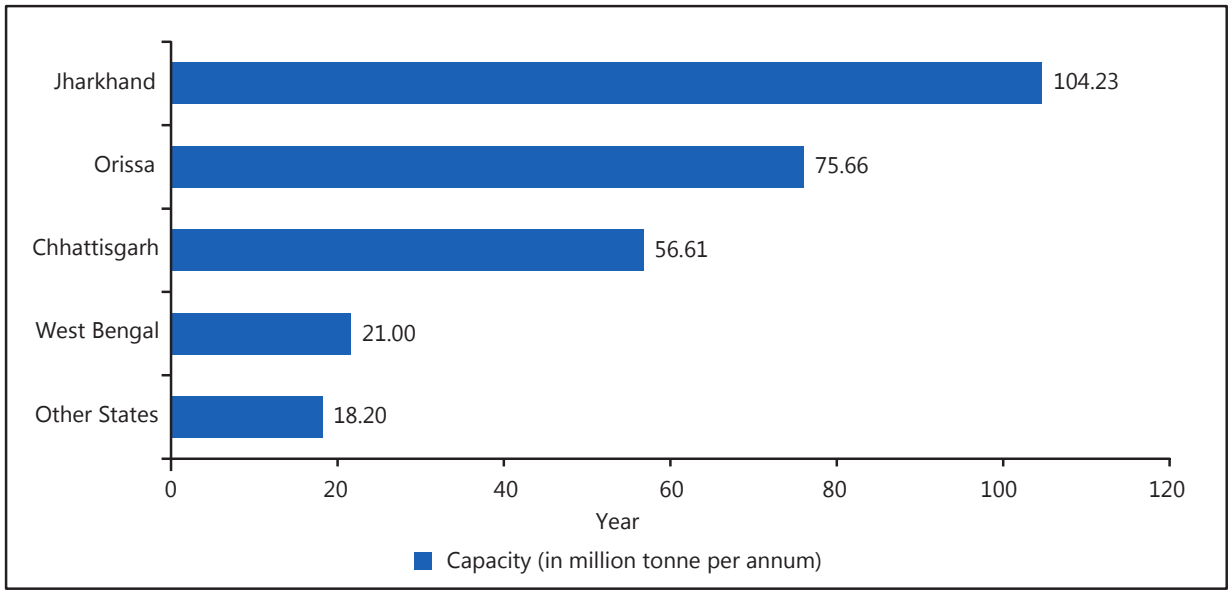


Figure 4.4: MoUs Signed and Capacity to be added



Source: Annual Report 2009-10, Ministry of Steel, Government of India.

percent of steel production capacity in the country while it has 25 percent of total iron ore reserves in the country. The Rourkela Steel Plant is the largest of all steel plants operating in the State. There are new large-scale-level potential entrants into steel such as Vedanta, Jindal, Posco, Tata, Essar and Arcelor-Mittal. By the end of 2009-10, the State Government had signed 86 Memoranda of Understanding (MoU) on various industrial sub sectors with a total investment of Rs. 4,11,726 crore. Of these, 31 projects have gone into production and have generated employment for 72,561 persons (both direct and indirect). Forty-six projects including 21 steel, 21 cement, 2 aluminium and one project each under the Titanium product and oil refinery of Indian Oil Corporation (IOC), are under progress. Of the 86 MOUs, 49 have been signed with various steel promoters with an investment of Rs. 195,150 crore and an estimated production of 75.66 million tons per annum (MTPA). Of these 49 MoUs, 28 projects have started partial production with an investment of Rs. 23,334.12 crore, achieving a production capacity of 4.01 MTPA of steel, 5.16 MTPA of sponge iron, 0.63 MTPA of pig iron and 0.29 MTPA of ferro chrome. These industries have provided direct and indirect employment to 53,495 persons. Figure 4.4 lists major states, which plan to expand their steel production on a massive scale.

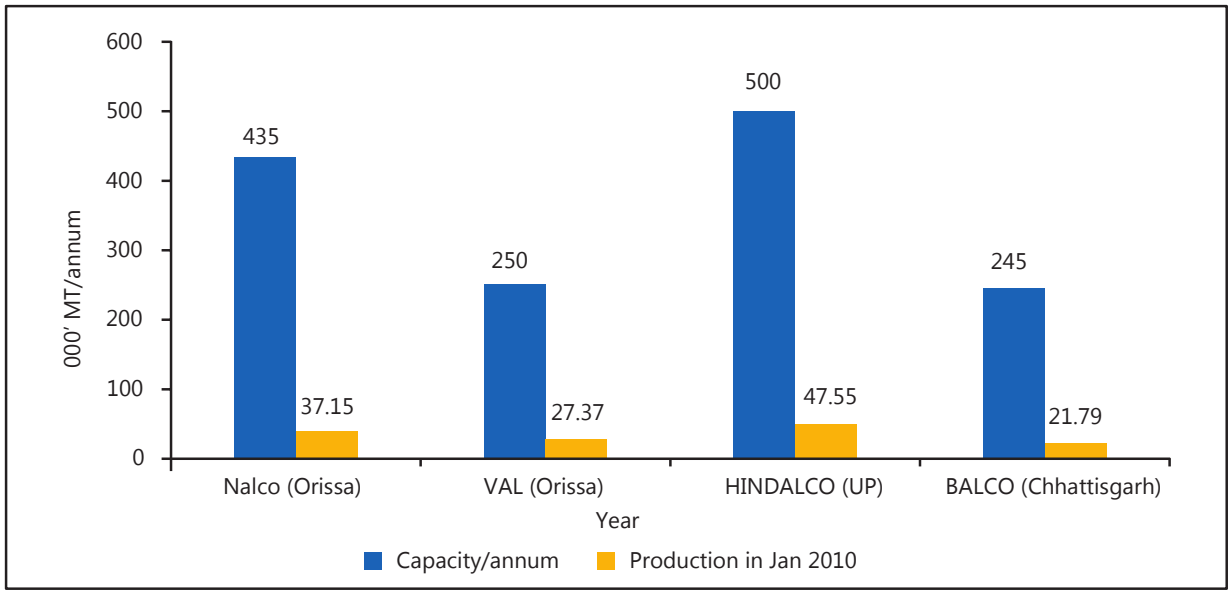
Orissa stands number one in India with respect to aluminium production capacity and actual production, after Vedanta Aluminium Limited (VAL) and National Aluminium Corporation (NALCO) started production. Figure 4.5 shows the big four aluminium producing plants. The total production in Orissa during January 2010 was 48 percent of total production by the big four combined.

4.1.2 Micro, Small and Medium Enterprises (MSME)

Small and medium scaled enterprises grouped together are called 'Micro, Small and Medium Enterprises' (MSME). The Directorate of Industries, Orissa is the nodal agency for promoting MSME and plays a vital role in identifying entrepreneurs and assisting them in setting up industrial units. It is encouraging to note that the number of small scale industry (SSI) and MSME units, and total investments therein, have been increasing over the years, as may be seen from Figure 4.6. Annexure 4.2 lists the data on these entities as well as employment generated by them. As Figure 4.7 shows, during 2009-10, the maximum number of industries was set up in Sundergarh, followed by Cuttack, Khurda and Ganjam.

Figure 4.8 reveals that the maximum number of MSMEs belong to the repairing and services sub sector (31.3%). In manufacturing, it is the food and allied sectors that have the highest number of MSMEs (22.4%) and investment (27.60%). In

Figure 4.5: Aluminum Capacity and Production by Major Plants



Source: Ministry of Mining, Month Summary Report for January, 2010.

Figure 4.6: Growth of SSI and MSME Units in Orissa

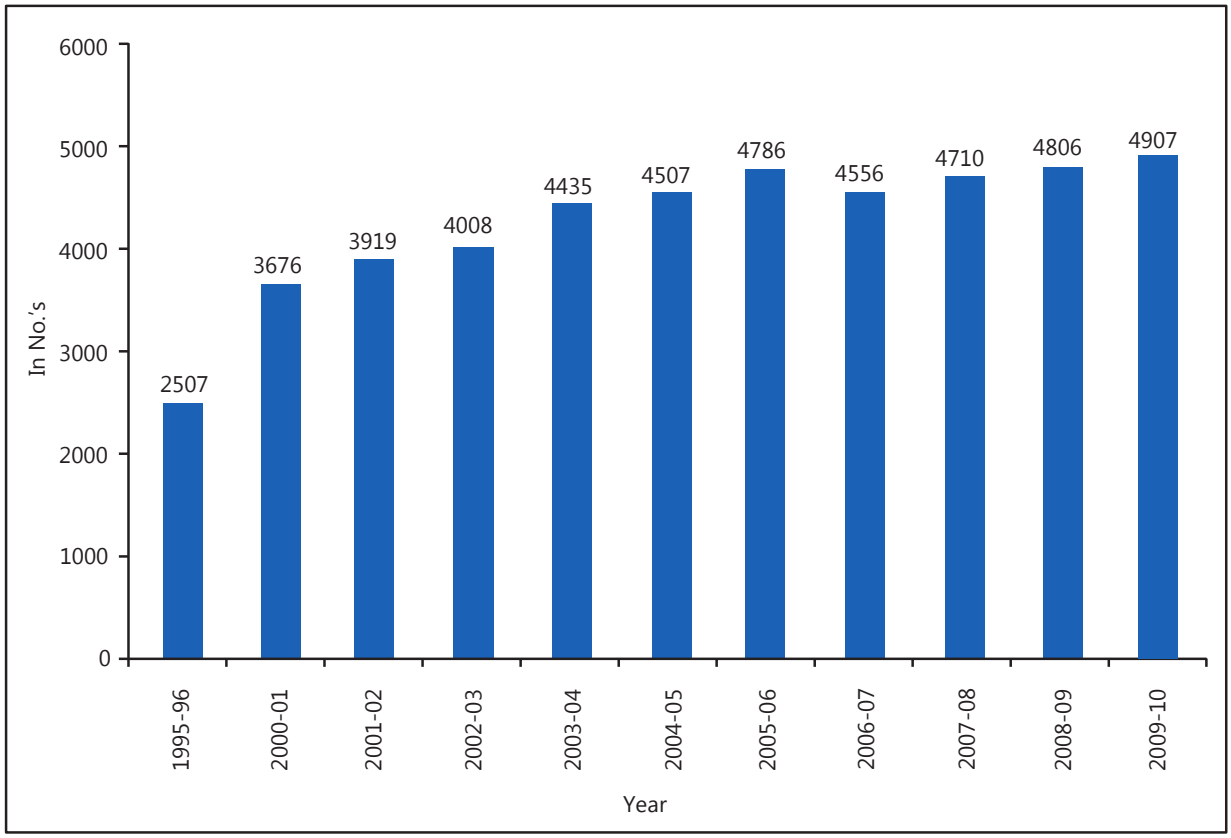


Figure 4.7: Ranking of Districts of Orissa by Number of MSME (2009-10)

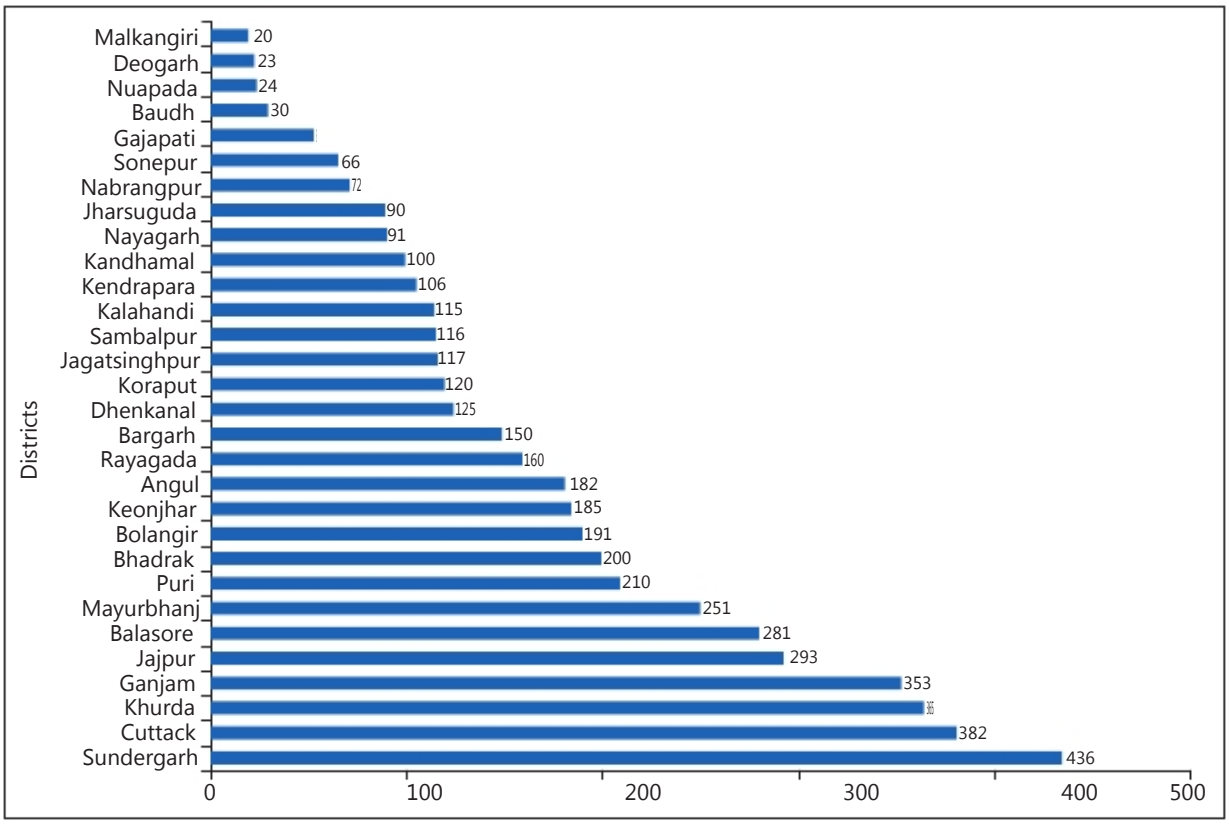
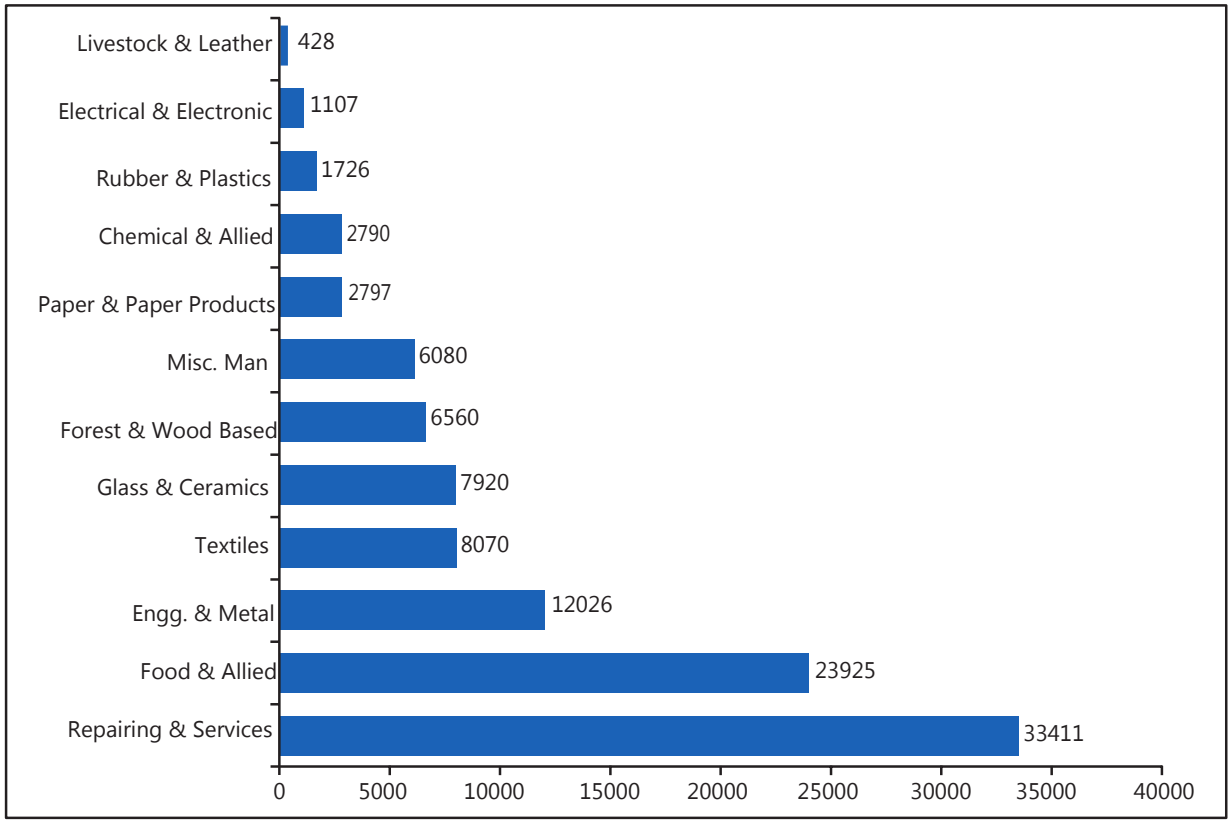


Figure 4.8: No. of MSME Units in Orissa, 2008-09



employment generation, it is the second highest employment generating sub sector (20.02%), following glass and ceramics (20.73%). Industrial sickness among MSMEs remains a major problem. There were 1,690 units identified as sick by the end of 2008-09. However, it is encouraging to note that no new MSME unit was declared as sick thereafter.

4.1.3 Some Traditional and Employment-oriented Industries

The State Government provides administrative, managerial and financial support for revival, promotion and diversification of traditional MSMEs through various schemes. Some of the traditional industries are discussed below:.

Handicrafts and Cottage Industries

Orissa is known for its excellence in silver filigree, appliquè, stone carving, brass and bell-metal works, horn carving, terracotta and patta painting. However, the number of units established has declined by 46 percent and so too the number of people employed in cottage industries from 2000-01 to 2009-10. Further details are provided in Annexure 4.5. The employment generated by these industries in various years has been shown in Figure 4.9.

Handloom and Sericulture

This sector occupies an important place in preserving the State's heritage and culture. The handloom products of Orissa have got wide recognition from all over the country and abroad for their highly artistic designs, craftsmanship and durability. During 2009-10, nearly 49,095 looms operated in the State, produced 166.65 lakh square metres of handloom products and employed 98 thousand persons. The total investment was Rs. 166.21 crore. In Orissa. Bargarh district has the highest number of looms (11,150), i.e. about 23 percent of total looms. Orissa is also known for its exquisite silk and tassar fabrics. Sericulture is an agro-based industry, providing employment to the rural poor on a large scale. Figures 4.10 through 4.12 exhibit the production of tassar, mulberry and eri cocoons from 2006-07 to 2009-10. More details are given in Annexure 4.6.

Figure 4.9: Employment Generation in the Cottage Industries in Orissa

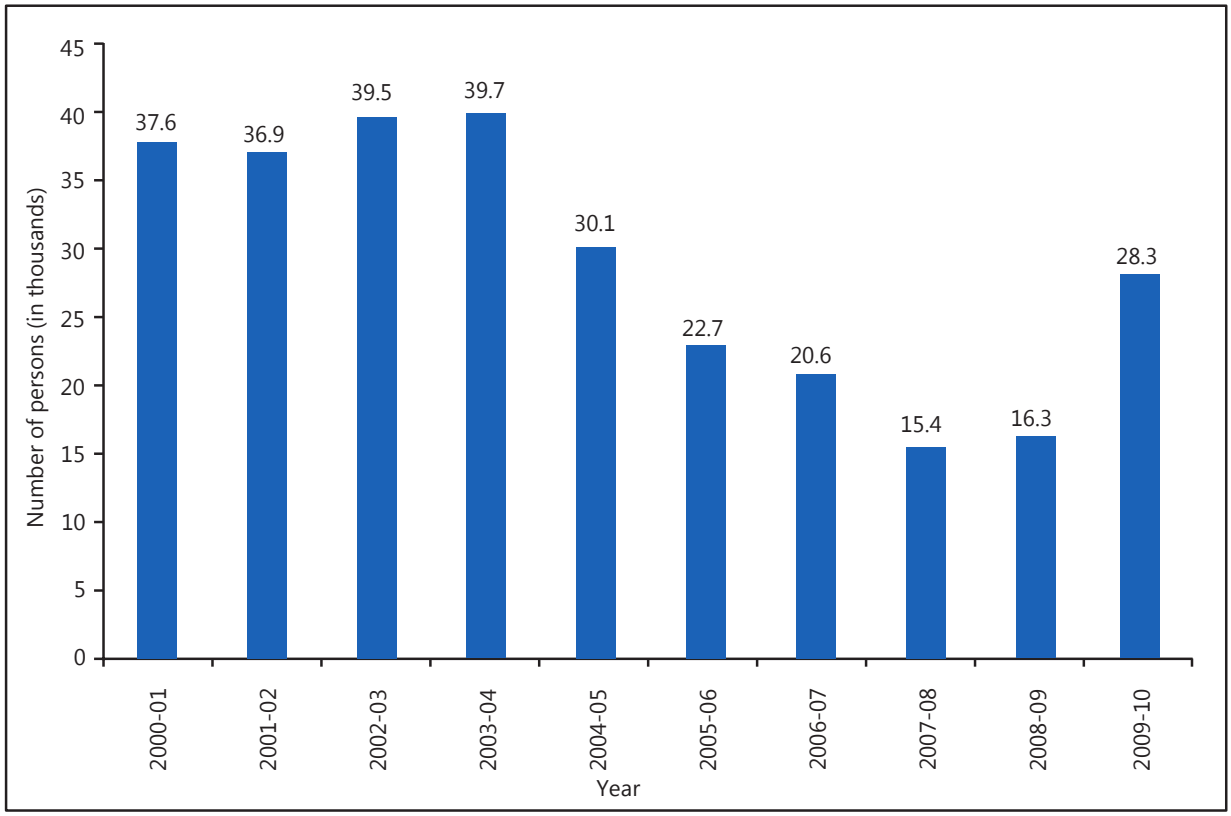


Figure 4.10: Production of Tassar

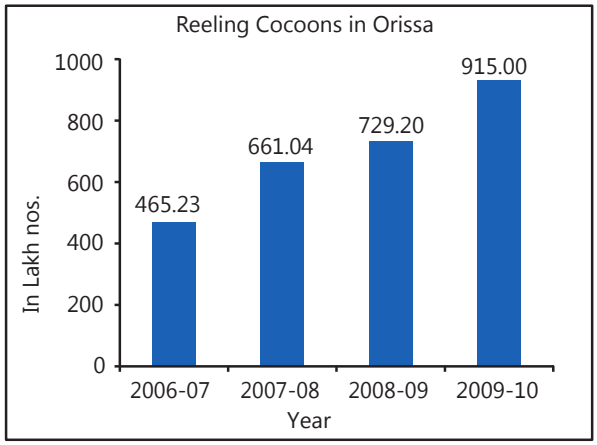
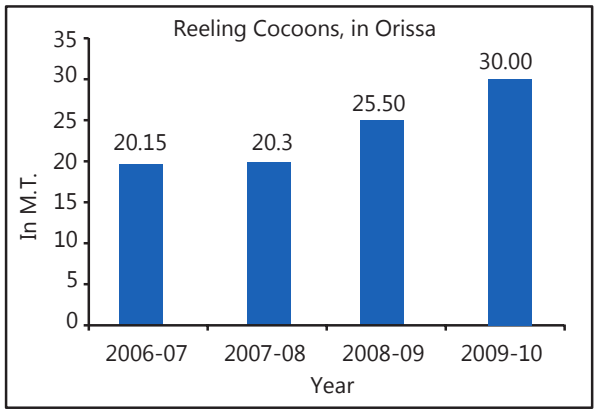


Figure 4.11: Production of Mulberry



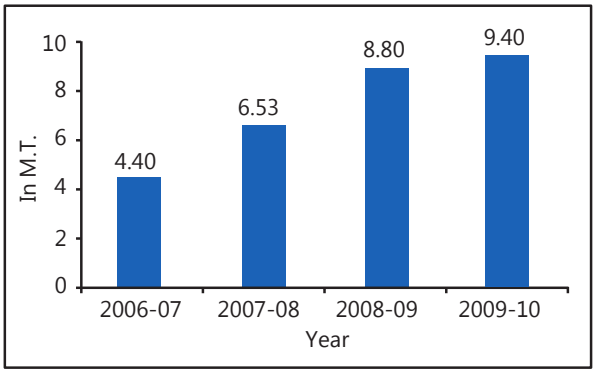
Salt

Salt is an important cottage industry in some coastal areas of Ganjam, Puri and Balasore districts. Although the value added by the salt industry is minuscule, this sector has good employment generating potential. Salt land is leased out to cooperatives and private sector firms by the Government of India, and the State Government. More details are given in Annexure 4.7. About 2/3rd of total salt production in Orissa is from the private sector. This is generally much lower than other states like Tamil Nadu and Gujarat.

Coir

This industry has an immense potential to provide employment in rural areas, particularly for women. During 2009-10, coconut cultivation was undertaken over an area of 52,493 ha and 3,192 lakh nuts were produced. At the end of 2009-10, 1,063 coir industries were operating in the State, including 210

Figure 4.12: Production of Eri Cut Cocoons in Orissa



set up during 2009-10. In the same year, 14,228 MT of coir products were produced, valued at Rs. 86.92 crore and providing employment to 8,982 persons. Out of 114 Registered Coir Cooperative Societies, only 30 were operational in 2009-10 with 7211 membership and produced 1,280 MT of coir products, valued at Rs. 92.44 lakh.

4.1.4 Exports

At the end of 2009-10, there were 344 exporters in Orissa and 2,259 industrial units including 907 small scale registered units. Nearly 8,510 samples were tested in the laboratories and Rs. 17.75 lakh of testing fees were collected in 2009-10. Figure 4.13 shows that the total value of exports from Orissa has been showing a rising trend. The export composition in terms of values during 2009-10 is

Figure 4.13: Value of Exports from Orissa to Foreign Countries

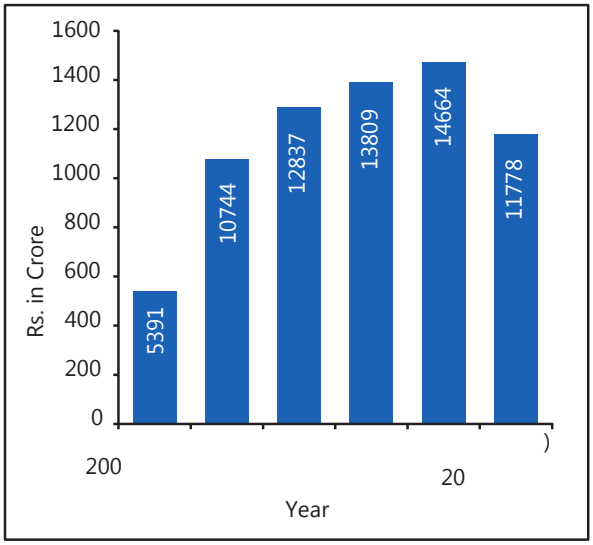
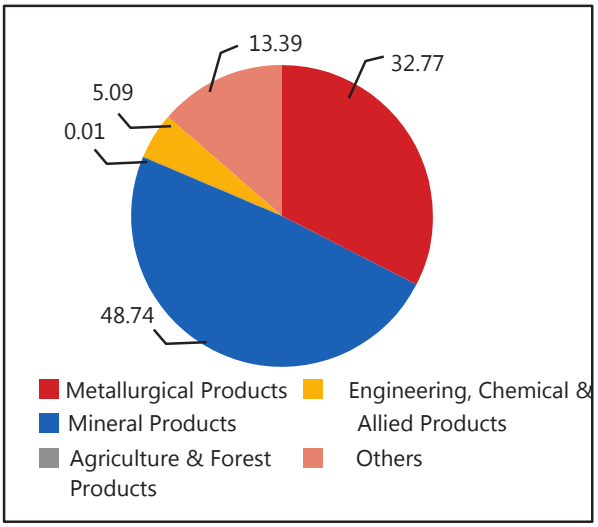


Figure 4.14: Composition of Exports from Orissa (2009-10)



shown in Figure 4.14. Mineral and metallurgical products constituted respectively 49 percent and 33 percent shares of exports from Orissa. Further details are given in Annexure 4.8. Exports of goods by items to foreign countries during 2009-10 are detailed in Annexure 4.9.

4.1.5 Public Sector Enterprises (PSE)

Public sector firms in Orissa are generally administrative and management units. They do not belong to the large-scale industry category. At the end of 2009-10, there were 60 government companies and four working statutory corporations. Of 60 government companies, 28 are operational and the rest are closed. The total investment in these 28 operational companies and 4 statutory corporations was Rs. 8,343.87 crore with Rs. 4,423.00 crore as equity and Rs. 3,920.87 crore as term loan. The list of 32 closed government companies is given in Annexure 4.10 and the list of profit making PSUs (24) and loss incurring ones (6) is given in Annexure 4.11.

4.1.6 Policy Initiatives

Several policy initiatives have been undertaken to promote industry in the State.

Orissa Industrial Policy Resolutions, 2001 & 2007

These resolutions have put in place a robust policy framework for industrial promotion and investment facilitation in the State. Though these resolutions have articulated several policy objectives, some specific ones are:

- To develop employment intensive sectors such as handicrafts, handlooms, khadi and village industries, coir and salt.
- To promote sectors such as IT/ITES, bio-technology, agro, marine products, food processing, tourism, textiles and apparel, and automotive industries, which offer maximum linkages for employment generation as well as exports.
- To arrest industrial sickness and promote revival and rehabilitation of potentially viable sick industries, especially in the MSME sector.
- To create awareness so that the MSME sector is able to respond to opportunities and challenges emerging under the World Trade Organisation (WTO) regime.
- To categorise ancillary and downstream industries as 'thrust sectors'
- To adopt a Cluster Development Approach for enhancing competitiveness among potential sectors.

Single Window Concept

This initiative aims at faster project clearance. The Orissa Industries (Facilitation) Act, 2004 has been enacted and the Orissa Industries (Facilitation) Rules, 2005 have been framed and issued with a view to ensuring single window clearance system.

Public-Private Partnerships (PPP)

This mode, popular throughout the country, is being encouraged in the State. Some of the initiatives to promote PPP projects in promoting industry and exports include: (i) establishment of an Info Park in Bhubaneswar, (ii) up-gradation of industrial infrastructure at Kalinganagar Industrial Complex through Orissa Industrial Infrastructure Development Corporation (IDCO) and user industries, (iii) development of Haridaspur-Paradeep Rail Link jointly by Rail Vikas Nigam Limited and user industries, (iv) promotion of Special Economic Zones (SEZs) at different locations, (v) establishment of a Bio-Tech Park, (vi) establishment of an International Convention Centre and IIT in Bhubaneswar, (vii) development of contact points like Shilpa Jyoti in IPICOL for large and medium projects and Shilpa Sathi in the Directorate of Industries, Orissa as well as in district industry centres for tiny and small units,

(viii) provision of 'escort services' at these contact points for interaction with various agencies and authorities, (ix) development of the second INFOCITY for establishments of IT industries in Bhubaneswar and for promotion of export oriented industrial units.

Public Enterprises Reforms

Orissa has taken several steps to initiate the process of public sector reforms. It restructured its power sector, sold the Charge Chrome Plant at Brahmanipal to TISCO and the Talcher Thermal Power Plant to NTPC. At the same time, the State aimed to protect the interest of workers who are adversely affected due to privatisation of State PSUs. Some such reforms and worker support schemes are outlined below:

(i) Privatisation/Disinvestment

The State Government has been pursuing a policy of selective privatisation / disinvestment of loss-making public and co-operative enterprises operating in non-core sectors. The prime objectives of the privatisation policy are: (i) to revive potentially viable loss-making enterprises, (ii) to safeguard the interest of the workers, and (iii) to create opportunities for generating further employment by catalysing such enterprises through private initiatives and energy. It has also identified a set of core enterprises, which will continue to be operated in the public sector. However, more autonomy has been granted to them, so that decisions are taken in a timely and efficient manner.

(ii) Model Voluntary Retirement/Separation Schemes

The State provided financial assistance for 21 days of ex-gratia for each completed year of service as well as gratuity and leave encashment to employees of the identified enterprises under the Voluntary Retirement Scheme (VRS) / Voluntary Separation Scheme (VSS). Financial assistance is also provided for meeting arrears, if any, under VSS. Under the Orissa Public Enterprise Reforms Programme (OPERP), 35,494 employees / workers of the State PSU and Cooperative Enterprises have been retired under VRS / VSS.

Social Safety Net

Under the Social Safety Net Programme (SSNP), 9,811 workers have been redeployed. Some workers have been offered alternative sources of livelihoods. As a part of the OPERP, project Rohini was set up to provide counselling and retraining to workers of PSUs who exited though VRS / VSS. The State Government has created the Orissa State Renewal Fund Society to further the objectives of these schemes.

Orissa State Renewal Fund Society

The State has setup the Orissa State Renewal Fund Society (OSRFS) to further the objectives of OPERP and continue with the momentum gained on public enterprise reform during two phases of OPERP. The society has a corpus of Rs. 50 crore with a tenure of five years till the end of March, 2014. An external agency, Deloitte, has been engaged to render management consultancy services to OSRFS and the Department of Public Enterprises and State PSU.

Corporate Governance Code for the State PSU

The Administrative Staff College of India, Hyderabad has developed the corporate governance manual for the State PSUs after number of rounds of consultations with Administrative Departments and PSUs. By introducing corporate governance in the State PSUs, the State Government intends to encourage greater transparency and accountability in their day-to-day operations and to stimulate their business performance.

Listing of PSUs on Stock Exchanges

The State has been encouraging various Public Sector Units to get listed on Stock Exchanges. This will make the managements of the listed entities more responsible to their shareholders. This move will also help profit-making PSUs to raise resources from the open market through public issues of shares and other financial instruments.

Assistance to Handicrafts and Cottage Industries

The State Government accords a high priority to Rehabilitation of Handicraft Artisans (RHA), promotion of handicraft enterprises and strengthening of cooperative societies in the sector. During 2009-10, 477 artisans were assisted under the RHA scheme and 73 artisans were assisted under the margin money assistance

scheme for setting up individual handicraft enterprises. In order to strengthen artisan based enterprises in the handicraft sector, 19 Handicraft Training Centres have been established and made functional. During 2009-10, 297 persons were trained in these centres, as against 280 persons in 2008-09. Furthermore, 1,511 artisans in different crafts have been trained under the Employment Mission and Self Employment Programmes. Rs.10 lakh has been sanctioned in favour of 7 handicraft cooperative societies for construction of work-sheds, installation of plants and machinery. Rs. 183.58 lakh has been sanctioned by the State Government for development of works of Handicraft Complex, Gandamunda as a Centre of Excellence and renovation of Utkalika. During 2009-10, 1,093 artisans participated in different exhibitions both inside and outside the State and sales turnover was around Rs. 2.36 crore.

Assistance to the Coir Industry

There are four departmental coir training centres in the State, in which 150 persons have attended training programmes. Of these, 92 have passed out and the rest are continuing. Action has been initiated to upgrade the State Coir Training and Design Centre, Teisipur, to an ITI level. Coir artisans were assisted to participate in different exhibitions/ melas/ festivals, like Parab at Koraput, Baliyatra at Cuttack and Beach festival at Puri. During 2008-09, about 67 participants in these exhibitions and sold coir products worth Rs. 62 lakh. It is proposed to assist ten societies and Self Help Groups to construct work-sheds to continue production throughout the year. Under the Marketing Development Assistance programme, Rs. 2.36 lakh has been sanctioned in favour of six co-operative societies. Sixty artisans selected from the developed coir clusters visited Kerala on an exposure tour for acquiring knowledge on improved technology in making coir products.

Assistance to the Salt Industry

A model salt farm has been established in Ganjam at a project cost of Rs. 10.80 lakh. The first scraping of this farm commenced in 2008 and it produced approximately 30 MT of salt. The construction work of one storage godown at an estimated cost of Rs. 6.98 lakh has commenced at this salt factory. In order to improve living conditions of salt workers, the Government of India has introduced the Namak Mazdoor Awas Yojana. The cost of each house under this programme is Rs. 50,000 including the infrastructure facility. As per the revised guidelines, the shares of the Centre and the State are in the ratio 90:10. It has been proposed to construct 298 dwelling units for salt workers. Two hundred thirty units have been completed by the end of 2009-10.

Assistance to the Handloom Sector

The State Government has laid emphasis on the development of the handloom sector and improvement of socio-economic conditions of weavers. Various schemes have been implemented by the State and Central Governments. Some of these are outlined below:

- Interest subsidy on NABARD loan to Primary Weavers' Co-operative Societies (PWCSs): During 2008-09, the State Government provided Rs. 97.94 lakh to 359 weavers' cooperative societies.
- Promotion of handloom industries: This is a continuing State plan scheme with expanded activities including Special Package for Handloom Weavers, announced by the Hon'ble Chief Minister. During 2009-10, Rs. 1,087.88 lakh was provided, and utilized, under this scheme.
- Capacity building through training and technological intervention: This scheme was launched in 2007-08. During 2009-10, Rs. 4.40 lakh was provided for installation of improved machinery in 22 common facility centres in Bargarh district to facilitate higher efficiency in pre-loom process.
- Self-Employment Programme: In order to provide regular and sustainable employment for daily livelihood of weavers as well as to develop their social and economical status, this programme offers skills up-gradation training in weaving, tie and dye and designing. During 2009-10, 16 training programmes for training 320 beneficiaries have been completed at a cost of Rs. 25.90 lakh.
- Cluster Development Programme: This is a centrally sponsored scheme introduced in 2007-08. In 2009-10, 8 clusters have been sanctioned at a project cost of Rs. 476.31 lakh. Rs. 145.66 lakh has been released.
- Group approach: Weavers who are not covered under cluster development programmes are

benefited by a group approach scheme. During 2009-10, 29 proposals involving Rs. 197.65 lakh have been sanctioned and Rs. 175.76 lakh has been released in the first phase.

- Marketing incentives: Rs. 462.52 lakh has been sanctioned and released towards such incentives in favour of 345 PWCS and three apex organisations.
- Marketing and Export Promotion Scheme: This is a centrally sponsored scheme introduced in 2007-08. Assistance is provided for development and marketing of exportable products, by way of participation in international exhibitions and buyer-seller meets. During 2009-10, 23 district level exhibitions, one special Expo at Puri and a National Expo were conducted. Handloom fabric worth Rs. 955.30 lakh was sold.
- One-time rebate of 10 percent on the sale of handloom clothes: This central scheme is in place since 2006-07. Under this scheme, 10 percent rebate is given to handloom agencies on the sale of handloom products during festivals for a period of 128 days in a year. During 2009-10, Rs. 639.24 lakh was sanctioned and Rs. 100.19 lakh was released in favour of 443 PWCS and 2 apex organisations.
- Health Insurance Scheme: This is one of the welfare schemes for handloom weavers, implemented by the Government of India in collaboration with ICICI Lombard General Insurance Company Ltd. A weaver family (self, wife and two children) can avail medical facility upto Rs. 15,000 by paying a premium amount of Rs. 980.30. For this scheme, the Central Government provides Rs. 809.10, the State Government contributes Rs. 129.20 and balance Rs. 50.00 is borne by the beneficiary. During 2009-10, 50,677 handloom weavers have been enrolled under this scheme. Cashless benefits worth Rs. 431.31 lakh to 2.23 lakh weavers, Rs. 95.92 lakh reimbursement benefit to 3,573 weavers for out-patient services and Rs. 50.62 lakh cash-less benefit towards hospitalisation to 887 weavers in empanelled IPD have been provided.
- Mahatma Gandhi Bunakar Bima Yojana: This is another weaver's welfare scheme, being implemented by the Central Government in collaboration with LIC of India. Under this scheme, a weaver can get a benefit of Rs. 60,000 on natural death, Rs. 1.50 lakh on accidental death/total disability and Rs. 75,000 on partial disability. Besides, students scholarship to the children of enrolled weavers who are members, studying in classes IX to XII @ Rs. 600/- per six months is being provided. During 2009-10, 30,690 weavers were enrolled and 234 weavers have benefitted, with a total claim of Rs. 145.30 lakh towards natural and accidental deaths. Similarly, 9,502 children of weaver families have been provided scholarships worth Rs. 73.82 lakh under the Sikhya Sahayaka Yojana.

Support to the Textile Sector

At present, seven co-operative spinning mills, one ginning unit and ten powerlooms exist under the Orissa State Co-operative Spinning Mills Federation Ltd. Out of these, one spinning mill was privatised in 1993. The production of the 6 cooperative spinning mills and eight powerloom societies has been closed since long. These units are in the process of privatisation / liquidation. The State has liquidated ten Orissa State Power Looms Weavers Servicing Societies and transferred ten power looms to SPINFED, a semi-government organisation.

Assistance to the Sericulture Sector

The State and Central Governments promote sericulture as a sustainable livelihood programme. During 2009-10, Rs. 504.68 lakh was received from the Central Silk Board under the Catalytic Development Programme. Fifty tassar seed rearers have been assisted for procuring and rearing equipment. Four hundred and forty bioltine mulberry rearers have been assisted towards enhancing productivity of mulberry cocoons and 100 farmers were assisted for constructing eri rearing houses. Several other schemes have been implemented. These schemes include the following programmes and support:

- During 2009-10, Rs. 0.57 crore was sanctioned and utilised under the State plan scheme for the promotion of sericulture. About 1,094 mulberry rearers, 16,343 tassar rearers and 2,250 eri rearers benefited.
- The State Government provides subsidy to the Orissa Cooperative Tussar and Silk Federation Ltd. At present, 62 primary Tussar Rearers' Cooperative Societies, 36 Primary Mulberry Rearers' Cooperative Societies and one

Primary Eri Rearers' Cooperative Society are affiliated to OCT & SF / SERIFED Ltd. During 2009-10, 3,000 rural tribal tassar, mulberry and eri rearers benefited from his scheme.

- To strengthen SERIFED and to provide technical support to its primary tassar, mulberry and eri rearers cooperatives, Rs. 1.50 crore has been provided during 2009-10.
- A micro project for development of sericulture is being implemented in Udayagiri and Mohana blocks of Gajapati district during the 11th Plan period. In 2009-10, Rs. 1.00 crore was been released and 100 new beneficiaries were assisted under the project.

Prime Minister's Employment Generation Programme (PMEGP)

This centrally sponsored scheme provides credit-linked subsidy and is aimed at generating employment opportunities through establishing micro enterprises in rural and urban areas. It is implemented through: (a) Khadi and Village Industries Commission (KVIC), (b) Khadi and Village Industries Board (KVIB), and (c) District Industries Centres (DIC). The maximum cost of a project admissible in the manufacturing sector is Rs. 25 lakh and in the business / service sector, it is Rs.10 lakh. During 2009-10, against the target of Rs. 11.79 crore fixed for DICs as subsidy, Rs. 15.42 crore was utilised and against the physical target of 982 units, 891 units got subsidy. Annexure 4.12 gives details under PMEGP in Orissa.

Ancillary and Downstream Industries

The Directorate of Industries coordinates with large and medium industries for the promotion of ancillary and downstream industries. The Central Public Sector Undertakings (Cusps) operating in the State procured spares and consumables worth Rs. 232 crore from local SSI units, out of a total purchase of Rs. 421.67 crore during 2009-10. The list of nine PSUs along with items identified for ancilliarisation and SSI units granted ancillary status are described in Annexure 4.14.

4.1.7 Major State-level Institutions

Orissa Industrial Infrastructure Development Corporation (IDCO)

IDCO has been entrusted with the responsibility of creating infrastructure facilities in industrial estates across the State. This is an ISO 9001 and ISO 14001 certified corporation and has established and managed 86 industrial estates in Orissa. It is also the nodal agency for identifying and acquiring land from the Government and private parties at strategic locations for industrial promotion. Land so acquired is allotted for industrial and infrastructure projects.

During 2009-10, over 4,700 acres of land were allotted to 28 industrial units. The corporation made a turnover of Rs. 625.26 crore with net surplus of Rs. 63.35 crore and undertook the following major activities:

- IID Centre at Somanathpur in Balasore district has been completed and made operational over 176 acre of land with central assistance.
- Urban Haat at Puri has been completed with an expenditure of Rs. 303.62 lakh. The Haat has been designed, keeping in mind, the ethnic cultural heritage of the State.
- Under the IIU scheme, the proposal for developing plastic, polymer and Allied Clusters at Balasore has got approval of the Government. of India.
- An agreement has been signed with M/s. Forum Project Pvt. Ltd. for establishment of an IT and commercial complex over 3.12 acres of IDCO land in the civil township of Rourkela.
- An MoU has been signed between IDCO and NALCO to develop an ancillary and downstream aluminium park in over 268 acres of land close to the NALCO smelter plant.
- A sector-specific SEZ for IT/ITES/BPO industries at Bhubaneswar named info valley is being developed by IDCO over 500 acre of land in PPP mode.
- Government of Orissa have decided to establish a Mega Food Park near Bhubaneswar over 282 acre in PPP mode. IDCO is the Nodal agency for establishment of this park. A Government of India grant up to Rs. 50 crore will be available for the project.

Industrial Promotion and Investment Corporation of Orissa Ltd. (IPICOL)

IPICOL is a key promotional institution with the main objective of accelerating the pace of industrial development and promoting large and medium scale industries in Orissa. It is also a State Level Nodal

Agency for the industrial sector. The role of IPICOL as a financial institution has undergone a change with an increasing focus on promoting and facilitating investors. It functions as the technical secretariat of Team Orissa, which is a broad institutional framework of the State Government engaged in industrial facilitation and investment promotion.

IPICOL is the single-point contact for investors with an investment of Rs. 50 crore and above. It receives a combined application form (CAF) from an investor, and, after due analysis places it before the State Level Single Window Clearance Authority (SLSWCA). Highlights of IPICOL activities in 2009-10 are given below:

- IPICOL signed MoU with Central Bank of India on 23.10.2009 for credit flow to MSME sector in coming 5 years, initially projected to be Rs. 1,200 crore. An amount of Rs. 800 crore has been sanctioned by October, 2010.
- During the current year, IPICOL has received 63 CAF with proposed investment outlay of Rs. 297,509 crore.
- During 2009-10, 36 projects involving Rs. 198,167 crore and 11 projects involving Rs. 88,257 crore were cleared by the State Level Single Window Clearance Authority (SLSWCA) and High Level Clearance Authority (HLCA) respectively.
- IPICOL has decided to set-up ITI in "No ITI Blocks" with support from corporate houses in their project areas to impart technical education / training to youth for enhancing their employability.
- Conducted 3 workshops/campaigns on rice milling in three districts for creating awareness among miller / farmers.
- Participated in several workshops / seminars and put-up common stalls in Asian Metallurgy, 2009 held at Mumbai, 3rd India Steel Summit at New Delhi, Food & Technology Expo, Auto Expo and Indian International Trade Fair, 2009 at New Delhi.
- Participated in Enterprise Orissa, 2009 and Investors meet at Bhubaneswar.

Industrial Development Corporation of Orissa Ltd. (IDCOL)

IDCOL supports some large and medium scale industries in the State sector. It has set up 15 industrial units in the State. As a part of the public sector reforms policy of the Government, sick subsidiary companies were disinvested or assets were sold. Presently, it continues as the holding company of the following companies:

- IDCOL Kalinga Iron Works Ltd. (IKIWL) at Barbil, engaged in manufacturing foundry grade pig iron and cast iron spun pipe.
- IDCOL Ferro Chrome and Alloys Ltd. (IFCAL) at Jajpur Road, which produces high carbon ferro chrome (HCFC).
- IDCOL Software Ltd. at Bhubaneswar, which acts as one of the nodal IT agents of the Government.
- Konark Jute Limited, Dhanamandal, engaged in jute products.
- During 2009-10, the Corporation exported 28,100 MT of chrome concentrate valued at Rs. 24.21 crore.

Directorate of Industries

Its main objective is to promote the growth of small-scale industries (SSIs) in the State. It works through 31 district industry centres (DIC) and administers the industrial policy of the State. It monitors various clearances and approvals in a time bound manner and maintains an industrial data bank.

Orissa Small Industries Corporation (OSIC)

The OSIC is mandated to assist SSI units in Orissa. Its major activities are as follows:

- Raw Material Assistance Scheme: OSIC procures various types of raw materials for SSI units through twelve raw material depots spread all over the State. Presently, it deals with raw materials like iron and steel, TISCON bars, aluminium ingots, plastics, bitumen and coal and has appointed 68 dealers to spread its TISCON bar business. The Corporation achieved a turnover of Rs. 266.10 crore during 2009-10.
- Marketing Assistance Scheme: It provides product and project marketing assistance to small-scale units and participates in tenders and liaisons with public and private sectors for procurement of bulk orders. Its main marketing products include agricultural implements and dual desks. The Corporation achieved a turnover of Rs. 76.64 crore during 2009-10.
- Sub-Contract Exchange Scheme: The Corporation provides marketing support to SSI

units through its Contract Exchange Scheme. In 2009-10, it achieved a business of Rs. 3.08 crore under this scheme.

Orissa State Co-operative Handicrafts Corporation Ltd. (OSCHC)

The corporation is engaged in strengthening the production base, enlarging marketing opportunities, encouraging exporters and introducing new designs and technologies in the handicraft sector. It provides assistance to primary handicraft co-operative societies, voluntary organisations and individual artisans by improving marketability of their products. It procures a wide variety of handicraft products and markets them both inside and outside the country through its sales outlets such as Utkalika.

Orissa Khadi and Village Industries Board (OK&VIB)

OK&VIB promotes khadi and village industries within the State with financial support from the Khadi and Village Industries Commission. The board has provided financial assistance for setting-up KVI units to 1,865 co-operative societies including 337 artisan multipurpose industrial co-operative societies and extended financial support to 358 individuals under Consortium Bank Credit Scheme through Regional Rural Banks.

Gramodyog Rozgar Yojana, also known as Rural Employment Generation Programme (REGP), is also implemented in the State. Financial assistance of Rs.29.29 crore in the form of margin money was provided to 3,842 units under REGP up to 2007-08, creating employment for 36,259 individuals. During 2009-10, articles worth Rs. 49.61 crore were produced and articles worth Rs. 63.04 crore were sold by 1,081 units. This resulted in full time employment for 5,259 persons and part time employment for 2,069 persons.

The Khadi and Village Industries Commission introduced the "Prime Minister's Employment Generation Programme" (PMEGP) from 2008-09. The scheme has been implemented in the State through KVIC, OK&IV and District Industries Centres. OK&VIB has released margin money of Rs. 11.84 crore to 607 units. Out of these, 114 units produced articles worth of Rs. 2.79 crore and sold articles worth of Rs. 4.60 crore during 2009-10.

Orissa State Financial Corporation (OSFC)

OSFC the premier financial institution, caters to the needs of industrial development in the State and provides financial assistance for setting up tiny, small and medium scale industries with support from institutions like IPICOL and commercial banks. It extends financial assistance for expansion, diversification, modernisation and revival of potentially viable units. By the end of 2009-10, it sanctioned loans of Rs. 1,306.27 crore to 28,209 units and disbursed Rs. 1,305.12 crore to 28,207 units. It rehabilitated 667 sick units. In 2009-10, the corporation earned a profit of Rs. 180.02 lakh.

Directorate of Export Promotion and Marketing

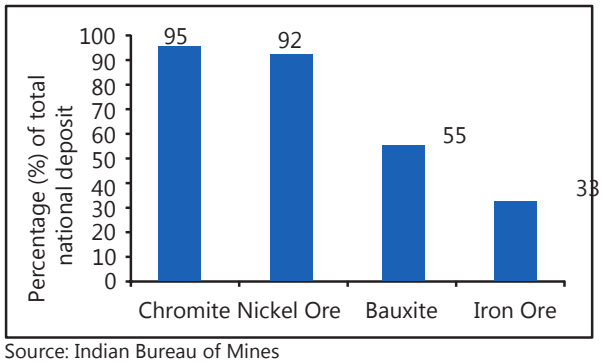
The Directorate has been declared as the nodal agency for providing marketing support to registered and rate contract holding industrial units and rendering technical assistance for promoting exports. Export promotion is made through the following activities:

- Creating infrastructure like an Export Promotion Industrial Park (EPIP)
- Providing overseas marketing information and overseas trading enquiries to potential exporters
- Liaisoning with Central Government / State Government departments and export promotion agencies to sort out difficulties encountered by exporters
- Presenting export awards annually to best exporters with a view to generating competitiveness among them.
- Conducting workshops and seminars in collaboration with national level institutions like IIFT, DIFT, MSME, ECG and EPCS.
- Assisting potential exporters in providing the know-how to enter the export market.

4.2 Mining and Quarrying

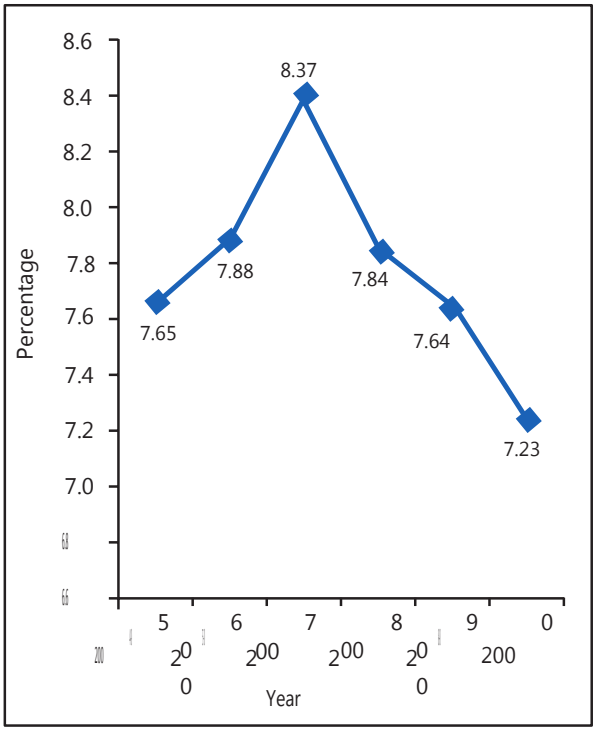
Endowed with vast mineral deposits, Orissa occupies a prominent place in the minerals map of India both in term of deposits and production Four major minerals deposits in the State are chromite, nickel, bauxite and iron, as shown in Figure 4.15. Orissa has other varieties of minerals and ores like coal,

Figure 4.15: Major Mineral Deposits in Orissa, 2009-10



Source: Indian Bureau of Mines

Figure 4.16: Share of Mining & Quarrying Sector in Orissa's Real GSDP, 2004-05 to 2009-10



dolomite, graphite and limestone. Annexure 4.16 compares major mineral deposits in Orissa with other states.

In recent years, the mining and quarrying sector has been contributing more than 7 percent towards Orissa's real GSDP at 2004-05 prices. The contribution of this sector to Orissa's real GSDP for the period from 2004-05 to 2009-10 is shown in Figure 4.16.

Figure 4.17: Total Value of Mineral Production of Major States, 2009-10

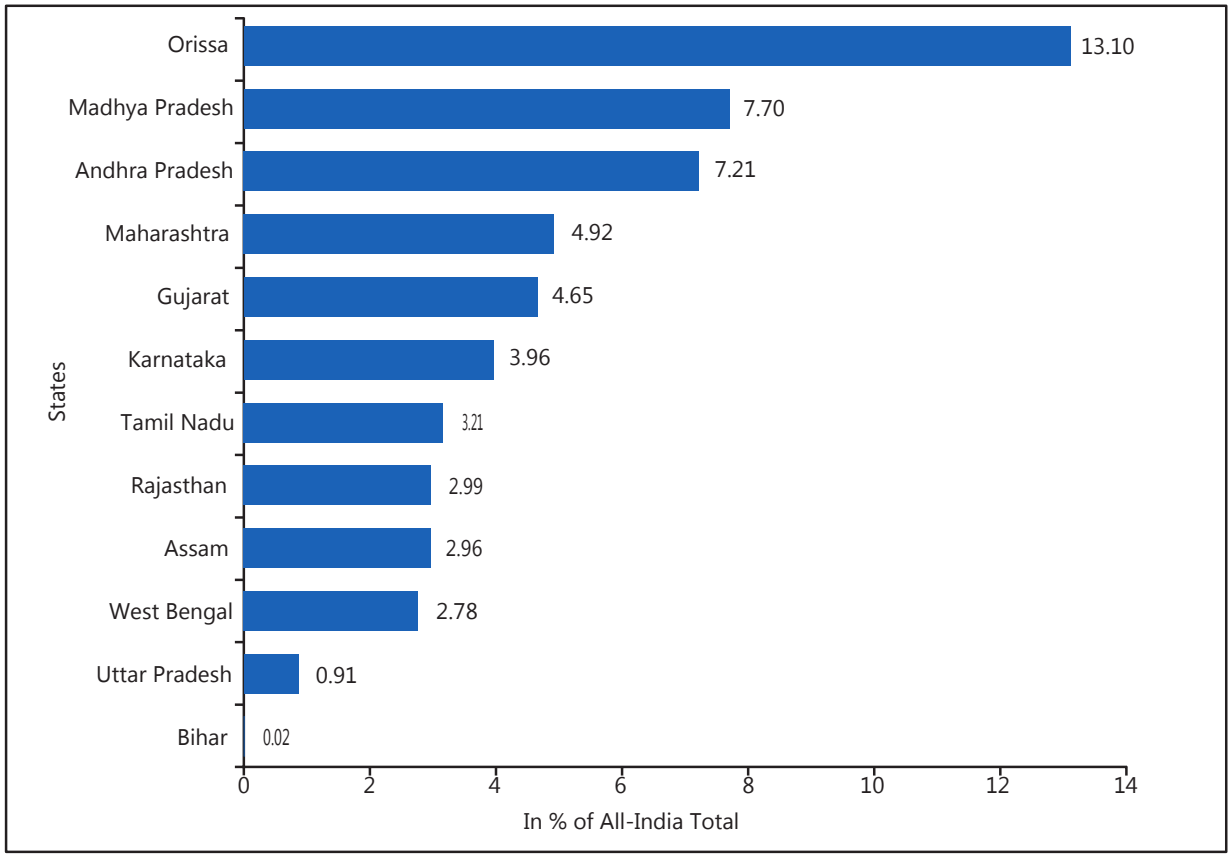
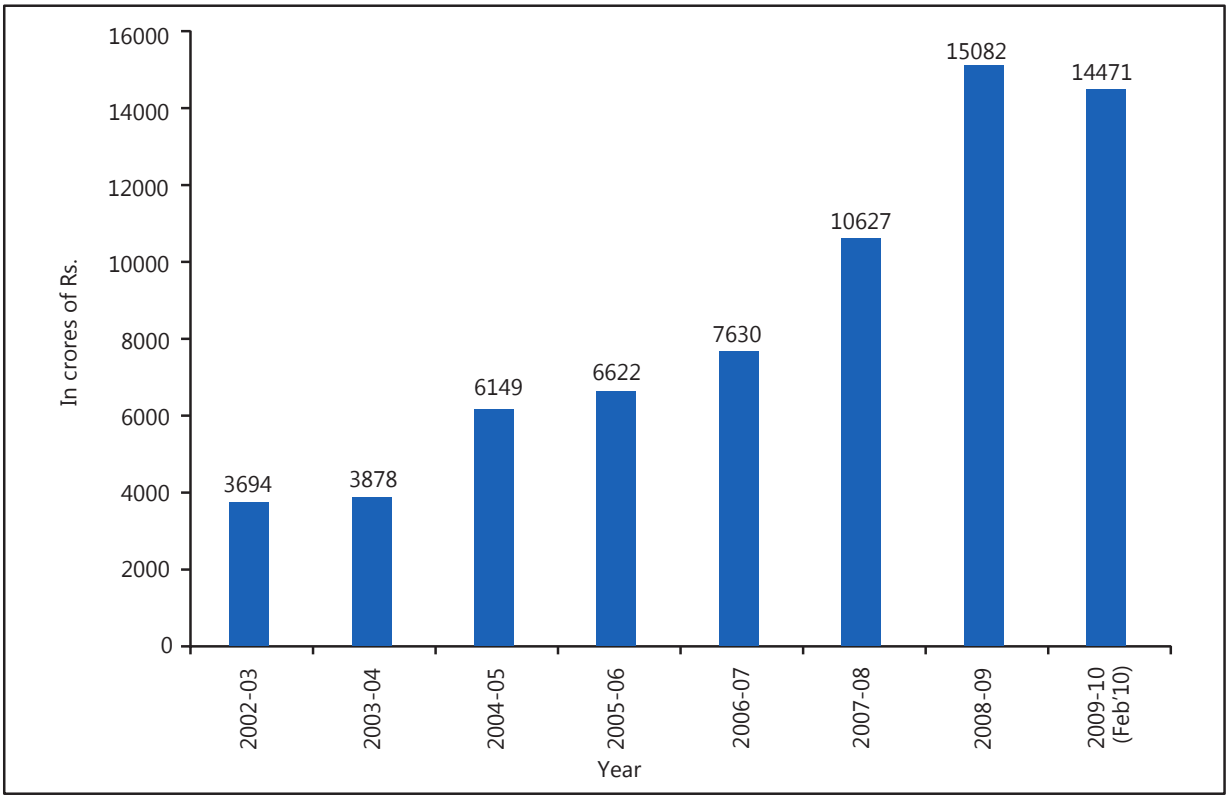
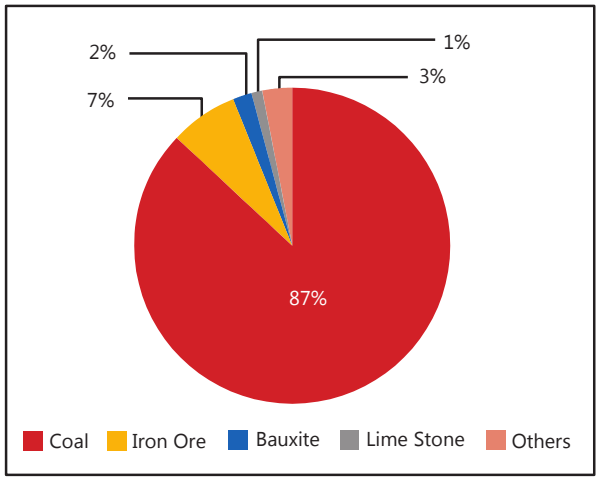


Figure 4.18: Total Value of Minerals Production in Orissa



In terms of value of output of minerals, Orissa ranks highest in India in recent years and its share has been increasing. Figure 4.17 compares Orissa with other major states in 2009-10 in terms of percentage share of total value of mineral output in India. Figure 4.18 depicts the growth of this sector in terms of total value of mineral production for the period from 2002-03 to 2009-10 (part).

Figure 4.19: Mineral Reserves in Orissa, 2009-10



4.2.1 Deposits, Production and Exports of Minerals

Within the State, coal constitutes the lion's share (87%) of all mineral deposits, followed by iron ore and bauxite, as may be seen from Figure 4.19. Further details are given in Annexure 4.19, while Annexure 4.20 presents the rates of annual extraction of mineral reserves.

District-wise break-up of mineral extraction activities is illustrated in Figure 4.20 and reported in Annexure 4.21. It may be observed that 55.77 percent of coal has been extracted in Angul district and the rest from Jharsuguda, Sundargarh and Sambalpur districts. Iron ore extraction is mostly confined to Keonjhar district which accounts for 72.42 percent of total extraction, followed by Sundargarh (25.13%). Most bauxite mining takes place in Koraput district.

Annexure 4.22 shows data on production and value minerals from 2000-01 to 2009-10, while Annexure 4.23 lists the break-up of production and value of different minerals from 2007-08 to 2009-10. Not only extraction or production, the exports of minerals and ores from the State have been increasing,

Figure 4.20: District-wise Break-up of Extraction of Major Minerals in Orissa, 2009-10

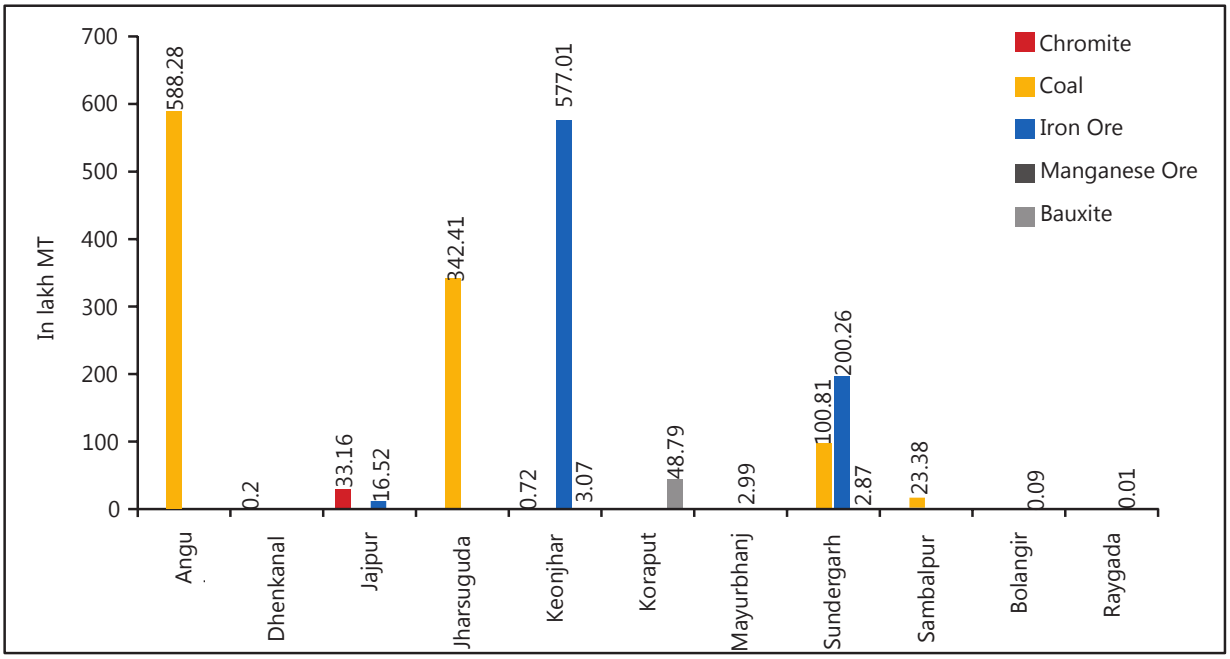


Figure 4.21: Total Exports of Minerals & Ores, 2004-05 to 2009-10

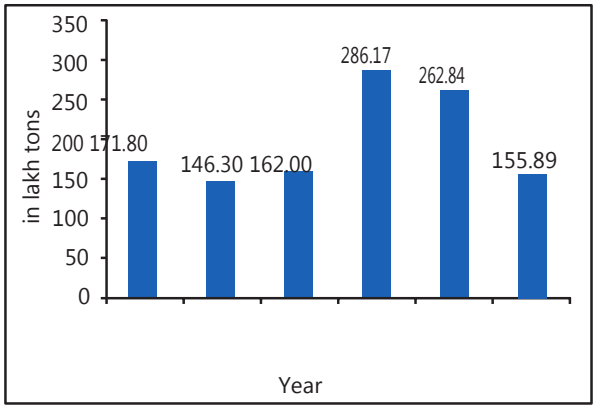
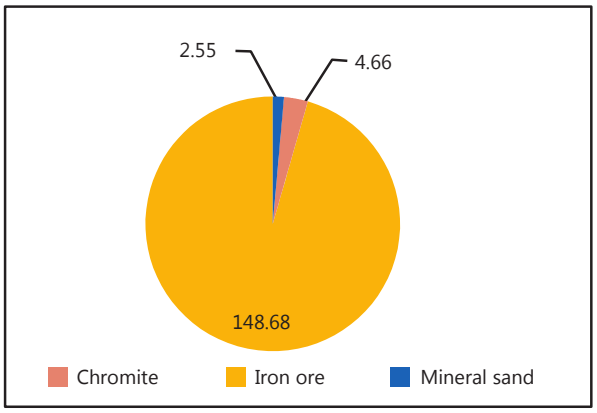


Figure 4.22: Composition of Exports of Minerals & Ores, 2009-10

(in lakh MT)



although not steadily as may be seen from Figure 4.21. Iron ore is the most important mineral in the export basket of all minerals. Its share in total exports of minerals stood at 95.4 percent in 2009-10, as may be seen from Figure 4.22. The domestic use and export of total production of minerals and ores has also been examined. Analysis suggests that the division of total production into domestic use and exports has not varied much.

4.2.2 Employment in Mining Sector

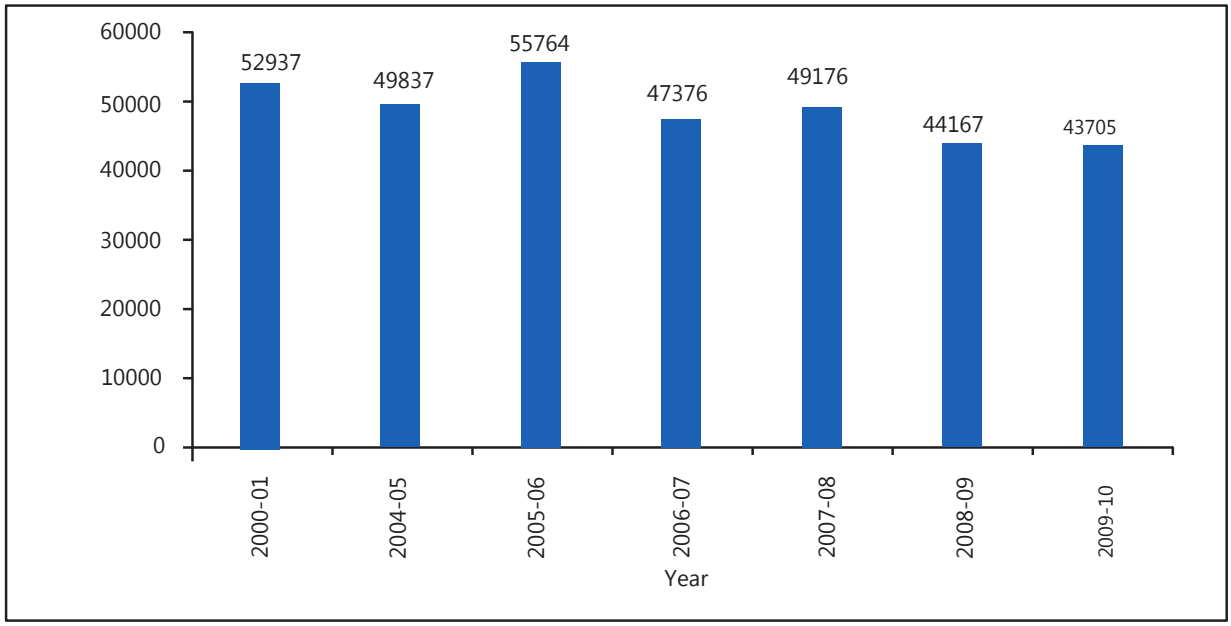
Mining and quarrying provides employment to different sections including tribals. Annexure 4.26 reports the number of workers directly engaged in various mining activities in different years. This is also graphed in Figure 4.23.

The sector has been increasingly employing labour-saving and capital-intensive production techniques and technology over the years. Total employment in the sector has been decreasing over the years, as this sector has become more mechanised. Further, as one would expect, most workers are engaged in the iron ore and coal sectors, as may be seen from Figure 4.24.

4.2.3 Mining Leases

There were 597 mining leases in 2009-10,

Figure 4.23: Direct Employment in the Minerals Sector in Orissa, 2000-01 to 2009-10



covering an area of 95.96 thousand ha. Of these, 330 leases over an area of 70.52 thousand ha were in operation. Mineral-wise leases, both working and non-working, in Orissa during 2009-10 are listed in Annexure 4.27. Figure 4.25 depicts all leases and operational leases in terms of area for the period 1990-91 to 2009-10. Given that the total area has decreased while the production of minerals and ores have increased steadily, it follows that better technology is being used and mining has become a more technology and capital intensive activity.

4.2.4 Orissa Mining Corporation (OMC)

Established in 1956, the Orissa Mining Corporation Limited (OMC) is today the largest State public sector unit in the country's mining sector. In 2009-10, out of 597 mining leases, 35 leases covering an area of 18,396 ha have been sanctioned to OMC. Of these, 5 were in operation, covering an area of 5,100 ha. Mineral-wise numbers of leases held by OMC by the end of 2009-10 are given in Annexure 4.29. The production of minerals by OMC has rapidly grown over the years. Its total production in 2009-10 is about double the amount in 2005-

Figure 4.24: Composition of Employment by Mineral Type (%)

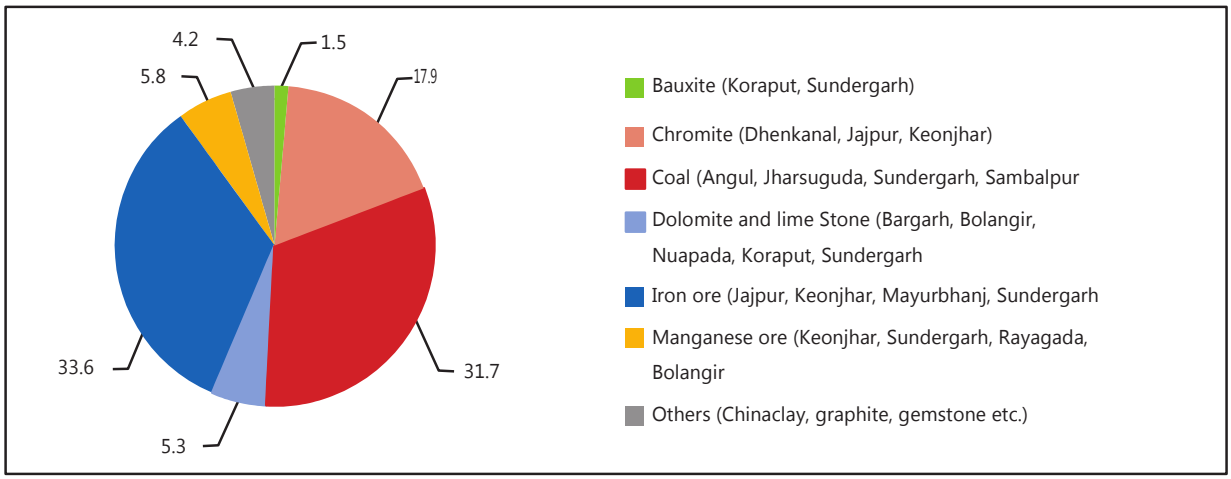
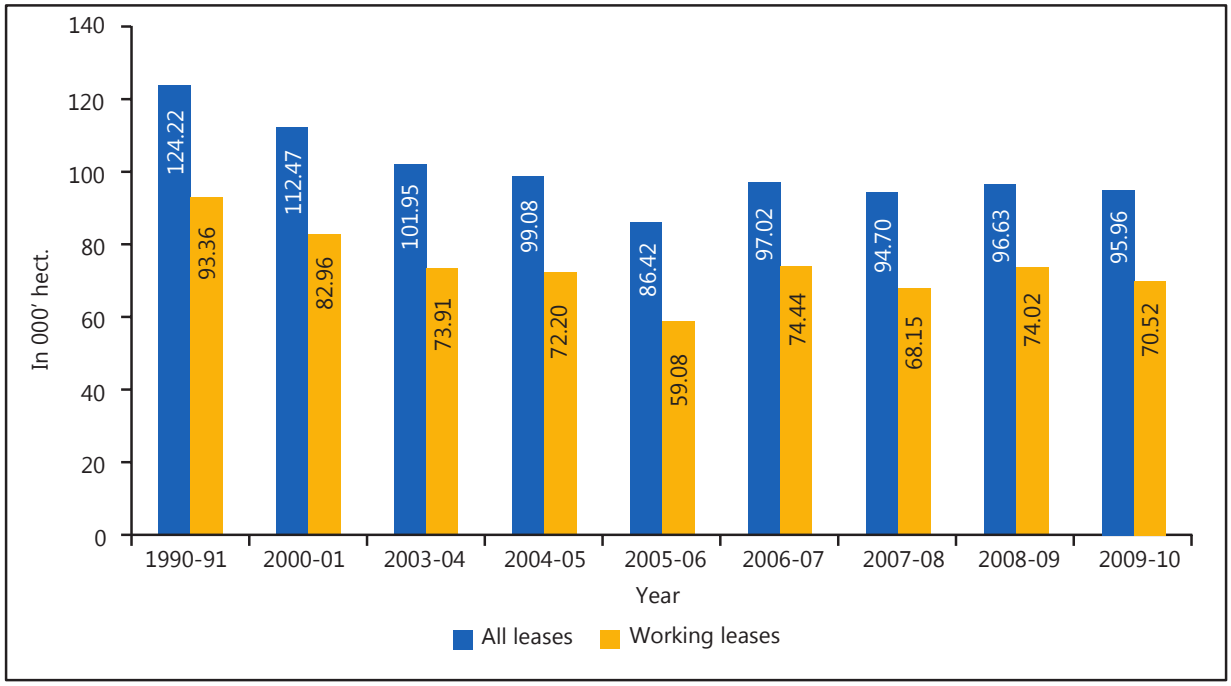


Figure 4.25: Leased Area, 1990-91 to 2009-10



06. Iron ore constitutes the major share of its total mineral production. In 2009-10, this share was about 93 percent.

OMC has considerably increased its internal sales and export of different minerals over the years. During 2009-10, it sold 2.39 lakh MT of ores/ minerals worth Rs. 1,577.85 crore. Of these, 62.31 lakh MT minerals / ores valued at Rs. 97.27 crore were exported. The turnover of OMC during 2009-10 was Rs. 1,578 crore, and it earned profits of Rs.1,089 crore before tax. Annual turnover, profit and dividend paid to the State Government from 2003-04 to 2009-10 are given in Annexure 4.32.

4.2.5 Geological Surveys and Explorations

The Directorate of Geology undertakes mineral investigation programmes under the overall direction of the State Geological Programming Board. During 2009-10, it undertook sixteen mineral investigations for minerals like coal, iron ore, bauxite, limestone, diamond, heavy minerals in the beach sand and including geophysical and geochemical investigations. Their major observations for 2009-10 are as follows:

- Iron and manganese investigations succeeded in locating 25 small iron ore bodies and 14 manganese occurrences in part of Sundergarh and Keonjhar districts and assessed availability of 17.13 million tons of iron ore and 0.46 million tons of manganese ore.
- Availability of 12.28 million tones of bauxite has been estimated in 8 small plateaus of Koraput district. Besides 17 small plateaus have been explored and identified for bauxite.
- Exploration for primary source of diamond in Kalmidadar area of Nuapada district establishes a thickness of the diamondiferous olivine lamproite body to be available between 4.6 m to 20.1 m.
- Exploration for industrial minerals like limonite and garnet in Puri district establishes a possible resource of 4 million tones of heavy minerals.

Orissa has emerged as a major source of coloured gemstones which occur in diverse geological milieux in the Eastern Ghats Granulites belt. Exploration efforts by the Orissa Mining Corporation and Directorates of Mines and Geology have resulted in identifying 52 gem belts with 16 mining blocks in western districts of Orissa. A sophisticated gemstone laboratory has been set up at Bhubaneswar with UNDP assistance.

ANNEXURE 4

Annexure 4.1: Number of Registered Factories, Value of Output and Value Added by the Organised Manufactures Sector

1985-86	1,922	423	160	1339	144,671	1993.25	1492.91	105.21	395.13
1986-87	1,972	506	205	1261	139,810	2343.18	1774.38	128.81	439.99
1987-88	1,981	595	150	1236	156,500	2882.55	2239.55	190.83	452.17
1988-89	2,060	611	114	1337	156,265	4276.49	3138.28	327.40	810.81
1989-90	2,025	515	171	1339	156,404	4821.94	3329.21	325.83	1166.90
1990-91	2,130	608	169	1353	155,018	4589.62	3328.33	326.83	934.46
1991-92	2,237	645	150	1442	166,462	6544.02	4855.72	420.95	1267.35
1992-93	2,124	615	122	1387	176,092	7631.03	5759.41	480.86	1390.71
1993-94	2,263	669	126	1468	180,343	8234.57	5999.66	449.66	1788.25
1994-95	2,346	719	80	1547	189,480	9827.19	7190.07	506.87	2129.55
1995-96	2,290	665	84	1541	186,538	11843.13	8573.19	679.05	2590.89
1996-97	2,358	698	120	1540	177,860	12235.08	9290.84	719.90	2224.34
1997-98	2,423	822	135	1466	178,925	14253.90	10687.61	1395.21	2171.08
1998-99	2,136	570	240	1540	140,087	10799.27	8033.65	790.02	1975.50
1999-00	2257	NA	NA	1615	147,452	11763.21	8535.10	632.25	2595.86
2000-01	2253	NA	NA	1665	128,662	13242.67	10163.24	727.75	2351.68
2001-02	2588	NA	NA	1709	116,434	14113.82	10654.16	910.41	2549.25
2002-03	2798	NA	NA	1683	120,367	15618.84	12465.72	798.11	2355.01
2003-04	2838	NA	NA	1687	125,166	18643.66	13606.49	1205.63	3831.54
2004-05	2899	NA	NA	1749	145,747	23294.00	15899.22	1349.36	6045.42
2005-06	2942	NA	NA	1862	144,554	27977.11	20230.76	1458.86	6287.49
2006-07	3046	NA	NA	1906	162,558	36641.60	25943.87	1675.02	9022.70
2007-08	3109	NA	NA	1823	184,886	48013.83	32504.72	1997.61	13511.50
2008-09	3243	NA	NA	1930	213534	69532.92	50337.61	2521.25	16674.06

Annexure 4.2: SSI/MSME Industries in Orissa

1995-96	49589	2507	74.82	13019
2000-01	66206	3676	153.18	18115
2001-02	70125	3919	165.23	16582
2002-03	74133	4008	155.14	16320
2003-04	78568	4435	170.13	20547
2004-05	83075	4507	245.59	21898
2005-06	87861	4786	270.44	25142
2006-07	92417	4556	271.14	20839
2007-08	97127	4710	295.51	23301
2008-09	101933	4806	227.92	20996
2009-10	106840	4907	292.34	23195

Source: Directorate of Industries, Orissa

Annexure 4.3: District-Wise Break-up of MSMEs, 2009-10

Bargarh	115	3.04	50	44	259	353	13
Jharsuguda	91	8/.16	44	53	378	475	18
Sambalpur	117	3.75	71	95	243	409	47
Deogarh	23	4.33	16	48	50	114	13
Sundergarh	436	31.37	147	567	1032	1746	152
Keonjhar	182	10.80	99	192	744	1035	462
Mayurbhanj	251	9.77	105	427	542	1074	156
Balasore	293	8.57	181	65	831	1077	157
Bhadrak	210	4.89	52	0	680	732	80
Kendrapara	106	7.17	51	0	377	428	54
Jagatsinghpur	120	6.75	71	0	474	545	42
Cuttack	382	27.23	246	12	1647	1905	172
Jajpur	281	14.28	99	24	856	979	73
Dhenkanal	150	21.12	245	93	749	1087	19
Angul	185	11.53	142	65	563	770	64
Nayagarh	90	5.70	58	11	307	376	53
Khurda	365	29.95	236	1	2421	2658	245
Puri	200	17.23	129	0	832	961	118
Ganjam	353	7.21	49	9	968	1026	30
Gajapati	72	7.93	161	167	326	654	290
Kandhamal	100	2.48	95	110	149	354	3
Baudh	24	3.62	23	5	110	138	11
Sonepur	53	3.66	55	26	271	352	36
Bolangir	191	8.76	293	130	708	1131	39
Nuapada	30	4.34	58	44	166	268	31
Kalahandi	116	11.23	164	163	333	660	42
Rayagada	160	9.32	64	130	370	564	30
Nabarangpur	66	1.44	52	25	208	285	20
Koraput	125	5.79	63	427	470	960	302
Malkangiri	20	0.93	23	17	39	79	0
Total	4907	292.34	3142	2950	17103	23195	2772

Annexure 4.4: Sector-Wise MSME Units in Orissa by the End of 2009-10

Food & Allied	23925	1004.81	124988
Chemical & Allied	2790	189.37	21494
Electrical & Electronics	1107	46.91	7076
Engineering & Metal	12026	757.91	89068
Forest & Wood based	6560	64.81	41439
Glass & Ceramics	7920	445.04	129442
Livestock & Leather	428	6.96	2433
Paper & Paper Products	2797	89.84	15362
Rubber & Plastics	1726	125.60	10103
Textiles	8070	108.57	47634
Misc. Manufacturing	6080	167.08	29786
Repairing & Services	33411	634.03	105575
Total	106840	3640.93	624400

Source: Directorate of Industries, Orissa.

Annexure 4.5: Growth of Cottage Industry

2000-01	22,431	40.65	37,641
2001-02	26,196	61.72	36,937
2002-03	25,041	61.34	39,528
2003-04	23,287	67.87	39,743
2004-05	18,277	48.41	30,052
2005-06	13,363	39.42	22,734
2006-07	13,063	53.32	20,605
2007-08	9,011	38.3	15,368
2008-09	9,294	34.83	16,279
2009-10	14539	37.55	28305

P: Provisional

Source: Directorate of Handicrafts and Cottage Industries, Orissa

Annexure 4.6: Achievements of Tussar, Mulberry and Eri Sectors

Tussar Sector				
Tussar Food Plants (Ha)	7620 + 838	8458	9115	10487
Production of Dfls (lakh nos.)	13.75	10.90	14.40	18.70
Procurement of Dfls (lakh nos.)	1.68	2.82	3.70	4.17
Consumption of Dfls (lakh nos.)	15.43	13.72	18.10	22.87
Production of reeling cocoons (lakh nos.)	465.23	661.00	729.20	915.00
Production of raw silk (M.T.)	34.89	47.60	57.00	71.00
Production of silk waste (M.T.)	11.50	2.20	4.40	14.20
No. of farmers covered (Nos.)	7622	8872	9570	16343
Mulberry Sector				
Mulberry area in Acre	533	669	774	762
Production of Dfls (lakh nos.)	-	-	-	-
Procurement of Dfls (lakh nos.)	0.87	0.79	0.86	100
Consumption of Dfls (lakh nos.)	0.87	0.79	0.86	100
Production of reeling cocoons (lakh nos.)	20.15	20.30	25.50	30.00
Production of raw silk (M.T.)	2.01	2.03	2.50	3.30
Production of silk waste (M.T.)	0.30	0.02	0.65	0.75
No. of farmers covered (Nos.)	1494	1406	1400	1094
Eri Sector				
Existing Castor Plantation (Ac)	813	938	1300	845
Consumption of Dfls (lakh nos.)	0.63	0.96	1.32	1.35
Production of cut cocoons (M.T.)	4.40	6.53	8.80	9.40
Production of raw silk (M.T.)	3.28	4.90	6.60	7.00
No. of farmers covered (Nos.)	1280	1545	2140	2250

Annexure 4.7: Salt Production in Orissa

In MT

2002	2332	3850	6182
2003	13677	24151	37828
2004	6206	13401	19607
2005	17258	39000	56258
2006	6082	14611	20693
2007	10372	21243	31615
2008	9188	10684	19872
2009	11653	18342	29995

Source: Directorate of H & CI, Orissa

Annexure 4.8: Value and Percentage of Goods Exported from Orissa to Foreign Countries

Rs. in crore

Metallurgical products	3096.00	4036.75	5134.26	5057.74	5673.49	3859.57
%	57.43	37.57	39.99	36.63	38.74	32.77
Engineering, chemical and allied	310.00	440.90	452.53	405.77	470.34	600.39
%	5.75	4.10	3.53	2.94	3.21	5.09
Mineral products	1266.00	5392.74	6085.42	7088.06	6900.06	5739.60
%	23.47	50.19	47.40	51.33	47.12	48.74
Agriculture and forest products	1.95	20.94	10.10	6.25	2.02	1.07
%	0.04	0.25	0.08	0.05	0.01	0.01
Marine products including Fish & shrimps products	325.00	373.00	401.24	387.25	413.67	435.05
%	6.03	3.47	3.13	2.80	2.83	3.69
Handloom and textile products	8.36	9.24	13.97	20.83	15.26	19.40
%	0.16	0.03	0.11	0.15	0.10	0.17
Handicraft products	0.98	0.93	1.01	0.81	0.42	0.09
%	0.02	0.01	0.01	0.01	0.00	0.00
Electronics	382.00	465.04	734.70	837.44	1162.80	1116.84
%	7.08	4.34	5.72	6.06	7.94	9.48
Others (Computer software & pharmaceutical etc.)	1.09	4.18	4.09	4.46	7.00	6.16
%	0.02	0.04	0.03	0.03	0.05	0.05
Total	5391.00	10743.97	12837.32	13808.63	14644.33	11778.18
%	100.00	100.00	100.00	100.00	100.00	100.00

P: Provisional

Source: Directorate of Export Promotion and Marketing, Orissa

Annexure 4.9: Item-Wise Exports of Goods from Orissa, 2009-10

1	Agriculture & Forest Praducts: - Tamarind Juice, Spices	1.07	UK, USA, UAE, Singapur, Israel, Australia
2	Engg./Chemical & Allied Praducts: D.I/C.I Castings, Machinery, Granite, Paper, Pesticides, refractoriey materials, transformers, Tyres, Tubes etc.	600.39	USA, Newszealand, Behrain, West Indies, Cyprus, Germany, UAE, enya, Togo. Tanzania, Bangladesh, Italy, Australia, China, Brazil, Nepal, Srilanka etc.
3	Electornics: Software	1116.84	USA, UK, Canada, Denmark, Sudan, China,Australia, Spain, Germany, Brazil, Japan, Europe etc.
4	Handicrafts: Stone, Painting	0.09	USA, UK, Germany
5	Marine Praducts: Forzen Shrimps, Other marine praducts	435.05	USA, UK, Canada, Germany, Japan, France, Grece, Hongkong, Netherland, China, Malaysia,
6	Metallurgical Praducts : Pig iron, Sponge iron, Ferro Crome, Ferro Manganese, Charge Crome, Almunium, Aluminium utensils/	3859.57	UAE, Malwi, Ghana, Bangladesh, Hongkong, China, France, Australia, Japan, Peru, Italy, Korea, Kenya, Nepal, Srilanka, Kuwait etc.
7	Mineral praducts: Iron Ore, Chrome Ore, concentrate, Ilmenite	5739.60	China, Japan, South Africa, Hongkong, Singapore, ustralia, Korea, Netherland etc.
8	Textile Praducts: Jute twine, Jute Praducts, Polo Shirts, Matrix Jackets, Helmet, Textiles.	6.16	Nepal, Srilanka, Bangladesh, UK, Indonesia, Malayasia etc.
9	Pharmaceutical Praducts & Others: Homoeopathic Medicine, Surgical dressings	19.40	USA, UK, UAE, Germany, Canada, Italy, Australia

Annexure 4.10: Lists of Closed PSUs

1 Konark Detergent Ltd.
2 Premier Bolt and Nut Ltd.
3 Kalinga Steel Ltd.
4 Gajapati Steel Ltd.
5 Orissa Electrical Manufacturing Corporation
6 Hira Steel and Alloy Ltd.
7 Modern Malleable Casting Corporation
8 IDCOL Piping and Engineering Ltd.
9 OSEDC
10 Manufacturing Electro Ltd.
11 Modern Electrical Ltd.
12 Orissa Instrument Company
13 IPITRON
14 Konark Television Ltd.
15 ELCO
16 ELCO MOS Ltd.

17 Mayurbhanj Textile Ltd.
18 New Mayurbhanj Textile Ltd.
19 OTM
20 Orissa State Textile Corporation
21 ABS Spinning Ltd.
22 Orissa State Handloom Development Corporation
23 Orissa State Transport Corporation
24 Orissa Pisciculture Development Corporation
25 Eastern Aquatic Product Ltd.
26 Orissa Boat Builder Ltd.
27 Orissa Board Milk Ltd.
28 Orissa State Leather Corporation
29 Orissa Leather Industry Ltd.
30 K. S. Refractory Ltd.
31 ELMARK Ltd.
32 General Engineering Works Ltd.

Annexure 4.11: List of Profit-Making and Loss-Incurring Operating PSUs

1	Orissa Agro Industries Corporation	Loss making
2	Orissa State Seeds Corporation	Profit making
3	Orissa State Cashew Development Corporation	Profit making
4	APICOL	No Profit/No Loss
5	IDCOL Software Ktd,	Profit making
6	Orissa Forest Development Corporation	Profit making
7	Orissa Mining Corporation	Profit making
8	Orissa Construction Corporation	Profit making
9	Orissa Bridge and Construction Corporation	Loss incurring
10	Orissa State Civil Supply Corporation	No Profit/No Loss
11	Orissa Tourism Development Corporation	Profit making
12	Orissa Power Generation Corporation	Profit making
13	Orissa Hydro Power Corporation	Profit making
14	GRIDCO	Profit making
15	Orissa Power Transmission Corporation Ltd.	Profit making
16	IPICOL	Profit making
17	Orissa State Police Housing and Welfare Corporation	Profit making
18	Industrial Development Corporation of Orissa	Profit making
19	Orissa Small Industries Corporation	Profit making
20	Orissa Film Development Corporation	Profit making
21	Kalinga Studio Limited	Under Compilation
22	Konark Jute Limited	Loss incurring
23	Orissa Lift Irrigation Corporation	Profit making
24	Orissa Rural Housing and Development Corporation	Loss incurring
25	Orissa State Beverage Corporation	Profit making
26	IDCOL Kalinga Iron Works	Loss making
27	IDCOL Ferrochrome and Alloys Ltd	Profit making
28	Orissa Pisciculture Development Corporation	Loss incurring
	Satutory Corporations	
29	Orissa State Road Transport Corporation	Profit making
30	Orissa State Ware Housing Corporation	Profit making
31	Orissa State Financial Corporation	Profit making
32	IDCO	Profit making

Annexure 4.12: Activities under the PMEGP Scheme in Orissa

1		Target		
	(i)	Number	982	982
	(ii)	Amount* (Rs. In crore)	11.79	Rs.11.79
2		Application received	6148	12,045
3		Cases sanctioned		
	(i)	Number	1054	1,341
	(ii)	Amount* (Rs. In crore)	11.59	22.78
4		Cases released		
(i)		Number	889	928
(ii)		Amount* (Rs. In crore)	9.93	15.42

* Involved margin money (Government subsidy)

Annexure 4.13: Progress under PMEGP Scheme by KVIB

Annexure 4.14: SSI units granted ANC status

Rourkela Steel Plant (RSP)	198 no of Regd. Vendors
National Aluminium Company (NALCO)	49 Ancillary
Mahanadi Coalfields Ltd. (MCL)	47 granted provisional/proven ancillary status
Hindustan Aeronautics Ltd. (HAL)	5 Ancillary
Indian Rare Earths Ltd. (IRE)	22 Regd. Vendors
NINL	35 vendors
NTPC, Kaniha	-
IOF, Saintala	-
PPT, Paradeep	-

Source: Directorate of Industries, Orissa.

2008-09	736	884	7366	553	709.92	3900
2009-10 (Till Nov' 09)	736	884	7366	607	1183.67	4567

Annexure 4.15: District-wise Loans Sanctioned, Disbursement Recovery and Outstanding Position of OSFC by the end of 2009-10

Rs. In lakh

1	Angul	359	13.18	359	13.17	2832.90	374.83
2	Bolangir	1068	40.49	1068	40.47	3438.68	1161.43
3	Balasore	1328	100.05	1328	100.05	14991.93	3423.06
4	Bargarh	414	16.37	414	16.37	1454.91	697.15
5	Bhadrak	487	22.74	487	22.74	880.69	1293.27
6	Baudh	225	5.23	225	5.23	593.08	77.25
7	Cuttack	4153	213.23	4153	213.21	25362.14	6251.00
8	Deogarh	80	2.87	80	2.87	3273.23	207.31
9	Dhenkanal	1130	25.24	1130	25.24	3419.62	891.48
10	Gajapati	86	6.51	86	6.51	3935.53	608.67
11	Ganjam	1691	66.07	1691	66.05	6847.82	1864.73
12	Jagatsinghpur	2246	32.47	2246	32.47	3312.87	399.08
13	Jajpur	656	73.18	656	73.17	3123.63	2107.51
14	Jharsuguda	395	20.49	395	20.49	2588.56	194.07
15	Kalahandi	736	21.03	736	21.03	2308.27	489.21
16	Kandhamal	514	16.09	514	16.09	1404.60	520.44
17	Kendrapara	1182	25.34	1182	25.33	11741.52	704.51
18	Keonjhar	962	43.69	962	43.69	5487.97	774.58
19	Khurda	2624	190.99	2624	190.99	29219.39	6774.65
20	Koraput	686	25.81	685	25.06	2943.51	445.88
21	Malkangiri	128	1.80	128	1.80	1254.27	28.98
22	Mayurbhanj	1263	41.00	1263	40.99	5944.60	937.50
23	Nabarangpur	224	7.02	224	7.02	1474.81	110.67
24	Nuapada	124	4.22	124	4.22	1396.49	108.33
25	Nayagarh	1266	21.70	1266	21.70	875.61	932.44
26	Puri	1188	50.62	1188	50.62	8664.42	1054.04
27	Rayagada	288	15.87	288	15.87	2194.11	247.34
28	Sambalpur	735	56.63	735	56.63	8475.13	1205.66
29	Sonepur	149	0.66	149	0.66	2017.14	33.68
30	Sundargarh	1822	145.70	1821	145.40	22222.74	3152.10
	Total	28209	1306.27	28207	1305.12	183680.17	37070.85

Source: OSFC

Annexure 4.16: Major Mineral Deposits Recorded in Major States by the End of 2004-05

In million tons

Assam	-	375.43	-	1304.94	-	0.36	-	12.6
Bihar	4.11	160	-	859.42	-	0.04	-	0.06
Andhra Pradesh	615.26	17145.6	0.19	35178.54	15.58	22.5	-	163.04
Gujarat	188.34	-	-	20012.41	2.95	58.37	-	-
Haryana	-	-	-	71.25	-	-	-	-
Karnataka	49.5	-	1.79	51885.79	82.74	11.34	0.23	1676.22
Kerala	14.1	-	-	206.99		13.18	-	-
Maharashtra	111.64	9076.74	0.53	1737.32	30.35	7.51	-	265.36
Madhya Pradesh	134.06	19758.37	-	5921.18	62.42	114.79	-	204.94
Orissa	1808.27	61999.26	202.96	1738.36	152.96	175.49	174.48	4760.63
	(54.97)	(24.48)	(95.26)	(0.99)	(40.40)	(24.90)	(92.46)	(32.54)
Rajasthan	0.53	-	-	19486.25	4.82	61.19	-	29.85
Tamil Nadu	26.85	-	0.28	1182.42	-	115.86	-	-
Uttar Pradesh	18.91	1061.8	-	505.98	-	3.22	-	38
West Bengal	-	27814.93	-	44.71	-	13.89	-	-
Jharkhand	117.55	73897.83	0.74	745.78	12.53	66.8	9	4035.75
India	3289.82	253301.66	213.06	175344.9	378.57	704.76	188.71	14630.39

Notes:

(1) * - the column for coal shows figures by the end of 2005-06;

(2) Figures in brackets indicate percentage to all-India reserved.

Sources: (1) Indian Mineral Year Book, 2006; (2) Indian Bureau of Mines, New Delhi

Annexure 4.17: Value of Mineral Production of Major States

In crores of rupees

Andhra Pradesh	4231.38	4571.70	4695.16	5292.40	6831.87	6826.42	7601.53
	(6.77)	(6.25)	(6.20)	(6.03)	(6.63)	(6.47)	(7.21)
Assam	3032.77	3109.93	3088.24	3088.51	3156.20	3262.31	3124.05
	(4.85)	(4.25)	(4.08)	(3.52)	(3.06)	(3.10)	(2.96)
Bihar	5.32	6.84	7.97	16.09	15.10	20.47	19.02
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)
Gujarat	5044.62	5241.62	5346.13	5704.48	5703.75	5209.05	4904.27
	(8.07)	(7.17)	(7.06)	(6.50)	(5.53)	(4.93)	(4.65)
Karnataka	1280.21	2611.00	2817.98	3619.15	6198.20	5082.36	4174.73
	(2.05)	(3.57)	(3.72)	(4.12)	(6.01)	(4.81)	(3.96)
Maharashtra	2819.61	3565.22	3713.86	4045.27	4777.58	4803.00	5193.16
	(4.51)	(4.87)	(4.91)	(4.61)	(4.63)	(4.55)	(4.92)
Madhya Pradesh	3926.66	5663.73	5900.08	6648.47	7937.91	8250.19	8118.30
	(6.28)	(7.74)	(7.79)	(7.57)	(7.70)	(7.81)	(7.70)
Orissa*	3877.75	6148.61	6622.00	7629.63	10627.05	15082.72	14471.75
	(6.20)	(8.41)	(8.75)	(8.69)	(10.86)	(14.28)	(13.72)
Rajasthan	1146.31	1349.15	1432.70	2084.28	2470.44	2531.91	3148.61
	(1.83)	(1.84)	(1.89)	(2.37)	(2.40)	(2.40)	(2.99)
Tamil Nadu	2012.73	2343.95	2347.20	2794.40	2961.15	2784.92	3388.02
	(3.22)	(3.20)	(3.10)	(3.18)	(2.87)	(2.64)	(3.21)
Uttar Pradesh	1191.41	1361.99	1292.60	925.20	891.86	913.10	959.42
	(1.91)	(1.86)	(1.71)	(1.05)	(0.87)	(0.86)	(0.91)
West Bengal	2407.90	3004.61	3174.56	3467.00	3072.02	3189.20	2930.00
	(3.85)	(4.11)	(4.19)	(3.95)	(2.98)	(3.02)	(2.78)
All India	NA	NA	NA	NA	103104.39	105586.61	105447.83
	NA	NA	NA	NA	(100.00)	(100.00)	(100.00)

Notes: (1) P – provisional; (2) Figures in brackets are % share to all-India value

Sources: (1) Directorate of Mines, Orissa (for Orissa Figure);

(2) Regional Controller of Mines – Bhubaneswar, Government of India

Annexure 4.18: Value of Minerals Produced in India

Production: In lakh MT, Value in crores of rupees

All Minerals	1890.98	15082.72	1997.31	14471.75	7170	66396	8235	81756
Fuel Minerals (coal)	977.86	4028.80	1054.88	5548.67	4776	37974	5139	47385
Metallic Minerals	856.75	10828.29	885.69	8791.26	2394	28422	2677	30856
Non-metallic	56.37	225.63	56.74	131.82	NA	NA	419	3515

Source: Directorate of Mines, Government of Orissa.

Annexure 4.19: Mineral Reserves in Orissa by the End of 2009-10

Bauxite	1805.72	2.41
China clay	313.95	0.42
Chromite	170.39	0.23
Coal	65121.37	87.00
Dolomite	329.62	0.44
Fire clay	175.46	0.23
Graphite	4.38	0.01
Iron ore	5073.63	6.78
Lead & Zinc ore (Base metal)	4.98	0.01
Lime stone	1004.47	1.34
Manganese ore	119.21	0.16
Heavy minerals	226.00	0.30
Nickel ore	174.48	0.23
Pyrophy lite	8.33	0.01
Mineral Sand	226.00	0.30
Vanadium ore	2.50	0.00
Quartz and Silica sand	70.39	0.09
Tin ore (tons)	347.56	0.46
Total	74830.88	100.00

Source: Directorate of Geology, Orissa.

Annexure 4.20: Rates of Exploitation of Important Minerals

In million tons

Iron ore	5074	74.50	77.20	79.68	1.40	1.48	1.37
Chromite	170	3.28	2.79	3.41	1.83	1.58	2.00
Coal	65121	89.69	97.79	105.49	0.14	0.15	0.16
Bauxite	1806	4.69	4.73	4.88	0.26	0.26	0.27
Lime stone	1004	2.83	3.07	2.71	0.28	0.30	0.27
Dolomite	330	1.78	1.53	1.32	0.53	0.46	0.40
Fire clay	175	0.08	0.08	0.06	0.05	0.05	0.04
Quartz, quartzite and silica	70	0.29	0.24	0.14	0.41	0.34	0.20
Mineral sands	226	0.24	0.24	0.25	0.29	0.29	0.11
Graphite	4.4	0.07	0.06	0.02	1.45	1.43	0.58
Manganese ores	119	0.71	0.95	0.60	0.58	0.79	0.51

Sources: Directorate of Mines, Orissa, and Directorate of Geology, Orissa.

Annexure 4.21: District-wise Break-down of Exploration and Value of Major Minerals in Orissa during 2009-10

Quantity in lakh MT, Value in crores of rupees

Angul	-	-	588.28	3094	-	-	-	-	-	-
Dhenkanal	0.20	7	-	-	-	-	-	-	-	-
Jajpur	33.16	1135	-	-	16.52	165	-	-	-	-
Jharsuguda	-	-	342.41	1801	-	-	-	-	-	-
Keonjhar	0.72	25	-	-	577.01	5776	3.07	108	-	-
Koraput	-	-	-	-	-	-	-	-	48.79	190
Mayurbhanj	-	-	-	-	2.99	30	-	-	-	-
Sundergarh	-	-	100.81	530	200.26	2005	2.87	101	-	-
Sambalpur	-	-	23.38	123	-	-	-	-	-	-
Bolangir	-	-	-	-	-	-	0.09	3.21	-	-
Rayagada	-	-	-	-	-	-	0.01	0.46	-	-
Total	34.08	1167	1054.88	5548	796.78	7976	6.04	212.67	48.79	190

Source: Directorate of Mines, Orissa

Annexure 4.22: Production and Value of All Minerals/Ores in Orissa, 2000-01 to 2009-10

2000-01	689.24	2776.15
2001-02	749.81	2910.47
2002-03	873.62	3694.17
2003-04	1080.00	3877.75
2004-05	1270.48	6130.93
2005-06	1396.78	6604.41
2006-07	1614.45	7629.63
2007-08	1784.23	10627.05
2008-09	1889.55	15122.90
2009-10	1988.40	15317.10

P: provisional

Source: Directorate of Mines, Orissa

Annexure 4.23: Production and Value of Various Minerals/Ores in Orissa, 2007-08 to 2009-10

Bauxite	46.85	137.55	47.34	168.53	48.78	190.24
China clay	0.09	0.14	0.07	0.11	0.18	0.28
Chromite	32.84	905.00	27.94	1537.26	34.08	1166.56
Coal	896.86	3782.34	977.86	4028.78	1054.88	5548.66
Dolomite	17.80	43.39	15.31	42.40	13.15	41.03
Fireclay	0.82	1.45	0.82	2.18	0.65	1.60
Gemstone	140 kg	0.08	365.1 kg	0.20	846.145 kg	0.46
Graphite	0.66	2.93	0.64	3.05	0.25	1.14
Iron ore	745.05	5441.38	771.95	8815.66	796.79	7975.87
Lime stone	28.31	80.84	30.71	77.39	27.08	75.01
Manganese ore	7.06	138.00	9.50	346.84	6.04	213.15
Mineral sand	2.38	79.99	2.39	80.32	2.47	83.00
Pynophilite	0.14	0.21	0.23	0.36	0.18	0.34
Pyroxenite	2.41	6.40	2.31	13.14	2.42	15.29
Quartz	0.86	0.85	0.64	1.60	0.40	0.80
Quartzite	2.06	6.34	1.76	4.54	0.99	3.56
Silica sand	0.01	0.04	0.05	0.20	0.03	0.08
Soap stone	0.03	0.09	-	-	0.003	NA
Kyanite	0.00	0.03	0.03	0.34	0.02	0.03
Total	1784.23	10627.05	1889.55	15122.90	1988.40	15317.10

Source: Directorate of Mines, Orissa

Annexure 4.24: Production, Dispatch and Revenue Collection from Minor Minerals, 2004-05 to 2009-10

2004-05	22704	20421	44.55
2005-06	19117	16842	58.59
2006-07	19117	16842	85.31
2007-08	51987	42216	111.86
2008-09	44696	43012	142.59
2009-10	NA	NA	202.65

Source: Directorate of Mines, Orissa

Annexure 4.25: Exports of Minerals /Ores from Odisha

Quantity in lakh tons, Value in crores of rupees

Chromite	13.60	843.20	13.30	828.90	9.07	1096.00	4.09	811.00	4.66	464.11
Iron Ore	129.80*	8307.00	145.7*	9927.40	167.00	5334.00	147.53	4017.24	148.68	4224.00
Mineral sand	2.30	NA	2.70	NA	2.00	49.40	1.08	26.65	2.55	72.32
Manganese	0.60	11.00	0.30	4.90	0.10	1.60	0.07	1.04	-	-
Others (thermal coal, Hard coal and Ferro-chrome)	-	-	-	-	108.00	1852.00	110.07	2232.45	-	-
Total	146.30	9161.20	162.00	10761.20	286.17	8333.00	262.84	7814.64	155.89	4760.43

*: excluding Haldia Port.108.0

Source: Directorate of Mines, Orissa

Annexure 4.26: Number of workers directly employed in major mineral activities

Bauxite (Koraput, Sundergarh)	775	839	866	678	634	664
Chromite (Dhenkanal, Jajpur, Keonjhar)	6607	8236	8452	9816	6528	7826
Coal (Angul, Jharsuguda, Sundergarh, Sambalpur)	17624	14500	13985	12747	13467	13875
Dolomite and lime stone (Bargarh, Bolangir, Koraput, Sundergarh)	1626	2378	1822	1843	2206	2312
Iron ore (Jajpur, Keonjhar, Mayurbhanj, Sundergarh)	19592	20782	16677	18912	16838	14679
Manganese ore (Keonjhar, Sundergarh, Rayagada, Bolangir)	1513	1505	2612	2655	2294	2538
Others (china clay, quartz & quantity, graphite, mineral sand, gem stone, pyrophilite et.)	2100	7524	2962	2525	2200	1811
Total	49837	55764	47376	49176	44167	43705

Source: Directorate of Mines, Orissa.

Annexure 4.27: Mineral-Wise Leases, 2009-10

Asbestos	1	117.35	1	117.35
Asbestos & Pyroxenite	1	49.22	-	-
Bauxite	8	6673.471	4	3820.596
Chinaclay	16	1557.352	5	636.14
Chinaclay and F. Clay	2	93.161	1	74.275
Chromite	24	6912.65	16	3103.077
Chromite & Pyroxenite	1	406	1	406
Serpentinite	1	187.03	1	187.03
Coal	29	18246.288	26	16010.701
Dolomite	5	521.668	4	441.916
Fireclay	26	3333.963	9	1007.943
Fireclay & Sandstone	1	192.175	-	-
Fireclay & Sillicasand	1	255.16	-	-
Gallena	1	5.261	-	-
Gemstone	15	246.595	4	27.489
Gemstone (Aquamarine)	1	24.289	-	-
Graphite	103	2750.997	49	1219.266
Iron ore & Mineral ore	59	14802.877	43	12382.136
Iron ore	76	18885.325	68	17944.324
Iron ore & Bauxite	2	470.163	2	470.163

(Contd...)

Iron, Dolomite & Lime stone	1	134.733	1	134.733
Kyanite	1	55.49	1	55.49
Limestone	9	2850.4	4	2185.465
Limestone & Dolomite	38	5515.958	24	4128.571
Manganese ore	41	6147.998	34	5007.893
Manganese & Bauxite	1	52.176	-	-
Mineral Sand	1	2464.054	1	2464.055
Nepheline Syenite	1	14.277	-	-
Oyrophilite	3	198.293	1	35
Oyrophilite & Quartzite	6	305.007	4	128.213
Quartz	68	1152.862	36	659.381
Quartz & Felshper	1	8.127	-	-
Quartz & Gemstone	4	115.574	4	115.574
Quartz & Quartzite	4	77.792	4	77.792
Quartz & Sillica sand	1	111.98	1	111.98
Quartzite	25	556.651	19	261.834
Sand (stowing)	5	502.885	2	276.455
Sand stone	2	9.921	-	-
Sillica sand	1	17.446	1	17.446
Soapstone	6	465.377	6	465.377
Soapstone & Pyroxenite	1	50.646	1	50.646
Soapstone, Stiatite & Talc	1	3.64	-	-
Talc	1	62.483	-	-
Tin ore	1	20.855	-	-
Total	596	96625.62	378	74024.311

Annexure 4.28: Number of Mining Leases, 1990-91 to 2009-10

1990-91	629	124.22	399	93.36
2000-01	613	112.47	335	82.96
2003-04	607	101.95	339	73.91
2004-05	594	99.08	331	72.2
2005-06	571	86.42	335	59.08
2006-07	602	97.02	370	74.44
2007-08	586	94.7	374	68.15
2008-09	596	96.63	376	74.02
2009-10	597	95.96	330	70.52

Source: Directorate of Mines, Orissa

Annexure 4.29: Leases Held by OMC at the End of 2009-10

Chromite	11	5829	2	935
Iron	11	6130	2	2953
Iron & Manganese	5	4737	1	1212
Manganese	3	685	-	-
Lime stone	1	860	-	-
Gemstone	4	155	-	-
Total	35	18396	5	5100

Source: Orissa Mining Corporation, Orissa.

Annexure 4.30: Production of Minerals by OMC

In lakh MT

Iron ore	34.19	44.31	56.45	78.37	74.46
Chrome ore	6.46	12.39	11.58	9.35	5.07
Manganese ore	0.81	0.08	0.03	-	-
Chrome concentrate	1.81	1.83	1.03	0.51	0.36
Total	43.27	58.61	69.09	88.23	79.89

Source: Orissa Mining Corporation, Orissa

Annexure 4.31: Minerals/Ores Sold by OMC

Quantity in lakh MT
Value in crores of rupees

1	Iron Ore						
	Domestic	43.48	784.71	50.09	1164.35	NA	963.36
	Export	1.56	53.59	2.00	48.87	NA	49.01
	Total	45.04	837.95	52.09	1213.22	NA	1012.37
2	Chromite						
	Domestic	8.87	818.23	6.60	786.99	NA	494.43
	Export	0.88	112.17	-	NA	NA	38.36
	Total	9.75	929.92	6.60	786.99	NA	532.79
3	Chrome concentrate						
	Domestic	-	-	-	NA	NA	22.79
	Export	1.16	154.47	0.39	79.18	NA	9.90
	Total	1.16	154.47	0.39	79.18	NA	32.69
4	Manganese						
	Domestic	1.33	41.82	0.05	5.88	NA	-
	Export	-	-	-	NA	NA	-
	Total	1.33	41.82	0.05	5.88	NA	-
5	Lime stone						
	Domestic	0.05	0.07	-	NA	NA	-
	Export	-	-	-	NA	NA	-
	Total	0.05	0.07	-	NA	NA	-
6	Aggregate						
	Domestic	53.73	1644.83	56.74	1957.22	NA	1480.58
	Export	3.60	320.23	2.39	128.05	NA	97.27
	Total	57.33	1963.26	59.13	2085.27	NA	1577.85

Source: Orissa Mining Corporation, Orissa.

Annexure 4.32: Turnover, Profits and Dividends Paid by OMC

In crores of rupees

2003-04	377.8	164.22	11
2004-05	758.89	528.04	60
2005-06	680.05	324.15	60
2006-07	1081.42	682.52	100
2007-08	1963.27	1623.03	200
2008-09	2085.27	1890.22	250
2009-10	1577.85	1089.32	NA

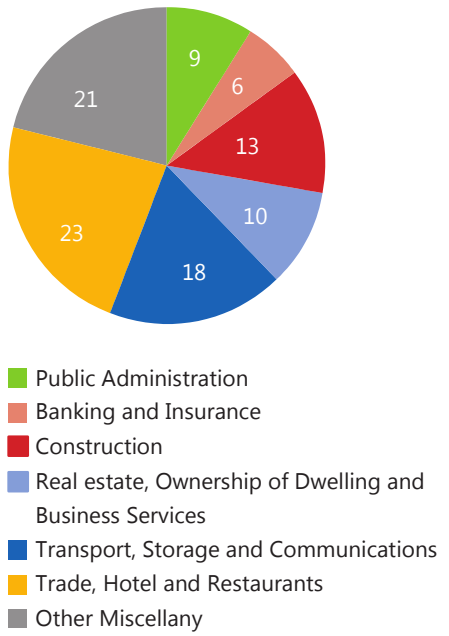
NA-Not Available
Source: Orissa Mining Corporation, Orissa

CHAPTER 5

Service Sector

The Service sector includes construction, trade, hotels and restaurants, transport, storage, communication, banking and insurance, real estate, other services and public administration. The composition of the service sector at current prices for 2009-10 is shown in Figure 5.1. Recently, this sector dominates Orissa's economy. Quick estimates for 2009-10 put the share of this sector at 53.73 percent. In the first three years of the 11th Five Year Plan, this sector has grown, in real terms at 2004-05 prices, at an average rate of 9.95 percent per annum and its growth rate has remained fairly steady as compared to the agriculture and industry sectors.

Figure 5.1: Composition of the Service Sector of Orissa's Economy (2009-10)



The most important sub-sector is "trade, hotel and restaurants" (23 percent), followed by 'other services (21 percent) and "transport and communication" (18 percent). Other sub-sectors include construction (13 percent), "real estate" (10 percent), "public administration" (9 percent) and "banking and insurance" (6 percent). Though the shares of sub-sectors reflect their direct contributions to the service sector, some of them have huge indirect contributions and multiplier effects. For instance, "transport and communication" add to the stock of infrastructure, which is invaluable for any economy. This sub-sector has been discussed in Chapter 6 on Infrastructure. By providing liquidity, "banking, insurance and financial services" act like 'grease' to businesses and the 'engine' of economic activity. In a broader sense, it can also be viewed as infrastructure. Construction adds to real capital stock, which is a major input to output growth in various sectors. This Chapter, however, discusses institutional finance, construction, tourism and the hotel industry.

5.1 Institutional Finance

The vast network of financial institutions helps an economy to augment its savings and channel them towards efficient utilisation. There has been a phenomenal growth and spread of banking services throughout the country, particularly in rural areas. Commercial banks have been directed to open many rural and semi-urban branches and have shouldered the responsibility for mobilising public savings. At constant prices (2004-05), the banking and insurance sector contributed 8.71 percent of GSDP of the Service Sector in Orissa in 2009-10 and recorded a growth rate of 17.73 percent over the previous year.

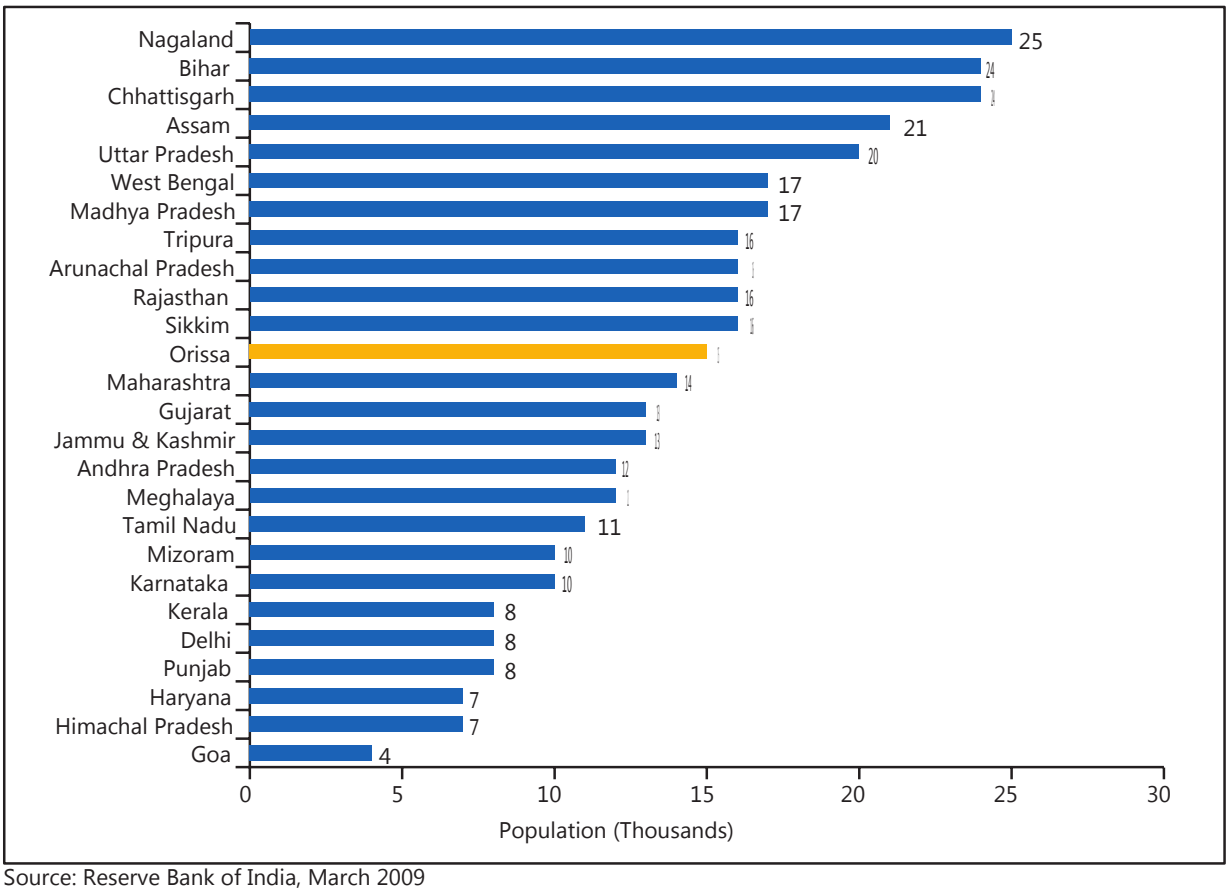
Box 5.1: Bank Branches in Orissa at the end of 2009-10

Number and Types of Banks	Number of Branches
Public Sector Banks (25)	1826 (909 rural)
Private Sector Banks (11)	116 (7 rural)
Regional Rural Banks (RRBs) (5)	875
Total Commercial Bank Branches	2817
State Co-operative Banks	328
State Cooperative Agriculture and Research Development (OSCARD) Bank and others	7
Total Number of Bank Branches	3152

5.1.1 Banking Network

Box 5.1 summarises the extent of the banking network in Orissa at the end of 2009-10. If we define "bank-density" as the ratio of population of the State to the total number of bank branches or the average population serviced by a bank branch, it is roughly equal to a population of 13,000. Likewise, commercial bank density is about a population of 15,000. Figure 5.2 compares commercial bank density among different States. Orissa has improved its commercial bank density from 16,000 in 2001-02 to 15,000 in March 2009 and fares better than several states including West Bengal, Rajasthan and UP. As Figure 5.3 shows, nearly 58 percent of all bank branches are located in rural areas in Orissa.

Figure 5.2: Population per Commercial Bank Branch (March 2009)



Source: Reserve Bank of India, March 2009

Figure 5.3: Distribution of Branches in Rural and Urban Areas (2009-10)

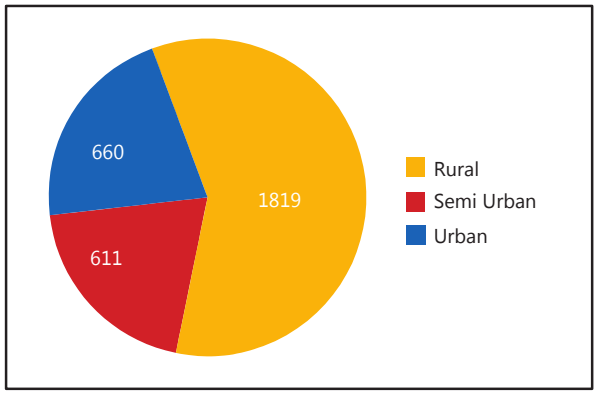
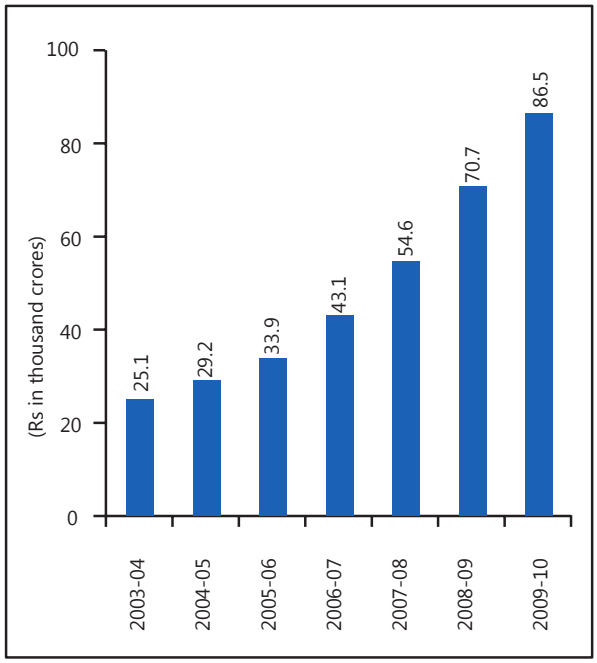


Figure 5.4: Trend of Total Bank Deposits in Orissa (2003-04 to 2009-10)



5.1.2 Bank Deposits

The total amount of bank deposits has been increasing consistently, as may be seen from Figure 5.4. The growth rate of bank deposits has also been increasing, that is, there is an acceleration in the volume of total bank deposits. From 2003-04 to 2004-05, they grew by 16 percent and from 2008-09 to 2009-10, their growth rate was a little over 22 percent. Furthermore, as Figure 5.5 illustrates, more than 90 percent bank deposits lie with commercial banks. However, co-operative banks also play a major role as they concentrate on rural areas and support agriculture in a major way.

Figure 5.5: Shares of Commercial and Co-operative Banks in Total Deposits (2003-04 to 2009-10)

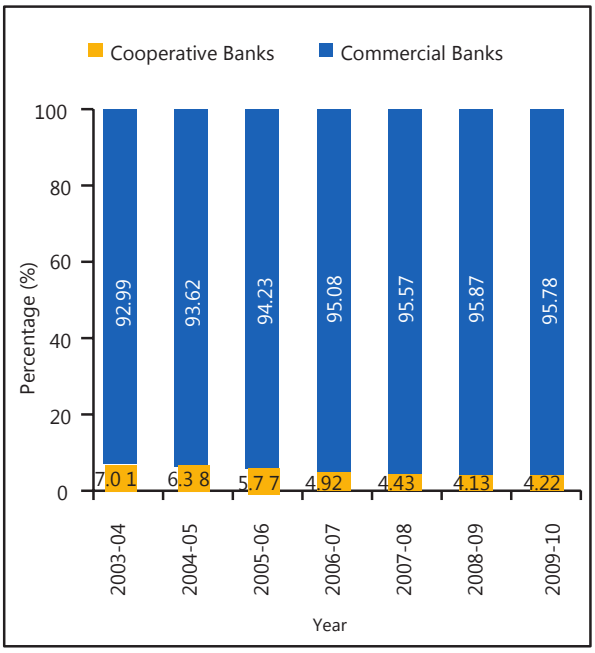
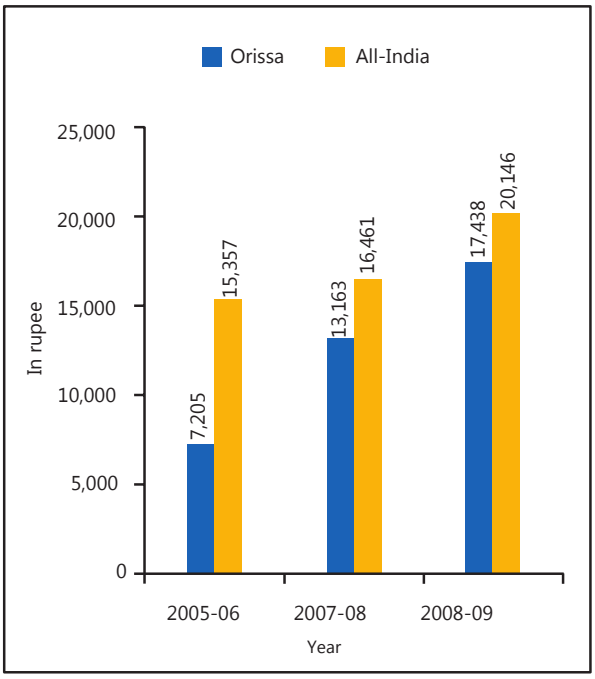


Figure 5.6: Per Capita Deposits at Commercial Banks, Orissa and All-India (2005-06 to 2008-09)



Source: 10th Plan Document, Orissa, Planning Commission

Figure 5.6 compares per capita bank deposits in commercial banks in Orissa, relative to the all-India level. It is observed that Orissa is catching up with the national average.

5.1.3 Credit-Deposit Ratio

This is the ratio of loans advanced to total deposits and serves as an important indicator of banking activity. A very high ratio would indicate a high level of risk, while a low ratio would mean that banks are being too risk-averse. A ratio in the range of 60-65 percent is considered moderate, which is neither too risky (aggressive) nor too conservative. Figure 5.7 compares credit-deposit ratios for co-operative and commercial banks. In comparison to co-operative banks, commercial banks advance loans in a more conservative fashion. As Figure 5.8 shows, amongst commercial banks, rural regional banks are the most conservative, followed by public sector and private sector banks.

Figure 5.7: Credit Deposit Ratio, within Commercial Vs. Cooperative Banks (2009-10)

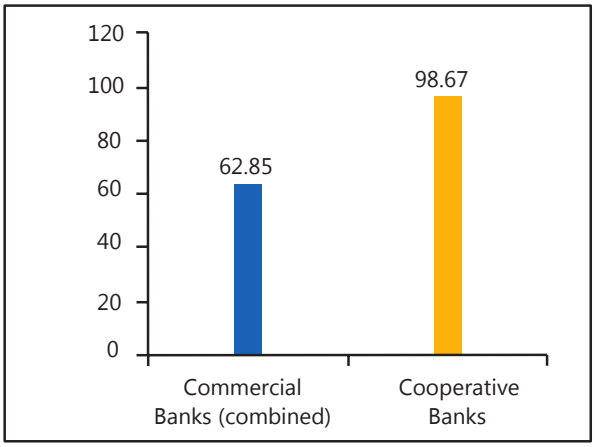


Figure 5.8: Credit-Deposit Ratio Commercial Banks (2009-10)

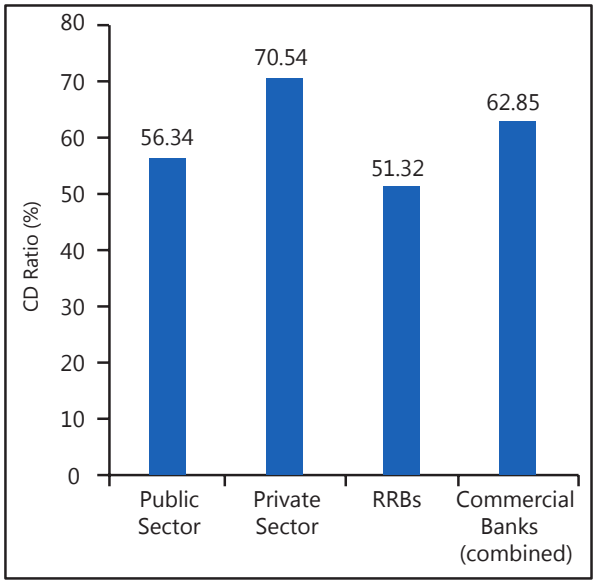
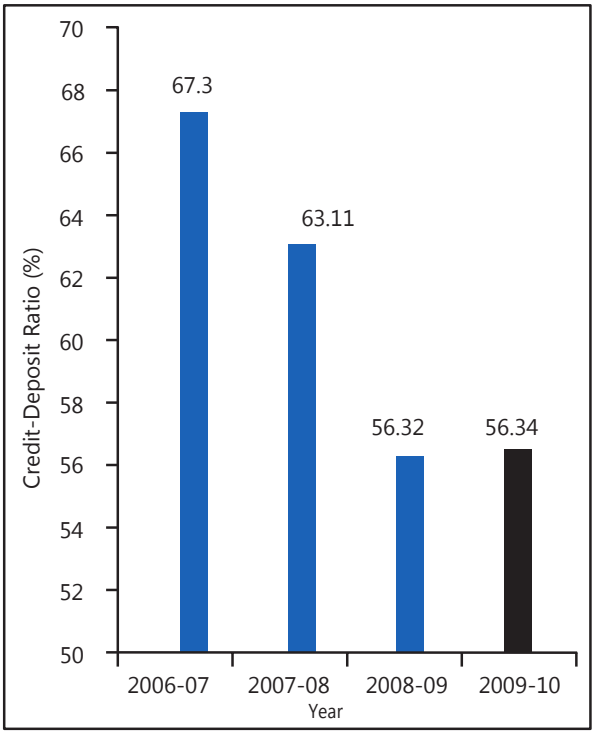


Figure 5.9: Credit-Deposit Ratio of Public Sector Banks (2006-07 to 2009-10)



Although public-sector banks have been generally liberal among commercial banks, over time they have become more conservative, as may be seen from Figure 5.9 that compares credit-deposit ratios for commercial banks over time. It suggests that credit-deposit ratios for public sector banks have been declining over time, that is, they have been gradually becoming more conservative and requiring closer scrutiny of applications while advancing loans.

Furthermore, between commercial banks and cooperative banks, it is the latter who take the lead in advancing loans to agriculture, medium and small-scale industries (MSE) and to weaker sections of the community. Figure 5.10 suggests that out of total advances made by co-operative banks, 77 percent advances were for the agriculture sector, while agriculture accounted for 29 percent advances out of the total loans advanced by commercial banks. For commercial banks, distribution of advances by sub-category is shown in Figure 5.11. It may be observed that private sector banks hardly advance any loans to weaker sections or MSEs. Even the role of public sector banks for these sections is limited. In this regard, regional rural banks take the lead.

Figure 5.10: Advances to Agriculture, MSE and to Weaker Sections by Commercial and Cooperative Banks at the End of 2009-10

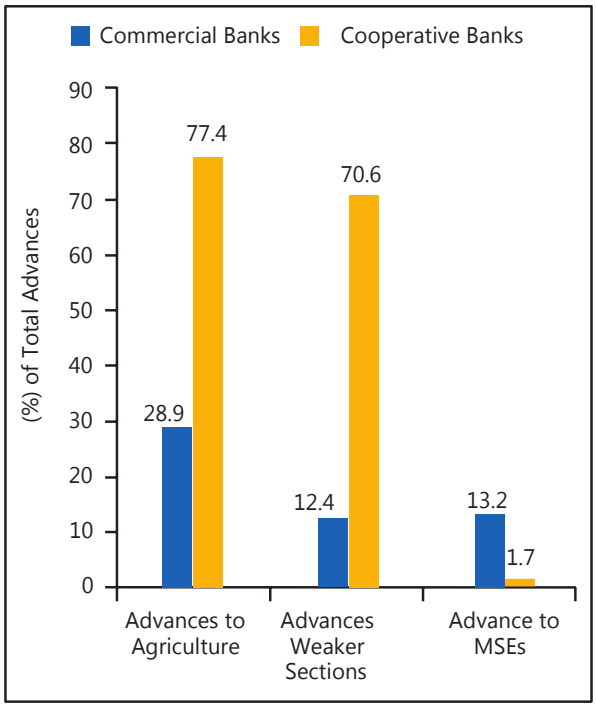
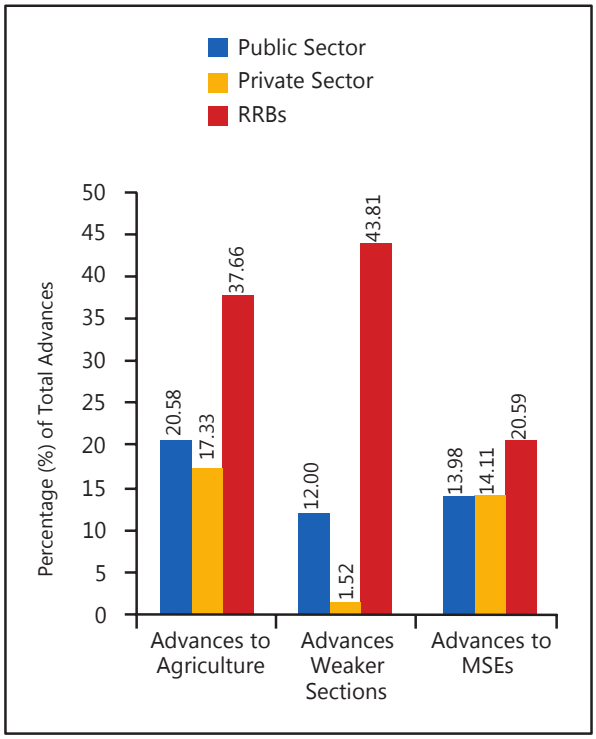


Figure 5.11: Advances to Agriculture, MSE and to Weaker Section by Different Types of Commercial Banks at the End of 2009-10



5.1.4 Annual Credit Plan (ACP)

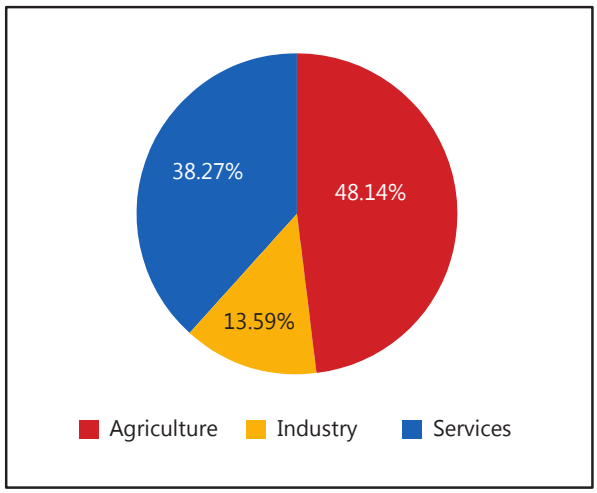
Banks in the State are not totally unregulated in granting bank loans. There is a District Level Co-ordination Committee (DLCC) for each district, which prepares the Annual Credit Plan (ACP) under the leadership of NABARD. As per the ACP, banks extend loans to priority sectors. During 2009-10, Rs. 11,142.89 crore of loan assistance was provided through banks, which is about 97 percent of the target fixed under ACP for the year. The sectoral distribution of loans advanced in 2009-10 is shown in Figure 5.12.

It may be noted that despite erratic monsoons and prevalence of drought conditions in some parts of the State, the amount of loans to the agriculture sector was high. It has been targeted to advance Rs. 16,903.69 crore during 2010-11. Of this amount, Rs. 9,165.80 crore have been earmarked for the agricultural sector, Rs. 1,400.02 crore for the industrial sector and Rs. 6,337.88 crore for the service sector. Annexure 5.4 presents the sector-wise targets and achievements of banks in priority sectors under the Annual Credit Plan from 2004-05 to 2009-10.

5.1.5 Co-operative Banks

The cooperative banking structure plays a pivotal role in the dispensation of both farm and non-farm credit in the State. It consists of three sectors namely, (a) short-term co-operative credit, (b) long-term co-operative credit, and (iii) urban co-operative banks.

Figure 5.12: Sectoral Distribution of Loans Advanced by Banks (2009-10)



5.1.5.1 Short-term Co-operative Credit Sector

The short term cooperative credit sector consists of 2,714 Primary Agriculture Cooperative Societies (PACS) including 213 Large Sized Adivasi Multi Purpose Cooperative Societies (LAMPCS), 17 District Central Cooperative Banks with 327 branches and the Orissa State Cooperative Bank at the apex level. This sector provides agricultural credit to member farmers to purchase agricultural inputs such as certified high yielding varieties of seeds, fertilisers, pesticides and agricultural implements. It also renders assistance for storage and marketing of agricultural produce and helps members to get remunerative prices for their produce. As recommended by the Vaidyanathan Committee, the Government of Orissa has striven to revive and revitalise this sector.

The revitalisation package envisaged financial assistance in the shape of recapitalisation for Primary Agricultural Co-operative Societies (PACS), Co-operative Central Banks and the Orissa State Co-operative Bank. The total quantum of assistance to the Short Term Credit Co-operative Sector in Orissa has been Rs. 772.05 crore. The shares of Government of India, Government of Orissa and PACS in this assistance scheme were respectively 83.59 percent, 9.27 percent and 7.14 percent. The share of the short-term co-operative credit sector in dispensation of short-term agricultural credit vis-à-vis commercial banks and regional rural banks was of the order of 65 percent in 2009-10. PACS, LAMPS and FSCS with their vast outreach provide easy access of credit to small and marginal farmers and the marginalised section of the society. Their activities are summarized below;

(i) Coverage of Agricultural Families

Priority has been accorded to enroll agricultural families as members of Primary Agriculture Cooperative Societies. By the end of 2009-10, there were 52.89 lakh members, of which cooperatives enrolled 50.79 lakh of the total membership.

(ii) Seasonal Agricultural Operations

The share of agricultural credit by cooperatives has declined at the national level to 27 percent. But these banks in the State have retained their high share over the years and continued to provide a large part of short-term loans. The share of cooperatives in granting crop loans is described in Annexure 5.7. From 2006-07 to 2009-10, it has gradually increased from 62.3 percent to 65 percent. In 2009-10, there has been a quantum jump both in the membership and the amount of finance through the co-operative network. The loans disbursed increased to Rs. 2,682.17 crore and 18.32 lakh members during 2009-10 registering a growth of 80 percent in respect of the amount of finance and 56.71 percent in respect of the number of farmers as compared to 2008-09.

(iii) Agricultural Term Loan

The Co-operative Credit Sector provides term loans to agriculture for capital investment, asset creation and land improvement, farm mechanisation, plantations and horticulture. This is known as Investment Credit, open to both scheme-based farm and non-farm sectors. Such investment-credit activities from 2006-07 to 2009-10 are summarized in Annexure 5.9.

(iv) Paddy Procurement

Cooperatives have taken initiative in linking credit with marketing of agricultural produce. In order to enable farmers to get remunerative prices for their agricultural produce, PACs and LAMPs, as agents of the State Government, have taken up paddy procurement and marketing. This has helped farmers as well as boosted the recovery of PACs. During 2009-10, PACs have been entrusted with the responsibility of procurement of paddy as the commissioned agents of the Orissa State Civil Supply Corporation and 1,205 PACs procured 16.32 lakh MT of paddy from 341,445 farmers.

(v) Credit linkage to SHGs

To extend institutional credit to poor and marginalised sections, a bank linkage programme for Self Help Groups has been put in place since 2003-04 through PACS and DCCB branches. By the end of 2009-10, 69,139 such groups with about 7 lakh members have been organised. Credit support of Rs 153.74 crore has been provided to 45,480 groups.

(vi) Credit Linkage to Tenant Farmers Group (TFG)

For providing sharecroppers and oral lessees access to institutional credit, Orissa has taken

the lead in organising exclusive Self Help Groups for them with a 1:10 deposit credit ratio facility, in place of the regular 1:4. At the end of 2009-10, 18,473 such groups have been formed and 15,326 groups have been provided credit, amounting to Rs. 47.54 crore.

5.1.5.2 Long-term Co-operative Credit Sector

The long-term credit co-operative structure is a two-tier one, consisting of the Orissa State Co-operative Agriculture and Research Development (OSCARD) Bank at the helm and 56 Primary Co-operative Agricultural and Rural Development (CARD) Banks. The CARD banks operate at sub-divisional levels and provide long term credit support for capital investment in land development, minor irrigation, farm mechanisation, inland fisheries, plantation and horticulture. They also provide finance for non-farm activities like small road transport and small-scale composite schemes. This sector gets refinance facilities from NABARD. Between 2005-06 and 2009-10, the Long-Term Cooperative Credit Sector granted finance of Rs.7.54 crore.

5.1.5.3 Urban Co-operative Banks

At present, fourteen Cooperative Urban Banks function in the State to provide credit support to artisans, entrepreneurs, unemployed youth and small businessmen for self-employment in urban and sub-urban areas. These banks command a perceptible stake in dispensing credit support to weaker sections under the priority sectors. The deposit mobilisation and loans advanced by these banks are given in Annexure 5.10.

5.1.6 Credit Cards

5.1.6.1 Kisan Credit Cards (KCC)

By the end of 2009-10, the co-operative sector had issued 36,37,490 Kissan Credit Cards (KCC) to members. Commercial banks and regional rural banks have issued 11.25 lakh KCCs including 3.43 lakh during 2009-10. The market share of the co-operative sector in respect of KCCs is 76.37 percent.

5.1.6.2 Kalinga Kissan Gold Cards (KKGC)

With a view to motivate members for timely repayment of loans, an innovative scheme, Kalinga Kissan Gold Card (KKGC), designed by the Orissa State Cooperative Bank, was introduced in 2001. Farmers who are members of PACS with a default-free status for at least two years are eligible under the scheme. Through KKGC, a farmer gets facilities like loans with less interest, free accident insurance, concessions on share linkages in respect of all loans, educational loans for their children, choice to purchase fertilisers and pesticides from any retail outlets of their choice and exposure visits to advanced agricultural farms. At the end of 2009-10, KKGC were issued to 2,09,299 members.

5.1.6.3 Swarozgar Credit Card

This credit card aims at providing timely and instant credit - as working capital and block capital – for self-employment and income generating activities. It targets small artisans, handloom weavers, fishermen, self-employed persons, rickshaw owners and other micro entrepreneurs. During 2009-10, 30,500 beneficiaries were financed by different banks, out of which 10,445 beneficiaries were financed Rs. 25.52 crore by District Central Cooperative Banks and Orissa State Cooperative Bank. In total, during 2009-10, nearly 7.44 lakh credit cards with value of advances of Rs. 1,116.54 crore were issued by different financial agencies to farmers, swarozgaries and artisans.

5.1.7 Bank Assistance to Non-agricultural Sectors

5.1.7.1 Handloom & Handicraft Sector

During 2009-10, credit worth Rs. 6.62 crore was provided to 1,371 units in the handloom sector and Rs.4.34 crore to 833 units in the handicraft sector by different banks. Details are given in Annexure 5.11.

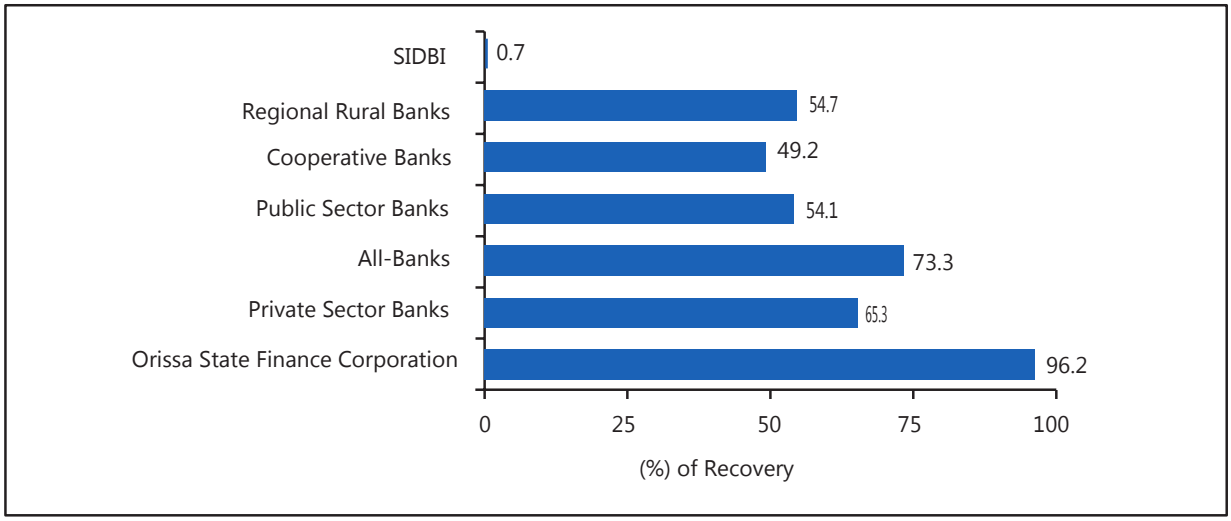
(I) Housing

Banks also provide loans under different housing loan schemes. For 2009-10, these are summarised in Annexure 5.12.

(II) Fisheries

Through Fish Farmers' Development Agencies (FFDA), banks offer finance towards pisciculture development in the State. By the end of 2009-10, out of 6,121 proposals, loans amounting to Rs.1,313.64 lakh were sanctioned in favour of 818 proposals and Rs.918.35 lakh was disbursed to 776 beneficiaries.

Figure 5.13: Recovery Rate of Loans by Banks in Orissa (2009-10)



(iii) Swarna Jayanti Gram Swarojgar Yojana (SGSY)

This is a credit-linked scheme that is implemented in the State since 1999 to generate self-employment. A major part of investment under the scheme consists of bank credit from various financial institutions like commercial banks, cooperative banks and regional rural banks. By the end of 2009-10, 1,33,732 loan applications were sanctioned and disbursements were made with respect to 1,31,334 cases.

(iv) Swarna Jayanti Shahari Rojgar Yojana (SJSRY)

Under this scheme, 6,006 applications were received by banks during 2009-10 and 5,343 were sanctioned. Credit worth Rs. 19.41 crore was disbursed to 5,258 beneficiaries. This included Rs. 6.36 crore disbursed in favour of 1,762 SC / ST and Rs. 6.12 crore to 1,586 women beneficiaries.

5.1.8 Recovery Position of Banks

Despite several initiatives, the recovery of loans has not been satisfactory. It remains as a major impediment to the expansion of the banking business, as it increases non-performing assets (NPA) and thereby adversely affects the resource position and profitability. Figure 5.13 shows the recovery rates of loans granted by various types of financial institutions in the State.

The Orissa State Finance Corporation has the poorest record. Relative to the total in the State, the proportion of loans handled by private sector banks and SIDBI is very small. In this regard, cooperative banks perform the best. For the whole State, the recovery rate is only 49.2 percent. By the end of 2009-10, 20,679 cases were filed with the competent authority for recovery of dues worth Rs.63.13 crore. It includes 16,283 cases amounting to Rs.44.76 crore pending over three years. In addition, 6,171 cases have been filed for recovery of Rs.4.85 crore under the provision of Orissa Agriculture Credit Operation and Miscellaneous Provision (Banks) Act.

5.1.9 State-level non-banking financial institutions

5.1.9.1 Orissa State Financial Corporation (OSFC)

This is the largest non-banking, State government-owned financial institution, providing financial assistance for the establishment of small and medium scale industries in different sectors of the State's economy. Its activities have been detailed in Chapter 4.

5.1.9.2 Orissa Rural Housing and Development Corporation (ORHDC)

The ORHDC was established in 1994. By the end of 2009-10, it disbursed loans amounting to Rs.567.30 crore in favour of 1,62,465 applicants under six housing finance schemes. Out of a total demand of Rs.718.58 crore, Rs. 367.21 crore (515%) were recovered. Annexure 5.16 presents the activity-summary of ORHDC.

5.1.9.3 Orissa ST & SC Development Finance Corporation (OSDFC)

In 2009-10, OSFDC financed Rs. 38.39 crore under various programmes to 36,828 applicants belonging to SC, ST, scavengers and other minorities. The physical and financial achievements of OSFDC during 2009-10 are presented in Annexure 5.17.

5.1.9.4 Private Non-Banking Financial Companies (NBFCs)

Non-banking Financial Companies are an important part of the Indian financial system. At present, there are 15 registered NBFCs operating under the jurisdictionoftheReserveBankofIndia,Bhubaneswar and Micro Finance Limited (MFL) is the only deposit taking NBFC in the State. The number of depositors of MFL has decreased drastically from 24,521 at the end of 2006-07 to zero at the end of 2009-10. The quantum of deposits also witnessed a big decline from Rs.6.99 crore in 2006-07 to nil at the end of 2009-10. Its investment in Government Securities decreased from Rs. 578.78 lakh in 2007-08 to Rs. 479.28 lakh in 2008-09 and to Rs. 468.78 lakh in 2009-10. However, its other investments increased from Rs. 2,407.02 lakh on 31st March, 2009 to Rs. 3,952.70 lakh on 31st March, 2010.

5.1.10 National-Level Non-Banking Financial Institutions

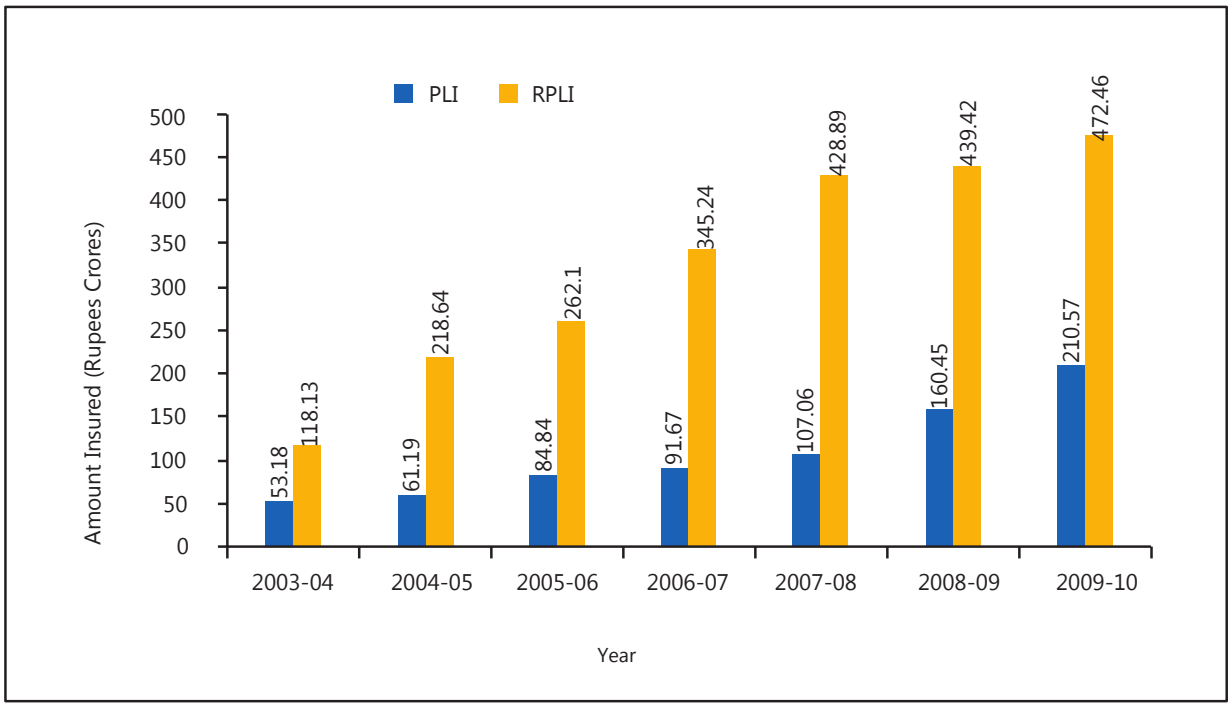
(i) Postal Life Insurance (PLI) and Rural Postal Life Insurance (RPLI)

The Postal Department of the Government of India provides life insurance under a number of schemes for employees in government, public sector banks and government-aided educational institutions aged between 19 to 55 years. The Central Government has also introduced the Rural Postal Life Insurance Scheme (RPLI) since 1995. Life insurance activities under both schemes have been increasing in an impressive manner. As Figure 5.14 shows, the total sum insured increased fourfold between 2003-04 and 2009-10.

(ii) Life Insurance Corporation of India (LIC)

The business of Life Insurance Corporation of India in Orissa has been increasing. During 2009-10, LIC issued 12.49 lakh policies and collected Rs. 960.15 crore towards first year premium through its 56 branch offices all over the State. Figure 5.15 indicates the growth of their business from 2005-06 to 2009-10. Details are given in Annexure 5.19.

Figure 5.14: Activities of PLI/RPLI in Orissa (2003-04 to 2009-10)



(iii) Small Industries Development Bank of India (SIDBI)

Established in 1990, SIDBI serves as a principal financial institution for promoting, financing and developing industries in the small-scale sector, especially in rural and semi urban areas. Through primary lending institutions such as State Financial Corporations, SIDBI provides refinance assistance for expansion, upgradation, modernisation and diversification of existing SSI units and rehabilitation of sick units. It extends financial support to small road transport operators, qualified professionals for self-employment, small hospitals and nursing homes and hotel and tourism related activities. During 2009-10, SIDBI sanctioned loans amounting to Rs.14.85 crore to 8 SSI / SME units and disbursed Rs.4.97 crore. Annexure 5.20 presents the performance summary of SIDBI since 2005-06.

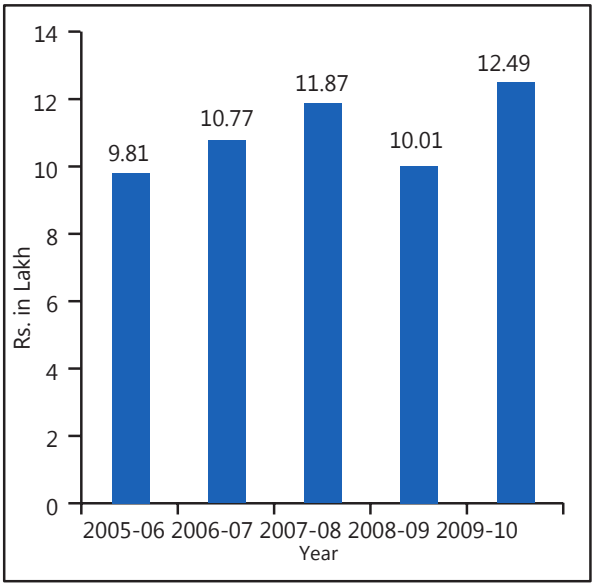
(iv) National Bank for Agriculture and Rural Development (NABARD)

Since its inception in 1982, it has endeavored to bring about integrated and sustainable rural development by facilitating credit flow for promotion and development of rural infrastructure, agriculture and rural non-farm sectors as well as for institutional development. It has set up the Rural Infrastructure Development Fund (RIDF). It refinances qualified banking institutions. Refinance assistance accorded by NABARD to various schemes/sectors from 2006-07 to 2009-10 is listed in Annexure 5.21. The District Potential Credit Linked Plan (PLP), prepared by NABARD, assesses the credit potential available for development in agriculture and rural development in a district. NABARD also undertakes various development activities.

(v) Housing and Urban Development Corporation (HUDCO)

HUDCO's financial assistance is available for housing as well as for the development of infrastructure, transportation and power projects. In Orissa, HUDCO has so far sanctioned 457 schemes with a loan commitment of Rs. 3,221 crore. It took an active role in reconstruction after the super cyclone in 1999. Under the Chief Minister's Relief Fund (CMRF), HUDCO has completed six projects – three schools, two bus stands and one mini stadium - with a project cost of Rs. 67.00 lakh. Besides, six model villages have been sanctioned by HUDCO

Figure 5.15: Total Amount Insured by LIC in Orissa (2005-06 to 2009-10)



with assistance of Rs. 1.77 crore and most of them are complete. During 2009-10, HUDCO sanctioned loans amounting to Rs. 4.09 crore towards urban housing schemes and disbursed Rs. 1.53 crore. Under the infrastructure scheme, loans amounting to Rs. 1.40 crore have been released. In the same year, loans amounting to Rs. 109 crore have been recovered, leaving Rs. 348 crore outstanding.

(vi) Bhubaneswar Stock Exchange

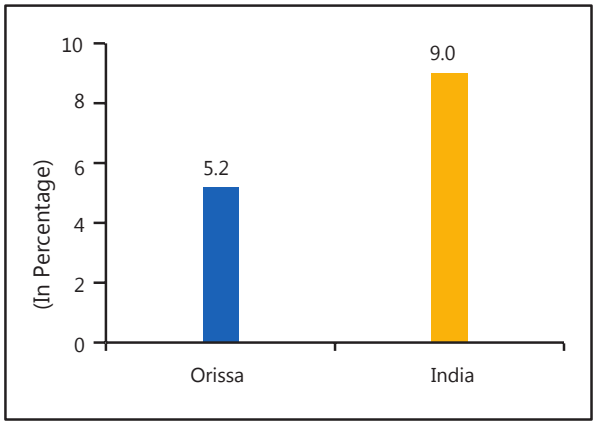
The Bhubaneswar Stock Exchange was established in 1989 as a public company limited by guarantee, in order to mobilise local savings for investment in local enterprises. It started trading operations in 1991 after being recognised by the Ministry of Finance, Government of India. However, its scale of operations has remained limited so far.

5.2 Construction

The construction sub-sector builds the capacity of the economy for achieving higher rates of growth. In India, this sector has grown at an annual rate of 9 percent between 20004-05 and 2009-10. As Figure 5.16 shows during the same period, the construction sector in Orissa has grown at an annual rate of 5.2 percent only.

Figure 5.17 depicts the share of the construction sector in the State and in India from 2004-05 to

Figure 5.16: Compound Annual Growth Rate of the Construction Sector



2009-10. It is seen that the share of this sector at the national level has remained higher than that at the State level. The sector had a share of 7.75 percent and 7.96 percent in the real GDP respectively in 2004-05 and 2009-10 at the national level. In contrast, the share of the sector in Orissa's GSDP was 8.28 percent in 2004-05 and 6.8 percent in 2009-10(Q).

5.3 Tourism

The tourism sector has a potential to generate high employment growth through a mix of activities of hotels, transport, shopping, food, entertainment

Figure 5.17: Share of Construction in GSDP/GDP

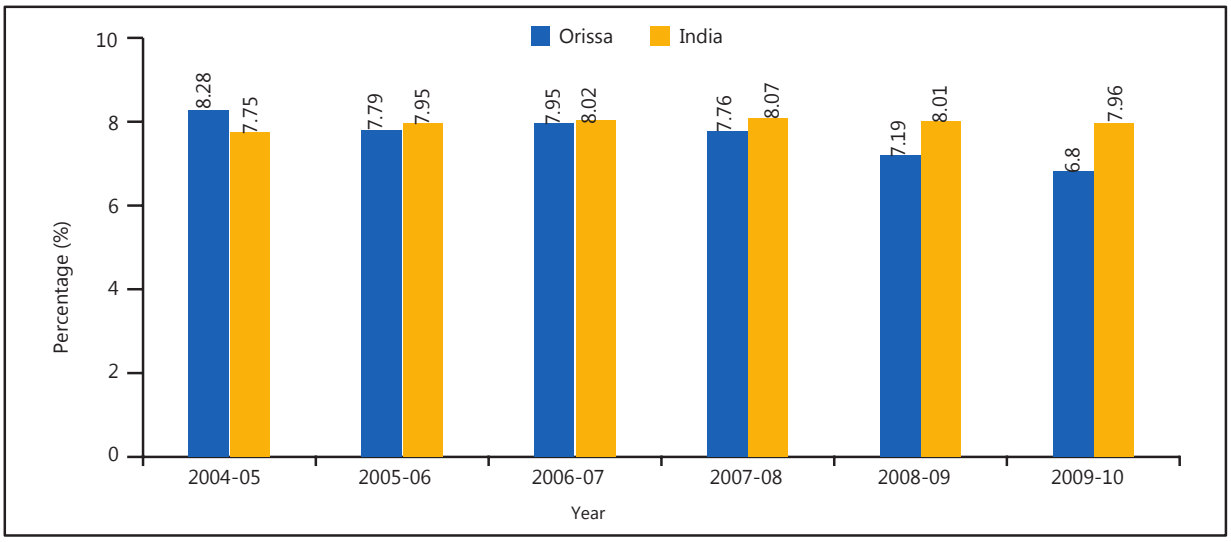
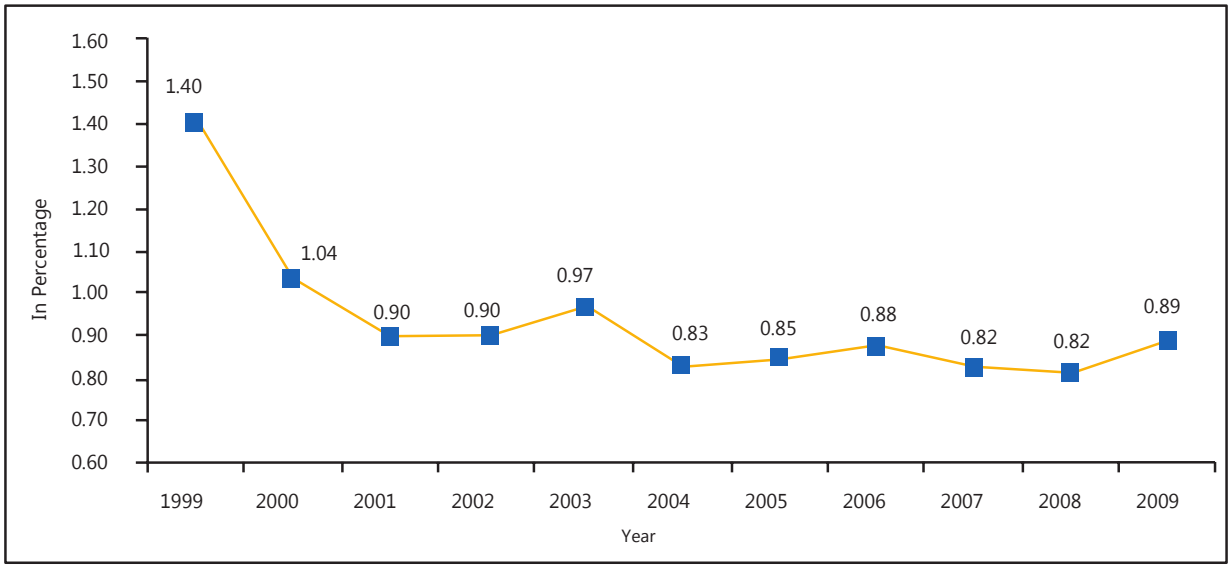


Figure 5.18: Share of Orissa in Total Foreign Tourist Arrivals in India (1999-2009)



and other areas. It is the hospitality sector, which binds together a lot of other employment generating sectors through backward and forward linkages. Tourism is a highly labour-intensive business. It not only creates direct employment but also creates opportunities for indirect employment. About 92,206 persons are directly engaged and 276,618 persons are indirectly engaged in the tourism sector in Orissa. The ratio of indirect jobs to direct jobs is approximately 3:1 in Orissa.

The State has several sources and triggers for attracting tourists. There are sites that abound in natural beauty. There are also places like Puri that attract a large number of devotees to the abode of Lord Jagannath. There is considerable scope for religious and recreational tourism. However, Orissa's full potential for tourism is yet to be realised. Figure 5.18 indicates that the relative share of foreign tourists to Orissa has been declining.

It may be observed from Figure 5.18 that Orissa used to get more than 1 percent share of foreign tourists till 2000 and since then, it has become less than 1 percent. However, in absolute terms, the number of tourists from within the State, outside the State and abroad has been increasing. The increasing trend of the total number of tourists is shown in Figure 5.19. It is significant that the first category has the highest growth rate, followed by the second and the last. As can be checked from Annexure 5.23, over the period 1999-2009, the number of tourists from within the State has tripled, that from India but outside the State has doubled and that from abroad has increased by 38 percent.

Within India, most tourists to Orissa come from West Bengal and Andhra Pradesh. During 2009-10, they respectively constituted 13.76 percent and 3.46 percent of all tourists from India and including those from Orissa. France and USA were the major tourist generating markets from overseas during 2009-10, and nearly 45 percent foreign tourists came from western Europe. The trend in the composition of tourists is depicted in Figure 5.20.

As per the tourist profile survey 2004-05, the average duration and spending of a domestic tourist is 3.9 days and Rs. 1,275 per day respectively, while that of a foreign tourist is 12.7 days and Rs. 1,944 per day. Based on this, the estimated inflow of money to Orissa during 2009-10 has been assessed at Rs. 3,717.72 crore, an increase of 9.7 percent over 2008-09. Annexure 5.24 gives detailed information on this sub-sector since 2004-05.

Figure 5.19: Tourist Arrivals in Orissa (1999-2009)

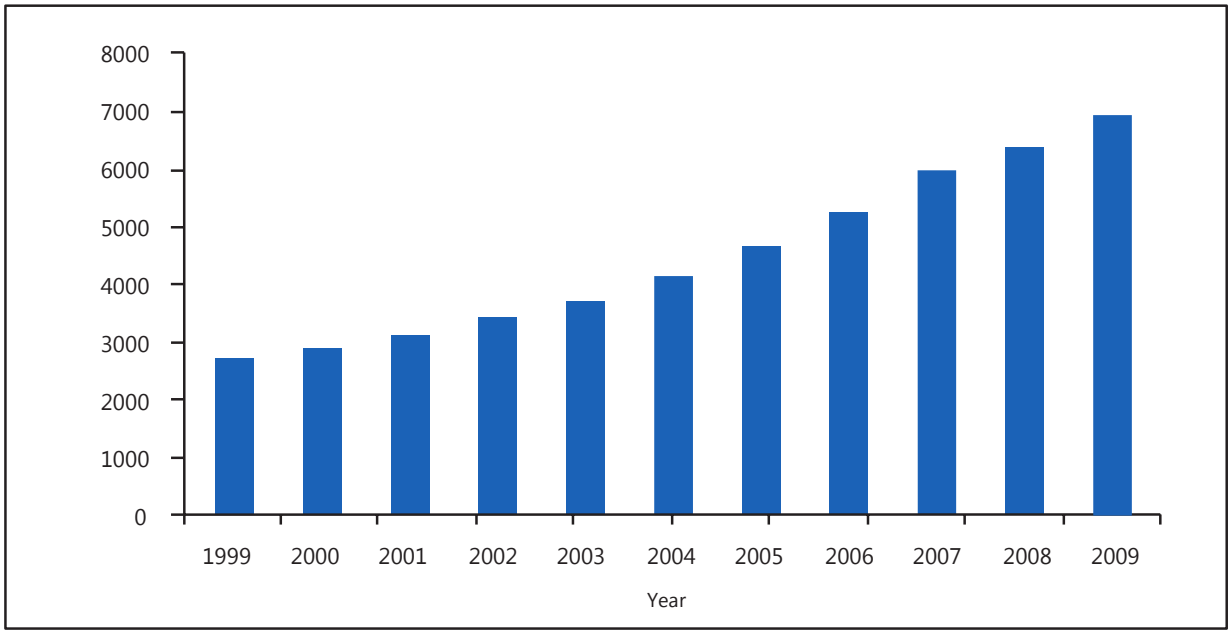
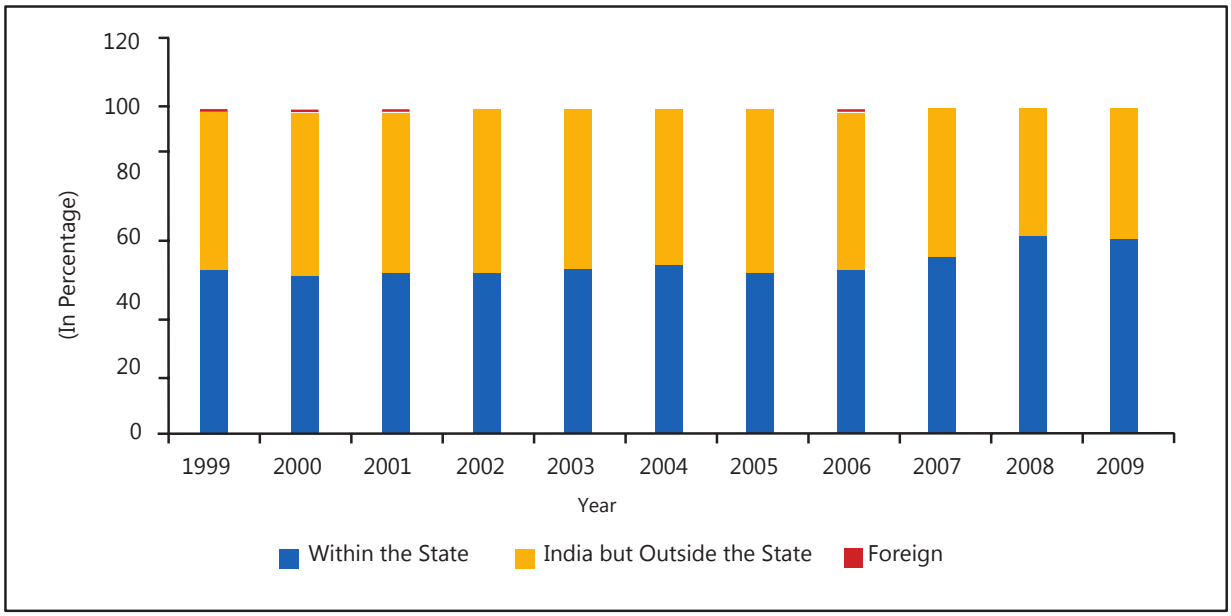


Figure 5.20: Composition of Tourists in Orissa



5.4 Trade & Hotel Industry

This sector has been growing consistently since 1950-51. The share of this sector in State domestic product increased from 4.85 percent in 1950-51 to 12.7 percent in 2008-09 in 1999-00 base. Figure 5.21 shows that the share of the sector in real GSDP has increased from 10.83 percent in 2004-05 to 12.58 percent in 2009-10 at 2004-05 prices.

The hotel and tourism industries are strongly linked. Development of the hotel industry is essential for the growth of tourism. Annexure 5.26 records the position of hotels in the State from 1990 onwards. Over the last 20 years, the number of hotels has grown 2.65 times, and, its compound annual growth rate is 5.38 percent. Thus, it is not keeping pace with the growth rate of the State during the same period. From 1999

Figure 5.21: Shares of the Trade-Hotel-Restaurant Sector in GSDP (2004-05 to 2009-10)

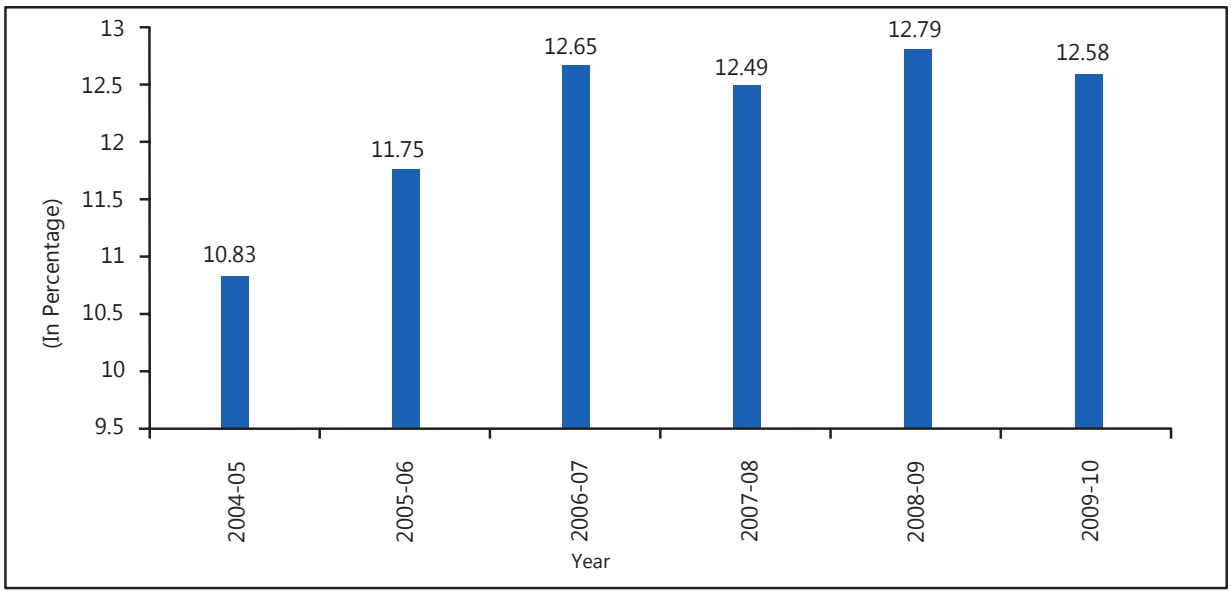


Figure 5.22: Standard of Hotels in Orissa (1999-2009)

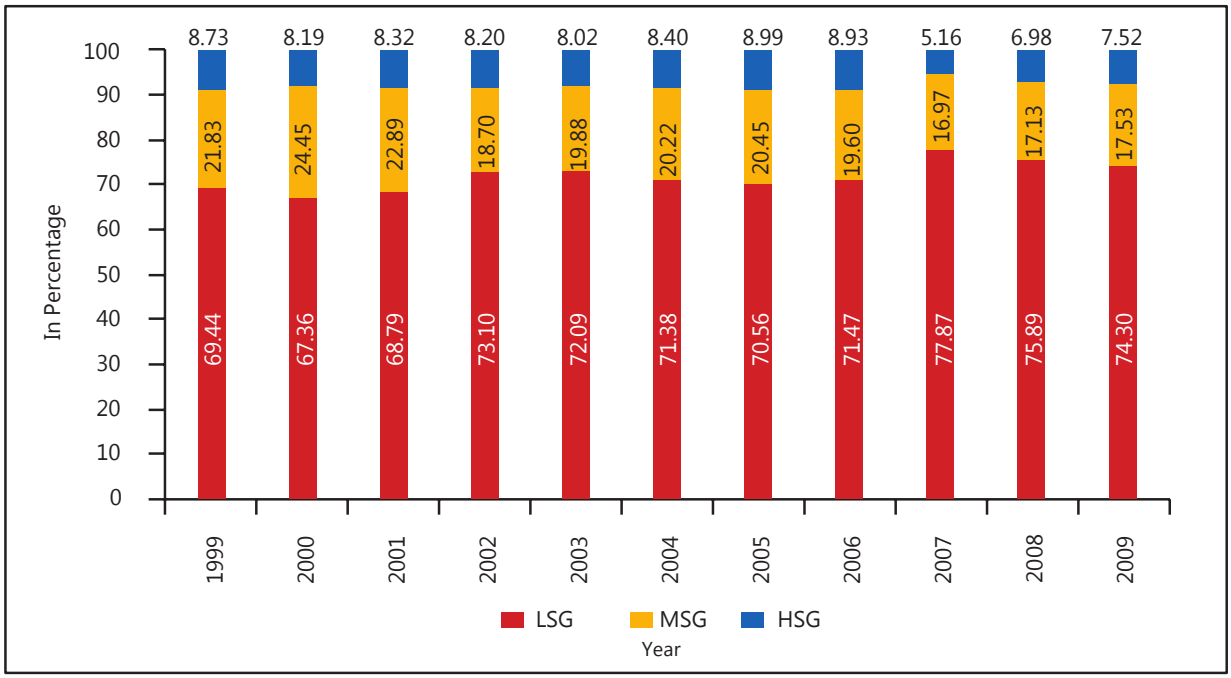
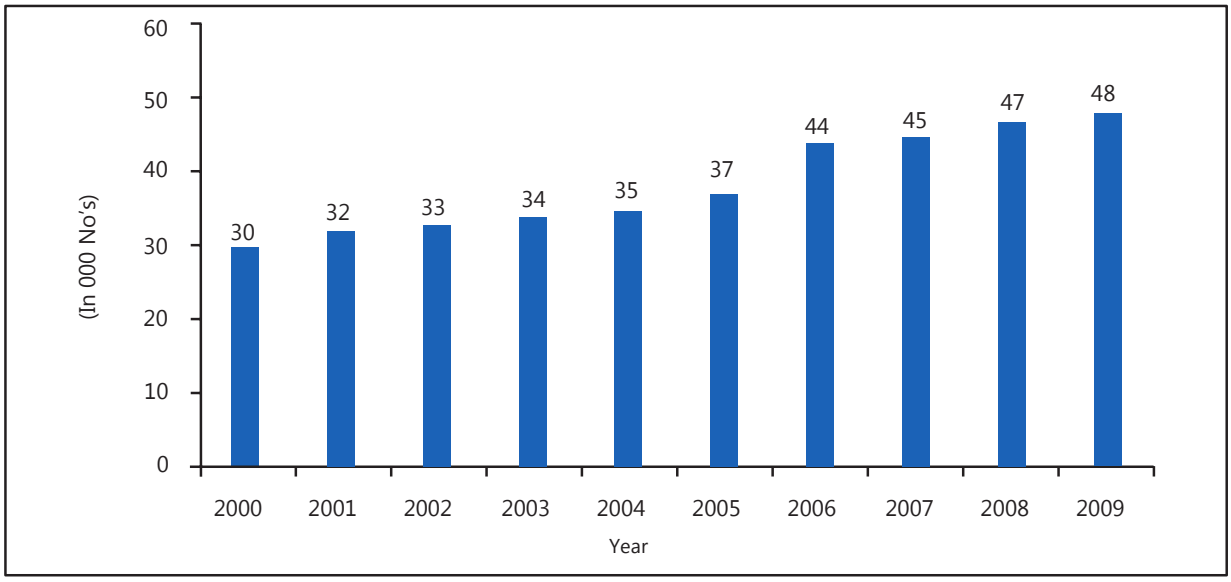


Figure 5.23: Trend and Extent of Hotel Beds in Orissa (2000-2009)



to 2009, the number of hotel rooms has grown at an annual rate of 6 percent, while the number of tourists in the State has grown at the rate of 10 percent. It, therefore, follows that the growth of this sector and its contribution to the tourism sector is founded on higher rate of capacity utilisation.

The trend in the standard of hotels in terms of servicing lower spending groups (LSG), middle spending groups (MSG) and high spending groups (HSG) from 1999 to 2009 can be seen from Figure 5.22. The trend and extent of total hotel beds is shown in Figure 5.23. From 2000 to 2009, the number of beds has increased by 63.8 percent. During 2008-09, about 1,276 hotels, comprising 96 that cater to high-spending groups, 232 that cater to middle-spending groups (MSG) and 948 that cater to lower-spending groups (LSG) were

operational in the State with 24,962 rooms and 48,408 beds.

5.5 Policies for Promotion of Tourism and Hospitality Industry

Of late, high priority has been given to the development and promotion of tourism as well as the hotel industry sector in Orissa. During the 10th Five Year Plan, public funds to the extent of Rs. 38.45 crore were spent on the tourism sector. In the first three years of the 11th Plan from 2007-08 to 2009-10, Rs. 89.94 crore has been spent for this purpose. In all, 320 tourist centres have been identified for their development and promotion in Orissa.

5.5.1 Organisation of State and District Level Festivals

Several festivals including the Rath Yatra, Konark Festival, National Crafts Mela, Mukteswar Dance Festival and other festivities have been recognised as state-level festivals in Orissa and are geared towards attracting tourists. Similarly, there are district-level festivals like the Parab in Koraput and Mahotsava in Sambalpur. While these are official festivals, interest groups such as industry sub-groups and civil society organizations also organise festivals such as beach festivals at Puri, Gopalpur and Chandipur.

5.5.2 Development of Shamuka Beach

The Shamuka Beach Project at Puri is in progress. Targeted towards high-end tourists, it is spread over 2,000 acres of land and 972 acres of land have already been acquired in Phase-I. Development works are in progress.

5.5.3 Tourist Units

At present, 19 tourist units, i.e., Panthasala, Panthika, Tourist Complex and Yatrinivas, with 105 rooms and 299 beds function under the Tourism Department, while 21 tourist units with 488 rooms and 1,033 beds are in operation under the Orissa Tourism Development Corporation (OTDC).

ANNEXURE 5

Annexure 5.1: Bank-Wise Key Indicators at the end of 2009-10

in crores of rupees

Banks	Total branches	Deposit	Advance	CD Ratio	Total Adv. To Agrl.	Adv. to MSE	Adv. to services sector	Adv. to weaker section	Adv. To DRI	Adv. To women	Adv. To SC/ST
1	2	3	4	5	6	7	8	9	10	11	12
Public Sector	1826	67804.98	38201.68	56.34	7863.78	5341.79	7100.27	4584.26	30.90	2699.67	1521.66
Private Sector	116	7199.37	5078.54	70.54	879.90	716.38	538.22	77.35	-	117.81	11.10
RRBs	875	7887.41	4047.75	51.32	1524.27	833.33	897.75	1773.30	-	776.53	742.43
RIDF (NABARD)	-	-	4769.90	-	4769.90	-	-	-	-	-	-
Total commercial	2817	82891.76	52097.87	62.85	15037.86	6891.51	8536.23	6434.91	30.90	3594.02	2275.19
Cooperative	333	3652.63	3603.99	98.67	2790.13	62.10	335.75	2545.04	-	184.94	576.89
OSFC	1	-	373.38	-	-	221.26	44.76	62.60	-	-	-
SIDBI	1	-	360.34	-	-	53.46	306.89	-	-	293.71	-
Grand Total	3152	86544.38	56435.59	65.21	17827.99	7228.33	9223.63	9042.55	30.90	4074.66	2852.08
Rural	1819	19608.66	16500.92	84.15							
Semi Urban	673	24862.90	11264.04	45.30							
Urban	660	42072.82	28670.63	68.15							

Source: State Level Bankers' Committee, Orissa

Annexure 5.2: Share of Commercial and Cooperative Banks in Total Deposits

Rupees in crores

2002-03	21006.85	1591.85	22598.70	7.04	92.96
2003-04	23359.86	1761.25	25121.11	7.01	92.99
2004-05	27372.64	1863.49	29236.13	6.38	93.62
2005-06	31966.97	1955.75	33922.72	5.77	94.23
2006-07	41037.16	2126.80	43163.96	4.92	95.08
2007-08	52272.25	2422.06	54694.31	4.43	95.57
2008-09	67766.26	2914.30	70680.56	4.13	95.87
2009-10	82891.56	3652.63	86544.38	4.22	95.78

Source: State Level Bankers' Committee, Orissa

Annexure 5.3: Individual Bank-Wise Total Deposits and Advances at the end of 2009-10

In lakhs of rupees

Allahabad Bank	67	228571	162162
Andhra Bank	106	307687	172758
Bank of Baroda	52	199813	127957
Bank of India	131	363626	193070
Bank of Maharashtra	2	3270	1820
Canara Bank	53	199442	91604
Central Bank of India	64	98509	61201
Corporation Bank	9	50070	8910
Dena Bank	7	29151	23924
Indian Bank	56	112293	85404
Indian Overseas Bank	91	258239	129771
Oriental Bank of Commerce	22	147525	74239
Panjab National Bank	69	266886	126178
Panjab & Sind Bank	4	18130	3845
State Bank of India	642	2795563	1731517
State Bank of Bikanar & Jaipur	3	8431	13445
State Bank of Hyderabad	10	82937	12486

(Contd...)

State Bank of Travancore	1	6997	5304
State Bank of Mysore	1	9631	10467
Syndicate Bank	51	120116	39032
Union Bank	69	387013	193161
United Bank of India	110	207805	114081
UCO Bank	186	636200	380824
Vijaya Bank	9	53281	9008
IDBI Bank	11	189311	48000
Total Public Sector Banks	1826	6780497	3820168
Laxmi Vilas Bank Ltd.	1	506	29
Federal Bank	3	16405	11722
HDFC Bank	24	93032	177244
ICICI Bank	37	197054	99744
The South Indian Bank Ltd.	1	21356	748
Karnataka Bank Ltd.	3	11943	31012
Rajasthan Bank Ltd.,	1	1541	339
ING Vysya Bank	1	14722	1781
Axis Bank	36	272042	132746
Indus Ind Bank	6	81698	36937
Karur Vysya Bank	3	9637	15552
Total Private Sector Banks	116	719937	507854
Baitarani Gramya Bank	104	104142	50604
Utkal Gramya Bank	333	241701	140855
Kalinga Gramya Bank	183	145429	77810
Neelachala Gramya Bank	174	214465	101073
Rushikulya Gramya Bank	81	83004	34433
Total of RRBs	875	788741	404775
RIDIF (NABARD)	-	-	476990
Total Commercial Banks	2817	8289176	5209787
Orissa State Co-Op.Bank	328	365263	356746
OSCARD Bank	5	0	3653
Total of Co-operative Bank	333	365263	360399
OSFC	1	0	37338
SIDBI	1	0	36034

Source: State Level Bankers' Committee, Orissa

Annexure 5.4: Sector-Wise Target and Achievements of Banks in Priority Sectors under the Annual Credit Plan (2004-05 to 2009-10)

	Agriculture		
Crop Loan			
2004-05	1371.00	1480.82	108.01
2005-06	1854.21	2111.10	113.85
2006-07	2335.97	2493.68	106.75
2007-08	2671.31	2665.84	99.80
2008-09	3224.19	2614.18	81.08
2009-10	4182.16	3944.91	94.32
Term Loans			
2004-05	326.83	237.12	72.55
2005-06	449.15	431.09	95.98
2006-07	574.19	702.82	122.40
2007-08	712.31	697.76	97.96
2008-09	797.34	601.95	75.49
2009-10	988.71	1182.07	119.56
Allied Sectors			
2004-05	138.37	186.09	134.49
2005-06	210.07	158.52	75.46
2006-07	289.34	261.76	90.47
2007-08	354.95	293.68	82.74
2008-09	535.39	234.42	43.79
2009-10	743.33	236.51	31.82
Total Agriculture			
2004-05	1836.20	1904.03	103.69
2005-06	2513.43	2700.71	107.45
2006-07	3199.50	3458.26	108.09
2007-08	3738.57	3657.28	97.83
2008-09	4556.92	3450.55	75.72
2009-10	5914.20	5363.49	90.69
Industries			
2004-05	358.56	252.06	70.30
2005-06	339.52	386.76	113.91
2006-07	486.10	497.26	102.30
2007-08	775.54	642.21	82.81
2008-09	814.34	650.50	79.88
2009-10	1121.70	1514.47	135.02

(Contd...)

Services (OPS)			
2004-05	1315.06	2683.04	204.02
2005-06	1562.47	2506.54	160.42
2006-07	2460.06	2784.23	113.18
2007-08	2748.21	2745.66	99.91
2008-09	3161.17	3383.44	107.03
2009-10	4466.66	4264.93	95.48
Total Loans			
2004-05	3509.82	4839.13	137.87
2005-06	4415.42	5594.01	126.69
2006-07	6145.66	6739.75	119.67
2007-08	7262.32	7045.15	97.01
2008-09	8532.44	7484.49	87.72
2009-10	11502.55	11142.89	96.87

Source: State Level Bankers' Committee, Orissa

Annexure 5.5: Progress of the Cooperative Movement in Orissa

1985-86	6329	46.01	1196.46	2600.43
1986-87	6333	46.36	1236.45	2667.06
1987-88	6488	74.51	1254.40	2640.29
1988-89	6516	48.15	1443.01	2996.91
1989-90	6491	45.67	1581.39	3249.21
1990-91	6563	49.13	1455.00	2961.53
1991-92	6686	49.98	1588.56	3178.39
1992-93	6691	51.42	1655.31	3219.19
1993-94	4511	50.84	844.86	1661.80
1994-95	4393	50.44	1066.13	2113.66
1995-96	4293	54.00	1184.16	2192.89
1996-97	4424	52.00	1413.44	2718.15
1997-98	4553	52.39	1389.12	2651.50
1998-99	4345	47.75	1685.73	3530.32
1999-00	3968	48.96	2033.49	4153.37
2000-01	4202	50.50	2297.59	4549.68
2001-02	4886	50.47	2684.63	5319.26
2002-03	4702	50.20	2968.01	5912.37
2003-04	4612	52.22	3273.36	6268.40
2004-05	4646	61.66	3603.46	5844.08
2005-06	4635	62.96	3926.07	6235.82
2006-07	4548	63.56	4262.80	6706.73
2007-08	4334	64.86	4756.88	7334.07
2008-09	4285	65.87	5091.00	

Source: Registrar, Co-operative Societies, Orissa

Annexure 5.6: Membership, Working Capital and Advances of Agricultural and Non-Agricultural Credit Cooperative Societies in Orissa

1985-86	3815	192	38555	4462	6556	3265	24105	3005
1986-87	3846	198	39855	5122	6099	1998	23447	3196
1987-88	3883	214	42045	6885	7500	6392	24338	3971
1988-89	3918	222	43879	7780	7009	4899	23724	5051
1989-90	3948	237	45716	9380	1967	3991	24861	6301
1990-91	3893	235	39669	11718	3507	5424	18855	9366
1991-92	4037	242	37320	14327	4105	8443	16971	11701
1992-93	4150	238	40432	17968	6643	7047	19712	11758
1993-94	4192	892	45989	38497	9287	2577	20686	15248
1994-95	4260	784	48929	57684	12286	8085	23975	18956
1995-96	4300	1100	55812	62604	16730	17237	33870	25223
1996-97	4200	1000	62600	78744	19387	50430	31288	33047
1997-98	4149	1090	73429	65483	22567	26475	35986	92557
1998-99	4369	406	94555	74018	33225	32335	44728	37185
1999-00	4554	342	126512	76837	44540	66698	66024	38417
2000-01	4638	362	138856	90903	51852	85702	78966	41784
2001-02	4700	347	170205	98258	62020	73050	83095	78741
2002-03	4659	361	191293	105508	62069	108936	94501	55597
2003-04	4867	355	223601	103735	85568	92707	96536	53437
2004-05	5215	951	253058	107288	120806	103815	128054	59419
2005-06	5367	929	282609	109998	142658	119079	150122	63081
2006-07	5281	1075	312767	113513	153172	122415	166910	64151
2007-08	5519	967	346602	129086	146304	136595	186284	67161
2008-09	5623	964	356764	152333	158394	167912	159615	80927

Source: Registrar, Co-operative Societies, Orissa

Annexure 5.7: Market Share of Cooperatives in Dispensing Crop Loan

Rs. in crores

2006-07	939.42	1554.26	2493.68	62.30	37.68
2007-08	875.02	1501.02	2376.76	63.15	36.85
2008-09	764.13	1489.46	2253.59	66.00	34.00
2009-10	1432.83	2682.17	4115.00	65.00	35.00

Source: SLBC, Orissa

Annexure 5.8: Season-Wise Dispensation of Short-Term Credit by Cooperative Banks in Orissa

Members in lakhs and amount in crores of rupees

Source: SLBC, Orissa

Annexure 5.9: Investment Credit in Orissa

2006-07	10766	39.38	19030	39.93	29796	79.30
2007-08	17123	56.44	19421	47.16	36544	103.60
2008-09	23133	84.43	20169	74.33	43302	158.76
2009-10	21517	104.17	25089	95.58	46606	199.75

Annexure 5.10: Deposits and advances by Urban Cooperative Banks in Orissa

Annexure 5.11: Bank Assistance to the Handloom and Handicraft Sector during 2009-10

Self Help Groups	189	153.09	74	90.35
Individuals	637	272.47	385	157.33
Artisan Credit Card (ACC)	324	124.70	267	96.26
Swarozgaries Credit Card	221	111.98	107	89.97
Total	1371	662.24	833	433.91

2006-07	7.30	837.47	5.74	721.70	13.04	1559.16
2007-08	7.21	899.24	4.44	602.50	11.65	1501.74
2008-09	4.65	546.41	7.04	943.05	11.69	1489.46
2009-10	10.11	1407.82	8.21	1274.35	18.32	2548.70

2006-07	625.23	421.23
2007-08	615.02	415.43
2008-09	840.52	495.37
2009-10	944.48	566.21

Annexure 5.12: Bank Loans for Housing during 2009-10

Annexure 5.13: Credit Cards issued during 2009-10

Artisan Credit Cards	1610	7.40
Swarozgar Credit Cards	30500	68.06
Kissan Credit Cards	711943	1041.08
Total	744053	1116.54

Annexure 5.14: Recovery Position of Banks at the end of 2009-10

In crores of rupees

Public Sector Banks	4467.19	2416.90	54.10	2050.29
Private Sector Banks	1.08	0.59	54.60	0.49
Regional Rural Banks	1057.05	690.47	65.30	366.58
Total Commercial Banks	5526.32	3107.97	56.20	2418.35
Cooperative Banks	3252.50	2384.52	73.30	867.98
Orissa State Finance Corporation	2462.78	16.77	0.70	2446.01
SIDBI	47.71	45.91	96.20	1.80
Grand Total	11288.31	5555.17	49.20	5733.14

Source: SLBC

Home Loan Scheme	186	5.98
Golden Jubilee Rural Housing Scheme	1,606	34.97
National Housing scheme	324	18.97

Annexure 5.15: Sector and Bank-Wise Loan Recovery Position in Orissa

A. Agricultural Short Term Loan								
Total demand for	33935	68593	48227	39169	265416	321108	347578	428869
Amount collected	23075	44376	36183	27516	178634	235821	237892	307713
Overdue amount	10860	24217	12044	11653	86782	85287	109686	121156
% of overdue to demand	32.00	35.31	24.97	29.75	32.70	26.56	31.56	28.25
B. Agricultural Term Loan								
Total demand for	41141	99911	22525	21044	37356	559	101022	121513
Amount collected	22334	55934	16313	12604	29756	124	68403	68662
Overdue amount	18807	43977	6212	8440	7600	435	32619	52851
% of overdue to demand	45.71	44.02	27.58	40.11	20.34	77.82	32.29	43.49
C. Other Priority Sector								
Total demand for	92346	278215	71613	45492	19451	3583	380662	578449
Amount collected	43026	141380	52901	28927	11906	2507	110784	179142
Overdue amount	49320	136835	18712	16565	7545	1076	269878	399307
% of overdue to demand	53.41	49.18	26.13	36.41	38.79	30.03	70.90	69.03
TOTAL (A+B+C)								
Total demand for	167422	446719	142365	105705	322223	325250	829262	1128831
Amount collected	88435	241690	105397	69047	220296	238452	417079	555517
Overdue amount	78987	205029	36968	36658	101927	86798	412183	573314
% of overdue to demand	47.18	45.90	25.97	34.68	31.63	26.69	49.70	50.79

Annexure 5.16: Activity-Summary of Orissa Rural Housing Development Corporation (ORHDC) at the end of June, 2010

In crores of rupees

EWS Housing (Kalinga Kutir scheme)	28525	59.25	74.47	41.21	55.30
Credit linked Housing scheme	102286	296.71	332.41	91.52	27.50
Loan to PSU/Govt. Employees	28364	126.36	129.90	140.62	108.20
Individual Housing Finance Scheme	3198	59.23	98.95	65.96	66.70
Builder/Project Finance	25	19.79	70.55*	27.09*	38.40
Building Centre Finance	67	5.96	12.30	0.81	6.60
Total	162465	567.30	718.58	367.21	51.10

* upto 31.12.2009

Source: ORHDC

Annexure 5.17: Activity Summary of Orissa State Financial Development Corporation (OSFDC) during 2009-10

SCA to SCP (SC Sector)	26036	25.14	36.03
SCA to TSP (ST Sector)	8896	10.65	13.93
Scavenger & Dependants	1865	2.37	3.06
Term Loan Scheme	31	0.23	-
Total	36828	38.39	53.02

Source: OSFDC

Annexure 5.18: Activities of Postal Life Insurance/Rural Postal Life Insurance of Orissa circle

2003-04	6148	53.18	29802	118.13
2004-05	7049	61.19	17239	218.64
2005-06	7608	84.84	20293	262.10
2006-07	8527	91.67	60703	345.24
2007-08	9547	107.06	71220	428.89
2008-09	11092	160.45	62711	439.42
2009-10	12534	210.57	144487	472.46

Source: PMG, Orissa

Annexure 5.19: Business of LIC in Orissa (2005-06 to 2009-10)

Source: Life Insurance Corporation Ltd. Central Office, Mumbai

2005-06	980644	7365.93	354.68
2006-07	1077229	6645.38	864.33
2007-08	1186679	7212.04	1342.21
2008-09	1001415	8630.12	611.86
2009-10	1249332	NA	960.15

Annexure 5.20: Performance Summary of SIDBI (2005-06 to 2009-10)

2005-06	26	35.76	22	19.40
2006-07	5	1.58	11	13.82
2007-08	13	12.43	13	9.57
2008-09	15	21.54	9	7.16
2009-10	8	14.85	8	4.97

Source: SIDBI

Annexure 5.21: Refinance Assistance Provided by NABARD in Orissa

Minor Irrigation	1.02	5.96	5.28	1.22	1.74
Land Development	5.83	11.96	4.14	5.04	2.17
Farm Mechanization	21.36	39.42	26.51	26.75	26.63
Plantation &Horticulture	2.09	3.45	12.06	3.09	9.68
Fishery (Inland)	0.96	4.31	5.59	1.64	1.16
Dairy Development	0.91	3.30	6.47	3.34	2.63
Poultry	0.42	1.92	4.51	1.43	1.14
IRDP/ITDP/SC & ST Action Plan/PMRY etc.	22.45	40.85	25.09	258.76	221.88
Non farm Sector	171.26	135.17	256.53		
Sheep/Goat/Piggery	0.71	0.43	12.21	2.05	7.52
Other Farm Sector	53.06	95.89	-	107.53	27.61
Animal Husbandry/Forestry & others	-	1.46	0.12	0.09	0.28
Storage go down market yards	-	0.03	-	-	-
Total	280.06	344.12	358.51	410.94	302.44

Source: NABARD, Orissa Branch

Annexure 5.22: Number of Foreign Tourist Arrival, Orissa and All-India 1999-2010

1999	2358929	33101
2000	2481928	25758
2001	2649378	23723
2002	2537282	22854
2003	2384364	23034
2004	3457477	28817
2005	3918610	33310
2006	4447167	39141
2007	5081504	41880
2008	5366966	43966
2009	5108579	45684
2010 (upto August)	NA	32055

Source: Department of Tourism, Government of Orissa.

Annexure 5.23: Tourist Composition in Orissa (1999 to 2010)

1999	1367311	1324529	33101
2000	1413956	1474436	25758
2001	1537855	1562461	23723
2002	1703002	1710350	22854
2003	1876571	1824679	23034
2004	2156986	1968550	28817
2005	2293865	2339111	33310
2006	2699654	2540242	39141
2007	3252380	2692510	41880
2008	3846512	2511933	43966
2009	4139456	2752054	45684
2010 (upto August)	2731246	1812481	32055

Source: Tourism Department, Government of Orissa.

Annexure 5.24: Inflow of Money via Tourist Spending in Orissa (2004-05 to 2009-10)

In crores of rupees

2004-05	2151.10	74.80	2225.90	70.60
2005-06	2334.91	88.21	2423.12	8.90
2006-07	2673.77	97.29	2771.06	14.40
2007-08	3088.21	106.93	3195.14	15.30
2008-09	3254.65	135.46	3390.11	6.10
2009-10	3566.89	150.83	3717.72	9.70

Source: Department of Tourism, Government of Orissa

Annexure 5.25: Number of Visitors and Revenue Collected by Nandankanan (2001-02 to 2009-10)

2001-02	11.99	0.81
2002-03	12.99	0.90
2003-04	13.37	0.87
2004-05	12.41	1.12
2005-06	13.06	1.46
2006-07	15.09	1.77
2007-08	17.33	1.93
2008-09	18.62	2.15
2009-10	21.29	3.61

Source: Directorate of Nandankanan.

Annexure 5.26: Hotel Position in Orissa (1990 to 2009)

1990	_	_	_	480	9761	18779
1991	_	_	_	506	10221	19526
1992	_	_	_	508	10534	19983
1993	_	_	_	531	10963	20816
1994	_	_	_	559	11508	21466
1995	_	_	_	608	12467	23383
1996	_	_	_	634	13036	24441
1997	_	_	_	672	13710	25826
1998	_	_	_	694	14207	26946
1999	64	160	509	733	14939	28223
2000	63	188	518	769	15668	29560
2001	68	187	562	817	16861	31922
2002	68	155	606	829	17289	32791
2003	69	171	620	860	17839	33907
2004	76	183	646	905	18541	35314
2005	84	191	659	934	19265	36771
2006	103	226	824	1153	22820	43828
2007	62	204	936	1202	23341	44948
2008	86	211	935	1232	24197	46809
2009	96	232	948	1276	24962	48408

Source: Tourism Department, Government of Orissa.

CHAPTER 6

Infrastructure

The importance of infrastructure for sustained economic development is well recognized. Good transport and communication networks, adequate irrigation facilities for agriculture, uninterrupted and adequate power supply to industries, residents and other users, banking and insurance backup for trade and commerce, marketing and storage support for agriculture, social infrastructure including water supply, sanitation, sewerage disposal, education and health and allied activities are considered essential for accelerated economic growth. There is a felt need for substantially improving the extent and quality of infrastructure in the State. The State Government has rightly focused on Bijli, Sadak and Pani. Irrigation or the Pani component of infrastructure has been discussed elsewhere. This Chapter focuses on power, transport, mail and tele-communication, science and technology.

6.1 Power

The power sub-sector along with gas and water supply sub-sectors contributes about 12 percent of Orissa's GSDP. It is a vital sector of the economy, since all other sectors depend on it for their performance and growth. Adequate availability or deficiency of power impacts the economic performance of a sector or a region

6.1.1 Power Consumption

Keeping pace with growth in major sectors, the power consumption of the State has been increasing over the years. It is seen from Figure 6.1 that during 2000-01 and 2009-10, Orissa's power consumption has doubled. Annexure 6.1 provides power consumption data by sectors such as domestic, commercial, industrial, railways, irrigation and agriculture. Figure 6.2 graphs the share of the two largest consumer categories: the

Figure 6.1: Total Annual Consumption of Power, 2000-01 to 2009-10

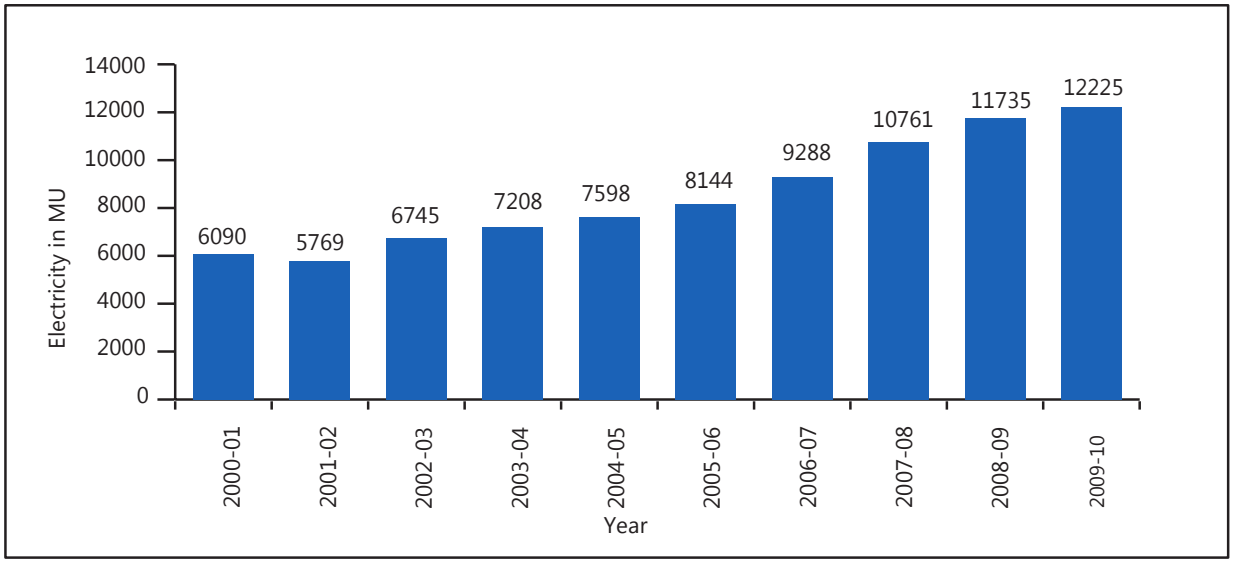
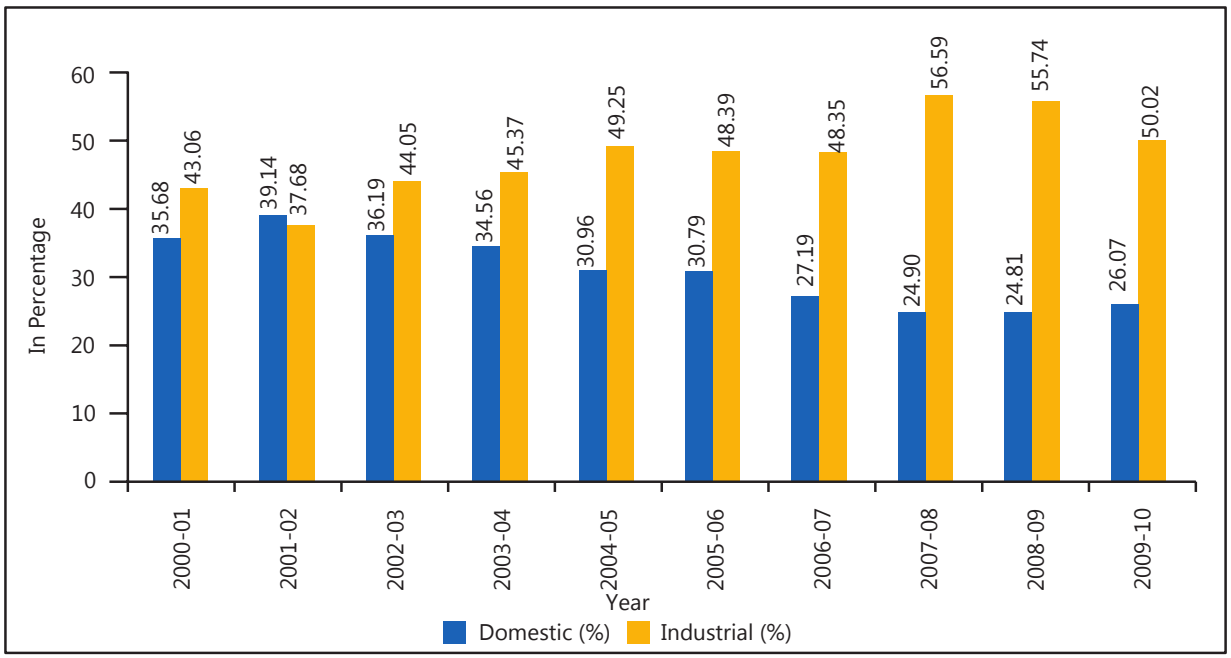


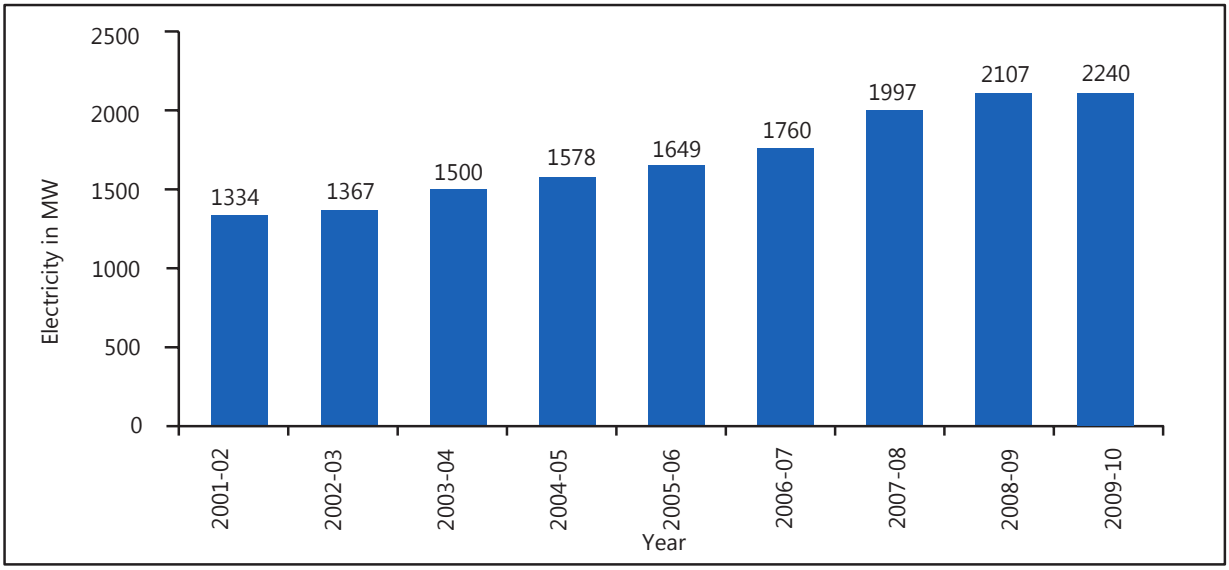
Figure 6.2: Share of Power Consumption by Domestic and Industrial Sectors, 2000-01 to 2009-10



industrial sector and the domestic (household) sector. The share of the domestic sector showing a declining trend since last two years has increased during 2009-10.

The Orissa Electricity Regulatory Commission (OERC) has reported that in 2009-10, there were 27.79 lakh consumers in the State, of which 24.65 lakh (88.7 percent) were domestic consumers. Further, sector-wise distribution of consumers in 2007-08 is given in Annexure 6.2. Out of a total of 25.76 lakh consumers about 65 percent were from rural Orissa including more than 85 percent domestic consumers. Figure 6.3 graphs the estimated demand for power in Orissa from 2001-02 to 2009-10. This is not the same as consumption of power, which is a "flow" concept and has a time dimension. Demand for power, a stock concept, refers to the consumption of power at a given point of time on an average. It has risen by 68 percent from 2001-02 to 2009-10.

Figure 6.3: Estimates of Demand of Power, 2001-02 to 2009-10



6.1.2 Power Supply

The supply of power to a region is measured by installed capacity and availability for consumption. Figure 6.4 depicts the time series of installed capacity. It is heartening to note that the installed capacity of the State has increased by 66 percent from 2002-03 to 2009-10. Unless there is a huge amount of import of power from elsewhere, availability is less than the installed capacity. The ratio of availability to installed capacity is shown in Figure 6.5. It is generally lower and may be attributed to several factors including capacity utilization, transmission and distribution losses.

If the estimated demand is compared to availability, the State has had a consistent surplus. This is shown in Figure 6.6. During the peak demand period however, shortage of supply of power is observed. During 2009-10, the peak demand was 3,491 megawatt net while the amount met during peak hours was 3,242 megawatt net, resulting in a deficit of 7.1 percent.

Figure 6.4: Installed Capacity for Power Projects, 2002-03 to 2009-10

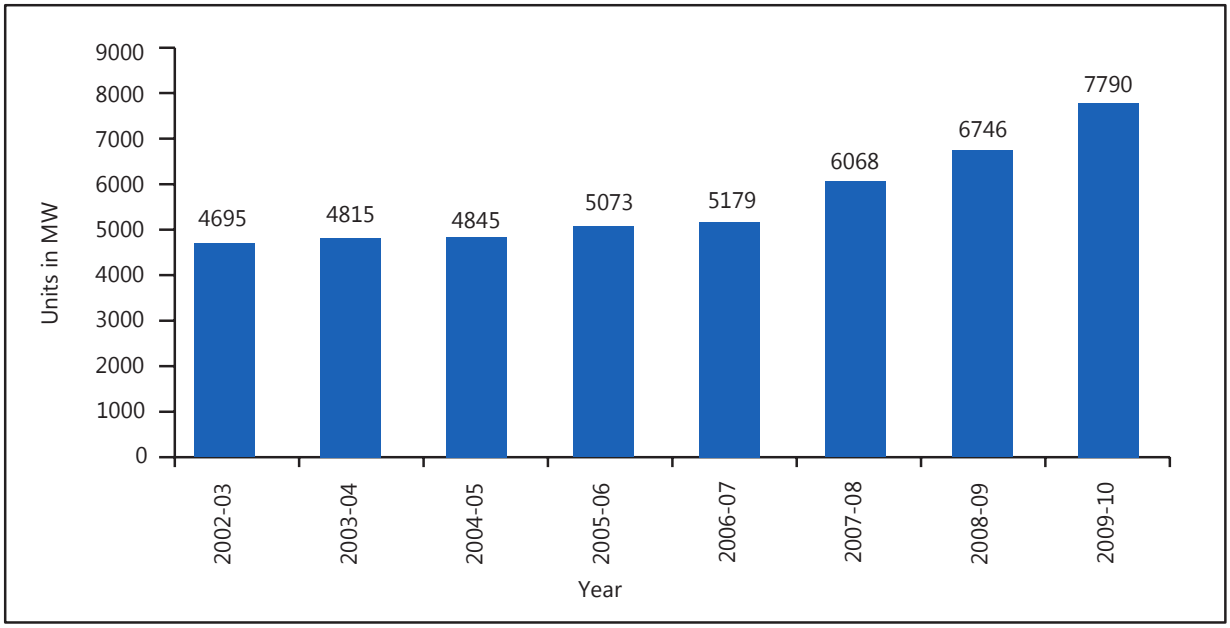


Figure 6.5: Ratio of Availability to Installed Capacity, 2002-03 to 2009-10

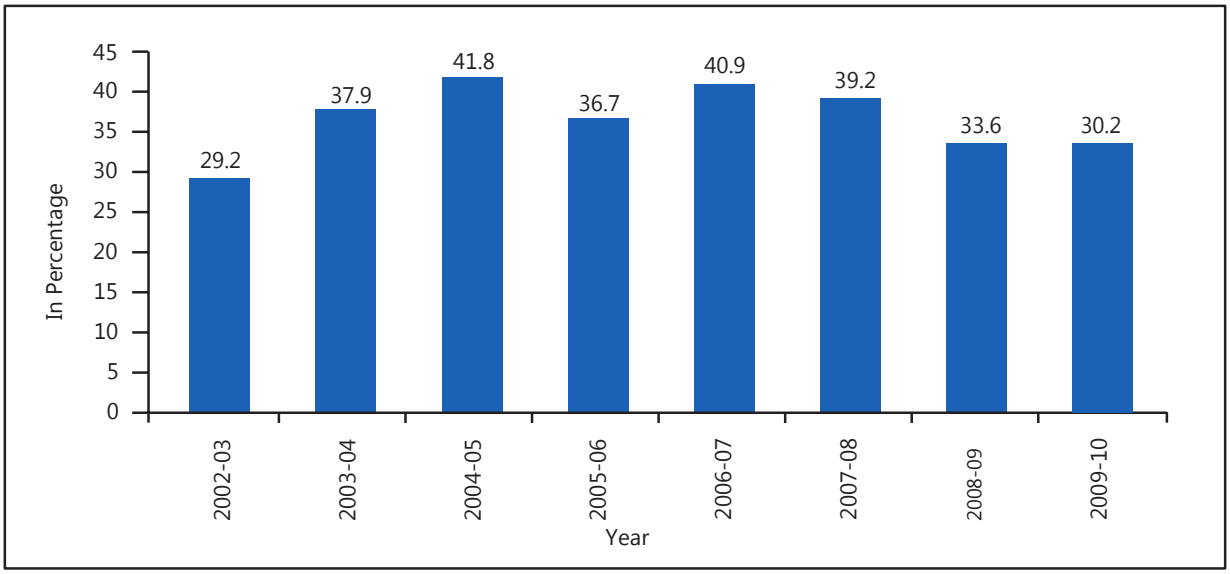
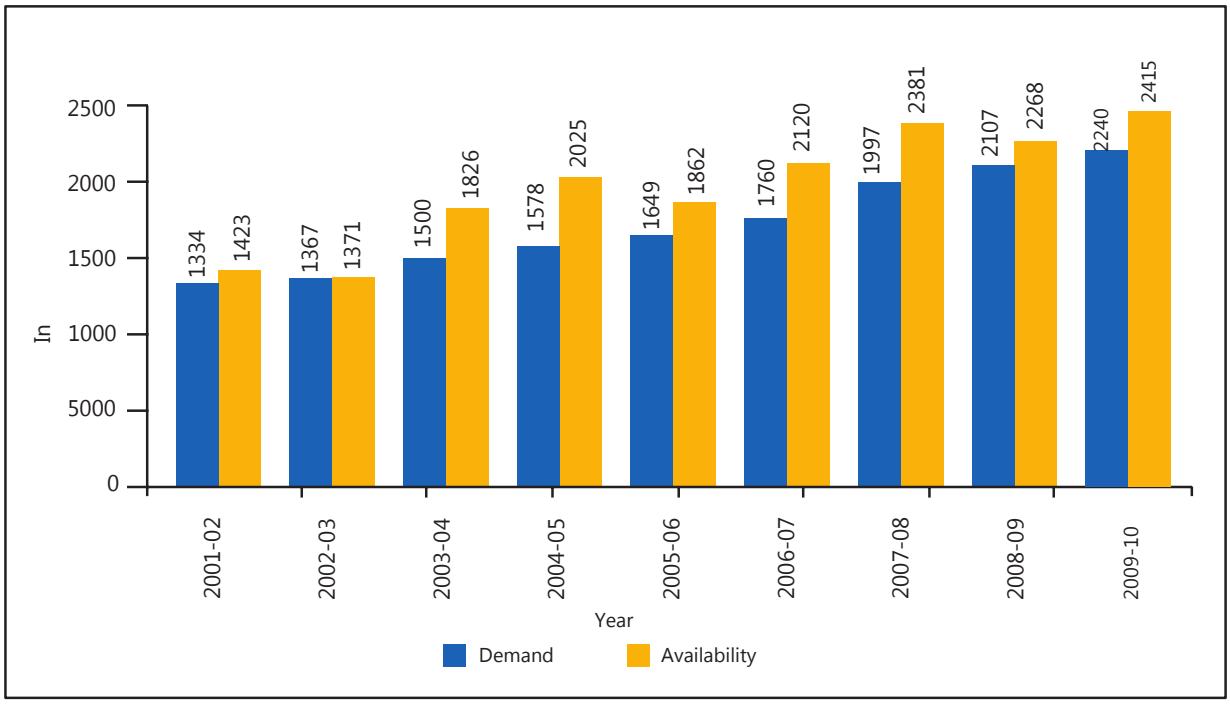


Figure 6.6: Demand vis-a-vis Availability of Power, 2001-02 to 2009-10



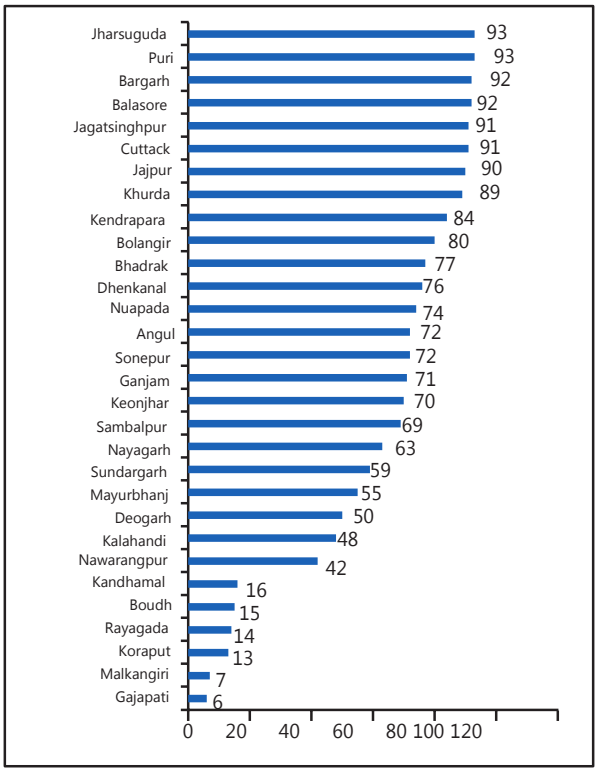
However, this was below the all-India average of peak-period deficit of 13.3 percent.

As regards supply of power, there are three "sector-wise" sources: the State, the Centre, and captive power plants by major industries. In 2009-10, the State's share was 48 percent and that of the Central sector was nearly 32 percent. The remaining 20 percent came from captive power plants purchased from other states. In Orissa, electricity supply is mostly hydro and thermal based. Out of a total power supply from the State sector in 2009-10, 58 percent was from thermal sources and the rest was hydro based. Details of the State sector and its break-up into hydro and thermal as well as details of central sector plants from which the State gets some power are given in Annexure 6.4. Annexure 6.5 lists the major industries that have captive plants (e.g., NALCO, Tata Sponge Iron, ICCL, RSP etc.). During 2009-10, the State purchased 329.57 MW power from captive power plants installed by industries such as NALCO, ICCL, RSP, INDAL, NINL, and NBVL (Meramundali) Jindal Steel and others.

6.1.3 Rural Electrification

Compared to 2000-01, the State's total consumption of power has nearly doubled in 2009-10, the rural-urban disparity in consumption remains high. By the end of 2009-10, of a total of 47,529 inhabited villages, 29,735 villages were

Figure 6.7: Percentage of Villages Electrified, 2008-09



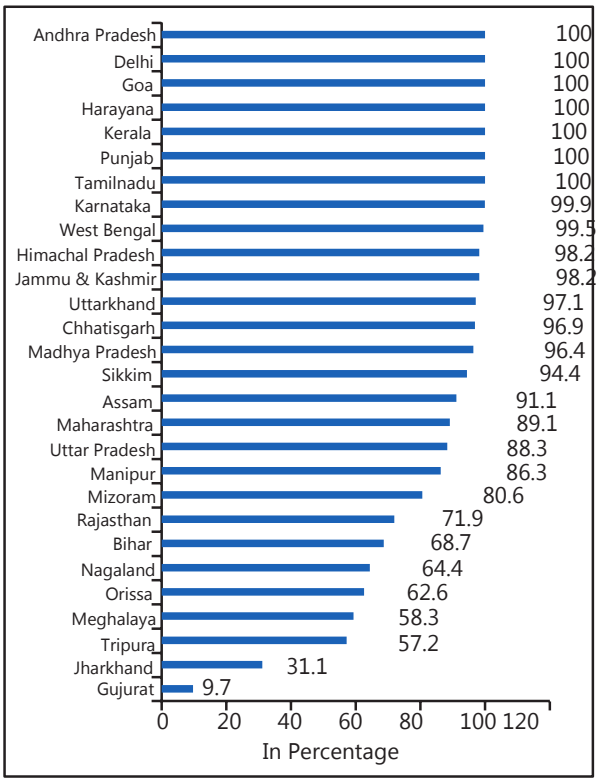
electrified. Nearly 38 percent of villages are yet to be electrified.

District-wise village electrification data by the end of 2008-09 is presented in Annexure 6.6. The district-wise percentage of villages electrified is shown in Figure 6.7. Village electrification rates in districts like Malkangiri, Koraput, Rayagada, Baudh, Kandhamal and Nabrangpur are very low. Figure 6.8 compares the extent of village electrification across states by the end of September 2010.

6.1.4 Government Institutions and Initiatives in Power Sector

The State Government has taken up a series of measures for creating additional generation capacity, demand-side management, reduction of transmission and distribution (T&D) losses and modernization/ renovation of old units. There are currently three general sources of power generation which include the central-sector, the state-sector and the private-sector units. Transmission lines are provided and maintained by the Orissa Power Transmission Corporation Ltd (OPTCL). The distribution task has been handed over to privately

Figure 6.8: Percentage of Villages Electrified Across States, September 2010



managed companies: WESCO, NESCO, SOUTHCO and CESU. The State has entrusted the commercial side to Grid Corporation of Orissa (GRIDCO). They negotiate bulk buying from generators and bulk selling to distributing companies. GRIDCO and OPTCL are both owned by the Government of Orissa. These two institutions are at the centre of the power sector organization in the State.

Although the distribution companies are private, they are not totally independent. The Orissa Electricity Regulatory Commission (OERC), established in 1996, is a critical intermediary between these companies and consumers. It determines tariff rates and is entrusted with the responsibility for promoting efficiency and protecting the interest of consumers. The activities of state-owned entities, namely, GRIDCO, OPTCL, OHPC, OPGC, and OERC are outlined below.

Grid Corporation of Orissa (GRIDCO)

GRIDCO purchases power from sources like OHPC, OPGC, NTPC and CPPs in the State. It receives the State's share from central-sector power stations viz. Farakka, Kahalgoan and Kaniha through EREB system. It is also involved in trading of surplus power in the ABT regime. During 2009-10, GRIDCO procured 2,415 MW of power from various sources and met the demand of 2,240 MW. Due to poor hydro-power availability in the last quarter of 2009-10, GRIDCO had procured 155.39 MW power from other states and sold 49.76 MW power to other states, thereby earning Rs. 38.03 crore. The Captive Generating Plants (CGPs), which have a total installed capacity of 3,909 MW, are encouraged to augment their capacity and supply their surplus power to GRIDCO.

GRIDCO has been able to reduce its overall loan liability during the last five years. Its total loan liability of Rs. 3,240.83 crore by the end of 2004-05 has been reduced to Rs. 1,829.98 crore by the end 2008-09.

Orissa Power Transmission Corporation Ltd (OPTCL)

OPTCL is a separate entity that was created in 2005 and ensures development of an effective and economical system of Intrastate and Interstate transmission lines for smooth flow of electricity from generating station to load centres.

It has commissioned many grid substations and transmission lines during 2009-10. The infrastructures of OPTCL's network is as follows:

i) 95 Grid Substations with transmission capacity of 8,845 MVA

ii) 10,902 ckt. kms of transmission lines of 400 KV, 220 KV and 132 KV rating.

Some of the major activities of OPTCL during 2009-10 are as follows:

- In order to improve the low voltage problem in 23 Grid substations, action has been initiated to install 275 MVAR shunt capacitor with an expenditure of Rs. 17.63 crore.
- It has taken up the construction of 3 Grid substations including transmission lines of Bidanasi-Cuttack, Paradeep-Jagatsinghpur, Mendhasala-Bidanasi and Ib-Meramundali.
- OPTCL has signed an MoU with PGCIL and placed an order for construction of six Grid substations and 400 KV transmission line from Meramundali to Duburi.
- OPTCL has taken up the construction work of 11 Grid substations.
- The commissioning work of 220 KV grid substations at Bolangir, Paradeep and 5. 132/33 KV Grid substations have been made operational.

Orissa Hydro Power Corporation (OHPC)

At present, OHPC has six ongoing projects and one joint hydro-electric project with an installed capacity of 2,062 MW. The capacity augmentation is due to:

- Operation of Upper Indrabati Hydro Electric Project (600 MW) at Mukhiguda.
- Renovation and Modernisation of Units-1, 2, 3 & 4 of HydroPower Station at Burla.
- Installation of two units of Balimela Hydro Electric Projects of 150 MW.

The achievements of OHPC during 2009-10 are as follows:

- At present OHPC has an installed capacity of 2,062 MW which is a distinct improvement over 1,272 MW at the time of incorporation.
- During 2009-10, OHPC has generated 6,046 MU and sold 5,882 MU to GRIDCO which is about 35percent of the total consumption of the state.
- During 2008-09, OHPC earned a profit of Rs. 136.53 crore as against Rs. 121.39 crore profit made in 2007-08.
- Renovation and modernisation of Unit-5 & 6 of Burla Power House, Unit-3 of Chipilima power house and Unit-1 of Rengali are at different stages of progress.
- Development of Baitarani west coal block of 602 MW has been allotted to OHPC, Kerala state Electricity Board and Gujurat Power Corporation. The work is under progress.
- OHPC and Orissa Mining Corporation Ltd. have together floated a joint venture company namely Orissa Thermal Power Corporation Ltd. for setting up Thermal power plant of 2,000 MW capacity. The process of land against coal linkage and water allocation is under progress.

Orissa Power Generation Corporation (OPGC)

The Orissa Power Generation Corporation (OPGC) is jointly managed by the Government of Orissa and AES, a private US company. The paid-up share capital of OPGC is Rs. 490.22 crore, of which, the share of Government of Orissa is 51percent. The company has set up two thermal power plants of 210 MW each in Ib valley area of Jharsuguda district with a project cost of Rs. 1,135 crore. It has also undertaken the construction of seven mini hydel stations having a total capacity of 5,075 KW. Annexure 6.7 indicates the total turnover and net profit of OPGC from 2000-01 to 2008-09.

The important activities are as under:

- The process development and system up-gradation activities were undertaken to improve plant reliability.
- Fuel Supply Agreement was signed between MCL and OPGC on 17.11.2009 for better fuel security.
- For up-keeping the environment, plantation of 9000 trees inside and outside Plant campus was undertaken.
- Construction and commissioning of 30 MT /hr. Ash handling system, increase of Ash utilisation, completion of Ash pond, reuse of all Industrial Liquid Effluent inside plant was undertaken.
- To ensure safety and health of the staff and local people, free medical service was provided through free health camps. Zero tolerance safety policy for contractors and OPGC employees

was implemented. Behavioral Based Safety (BBS) manager programme was implemented for sustainable approach for achieving higher level EHS goal.

- As a part of corporate social responsibilities (CSR) a number of welfare projects like supply of drinking water to nearby villages, deepening of pond and bathing ghat, construction of Puja Mandap, repair of periphery road, electrification of nearby schools were undertaken.

Capacity Up-gradation and Completion of Ongoing Projects

Capacity building projects are Ib valley thermal power station (T.P.S.) units 3, 4, 5 & 6 (920 MW), Duburi T.P.S. (500 MW), Upper Indravati Hydro Electric Project (600 MW), Balimela HEP units 7 & 8 (150 MW) and Potteru Small HEP (6 MW). Besudes, power stations in Burla and Chiplima are being renovated.

Accelerated Power Development and Reform Programme (APDRP)

The State has signed an MoU with the Centre to implement the Accelerated Power Development and Reform Programme (APDRP) in the state. The objectives of the programme are to improve (a) financial viability through loss reduction, (b) consumer service, and (c) reliability of quality power supply. It envisages metering of feeders, distribution of transformers, energy auditing and accounting. Seven state projects, costing Rs. 592.22 crore, have been approved by the Government of India. By the end of 2006-07, Rs.74.02 crore was received from the Centre and utilised by DISTCOs. In the re-structured APDRP scheme, however, Orissa has not received any central funds.

Investments

Year-wise investment in the energy sector in Orissa since 2002-03 is presented in Annexure 6.8. A substantial increase in investment over the years reflects the priority accorded to the power sector by the State Government. During the 10th Five Year Plan (2002-07), Rs. 1,206 crore was spent on the energy sector, which is 8.67percent of the total state plan expenditure made during the same period. The approved outlay for the energy sector during the 11th Plan period has been fixed at Rs. 4,307 crore, out of which Rs. 329.90 crore was spent during 2007-08 and an outlay of Rs. 1,973 crore was slated for the Annual Plan of 2009-10.

Initiatives Towards Rural Electrification

Both Government of India and the State Government have stressed for expeditious electrification in rural areas. As per the MoU signed with the Government of India, the State Government is committed to electrify each household by 2012. A state-level monitoring committee has been constituted for the purpose.

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) under Bharat Nirman

Launched in 2005, this Central Scheme aims to provide electricity to all villages having a population of 100 and more in five years. It envisages 90percent as capital subsidy and 10percent as loan to the State Government. The scheme has been executed in Orissa by Central PSUs such as NTPC, NHPC and PGCIL. The tentative project cost is Rs. 3,593.75 crore for electrifying 17,895 un-electrified and de-electrified villages, 29,222 partially electrified villages and 40,706 un-electrified habitations. The scheme also aims to provide connections to 31.86 lakh below-poverty-line households. By the end of October, 2010, 23,402 villages/ habitations and 359,275 below-poverty-line households were electrified.

Biju Gram Jyoti

While RGGVY targets villages with at least a population of 100, this programme, initiated by the Government of Orissa in 2007 under the district sector, targets villages and habitations having a population of less than 100. The plan is to cover 10,000 such habitations / villages during the 11th Plan period with an outlay of Rs. 314 crore at the rate of Rs. 1 crore per block. The work under the scheme is in progress. Total 7,714 villages and 67,744 BPL house holds have been electrified under this programme as on 30th October, 2010.

6.1.5 Renewable and Alternative Energy Development and Use

While thermal and hydro-based energy is the mainstay of the State's power supply, several schemes are in operation to tap alternative energy sources. The Orissa Renewable Energy

Development Agency (OREDA) is the apex agency under the Department of Science and Technology, Government of Orissa, and looks after renewable and alternative energy projects.

Remote Village Electrification Programme (RVEP)

This programme targets electrification by non-conventional energy sources of those un-electrified remote villages and un-electrified hamlets of electrified villages where grid connectivity is neither feasible nor cost effective. Financial assistance is provided by both the Centre and the State for this programme.

During 2009-10, 371 remote villages in 8 districts have been sanctioned by MNRE, Govt. of India for coverage under RVEP with a total financial outlay of Rs. 31.97 crore. By the end of March, 2010, work orders have been placed for 245 villages and the work is in progress. Besides, survey in respect of 23 identified villages is in progress.

National Biogas and Manure Management Programme (NBMMP)

The National Biogas and Manure Management Programme (NBMMP) is a high-priority central-sector scheme, and a part of the 20-Point Programme. It can be used for cooking and lighting purposes. It also provides rich organic manure. During 2009-10, a target of 5,000 biogas plants was allotted for Orissa by MNRE. The total achievement against the target was 4,507 plants.

Wind Energy

Orissa has a wind power potential of 1,700 MW. Wind resource assessment is being taken up in 22 sites by C-Net, Chennai, an organisation under the Ministry of New and Renewable Energy, Govt. of India and Suzlon and Epuron wind power majors in private sector.

Biomass Power Project

The Biomass Power Potential of the State has been estimated at 300 MW. So far, the State Technical Committee has cleared the projects for a cumulative capacity of 173 MW with an investment of Rs. 900.00 crore (approximate). First project with 20 MW capacity is to be commissioned shortly in Dhenkanal.

Solar Power Project

OREDA has been proactively promoting solar power projects under the Jawaharlal Nehru National Solar Mission with a view to fulfill the Solar Power Purchase and Renewable Power Purchase obligation of the State to start with. During 2009-10, the State Technical Committee recommended 19 solar power projects, proposed by private developers to MTPC /MNRE for inclusion under the National Programme. The cumulative capacity of these projects is 294 MW with an investment of Rs. 5,292 crore.

SPV Programme

During 2009-10 under the Solar Photo Voltaic (SPV) programme, a 2 KWP stand alone solar power plant has been installed in Satapada village of Puri district.

Small and Mini Micro Hydro Projects

Commissioned by OREDA, 110 KW capacity Mini Hydel Project at Sunei in the district of Mayurbhanj and the 2x20 KW Micro Hydel Project at Badaghaghra in Keonjhar district are in operation and they feed power to the State grid.

Energy Plantations and Bio-Diesel Production

OREDA functions as the single-window entity for promotion and facilitation of all such projects. Plantations of Jatropha over 912 acre in Rayagada district, 1,870 acres in Ganjam district, 1,483 acres in Kalahandi district and 955 acres in Keonjhar district have been taken up. During 2009-10, a decision was taken to discontinue back-ended subsidy to support Jatropha plantation being raised by individual farmers by availing bank loans and link NREGA to the programme so as to provide the necessary labour as well as material component for raising Jatropha plantation through NREGES job card holders.

Awareness Generation /Publicity

During 2009-10, OREDA placed funds for erection of six hoardings on renewable energy programme, for putting up advertisement boards on bus-back panels in ten districts and for wall painting on different renewable energy projects and programme in all the districts. Besides, advertisements have been published in different Oriya newspapers for

awareness generation on different renewable energy programme. Ten second spots on different renewable energy programmes have been telecast on O-TV, E TV, Kanaka TV, Kamyab TV and Doordarshan (Oriya).

A State Level Renewable Energy Awareness Park

The Biju Patnaik Energy Park, has been established in Bhubaneswar. It aims to promote education and awareness among students, researchers, entrepreneurs and common people on history, development, application, conservation practices and renewable energy based businesses.

6.2 Transport

A well-developed transport network and an efficient communications system are basic prerequisites for rapid economic development and sustained growth. Besides, promoting the development of backward areas, an efficient transport network plays a crucial role in enhancing the productivity and efficiency of various economic activities. The State Government has therefore, accorded high priority to develop transport and communication infrastructure in Orissa and to connect remote habitations to growth and service centres. As mentioned earlier, it is the avowed resolve of the State Government to substantially improve the conditions of Bijli (i.e., electrification, particularly to and within villages), Sadak (i.e., improving the quality and quantity of roads of all types and providing round the year connectivity to villages) and Pani (i.e., developing water sources for both irrigation and drinking purposes).

6.2.1 Roads

As the rail network in Orissa is grossly inadequate, roads are crucial in providing connectivity to all habitations. The State has a total road length of 242,736 km by the end of 2008-09. Roads are classified by way of their importance in terms of traffic density, width, surface quality (e.g., expressways, national highways, state highways, MDR and ODR in that order), and ownership (e.g., national government, state government departments and agencies, urban and rural local bodies).

2,039.57 km of urban roads belong to three municipal corporations, 8,232.45 km to 37 municipalities and the balance to 63 Notified Area Councils at the end of 2008-09. Twenty-nine percent of urban roads were black-topped and 14percent were cement-concrete.

Box 6.1: Illustrates the break-up of road length in Orissa into various types by the end of 2009-10.

Type of Roads	Length (km)
National Highways	3,590
State Highways	5,102
Urban Roads	18,192
Rural Roads	31,167
Major District Roads	4,277
Other District Roads	6,314
Panchayat Samiti Roads	20,324
Gram Panchayat Roads	1,39,942
Forest Roads	7,463
Irrigation Roads	6,277
GRIDCO Roads	88
Total	2,42,736

Road Density, Surfaced-Road-Density and Highway Works

Road density is a preliminary measure of the extent of road networks in a region. It is usually defined as the total length of all roads per 1,000 square kilometers of area. Orissa fares much better than the all-India average with respect to road density. However, road density does not take into the account the quality of roads. The total length of all roads includes those of national highways as well as metalled roads of varying standards and un-surfaced village roads. The Ministry of Road Transport and Highways maintains data on the lengths and types of roads that are surfaced and un-surfaced.

One can define surfaced-road-density as the percentage of length of roads that is surfaced. For India it has always remained above 50percent, while for Orissa it has generally remained in the 20 to 30percent range. Recently however, massive programmes have been undertaken by the Central and State Governments to improve and extend roadways in Orissa. Before discussing the specific programmes, it is noted that during 2008-09:

- Nearly, 202 km of national highways (running within the state) were improved.
- The missing link of NH 23 from Kalanda to Pitri was completed and opened to traffic.
- Five bridges (Pipal on NH 201, Madhiapalli on NH 201, Anladhar on NH 215 and three MBs on NH 23) were completed.

Annexure 6.10 shows the allotment of funds and the expenditure for development of national highways in Orissa since 2001-02. Annexure 6.11 and 6.12 respectively list national highways construction works under progress in 2008-09 and proposals for 2009-10.

Rural Roads and Connectivity

Both Government of India and the State Government have stressed on providing connectivity to villages of specified population. The focus is also on improving the quality of roads. The major programmes to improve rural connectivity are briefly discussed below.

Pradhan Mantri Gram Sadak Yojana (PMGSY) and Bharat Nirman Programme

Since the inception of PMGSY in 2000-01, rural road connectivity has remained a benchmarks policy objective. Under PMGSY, out of 7,488 roads of 29,289 km length sanctioned, 3,736 roads of length 14,972 km have been completed with an expenditure of Rs. 5,372 crore as on 31st March, 2010. These roads provided assured all weather connectivity to 6,249 habitations. During 2009-10, 596 roads of 3,838 kms. length have been completed with an expenditure of Rs. 1,895 crore. Figure 6.9 to 6.11 shows the status of PMGSY scheme in Orissa. Annexure 6.13 also shows the detail progress of PMGSY programme since 2000-01.

Maintenance of PMGSY roads rests with the State Government after creation of assets. Rs. 5.38 crore has been spent for maintenance of PMGSY roads in the last 5 years (2005-06 to 2009-10) including an expenditure of Rs. 3.08 crore in 2009-10.

PMGSY became a part of "Bharat Nirman" in 2005-06 with little modified target to provide all-weather connectivity to unconnected habitations with a population of 1,000 or more in general areas and 500 or more in scheduled areas. The target under Bharat Nirman was to connect 5,715 un-connected habitations (3,625 nos. with 1,000 or more population and 2,090 nos. with 500 or more population). Out of these 37 habitations have been excluded due to various problems. By the end of 2009-10, about 3,787 habitations have been covered under this programmes with 16,261 km of

Figure 6.9: Number of Roads Completed in Orissa

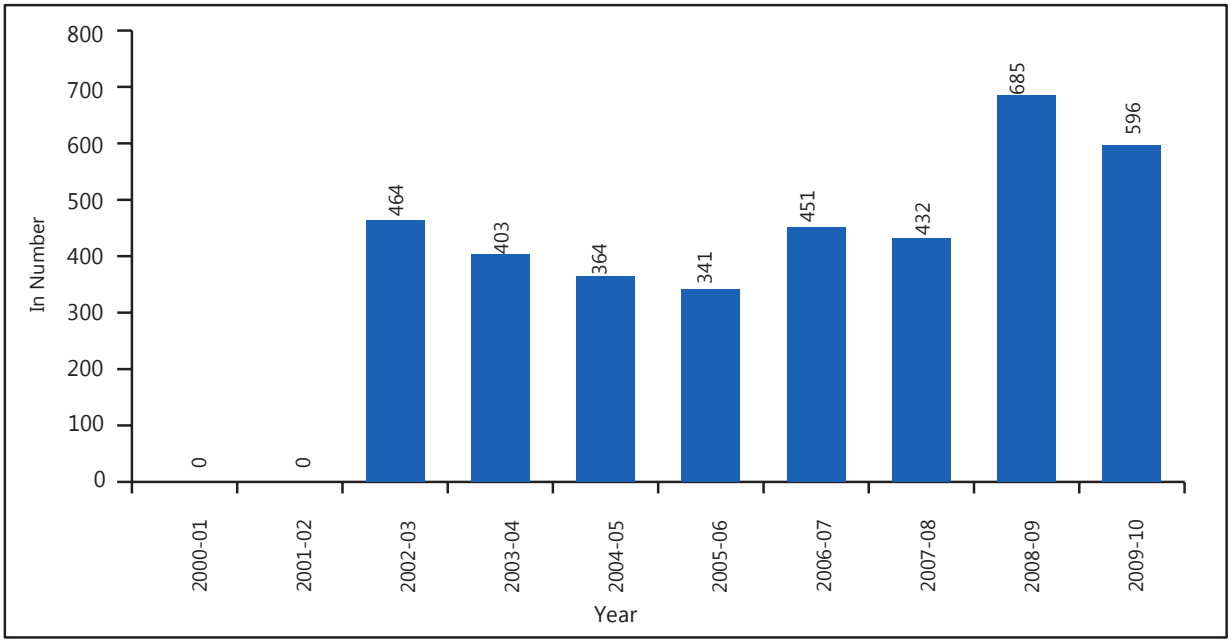


Figure 6.10: Completed Road Length

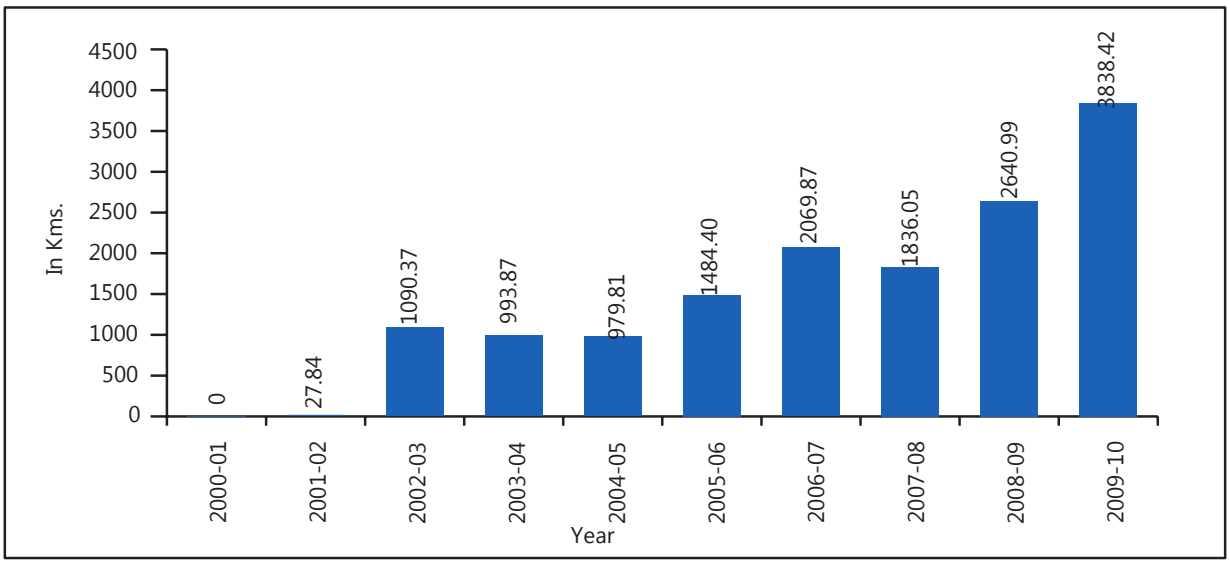
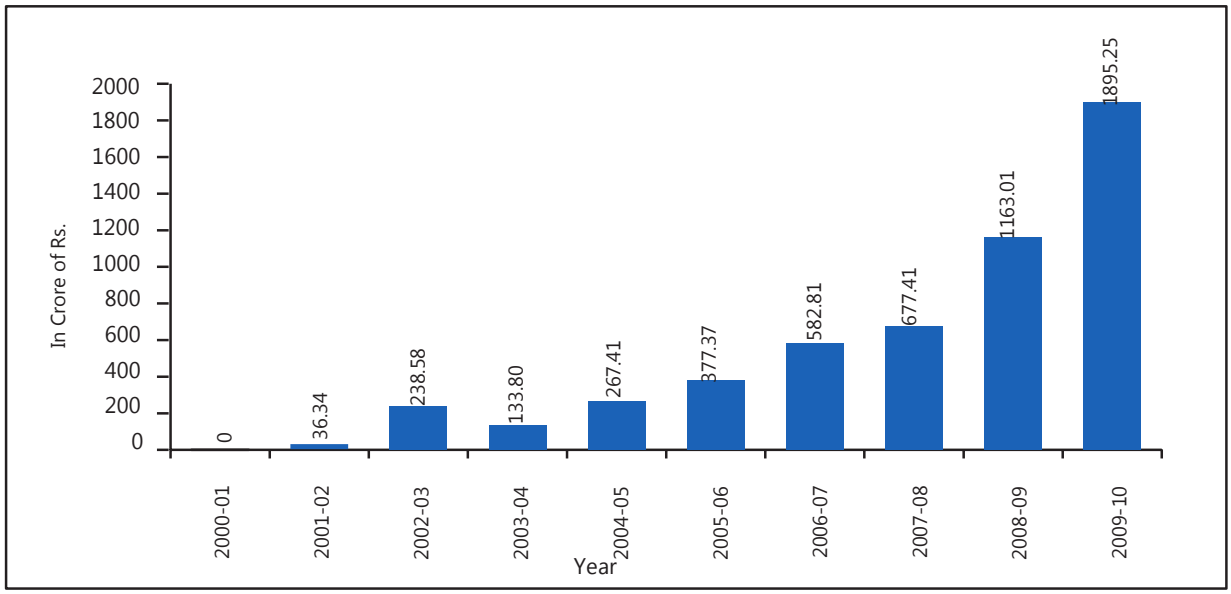


Figure 6.11: Amount Utilized under PMGSY



road (New connectivity 9,256 km + up gradation – 7,004 km). Annexure 6.14 records the achievement of this programme.

Other Road Construction and Improvement Programmes

There are other rural road construction projects that are funded under the Rural Infrastructure Development Fund (RIDF) of NABARD. One hundred eighteen roads covering 1,158 km and 233 bridges were completed by 2009-10, at a cost of Rs.589.01 crore including 18 roads of 175.56 kms and 20 bridges completed during 2009-10 utilising Rs. 120.00 crore. Besides, 81 project cost of Rs. 42,732.89 crore are under progress under different tranches of RIDF. Similarly, 73 bridges and new projects costing Rs. 151.13 crore approved by a High Power Committee and loan amounting to Rs. 151.13 crore have been sanctioned by NABARD. Figures 6.12 and 6.13 show the progress of the RIDF programme in Orissa during the last three years.

Figure 6.12: Number of roads and bridges completed under RIDF

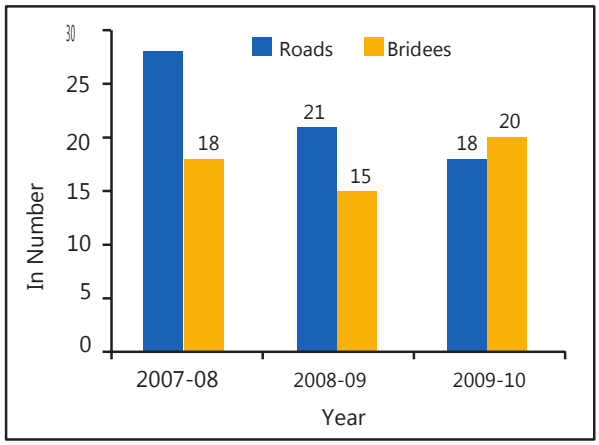
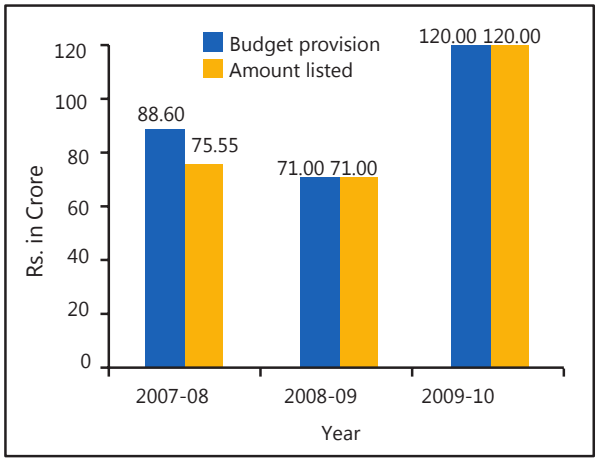


Figure 6.13: Financial status of RIDF



The Twelfth Finance Commission Grant and Special Repairs Programme are other important sources of funding for improving rural roads. The 12th Finance Commission grant to the State Government amounts to Rs. 540 crore for maintenance of rural roads and Rs. 167 crore for maintenance of non-residential buildings. This is spread over four years from 2006-07 to 2009-10. In addition, rural connectivity programmes are also funded under RLTAP, Biju KBK Plan, Gopbandhu Grameen Yojana, Biju Kandhamal O Gajapati Yojana and Backward Regions Grant Fund (BRGF). RLTAP and BRGF are funded by the Government of India. Biju KBK Plan, Gopbandhu Grameen Yojana (GGY) and Biju Kandhamal O Gajapati Yojana are flagship programmes of the State Government and focus, amongst other things, on Bijli, Sadak and Pani. The status of GGY scheme from 2006-07 to 2009-10 is given in Annexure 6.9. During 2009-10, 223 roads and 2036 non-residential buildings were completed under this programme with expenditure of Rs.162.00 crore and Rs. 41.79 crore respectively.

During 2009-10, 751 roads and 192 CD works were completed, utilising Rs. 28.40 crore provided under Constituency-Wise Allotment (CWA). Besides, Rs. 136.00 crore has been utilised for repair and maintenance of rural roads under the Rural Development Department during 2009-10.

Overall Rural Road Connectivity

The extent of rural road connectivity in Orissa is far less than the requirement. So far, only 40percent of all villages have all-weather connectivity, as compared to the national average of 60percent. Annexure 6.15 presents the status of rural connectivity vis-à-vis habitations in the State.

Number and Composition of Vehicles on Roads

As roads have expanded, so has their use. The total number of vehicles on roads in Orissa from 2004-05 to 2009 -10 is shown in Figure 6.14. As illustrated in Figure 6.15, two-wheelers constitute 81percent of total vehicles on the road.

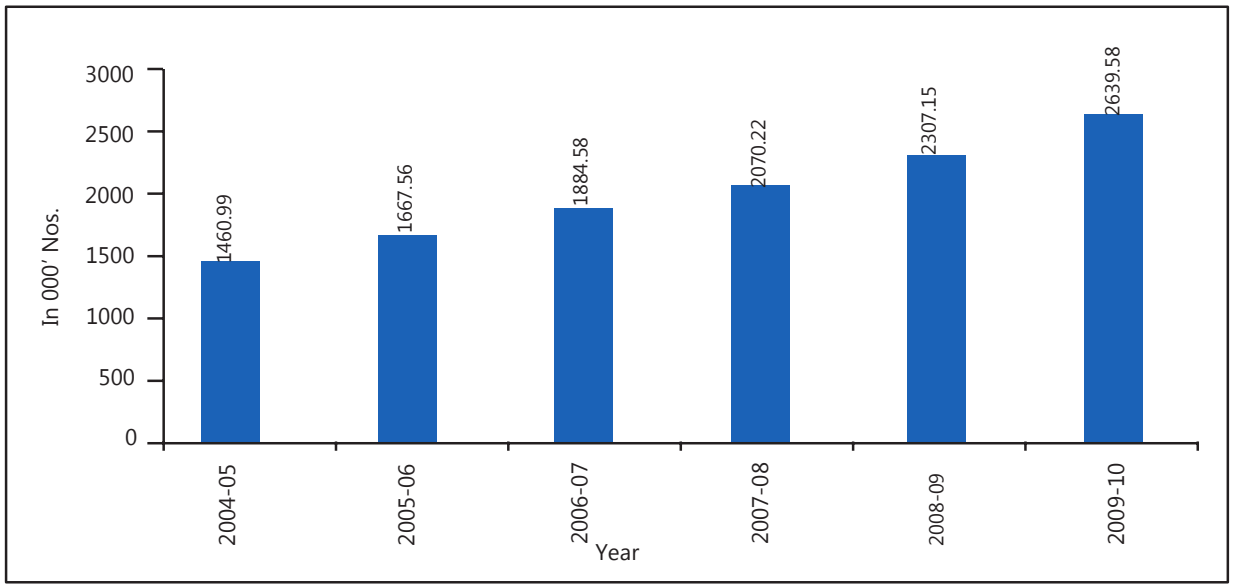
Buses are a major means of road transport by the common people in the State. During 2009-10, 8,908 buses, both public and private together, were plying.

This indicates 20 buses per one lakh population in the State. From 2000-01 to 2009-10, the number of public sector buses plying on the roads has increased from 254 to 279, while, as Figure 6.16 shows, the number of passengers served has declined by two-thirds. This indicates a huge expansion in the private-sector bus services.

Policy and Administration of Road Transport

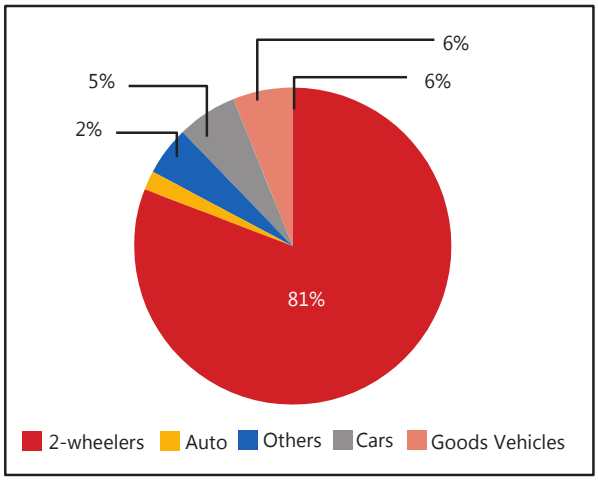
Orissa is the leading State in India to declare a State Transport Policy in 2007. The main objectives of this policy are to increase competition, efficiency, transparency, accessibility and adequate availability of transport services in the State, ensure user friendly road transport and evolve an improved urban transport system. The policy included forming

Figure 6.14: Total Number of Vehicles on Roads in Orissa, 2004-05 to 2009-10



Source: State Transport Authority, Orissa

Figure 6.15: Composition of Vehicles on the Roads, 2009-10 (in percent)



institutional and regulatory mechanisms like the Orissa Transport Infrastructure Development Authority (OTIDA) and Orissa Transport Regulatory and Advisory Council (OTRAC). It also identified special thrust areas to modernise railways, waterways and airways in the state.

The State Transport Authority (STA) is the apex regulatory body of Orissa to administer and manage the road transport sector. The Orissa State Road Transport Corporation is the provider of transport services and amenities to passengers. The activities of the Corporation, revenue collections from motor vehicles and those from motor vehicle related offenses are outlined in Annexure 6.16 through 6.19.

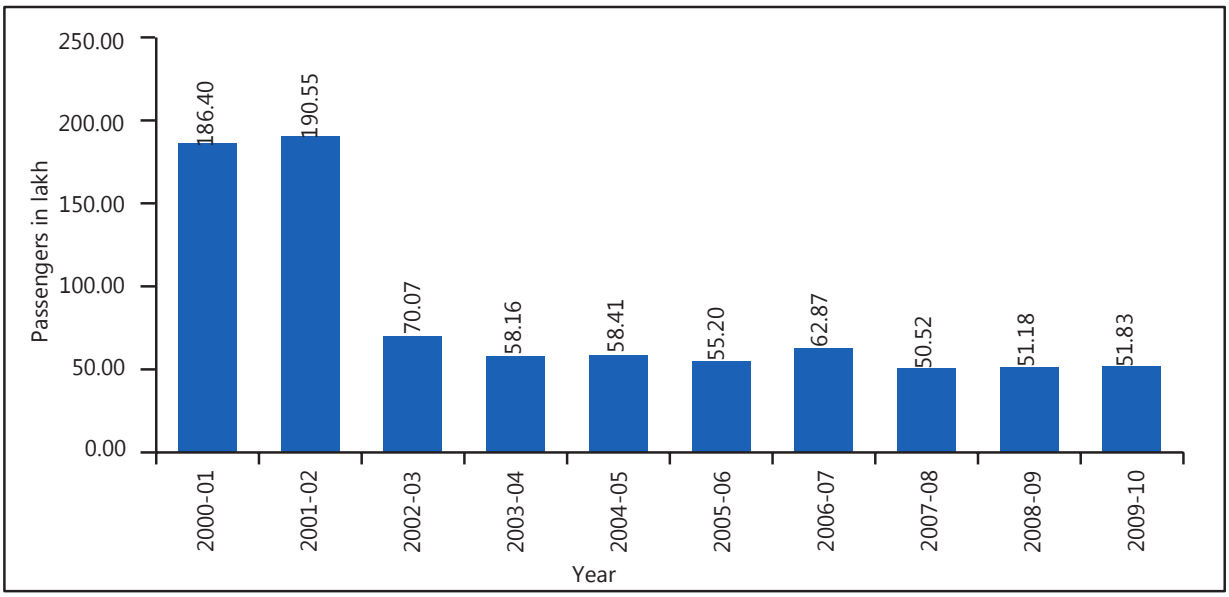
Road Accidents and Safety Measures Undertaken

High growth of vehicles and human mobility, heterogeneous mix of vehicles, technology development in transport, poor driving skills and deficient road infrastructure have led to an increasing number of accidents in the State. During 2009, 8,827 road accidents were recorded, claiming 3,491 lives, as against 8,181 road accidents and 3,079 deaths recorded in 2008. The fatality rate of Orissa remains high with 40 deaths per 100 accidents in 2009.

The State Government implements a series of road safety measures with support from the Orissa Road Safety Society, Ministry of Road Transport and Highways, the Central Government, Police Department, voluntary organisations, institutes, State truck and bus owners associations. During 2009-10, STA has implemented the following measures on road safety:

- Opened 5 accident helplines to provide round-the-clock services to road accident victims;
- Pasted retro-reflective tapes on the rear corners of transport vehicles;

Figure 6.16: Passengers Carried in Public- Sector Buses, 2000-01 to 2009-10



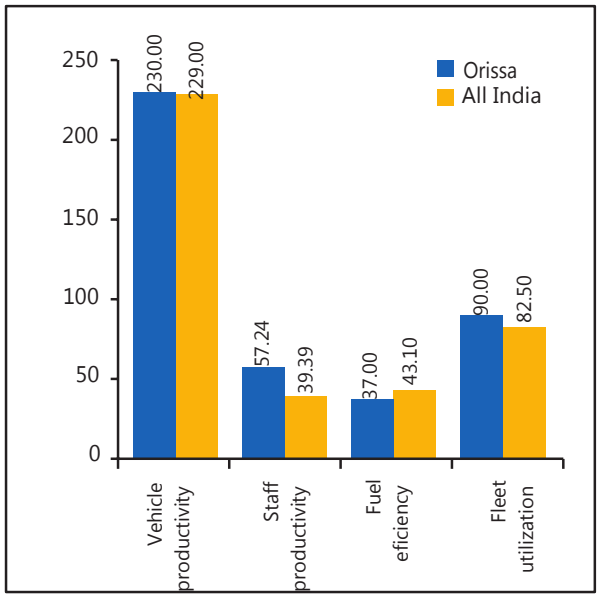
Source: Orissa State Road Transport Corporation

- Operated twenty ambulances and thirteen tow cranes;
- Deployed home guards to control erring drivers and road users on highways and city roads;
- Conducted awareness programmes on accident hasards, with financial support from the Ministry of Road Transport and Highways;
- Conducted refresher training programmes for 4,750 Heavy Motor Vehicle drivers in the unorganised sector under direct supervision of the Orissa Road Safety Society.
- STA has procured 15 highway interceptors to curb over-speeding in accident prone areas;
- STA has supplied hand-held terminals to all enforcement officials for online checking of drivers' licenses and vehicle registrations;
- It has procured fifteen portable weigh bridges for checking overloading of commercial vehicles on highways;
- With the support of the Ministry of Road Transport and Highways (Government of India), STA is going to establish, at an estimated cost of Rs. 8 crore, a hi-tech driving training school and road safety institute for heavy motor vehicle drivers. The school will impart defensive driving skills and traffic discipline.
- To minimize the use of forged permit documents, it has introduced permit papers on securitised paper.

Relative Efficiency of Orissa State Road Transport Corporation

The Planning Commission measures the efficiency of different state transport corporations by four criteria: (a) vehicle productivity, measured by revenue earning per bus per km, (b) staff productivity, measured by revenue earning km per

Figure 6.17: Relative Efficiency of Orissa State Road Transport Corporation



worker per day, (c) fuel efficiency, measured by km per litre and (d) fleet utilisation in percent terms. As Figure 6.17 shows, by any of the four criteria, the efficiency of the Orissa State Transport Corporation is about the same as the national average.

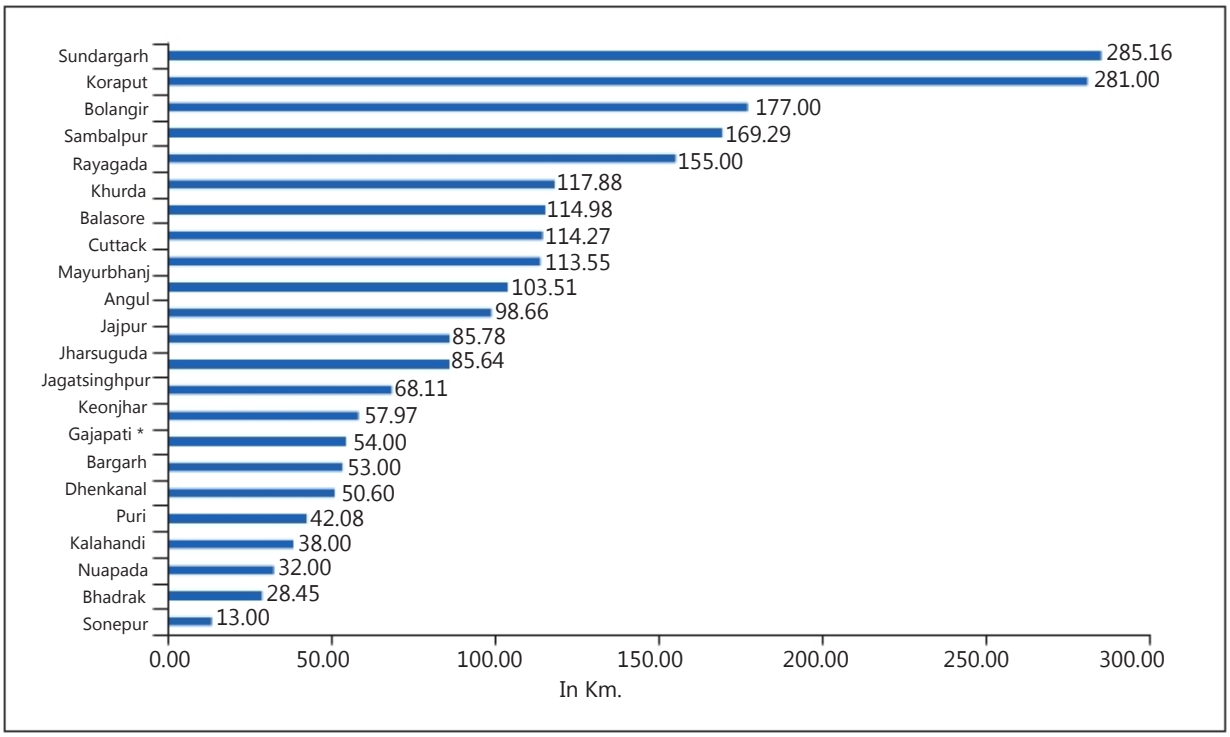
6.2.2 Railways

Railway routes pass through twenty-two districts of the State, excluding Baudh, Deogarh, Kandhamal, Kendrapara, Malkangiri, Nabrangpur, Nayagarh and Sonepur. The density of coverage is relatively high in some of the fringe regions of the State, while central parts remain largely untouched. Figure 6.18 shows district-wise railway coverage, while details are provided in Annexure 6.20. A large disparity across districts exists. The progress on railways network and traffic during 2009-10 is summarized below:

- The electrification of railway lines between Kharagpur – Bhubaneswar – Vishakhapatnam (including Talcher – Cuttack – Paradeep) has been completed.
- Raipur – Bhubaneswar Express, Paradeep-Bhubaneswar Express and Bhubaneswar-Howrah Dhauli Express has been extended up to Puri.
- 7 new trains as detailed below have been introduced.
  - i) Puri – Surat (weekly) Express
  - ii) Bhubaneswar-Rourkela Intercity daily (except Sunday)
  - iii) Puri-Howrah Special (twice a week)
  - iv) Puri – Kamakhya weekly Express
  - v) Puri-Lokamanya Tilak weekly Express
  - vi) Bhubaneswar-New Delhi-Bhubaneswar weekly DURONTO Express
  - vii) Bhubaneswar-Rameswaram, weekly Express
- A new rail link from Jaleswar to Digha (41 kms) has been announced in the Railway Budget, 2010-11.

By the end of 2009-10, the State had 2,339 km of railway lines including 54 km of narrow gauge lines Overall, the State remains poor in railway coverage and this is one of the factors that have hampered the pace of its industrial development. The railway route length in the State per thousand sq km , which is the same as railway density, is about 15 km, while the national railway density is around 20 km.

Figure 6.18: District-wise Railway Coverage, 2009-10



6.2.3 Ports

Paradeep Port is the only major port in the State., The 8th largest port of India, it has witnessed a consistent increase in traffic in recent years. As Figure 6.19 shows, exports grew by 9.36percent in 2008-09 in the midst of a global slowdown. It is estimated that its traffic will reach 57 million tons by the end of 2009-10 and about 100 million tons by the end of 2016-17. Iron ore and coal constitute the bulk of all exports through Paradeep Port. Much smaller than Paradeep port, Gopalpur Port is the second largest in Orissa. During 2008-09, it handled 67 thousand tonnes of exports and 170 thousand tonnes of imports. In addition to these, there are 13 other ports in the State. A new port facility, to be situated between Haldia and Paradeep, called Dhamara Port, is under construction. Two more ports, one at Kirtania (Balasore District) and the other at Astrang (Puri district), are scheduled to be constructed. There is also a fishing harbor operating at Dhamara, which is primarily used by trawler owners. The revenue earned from this harbour during 2008-09 was Rs. 65.57 lakh, as compared to Rs. 65.20 lakh in 2007-08.

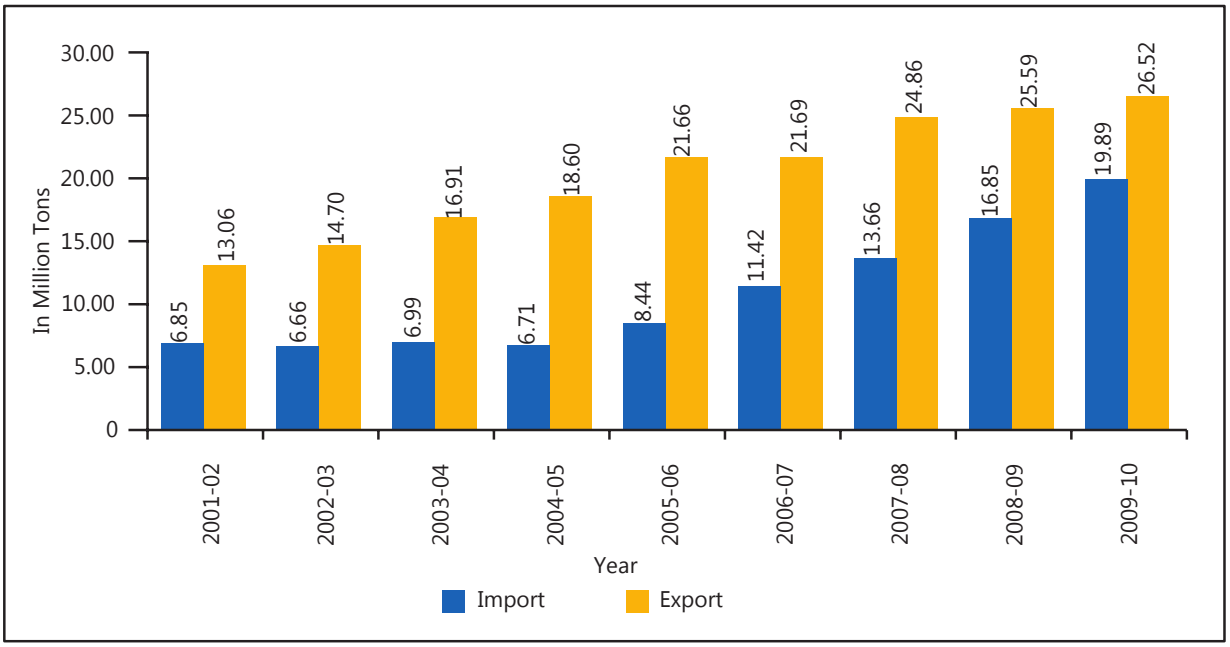
6.2.4 Inland Water Transport and Civil Aviation

These sectors have a small presence in the State. The passenger launch services are used in remote areas where other modes of transport are generally lacking. Inland water transport services are provided by the State Government, with assistance from the Ministry of Surface Transport, Government of India. The Directorate of Port and Inland Water Transport is the nodal agency which controls activities relating to passenger launch services, survey and registration of inland crafts. Passenger motor launch services are present in eight different water routes in three sectors:

- Chandabali sector provides launch services from Chandabali to Aradi, Talachuan and Rajnagar
- Balugaon sector provides services from Balugaon to Krushnaprasad, Kalijai, Nuapada, Satapada and Chandabali-Rajnagar.
- Astaranga sector provides services from Nayagarh to Sribantapur with the help of twenty motor launches and five country boats. But after the super cyclone of 1999, ten motor launches are plying in these routes after necessary repairs.

Annexure 6.22 provides data on passengers and revenues raised from 2005-06 to 2009-10. It is observed that as alternative sources of transport have become available in some areas, the number of passengers availing motor launch services has been declining over the years. A proposal for

Figure 6.19: Traffic through Paradeep Port, 2001-01 to 2008-09



spending Rs. 176.50 lakh has been approved by the Government for acquisition of three 50-seater and three 20-seater FRP passenger boats. Orissa Boat Rules, 2004 is implemented in the State and ensures registration and proper checking of all types of boats. During 2009-10, Rs. 2.82 crore has been collected from 260 boats towards survey and registration charges.

A Crew Training Institute functions at Chandabali, under the control of the Directorate of Ports and Inland Water Transport. It conducts examinations for granting certificates of competency to Serangs, Masters, Engine Drivers and Inland Engineers. During 2009-10, 128 candidates appeared in these examinations and 101 of them passed.

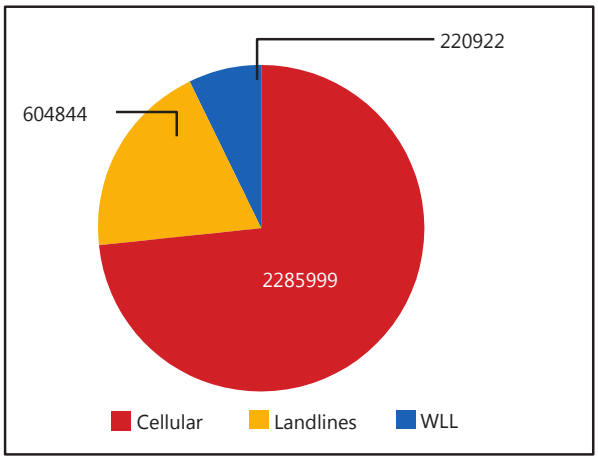
The prime objective of the Directorate of Civil Aviation is to look after the use and maintenance of the State Government's passenger aircraft and trainer aircrafts, training of student pilots, and construction and development of air strips in the State. There are thirteen airstrips and sixteen helipads. A proposal for the procurement of new aircraft is under consideration. A Government Aviation Training Institute, set up under a public-private-partnership model, has started functioning.

6.3 Mail and Telecommunication

During 2009-10, there were 8,160 post offices in Orissa comprising 35 HO, 35 MDG, 1,122 SOs, 58 GDS SO and 691 BOs. Among these, 7,575 were in rural areas. 88 post offices (including 35 head post offices) have been covered under project Arrow. Of these, 61 post offices are functional. Many post offices provide regular products and services as well as premium postal services, including speed post, express parcel post, mass mailing service, corporate money order service and satellite mail service, greeting post and retail post. As per an evaluation made internally as well as through an external agency, Gopalpur Post Office in Berhampur postal division was rated the best at the national level. Its staff were deputed for training abroad at the Asia Pacific Postal College, Bangkok for a week under the Reward and Recognition scheme.

The effect of telecommunications on the productivity in various sectors of an economy is enormous. The telecommunication network in Orissa has vastly expanded over the years. During 2009-10, there were 1,169 telephone exchanges (all electronic) and telephone facilities were available in 43,222 villages, which is about 91percent of the total number of inhabited villages in the state. The total number of telephone connections during 2008-09 was 22,50,870 and it increased to 31,11,765 by the end of 2009-10. The distribution of telephone connections by types is illustrated in Figure 6.20.

Figure 6.20: Number of Telephone Connections by Type, 2009-10



Cell phones constitute 73percent, while landlines represent 19percent of all connections. Public Telephone Subscriber Trunk Dialing (STD) services are available at 19,726 stations, along with 2,361 Local PTS and 654 Highway PTS. During 2009-10, there were 1,078 STD stations in the State with 4,60,570 subscribers.

Orissa stands above the national average in postal density. However it is below the national average with respect to tele-density, defined as the number of telephone connections per 100 population. Figures 6.21 and 6.22 compare tele-density in rural and urban Orissa vis-à-vis all India levels. Figure 6.23 graphs the tele-densities across the states.

6.4 Science and Technology

6.4.1 Information Technology

Adoption of Information Technology (IT) has become vital for development in any region. The Industrial Policy Resolution, 2001 of the State has identified

Figure 6.21: Rural Tele-density, Orissa vis-à-vis All-India, 2003-04 to 2008-09

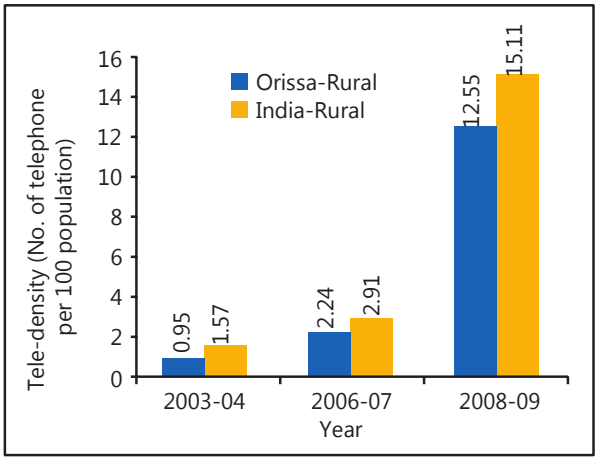
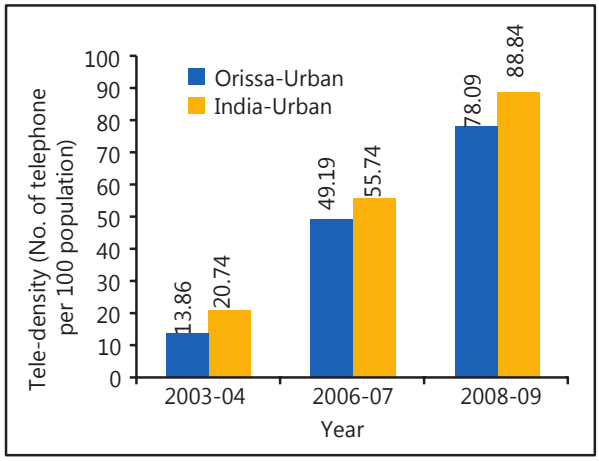


Figure 6.22: Urban Tele-Density, Orissa vis-à-vis and All-India, 2003-04 to 2008-09

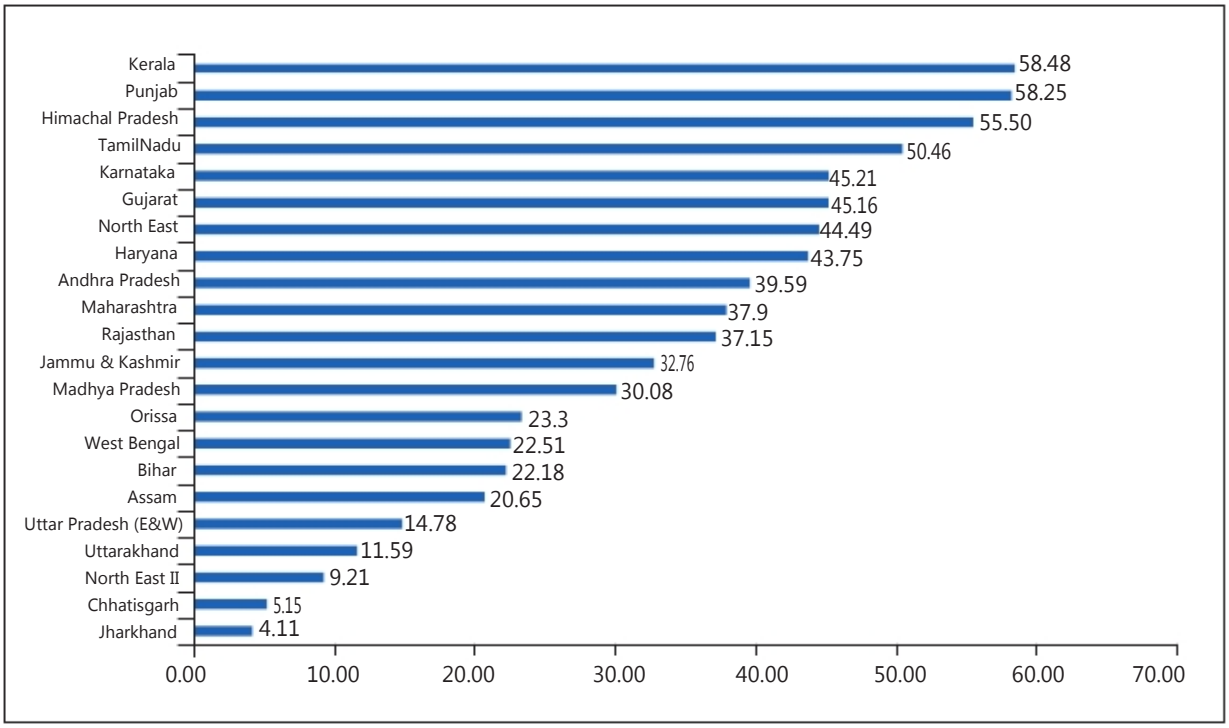


electronics, telecommunication, information technology and IT-enabled services as a "priority sectors." Establishments and enterprises in this sectors have been declared as "public utility services." Use of IT in the private sector has been improving in India. In Orissa, the State Government has been proactive in incorporating it in its own administration as well as helping the growth of this sector in general.

National Informatics Centre (NIC)

As the nodal organisation at the national level, NIC provides the network backbone and e-Governance support to the Central Government Departments, States, UTs and District Administrations in the country. It offers a wide range of information-cum-communication technology services for transparency in national and local governance. Its Orissa unit has been playing a catalytic role in

Figure 6.23: Tele-Density Across States, 2008-09



Source: Central Statistical Organization, Millennium Development Goals – India Country Report 2009

promoting IT. Both the State Government and NIC have taken several initiatives in this regard. Some of these are summarised below:

- E-procurement system yields a good performance in Orissa. By the end of 2009-10, tenders amounting to Rs. 24,471 crore have been hosted on the Tender Orissa portal. After e-procurement roll out in Orissa, bidders' participation base has substantially increased resulting in fair competition among prospective bidders. As a result, Tender Life Circle has come down to a great extent resulting in savings for the Government exchequer as well as paper works. More than 2,500 departmental officers and 5,500 bidders have been trained in using NIC software.
- Web based Budget query analysis and Reclassification system has been implemented to meet the requirements of the World Bank, Legislative Assembly and other Departments.
- Under project SUBIDHA more than eleven G2C and eight G2G modules have been developed to bring in transparency and accountability and to provide need-based quality and timely information and services to citizens. It also boosts internal Government Operation to support and stimulate good governance.
- NIC, Orissa has taken up a number of projects / schemes for Government / PSUs of the State.

Information Technology Department

The State Information Technology Department (briefly IT Department) is entrusted with matters relating to computer communication and electronics, both software and hardware. It also acts as the nodal department for the National Informatics Centre (NIC). In 2004, it formulated the Information and Communication Technology (ICT) Policy, to help IT reach the common man. The Orissa Computer Application Centre (OCAC) is under its administrative control and it is designated to function as a Technical Directorate. OCAC has the responsibility of system development for administration and public sector units. Major activities by the IT department in 2009-10 were as follows:

National E-Governance Plan (NeGP)

It envisions a three-pillar model for delivery of "web-enabled anytime, anywhere access" to information and services in rural India. These are: (a) Orissa State Wide Area Network (OSWAN), (b) Common Services Centres (CSC), and (c) State Data Centre (SDC). OSWAN is a comprehensive programme which envisages creating a core computerisation infrastructure for the entire state. The approved outlay of this project is Rs. 165.40 crore. By the end of 2009-10, the State headquarters, all district headquarters and 275 block headquarters have been linked under OSWAN.

The objective of CSC is to develop a platform that can enable Government, Private and Social Sector organisations to align their social/commercial goals for the benefit of rural people in the remotest corners of the country. The approved outlay of this project is Rs. 135.72 crore. The scheme is being executed in the PPP mode in association with three private agencies and by the end of March, 2010, 5,824 CSC were rolled out.

The State Government has decided to establish a State Data Centre (SDC) which is part of the core infrastructure for supporting e-Governance Plan (NeGP) with an approved outlay of Rs. 54.2 crore. The SDC is being set up in the premises of the OCAC building for which 90percent of infrastructure work such as electrification, interior work, net work etc. has been completed by the end of March, 2010.

Establishment of the Orissa Computer Application Centre (OCAC)

OCAChasbeendesignatedasaTechnicalDirectorate, functioning under the IT Department, bestowed with the responsibility of system development in Government, Government Agencies and PSUs to promote various need-based e-Governance activities in the state. It also undertakes various schemes, programmes and projects viz. Local Area Network (LAN), Information Technology Enabled Services (ITES), the State Government Portal (SGP), Common Service Centres (CSC) during 2009-10.

OCAC Incubation Tower

In order to facilitate growth of new IT/ITES/BPO industries, the State Government has formulated an Information and Communication Technology Policy, 2004 and provided space for facilitating the IT/ITES/BPO activities in four Designated Government buildings at Bhubaneswar viz. IDCO Tower, IPICOL Tower, Fortune Tower and Tower 2000. The space

in these buildings has saturated. As a result of the high demand from IT companies, it has been decided to construct an "IT Incubation Tower" over 1.412 acres of land at Bhubaneswar with a project cost of Rs. 35.50 crore. The civil construction work has been allotted to IDCO and is in progress.

Smart Panchayat

The scheme that is implemented by OCAC with the objectives: to develop a suite of integrated applications for automating internal processes of gram panchayats, to deploy a suite of applications for carrying out financial and administrative functions of Panchayat offices, to develop a suite of integrated applications for various citizens' services delivered at Panchayat level and to introduce Multipurpose Identity Cards (MICs) for citizens.

In the first phase, services directly covered by the PR Department will be covered. In the 2nd phase, services relating to 17 other departments will be implemented and focus will be on application enhancement and integration, monitoring, evaluation and impact assessment. After successful implementation, it will roll out throughout the state.

Orissa Secretariat Workflow Automation System

The scheme aims at providing automated functions at all levels of the administrative hierarchy of Government Departments. Most of the work by Government departments is workflow-intensive, i.e., there is a lot of information flow in the form of file movement. Some of this work necessitates the creation and maintenance of databases, which are critical to the decision making process. It also provides document and knowledge management in an integrated fashion and delivers an electronic workplace.

In the first phase, eight major Departments / Offices have been identified for pilot implementation of the project. The Orissa Secretariat Data Centre for OSWAS has been established at the IT Centre, State Portal in Orissa Secretariat and required server, storage and oracle software have been installed. Master Data configuration has been completed for 35 out of 38 Departments and core application has been demonstrated to 27 Departments.

E-Procurement

The State Government has decided to implement e-Procurement in place of a traditional procurement system. NIC was engaged as consultant for its implementationintheState.Atpresent,e-procurement has been implemented in four engineering Departments viz. Works, Rural Development, Water Resources and H&UD. Some PSUs like IDCO, OMC and CESU have also been approached to avail the facility. At present, all tenders above Rs. 20 lakh of Engineering Departments are floated through e-Tendering process. Till date more than 5000 engineers and 2000 contractors have been trained in this system. Now the State Government has taken new initiatives for implementation of e-tendering for "Goods and Services" to make the tendering process more transparent.

Crime and Criminal Tracking Network and System (CCTNS)

Funded by the Home Ministry, Government of India, this Mission Mode Project is executed by OCAC. It aims to modernise the police force by giving priority enhancing outcomes in the areas of crime investigation and criminal detection. All police organisations will be linked through CCTNS.

Map Digitisation Project and Modernisation of Record rooms of Tehsils

This is funded by the Land Records and Survey, Board of Revenue, Orissa. In the initial phase, maps of four districts are being digitised. Scanning of maps has been completed. The prokect aims to modernise the record rooms of 33 Tehsils.

6.4.2 Science and Other Technologies

While adopting IT technology enhances productivity directly and immediately, the results of general science and other technology take much longer and are an indirect process to improve long-term productivity of people and organisations, quality of life and social welfare. There are many institutions in the State, which undertake applied research, and, their activities are summarised below.

Orissa University of Agriculture and Technology (OUAT)

As the second oldest agricultural university in the country, OUAT has seven constituent colleges.

During 2009-10, the University made several contributions in terms of developing technologies on improvement, production and protection of crops, animals, fish and land management. A few of the research findings are listed below:

- The University has so far released 127 high yielding crop varieties including Mandakini, Mrunalini and Tejaswini of rice, T.G-51 and JAL – 42 of Ground nut, Jagannath and Balabhadra of Cashewnut, Sabita and Neelamadhaba of sugar cane and Saura of little millet during 2009-10. Some of these are popular in neighbouring states.
- Suitable Agri-Silvicultural System (A. mangium + sesamum) and Hort-Silvi-Pastoral System (Guava + Sissoo + Stylo) have been identified for the rainfed upland situation.
- Rice-based cropping systems has been identified both for coastal and western Orissa with benefit-cost ratio ranging from 2.15 to 2.75.
- Raised and sunken bed systems for crop diversification in water logged areas have-s been identified.
- Newer insecticides, fungicides and botanicals have been evaluated against important crop pests and diseases.
- Farm machineries viz. Ragi thresher, Mahua seeds decorticator and Hand operated pineapple peeler-cum-slicer have been improved.
- Feeding concentrates to Ganjam goats in its native tract during gestation and lactation periods improved Post-partum body weight, nutrient utilisation, reproductive performance and birth weight of kids.

International Institute of Information Technology (IIIT-Bhubaneswar)

IIIT Bhubaneswar has been setup in Bhubaneswar as a world class institute primarily to meet faculty requirements in the IT disciplines of Engineering colleges. IIIT Bhubaneswar is also mandated to nurture academic research in cutting-edge technologies and industry sponsored research programmes. The construction work of the Institute is under progress.

Central Rice Research Institute (CRRI)

CRRI's main objective is to conduct basic, applied and adaptive research on crop improvement and resource management towards increasing and stabilising rice productivity in different rice ecosystems, along with special emphasis on rain-fed ecosystems and related biotic stresses. Some of its achievements made during 2009-10 are as follows:

- Till now, about 82 high-yielding varieties of rice have been developed for different types of land under different maturity groups by this institute and these have been released for cultivation by the Central Variety Release Committee (CVRC) as well as the State Variety Release Committee (SVRC).
- In 2009-10, the institute introduced 6 new high yielding varieties of seed. The duration of these varieties are about 145 days and the yield potential varies from 3.5 to 5.0 tonnes per hectare.
- The farmers of Orissa have benefitted by cultivating the improved High Yielding Varieties (HYV) developed by this institute. Different HYV seeds introduced by CRRI during the last two years are listed in Annexure 6.24.
- CRRI has developed a rice-fish farming system technology for rain-fed low lands. It involves rain-water-harvesting-cum-recycling and a diversified farming system. This system can increase farm productivity and income by about 15 times, as compared to traditional rice farming. It can also generate employment throughout the year.

Software Technology Park of India (STPI)

STPI is an autonomous society under the Ministry of Communication and Information Technology, Government of India. It aims to promote the export of IT software and services. There are two STPI centres in Orissa, one at Bhubaneswar and the other at Rourkela. STPIs offer various incentives like 100 percent foreign equity permission and various tax exemptions. The STPI centres have set up incubating infrastructure and provide facilities based on the member unit requirement. The idea is to give one-stop and non-stop services to the software industries. A second International Gateway at Bhubaneswar and Rourkela has been installed to facilitate reliable data communication at good speed. STPIs also offers customized solutions in network design and architecture, international connectivity, local loops, facility management,

feasibility study and project management and implementation. STPI, Bhubaneswar, has designed a comprehensive course module in various fields to keep abreast students of changing trends and technology. It also promotes IT-enabled services such as medical transcription, manpower intensive GIS as well as call centre operations.

Central Institute of Freshwater Aquaculture (CIFA)

This premier institute, located at Bhubaneswar is devoted to research in fishing. Among several research projects, the following are directed towards increasing productivity in the fishery sector:

- Improved Rohu Jayanti: Germ plasm from some river systems in India has been pooled together for stock development of Rohu. Improved Rohu 'Jayanti' has been distributed to farmers through different multiplier units.
- Round the year breeding of carp: The breeding season of carp generally commences in May and lasts till August, depending on the onset of the monsoons. A breakthrough has been made by the Institute in that Rohu can be bred in January. For the first time in India, this would enable farmers to have fingerlings (80-100 mm) by mid-April for stocking their ponds and utilising at least five more months as the growing periods.
- Fiber Re-Enforced Plastic (FRP) hatchery: The Institute has designed and developed a complete hatchery system made for FRP for carp fish breeding and hatchery rearing of seed. The hatchery has many advantages such as ease of transport to different locations, installation in less space, low water consumption per cycle of hatchery operation, durability and ease of repairing. This has been installed in six places in Orissa.
- Species Diversification: A large number of commercially important fish food were selected for their mass-scale breeding, seed production, rearing and culture to develop a package of practices for dissemination to the farming community. Polyculture of different minor and medium carp along with major Indian carps was explored. Yellow catfish were indoor-bred for the first time on a large scale and their culture potential is being worked out. The mass-scale seed production and culture potential of climbing perch were also standardised. Many commercially important indigenous ornamental fish species are bred and their compatibility in aquarium conditions is being studied, with the objective of increasing the income of ornamental fish farmers.
- Health Management: Commercialisation of disease diagnostic kits and CFAX to control ulcerative diseases saved many crops from epidemics.
- Livelihood Development of SC/ST population: In Kendrapara, a disaster-prone coastal district, and Keonjhar, a tribal and hilly district, a total of 163 SC/ST fish farmers have been adopted under the project. The average fish production through CIFA's intervention has increased three to four times.

Orissa Space Application Centre (ORSAC)

ORSAC is as an apex organisation promoting remote sensing technology in the State. Remote sensing data are used in forecasts in the fields of agriculture, transport, land use, revenue, urban development, drinking water, flood mapping, wetland and wasteland, block level resource mapping, forest and environment sectors. ORSAC has undertaken several projects for the Central and State Governments. Important activities of ORSAC during 2009-10 are listed below:

- Forecast of acreage, production and yield of kharif paddy, ragi, groundnut and jute were made in 2009-10. The paddy acreage has been estimated by analysing multi-date RADARSAT SAR data. It also forecasts yield, based on agro-meteorological models. Results have been made available to user departments of the State and Central Governments for decision on procurement, storage, transport and price fixation of food grains.
- 78 interactive training programmes have been conducted by the user departments during 2009-10. One hundred thirty episodes each of news programmes "Sunar Odisha and Swapnara Odisha" have been produced and transmitted through O TV & E TV respectively.
- Block level resource atlas and GIS data base "Odisha Sampada" have been developed and submitted to the National Informatic Centre (NIC) for making the package web enabled.

- Pilot projects on cadastral survey in two villages have been completed and reports thereof submitted to the Revenue and Disaster Management Department. Monumentation over 1,190 sites of ground control points has been completed. Requisite satellite data has also been indented with NRSC, Hyderabad.
- Foreign inventory data has been collected for 16 sample points in Sundargarh, Jharsuguda, Angul, Sambalpur and Deogarh districts.
- The land use / land cover mapping of Baitarani Reserve Forest and Baphalimali Mining Area has been completed.
- Two day training programme on GIS based Aqua Farm Information System for MPEDA officers, three day workshops on National Urban Information System for planners/Engineers of ULBs of Orissa were also conducted.

Regional Plant Resource Centre (RPRC)

RPRC is a leading plant conservation and research institute, known for its significant work in the field of plant biotechnology and molecular biology. The centre also works on habitat preservation, conservation and multiplication of plant species in man-made habitats like botanical gardens, seed banks, conservatories orchidariums and other living plants. It has the largest cacti garden in Asia with 1,050 varieties. The arboretum, orchidrium and bamboo septum of the centre are enriched with a large number of species of timber, fire wood, orchids, bamboo and bamboo grasses. Its herbarium stores 8,000 plant specimens belonging to 1,410 species of angiosperms and 65 species of ferns. The main research outputs of RPRC during 2008-09 include:

- 2.50 lakh tissue cultured banana plants in its laboratory, which were supplied to farmers through Government organisations, NGOs and individuals
- Improved types of drumsticks and papaya, which were distributed in Orissa and other states.

Institute of Material Sciences (IMS)

The IMS was established in 1996-97 with the basic objective of providing facilities for research in the frontier areas of material science and conducting inter-disciplinary research on special materials. The Institute is dedicated to experimental research by young researchers in the frontier research fields of Colossal Magneto Resistance (CMR) and Diluted Magnetic Semiconductors Multifarious Materials. The activity of IMS for the year 2009-10 is as follows:

- A CSIR-Net qualified research scholar has joined in IMS availing financial support from Government of India to pursue his research work in the broad area of ferroelectrics.
- Basic research on Multi-ferroics and Diluted Magnetic Semiconductors is being taken up by two research scholars of the Institute which have got tremendous impact in the field of future spintronics devices.
- Three research papers on Diluted Magnetic Semiconductor and Colossal Magnetic Resistance were published in international journals. Besides, IMS completed the scientific exposure visit programme of 253 SC/ST school students of TSP area and awarded 5 best pride of the school award to them.

6.4.3 Other Government Initiatives

State Council on Science and Technology (SCST)

The SCST is the apex policy-making body for the development of science and technology and overseeing the implementation of various programmes. The council extends financial support for application-oriented research projects, publicity, seminars, workshops, conferences etc. Major activities undertaken by the Council during 2009-10 are highlighted below:

- To promote and encourage meritorious students to pursue their post graduate studies in basic science subjects such as physics, chemistry, mathematics, botany, zoology and geology, SCST introduced a scholarships programme @ Rs 2,000 per month for 25 students. The Institute of Mathematics and Applications, Bhubaneswar, is the nodal agency to implement this scheme. 25 students were enrolled during 2009-10.
- 3 Oriya scientists were provided partial assistance to promote scientific tamper and encourage local scientists -- through national and international scientific exposure.
- During 2009-10, SCST has provided financial assistance of Rs. 1.05 lakh for the 12th Orissa Science Congress held at Bhubaneswar and

for a state level science fair "International Year of Astronomy, 2009".

- A one-time grant of Rs. 10 lakh for scientific exposure visits was sanctioned as proposed by the Director, IMS Bhubaneswar to create a scientific temper and attitude among the SC&ST students located in TSP areas.
- Installation of water filters in 20 schools in Orissa is in progress with the Department of Science and Technology, Government of India.
- Two SC&ST inventors were rewarded with cash prizes of Rs. 25,000/- each for innovation of concrete hand pumps and machine for generating electricity using sea waves.

Biotechnology Department

Biotechnology has huge potential uses that can contribute significantly to food security, nutritional supplementation, health care and industrial applications. Some important activities of this department are listed below:

- Ac 64.613 government land at Mouza Andharua, Bhubaneswar has been leased out in favour of the Managing Director, IDCO, Bhubaneswar for development of a Biotechnology Pharma IT Park (Konark Knowledge Park) in PPP mode and its Foundation stones was laid by the Hon'ble Chief Minister on 25.10.2009.
- It has been decided to develop two more Biotech parks at Devas, Khurda and the other in Ganjam district.
- A research grant for 12 short term Research and Development Projects has been sanctioned.

Orissa Bigyan Academy

Its aim is to popularize science and technology in the State. Some of its activities in 2009-10 are listed below:

- Twelve issues of Bigyan Diganta (a Monthly Oriya Science Magazine, specially designed for school students, their parents and general public) have been released and distributed free of charge to high schools of the Gram Panchayat headquarters.
- It also published an abridged version of Bigyan Diganta on a quarterly basis for visually handicapped students. Two issues (1st and 2nd quarter) were printed in Braille in Oriya script.
- It organised various popular science programmes viz. science exhibitions, science based essays/ debates/ quizzes/ sit and draw competitions and seminars among school children, in collaboration with different organisations and institutions of the state.
- The Academy has selected fourteen scientists and science writers for Samanta Chandrasekhar Award, Orissa Young Scientist Award, Popular Science Writer Award. It felicitated a Senior Scientist award for 2007.

Pathani Samant Planetarium

Pathani Samanta Planetarium is a premier institute of the State. While its main objective is exhibitions, it also aims at creating awareness on astronomy, astrophysics and space science among the common people and young students in particular. Since its inception in 1990, PSP has increased its activities many fold and it attracts about one lakh visitors every year. The number of visitors to the Planetarium and revenue collected in the last five years are given in Annexures 6.25.

The planetarium has taken up 9 activities for popularisation of science, specifically astronomy and for creating consciousness and its culture in the State. Some of the activities include night sky watch programme, publication of wall magazine "Chhayapath", teachers training programme on astronomy, astro-physics and space science, contact programme for talented secondary school students, Astronomy Olympiad and other activities.

ANNEXURE 6

Annexure 6.1: Power Consumption in Orissa

In million unit

Year	Total consumptiion	Consumption Sector							
		Domestic	Commer- cial	Industrial	Public lighting	Irrigation & agriculture	Rail- ways	Public water works	Bulk supply & others
1	2	3	4	5	6	7	8	9	10
2000-01	6090	2173	548	2622	41	186	201	117	202
	(100.00)	(35.68)	(9.00)	(43.06)	(0.67)	(3.05)	(3.30)	(1.92)	(3.32)
2001-02	5769	2258	607	2184	38	162	213	120	187
	(100.00)	(39.14)	(10.52)	(37.86)	(0.66)	(2.81)	(3.69)	(2.08)	(3.24)
2002-03	6745	2441	468	2971	37	139	263	117	309
	(100.00)	(36.19)	(6.94)	(44.05)	(0.55)	(2.06)	(3.90)	(1.73)	(4.58)
2003-04	7208	2491	488	3270	39	133	302	120	366
	(100.00)	(34.56)	(6.77)	(45.37)	(0.54)	(1.84)	(4.19)	(1.66)	(5.07)
2004-05	7598	2352	482	3742	41	147	355	126	353
	(100.00)	(30.96)	(6.34)	(49.25)	(0.54)	(1.93)	(4.67)	(1.66)	(4.65)
2005-06	8144	2483	558	3941	55	137	384	129	457
	(100.00)	(30.49)	(6.85)	(48.39)	(0.68)	(1.68)	(4.72)	(1.58)	(5.61)
2006-07	9288	2525	640	4967	45	131	525	134	321
	(100.00)	(27.19)	(6.89)	(53.48)	(0.48)	(1.41)	(5.65)	(1.44)	(3.46)
2007-08	10761	2679	891	6090	51	132	594	142	182
	(100.00)	(24.90)	(8.28)	(56.59)	(0.47)	(1.23)	(5.52)	(1.32)	(1.69)
2008-09	11747	2914	1087	6548	54	155	627	151	211
	(100.00)	(24.81)	(9.25)	(55.74)	(0.46)	(1.32)	(5.34)	(1.28)	(1.80)
2009-10	12223	3187	1164	6114	56	153	960	172	417
	(100.00)	(26.07)	(9.52)	(50.02)	(0.46)	(1.25)	(7.86)	(1.41)	(3.41)

Figure in bracket indicates percentage to total consumption.

Sources: CESU (Central Electricity Utility Office of Orissa), previously CESCO, Bhubaneswar
SOUTHCO (South Electricity Supply Company of Orissa), Berhampur
NESCO (North Electricity Supply Company of Orissa), Balasore
WESCO (West Electricity Supply Company of Orissa), Sambalpur.

Annexure 6.2: Sector-wise Distribution of Power Consumers, 2007-08

Consumer (in lakh)

Domestic	15.87	6.96	22.83	69.51
Commercial	0.86	1.31	2.17	39.63
Industrial	0.03	0.2	0.23	13.04
Others	0.17	0.36	0.53	32.07
Total	16.93	8.83	25.76	65.72

Source: All the distributing Companies

Annexure 6.3: Demand and Availability of Power

In Mega Watt

2001-02	1334	1271	98	54	1423	NA	0
2002-03	1367	869	440	62	1371	4695.34	0
2003-04	1500	1269	481	76	1826	4815.34	0
2004-05	1578	1459	498	69	2025	4845.34	517
2005-06	1649	1275	525	62	1862	5073.48	250
2006-07	1760	1543	485	92	2120	5178.89	207
2007-08	1997	1563	736	82	2381	6067.9	311
2008-09	2107	1375	763	130	2268	6745.75	32
2009-10	2240	1157	773	485	2415	7990.25	50

* Includes installed capacity of the state's share in central sector projects and captive power plant capacities;
Source: Orissa Power Transmission Corporation Ltd (OPTCL)

Annexure 6.4: Installed Capacity and Power Generation from Different Power Projects, 2007-08 to 2009-10

In Mega Watt.

A. STATE SECTOR							
a) Hydro Power Projects							
i)	Hirakud Power System – I & II	347.50	100.00	347.50	106.33	102.39	75.28
ii)	Balimela HE Project	510.00	100.00	510.00	204.92	118.26	87.58
iii)	Rengali HE Project	250.00	100.00	250.00	108.83	98.05	60.46
iv)	Upper Kolab HE Project	320.00	100.00	320.00	122.26	65.13	45.56
v)	Upper Indrabati HE Project	600.00	100.00	600.00	335.61	253.52	161.50
vi)	Machhakunda HE Project	114.75	50.00	57.38	19.81	27.74	36.64
viii)	Samal SHEP	20.00	100.00	20.00	-	-	1.64
vii)	Meenakshi SHEP	37.00	100.00	37.00	-	-	16.13
	Total (a)	2199.25		2141.88	897.76	665.08	480.79
b) Thermal Power Projects							
i)	Ib (I & II)	420.00	100.00	420.00	311.25	326.03	302.06
ii)	Talcher Thermal Power Station, Stage – I & II	460.00	100.00	460.00	354.62	381.19	374.24
	Total (b)	880.00		880.00	665.87	710.12	676.30
	Total A (a + b)	3079.25		3021.88	1563.60	1375.20	1157.09
B. CENTRAL SECTOR							
i)	Farakka, STPS (West Bengal)	1600.00	13.63	218.00	167.92	154.85	148.67
ii)	Kahalgaon STPS (Bihar) I & II	1840.00	15.24	134.00	77.98	71.33	84.15
iii)	Talcher STPS I & II (Orissa)	3000.00	31.80	518.00	438.64	419.65	431.51
iv)	Chhuka Hydro power station (Bhutan)	270.00	15.19	41.01	31.54	28.31	31.71
v)	Tala HPS	1020.00	5.00	43.35	15.48	18.53	16.13
vi)	Teesta HPs	510.00	20.59	105.01	1.37	43.46	60.49
vii)	Regional pool	-	-	-	2.96	-	-
	Total B	8240.00		1059.37	735.89	736.12	772.67
	Total (A+B)	11262.25		4024.25	2299.52	2111.32	1929.77

Source: OPTCL and GRIDCO

Annexure 6.5: Major Industries Having Captive Power Plants and Power Supplied to GRIDCO

In Mega Watt

NALCO, Angul	960.00	46.10	36.80	48.10	14.70	-	1.56
ICCL, Choudwar	108.00	7.60	3.80	2.20	0.40	4.89	-
RSP, Rourkela	220.00	8.30	2.90	4.40	2.80	1.60	1.89
INDAL, Hirakud	367.50	0.00	7.00	3.50	3.60	5.62	10.37
NINL , Duburi	62.50	2.70	8.10	8.10	10.10	8.71	8.11
NBVL, Meramundali	95.00	4.30	4.00	2.40	-	20.09	24.55
MESCO (Duburi)	9.00	-	-	0.10	-		-
B.P.&S, Jharsuguda	230.00	-	-	13.30	19.30	6.71	11.16
Aarti Steels	40.00	-	-	9.80	9.60	14.54	12.49
IFFCO, Paradeep	110.00	-	-	-	0.03		2.76
B.S&E Meramundali	110.00	-	-	-	4.90	40.05	15.58
Tata SPONGE IRON (Joda)	26.00	-	-	-	12.80	14.40	12.82
Shyam Drt. Ltd. Sambalpur	30.00	-	-	-	1.00	3.54	2.62
Jindal Stainless Duburi	250.00	-	-	-	2.60	31.97	99.84
Ratha Steel & Power Ltd. SBP	20.00	-	-	-	-	0.04	1.96
Minakshi	37.00	-	-	-	-	1.10	-
Vedanta Aluminium, Lanjigarh	90.00	-	-	-	-	1.18	1.87
Vedanta Aluminium, Jharsuguda	995.00	-	-	-	-	3.34	79.76
SMC Power Pvt. Ltd., Jharsuguda	33.00	-	-	-	-	3.76	5.34
Pattnaik Steel Ltd., Keonjhar	15.00	-	-	-	-	1.73	4.12
Mahavir Ferro Alloys, RKL	12.00	-	-	-	-	0.02	3.59
Scaw Industries Ltd. Dhenkanal	8.00	-	-	-	-	0.55	-
Visa Steel Ltd., Duburi	50.00	-	-	-	-	0.23	0.78
IMFA, Choudwar	108.00	-	-	-	-	-	18.35
Action Ispat	37.00	-	-	-	-	-	3.00
Aryan Ispat	18.00	-	-	-	-	-	3.42
OSIL, Polaspanga	24.00	-	-	-	-	-	2.86
Dinabandhu Power & Steel Ltd.	10.00	-	-	-	-	-	0.41
Maheswari Ispat Ltd	24.00	-	-	-	-	-	0.34
Scaw Industries Ltd. Dhenkanal	8.00	-	-	-	-	-	-
OCL Iron & Steel Ltd.	14.00	-	-	-	-	-	-
Total	3909.00	-	-	-	-	-	329.57

Sources: OPTCL and GRIDCO

Annexure 6.6: District-wise Status of Rural Electrification

1	Angul	1661	1035	162	1197	464
2	Cuttack	1856	1695		1695	161
3	Dhenkanal	1076	816		816	260
4	Jagatsinghpur	1227	1111		1111	116
5	Jajpur (Cesu Person)	1575	197		197	2
6	Kendrapara	1407	1178		1178	229
7	Khurda	1358	1214		1214	144
8	Nayagarh	1531	879	86	965	566
9	Puri	1591	1486		1486	105
10	Balasore	2587	2380		2380	207
11	Bhadrak	1243	951		951	292
12	Keonjhar	2069	1457	1	1458	611
13	Mayurbhanj	3748	2050		2050	1698
14	Bargarh	1180	1080		1080	100
15	Bolangir	1764	1411	1	1412	352
16	Deogarh	711	354		354	357
17	Jharsuguda	346	321		321	25
18	Kalahandi	2099	1013	1	1014	1085
19	Nuapada	648	481		481	167
20	Sambalpur	1238	849	2	851	387
21	Sonepur	829	599		599	230
22	Sundargarh	1723	1012	9	1021	702
23	Baudh	1115	152		152	963
24	Koraput	1922	131		131	1791
25	Rayagada	2467	327		327	2140
26	Gajapati	1512	447	185	632	880
27	Ganjam	2812	1987	19	2006	806
28	Kandhamal	2379	355		355	2024
29	Malkangiri	979	61		61	918
30	Nabrangpur	876	144		144	732
	GRAND TOTAL	47529	28405	466	28871	18658

Annexure 6.7: Turnover and Net Profits of Orissa Power Generation Corporation (OPGC)

In crores of rupees

1999-2000	3166.47	86.06	456.52	124.39
2000-01	3001.45	81.58	418.03	98.27
2001-02	2598.81	70.64	411.59	122.11
2002-03	2618.49	71.17	473.28	181.7
2003-04	3006.46	81.71	423.11	136.23
2004-05	3160.29	85.9	426.69	143.39
2005-06	3089.61	83.98	448.73	161.91
2006-07	3310.53	89.98	477.07	156.77
2007-08	3043.54	82.72	484.69	165.34
2008-09	3190.63	86.72	440.79	112.48

Annexure 6.8: Investment in Power and Renewable Energy in Orissa

In crores of rupees

AE: Anticipated Expenditure; P: Provisional
Source: Plan Document, 2007-12 & Orissa Budget at a Glance, 2007-08

Annexure 6.9: Gopabandhu Gramina Yojana, 2006-07 to 2009-10

Physical						
A		Works taken up				
	i	Bijli	280	2046	241	201
	ii	Sadak	5882	7344	7961	7520
	iii	Pani	378	389	212	115
	iv	Other	31	14	30	10
		Total	6571	9793	8444	7846
B		Works completed	4693	8119	7096	4960
C		Man days generated (in lakh)	63.03	62.13	67.73	26.28
D		Villages covered	5713	6165	6317	6197
Financial						
A		Total funds available (Rs. in crore)	110.27	136.01	146.86	162.21
B		Expenditure (Rs. in crore)	84.43	99.15	119.01	75.91

Source: Panchayati Raj Department, Orissa

10 Plan Period (2002-07)	1206.22	13919.99	8.67
2007-08	329.9	6032.81	5.47
2008-09 (AE)	472.93	7500	6.31

Annexure 6.10: Allotment of Funds and Expenditure for the Development of National Highways in Orissa

In crores of rupees

2001-02	46.40	46.40	21.81	21.81	13.49	13.49	11.81	11.81
2002-03	45.32	45.32	19.00	19.00	13.44	13.44	9.61	9.61
2003-04	69.97	69.67	11.00	11.00	18.42	18.42	12.54	12.54
2004-05	72.03	72.03	13.77	13.77	7.69	7.69	12.24	12.24
2005-06	67.63	67.63	18.00	18.00	9.35	9.35	13.54	13.54
2006-07	72.22	72.22	22.58	22.58	8.40	8.40	12.80	12.80
2007-08	138.87	138.87	22.66	22.66	13.00	13.00	13.65	13.65
2008-09	208.84	208.84	31.00	31.00	17.00	17.00	13.65	13.65
2009-10	333.12	333.12	29.41	29.41	18.00	18.00	14.50	14.50

Source: Chief Engineer, National Highways

Annexure 6.11: Road Construction under Progress in 2008-09

Widening to Two Lanes, 366 km	423
Strengthening, 178 km	137
Improving Riding Quality, 130 km	80
Construction and Rehabilitation of 7 bridges	17
Construction of 1 ROB (chain pal on NH-23)	23

Annexure 6.12: Proposals for 2009-10

Widening to Two Lanes, 60 km	61
Strengthening, 42 km	35
Improving Riding Quality, 73 km	37
Construction and Rehabilitation of 10 bridges	20
Other works	10

Annexure 6.13: Progress of PMGSY in Orissa, 2009-10

2000-01	179.7	0	0	0	0
2001-02	175	0	0	27.84	36.34
2002-03	170.09	464	260	1090.37	238.58
2003-04	175	403	587	993.87	133.8
2004-05	175	364	589	979.85	267.41
2005-06	305.29	341	604	1494.44	377.37
2006-07	624.57	451	697	2069.87	582.81
2007-08	546.83	432	621	1836.03	677.41
2008-09	1251.4	685	2419	2640.99	1163.01
2009-10	1594.34	596	472	3838.42	1895.26
Total	5197.22	3736	6249	14971.69	5371.99

Source: Chief Engineer, Rural Works

Annexure 6.14: Rural Connectivity through Bharat Nirman

1	Total Villages Connected						
	a) More than 1000 Population	272	259	250	1768	438	2987
	b) More than 500 Population Scheduled area	23	63	71	437	206	800
2	Total Habitations	295	322	321	2205	644	3787
3	New Connectivity (km.)	132	1602	1398	2064	2801	9256
4	Upgradation /Renewal	103	970	1400	2079	2451	7004
5	Total length (km)	1495	2752	2798	4143	5251	16261

Source: Chief Engineer, Rural Works

Annexure 6.15: Status of Rural Connectivity in Orissa by the End of 2006-07 (Based on 2001 Population Census)

Source: Chief Engineer, Rural Works
PMGSY: Pradhan Mantri Gram Sadak Yojana
ADB: Asian Development Bank assisted PMGSY

Total Habitations by the end of 1999-00	9,173	12,474	12,932	15,520	50,099
Total Connected Habitations by the end of 1999-00	5,470	5,759	5,011	4,838	21,078
Total Uncovered Habitations by the end of 1999-00	3,703	6,715	7,921	10,682	29,021
Coverage of Habitations (PMGSY Ph-I to VI & ADB Ph-II)	3,596	3,607	1,504	1,214	9,921
Habitations covered through other schemes	78	130	0	0	208
Balance of Uncovered Habitations by the end of	29	2,978	6,417	9,468	18,892

Annexure 6.16: Motor Vehicles Registered and on Road in Orissa

Goods vehicle (truck to tempo)	197,099	94,859	119,352	94,130	109,738	115,108	136,174	159881
Public/Private bus	21,763	5,297	5,997	6,395	6,699	6,877	7,647	8908
Motor car/jeep/ taxi	198,358	80,510	95,531	114,469	136,792	134,960	152,213	164614
Auto rickshaw	55,285	15,086	18,811	23,610	27,314	31,700	37,784	4703
Motorcycle/ scooter/mopeds	2,298,251	1,064,323	1,208,210	1,368,209	1,537,758	1,691,684	1,870,020	2132508
Others (tractor, trailor, trecker, & Others)	168,996	11,789	13,092	60,751	66,279	89,887	103,307	120792
Total	2,939,752	1,271,864	1,460,993	1,667,564	1,884,580	2,070,216	2,307,145	2639576

Source: State Transport Authority, Orissa

Annexure 6.17: Activities of Orissa State Road Transport Corporation (OSRTC)

2000-01	383	254	134.98	3,492	186.4
2001-02	297	251	134.98	2,419	190.55
2002-03	265	241	134.98	1,602	70.07
2003-04	260	233	134.98	1,387	58.16
2004-05	258	228	134.98	1336	58.41
2005-06	259	230	134.98	1243	55.2
2006-07	273	227	161.34	1192	62.87
2007-08	259	231	171.29	1114	50.52
2008-09	297	264	176.29	1045	51.18
2009-10	322	279	176.29	990	51.93

Source: Orissa State Road Transport Corporation

Annexure 6.18: Motor Vehicle Revenue Collection

In crores of rupees

2004-05	320.00	338.11	105.70	20.69
2005-06	400.00	405.66	101.40	19.98
2006-07	500.00	425.80	85.20	4.97
2007-08	500.00	459.78	91.96	7.98
2008-09	580.00	525.30	90.57	14.25
2009-10	600.00	611.08	101.85	16.32

Source: State Transport Authority, Orissa

Annexure 6.19: Revenues from Motor Vehicle Offenses

2004-05	102019	23.38
2005-06	117320	37.52
2006-07	92356	25.58
2007-08	109242	34.62
2008-09	106539	35.16
2009-10	96637	40.11

Source: State Transport Authority, Orissa

Annexure 6.20: District-wise Length of Railway Routes and Railway Stations/Passenger Halts in Orissa, 2009-10

In Km

Angul	88.13	0	88.13	15.38	-	15.38	10	1	15.38
Balasore	0	0	_	114.98	-	114.98	14	4	114.98
Bargarh	53	_	53	-	-	-	3	0	
Bhadrak	-	-	_	28.45	-	28.45	4	2	28.45
Bolangir	177	_	177	-	-	-	13	1	
Baudh	-	-		-	-	-	-	0	
Cuttack	46.27	_	46.27	68	-	68	15	5	99.46
Deogarh	-	-	_	-	-	-	-	0	
Dhenkanal	-	-	_	50.6	-	50.6	5	4	50.6
Gajapati *	-	54	54	-	-	-	8	0	
Ganjam	-	-	_	85.64	-	85.64	9	2	85.64
Jagatsinghpur	_	-	_	68.11	-	68.11	7	2	
Jajpur	33.05	-	33.05	65.61	-	65.61	10	1	65.61
Jharsuguda	7	-	7	78.78	-	78.78	8	5	78.78
Kalahandi	12	-	12	26	-	26	5	0	
Kandhamal	-	-	_	-	-	-	-	0	
Kendrapara	-	-	_	-	-	-	-	0	
Keonjhar	57.97	-	57.97	-	-	-	6	0	57.97
Khurda	1.11	-	1.11	116.77	-	116.77	14	7	117.88
Koraput	281	-	281	-	-	-	26	1	159
Malkangiri	-	-	_	-	-	-	-	0	
Mayurbhanj	113.55	_	113.55	-	-	-	6	7	51.5
Nabrangpur	-	-	_	-	-	-	-	0	
Nayagarh	-	-	_	-	-	-	-	0	
Nuapada	32	-	32	-	-	-	3	0	
Puri	42.08	-	42.08	-	-	-	6	3	42.08
Rayagada	42	_	42	113	-	113	12	1	
Sambalpur	144.91	-	144.91	24.38	-	24.38	15	3	24.38
Sonepur	13	-	13	-	-	-	1	0	
Sundargarh	153.88	-	153.88	131.28	-	131.28	25	7	285.08
Total	1297.95	54	1351.95	986.98	-	986.98	225	56	1276.79

*Under Conversion Broad Gauge

Source: All Railway Division, South Eastern Railway

Annexure 6.21: Traffic through Paradeep Port

In million tones

2000-01	6.85	13.05	19.9	-
2001-02	6.66	14.47	21.13	6.18
2002-03	6.99	16.91	23.9	13.11
2003-04	6.71	18.6	25.31	5.9
2004-05	8.44	21.66	30.1	18.92
2005-06	11.42	21.69	33.11	10
2006-07	13.66	24.86	38.52	16.34
2007-08	16.85	25.59	42.44	10.18
2008-09	19.89	26.52	46.41	9.35

Source: Paradeep Port Trust

Annexure 6.22: Passenger Traffic and Revenue Collected from Inland Water Transport Services

2005-06	1.33	19.52
2006-07	1.15	17.21
2007-08	1.08	18.75
2008-09	1.04	19.19
2009-10	1.22	23.08

Source: Directorate of Inland Water Transport, Orissa

Annexure 6.23: Availability of Postal Services, Orissa and All-India

2006-07	7582	579	8161	137508	17696	155204
2007-08	7583	579	8162	NA	NA	NA
2008-09	7585	577	8162	NA	NA	NA
2009-10	7575	585	8160	NA	NA	NA

Source: Chief Postmaster General, Orissa

Annexure 6.24: HYV Seeds Introduced by CRRI

2008	Satya Krishna	135	5.0 – Kharif 6.0 – Summer	Recommended for irrigated and rain-fed shallow lowlands
2008	Nua Kalajira	145	3.0 – Kharif	Recommended for shallow low lands
2008	Nuadhusura	145	3.0 – Kharif	Recommended for shallow low land
2008	Hanseswari	Photosensitive flowers in 4th week of October	5.0 – Kharif	Recommended for rain-fed semi-deep water ecology of Orissa
2008	Chandan	125	6.0 – Summer	Recommended for cultivation in Summer season
2009	Swarna Sub-I	145	4.5	Recommended for areas where normally Swarna is grown and can tolerate sub-mergence up to 10 days
2009-10	Phalguni	117	5.0	Recommended for irrigated and bunded upland.
2009-10	Reeta	145	5.5	Recommended for shallow rainfed lowlands.
2009-10	Luna Suvarna	150	4.0	Recommended for coastal saline low
2009-10	Luna Sampad	145	4.0	Recommended for coastal saline low
2009-10	Nua Chipikamini	150	3.5	Recommended for shallow low land

Source: Central Rice Research Institute, Cuttack

Annexure 6.25: Visitors and Revenue Collected at Pathani Samant Planetarium

2004-05	92903	854652
2005-06	93522	848580
2006-07	133289	1219350
2007-08	112056	1336369
2008-09	90019	1097609
2009-10	88341	1116183

Source: Pathani Samant Planetarium

CHAPTER 7

Human Development and Poverty

Human Development has been conceived as processes that enable people to improve their skills, capabilities and choices to live a long, healthy and fulfilled life. As a developmental approach, the major pillars of human development are equity, empowerment, participation and sustainability. It is about creating an environment in which people develop their full potential and lead productive and creative lives in accordance with their needs and interests. Reduction of inter-regional and inter-personal disparities is also a key concern that has considerably informed the human development debate. The methodology propagated by UNDP suggests that levels of literacy, infant mortality rates, life expectancy at birth, access to safe drinking water, and income capture key dimensions of human development and are generally used to develop the human development index of a region, community or society. Orissa was the 9th state to bring out its first Human Development Report in 2005. An overall status of human development including the extent and distribution of poverty, health and literacy conditions in Orissa is discussed in this chapter.

7.1 Poverty: Its Multiple Dimensions

The concept of poverty has been gradually evolving. It is no longer associated with only material deprivation. It has acquired several dimensions and forms an integral component of human development. Orissa has committed itself to address poverty in its multiple dimensions. In most general terms, poverty can be defined as "deprivation in well-being" and encompasses several dimensions of deprivation:

- Material deprivation (lack of income; poverty of assets)
- Social deprivation (discrimination on account of caste, gender, region and religion; unable to enjoy social relationships in their full scope)
- Political deprivation (a sense of voicelessness and powerlessness; not able to influence political decisions that profoundly affect their lives)
- Intellectual deprivation (poverty of education and skills; lack of opportunities)
- Deprivation in health (health poverty; poor or no access to health services)
- Inability to cope with vulnerabilities and risks.

7.1.1 Trends and Spread of Poverty

Table 7.1 presents poverty head count ratios (i.e., percentage of people below the poverty line), based on analysis of National Sample Survey (NSS) data, for Orissa and India from 1973-74 to 2007-08. The analysis of poverty from 1999-2000 to 2007-08 is based on NSS data for mixed recall period (MRP). The estimates for 1999-2000 and 2004-05 are made by the Planning Commission and those for 2007-08 are obtained using the 64th NSS round data. Poverty has declined by 7.25 percentage points from 47.15 percent in 1999-2000 (55th NSS round) to 39.90 percent in 2004-05 (61st NSS round) and further by 11.73 percentage points from 39.90 percent in 2004-05 to 28.17 percent in 2007-08. The sample size in the 64th round is smaller compared to that of the 61st and other rounds in Table 7.1 and thus might be taken as indicative of recent developments. Given the large change between 2004-05 and 2007-08, even this indicative figure reinforces the declining trend noticed earlier during 1999-2000 and 2004-05.

Based on uniform recall period (URP) in earlier rounds of survey by the NSSO, poverty in Orissa seemed to be nearly stagnant during 1993-94 and 2004-05. Against this backdrop, the drop in

Table 7.1: Poverty Head Count Ratio (%) for Orissa and India (1973-74 to 2007-08)

1973-74	67.28	55.62	66.18	56.44	49.01	54.88
1977-78	72.38	50.92	70.07	53.07	45.24	51.32
1983	67.53	49.15	65.29	45.65	40.79	44.48
1987-88	57.64	41.53	55.58	39.09	38.20	38.36
1993-94	49.72	41.64	48.56	37.27	32.36	35.97
1999-00	48.01	42.83	47.15	27.09	23.62	26.10
2004-05*	39.80	40.30	39.90	21.80	21.70	21.80
2007-08*	29.54	19.28	28.17	15.06	15.10	15.07

* Based on MRP Consumption.

poverty ratio since 1999-2000 based on MRP data is a welcome development for the State in so far as growth in GSDP seems to have a favourable effect on poverty in Orissa. The current signals are that the State's poverty ratio has fallen by almost similar proportion as at the all-India level in recent years.

A tentative analysis, by social groups (i.e., ST, SC, OBC and others) and by NSS regions (i.e., coastal, northern and southern), of state sample, central sample and pooled data (i.e., both state and central) of NSS data for 1999-2000, 2004-05 and 2007-08 has been given in Annexures 7.3 through 7.7. The poverty estimates for rural Orissa by social groups and by regions are presented in Tables 7.2 and 7.3 respectively for 1999-2000, 2004-05 and 2007-08. Scheduled Tribe (ST) communities are poorer than other social groups followed by Scheduled Caste (SC) communities. The ST and SC communities together contribute to 70 percent of the total poor in the State. It is, heartening to note that poverty among ST and SC communities is also reducing at a faster rate.

The southern region has the highest poverty followed by the northern region. Both southern and northern regions account for as much as 85 percent of the poor in the State. In 2007-08, only about 10 percent of the population lived below the poverty line in the coastal region. It is a matter of satisfaction that all three regions have witnessed substantial reduction in poverty between 2004-05 and 2007-08.

Table 7.2: Incidence of Poverty by Social Groups, Rural Orissa, 2007-08, 2004-05 and 1999-2000

* Tentative Analysis of Pooled NSS data using MRP Method.

Table 7.3: Incidence of Poverty by NSS Regions, Rural Orissa, 2007-08, 2004-05 and 1999-2000

2007-08*	45.65	32.50	10.23	29.54
2004-05*	62.50	43.69	18.37	39.80
1999-2000	87.14	49.84	31.81	48.14

* Tentative Analysis of Pooled NSS data using MRP Method.

2007-08*	52.09	33.62	17.08	13.18	29.54
2004-05*	70.09	44.94	28.89	16.13	39.80
1999-2000	73.10	52.30	39.70	24.01	48.14

Table 7.4: Incidence of Poverty in Orissa vis-à-vis Other Major States, 1973-74 to 2004-05

1	Andhra Pradesh	48.86	39.31	28.91	25.86	22.19	15.77	11.10
2	Bihar	61.91	61.55	62.22	52.13	54.96	42.60	32.50
3	Gujarat	48.15	41.23	32.79	31.54	24.21	14.07	12.50
4	Haryana	35.36	29.55	21.37	16.54	25.05	8.74	9.90
5	Karnataka	54.47	48.78	38.24	37.53	33.16	20.04	17.40
6	Kerala	59.79	52.22	40.42	31.79	25.43	12.72	11.40
7	Madhya Pradesh	61.78	61.78	49.78	43.07	42.52	37.43	32.40
8	Maharashtra	53.24	55.88	43.44	40.41	36.86	25.02	25.20
9	Orissa	66.18	70.07	65.29	55.58	48.56	47.15	39.90
10	Punjab	28.15	19.27	16.18	13.20	11.77	6.16	5.20
11	Rajasthan	46.14	37.42	34.46	35.15	27.41	15.28	17.50
12	Tamil Nadu	54.94	54.79	51.66	43.39	35.03	21.12	17.80
13	Uttar Pradesh	57.07	49.05	47.07	41.45	40.85	31.15	25.50
14	West Bengal	63.43	60.52	54.85	44.72	35.66	27.02	20.60
	All India	54.88	51.32	44.48	38.36	35.97	26.10	21.80

* Based on MRP consumption

Given that the concentration of poverty is among specific social groups and regions in the State, the Government has undertaken several programmes to reduce poverty in Orissa in general and particularly among the most backward social groups and regions. Orissa's development strategies and developments aimed at faster poverty reduction are discussed in section 7.4.

The incidence of poverty in Orissa vis-à-vis other major states from 1973-74 to 2004-05 on the basis of NSS consumer expenditure data, has been compared in Table 7.4. The number and percentage of BPL population for the 61st NSS round (2004-05), based on mixed recall period (MRP) and uniform recall period (URP), for all states and union territories are given in Annexure 7.1 and 7.2 respectively.

7.2 Literacy Levels

Literacy and education are both indicators and instruments of socio-economic development. Knowledge base, levels of skills of the people and evolution of art and culture in a society depend on education. Orissa has done reasonably well on the literacy front. The literacy in Orissa has increased 4 times from 15.80 percent in 1951 to 63.08 percent in 2001 growing at an annual compound rate of 2.81 percent as against 2.58 percent per annum at the national level from 18.33 percent in 1951 to 65.38 percent in 2001. Whereas male literacy has increased 2.76 times from 27.32 percent in 1951 to 75.35 percent in 2001, female literacy has grown much faster (i.e., 11.17 times) from a low base of 4.52 percent in 1951 to 50.51 percent in 2001. Though both male and female literacy are fast approaching national averages, there is still a gender gap of 25 percentage points in literacy. An analysis of NSS data for the 64th round has indicated that literacy levels in Orissa are of the order of 68.3 percent in 2007-08 in comparison to 71.7 percent at all India level. The school attendance rates in Orissa and India are respectively 83.5 percent and 85.2 percent in 2007-08.

There are substantial social, regional and gender disparities in literacy. The Scheduled Tribes communities have very low levels of literacy. The ST female literacy has increased from a very low level of 4.76 percent in 1981 to 23.23 percent

Table 7.5: Some Important Demographic Indicators of Orissa

Crude Birth Rate (2008-SRS)	21.4 Per 1000 Population
Crude Death Rate (2008-SRS)	9.0 Per 1000 Population
Infant Mortality Rate (2008-SRS)	69 Per 1000 Live Births
Infant Mortality Rate - Urban (2008-SRS)	49 Per 1000 Live Births
Infant Mortality Rate - Rural (2008-SRS)	71 Per 1000 Live Births
Natural Growth Rate (2008-SRS)	1.24%
Total Fertility Rate (NFHS-3)	2.40%
Couple Protection Rate (NFHS-3)	50.70%
Life Expectancy at Birth (2006-10 Project)	63.5
Maternal Mortality Rate (2004-06)	303 per 1,00,000 Live Births

Source: National Rural Health Mission, Orissa Profile, Govt. of Orissa

Table 7.6: Inter-State Comparisons of IMR, 1991 –2008

Andhra Pradesh	73	66	62	59	57	52
Assam	81	74	70	66	68	64
Bihar	69	62	61	61	61	56
Gujarat	69	60	60	53	54	50
Haryana	68	66	62	61	60	54
Karnataka	77	58	55	49	50	45
Kerala	16	11	10	12	14	12
Madhya Pradesh	117	86	85	79	76	70
Maharashtra	60	45	45	36	36	33
Orissa	124	91	87	77	75	69
Punjab	53	52	51	45	44	41
Rajasthan	79	80	78	67	68	63
Tamil Nadu	57	49	44	41	37	31
Uttar Pradesh	97	83	80	72	73	67
W. Bengal	71	51	49	40	38	35
India	80	66	63	58	58	53

Source: Statistical Abstract of Orissa, 2008, Govt. of Orissa, Economic Survey, GoI: 2006-07, SRS Bulletin, 2008.

in 2001, which is significantly lower than SC and general female literacy. Though the ST male literacy has increased from 23.27 percent in 1981 to 51.48 percent in 2001, there is still a big gap between that and the general male literacy. The SC communities have comparatively done better. The SC male literacy has almost bridged its gap with the general male literacy in 2001. The SC females are also catching fast. Though the rural female literacy has more than doubled from 21.90 percent in 1981 to 47.22 percent in 2001, there is still a substantial gap with their urban sisters. The gap between rural and urban male literacy has, however, been decreasing.

It is heartening to note that despite its weak fiscal condition, Orissa has done reasonably well on the literacy front and has committed higher resources to education in general and primary education in particular. Secondary education and technical education have been receiving increasing attention and resources in recent years. Orissa has the potential to perform better than the national average provided that greater attention is paid to improve delivery of educational services and to effectively convert outlays to outcomes.

7.3 Health Conditions

Good health is a livelihood asset that enables people to participate in work and socio-economic development. Illness, on the other hand, causes misery and impoverishment. Some of the important demographic indicators of Orissa are given in Table 7.5.

Key health indicators such as Infant Mortality Rate (IMR) and Life Expectancy at Birth (LEB) are compared across major States in Tables 7.6 and 7.7 respectively. Recently, Orissa has made notable achievements in reducing its IMR to 69 as per the 2008 SRS report. The SRS survey reveals that the rate of decline in IMR in both rural and urban areas in Orissa was better than the national averages.

Three factors explain a high level of IMR in Orissa: (i) poor availability of professional attendants at birth, (ii) high percentage of low birth weight babies, and (iii) lack of professional pre- and post-natal care. Sixty-four percent infant deaths are attributed to neo-natal mortality. Premature deliveries result in 38.5 percent infant deaths. Pneumonia, respiratory infections in newborns, tetanus, and diarrhoea result in 34.1 percent infant deaths. Anaemia, which is caused due to malnutrition suffered by both pregnant mothers and infants, explains 8.1 percent infant deaths. Other causes account for another 19.3 percent infant deaths. There also appears to be a high correlation between IMR and Maternal Mortality Rate (MMR). Orissa has launched an IMR Mission with a view to expediting fast reduction in IMR. Verbal autopsy has been made mandatory for each infant and child death.

There are significant social, regional and gender disparities in accessing public health in Orissa. Interior regions in general and tribal districts in particular have poor physical and economic access to health services. These regions also bear the brunt of a resource crunch both in terms of health budget deficit and neglected public health institutions. Health conditions of women need substantial improvement. Institutional deliveries are lower in the case of tribal women. Post-natal care of mothers and infants also needs greater attention. There is, however, some improvement in recent years. Table 7.8 compares results of the report of NFHS-I, NFHS-II and NFHS-III conducted by the International Institute for Population Sciences (IIPS) and shows that there has been remarkable improvement in all health indicators of the State from 1992-93 to 2005-06.

Health conditions depend on a number of factors including: (i) income and poverty levels, (ii) food security, food pricing and malnutrition, (iii) availability of professional medical attendants, paramedical professionals, quantity and quality of health infrastructure, (iv) socio-economic development, literacy and health awareness, and (v) physical and economic accessibility of private or public health care system. Orissa has been making sustained efforts to improve its health situation. The private health care system is generally less developed in interior areas and is not economically accessible. Low female literacy levels adversely impact reproductive child healthcare in tribal and other interior areas.

Table 7.7: Inter-State Comparisons of Life Expectancy, 1981 –2006

Andhra Pradesh	56.10	59.98	61.40	64.48	63.40	65.93	63.40	67.90
Assam	52.74	51.98	58.74	58.48	61.14	61.18	59.60	60.80
Bihar	55.21	52.90	60.81	60.09	62.81	62.78	65.60	64.70
Gujarat	55.34	58.30	60.94	62.74	62.94	65.59	64.90	69.00
Haryana	61.41	59.59	65.21	64.22	66.21	65.94	66.40	68.30
Karnataka	60.15	61.06	64.15	65.30	66.55	66.55	64.50	69.60
Kerala	65.23	69.87	67.23	72.37	68.23	73.62	70.80	76.00
Madhya Pradesh	53.24	51.46	59.24	57.96	61.50	60.81	60.50	61.30
Maharashtra	59.85	60.66	63.90	65.06	65.45	66.31	66.40	69.80
Orissa	54.13	51.90	60.13	58.40	62.13	61.15	60.30	62.30
Punjab	64.31	64.34	66.61	66.55	67.61	68.80	67.70	70.40
Rajasthan	54.80	55.44	60.50	61.34	62.50	63.59	64.10	67.20
Tamil Nadu	58.25	57.85	62.85	63.05	64.85	65.20	66.10	69.10
Uttar Pradesh	51.14	46.89	57.14	52.84	60.09	56.09	62.00	61.90
W. Bengal	56.95	56.28	61.95	61.94	63.95	64.19	66.70	69.40

Source: Statistical Abstract of Orissa, 2005, Govt. of Orissa, and Budget at a glance, Orissa, 2007-08

Table 7.8: Comparison of Health Indicators: National Family Health Survey, Orissa

1	Infant Mortality Rate (IMR)	112	81	65
2	Total Fertility Rate	2.92	2.45	2.4
3	Current use of any method (percent)	36.3	46.8	50.7
4	Female Sterilisation (percent)	28.3	33.9	33.1
5	Male Sterilisation (percent)	3.4	1.7	1
6	Spacing Method	12.7	8.7	6.9
7	Mothers receiving ANC (percent)	61	79.2	60.9
8	Institutional Delivery (percent)	14.1	22.9	39
9	Children fully vaccinated	36.1	43.7	51.8
10	BCG	63.3	84.7	83.6
11	DPT	56.3	61.9	67.9
12	Polio	56.7	68.4	65.1
13	Measles	40.2	54	66.5

Source: NFHS-III, 2005-06, Orissa

7.4 Development Approach for Orissa

In recent years, Orissa has made significant achievements in terms of economic growth, poverty reduction and other socio-economic indicators. During the 10th Five Year Plan (2002-07), Orissa witnessed a higher annual real growth rate of 9.51 percent at 1999-2000 prices and a reduction in poverty by 7.3 percentage points in 2004-05 over 1999-2000. During the first three years of the 11th Plan, Orissa has recorded average annual real growth rate of 9.57 percent at 2004-05 prices. A tentative analysis of NSS data has indicated reduction of poverty by 11.73 percentage points between 2004-05 and 2007-08. The State Government has been giving emphasis to the following areas which need special attention and focus on an overall development approach for Orissa:

i. Orissa's economy needs to grow faster than the national average in order to catch up with the nation.
ii. Agriculture and allied sectors need to perform above the national average over a long period of time.
iii. Sustained efforts are needed to mitigate adverse impacts of natural calamities and other shocks on Orissa's economy and people.
iv. Special attention needs be given to depressed regions, marginalised classes including ST, SC and women to substantially reduce regional, social and gender disparities.
v. With a view to addressing the problem of unemployment and under-employment, particularly among educated and uneducated young persons, special efforts are required to improve their employable skills, education and other soft skills to harness opportunities that may come up for them in and outside Orissa.
vi. Infrastructure including roads, ports, railways and irrigation facilities need to be adequately augmented and improved.
vii. As Orissa has a high incidence of poverty, special efforts are needed to reduce poverty at a faster pace.

7.4.1 State Interventions

Poverty Reduction Programmes

The State Government has been implementing various poverty reduction programmes including SGSY, NREGA and other programmes for generation of wage employment and gainful self-employment. Apart from these, food security / nutrition programmes such as heavily subsidised rice at the rate of Rs 2 a kg for all BPL households in non-KBK regions and for all in the KBK region, Targeted Public Distribution Programme (TPDS), Antyodaya Anna Yojana (AAY), Mid-day Meal Programme (MDM)/Emergency Feeding Programme (EFP) and Supplementary Nutrition Programme (SNP) are implemented in the State. The allotment of essential commodities received from the Central Government for earmarked food security programmes has been given in Annexure 7.8 for 2003-04 to 2008-09. Some of these programmes have also been discussed elsewhere in this document.

Special programmes like Indira Awas Yojana (IAY) and Mo Kudia, both housing schemes for economically weaker and low income groups, Madhubabu Pension Yojana, and Maintenance of Critical Irrigation Projects have been undertaken to improve the social and economic conditions of rural people. Annexures 7.9 and 7.10 summarise relevant details as regards IAY and other housing schemes.

For improving livelihoods of tribals and other vulnerable communities, several schemes have been implemented with active support from a number of external donors. These schemes include the Orissa Tribal Empowerment and Livelihood Programme(OTELP),WesternOrissaRuralLivelihood Programme (WORLP), Jeebika, Targeted Rural Initiative for Poverty Termination and Infrastructure (TRIPTI), and improvement of traditional water bodies and tanks through community participation. Some of these programmes have been discussed elsewhere in this document.

The State has witnessed a decline in main workers from 1991 to 2001 (103.78 lakh in the 1991 census to 95.78 lakh in the 2001 census), although the number of total workers has increased from 118.83 lakh (1991 census) to 142.76 lakh (2001 census). This indicates that there is an increase in under-employment in the State. In order to tackle the problem of unemployment and under-employment, the State Government has constituted a High Power Employment Mission under the Chairmanship of the Chief Minister to facilitate generation of adequate

employment opportunities, both wage employment and self-employment, in the State. The Orissa State Employment Mission Society under the aegis of the High Power Employment Mission takes care, in Orissa, of the objectives of the National Skill Development Council constituted under the Chairmanship of the Prime Minister with an aim to train 500 million skilled people by 2022.

With a view to tracking the progress of poverty reduction, improving human development indicators, developing appropriate development programmes and assessing the impact of various programmes and policies on the poor, the State Government has constituted an Agency, called "Poverty and Human Development Monitoring Agency (PHDMA)" under the administrative control of the Planning & Coordination Department. The Agency aims at tracking the progress of Poverty and Human Development Indicators within the State from time to time.

Key Interventions for Improving Literacy

In order to improve the literacy rate in the State, Sarva Shiksha Abhiyan (SSA) has been implemented in all 30 districts with three objectives, i.e., universal enrollment, retention and quality of education. Similarly, for reduction of the gender gap and greater participationofgirlsineducation,twospecialschemes, the National Programme for Education of Girls at Elementary Level (NPEGEL) and Kasturba Gandhi Balika Vidyalaya (KGBV) have been implemented in educationally backward blocks of the State.

Improving Health Services

Fivemajordiseases,alsocalledPanchvyadhi(malaria, leprosy, diarrhoea, acute respiratory infections and scabies) contribute to about 70 percent of the patient load in the primary health institutions and affect a large number of poor people. Orissa accounts for about one-third of malarial deaths in India. The State Government launched the Panchvyadhi Chikitsa scheme in 2001 to provide free treatment, including free medicines, for these diseases. The scheme has also prescribed clinical protocols to be followed by all doctors and public health institutions for treatment of these diseases.

National Rural Health Mission

The National Rural Health Mission (NRHM) was launched in Orissa in 2005. NRHM seeks to provide effective healthcare to rural and urban populations throughout the State with a special focus on backward districts with weak human development and health indicators especially among the poor and marginalised groups like women, ST and SC communities. It seeks to integrate health with the determinants of health for which inter-sectoral convergence between departments like Panchayati Raj, Women & Child Development, Rural Development and Education is essential. The main components of NRHM are RCH-II, Immunisation and the National Disease Control Programme.

Nutrition, Drinking Water Supply and Sanitation

The nutritional status of women in Orissa, as indicated in the NFHS-3 survey, shows that about 41.4 percent of women have a BMI below 18.5, indicating a high prevalence of nutritional deficiency. Prevalence of severe malnutrition among children, mothers, old and indigent people is a matter of serious concern in the State. Sixty-two percent women suffer from anaemia against the national average of 55.3 percent. Sixty-five percent children remain anaemic and suffer from chronic energy deficiency.

Sustained access to safe drinking water and sanitation is critical for healthy living and has been included under the minimum needs programme. Orissa has done rather well in terms of coverage of rural and urban habitations with safe sources of drinking water including piped water supply, tube wells and shallow wells. However, there are several areas of concern. Water quality in many pockets is a serious issue. In some areas such as Nuapada, the content of fluoride in the ground water is much more than its safe levels. Frequent breakdown in tube wells and rural piped water supply units is another problem area. The rural people in many parts are still not tuned to appreciate the value of safe drinking water.

Sanitation habits of people in many districts are also poor. As per the 2001 census estimates, only 8 percent of total rural population have access to basic sanitation facilities. As a result, the incidence of diarrhoea in interior Orissa is generally high and a major source of infant and other deaths. Many civil

society organisations including UNICEF, CARE and local NGOs have joined hands with the Government to assist people in modifying their behaviour, improving their sanitation and making them aware of the value of sanitation and safe drinking water.

Addressing Regional Disparities

Removal of regional disparities has been one of the important development strategies of the State Government. However, due to several economic, social and institutional obstacles, all regions in Orissa have not shared the gains of development in an equitable manner. Some regions continue to languish in abject poverty. The undivided districts of Koraput, Bolangir and Kalahandi (popularly known as KBK districts) form one such region where the incidence of poverty is very high. Several other pockets of southern and western Orissa are also socially and economically depressed. These regions are also frequently visited by natural calamities including severe droughts and floods. Persistence of heavy incidence of poverty in these regions is a cause of concern.

Eight key initiatives have been taken to address problems of under-development and regional disparities. The initiatives are: (i) Special Plan for KBK districts, (ii) Biju KBK Plan for KBK districts, (iii) Biju Kandhamal 'O' Gajapati Yojana, (iv) Backward Regions Grant Fund, (v) Gopabandhu Gramin Yojana, (vi) Western Orissa Development Council (WODC) for backward districts (vii) Grants-in-aid received under Article 275(1) of the Constitution of India to bridge critical infrastructure gaps in identified sectors in the Tribal Sub Plan (TSP) areas, and (viii) Implementation of development programmes in TSP areas funded out of Special Central Assistance. Some of these special area development programmes are briefly discussed below.

Special Plan for KBK Districts

The State Government, in consultation with the Government of India, has formulated a Long Term Action Plan (LTAP) / Revised Long Term Action Plan (RLTAP) for speedy development of the KBK districts. The special plan has focused on improving productive infrastructure, strengthening livelihoods of the marginalised communities, improving literacy levels and accelerating the pace of development in this region. The implementation of the special plan has brought several benefits to this region. Poverty in this region came down by 24.6 percentage points from 87.14 percent in 1999-2000 to 62.50 percent in 2004-05 and by 16.9 percentage points from 62.50 percent in 2004-05 to 45.65 percent in 2007-08 as reported in section 7.1.1. The State Government has submitted a new Eight Year Perspective Plan for KBK Districts for Rs.4,550.00 crore for approval of Planning Commission.

Biju KBK Plan

This scheme was launched in KBK districts in the financial year 2006-07 out of the State's own funds to fill critical gaps in development in the region. An annual outlay of Rs. 120 crore has been envisaged during the 11th Five Year Plan and the scheme has a focus on Bijli, Sadak and Pani, i.e., creating productive infrastructure including village electrification, construction of roads, bridges, cross drainage works, irrigation and drinking water sources.

Biju Kandhamal O Gajapati Yojana (BKGY)

A new Special Area Development Initiative called, "Biju Kandhamal O Gajapati Yojana (BKGY)", has been launched by the State in 2009-10 under the State Plan with an annual outlay of Rs.28.50 crore with a view to accelerating the development process and expediting poverty reduction in tribal dominated Kandhamal and Gajapati districts. The scheme aims to improve human development indicators in these districts at an accelerated pace.

Western Orissa Development Council (WODC)

The State Government has constituted a Western Orissa Development Council (WODC), the jurisdiction of which extends over ten districts, i.e., Baragarh, Bolangir, Boudh, Deogarh, Jharsuguda, Kalahandi, Nuapada, Sambalpur, Sonepur, and Sundergarh districts and Athamallick Sub-division of Angul district. WODC aims at accelerating the pace of development in these districts and mitigating regional disparities. The Council is mandated to develop appropriate long-term and short-term development plans and programmes for these districts. An outlay of Rs. 100 crore is provided to the Council every year.

Backward Regions Grant Fund (BRGF)

This Central scheme is implemented in Orissa in 19 districts namely, Bolangir, Boudh, Deogarh, Dhenkanal, Gajapati, Ganjam, Jharsuguda, Kalahandi, Keonjhar, Koraput, Malkangiri, Mayurbhanj, Nawarangpur, Nuapada, Phulbani, Rayagada, Sambalpur, Sonepur and Sundargarh. The main objectives of this scheme are to: (i) bridge critical gaps in local infrastructure and other development requirements that are not being adequately met through existing inflows, (ii) strengthen local level governance with appropriate capacity building of PRI and facilitate participatory planning, decision making, implementation and monitoring, (iii) provide professional support to local bodies for planning, implementation and monitoring their plans, and (iv) improve the performance and delivery of critical functions assigned to PRI and counter possible efficiency and equity losses on account of inadequate local capacity.

Gopabandhu Gramin Yojana (GGY)

The Government of Orissa has launched the "Gopabandhu Gramin Yojana (GGY)" with a view to providing additional developmental assistance to the targeted 11 districts which are not covered under the Backward Regions Grant Fund (BRGF), i.e., Angul, Balasore, Bargarh, Bhadrak, Cuttack, Jajpur, Jagatsinghpur, Kendrapara, Khurda, Nayagarh, and Puri. The main objective of the scheme is to provide additional development funds to the targeted districts to improve infrastructure, i.e., Bijli, Sadak and Pani. Each targeted district receives development assistance to the extent of Rs.15 crore per annum during Eleventh Five Year Plan.

7.5 Composite Human Development Status for Orissa

In the UNDP methodology, HDI is an average of health index that is generally based on the life expectancy index, education index (a weighted average of the adult literacy rate index- 2/3rd weight and combined gross enrolment rate (GER) index - 1/3rd weight) and income index. Orissa published its first Human Development Report in 2004-05 and has prepared District Human Development Reports for Ganjam, Kalahandi, Kandhamal, Mayurbhanj and Sundergarh districts.

Table 7.9: Human Development Index for Major States of India

1	Andhra Pradesh	0.298	9	0.377	9	0.416	10
2	Assam	0.272	10	0.348	10	0.386	14
3	Bihar	0.237	15	0.308	15	0.367	15
4	Gujarat	0.360	4	0.431	6	0.479	6
5	Haryana	0.360	5	0.443	5	0.509	5
6	Karnataka	0.346	6	0.412	7	0.478	7
7	Kerala	0.500	1	0.591	1	0.638	1
8	Madhya Pradesh	0.245	14	0.328	13	0.394	12
9	Maharashtra	0.363	3	0.452	4	0.523	4
10	Orissa	0.267	11	0.345	12	0.404	11
11	Punjab	0.411	2	0.475	2	0.537	2
12	Rajasthan	0.256	12	0.347	11	0.424	9
13	Tamil Nadu	0.343	7	0.466	3	0.531	3
14	Uttar Pradesh	0.255	13	0.314	14	0.388	13
15	West Bengal	0.305	8	0.404	8	0.472	8
	All India	0.302		0.381		0.472	

Table 7.10: District-wise Comparison of Human Development Index, Gender Development Index and Infrastructure Development Index, 2001

1	Angul	0.663	6	0.637	4	90.68	18
2	Balasore	0.559	18	0.519	14	118.46	8
3	Bargarh	0.565	17	0.528	13	114.01	11
4	Bhadrak	0.646	8	0.497	21	119.8	5
5	Bolangir	0.546	21	0.518	16	100.24	15
6	Baudh	0.536	23	0.509	19	86.34	21
7	Cuttack	0.695	3	0.618	7	134.87	4
8	Deogarh	0.669	5	0.647	3	86.55	20
9	Dhenkanal	0.591	12	0.531	12	96.88	16
10	Gajapati	0.431	28	0.401	27	89.45	19
11	Ganjam	0.551	20	0.518	15	119.15	6
12	Jagatsinghpur	0.557	19	0.491	22	140.4	3
13	Jajpur	0.54	22	0.386	28	114.19	10
14	Jharsuguda	0.722	2	0.687	1	109.59	12
15	Kalahandi	0.606	11	0.579	8	79.75	25
16	Kandhamal	0.389	29	0.372	29	73.28	29
17	Kendrapara	0.626	10	0.516	18	105.52	13
18	Keonjhar	0.53	24	0.504	20	82.09	24
19	Khordha	0.736	1	0.632	5	160.04	1
20	Koraput	0.431	27	0.415	26	95.93	17
21	Malkangiri	0.37	30	0.362	30	75.65	27
22	Mayurbhanj	0.639	9	0.621	6	86.31	22
23	Nabrangpur	0.436	26	0.422	25	66.06	30
24	Nayagarh	0.571	15	0.452	23	77.36	26
25	Nuapada	0.581	14	0.561	9	75.39	28
26	Puri	0.657	7	0.516	17	154.04	2
27	Rayagada	0.443	25	0.428	24	84.37	23
28	Sambalpur	0.589	13	0.56	10	119.01	7
29	Sonepur	0.566	16	0.543	11	115.82	9
30	Sundargarh	0.683	4	0.659	2	104.17	14
	Orissa	0.579	-	0.546	-	100	-

Human Development: Orissa-vis-à-vis Major States and India

Human Development Index, a summary indicator of human development, brings together the twin objectives of economic progress and social development. Therefore, HDI is now widely used as a basic measure of human development. Table 7.9 exhibits the position of Orissa among 15 major States of India. It is observed that inter-state disparity in the level of human development has declined between 1981 and 2001.

Human Development in Orissa

Wide variations have been observed in human development across districts in Orissa. The Human Development Index (HDI) for all 30 districts has been compared in Table 7.10. Orissa has taken several steps to mainstream human development concerns and issues into the development planning process. Several regional workshops have been organised to popularise the concept of human development and to disseminate the current status of human development in Orissa. The UNDP sponsored Legislators' Forum has also been exposed to human development concerns in Orissa, particularly with a view to sensitise them on human development issues. The State Government has been pursuing the objective of attaining Millennium Development Goals (MDG) viz. to: (i) eradicate extreme poverty and hunger; (ii) achieve universal primary education, (iii) promote gender equality and empower women, (iv) reduce child mortality, (v) improve maternal health, (vi) ensure environmental sustainability, and (viii) develop a global partnership for development and is also a participant in implementing the GoI-UNDP Project.

The State has implemented the Government of India-United Nations Development Assistance Framework (UNDAF) Joint Programme in five selected districts namely, Ganjam, Kalahandi, Kandhamal, Mayurbhanj and Sundergarh for effective implementation of the programme. Various monitorable targets have been worked out to improve human development indicators in the State and are given in Table 7.11.

Table 7.11: Some Monitorable Indicators for the 11th Plan

Infant Mortality Ratio	77	37
Maternal Mortality Ratio	358	119
Total Fertility Rate	2.6	2.1
Malnutrition of Children (0-3) Years	54.4	27.2
Anaemia among Women	63	31.5
Child Sex Ratio (0-6 years)	953	961
Literacy Rate – Total	63.1	83.96
Literacy Rate – Female	50.51	76.33
Gender Gap in Literacy	24.8	15.1

ANNEXURE 7

Annexure 7.1: Number and Percentage of Population below the Poverty Line, 2004-05 (based on MRP Method)

1	Andhra Pradesh	7.50	43.21	20.70	45.50	11.10	88.71
2	Arunachal Pradesh	17.00	1.47	2.40	0.07	13.40	1.54
3	Assam	17.00	41.46	2.40	0.93	15.00	42.39
4	Bihar	32.90	262.92	28.90	27.09	32.50	290.01
5	Chhattisgarh	31.20	54.72	34.70	16.39	32.00	71.11
6	Delhi	0.10	0.01	10.80	15.83	10.20	15.83
7	Goa	1.90	0.13	20.90	1.62	12.00	1.74
8	Gujarat	13.90	46.25	10.10	21.18	12.50	67.43
9	Haryana	9.20	14.57	11.30	7.99	9.90	22.56
10	Himachal Pradesh	7.20	4.10	2.60	0.17	6.70	4.27
11	Jammu & Kashmir	2.70	2.20	8.50	2.34	4.20	4.54
12	Jharkhand	40.20	89.76	16.30	10.63	34.80	100.39
13	Karnataka	12.00	43.33	27.20	53.28	17.40	96.60
14	Kerala	9.60	23.59	16.40	13.92	11.40	37.51
15	Madhya Pradesh	29.80	141.99	39.30	68.97	32.40	210.97
16	Maharashtra	22.20	128.43	29.00	131.40	25.20	259.83
17	Manipur	17.00	2.86	2.40	0.14	13.20	3.00
18	Meghalaya	17.00	3.32	2.40	0.12	14.10	3.43
19	Mizoram	17.00	0.78	2.40	0.11	9.50	0.89
20	Nagaland	17.00	2.94	2.40	0.09	14.50	3.03
21	Orissa	39.80	129.29	40.30	24.30	39.90	153.59
22	Punjab	5.90	9.78	3.80	3.52	5.20	13.30
23	Rajasthan	14.30	66.69	28.10	40.50	17.50	107.18
24	Sikkim	17.00	0.85	2.40	0.02	15.20	0.87
25	Tamil Nadu	16.90	56.51	18.80	58.59	17.80	115.10
26	Tripura	17.00	4.70	2.40	0.14	14.40	4.85
27	Uttar Pradesh	25.30	357.68	26.30	100.47	25.50	458.15
28	Uttarakhand	31.70	21.11	32.00	7.75	31.80	28.86
29	West Bengal	24.20	146.59	11.20	26.64	20.60	173.23
30	A & N Islands	16.90	0.44	18.80	0.27	17.60	0.71
31	Chandigarh	3.80	0.04	3.80	0.36	3.80	0.40
32	Dadra & N Haveli	36.00	0.62	19.20	0.16	30.60	0.77
33	Daman & Diu	1.90	0.03	20.80	0.14	8.00	0.16
34	Lakshadweep	9.60	0.04	16.40	0.05	12.30	0.09
35	Puducherry	16.90	0.58	18.80	1.34	18.20	1.92
All India		21.80	1702.99	21.70	682.00	21.80	2384.99

Source: Planning Commission

Annexure 7.2: Number and Percentage of Population below the Poverty Line, 2004-05 (based on URP method)

1	Andhra Pradesh	11.20	64.70	28.00	61.40	15.80	126.10
2	Arunachal Pradesh	22.30	1.94	3.30	0.09	17.60	2.03
3	Assam	22.30	54.50	3.30	1.28	19.70	55.77
4	Bihar	42.10	336.72	34.60	32.42	41.40	369.15
5	Chhattisgarh	40.80	71.50	41.20	19.47	40.90	90.96
6	Delhi	6.90	0.63	15.20	22.30	14.70	22.93
7	Goa	5.40	0.36	21.30	1.64	13.80	2.01
8	Gujarat	19.10	63.49	13.00	27.19	16.80	90.69
9	Haryana	13.60	21.49	15.10	10.60	14.00	32.10
10	Himachal Pradesh	10.70	6.14	3.40	0.22	10.00	6.36
11	Jammu & Kashmir	4.60	3.66	7.90	2.19	5.40	5.85
12	Jharkhand	46.30	103.19	20.20	13.20	40.30	116.39
13	Karnataka	20.80	75.05	32.60	63.83	25.00	138.89
14	Kerala	13.20	32.43	20.20	17.17	15.00	49.60
15	Madhya Pradesh	36.90	175.65	42.10	74.03	38.30	249.68
16	Maharashtra	29.60	171.13	32.20	146.25	30.70	317.38
17	Manipur	22.30	3.76	3.30	0.20	17.30	3.95
18	Meghalaya	22.30	4.36	3.30	0.16	18.50	4.52
19	Mizoram	22.30	1.02	3.30	0.16	12.60	1.18
20	Nagaland	22.30	3.87	3.30	0.12	19.00	3.99
21	Orissa	46.80	151.75	44.30	26.74	46.40	178.49
22	Punjab	9.10	15.12	7.10	6.50	8.40	21.63
23	Rajasthan	18.70	87.38	32.90	47.51	22.10	134.89
24	Sikkim	22.30	1.12	3.30	0.02	20.10	1.14
25	Tamil Nadu	22.80	76.50	22.20	69.13	22.50	145.62
26	Tripura	22.30	6.18	3.30	0.20	18.90	6.38
27	Uttar Pradesh	33.40	473.00	30.60	117.03	32.80	590.03
28	Uttarakhand	40.80	27.11	36.50	8.85	39.60	35.96
29	West Bengal	28.60	173.22	14.80	35.14	24.70	208.36
30	A & N Islands	22.90	0.60	22.20	0.32	22.60	0.92
31	Chandigarh	7.10	0.08	7.10	0.67	7.10	0.74
32	Dadra & N Haveli	39.80	0.68	19.10	0.15	33.20	0.84
33	Daman & Diu	5.40	0.07	21.20	0.14	10.50	0.21
34	Lakshadweep	13.30	0.06	20.20	0.06	16.00	0.11
35	Puducherry	22.90	0.78	22.20	1.59	22.40	2.37
	All India	28.30	2209.24	25.70	807.96	27.50	3017.20

Source: Planning Commission

Annexure 7.3: Social Group and Region-wise Estimates on State Sample, 61st Round NSS (Rural)

URP	ST	1082063	2668245	3847003	7597311	619113	2034450	2157586	4811149
	SC	3297768	1448319	1725690	6471777	1185036	831121	796153	2812310
	OBC	6308715	1762484	4479177	12550376	1291216	811278	1503364	3605858
	Others	4051578	328304	730403	5110285	646496	187703	269633	1103832
	Total	14740124	6207352	10782273	31729749	3741861	3864552	4726736	12333149
MRP	ST	1082063	2668245	3847003	7597311	478465	1936312	1999051	4413828
	SC	3297768	1448319	1725690	6471777	795070	817254	526365	2138689
	OBC	6308715	1762484	4479177	12550376	586259	678045	1271963	2536267
	Others	4051578	328304	730403	5110285	400049	185627	178119	763795
	Total	14740124	6207352	10782273	31729749	2259843	3617238	3975498	9852579

URP	ST	57.22	76.25	56.08	63.33	16.55	52.64	45.65	39.01
	SC	35.93	57.39	46.14	43.45	31.67	21.51	16.84	22.80
	OBC	20.47	46.03	33.56	28.73	34.51	20.99	31.81	29.24
	Others	15.96	57.17	36.92	21.60	17.28	4.86	5.70	8.95
	Total	25.39	62.26	43.84	38.87	100.00	100.00	100.00	100.00
MRP	ST	44.22	72.57	51.96	58.10	21.17	53.53	50.28	44.80
	SC	24.11	56.43	30.50	33.05	35.18	22.59	13.24	21.71
	OBC	9.29	38.47	28.40	20.21	25.94	18.74	32.00	25.74
	Others	9.87	56.54	24.39	14.95	17.70	5.13	4.48	7.75
	Total	15.33	58.27	36.87	31.05	100.00	100.00	100.00	100.00

Source: Directorate of Economics & Statistics

Annexure 7.4: Social Group and Region-wise Estimates on Central Sample, 61st Round NSS (Rural)

URP	ST	1027340	3000575	4198552	8226467	695626	2485400	3058745	6239771
	SC	2684750	1119410	1838959	5643119	881202	751794	1184666	2817662
	OBC	6977716	1407926	4265906	12651548	1705638	910345	2073521	4689504
	Others	4190509	458259	914905	5563673	797614	202007	309983	1309604
	Total	14880315	5986170	11218322	32084807	4080080	4349546	6626915	15056541
MRP	ST	1027340	3000575	4198552	8226467	589661	2395595	2779222	5764478
	SC	2684750	1119410	1838959	5643119	819492	711128	1001038	2531658
	OBC	6977716	1407926	4265906	12651548	1210623	756958	1665003	3632584
	Others	4190509	458259	914905	5563673	565432	139817	192393	897642
	Total	14880315	5986170	11218322	32084807	3185208	4003498	5637656	12826362

URP	ST	67.71	82.83	72.85	75.85	17.05	57.14	46.16	41.44
	SC	32.82	67.16	64.42	49.93	21.60	17.28	17.88	18.71
	OBC	24.44	64.66	48.61	37.07	41.80	20.93	31.29	31.15
	Others	19.03	44.08	33.88	23.54	19.55	4.64	4.68	8.70
	Total	27.42	72.66	59.07	46.93	100.00	100.00	100.00	100.00
MRP	ST	57.40	79.84	66.19	70.07	18.51	59.84	49.30	44.94
	SC	30.52	63.53	54.44	44.86	25.73	17.76	17.76	19.74
	OBC	17.35	53.76	39.03	28.71	38.01	18.91	29.53	28.32
	Others	13.49	30.51	21.03	16.13	17.75	3.49	3.41	7.00
	Total	21.41	66.88	50.25	39.98	100.00	100.00	100.00	100.00

Source: Directorate of Economics & Statistics

Annexure 7.5: Social Group-wise and Region-wise Estimates based on Pooled Data, 61st Round NSS

URP	ST	1054783	2834440	4022718	7911941	657406	2259947	2608086	5525439
	SC	2991285	1283860	1782350	6057495	1033144	791462	990445	2815051
	OBC	6643164	1585210	4372531	12600905	1498383	860804	1788444	4147631
	Others	4120970	393315	822695	5336980	722043	194863	289833	1206739
	Total	14810202	6096825	11000294	31907321	3910976	4107076	5676808	13694860
MRP	ST	1054783	2834440	4022718	7911941	534085	2165965	2389054	5089104
	SC	2991285	1283860	1782350	6057495	807336	764197	763741	2335274
	OBC	6643164	1585210	4372531	12600905	898415	717498	1468493	3084406
	Others	4120970	393315	822695	5336980	482730	162739	185268	830737
	Total	14810202	6096825	11000294	31907321	2722566	3810399	4806556	11339521

URP	ST	62.33	79.73	64.83	69.84	16.81	55.03	45.94	40.35
	SC	34.54	61.65	55.57	46.47	26.42	19.27	17.45	20.56
	OBC	22.56	54.30	40.90	32.92	38.31	20.96	31.50	30.29
	Others	17.52	49.54	35.23	22.61	18.46	4.74	5.11	8.81
	Total	26.41	67.36	51.61	42.92	100.00	100.00	100.00	100.00
MRP	ST	50.63	76.42	59.39	64.32	19.62	56.84	49.70	44.88
	SC	26.99	59.52	42.85	38.55	29.65	20.06	15.89	20.59
	OBC	13.52	45.26	33.58	24.48	33.00	18.83	30.55	27.20
	Others	11.71	41.38	22.52	15.57	17.73	4.27	3.85	7.33
	Total	18.38	62.50	43.69	35.54	100.00	100.00	100.00	100.00

Source: Directorate of Economics & Statistics

Annexure 7.6: Region-wise Poverty Analysis based on Pooled Data, 61st Round NSS

URP	Coastal	25.39	27.42	26.41	30.34	27.10	28.56
	Southern	62.26	72.66	67.36	31.33	28.89	29.99
	Northern	43.84	59.07	51.61	38.33	44.01	41.45
	Total	38.87	46.93	42.92	100.00	100.00	100.00
MRP	Coastal	15.33	21.41	18.38	22.94	24.83	24.01
	Southern	58.27	66.88	62.50	36.71	31.21	33.60
	Northern	36.87	50.25	43.69	40.35	43.95	42.39
	Total	31.05	39.98	35.54	100.00	100.00	100.00

Source: Directorate of Economics & Statistics

Annexure 7.7: Social Group-wise Poverty Analysis based on Pooled Data, 61st Round NSS

URP	ST	63.33	75.85	69.84	39.01	44.44	40.35
	SC	43.45	49.93	46.47	22.80	18.71	20.55
	OBC	28.73	37.07	32.92	29.24	31.15	30.29
	Others	21.60	23.54	22.61	8.95	8.70	8.81
	Total	38.87	46.93	42.92	100.00	100.00	100.00
MRP	ST	58.10	70.07	64.32	44.80	44.94	44.88
	SC	33.05	44.86	38.55	21.71	19.74	20.59
	OBC	20.21	28.71	24.48	25.74	28.32	27.20
	Others	14.95	16.13	15.57	7.75	7.00	7.33
	Total	31.05	39.98	35.54	100.00	100.00	100.00

Source: Directorate of Economics & Statistics

URP	Coastal	14740124	14897538	14810202	3741861	4080080	3910976
	Southern	6207352	5986170	6096825	3864552	4349546	4107076
	Northern	10782273	11218322	11000294	4726736	6626915	5676808
	Total	31729749	32102030	31907321	12333149	15056541	13694860
MRP	Coastal	14740124	14897538	14810202	2259843	3185208	2722566
	Southern	6207352	5986170	6096825	3617238	4003498	3810399
	Northern	10782273	11218322	11000294	3975498	5637656	4806556
	Total	31729749	32102030	31907321	9852579	12826362	11339521

Annexure 7.8: Allotment of Essential Commodities Received from Government of India

[P: Provisional/ ** For APL + BPL beneficiaries]
Source: Food Supplies and Consumer Welfare Department, Orissa.

Annexure 7.9: Work Completed and Finances Involved under IAY

2001-02	50639	27394	54	53.75	54.18	101
2002-03	51824	48465	94	80.36	80.62	100
2003-04	66026	58996	89	123.1	126.36	103
2004-05	74735	67892	91	194.39	181.94	94
2005-06	75465	77850	103	195.42	194.84	100
2006-07	80228	79668	99	215.84	210.27	97
2007-08	111431	90627	81	276.83	233.72	84
2008-09	111422	61662	55	312.46	251.99	70
2009-10	286282	151234	53	957.9	682.59	71

Source: Panchayat Raj Department, Government of Orissa

Annexure 7.10: Housing Construction under the EWS/LIG Housing Schemes

2002-03	3600	4909	136.4
2003-04	2070	296	14.3
2004-05	1500	271	18.1
2005-06	285	104	36.5
2006-07	100	230	230.0
2007-08	280	210	75.0
2008-09	150	260	173.3

Source: Housing and Urban Development Department, Orissa

Sugar	Lakh MT	0.27	1.08	1.05	1.07	1.06	1.08
Wheat (APL)	Lakh MT	3.6	3.6	3.51	1.55	1.39	1.58
Rice (APL, BPL)	Lakh MT	22.80**	22.81**	20.81**	18.49	17.18	11.76
Rice (AP)	Lakh MT	0.08	0.08	0.08	0.08	0.08	0.08
Rice (AAY)	Lakh MT	2.12	2.61	4.31	5.31	5.31	5.31
Kerosene Oil	Lakh KL	4	4.05	4.05	4.06	4.05	3.15

CHAPTER 8

Social Sector

With "human development" being on the radar of the world development community, the social sector has assumed greater importance. Orissa has taken rapid strides in recent years towards several social sector indicators and Millennium Development Goals (MDG). This chapter focuses on education, health, food security, nutrition, safe drinking water supply, sanitation and welfare of the disadvantaged and marginalised groups such as scheduled castes (SC), scheduled tribes (ST) and women.

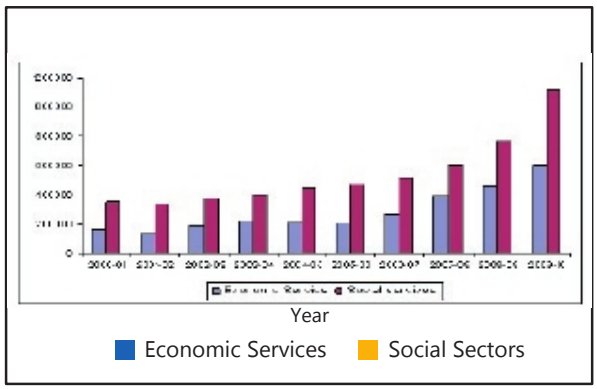
Figure 8.1 shows the revenue expenditure of the State on economic services and social services from 2000-01 to 2009-10. In absolute terms, revenue expenditure on social services far exceeds that on economic services throughout the decade. However, their growth rates differ, being 24.48 percent and 29.72 percent respectively in case of social and economic services.

8.1 Education

Free and compulsory education for children in the age group of 6-14 years has been made a Fundamental Right under the 86th Constitutional Amendment. Both the State and Central Governments have framed policies, strategies and programmes for universal elementary education (UEE) as well as for higher-level studies and training.

Figure 8.1: Composition of Orissa's Revenue Expenditure, 2000-01 to 2009-2010

(Rs. Lakh)



8.1.1 Literacy

As shown in Figure 8.2 and Annexure 8.1, literacy in the State has improved steadily over the past decades. In 1951, only 15.8 percent of the State's population was literate. Census 2001 returned 63.1 percent of Orissa's population as literate. According to the NSS data of the 64th round, Orissa's literacy in 2007-08 has been estimated at 68.3 percent compared to the national average of 71.7 percent. There is an improvement in literacy rates for both males and females and the gap between them has narrowed down. Figure 8.2 captures the temporal growth of literacy in Orissa and India from 1951 to 2008. The literacy rates for males and females in Orissa from 1951 to 2008 are depicted in Figure 8.3.

Figure 8.2: Literacy Rate for Orissa and All India, 1951 to 2001

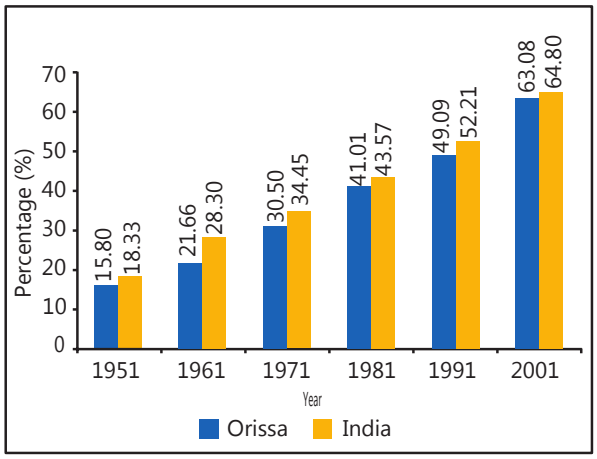
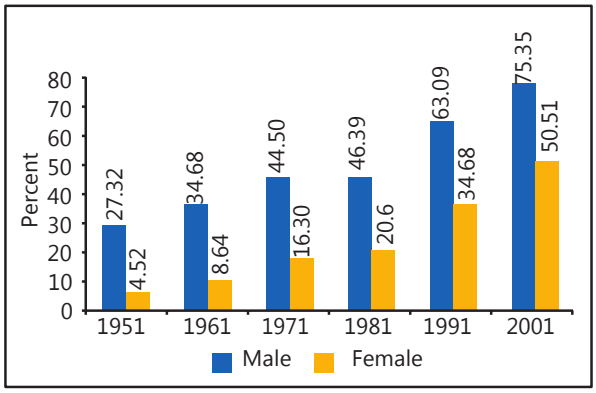


Figure 8.3: Male & Female Literacy Rates for Orissa, 1951-2001



Though the gender gap in literacy levels has been declining over the years, there are still wide social, regional and gender disparities. The ST communities are the least literate (37.4 percent) as per the 2001 census. The literacy rate for SC communities is 55.5 percent. Spatially, the literacy rates vary widely from 30.5 percent in Malkangiri district to 79.6 percent in Khurda district.

8.1.2 Primary Education

Primary and upper primary education has been expanding in the State, especially in rural and backward areas. The State aims at providing primary schools within 1 km and upper primary schools within 3 km from habitations having a population of more than 300 and 500 respectively. In 1947-48, there were only 6,814 primary schools with 16,520 teachers and 2.55 lakh students. In the current decade alone, 10,868 new schools have been set up and 23,042 more teachers added between 2000-01 and 2009-10. There are 52,972 functional primary schools with 1.38 lakh teachers and 44.93 lakh students in 2009-10. The growth in the number of schools and teachers from 2000-01 to 2009-10 has been shown in Figure 8.4. The annual growth rates of primary schools and teachers over the previous year were 5.8 percent and 9.9 percent respectively. In 2009-10, there is one primary school per 2.9 sq km on an average. The average teacher-pupil ratio is 1:33, which is better than the national norm of 1:40. More detailed information about primary education is given in Annexure 8.2. In addition, the State Government has engaged 52,000 more Sikhya Sahayaks. With a view to building and improving their teaching capabilities and assuring reasonable career growth, the Government has introduced a career advancement policy.

All children in schools do not complete their grades. However, dropout rates have drastically fallen over the last decade. At the primary level, the dropout rate declined from 41.80 percent in 2000-01 to 2.83 percent in 2009-10. The dropout rate of boys fell from 42.30 percent to 2.57 percent and that for girls from 41.40 percent to 3.10 percent over this period. The trends in dropout rates at the primary school level are shown in Figure 8.5. Though the

Figure 8.4: Growth of Primary Schools & Teachers in Orissa, 2000-01 to 2009-10

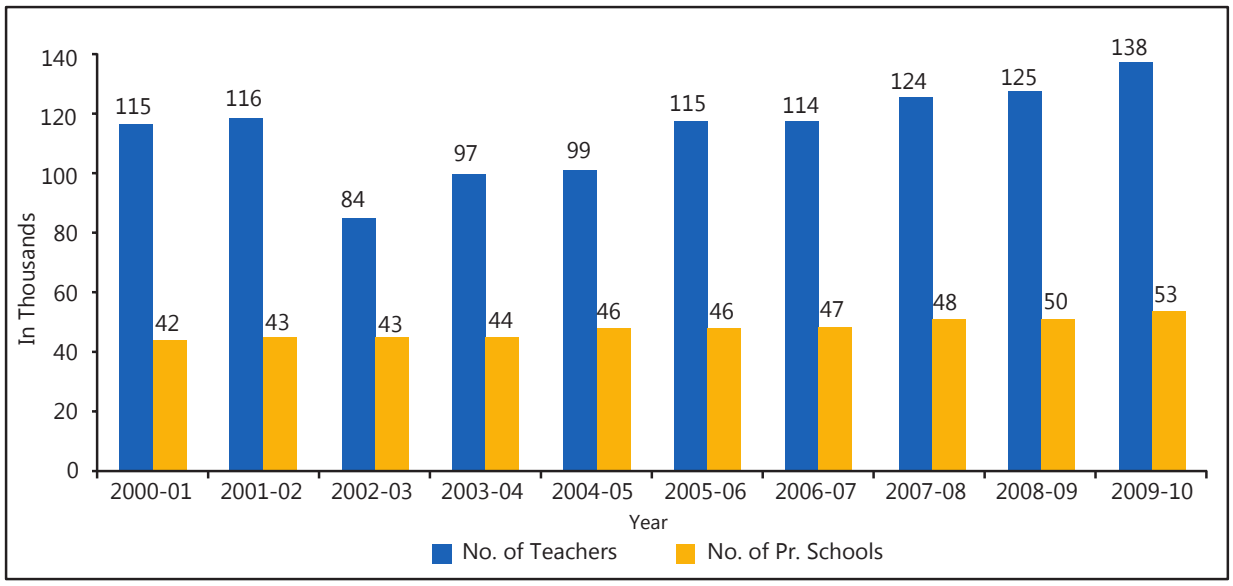
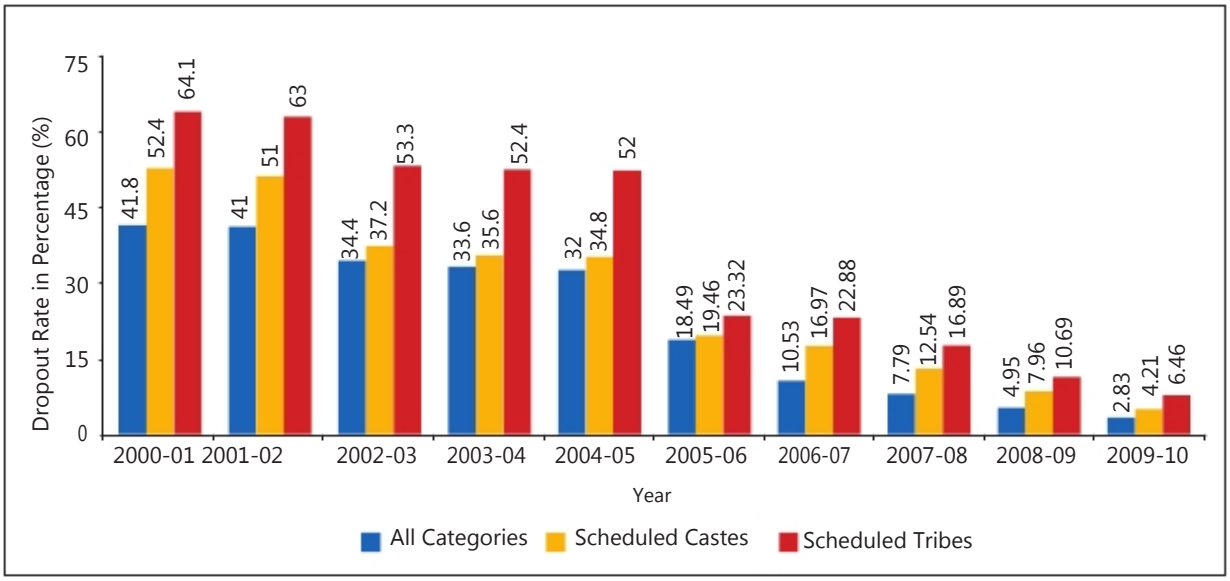


Figure 8.5: Dropout Rates in Primary Schools, 2000-01 to 2009-10



dropout rate at the primary level has fallen, this still remains high for SC and ST students at 4.21percent and 6.46 percent respectively. It is highest (9.90 percent) in Mayurbhanj district and lowest (1.51 percent) in Bargarh district. Infrastructure facilities in schools have a direct bearing on enrollment and dropout rates. A number of primary schools function without proper buildings and other infrastructure, though the Government has been striving to improve school infrastructure including toilets, safe drinking water and other amenities.

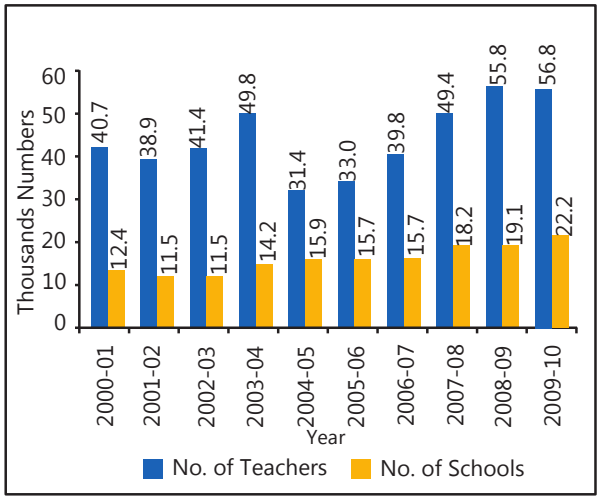
8.1.3 Upper Primary Education

There were only 286 upper primary schools with 1,483 teachers and 32,000 enrollment in the State in 1947-48. Due to sustained efforts of the Government, the number of upper primary schools increased to 22,209, with 56,758 teachers and and enrollment of 21.28 lakh in 2009-10. Figure 8.6 traces the trend in the number of schools and teachers at upper primary level in Orissa, while more details are given in Annexure 8.4. During 2009-10, gross enrolment ratio (GER) and net enrolment ratio (NER) at both primary and upper primary levels have been high, being over 85 percent.

In 2000-01, there were 27 primary and about 8 upper primary schools per 100 sq km of area. The respective numbers increased to 34 and about 14 in 2009-10. The teacher-pupil ratio for upper primary schools was 1:37 during 2009-10. However, the ratio is still lower than the national norm of 1:25. The major initiatives for promotion of elementary education have been summarised in Box 8.1.

The overall dropout rate in UP schools of the State declined substantially from 57 percent in 2000-01 to 8.19 percent in 2009-10 (see Figure 8.7), but it is higher than that at primary level. The dropout rates for SC, ST and girl students were relatively higher. According to the Orissa Primary Education Programme Authority (OPEPA), the overall dropout rate at the UP level is highest in Nabarangpur district (13.66 percent) and lowest in

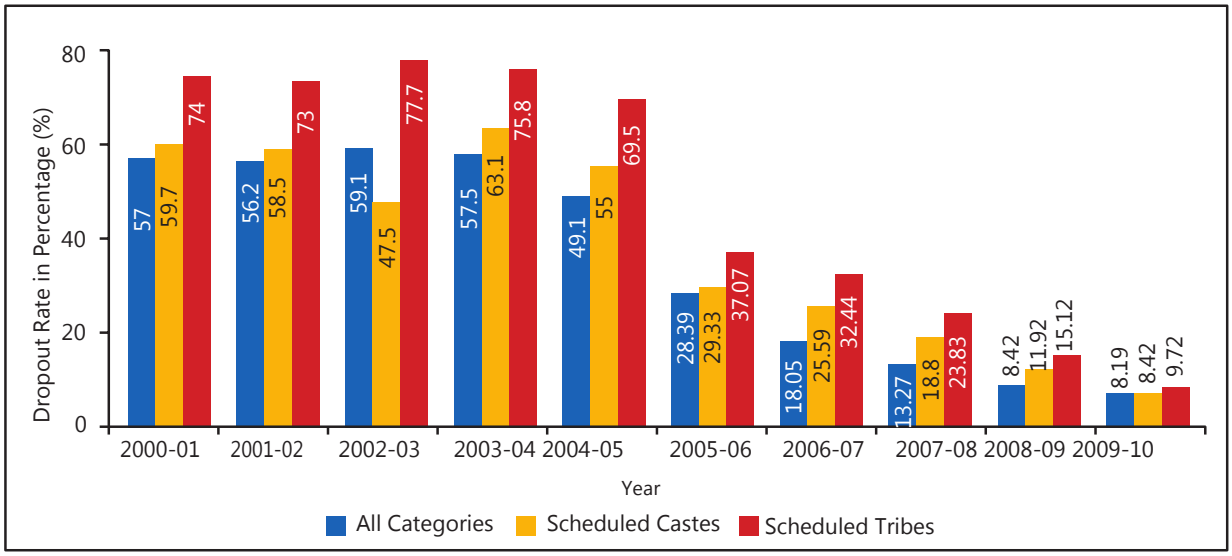
Figure 8.6: Growth of Upper Primary Schools and Teachers, 2000-01 to 2009-10



Box 8.1: Major Initiatives for Promotion of Elementary Education, 2009-10

- Norms for establishing new primary and upper primary schools in the State relaxed in terms of requirement of minimum number of children in one habitation and distance from the habitation
- Grant-in-aid released to 599 teachers in 218 primary schools and 1,568 teachers in 691 upper primary schools
- Government provides GIA (Block Grant) to 867 eligible upper primary (ME) schools
- 14,089 Sikshya Shayayaks regularised as primary teachers
- Block grant benefit extended to 'Madrassa' teachers at primary level
- 972 DPEP Phase I para teachers engaged as Sikshya Shayayaks and Gana Sikshyaks
- 21,661 EGS volunteers rehabilitated as Gana Sikshyaks
- Remuneration to Sikshayaks and junior teachers enhanced
- During 2010-11, it is targeted to enroll 64.61 lakh children (6-14 years age group) in elementary education

Figure 8.7: Dropout Rate of Upper Primary Schools, 2000-01 to 2009-10



Jagatsinghpur district (4.63 percent). The dropout rate is the highest in case of ST (20.46 percent) in Bhadrak district, and among SC (15.69 percent) in Deogarh district.

8.1.4 Secondary Education

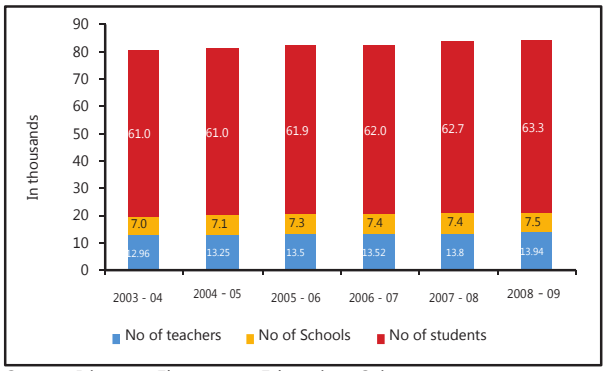
In 1947-48, the State had only 106 high schools with 15,000 enrolments. By the end of 2009-10, there were 6,193 government and aided secondary schools, 849 recognised high schools and 151 permitted high schools in Orissa. Private high schools numbering 1,979 have been notified to receive block grants. Three thousand two hundred and ten teachers have been engaged on contracts. Rs 67.74 crore was utilized for purchase of dual desk-cum-benches, library books, laboratory and other equipments in 3,554 government schools during 2009-10 under the 12th Finance Commission award. Computer literacy has been popularised at high school level. The Rastriya Madhyamik Sikhya Abhiyan (RMSA) has been launched at the national level to promote secondary school education. The salient aspects of RMSA are summarised in Box 8.2. Box 8.3 gives an account of different non-Oriya medium secondary schools in the State.

The dropout rates at the high school level are declining at a slower pace. The overall dropout rate declined from 69.5 percent in 2001-02 to 59.3 percent in 2008-09. The dropout rates for STs and SCs are still higher. Further details regarding dropout rates are given in Annexure 8.6. There is a need for special attention to address this problem.

Box 8.2: Universalisation of Secondary Education, 2009-10

- Rastriya Madhyamik Sikhsya Abhiyan (RMSA) is a national flagship programme that aims at affordable and assessable education of students aged between 14-18 years by 2017. Funding of Rs 207.18 crore has been proposed for RMSA in Orissa during 2009-10.
- There is a proposal to provide special incentives to 32,859 girl students under the National Scheme.
- 1,500 schools are expected to benefit under the information and communication technology programme during 2009-10.

Figure 8.8: Growth of Schools, Teachers and Students at High Schools Level



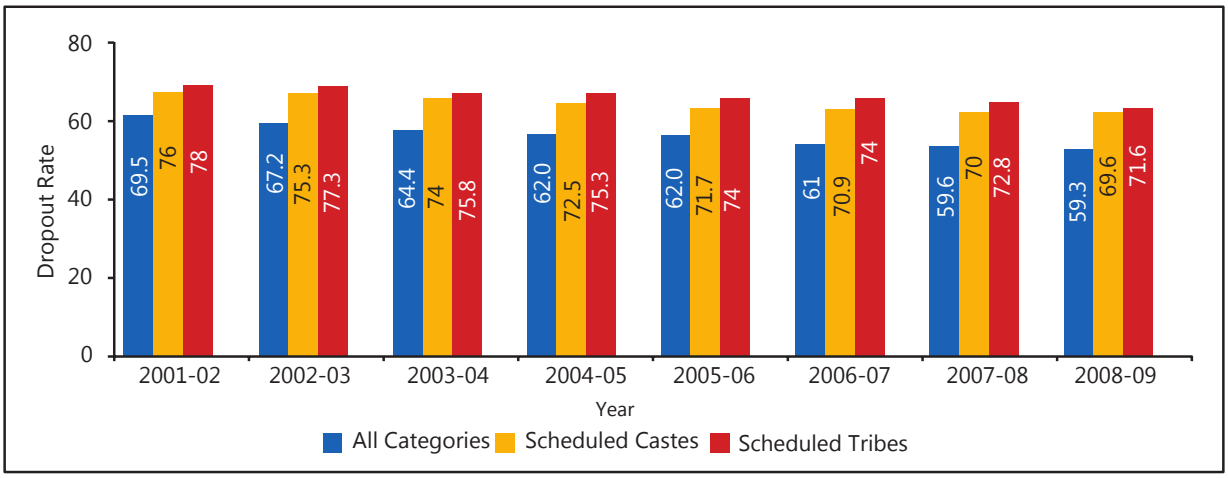
Source: Director, Elementary Education, Orissa

Box 8.3: Other Than Oriya Medium Level Schools, 2009-10

Type	Number
CBSE (English Medium)	143
ICSE (English Medium)	82
Sanskrit Tolls	202 (10 Govt & 192 non-Govt Schools)
Navodaya Vidyalaya	28 (10 government managed)
Madrasa*	166 (78 government managed; 88 unaided but recognized)

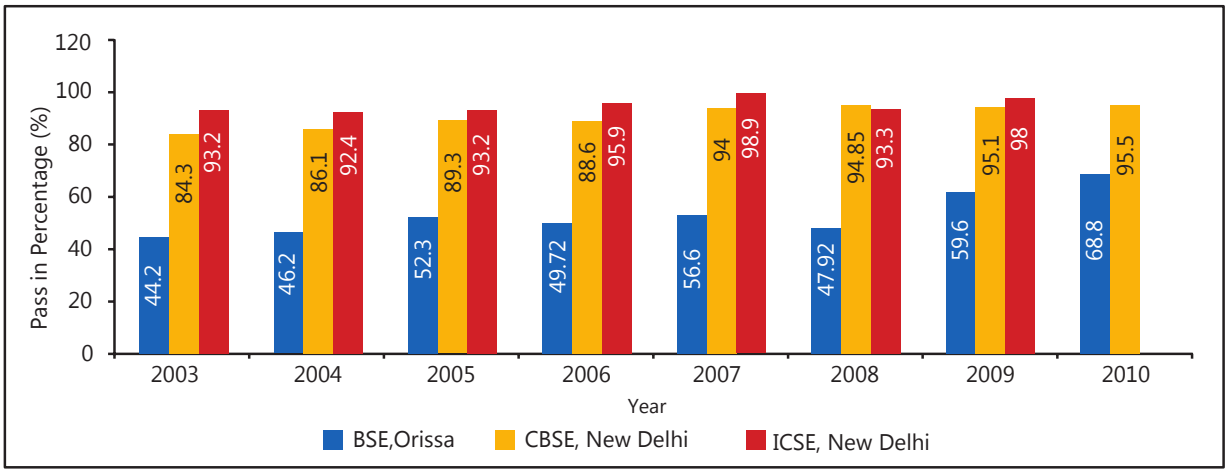
*Syllabi in 145 Madrasas are being modernised, by engaging science and mathematics teachers, supplying kits and opening book banks.

Figure 8.9: Drop-out Rate in High Schools by Communities



The Board of Secondary Education (BSE), Orissa regulates various types of examinations. These include high school examinations, teachers' certification, hindi teachers' certification and the certificate course for physical education. It also grants recognition to institutions that provide education through correspondence courses. In 2010, 4.29 lakh students were enrolled and 4.24 lakh students appeared under the Board of Secondary Education, Orissa. Two lakh ninety-two thousand students passed the examination. The pass result was 68.81 percent. One lakh thirty-seven thousand girl students passed the HSC examination, 2010. Figure 8.10 gives an account

Figure 8.10: Results of High School Examination by Boards, 2003-2010



of the results of high school level examinations. Further details are given in Annexure 8.7.

8.1.5 Higher Secondary Education

There are 1,176 general colleges including 50 government colleges that provide higher secondary level education. The Council of Higher Secondary Education (CHSE), Orissa, regulates higher secondary education. The overall percentage of success rate in examinations conducted by CHSE in 2010 was 71.82 percent. The success rate was highest for the Commerce stream (74.4 percent) followed by Science (73.92 percent) and Arts streams (70.69 percent). In addition, 98 schools affiliated to CBSE/ICSE also provide +2 level education. Annexure 8.8 presents the results of class XII examination conducted by CHSE, whereas Annexure 8.9 depicts the same for CBSE and ICSE.

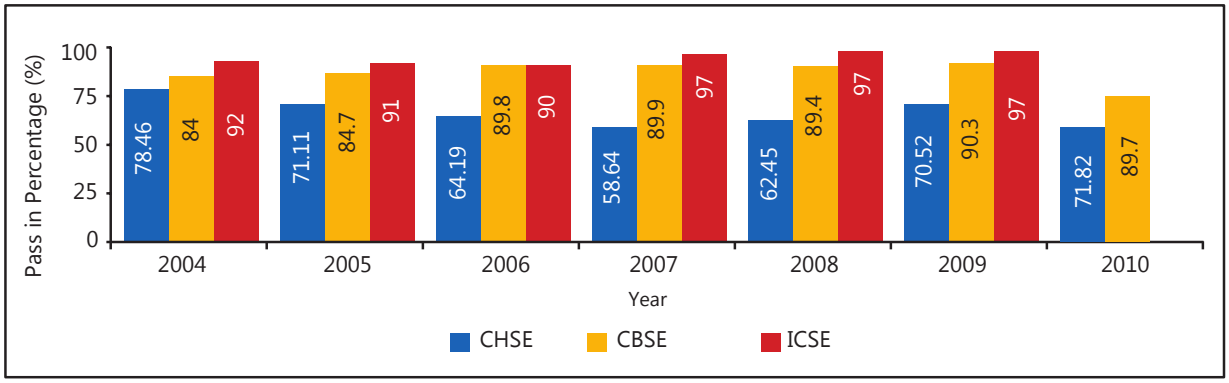
8.1.6 Vocational Education

Vocational courses at +2 level are offered in 231 government vocational/junior colleges in 30 districts. They produce middle-level skilled personnel for self-employment. These institutions are spread all over the State and teach courses as per the recommendations of District Vocational Education Committees. At present, twenty vocational courses are taught in different vocational education institutions. In 2010, 5,955 students appeared at +2 level for vocational courses, out of which 4,680 passed out, yielding 78.6 percent success rate.

8.1.7 Higher Education

The Department of Higher Education looks after education at the university, post-graduate, graduate and higher secondary levels. It also oversees vocationaleducation,promotesprofessionalcourses and provides grants to institutes for development studies. In 1947, there were only 12 colleges in Orissa with an enrolment of 4,104 students. In 2009-10, there were 96 government colleges, 609 aided colleges, 153 block grant colleges, 990 non-

Figure 8.11: Results of Higher Secondary Education, 2004-2010



Box 8.4: Technical Institutions in the Orissa, 2010-11

Institution	No.	Intake Capacity	Institution	No.	Intake Capacity
Government Engineering College	8	1960	Orissa University of Agriculture and Technology	1	1250
Private Engineering College	93	35700			
Government Engineering Schools /polytechnics	13	3080	Government Medical Colleges	3	450
Private Engineering Schools/ Polytechnics	77	23895	Government Dental Colleges	1	20
Architecture	2	200			
Film &TV Institute	1	200	Private Medical College	3	600
Government MCA Colleges	13	472	Private Dental College	4	360
Private MCA Colleges	47	3345	Government Pharmacy College	1	60
Government MBA Colleges	10	505	Government Nursing College	1	20
Private MBA College	61	4920	Private Pharmacy College	32	1840
ITI/TTC	582	60849	Private Nursing College	11	245
National Institute of Technology	1	360	Nursing Schools	17	480
Indian Inst of Handloom & Textile	1	60			

Government (unaided) colleges, 236 self-financing colleges and 14 other colleges in the State. At the time of independence, there was only one university. Now there are, eleven including a Central University at Koraput and a National Law University at Cuttack. The Government has permitted the establishment of the Sri Sri University, Vedanta University, ICFAI University and Sambalpur University of Information & Technology in the State.

The State Government has provided 185.97 acres of land at Naraj, Cuttack, for the establishment of the Sri Sri University and 3,277.73 acres of land in Puri district for the Vedanta University, expected to be a world-class multi-disciplinary educational institution. The National Institute of Science Education and Research (NISER) has been set up by the Department of Atomic Energy, Government of India. It currently functions at the campus of the Institute of Physics from the academic session, 2007-08.

National Assessment and Accreditation Council (NAAC) accreditation has been made mandatory for all universities, government and non-government aided degree colleges. So far, 149 colleges and three universities in the State have received accreditation from NAAC. Autonomous status has been accorded to 19 government colleges and 6 non-government aided colleges. The University Grants Commission (UGC) has identified Ravenshaw College, Cuttack, Government College, Bhawanipatna and Gangadhar Meher College, Sambalpur, as Centres of Potential Excellence (CPE), entitling them to special financial assistance. In the meantime, Ravenshaw College has been converted into a residential university.

8.1.8 Technical Education

The Industrial Policy of the State envisages a series of measures to improve technical education and enhancethequalityoftechnicalmanpower. Technical education is imparted through engineering colleges, engineering schools, polytechnics, industrial training institutes (ITIs), industrial training centres (ITCs) and vocational educational institutions and universities. The present position of technical institutions in the State is summarised in Box 8.4. The Directorate of Technical Education and Training (DTET) functions as the nodal agency plan and implement technical education programmes in the State and liaise with the State Council of Technical Education, universities, and national-level technical institutions and agencies. The Craftsman Training Scheme under the National Council of Vocational

Training (NCVT) is implemented in 25 government and 206 private ITIs with an intake capacity of 21,453 students. A scheme, called "Training-cum-Production Centre" is in operation to raise the skill levels of trainees.

8.1.9 Important Government Policies and Programmes

Mass Education

Sakhshar Bharat, a centrally sponsored scheme, has been launched in September 2009 by Government of India as a new variant to the National Literacy Mission (NLM). It aims at imparting functional literacy to non literates aged 15 and above. In Orissa, 19 districts were identified under this programme in 2009-10 and 3 districts i.e. Kalahandi, Bolangir and Sundergarh were chosen in the 1st phase for implementation of NLM. The Ministry of Human Resource Development (MHRD) has redesigned NLM to inculcate new enthusiasm into it. The restructured programme, known as Lok Talim's motto of education through productive work and self-reliance and has been implemented in the 11th Five Year Plan. The expenditure-sharing pattern between the Centre and State is 75:25 for normal districts and 90:10 for educationally backward districts. There are 15 Jana Sikhyana Sansthans (JSS) that impart training under different skills development programmes and conduct need-based surveys.

Mid-Day Meal (MDM) Scheme

With a view to increasing enrollment, reducing dropouts and improving the nutritional status of children in schools, the Mid Day Meal (MDM) programme was introduced in the State in 1995. Noon meals are provided to primary school children in all government and government-aided primary schools on all working days in a year. During 2009-10, the total coverage of the scheme was 423,674 students in 47,453 primary schools and 1,913,745 students in 18,935 upper primary schools. Daily ration costs per student are Rs. 3.30 and Rs. 4.92 respectively in the primary and upper primary schools. During 2009-10, Rs. 454.30 crore was provided for this scheme. In 2009-10, the Government of India also gave Rs. 420.75 crore for construction of 69,152 kitchen sheds and Rs. 33.19 crore for replacing kitchen equipment/devices in 56,385 primary and upper primary schools.

Sarva Sikshya Abhiyan (SSA)

SSA is a national flagship programme that is implemented in a mission mode to achieve the constitutional goal of universalisation of elementary education and provide useful and quality education to all children in the 6-14 age group by 2010. The cost of the programme is shared by the Centre and State in the ratio of 65:35. The programme supports infrastructure development, ie.,construction of new school buildings and classrooms, toilets, compound walls, drinking water facilities, block and cluster resource centres, hostels, teachers' training programmes, free supply of uniforms for girls and supply of text books. Under the SSA programme, the following achievements have been made: (i) 8,623 new primary schools opened and 9,004 primary schools were up-graded to upper primary level, (ii) 8,006 UP (ME) schools were upgraded to class-VIII, (iii) free text books for all children of government and aided schools were provided, (iv) uniforms were provided to all girl students in government schools, (v) training modules for BRCC and CRCC were provided (vi) civil works were completed for 5,095 new primary school buildings, 6,761 new UP schools and 36,101 additional classrooms, (vii) computer aided learning programmes were implemented in 1,500 upper primary government schools for 912,601 children, (viii) 157 Kasturva Gandhi Balika Vidyalaya (KGBV) were made operational for 15,632 girl students, and (ix) instructions were given in the mother tongue in 10 tribal languages in 547 schools in 10 tribal districts.

National Programme for Education for Girls at Elementary Level (NPEGEL)

The programme is implemented in 3,159 clusters of 190 blocks in 27 districts to encourage skills development and education for girls. Under this programme, 27,873 girls have been given vocational training and remedial teaching undertaken in 2,711 clusters for low achievers among girls.

State Institute of Educational Technology (SIET)

The prime activity of the institute is to attain educational curriculum enrichment for school children through video/audio programmes and telecast/broadcast in electronics media. It also deals with the design and production of teaching aids including purchase and supply of colour

TV/radio-cum-cassette player (RCCP) sets. The educational programmes are on subjects like mathematics, science, social studies, health and hygiene. During 2009-10, SIET has produced 64 video and 75 audio programmes and transmitted 513 programmes through Regional Doordarshan Kendras. It has distributed 53,112 RCCP sets and 4,950 TV sets between 1987-88 and 2002-03. Besides, it has organised workshops on video production and facilitated CIET to develop four projects.

Quality Improvement in Education

The State Government has taken initiatives not only for quantitative expansion but also for qualitative improvement in education at all levels. The Government provides grants to institutions, incentives to teachers and scholarships to students for improved performance.

National Service Scheme (NSS)

This is a centrally sponsored scheme that engages and encourages rural youth to undertake productive activities. The funding pattern of the scheme is in the ratio of 7:5. The programme has a volunteer strength of 90,000. In 2009-10, Rs.154 lakh were provided in the State budget for this programme. Volunteers were involved in activities like blood donation, plantation and AIDS awareness programmes.

National Cadet Corps (NCC)

At present 45,600 students of 156 colleges and 535 high schools have been enrolled under the NCC programme. Cadets take part in national-level camps as well as in annual training camps. They are also involved in social welfare activities like plantations, sanitation and blood donation. The Government of India has agreed to open new NCC battalions at Nabarangpur, Malkangiri, Rayagada and Bhawanipatna, with group headquarters at Koraput. During 2009-10, Rs 884.65 lakh was provided for the programme.

Scholarships

A scheme called National Merit Scholarship was introduced by the Ministry of HRD, Government of India and 637 students were awarded junior/senior/PG merit scholarships. In all, 826 students received merit-cum-means scholarships so far. To encourage bright girl students, scholarships were awarded for technical, professional and management studies, both inside and outside the state. For the development of Sanskrit and Hindi studies, scholarships were awarded respectively to 2,163 and 110 students. Besides, Rs. 1.20 crore was sanctioned under a loan stipend scheme. During 2009-10, Rs.307.60 lakh was provided for scholarships at the rate of Rs. 10,000 per annum to students of technical institutes such as engineering and medical colleges.

Teachers' Education and Training

At present, two Institutes of Advanced Study in Education (IASE), ten Colleges of Teachers Education (CTE) and two Government Training Colleges function in the State. The intake capacity of these institutions is 997. During 2009-10, 36 students in M.Phil, 49 students in M.Ed. and 912 students in B.Ed. were admitted. There are 24 District Institutes of Education and Training (DIETs) and 136 Distance Education Centres with an intake capacity of 19,200 trainees for CT training. During 2009-10, 18,915 students were admitted. In addition, there are 35 Government Secondary Training Schools with an intake capacity of 1,650 students, against which 1,641 students were admitted during 2009-10

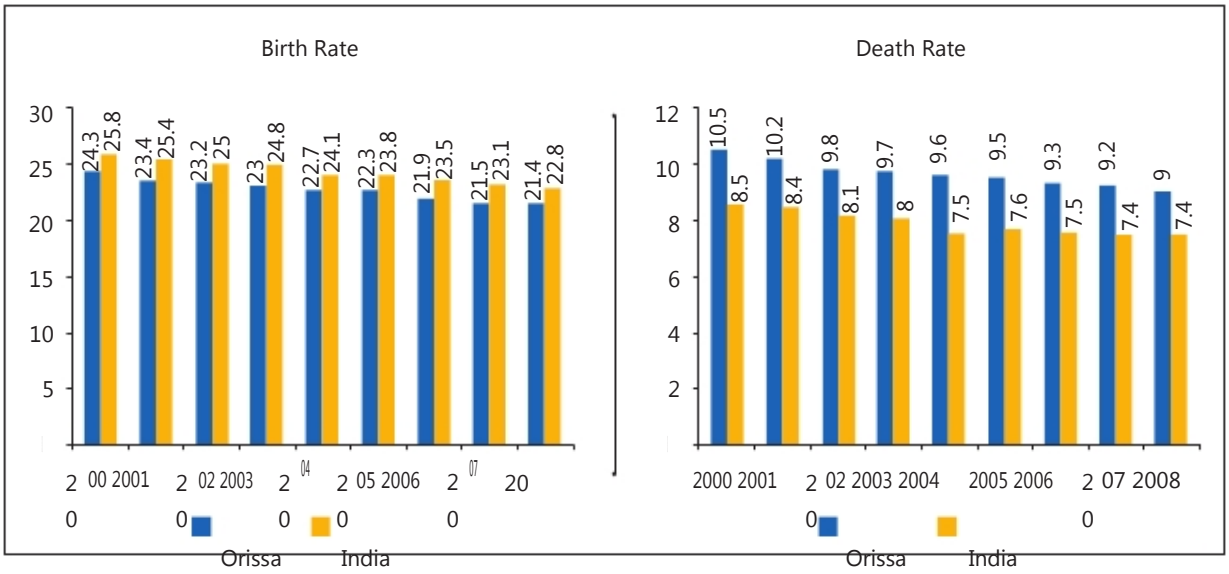
8.2 Health and Family Welfare

The Government is the main provider of healthcare services in the State and has been allocating increasingly more funds for this sector. Though health indicators have been gradually improving, there are still several gaps in health services.

8.2.1 General Health

The Crude Birth Rate (CBR) and Crude Death Rate (CDR) for Orissa vis-à-vis India are shown in Figure 8.12 from 2000 to 2008. As of 2008, the CBR for Orissa was 21.4 against the national average of 22.8. The CBR for urban and rural Orissa stood at 16 and 22.2 respectively against the corresponding national averages of 18.5 and 24.4. The CDR declined from 13.1 in 1981 to 9.0 in 2008 as against 7.4 at the national level. Orissa still has the highest CDR in the country, followed by Madhya Pradesh (8.6), Assam (8.6) and Chhattisgarh (8.1). The CDR for rural and

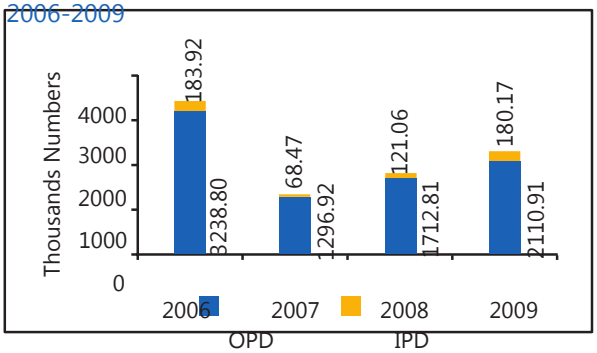
Figure 8.12: Birth and Death Rates in Orissa and India, 2000-2008



urban Orissa stood at 9.4 and 6.9 respectively as against 8.0 and 5.9 for India.

People of Orissa suffer from multiple diseases. Details about the incidence of selected diseases in the State are given in Annexure 8.12. Figure 8.13 depicts the situation relating to outdoor and indoor patients in Orissa from 2006 to 2009. The decline in the number of reported patients is probably due to a substantial drop in the number of people suffering from minor diseases, grouped under "other diseases", as may be seen from Annexure 8.12. This may also be due to increased participation of the private healthcare sector as well as better public awareness about health and hygiene. Expectedly, out-patients constitute a large proportion of the total number of patients. Five major diseases of Orissa, also called "panchavyadhi" are malaria,

Figure 8.13: Indoor & Outdoor Patients in Orissa, 2006-2009



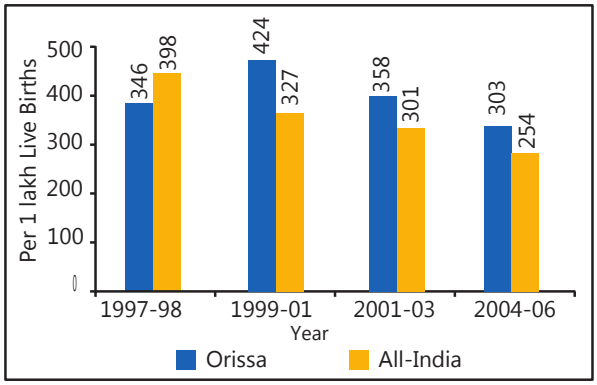
leprosy, scabies, acute respiratory infection and diarrhoea, which account for more than 70 percent patient load.

Major causes of reported deaths in Orissa in 2009 are presented in Annexure 8.13. The single most important cause of death is senility (27.6 percent), followed by heart disease (9.5 percent), paralysis (3.5 percent) and asthma (3.4 percent). Life expectancy at birth in the State has increased from 58.6 years for males and 58.7 years for females during 1999-2003 to 60.3 years and 62.3 years respectively during 2001-05. As per the report of the Technical Group on Population Projection, the projected level of life expectancy at birth in Orissa will be 64.3 years for males and 67.3 years for females during 2011-15 as against 67.3 for males and 69.6years for females at the national level.

8.2.2 Maternal Health and Family Welfare

Maternal Mortality Rates (MMR) for Orissa and India from 1997-98 to 2004-06 are shown in Figure 8.14. In case of Orissa, the decline in MMR from 346 in 1997-98 to 303 in 2004-06 is moderate compared to corresponding figures at an all-India level of 398 in 1997-98 to 254 in 2004-06. It is targeted to reduce the MMR to 119 in Orissa and 100 at the all India level by the end of the 11th Plan period. Ante-natal and post-natal care is necessary for healthy motherhood and safe child birth. The number of women and infants

Figure 8.14: Maternal Mortality Rates in Orissa and India, 1997-98 to 2004-06



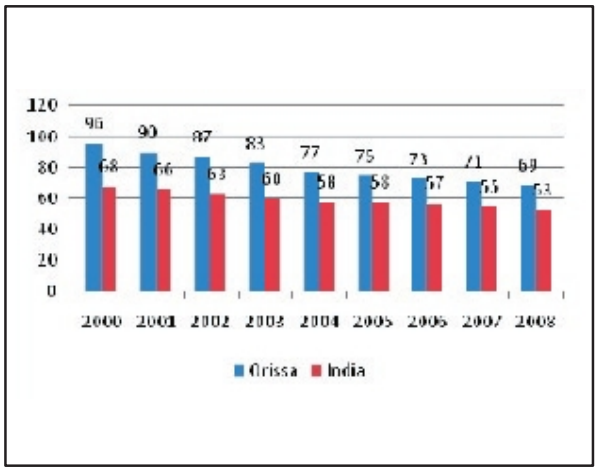
who are receiving these health services has been increasing over the years. Figure 8.16 reveals that institutional deliveries have significantly increased from 36.8 percent in 2004-05 to 71 percent in 2008-09.

The pregnancy burden of women can be gauged from the General Fertility Rate (GFR) and the order of deliveries of eligible women. As shown in Figure 8.17, GFR in Orissa is less than the all-India rate, and has declined marginally from 79.7 in 2004 to 79.3 in 2008. Higher birth orders indicate longer reproductive span and associated child-bearing problems. About one-third (30.9 percent) of deliveries in the State were of 3rd and higher orders in 2008. The proportion of such delivers has recently declined from 34.8 percent in 2004 to 30.9 percent in 2008. Details of birth orders as well as general fertility rates for Orissa vis-a-vis India are reported in Annexure 8.14. Various family welfare programmes are in place in Orissa since 1956 with the objective of stabilising population growth. Under this programme, the strategy has been to motivate eligible couples to limit their family sizes by adopting various family planning methods. It seeks to promote responsible parenthood with focus on one child norm. Annexure 8.15 shows the progress of the programme in Orissa since 2002-03.

8.2.3 Child Health

The status of child health is indicated by the Infant Mortality Rate (IMR), nutritional status of children and prevalence of diseases among them.

Figure 8.15: IMR in Orissa and India, 2000-2008



Infant Mortality

As is evident from Figure 8.15, IMR has shown a considerable decline from 96 per 1000 live births in 2000 to 69 in 2008. IMR in rural Orissa was 71 as compared to 49 in urban areas in 2008. At the national level, IMR stood at 53 and varied from 58 in rural areas to 36 in urban areas in 2008. Though

Figure 8.16: Institutional Deliveries in Orissa, 2004-05 to 2008-09

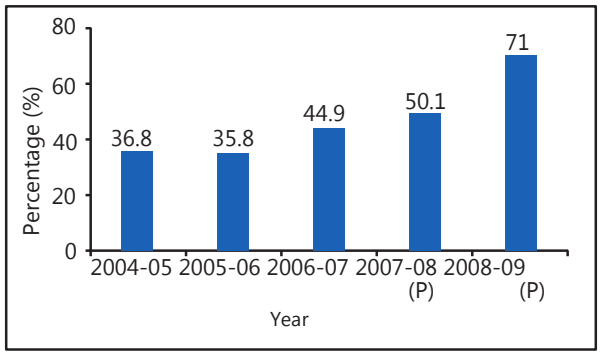
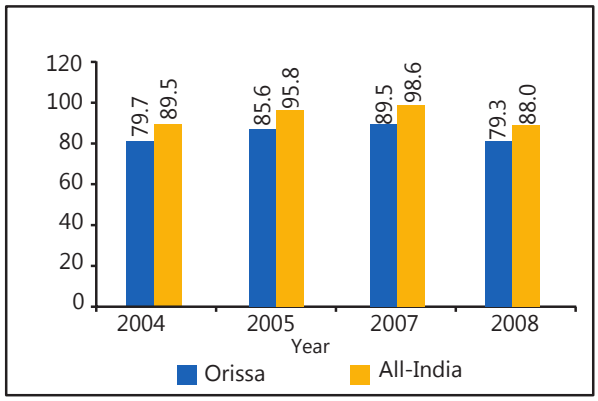


Figure 8.17: GFR in Orissa and India, 2004-8



the decline in IMR in Orissa has been significant in recent years, it is still very high. This is mainly due to three factors: (i) poor availability of professional attendance at birth and high rate of premature deliveries, (ii) high incidence of malaria, acute respiratory and tetanus infections and anaemia among infants and women, particularly during pregnancy, and (iii) lack of professional pre and post-natal care.

About 64 percent infant deaths are attributed to neonatal mortality. Premature deliveries cause 38.5 percent infant deaths. Pneumonia, respiratory infection, tetanus and diarrhoea of new borns account for 34.1 percent infant deaths. Anaemia, which is caused due to malnutrition and suffered by both pregnant mothers and infants, accounts for 8.1 percent infant deaths. Orissa has mounted an Infant Mortality Reduction Mission with a view to reducing IMR at an accelerated rate.

Child Malnutrition

Figure 8.18 shows that child malnutrition in Orissa is high. Morethan50percentchildrenaremalnourished. Malnourished children are categorised into four grades. Grade-I is the least malnourished and Grade-IV is the most malnourished. The proportion of Grade-I malnourished children in between 2004-2010 has been around 36 percent. However, the proportion of Grades II to IV-malnourished children has been declining over the period. Further details are given in Annexure 8.16.

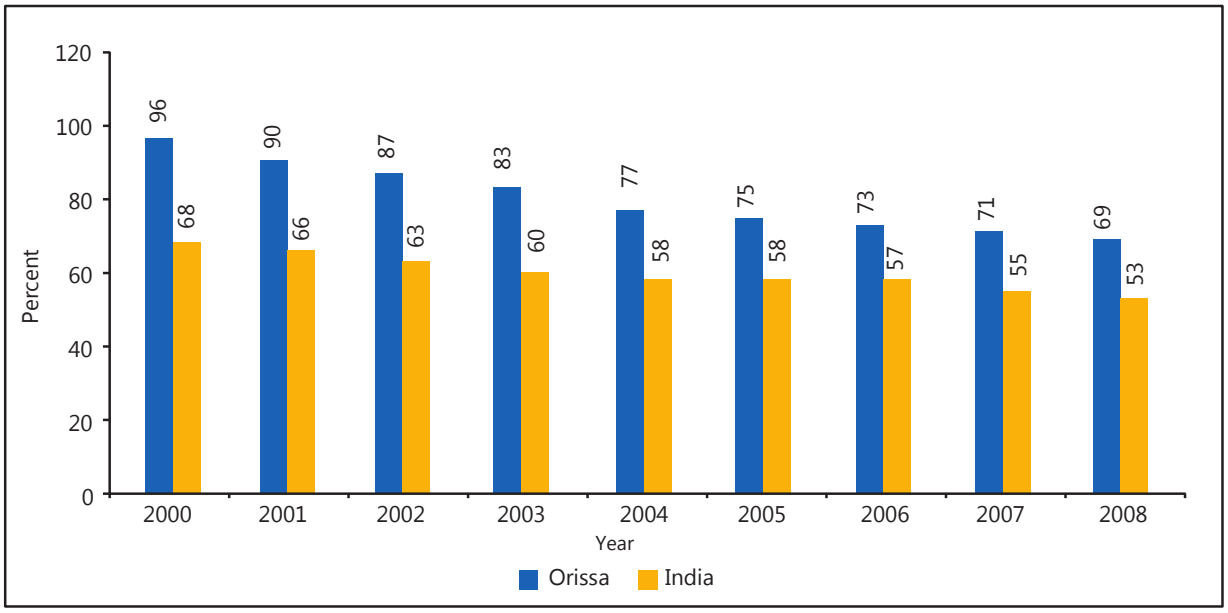
8.2.4 Medicine Systems and Hospitals

Healthcare in the State is mostly provided through public allopathic institutions. However, alternative health systems are also supported by the State.

Allopathic Medicine

In 1951, medical and healthcare facilities in the State were provided through a network of 365 Government medical institutions with 3,112 hospital beds and 1,083 doctors. The doctor-population ratio stood at 1:13,500. By the end of 2009-10, 1,880 medical institutions, comprising 142 hospitals, 377 community health centres, 1,162, primary health centres and 199 Mobile Health Units (MHU) were functional in the public sector. Private sector medical institutions numbered 1,952 including 189 hospitals, 314 nursing homes, 662 diagnostic centres, and 575 pathology centres having 8,497 beds. Thus 3,832 allopathic medical institutions provided medical care in the State. In addition, there are 6,688 health sub-centres in the public sector. At the end of 2009-10, there were about 25 medical institutions per lakh population and one medical institution per 16 sq km. The bed-population ratio is 1:1,798. District-wise medical institutions and hospital beds, in both public and private sectors in Orissa are given at Annexure-8.17.

Figure 8.18: Nutritional Status of 0-3 year Children in Orissa, 2000-2008



While public health institutions are spread all over the State, private institutions are located mainly in cities. Of 1,952 private institutions, 269 (13.8 percent) are in Bhubaneswar, 339 (17.4 percent) in Cuttack and 105 (5.4 percent) in Ganjam district. Several districts including Boudh, Malkangiri, Nayagarh and Subarnapur do not have any private hospital. There is no nursing home in Nuapada and Malkangiri districts. There are 25 diagnostic centres in Cuttack and 80 in Bhubaneswar. Boudh district has no diagnostic centre, but Kalahandi has 108 diagnostic centres.

Alternative Systems of Medicine

Healthcare facilities are also provided under the Indian system of medicines and Homoeopathy (ISM &H). Chronic and complicated diseases like paralysis, arthritis, liver disease, diabetes, asthma and tuberculosis are successfully treated at affordable cost through ISM&H. By the end of 2008-09, there were 4,981 registered ayurvedic doctors and 3,883 registered homeopathic doctors. At present 5 ayurvedic hospitals with 418 beds and 4 homoeopathic hospitals with 125 beds provide health services in the State. Besides, 619 ayurvedic, 590 homoeopathic and 9 unani dispensaries provide primary healthcare services. During 2009-10, about 151.77 lakh patients availed treatment facilities in these hospitals and dispensaries. Annexure 8.18 shows the status of public homoeopathy, ayurvedic and unani hospitals in Orissa. At present, three Government ayurvedic and four homeopathic colleges with an intake capacity of 90 and 100 respectively offer degree courses. Besides, post-graduate teaching is imparted in five ayurvedic and five homoeopathic disciplines. Post-graduate courses in two new subjects were introduced in Dr. Abhin Chandra Homoeopathic Medical College, Bhubaneswar in 2009-10 under a Centrally Sponsored Scheme. In 2009-10, three ayurvedic and two homeopathic college buildings were improved and 10 ayurvedic and 10 homoeopathic dispensaries and 1 homeopathic college hostel were constructed.

System Load of Government Hospitals

The system load of the healthcare infrastructure can be assessed from Annexure 8.19. Indicators of system load in Government hospitals have remained the same between 2005-06 and 2009-10. There are 12 doctors per lakh population and less than 4 beds per 10,000 population. However, the proportion of patients in the total population of the State declined from 70.8 percent in 2005-06 to 65.3 percent in 2009-10.

8.2.5 Employees State Insurance (ESI) Scheme

This is an integrated multi-dimensional health insurance and social security scheme, being implemented in the State since 1960. It is one of the most effective and sustainable social security measures available to workmen employed in industrial and commercial establishments of varying nature and sizes. At present, medical care is provided to 236,500 insured persons and their dependent family members through five ESI hospitals and 46 ESI dispensaries. Besides, there are two annexed wards that function in 20 districts, with 297 beds and 110 doctors and one 50 bedded ESI model hospital at Rourkela.

The ESI Corporation has prescribed an expenditure ceiling of Rs.1, 200 on medical care per insured person per annum from 1st April, 2009. It is shared between ESI Corporation and the State Government in the agreed ratio of 7:1 and the expenditure in excess of the ceiling is borne by the State Government. During 2009-10, about 7.44 lakh patients including 6,992 indoor patients were treated in the ESI hospitals/dispensaries. Besides, immunisation and family welfare programmes are also performed in these hospital/dispensaries. The details are given in Annexure 8.19.

One AIDS cell has been set up at the ESI Directorate to implement the AIDS control programme, which is fully financed by National AIDS Control Organization (NACO). AIDS awareness programmes are being conducted in different industrial areas. One STD laboratory and clinic functioning in the ESI hospital, Bhubaneswar since 2004-05 has been upgraded to a VCTC. As per the guidelines of the Orissa Pollution Control Board, hospital waste management in ESI hospitals at Choudwar and Bhubaneswar has been entrusted to M/s Saniclean (P) Ltd. on a contract basis since 2004.

8.2.6 Government Health Programmes and Projects

Revised National Tuberculosis Control Programme (RNTCP)

National Tuberculosis Control Programme (NTP) is implemented in Orissa since 1964. It provides free and domiciliary treatment to patients detected through the passive case landing method. The NTP did not achieve the desired success and hence was revised as RNTCP in 1997 under which Directly Observed Treatment Short Course Chemotherapy (DOTS) was implemented. It aims at detecting 70 percent of infectious new sputum positive TB cases and curing at least 85 percent of them. It is implemented through 31 implementing units, 108 TB units and 545 microscopy centres. In addition, there are 47,192 trained DOT providers identified to administer DOT to patients. Since its inception till Sept, 2010, 402,365 TB cases were detected, out of which 295,889 were treated and cured and 18,087 persons died. New smear positive case detection rate was 64 percent against the norm of 70 percent and the success rate 87 percent.

National Filaria Control Programme (NFCP)

NFCP is a centrally sponsored scheme on a 50:50 sharing pattern between the Centre and State. It is implemented through the Filariasis Bureau and comprises a research unit at Puri, 15 filaria control units and 15 filaria clinics in urban areas. The filaria clinics conduct night blood survey in a confined area of 50,000 population and undertake treatment of microfilaria carriers as well as the diseased. Table 8.1 indicates the epidemiological trend in the State.

Table 8.1: Epidemiological Data on NFCP, 2004-2009

2004	36,668	774	2.1
2005	36,484	409	1.2
2006	40,127	336	0.9
2007	40127	339	1.0
2008	38924	464	1.2
2009	40067	322	0.8

Source: Directorate of Health Services.

Considering the magnitude of the disease burden, the Mass Drug Administration (MDA) programme has been implemented in twenty districts since 2004 for elimination of lymphatic filariasis. Under this programme, all beneficiaries except pregnant women, children below 2 years and seriously ill persons are to be administered DEC and Altherdazale tablets once in a year. The national goal of the programme is to eliminate filaria by 2015.

National Programme for Control of Blindness (NPCB)

This programme was introduced in the State in 1976 as a World Bank assisted project to reduce prevalence of blindness from 1.4 percent to 0.3 percent. At present, the programme functions with full central assistance. During 2009-10, 128,508 cataract operations were performed as against 110,716 in 2008-09. The cataract operation rate during 2009-10 was 321 per one lakh population in Orissa. Besides, the school eye screening programme is also operational in the State. The achievements made under the programme in the last five years are given in Annexure 8.21.

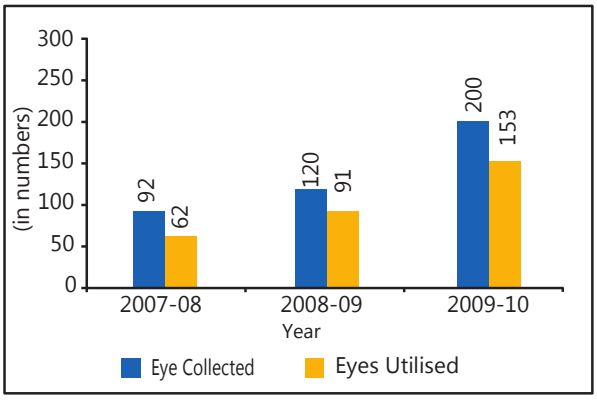
Eye Donation

Eye donation is being popularised and implemented in the State through three medical colleges and one private organisation. As Figure 8.19 shows, eyes collected and utilised have increased from 2007-08 to 2009-10.

National Iodine Deficiency Disorders Control Programme

Iodine is an essential micro nutrient and 100-150 gram of it is required daily for normal body and mental development. The disorders due to deficiency of iodine in diet are called iodine

Figure 8.19: Eye Donation and Utilisation, 2007-08 to 2009-10



deficiency disorders (IDD). Nutritional iodine deficiency impacts development of a person right from the foetus stage. It could result in abortion, still birth, mental retardation, deafness, autism, squint, goitre, neuro-motor defects and other disorders.

An IDD survey was conducted in the State to assess its prevalence. By the end of 2009-10, twenty districts have been surveyed and two districts were resurveyed. Annexure 8.22 shows the results of the IDD Surveys conducted in Orissa since 1987. Presently the IDD survey is being conducted in four more districts. Under the School Health Programme, the IDD/Goitre surveys and awareness campaigns have been organised by the State IDD Cell in 11 primary schools. Out of 1,518 school children who were examined, 69 cases were found with goitre and the prevalence rate of IDD was 4.5 percent. In 2009, out of 2,260 salt samples collected, 2,062 samples were analyzed and 532 were found not up to the specific standard. The State Government has banned sale and manufacturing of non-iodised salt for human consumption.

National Leprosy Elimination Programme (NLEP)

This programme is operational in the State since 1982-83. It is supported by WHO, the World Bank and other international donor agencies including Lepra India, HOINA and the German Leprosy Relief Association. The objective of the programme is to eliminate leprosy by detecting all leprosy cases and to bring them under "Multi Drug Therapy (MDT)". Elimination of leprosy means to bring down the prevalence rate of leprosy to one or less per 10,000 population. As a result of successful implementation of the programme, the prevalence rate of leprosy in the State came down from 121.4 per 10,000 population in 1982-83 to only 0.87 in 2010. At the national level, it has come down from 55 to 0.72 per 10,000 population during the same period.

By the end of 2009-10, 19 districts and 205 blocks have achieved the elimination goal and the prevalence rates (PR) of the remaining 11 districts have decreased remarkably to 1-3 per 10,000 population. The prevalence rate in Kandhamal district is the lowest (0.27), whereas it is highest in Sonepur district (2.78). Since the beginning of this programme, 9.5 lakh leprosy cases have been cured with MDT and only 4,500 cases are on record in the State. The diagnosis and treatment facilities for treatment of leprosy cases have been extended to all peripheral health institutions including sub-centres and re-constructive surgery facilities have been made available at the Leprosy Home and Hospital, Cuttack, MKCG Medical College, Berhampur, V.S. Medical College, Burla, Mission Hospital, Bargarh and District hospitals at Jharsuguda, Sonepur & Mayurbhanj.

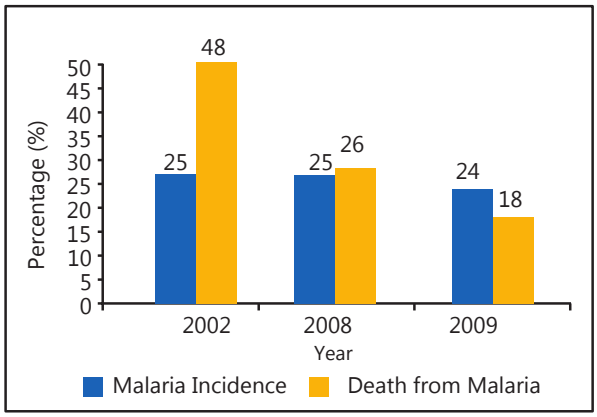
National Vector Borne Disease Control Programme (NVBDCP)

This programme brings in a number of new tools and strategies in diagnosis, treatment, vector management and surveillance. Several strategies for vector borne diseases are being implemented within the existing healthcare system with exclusively employed supporting human resources. In addition, resources are given by the Government of India. Orissa also gets funding support from the Global Fund for AIDS, TB and Malaria (GFATM) as a grant for 16 districts. Orissa also got a soft loan from the World Bank for the remaining 14 districts.

Out of the six vector borne diseases (Malaria, Lymphatic Filariasis, Japanese Encephalitis, Kalaazar, Chikungunya and Dengue) under the Indian National Vector Borne Disease Control Programme, malaria control component takes the major share due to the sheer magnitude of the problem. As per the World Malaria Report 2008, in terms of malaria incidence, India ranks 15th among 109 countries and contributed around 2 percent of global cases in 2006. In Orissa, 48 lakh fever cases are screened for malaria annually and 3 to 4 lakh are found positive. The proportion of falciparum malaria, a kind of malaria that can cause death, was more than 85 percent over the last five years.

A large part of the western and southern districts of the State are covered with forests and hills and are prone to vector breeding. The majority of the population in these districts are tribal. Their customs, beliefs, poor health seeking behaviour and operational difficulties of vector control measures have resulted in a high burden of malaria in these districts. The burden of malaria in non–endemic districts has increased manifold over the years due

Figure 8.20: Incidence of Malaria in Orissa (as Percentage of all India), 2002-2009



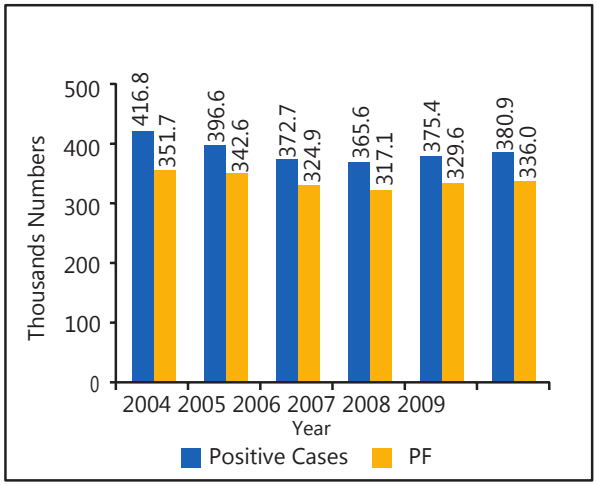
to mobility of their population to high malaria prone districts in search of livelihood and other purposes.

Figure 8.20 reports that Orissa accounted for 25 percent of malaria cases and 48 percent of malarial deaths in India in 2002 and 24 percent and 18 percent respectively in 2009. The number of confirmed malaria cases per 100 population has come down from 12.7 in 2002 to 9.1 in 2008 in the State, but the number varies widely across districts. Fatal cases due to malaria are higher among females than males and among children than adults. Figure 8.21 traces a declining trend in malaria positive cases from 2004 to 2009. Further details are given in Annexure 8.23.

National AIDS Control Programme (NACP)

The incidences of HIV/AIDS in the State and by

Figure 8.21: Malaria Positive Cases & PF in Orissa, 2004-2009



districts are given in Annexure 8.24 and 8.25 respectively. The highest number of HIV+ve cases (6,694) has been detected in Ganjam district, followed by Cuttack (2,271). Boudh is credited with the minimum number of positive cases (4). Out of 1,166 deaths due to AIDS, the highest number was registered in Ganjam (377), followed by Koraput (145). No death case has been recorded in Boudh, Deogarh and Sonepur districts so far. Annexure 8.26 indicates HIV+ve persons in the State by age, sex and mode of transmission by March, 2010. At present, NACP-III is being implemented to prevent new infections, particularly among high risk groups. Infrastructure and human resources under the programme have been strengthened to develop a nation-wide strategic information management system (MIS). In order to institutionalise services at district and sub-district levels, 184 Integrated Counselling and Testing centres (ICTCs) have been set up in the State with 187 counsellors and 136 LTs. The trend of HIV positive cases has been traced in Figure 8.22. Annexure 8.24 shows the HIV scenario in Orissa since 2002.

8.3 Water Supply and Sanitation

Many health hazards can be overcome by supply of clean and safe drinking water as well as good sanitation facilities. These facilities are critical components of what may be called "health infrastructure". Figure 8.23 analyses access to safe drinking water by households in Orissa and India as per the 2001 census. In both rural and urban areas, the coverage in Orissa was higher than national averages.

However, Orissa lags far behind the national averages as regards access to toilet facilities. Though the proportion of rural households having access to toilets increased from 3.58 percent in 1991 to 7.71 percent in 2001 as shown in Figure 8.24, only 14.89 percent households had toilet facilities including 59.59 percent urban households in Orissa in 2001. Figure 8.25 depicts district-wise distribution of households having access to toilet facilities.

8.3.1 Rural water supply

In rural Orissa, the percentage of households covered with different sources of safe drinking

Figure 8.22: HIV Positive cases in Orissa, 2002-2010

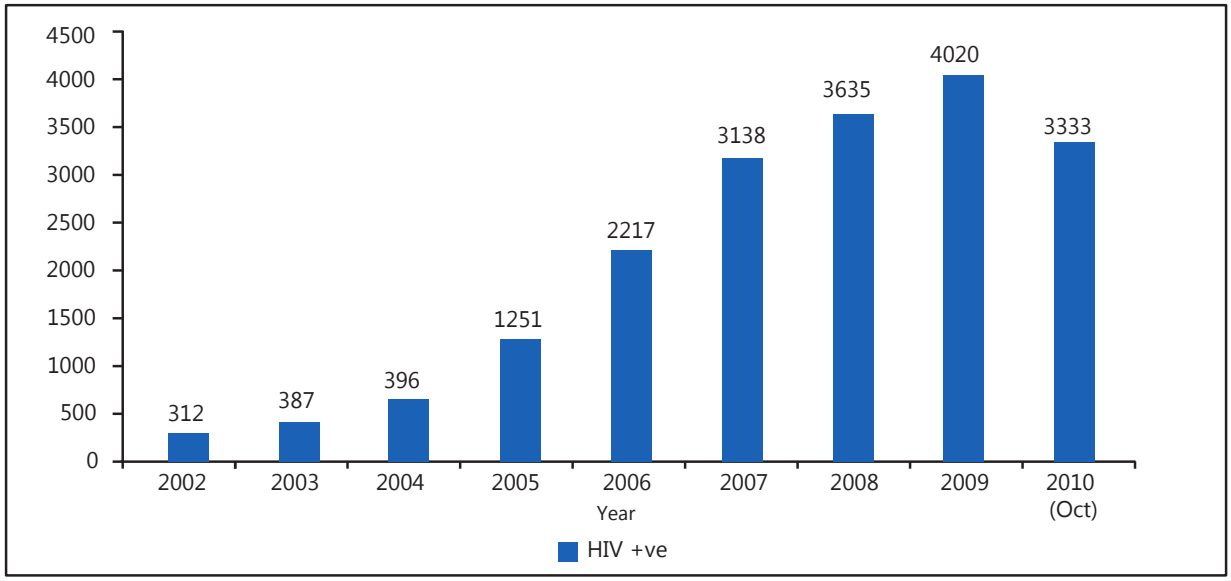


Figure 8.23: Access to Safe Drinking Water by Households in Orissa and India, 2001

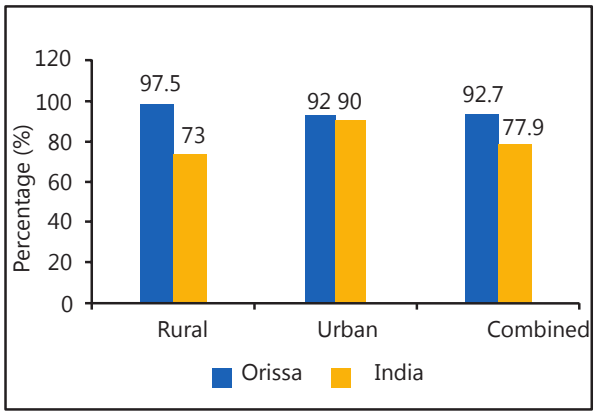
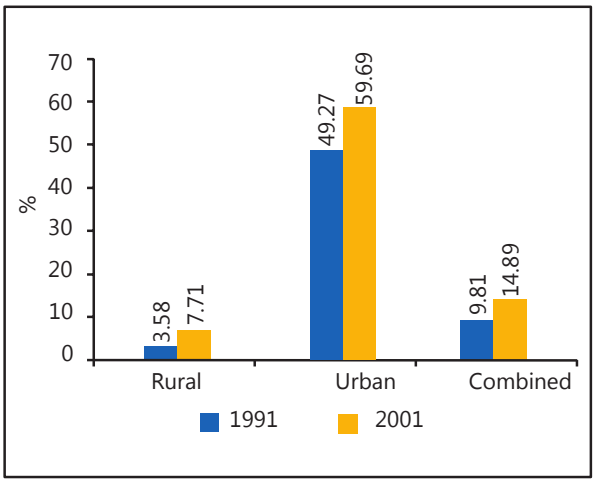


Figure 8.24: Access to Toilet Facilities by Households in Orissa, 1991-2001



water is shown in Figure 8.26. As per the survey conducted by the Integrated Management Information System (IMIS) in 2009, out of 141,928 habitations in rural Orissa, 44.7 percent were fully covered, i.e., all households had access to safe drinking water, 52.6 percent partially covered and the remaining 2.7 percent not covered. This is shown in Figure 8.27.

There are, however, wide variations across districts in terms of coverage of rural habitations with safe drinking water supply. The highest proportion of habitations (5,998 out of 6,646) was fully covered in Kandhamal district, whereas the lowest coverage (406 out of 3,142) was reported from Nabarangpur district. Drinking water in rural areas is supplied through various means including piped-water supply, hand pumps, tube wells and sanitary wells. Annexure 8.27 details different sources of drinking water supply to rural habitations. By 2008-09, there were 13126 functional spot sources, 148 spring based sources and 2020 commissioned water supply projects in the State. Besides, 45,180 schools have been provided with safe drinking water supply. Water supply and sanitation facilities have been provided in to 920 SC/ST girls' hostels during 2008-09 at a cost of Rs. 16 crore.

Rural Water Supply Schemes

The Rural Water Supply and Sanitation Organisation is responsible for providing safe drinking water in

Figure 8.25: District-wise Distribution of Household with Access to Toilets/Latrine, 2001

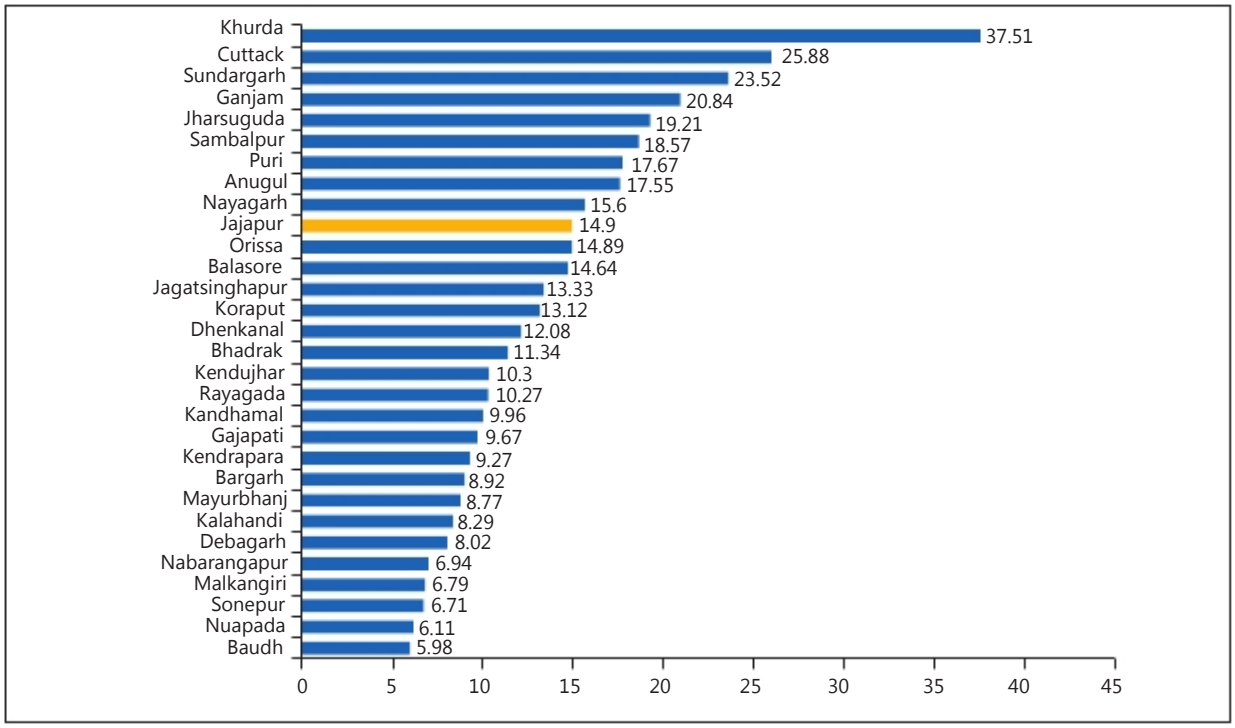


Figure 8.26: Drinking Water Supply to Rural Households by Sources

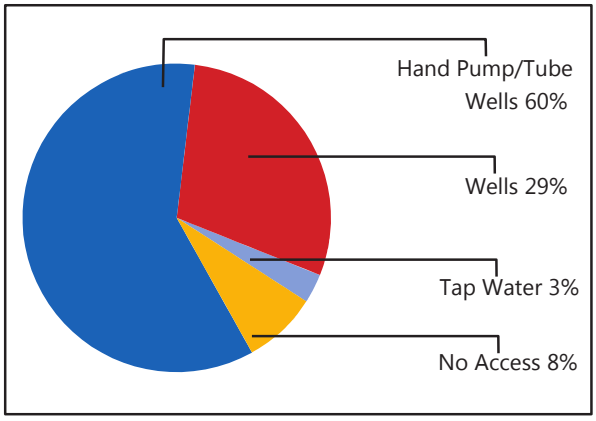
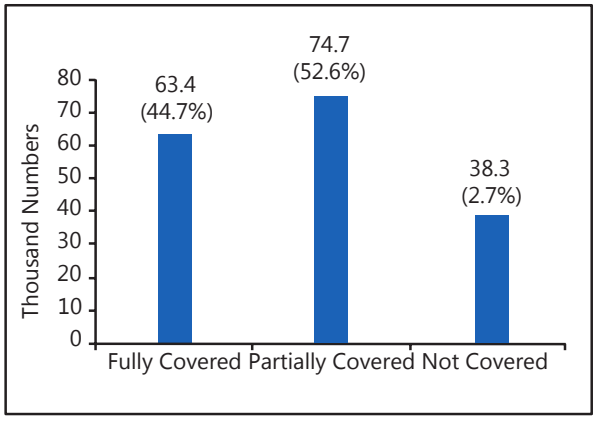


Figure 8.27: Coverage of Habitations with Rural Drinking Water Supply, 2009



rural areas under Accelerated Rural Water Supply Scheme (ARWSS) and Swajaladhara Scheme.

Accelerated Rural Water Supply Programme (ARWSP)

This is a centrally sponsored scheme which is jointly funded by the Government of India and the State in varying proportions depending on the nature of components of the scheme. It supports creation of spot sources for safe drinking water near the targeted habitations. The scheme also addresses issues pertaining to water quality. The State Government has accorded high priority to testing water resources, particularly for fluoride, salinity and iron. The action plan for monitoring water quality includes: (i) monitoring and surveillance of water quality within the appropriate institutional framework, (ii) integration of community water supply projects with hygiene education and sanitation, (iii) participation of the users in water quality monitoring and surveillance and developing necessary competencies for participation from within the community, and (iv) dissemination of technological solutions to tackle water quality problems.

Quality Monitoring and Surveillance through Submission Projects

Activities under this programme are aimed at water quality testing at the time of commissioning of the PWS Projects and providing alternative water supply through submission projects. Submission Projects operate in areas where occurrence of fluoride, salinity and iron in ground water are beyond permissible limits. Government of India provides funds for implementation of such projects. The programme is implemented at three levels: State, district and grassroots. By 2008-09, there were 1,581 projects under this scheme, out of which 887 had been commissioned and the remaining 694 projects are in different stages of progress. Two new laboratories have been made functional at Bhanjanagar and Rairangpur. Field test kits are provided at GP levels to test water samples at the grass-root level.

Consultation on Fluoride Problem Mitigation

To provide safe drinking water in the fluoride affected habitations of Nuapada district, studies were undertaken to assess availability, quality and quantity of drinking water in the driest period of the year and traditional water use practices of the local people for each habitation. On the advice of the Fluoride Task Force, field functionaries explored cost effective local solutions to the drinking water problem in all fluoride affected habitations. Dilution and open wells comprised short-term solutions. In the long run, drinking water supply for the affected habitations need be made from the nearby medium irrigation projects and rivers.

Bharat Nirman

Provision of safe drinking water in rural areas is one of the activities under Bharat Nirman. Physical targets and achievements under this programme from 2006-07 to 2009-10 are presented in Annexure 8.29 which indicates that 3,357 uncovered habitations, 42 schools and 2,114 quality affected habitations were covered in 2009-10.

8.3.2 Rural Sanitation

Sanitation is an essential requirement for healthy living. Several initiatives have been taken to improve sanitations in rural areas.

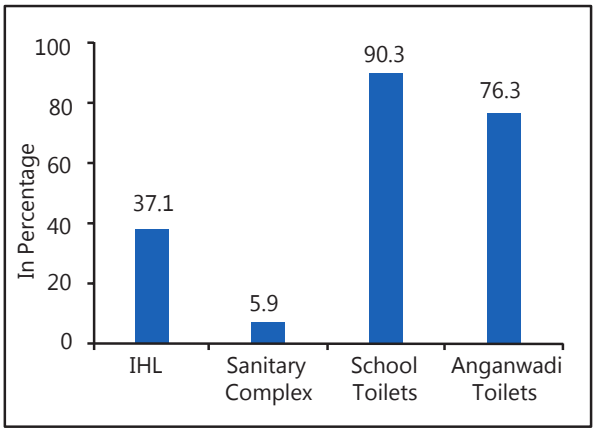
Total Sanitation Campaign (TSC)

The TSC under the National Sanitation and Water Mission is a Millennium Development Goal (MDG). The programme is currently implemented in all 30 districts. Besides creating awareness among people to demand sanitation, the campaign offers a mix of incentives and investment. However, this scheme has covered only 37 percent of rural households with cost effective usable toilets. The revised cost estimate of the project is Rs. 1,313.20 crore, out of which the central share is Rs. 849.02 crore, state share is Rs. 336.17 crore and beneficiaries' contribution amounts to Rs. 128.00 crore. The financial details of the scheme are given in Annexure 8.30. Year-wise achievements of the total sanitation campaign are presented in Annexure 8.31. Physical achievements under the programme by 2009-10 are shown in Figure 8.28. District-wise status of individual household latrines, school toilets and anganwadi toilets is presented in Annexure 8.32, which indicates that Bargarh district has performed best with achievement of 76 percent targets, while Nabarangpur district has made lowest achievements (17 percent). In case of toilets in schools, eleven districts reported 100 percent achievement and under the anganwadi toilet programme, 10 districts reported 100 percent achievement.

Nirmal Gram Puraskar (NGP)

To encourage full sanitation coverage, eradicate the habit and practice of open defecation and maintain cleanliness, the Government of India has launched Nirmal Gram Puraskar (NGP). Awards are given

Figure 8.28: Achievements under Total Sanitation Campaign, 2010



to Gram Panchayats, Panchayat Samitis and Zilla Parishads where there is no open defecation, and all households as well as institutions like schools, anganwadi and ICDS centre have access to toilets. By the end of 2008-09, 135 Gram Panchayats (GP) including 20 in Puri district, 19 in Balasore and 13 in Cuttack were given the award.

8.3.3 Urban Water Supply and Sanitation Programmes

The Public Health Engineering Organisation (PHEO) and the Orissa Water Supply and Sewerage Board (OWSSB) look after water supply and sewerage schemes in urban areas. The OWSSB plans and executes major water supply and sewerage schemes and after completion, hands over the same to the PHEO for operation, maintenance and management. The supply and maintenance of piped drinking water systems are looked after by PHEO in all urban local bodies (ULB) except Paradeep. At present, about 773.82 million litres of drinking water is supplied every day through the piped water supply system and benefit 44.60 lakh people. About 12.40 lakh urban population are served through 217,586 house connections and balance 32.20 lakh by more than 21,084 stand posts. Besides, about 22,683 hand pump tube wells function in different ULBs to cater to water demand during non-supply hours and in areas uncovered by the piped water supply system.

During 2009-10, 396 water supply projects have been taken up with a budget provision of Rs. 25.37 crore, of which 180 projects were completed and Rs. 25.31 crore were spent. Further, Rs. 2.50 crore was provided for sinking 200 hand pumps / tubewells and 145 sewerage works of which all targeted hand pumps tube wells and 93 sewerage works have been completed with an expenditure of Rs. 1.50 crore,. The achievements of PHEO during 2009-10 are presented in Annexure 8.33.

RLTAP Water Supply Schemes

In KBK districts, 17 water supply schemes in 17 ULBs have been approved at an estimated project cost of Rs 93.36 crore. These schemes are expected to benefit about 7.04 lakh people. Two projects at Koraput and Rayagada have been completed and Rs. 11.07 crore has been utilised during 2009-10.

8.4 Welfare Programme

8.4.1 Child and Women Welfare

There are 53.59 lakh children below the age of 6, constituting 14.6 percent of the State population as per the 2001 census. The Government implements a number of programmes for welfare of children and women.

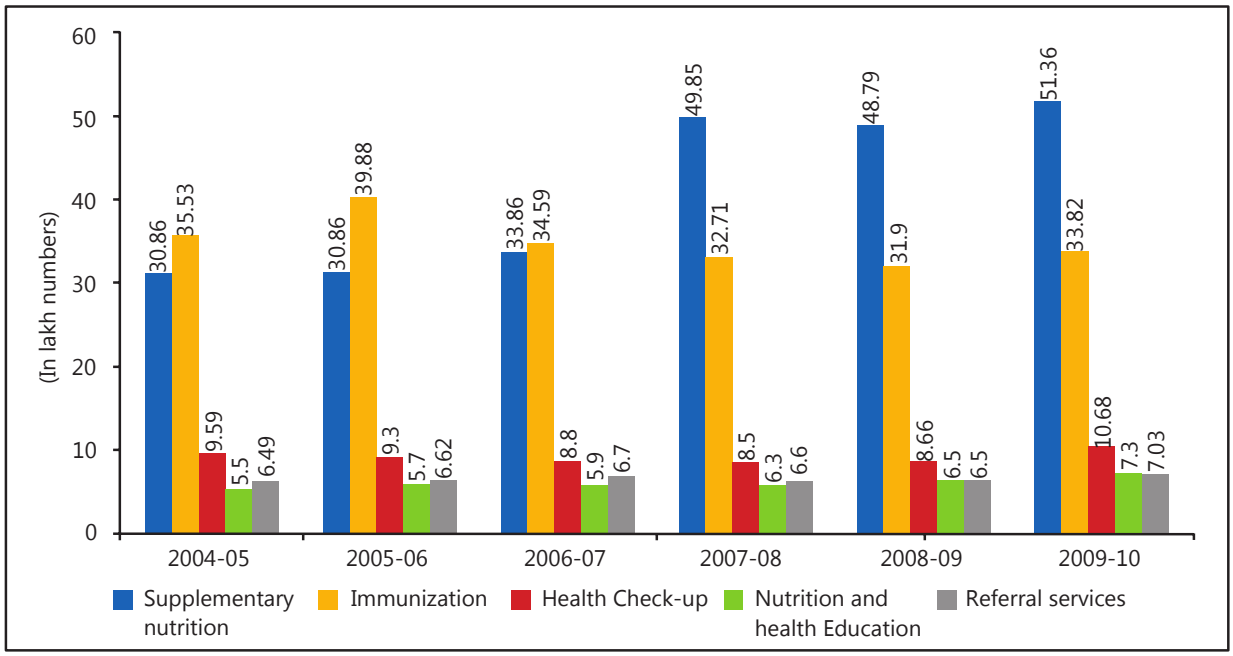
Integrated Child Development Scheme (ICDS)

This programme was launched in 1985 and now covers all blocks and twelve urban local bodies of the State through 60,918 Anganwadi centres (AWC) and 10,216 mini Anganwadi centres. It provides a package of six services to children below the age of 6, pregnant women and nursing mothers. These are: (i) supplementary nutrition, (ii) immunisation, (iii) health check-up, (iv) referral services, (v) non-formal pre-school education, and (vi) nutrition and health education. Figure 8.29 shows the trend of coverage of beneficiaries between 2004-05 and 2009-10. Annexure 8.34 gives more details. During 2009-10, Rs.335.30 crore was made available for this programme under the Central Plan. As on 31st March, 2010, ICDS covers 55.14 lakh beneficiaries (47.17 lakh children and 7.97 lakh women), were covered under ICDS through 57,243 AWCs and 6,781 mini AWCs.

Supplementary Nutrition Programme (SNP)

With a view to improving health and nutritional status, children in the age group of 6 months to 6 years, pregnant women and lactating mothers are given nutritional support for 300 days a year. This is a centrally sponsored scheme with cost sharing between the Centre and State in the proportion of 50:50. During 2009-10, the total number of beneficiaries under this scheme was 5,135,677, out of which 4,334,733 were normal, 32,243 were malnourished, and 768,701 were pregnant women and lactating mothers. Each beneficiary was given nutritious food. These ration costs have been revised upward to respectively Rs. 4, Rs. 6 and Rs. 5 for normal children, malnourished children and women from 2009-10 onwards. The State has launched a new initiative, called the Nutrition Operation Plan, in 15 high burden districts with large tribal populations.

Figure 8.29: Coverage of ICDS Beneficiaries in Orissa



The State Government provides rice-based nutritional support to 4,387,271 beneficiaries in 37,483 AWC and 4,029 mini AWC of 294 ICDS projects in 27 districts. In three KBK districts, namely, Koraput, Nabarangpur and Malkangiri, World Food Programme (WFP) supplied ready to eat food under the nomenclature of India-mix to 500,221 beneficiaries in 32 ICDS projects in 2009-10.

Immunisation

To reduce the Infant Mortality and Maternal Mortality Rates, the Universal Immunisation Programme is implemented in the State. Under the programme, children below 6 years of age are inoculated for prevention of contagious diseases like TB, diphtheria, whooping cough, tetanus, poliomyelitis and measles. The immunisation programme has been further strengthened through ICDS. The Anganwadi workers (AWW) posted in ICDS blocks and Auxiliary Nurse Midwives (ANMs) posted in sub-centres play an active role in this programme. The National Pulse Polio Programme is implemented throughout the State with the goal of making the State polio-free by immunising infants and children aged between 0-5 years. Immunisation of pregnant women against tetanus also reduces maternal and neonatal mortality. Annexure 8.35 indicates the coverage of immunisation programmes in the State from 2003-04 to 2009-10.

Nutrition and Health Education (NHEd)

NHEd disseminates information on basic health, nutrition, child care and development, infant feeding practices, utilisation of health services, family planning and environmental sanitation. This is imparted through counselling sessions during home visits on fixed immunisation days and in gatherings of women's groups and mothers' meetings in the area. All women in the age group of 15-45 are covered under this programme so that they can look after their own health, nutrition and development needs as well as those of their children and families. Annexure 8.34 details the programme coverage from 2004-05 to 2009-10.

Health Check-ups

This includes: (i) ante-natal care of expectant mothers, (ii) post-natal care of nursing mothers and care of newborns and (iii) care of children under six. Various health services, provided by AWWs and PHC staff, include regular health check-up's recording of weight, immunisation, addressing malnutrition, treatment of diarrhoea, de-worming and distribution of simple medicines. At Anganwadi centres, children, adolescent girls, pregnant women

and nursing mothers are examined at regular intervals by health functionaries like the Lady Health Visitor (LHV) and ANM who diagnose minor ailments and distribute simple medicines. They are a link between the village and PHC. During 2009-10, 10.68 lakh children and mothers were covered under the programme.

Referral Services

During health check-ups and growth monitoring, identified sick or malnourished children in need of prompt medical attention are provided referral services. AWW is oriented to detect disabilities in young children. They enlist all such cases in a special register and refer them to medical officers. The effectiveness of this service depends on timely action, co-operation from health functionaries and willingness of families to avail of these services. In 2009-10, 7.05 lakh children, pregnant women and nursing mothers were been provided referral services through AWC. Coverage of the programme over the last seven years has been summarised in Annexure 8.34.

Non-formal Pre-School Education

Pre-school education kits with toys and different kinds of educational materials are provided to every AWC each year at a cost of Rs. 1000 per kit. During 2009-10, 16.08 lakh children in the 3-6 year age group were enrolled in pre-schools and 14.5 lakh attended. Figure 8.30 indicates the achievements of the programme from 2004-05 to 2009-10.

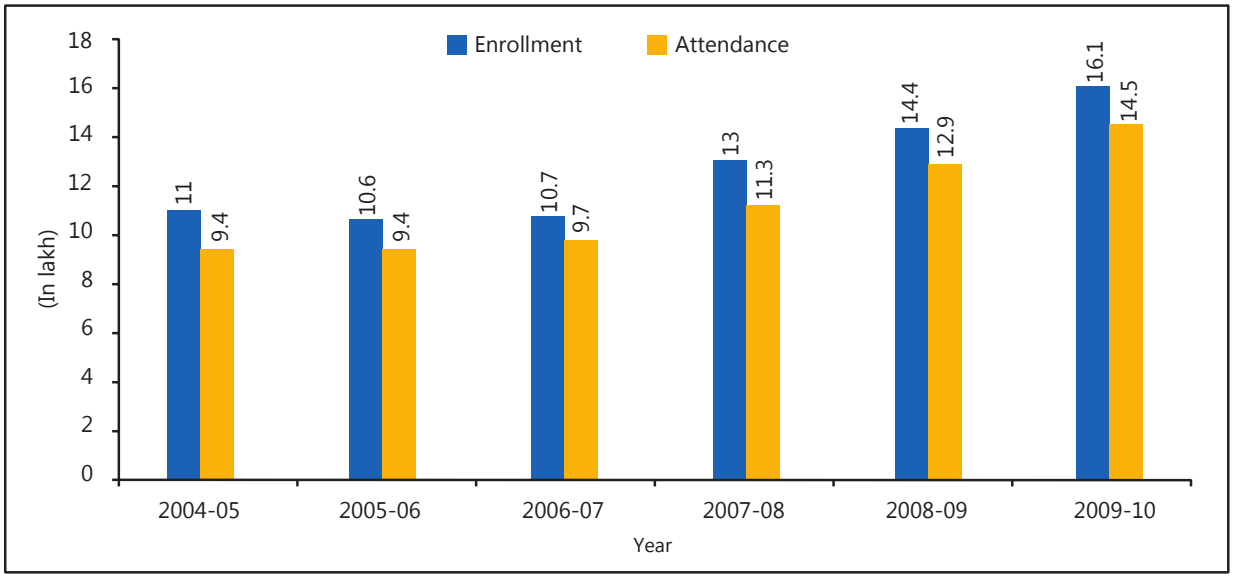
Orissa State Council for Child Welfare (OSCCW)

Orissa State Council for Child Welfare is the nodal agency in the State to coordinate schemes, programmes and activities relating to children in difficult circumstances. It scrutinises applications of deemed orphans relating to 'adoption' under the guidelines prescribed by the 'Central Adoption Resource Agency. There are six Balashrams (orphanages) and nine Anganwadi Training Centres in the State, which function under the Council's supervision.

Orphanges

Children under the category 'in need of care and protection' are admitted and maintained in childcare institutions (orphanages) for being mainstreamed in society. In addition to general education, they are imparted different kinds of vocational training. Steps are taken for their overall development: physical, mental, intellectual and moral. They are taught yoga, music and sports. To supervise their home tasks and clarify doubts from text books, retired head-masters and experienced teachers are engaged in the orphanages. One hundred thirty-two childcare institutions that accommodate inmates, both boys and girls in the age group of 18 - 25 are managed by different NGOs and OSCCW all over the State.

Figure 8.30: Enrollment and Attendance of Pre-School Children



Programme for Street Children

The objective of this programme is to protect children from destitution and facilitate their withdrawal from life on the street. The target group under this programme is essentially children without house and family support, who are driven to streets and are especially vulnerable to abuse and exploitation.

Juvenile Justice

The Government of India has amended the Juvenile Justice (C&P of Children) Act, 2000 and enacted a more child friendly JJ (C&P of Children) Act, 2006. The Act provides for proper care and protection to children for their ultimate rehabilitation. There are fifteen Observation Homes in the State, out of which twelve homes are run by NGOs and the rest by the State Government. Four Special Homes and Observation Homes have been established, in which children are kept till they are released.

A Child Welfare Committee (CWC) was constituted in each district in 2003. Twenty-five CWCs have been reconstituted. There are 85 Childcare Institutions (Orphanages) run by the State Government for care, maintenance and rehabilitation of destitute children and children 'in need of care and protection'. The State Government has declared 46 Childcare Institutions as Children's Homes spread all over the State. 'Children in need of care and protection' during any enquiry are given shelter and are looked after by these Children's Homes. Besides, they are given treatment, education, training and help for rehabilitation.

Adoption

A State Adoption Cell has been constituted for the promotion and monitoring of child adoption activities in the State. Grant-in-aid is given by the Government of India to NGOs for running Homes for Infants (Sishu Grehas) to promote adoption within the country. There are 12 Sishu Grehas in the State renamed as Specialised Adoption Agencies. Besides, there are three placement agencies for inter-country adoption.

8.4.2 The Handicapped

As per the 2001 census, there were 10.21 lakh disabled persons in Orissa, out of which 5.14 lakh (50.34 percent) were visually impaired, 2.81 lakh (24.58 percent) orthopaedically handicapped, 1.03 lakh (10.09 percent) mentally retarded, 0.84 lakh (8.23 percent) hearing impaired and 0.69 lakh (6.76 percent) had defective speech. Disabled women numbered 4.52 lakh (44.27 percent). The incidence of disabled per lakh population stood at 2,775 in the State. There were more disabled among males (3,049 per lakh male population) than among females (2493 per lakh female population). The corresponding figures at all India level were 2,130, 2,399 and 1,974 respectively. The highest incidence of handicapped, 0.66 lakh (6.46 percent) is recorded in Cuttack district, followed by 0.63 lakh (6.17 percent) in Khurda district and the lowest, 0.10 lakh (0.98 percent) in Deogarh district. The 58th round of NSSO estimates in 2002 indicated a lower figure of disabled in Orissa at 2,459 per lakh population. A number of welfare schemes are implemented in the State with financial support from the Government of India and the State Government to bring the handicapped into the mainstream of the society. Some welfare schemes include: (i) disability pension under Madhu Babu Pension Yojana, (ii) special schools for children with disability, (iii) distribution of special aids and appliances, (iv) Banshree scholarships to students with disability, (v) training centres for teachers for the handicapped, (vi) rehabilitation of cured leprosy patients, and (vii) loan assistance scheme under NHFDC.

Mahila Vikash Samabaya Nigam (MVSN) has been declared the channelising agency since 1998-99 for the State in extending benefits of NHFDC to the disabled persons. By the end of March 2010, out of Rs.1, 077.78 lakh sanctioned by NHFDC for 2,617 beneficiaries, the Nigam released Rs. 966.87 lakh for 2,158 handicapped persons.

8.4.3 Emergency Feeding Programme

This is implemented in KBK districts under the Revised Long Term Action Plan (RLTAP). Under the programme, 200,000 old, infirm and indigent persons are provided food daily through AWC. The daily ration consists of 250 gm of rice, 36 gm of dal, vegetables, oil, salt and condiments comprising 812 kilocalories of energy and 21.6 gram of protein. The daily ration cost has been raised from Rs. 3.03 to Rs. 5.50 in 2010, with nutritional value of 1,060 kil0calories of energy and 23.20 gm of protein. Funds for the programme are provided from the

Special Central Assistance (SCA) for KBK districts. In between 1998-99 to 2009-10, Rs 16,782.01 lakh was allocated and Rs 15,707.81 lakh was released.

8.4.4 Social Security Measures

National Old Age Pension Scheme (NOAP)

This programme is being implemented in the State since 1995 to provide social security to the poor and destitute. It is a 100 percent Central Scheme supported under the National Social Assistance Programme (NSAP) and has been re-named since as Indira Gandhi National Old Age Pension (IGNOAP) with revised selection criteria. All persons aged 65 and above and listed as BPL families in the 2002 survey are covered under IGNOAP. The scheme covers 11.93 lakh beneficiaries each entitled to a monthly pension of Rs. 200. A provision of Rs. 25,717 lakh has been made in budget for the year 2009-10.

National Family Benefit Scheme (NFBS)

The scheme is the second component of NSAP that has been implemented in the State since 1995. Under this scheme, financial assistance of Rs. 10,000 is given to a BPL family on the death of its primary bread earner in the age group of 18-64 years. The assistance is paid to the head of the household such as the spouse, minor children, unmarried daughters and dependent parents. In case of an unmarried adult, the term household would include minor brothers and sisters. The scheme covered 33,384 beneficiaries in 2009-10 at a cost of Rs 33.38 crore.

Madhu Babu Pension Yojana

In 2008, the State introduced Madhu Babu Pension Yojana (MBPY) by merging two pension schemes: "Old Age Pension Rules, 1989" and "Disability Pension Rule, 1985". All beneficiaries of these schemes are covered under MBPY since 2008. During 2009-10, 14.08 lakh beneficiaries were covered under the scheme.

8.5 Women's Development and Welfare

Many women suffer from discrimination, illiteracy, poverty, obscurantism and exploitation in Orissa. There are acute gender disparities in terms of literacy, access to health services and other human development indicators. Figure 8.31 shows the district-wise gender gap in literacy as per the 2001 census. There were more workers among rural women (33.47 percent) than among urban women (15.45 percent) and 95 percent of the female workers were concentrated in rural areas. Figure 8.32 graphs the proportion of women in the total workforce in Orissa from 1971 to 2001. Their share in the total workforce has been consistently increasing. Further analysis indicates that the proportion of women in total main workers has increased from 16.18 percent in 1981 to 16.53 percent in 2001, while the proportion of women marginal workers as compared to total marginal workers has decreased from 85.80 percent in 1981 to 61.66 percent in 2001. This appears to be the outcome of increased literacy among women and higher participation of women in the service sector.

Women's Employment in Agriculture and Allied Activities

Women workers participate actively in farm operations like sowing, transplanting, weeding, hoeing and harvesting, whereas the majority of male workers attend to ploughing operations. Wage differentials exist among men and women for the same type of jobs. Women face wage discrimination at many work sites. As can be inferred from Annexure 8.39, the proportion of women agricultural workers (cultivators and agricultural labourers) to the total women workforce increased from 42.75 percent in 1981 to 47.07 percent in 1991, but declined to 21.43 percent in 2001. The proportion of women employees in the total workforce of the organised sector has increased from 6.7 percent in 1970 to 16 percent in 2008. Their proportion in the public sector increased from 4.1 percent in 1972 to 17.2 percent in 2008, but decreased from 18.7 percent to 9.1 percent in the private sector.

8.5.1 Government Policies and Programmes

Prevention of Dowry

The State Human Rights Protection Cell monitors dowry-related homicide, suicide and torture cases. The 'Dowry Prohibition Act' was passed by the State in 1991 when it set up a complaint committee in the Secretariat. Special instructions have been issued for initiation of disciplinary action against its employees involved in dowry offences. The State

Figure 8.31: Gender Gap in Literacy by Districts, 2001

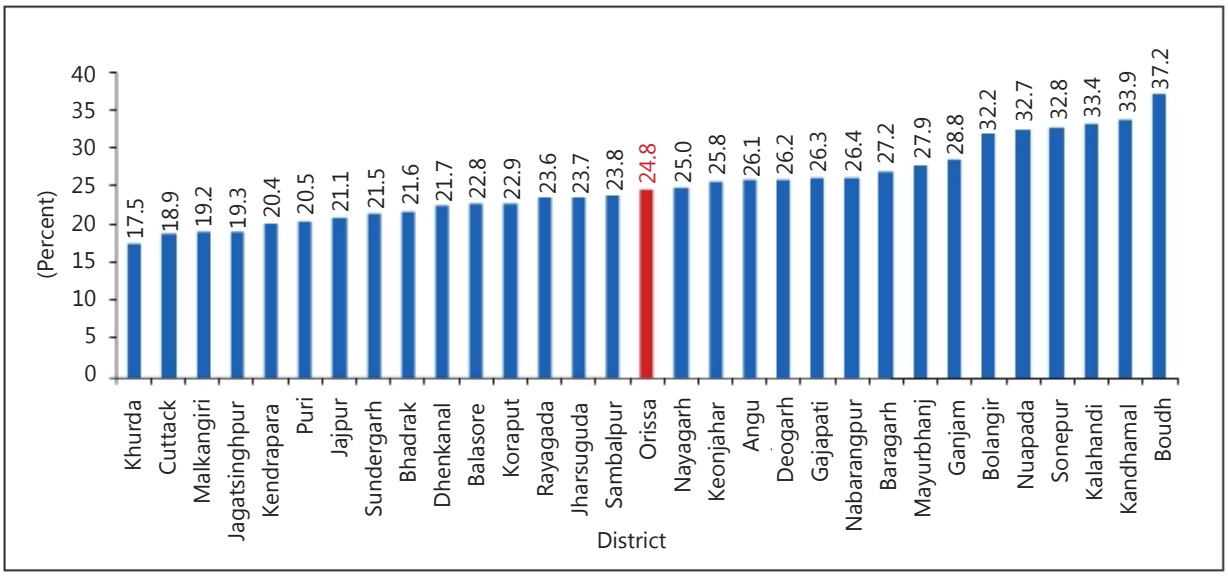
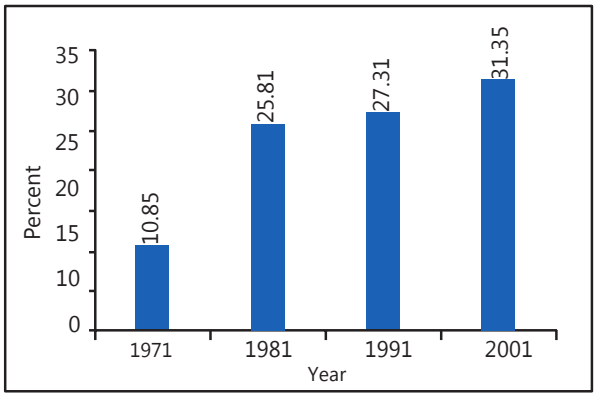


Figure 8.32: Proportion of Women in Total Workforce in Orissa, 1971-2001



has appointed Sub-Divisional Magistrates as the Dowry Prohibition Officers to act against dowry offenders. Advisory Boards have been appointed to assist them. A Committee with a senior lady officer as Chairperson has been set up at the district level to monitor the problems of sexual harassment of women in the workplace. NGOs are given financial assistance by the Government to propagate and organise dowry-less marriages, anti-dowry campaigns, seminars, workshops and street theatres to create mass awareness.

State Commission for Women

State Commission for Women is a statutory body, constituted in 1993 to sort out family disputes and problems concerning women. It also monitors the condition of women in prisons. Besides, the Commission intervenes in instances of complaints of sexual harassment and trafficking in women. During 2009-10, it received 2,464 complaints including 98 dowry deaths, 640 dowry tortures, 52 rapes, 58 kidnapping, and 37suspected deaths. Besides, there were 470 non-dowry and 1,109 other cases. Out of a total of 2,464 cases, 1,367 have been disposed off.

Orissa State Social Welfare Advisory Board (OSSWAB)

This Board was set up in 1954. It receives grants from the Central and State Governments for various welfare programmes, some of which are detailed below. During 2009-10, Rs 3 lakh was provided for OSSWAB.

Rajiv Gandhi National Creche for Children of the Working and Ailing Mothers

Registered voluntary organisations are provided financial assistance to set up crèches for children of working and ailing mothers belonging to lower income groups. Each unit consists of 25 children in the age group of 0–6 years. These children are provided with health check-ups, supplementary nutrition, and immunisation and sleeping facilities. During 2009-10, 353 voluntary organisations (rural-271 and urban-82) with 555 units availed of this programme.

Condensed Course of Education for Adult Women

This course aims to facilitate social welfare and economic empowerment of women aged 15 years and above through education and skills development. Women are given two years' non-residential education to enable them to appear for primary, middle, secondary and higher secondary examinations and a one year non-residential course for those who have failed in secondary or equivalent examinations. In 2009-10, seven institutions, including five in rural and two in urban areas with 175 beneficiaries were given support.

Awareness Programme

This programme provides a platform to women from rural areas to join together and share their ideas and experiences. During 2009-10, 118 institutions including 92 in rural and 26 in urban areas received support under this scheme and 3,350 persons benefitted.

Family Counselling Centres

These centres provide preventive, curative and rehabilitative services to women who are victims of atrocities, exploitation and maladjustment. They create awareness among children about the prevailing laws relating to them. Referral services like free legal aid, police assistance, short-stay homes, medical treatment, vocational training etc. are also provided. During 2009-10, 35 counselling centres including one in rural and 34 in urban areas were monitored and Rs. 48.91 lakh were disbursed to 2,026 beneficiaries.

Working Women's Hostels

This scheme provides hostel facilities through NGOs to working women, women undergoing one year training for employment and girl students studying in post-school professional courses for five years. There are twenty-two working women's hostels in the State with an intake capacity of 1,351. Presently, 832 women stay in these hostels. During 2009-10, three NGOs with 65 inmates have taken advantage of the programme.

Rehabilitation of Women in Distress

The objective of this scheme is to come to the rescue of women in distress and provide them training and support for their economic rehabilitation in society. Women in distress include young widows, unmarried mothers, victims of kidnapping and those driven to destitution because of prolonged illness. The scheme is operated through six NGOs with financial assistance from the State Government. Rs. 3.10 lakh was provided for the scheme in 2009-10.

Swadhar

This Central Scheme has been operating in the State since 2001-02. It provides holistic and integrated services to women in vulnerable circumstances such as destitute widows deserted by their families, women prisoners released from jail and without family support and women survivors of natural disasters who are rendered homeless and without any social and economic support. The package of services made available under the scheme includes provision of food, clothing, shelter, healthcare, counselling and legal support, social and economical rehabilitation through education, awareness generation, skill up-gradation and behavioral training. Presently 51 Swadhar Homes, managed by NGOs operate in the state with 2,725 beneficiaries.

Mahila Vikas Samabaya Nigam (MVSN)

The Nigam, a women's development corporation under Women and Child Development Department, was established as the nodal agency for implementing schemes and programmes for welfare, development and empowerment of women. In collaboration with ORMAS, an agency of the Panchayati Raj Department, it has widened the scope of marketing of products of women's Self Help Groups (WSHG) through Palishree Melas and "Sisir Saras". It provides funds for training of poor and needy women in traditional occupations to upgrade their skills and sell their products. It also facilitates loans to the disabled under the loan assistance scheme of the NHFDC. During 2009-10, Rs 20 lakh have been provided to MVSN as grant.

Mission Shakti

This campaign was launched in 2001 for holistic empowerment of women by organising two lakh women SHGs covering all revenue villages in the State by 2008. As this target was achieved by 2006, it was revised upward to 3 lakh during the mission period. Mission Shakti is an umbrella organisation extending support to different stakeholders such

Box 8.5: Status of WSHG in Orissa, 2009-10

i)	Number of WSHGs formed:	4,15,203
ii)	No. of members:	49,82,436
iii)	Credit advanced:	Rs. 1,59,582.17 lakh
iv)	Amount of savings:	Rs. 28,893.29 lakh
v)	No. of WSHGs credit linked:	4,80,045 (include repeat finance)
vi)	Federations formed:	7,842
vii)	No. of SHGs with repeat finance:	92,506
viii)	Amount of repeat finance:	Rs70,055.70 lakh

Other achievements:

- MDM programme is managed by WSHGs in 43,021 of 60,389 schools.
- 7,700 WSHGs are engaged as PDS agents for retailing and sub-wholeselling of kerosene.
- Out of 15,000 GP tanks in the State, about 6,389 tanks have been leased to WSHGs.

as banks, NGOs, WSHGs and other institutions, which work in the field of women's empowerment. It has also provided opportunities to women for self-employment by making use of their own and acquired skills. Information about women's Self-Help Groups (WSHG) in the State is given in Box 8.5.

Kishori Shakti Yojana (KSY)

This Central Government Scheme is implemented through the State's ICDS infrastructure and targets 11-18 year old adolescent girls to address their needs of self-development, nutrition, health, literacy, numerical and vocational skills. Balika Mandals are constituted at anganwadi level to execute the scheme. In 2009-10, 2,014,600 adolescent girls were covered in all 326 ICDS projects with a budgetary provision of Rs 145 lakh.

8.6 Welfare of Scheduled Castes and Scheduled Tribes

ST and SC taken together constitute about 38.66 percent of the State's total population. Out of 635 tribal communities in India, 62 are found in Orissa and 13 are primitive tribal groups (PTG). The State Government implements several programmes for welfare and development of ST and SC communities.

8.6.1 Status of Scheduled Tribes (ST)

The ethos, ideology, world view and cultural heritage of tribal communities are rich and varied. They range from nomadic food gatherers and hunters to skilled and settled agriculturists and horticulturists. Tribal areas present diverse socio-economic panorama. Tribals speak as many as 74 dialects. The PTG in Orissa include Bonda, Chuktia, Bhunjia, Didayi, Dongaria Kandha, Juang, Kharia, Kutia Kandha, Lanjia Soura, Lodha, Mankadia, Paudi Bhuyan and Souras. These communities are considered a special category in view of their distinct social, cultural and occupational practices and traits. The PTG are distinguished from other tribal communities for their pre-agricultural economy, low levels of literacy, isolated habitations and other characteristics. It is encouraging to note that their population, based on a survey conducted in 2007 has increased to 78,519 from 70,657 in 2001. They reside in parts of twenty blocks of twelve districts.

The ST population of Orissa increased from about 42.24 lakh in 1961 to 81.45 lakh in 2001. However, their proportion in the total population decreased from 24.07 percent in 1961 to 22.13 percent in 2001. Orissa has the 3rd largest concentration of tribal population in the country. The decadal population growth rate of ST since 1961 has been less than that for the total population. About 94.5 percent of STs in Orissa reside in rural areas as against 91.7 percent in India. As per the 2001 census, the sex ratio among ST at 1003 is higher than the State average of 972 and the national ST ratio of 973. The decadal growth rate of ST population in Orissa is lower

(15.82 percent) than that at the all-India level (24.5 percent). Annexure 8.41 provides demographic and other details.

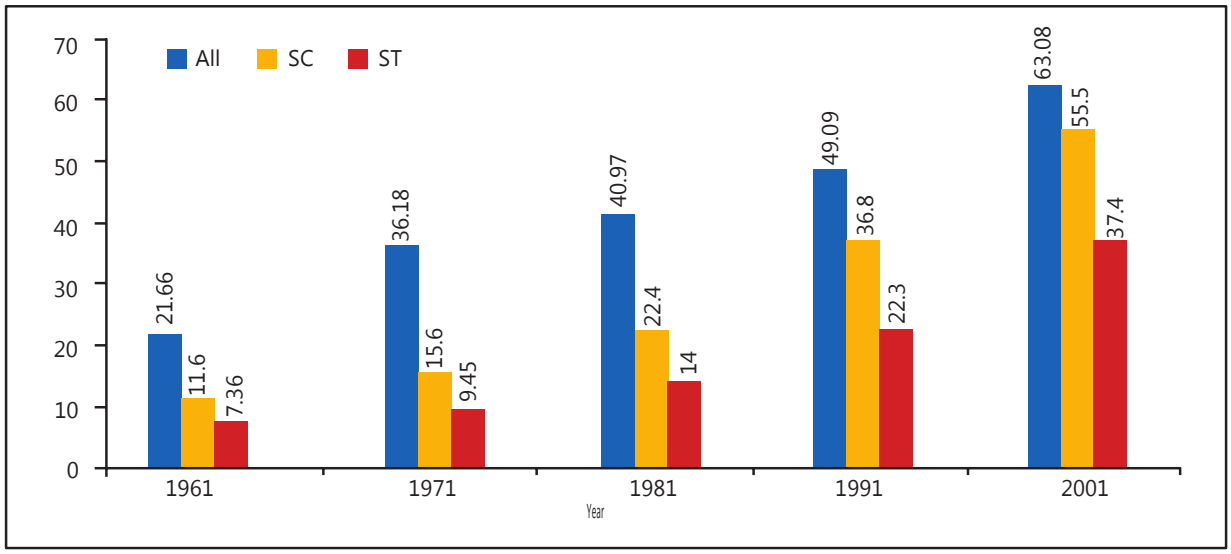
Nine districts having 45 percent or more ST population as per the 2001 census are Malkangiri, Mayurbhanj, Rayagada, Nabarangpur, Kandhamal, Gajpati, Sundargarh, Koraput and Keonjhar. The ST population in these districts accounts for two-thirds (i.e., 66 percent) of the State ST population and ranges from 25 percent to 45 percent of the total population of the five additional districts of Nuapada, Sambalpur, Deogarh, Jharsuguda and Kalahandi. These 14 districts together have 80.02 percent of the total ST population of Orissa. Although Mayurbhanj district has the maximum ST population (12.58 lakh), the proportion of ST population in the total population is highest in Malkangiri district (57.43 percent). There is a wide inter-district variation in the decadal growth rate of ST population, which was highest in Jagatsinghpur district (72.7 percent) and lowest (1.6 percent) in Bolangir district. It is argued that births alone cannot account for higher decadal growth rate of the tribal population in coastal districts. This indicates higher inter-district migration of ST population to coastal districts in search of better livelihood opportunities. The decadal growth rate of ST population in rural Orissa is 30.3 percent and in urban areas it is 14.1 percent.

8.6.2 Status of Scheduled Castes (SC)

The SC population in Orissa increased from 33.11 lakh (15.76 percent) in 1961 to 60.82 lakh (16.20 percent) in 2001. In 1961, females outnumbered males among SC, but the situation reversed in subsequent census years. As a result, their sex ratio declined from 1,015 in 1961 to 979 in 2001 as against 972 for all communities in Orissa. Most SCs still live in rural areas, the rural SC population being 89 percent in 1991. There are 93 SC communities in the State. The districts with a high concentration of SC population are Ganjam (5.87 lakh), Cuttack (4.47 lakh), Balasore (3.81 lakh) and Jajpur (3.74 lakh), while Gajapati district (0.39 lakh) has the minimum concentration. The proportion of SC population to the total district population is highest (23.62 percent) in Sonepur district. Panas with 10.79 lakh persons (17.73 percent) are the most dominant SC community.

As shown in Annexure 8.42, the decadal growth rate of SC population in the State was less than the state average till 1981, after which the trend reversed. The decadal growth rate of SC population at 18.60 percent in 1991-2001 was lower than the all-India average of 20.60 percent and that for rural and urban Orissa was 27.70 percent and 17.50 percent respectively. There have been wide inter-district variations in the decadal growth rates of SC population. Boudh district witnessed the highest growth rate (31 percent), while Gajapati district registered a negative growth rate (-2.4 percent).

Figure 8.33: Literacy Rates in Orissa by communities, 1961-2001



8.6.3 Literacy

The literacy levels by gender and social groups have been analysed in Chapter 7. As indicated in Figure 8.33, ST had the lowest literacy rate of 37.37 percent in 2001. SC communities in Orissa have generally done better, with a literacy rate of 55.53 percent in 2001. Growth of the SC and ST literacy rates in the State has been traced in Annexure 8.43. The SC literacy rate has substantially improved between 1961 and 2001 and the gap between SC and overall literacy rates has been declining at a faster rate than that between ST and total literacy rates. But, the difference between literacy rates of SC and ST has increased from about 4 percent in 1961 to around 18 percent in 2001. Figure 8.34 compares literacy rates in Orissa by communities from 1961 to 2001.

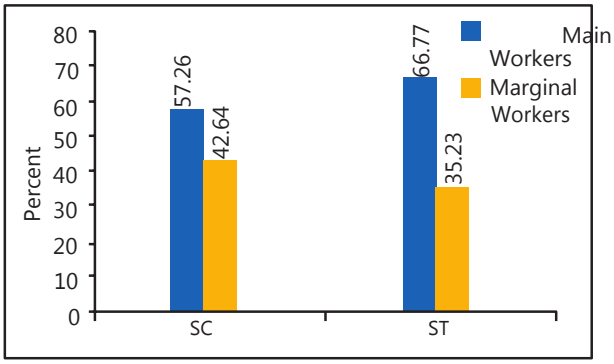
There are wide inter-district differences in ST literacy rates. Performance of the northern districts has been better than that of the southern districts. As against 57.23 percent literacy rate of ST in Jharsuguda, the ST literacy rate for Malkangiri district was only 14.69 percent in 2001. It may be seen that the literacy rate of ST women is very low at 23.37 percent in 2001, compared to 40.33 percent of SC women and 50.51 percent of all women in Orissa. Though literacy rates of both ST and SC women have increased over the years, the increase is less than that for their male counterparts. As a result, the gap between male and female literacy rates of ST increased from 11.27 percentage points in 1961 to 28.11 percentage points in 2001. In the case of SC, the gap kept on increasing from 16.38 percentage points in 1961 to 31.67 percentage points in 1991, but declined in 2001.

8.6.4 Occupational Patterns

As per the 2001 census, there were 3,990,007 workers among ST, out of which 57.36 percent were main workers and the rest were marginal workers. The total number of workers among SC was 2,392,067 - 66.77 percent being main workers and the rest being marginal workers. Figure 8.34 shows that there are proportionately more main workers among SC and more marginal workers among ST.

Among the tribals, cultivators account for 33.35 percent and agricultural labourers 46.85 percent

Figure 8.34: Distribution of Main and Marginal Workers by Communities, 2001



of total workers. Of the total SC workers, 18.17 percent were cultivators and 45.66 percent were agricultural labourers. Most of the tribal and SC cultivators are marginal and small farmers or share croppers. Other important occupational groups are weavers, fishermen and cobblers. There are 15 SC communities in the category of sweepers and scavengers. Apart from nomadic and semi-nomadic groups among SCs, there are de-notified communities identified as Special Vulnerable Groups (SVG).

8.6.5 Government Projects and Programmes

Enhancing welfare and development of ST and SC communities has been the prime objective of development policies of both the Government of India and State Government. Several special programmes have been launched to uplift the socio-economic status of both ST and SC communities. Some such programmes are briefly described below:

Tribal Sub-Plan (TSP)

About 44.70 percent area of Orissa has been notified as scheduled or TSP area. It extends over 118 blocks in twelve districts and covers 55.46 lakh ST population, which is 68 percent of the total tribal population of the State. There are twenty-one Integrated Tribal Development Agencies (ITDA) in the State to implement various tribal welfare programmes in tribal sub-plan areas. Box 8.6 lists ITDA areas in Orissa. TSP approach envisages integrated development of tribal areas. All programmes in TSP areas, irrespective of their sources of funding, operate in unison. The objective is to bring the area at par with the rest

of the State and raise the level of welfare of ST. The original strategy of the TSP approach has been reoriented to focus on employment and income generating activities and to bring about incidental infrastructure development.

Box 8.6: ITDA Areas in the State

The whole of Mayurbhanj, Koraput, Malkangiri, Nabarangpur, Rayagada, Sundergarh and Kandhamal districts. Other areas include R. Udayagiri Tehsil, Gumma and Rayagada blocks, Sorada Tehsil excluding Gazabadi and Gochha Panchayats of Ganjam district, Kuchinda Tehsil of Sambalpur district, Telkoi, Keonjhar, Champua and Barbil Tehsils of Keonjhar district, Th. Rampur and Lanjigarh blocks of Kalahandi district and Nilagiri block of Balasore district.

Special Central Assistance (SCA) to TSP

The Government of India has been providing Special Central Assistance (SCA) as an additional funding to TSP for furthering income generating activities and creating infrastructure to assist tribal households. Rs. 347.62 crore was received and utilised under SCA to TSP during the Tenth Plan period.

Integrated Tribal Development Agency (ITDA)

ITDA was set up in the mid-1970s as nodal tribal development agencies for plan formulation, programme implementation and operationalisation of various development programmes in TSP areas. During 2009-10, Rs. 67.40 crore was released as SCA to ITDA and 937 projects were completed covering 51,189 families.

Grants under Article - 275(1) of the Constitution of India

As per the provisions of Article 275 (1) of the Constitution of India, the Ministry of Tribal Affairs gives annual grants to States to promote the welfare of ST. The assistance covers the entire TSP area. Under this Scheme, 100 percent grants are given to meet the cost of specific projects for tribals and raise the level of administration of scheduled areas. The proportion of ST population is the basis for allocation of grants to States. Orissa has been receiving Rs 35–40 crore annually. Projects like Ekalavya Model Residential Schools (EMRS) from Classes VI to XII, roads, bridges, minor irrigation projects, hostel buildings, educational complexes, drinking water facilities and electrification of tribal bastis are usually implemented under the programme. Release of funds by year is given in Figure 8.35. In 2009-10, 387 projects were completed utilising Rs. 23.68 crore released under Article 275 (1).

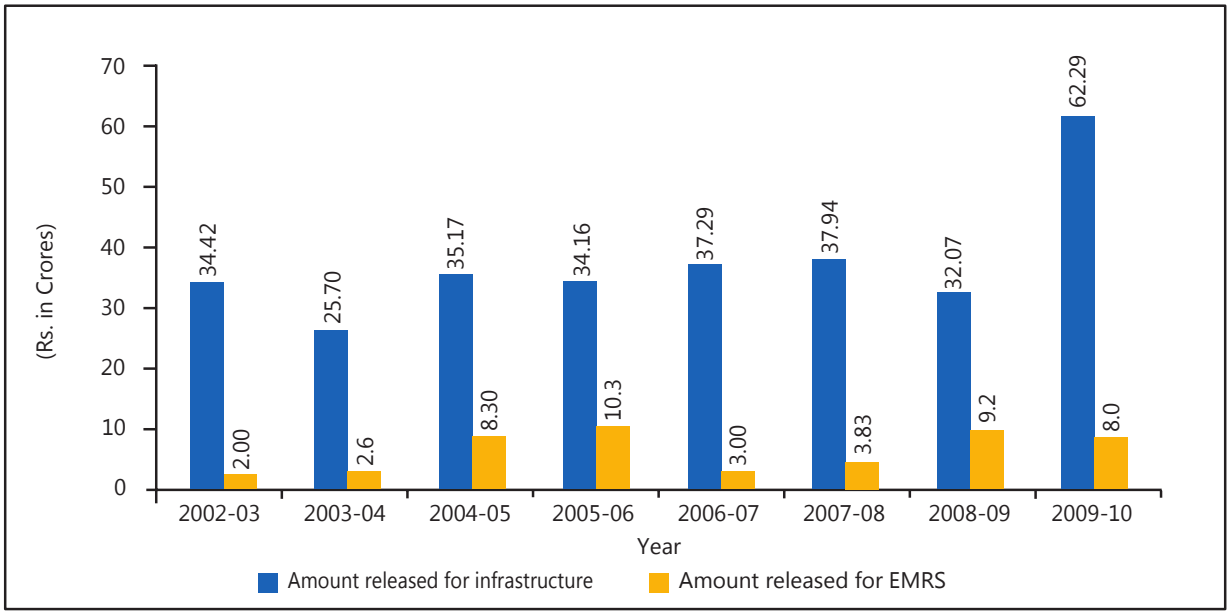
Modified Area Development Approach (MADA)

Adopted during the 6th Plan, this programme aims at the development of tribal populations residing outside TSP areas in contiguous patches having a population of 10,000 or more, of which, at least 50 percent are tribals. There are 46 MADA pockets in 47 blocks of 17 districts. These MADA pockets cover 5.68 lakh population. Individual family oriented income-generating schemes for ST communities and critical infrastructure development programmes are implemented in these pockets. There is a MADA Project Level Committee for each MADA pocket under the chairmanship of the Sub-Collector and including officials and non-officials, local MLAs and MPs as members. The committee draws up programmes and oversees their implementation. During 2009-10, Rs. 6.10 crore were spent under this programme out of SCA, benefiting 4,772 ST households in 243 completed projects.

Clusters

This approach was introduced during the 7th Plan in order to bring smaller areas with tribal concentrations into the mainstream of development. Contiguous areas with at least 5,000 population and 50 percent tribal concentration are identified as clusters. There are fourteen such clusters spread over thirteen blocks in ten districts with 62,021 tribal population. The administrative arrangements for these fourteen clusters are similar to those of MADA pockets. For the development of tribals in these clusters, SCA is provided for the implementation of income generating schemes in group mode and through community benefit oriented programmes. This is in addition to normal development programmes. During 2009-10, Rs. 70 lakh was released and utilised and 16 projects, benefiting 546 ST families were completed.

Figure 8.35: Fund Flow to Orissa under Article 275 (1)



Micro Projects

Seventeen Micro Projects aim at all-round development of 13 primitive tribal groups (PTGs) in the State - 13 are within the scheduled area and 4 are located outside. The Government of India has re-evaluated the strategy for development of PTGs during the 11th Plan period (2007-12) and formulated a conservation-cum-development (CCD) plan. This is a modest attempt for holistic development of PTGs. It addresses the critical needs of the PTG by improving infrastructure and providing basic facilities within their easy reach to eliminate poverty, increase literacy levels, improve health status and quality of life, and conserve their traditional culture. The CCD plan for the State during 2007-12 has been budgeted at Rs. 84.25 crore. For this purpose, the Central grant of Rs.64.46 crore is expected during the Plan period. The gap of Rs. 19.80 crore has to be bridged through programmes of various line departments. The Government of India has released Rs. 22.43 crore in 2007-08 and 2008-09. In 2009-10, Rs. 2 crore was spent on 79 projects for 2038 ST families.

Dispersed Tribal Development Programme (DTDP)

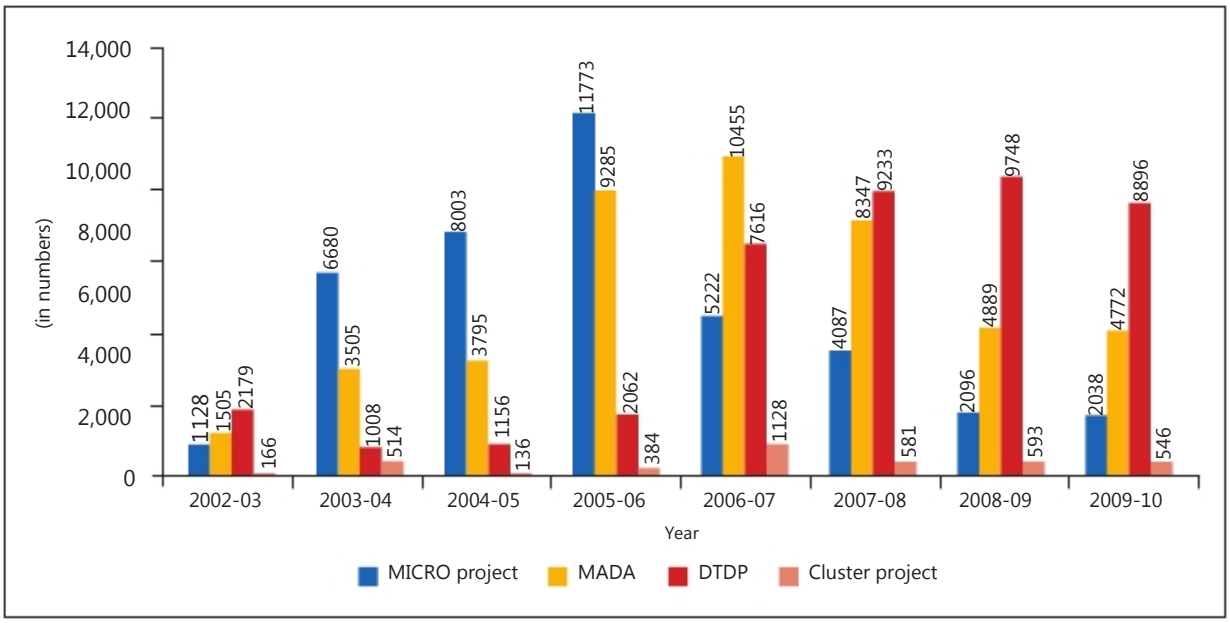
About 27 percent tribal population is dispersed all over the State outside the aforesaid concentrated areas and is at different stages of socio-economic development. For this population, DTDP is being implemented and has the following salient aspects: (i) to provide margin money for various bankable income generating schemes under the margin money loan programme, (ii) to initiate community minor irrigation projects such as LIP, WHS and the like, (iii) to conduct training programmes for promoting self- employment and wage- employment, and (iv) to enrol ST households as members of cooperatives. Rs. 12.00 crore SCA was released and 8896 families were covered during 2009-10.

Figure 8.36 shows the number of families covered under different programmes between 2002-03 and 2009-10. Details of the achievements of different programmes are given in Annexure 8.44.

Special Plan for KBK districts

The Special Plan for KBK districts, i.e., the Revised Long Term Action Plan (RLTAP) started in 1998-99 to promote general and female literacy among ST and SC by providing scholarships, hostel accommodation and other facilities. Under this scheme, special focus has been on promoting literacy of ST female and male and improving livelihood opportunities for them.

Figure 8.36: Families Covered under Different Programmes



In order to spread education among ST and SC children, particularly among girls, the State Government has taken up a number of measures like free education, award of scholarships, boarding facilities and free distribution of text books. During 2009-10, 1,597 schools and 3,451 hostels functioned in the State under the administrative control of the ST and SC Development Department. Most of these schools are residential in nature. Category-wise schools and hostels functioning under the administrative control of the ST and SC Development Department are given in Annexure 8.46.

As per the decision of the State Government., ST girls' hostels and primary school hostels have been opened in 109 Ashram Schools and 142 sevashrams. The remaining sevashrams located in thickly populated areas and in places where Upper Primary/Middle English schools are not available within 3 km have been upgraded into Upper Primary schools (up to Class-VIII) from the academic year 2008-09. OPEPA provides Sikhya Sahayaks for upgraded classes and allots funds for the construction of class rooms in these schools. With a view to encouraging teaching tribal dialects, tribal language teachers have been appointed to teach in tribal languages like Santali, Saura, Munda, Bonda, Kui, Kuvi, Juang, Koya, Kisan and Oram in selected primary schools located in remote tribal areas.

During 2008-09, the ST and SC Development Department has opened 52 new residential girls' schools from Classes VI to X in 52 tribal blocks of 11 districts where there was no girls' high school. Each school has an intake capacity of 250 girl students. In order to provide higher education to the children of Primitive Tribal Groups, 19 educational complexes have been opened in Micro Project Areas.

Scholarships

Pre- and post-matric scholarships are given to SC and ST students to encourage them to pursue education. The SC and ST boarders studying in Classes I to X of the ST and SC Development Department schools and in Classes VI to X of the School and Mass Education Department get scholarships at the prescribed rate. Day scholars in ME and high schools are given scholarships. The Government provides post-matric scholarships at different rates for different courses. Annexure 8.47 indicates that during 2009-10, Rs. 30.69 crores have been released towards the payment of post-matric scholarships to 122,107 SC/ST students (Rs.13.61 crore to 69,401 SC and Rs. 17.08 crore to 52,706 ST students). During 2009-10, Rs. 210.64 crores have been released towards the

payment of pre-matric scholarships to 1,137,827 SC/ST students (Rs.29.50 crore to 507183 SC and Rs. 181.14 crore to 630,644 ST students).

Protection of Civil Rights of SCs and STs

- Legal aid assistance: Legal aid is being extended to SCs/STs to fight cases for establishing their rights, titles, interest and possession over disputed land and also for cases under the PCR Act, 1955 and the POA Act, 1989. In 2008-09, Rs. 60,000 was released in favour of beneficiaries, but the amount increased to Rs.1.42 lakh for one beneficiary in 2009-10.
- Inter-Caste Marriages: Cash incentives @ Rs.3, 000 per married couple are provided for inter-caste marriages between SCs and caste Hindu communities for social integration and removal of untouchability. This incentive has been revised upward to Rs. 50,000/- since 2007. During 2009-10, 197 couples received this incentive amounting to Rs. 82.60 lakh as against Rs. 45.29 lakh released in favour of 85 beneficiaries in 2008-09.
- Monetary Relief to SC/ST Victims of Atrocity: During 2009-10, monetary benefit of Rs. 45.35 lakh was released for 286 SC and 67 ST victims of atrocity, while Rs. 55.90 lakh was released in favour of 323 SC and 151 ST victims in 2008-09.
- Land Alienation: The State Government has amended the Orissa Scheduled Areas Transfer of Immovable Property (by Scheduled Tribes) Regulation, 1956, in which transfer/alienation of land belonging to ST and to non-ST persons has been completely banned. Since its inception till 2008-09, 107,903 land alienation cases were instituted, out of which 107,467 cases were disposed off and 57,103 acres of land restored to tribal families.

Poverty Alleviation Programmes for SC and ST

The incidence of poverty among ST and SC communities has been detailed in Chapter 7 and is, therefore, not discussed in detail in this Chapter. It is, however, emphasized that ST and SC have a higher proportion of people below the poverty line (BPL) than other communities. There are also other discriminations and disadvantages. Therefore, many development programmes have been devised to tackle poverty and unemployment among ST and SC communities. Annexure 8.48 shows the number of SC and ST families covered under different anti-poverty programmes during 2008-09.

Distribution of Waste Land/Ceiling Surplus Land to Landless Families

The State Government provides land to SC, ST and other poor families for agricultural purposes as well as for construction of dwelling houses. Government land up to 0.01 ac is provided to homestead-less persons. During 2005-06, project Vasundhara was launched on a mission mode to provide house sites to all homestead-less families within three years. During 2009-10, 16,826 homestead-less families, comprising 9,026 ST, 3,591 SC and 4,209 other categories were provided with house sites.

As a part of land reform measures for agricultural development and social equity, ceiling surplus land up to 0.7 acres is being allotted free of salami to landless agricultural families. Between 1974-75 and 2009-10, ceiling surplus land was distributed among 1,43,358 landless families of which 51,311.91 ac. were distributed among 49,072 SC, 66,416.39 ac. among 53,130 ST and 42,832.62 ac. among 41,156 other caste families. During 2009-10, 62.00 acres were distributed among 76 beneficiaries (12.09 acre to 14 SC, 39.18 acre to 49 ST and 0.73 ac. to other caste beneficiaries.

In addition, the State Government also allotted Government wasteland up to one standard acre to the landless poor families for agricultural purposes. From 1974-75 to 2008-09, 7,42,162 acres of Government wasteland has been distributed among 4,85,409 landless families, including 3,87,398 acres for 2,35,197 ST and 1,76,504 acres for 1,05,474 SC landless families. During 2009-10, 1,516.13 acre wasteland was distributed among 1,684 landless families for agricultural purpose and it included 741.39 ac. for 860 ST, 323.43 ac. for 331 SC and 451.31 ac. for 493 other caste families in the State.

Orissa SC and ST Development Finance Co-Operative Corporation (OSFDC)

Established in 1979-80, OSFDC aims at implementing various economic development programmes for the benefit of SCs, STs, scavengers and minorities in the State. In 2009-10, OSFDC financed Rs. 38.18 crore and 36,828 families benefitted. Amount

financed and familiies benefitted during 2005-06 to 2009-10 are given in Annexure 8.49. Programmes implemented by OSFDC include:

- SCA under Special Component Plan for the development of SC
- SCA under TSP for dispersed tribals outside ITDA, MADA, Micro Projects and Cluster areas
- Self-employment scheme for rehabilitation of manual scavengers (SRMS)
- Term loan scheme for SC, ST, scavengers and minorities with assistance from National SC and ST Finance Development Corporation (NSFDC), NationalScheduledTribesFinanceDevelopment Corporation (NSTFDC) and National Safai Karamchari Finance Development Corporation (NSKFDC).

Liberation and Rehabilitation of Scavengers

As per the survey conducted in June 2008, there were 16,386 scavengers with dependents in the State to be rehabilitated. To rehabilitate this group, this self employment scheme is being implemented in the State since 2008-09. During 2007-08, OSFDC received Rs. 19.65 crore under bankable income generating schemes (IGS) and Rs. 7.92 lakh for self-employment training programmes. From this amount, Rs. 4.00 crore was spent under the bankable IGS for rehabilitation of 3,418 scavengers and their dependents and Rs.3.12 lakh for training of 26 scavengers in that year. In 2008-09, Rs. 10.50 crore was utilised under the bankable IGS for rehabilitation of 8,531 scavengers and Rs. 5.25 lakh to organise training programmes for 43 scavengers and their dependents.

Orissa Tribal Empowerment and Livelihood Programme (OTELP)

After the closure of the International Fund for Agricultural Development (IFAD) assisted by the Orissa Tribal Development Programme (OTDP) in Kasipur block, a new initiative called, "Orissa Tribal Employment and Livelihood Programme (OTELP)" has been implemented in the State since 2004-05 with financial assistance from the Department For International Development (DFID), IFAD and the World Food Programme (WFP). This programme aims at ensuring sustainable improvement in livelihoods and food security of poor tribal households. It can be achieved through the promotion of a more efficient, equitable, self-managed and sustainable exploitation of natural resources at the disposal of tribals through off-farm/non-farm enterprise development.

The programme has been implemented in thirty backward tribal blocks of seven tribal dominated districts in a phased manner. In Phase-I, 10 blocks in 4 districts covering 19,481 households in 390 villages were covered. Phase-II is in operation since 2008-09 covering the remaining 20 blocks of 7 districts. This scheme has covered 255,661 beneficiaries, of which 127,979 are men and 127,682 are women. As the scheme adopted a complete inclusion strategy, all people from the targeted villages have been included. Operation in Phase II districts started from January 2009 in 11 blocks covering 21,570 households in 316 villages. Details of achievement of OTELP are given in Annexure 8.50.

Research and Development for Tribal Culture

Academy of Tribal Language & Culture (ALTC)

Tribals speak different dialects and languages. With a view to developing these languages and their cultural heritage, the State Government has initiated a detailed study through research projects. In 1979, the Government established the Academy of Tribal Dialects and Culture (ATDC). Because of its multidimensional activities, the nomenclature of the academy was changed to the "Academy of Tribal Language and Culture" (ATLC). During 2009-10, the academy: (i) organised 8 language training programmes for primary school teachers working in TSP areas in which 198 teachers from Rayagada, Koraput, Mayurbhanj, Keonjhar districts participated (ii) published "Banana, 2009", the annual souvenir as a special volume on 'Art and Crafts of Tribal Orissa', (iii) published "Saragiphula, 2010", a collection of creative writings of tribal students and traditional tribal dances and their changing trend among 20 fascinating tribal communities of Orissa, (iv) felicitated 10 tribal luminaries (6 male and 4 female) for their excellent work on tribes.

SC/ST Research & Training Institute (SCSTRTI)

This is a premier, and an old, tribal research institute in the country which publishes the research journal titled 'the ADIVASI' (bi-annual)

under the theme-Tribal Festival of Orissa and PTGs and Tribal Development along with five books on tribal's. Its activities during 2009-10 are summarized below:

- Five research studies were undertaken and completed: (i) PESA Act (ii) Food insecurity (iii) ST and other forest dwellers Act – 2006 (iv) Low performing of schools etc.
- Empirical ethnic status studies were taken up on 7 communities namely, Khaira Paik Dora/Konda Dora Muka Dora/Nooka Dora and Kandha/Kui etc. Out of these, two have been completed and the other two are under progress.
- Evaluation studies are completed on the: (i) impact of mini irrigation projects on tribal
- Families in ITDA areas (ii) review of TSP approach in Orissa: Study on provision, implementation and outcome, and (iii) Evaluation of the WADI programme.
- During 2009-10, the Institute conducted 30 training programmes/workshops and seminars which were attended by various Government officials. It also conducted 6 National seminars.
- The Institute has a tribal museum in its sprawling campus, which is one of its star attractions. This unique and specialised ethnographic museum, showcasing many rare objects of arts and artifacts of colourful tribal communities of the State, attracts a large number of visitors, including foreign tourists. It also has a special tribal photo gallery.

Tribal Development Co-Operative Corporation of Orissa Ltd (TDCCOL)

This is apex organisation. Its field outlets include fourteen branch offices located in tribal areas. It also has 96 storage go-downs with a capacity of 39,550 MTs located in TSP areas. Its objective is to ensure fair and remunerative prices to primary tribal collectors of minor forest produce items by providing marketing linkages and granting consumption-cum-production loans to tribals in order to protect them from money lenders. After the introduction of the Non-Timber Forest Produce (NTFP) Policy in 2000, the corporation lost its monopoly in the collection of minor forest produce as well as a source of assured revenues.

In 2007-08, a one-time grant of Rs. 5 crore was given by the State Government as working capital for the procurement of NTFP and a sum of Rs. 2.15 crore was sanctioned as managerial subsidy. During 2009-10, Rs. 1.50 crore was sanctioned as managerial subsidy and Rs. 56.00 lakh was given out of SCA under the TSP scheme for the purchase of minor forest produce.

ANNEXURE 8

Annexure 8.1: Growth of Literacy in Orissa vis-à-vis India

1951	27.32	4.52	15.8	-	27.16	8.86	18.33	-
1961	34.68	8.64	21.66	5.86	40.4	15.35	28.3	9.33
1971	44.5	16.3	30.5	14.52	45.96	21.97	34.45	6.15
1981	56.45	25.14	40.97	4.79	56.38	29.76	43.57	9.12
1991	63.09	34.68	49.09	8.12	64.13	39.29	52.21	8.64
2001	75.35	50.51	63.08	13.99	75.85	54.16	64.8	13.2
2008*	76.9	59.7	68.3	8.28	80.5	62.3	71.7	10.65

Source: * NSS 64TH ROUND 2007-08
Sources: Census data 1951-2001; Orissa Human Development Report 2004

Annexure 8.2: Number of Primary Schools, Enrolment, Teachers and Gross/Net Enrolment Ratio in Orissa

1947-48	6,814	16,520	4.4	1:16	255	NA	NA
1950-51	9,801	16,525	6.3	1:20	315	NA	NA
2000-01	42,104	1,14,791	27	1:41	4,710	NA	NA
2001-02	42,824	1,16,231	27.5	1:41	4,769	98.27	87.25
2002-03	42,824	83,652	27.5	1:56	4,608	101.78	90.98
2003-04	44,416	97,175	28.5	1:54	5,214	103.48	91.51
2004-05	45,700	99,079	29.3	1:53	5,215	104.26	93.13
2005-06	45,890	1,15,351	29.5	1:40	4,602	83.59	78.58
2006-07	46,722	1,14,105	30.01	1:39	4,485	93.49	92.02
2007-08	48,402	1,23,765	31.1	1:37	4,513	96.66	84.23
2008-09	50,062	1,25,434	32.1	1:37	4,587	97.48	92.72
2009-10	52,972	137,833	34	1:33	4493	98.04	92.88

NA: Not Available
Sources: Director, OPEPA and Director, Elementary Education, Orissa

Annexure 8.3: Dropout Rates in Primary Schools in Orissa

Year	All Categories			Scheduled Castes			Scheduled Tribes		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2000-01	42.3	41.4	41.8	50.5	54.3	52.4	61.7	66.5	64.1
2001-02	42	40	41	50	52	51	61	65	63
2002-03	32.3	36.5	34.4	35.8	38.7	37.2	49.3	57.4	53.3
2003-04	31.9	35.4	33.6	34.6	36.6	35.6	48.2	56.6	52.4
2004-05	31.4	32.7	32	34	35.6	34.8	48	56	52
2005-06*	18.12	18.86	18.49	19.09	19.82	19.46	12.44	24.34	23.32
2006-07	10.34	10.72	10.53	15.91	18.02	16.97	18.7	27.05	22.88
2007-08	7.76	7.83	7.79	11.93	13.16	12.54	14.03	19.75	16.89
2008-09	5	4.89	4.95	7.7	8.22	7.96	9.05	12.34	10.69
2009-10	2.57	3.1	2.83	4.06	4.36	4.21	6.27	6.66	6.46

(* 2005-06 year based on Orissa Child Census, 2005)

Sources: Director, OPEPA and Director, Elementary Education, Orissa

Annexure 8.4: Position of Upper Primary Schools in Orissa

1947-48	286	1,483	0.18	1:26	32		
1950-51	501	2,569	0.32	1:16	40		
2000-01	12,406	40,706	7.69	1:26	1057		
2001-02	11,510	38,914	7.14	1:27	1055		
2002-03	11,510	41,375	7.14	1:23	953	73.96	58.64
2003-04	14,233	49,786	9.09	1:27	1363	79.37	65.96
2004-05	15,893	31,393	10	1:44	1383	81.29	69.04
2005-06	15,737	32,985	10	1:37	1225	83.3	71.84
2006-07	17,322	39,832	11.11	1:47	1817	100.31	73.11
2007-08	18,224	49,413	11.11	1:40	1997	104.28	76.62
2008-09	19,057	55,832	12.5	1:38	2128	99.06	85.52
2009-10	22209	56758	14.2	1:37	2128	104.11	85.68

Source: Director, OPEPA

Annexure 8.5: Dropout Rates in Upper Primary Schools in Orissa

2000-01	52.9	61.1	57	49.7	69.7	59.7	70.9	77.1	74
2001-02	52	60.5	56.2	49	68	58.5	70	76	73
2002-03	57.7	60.5	59.1	45.7	49.2	47.5	75	80.3	77.7
2003-04	56.5	58.6	57.5	60.9	65.3	63.1	73	78.5	75.8
2004-05	48.2	50.1	49.1	47	63	55	67	72	69.5
2005-06	27.86	28.96	28.39	28.46	30.21	29.33	35.89	38.46	37.07
2006-07	17.63	18.47	18.05	23.71	27.46	25.59	29.91	34.97	32.44
2007-08	13.05	13.49	13.27	17.55	20.05	18.8	22.13	25.53	23.83
2008-09	8.42	8.43	8.42	11.32	12.53	11.92	14.28	15.96	15.12
2009-10	8.13	8.24	8.19	8.64	8.17	8.42	8.47	6.82	9.72

Sources: Director, Elementary Education and Director, OPEPA

Annexure 8.6: Dropout Rate in High Schools in Orissa

Annexure 8.7: Results of Secondary Level Examination, Appeared/Passed, in Orissa

2003	376.3	166.18	44.2	7.17	6.05	84.3	4.73	4.41	93.2
2004	395.01	182.74	46.2	7.58	6.53	86.1	5.02	4.64	92.4
2005	350.41	183.37	52.3	7.91	7.07	89.3	5.15	4.8	93.2
2006	411.37	204.54	49.72	8.4	7.48	88.6	5.41	5.19	95.9
2007	394.32	223.23	56.62	9.34	8.78	94	5.43	5.37	98.9
2008	433.14	207.57	47.92	10.16	9.63	94.85	5.64	5.55	93.3
2009	397.23	236.62	59.56	10090	9594	95.08	5.51	5.4	98
2010	423758	291568	68.81	10819	10332	95.5	NR	NR	NR

NR: Not Reported

Sources: Board of Secondary Education, Orissa; CBSE, India and ICSE, India

2001-02	67	72	69.5	75	77	76	79	77	78
2002-03	65.9	68.5	67.2	74.1	76.5	75.3	78	76.5	77.3
2003-04	62.5	66.7	64.4	74.3	73.7	74	76.3	74.9	75.8
2004-05	61	66	63.5	72	73	72.5	76.5	74	75.3
2005-06	60	64	62	70.8	72.5	71.7	75	73	74
2006-07	59	62	61	70	71.8	70.9	75	73	74
2007-08	58.2	61.0	59.6	69.0	71.0	70.0	74.6	71.0	72.8
2008-09	58.0	60.6	59.3	68.5	70.7	69.6	73.0	70.0	71.6

Source: Director, Elementary Education, Orissa

Annexure 8.8: Results of Higher Secondary Education (+2) under CHSE

Year	Appeared				Passed				Percentage of success			
	Arts	Science	Comm	Total	Arts	Science	Comm	Total	Arts	Science	Comm	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
2004	1,00,090	43,388	12,500	1,55,978	79,393	33,189	9,803	1,22,385	79	76.5	78.4	78.5
2005	103320	42322	12083	157725	72988	30119	9055	112162	71	71.2	74.9	71.1
2006	105600	45561	12102	163263	64288	31389	9143	104812	61	70.4	76.7	64.2
2007	114597	49120	13065	176784	65427	29555	9080	103664	57	60.2	69.5	58.6
2008	121676	54751	15340	191767	73811	34848	11090	119749	61	63.7	72.3	62.5
2009	140249	57812	18565	216626	97433	41439	13884	152756	69.47	71.67	74.78	70.51
2010	145231	52528	20765	218524	102674	38832	15451	156951	70.69	73.92	74.4	71.82

N:B: Besides the result in vocational +2 result 5955 appeared, 4680 passed with 78.7% success.

Annexure 8.9: Results of Higher Secondary Education in Orissa, CBSE and ICSE

Year	CBSE						ICSE					
	Total sch ools	Students appeared		Students passed		% success	Total schools	Students appeared		Students passed		% success
		Total	Girls	Total	Girls			Total	Girls	Total	Girls	
1	2	3	4	5	6	7	8	9	10	11	12	13
2001	51	2172	867	1772	718	81.6	15	840	325	745	283	89
2002	54	2676	1108	2140	872	80	16	973	398	889	368	91
2003	58	2859	1127	2266	925	79.3	16	1069	400	976	370	91
2004	62	3165	1267	2660	1068	84	18	1069	403	983	375	92
2005	65	3289	1296	2786	1101	84.7	20	1178	475	1071	441	91
2006	72	3686	1526	3309	1377	89.8	21	1262	498	1141	463	90
2007	72	4012	1620	3605	1462	89.9	22	1173	474	1142	461	97
2008	77	4525	1860	4046	1694	89.4	21	1388	621	1342	609	97
2009	77	5429	2279	4903	2089	90.3	21	1458	584	1407	570	97
2010	77	6188	2579	5551	2341	89.7	N	N	N	N	N	N

Sources: CBSE, New Delhi and ICSE, New Delhi

Annexure 8.10: Financial Position of SSA and NPEGEL

Rs in crore

2001-02	1.5	0	0	0	1.5	0	0.54	0
2002-03	51.74	0	5.22	0	56.96	0	25.42	0
2003-04	133.11	3.59	18.86	0	151.97	3.59	157.93	0
2004-05	198.07	20	98.57	1.2	296.64	21.2	251.9	18.8
2005-06	312	15.93	80	11.98	392	27.91	343.26	28.39
2006-07	405.68	34.43	155.95	11.47	561.63	45.9	613.87	43.92
2007-08	584.82	22.41	318.19	12.07	903.01	34.48	739.57	30.01
2008-09	456.21	9.84	245.65	5.3	701.86	15.14	796.68	22.1
2009-10	431.78	0	353.27	0	785.05	0	639.72	21.78

Source: Director, OPEPA and Director, Elementary Education, Orissa

Annexure 8.11: Birth rate, Death Rate and Infant Mortality rate in Orissa/All India

1981	33.1	13.1	135	33.9	12.5	110
1991	28.8	12.8	124	29.5	9.8	80
1995	27.8	10.8	103	28.3	9	74
2000	24.3	10.5	96	25.8	8.5	68
2001	23.4	10.2	90	25.4	8.4	66
2002	23.2	9.8	87	25	8.1	63
2003	23	9.7	83	24.8	8	60
2004	22.7	9.6	77	24.1	7.5	58
2005	22.3	9.5	75	23.8	7.6	58
2006	21.9	9.3	73	23.5	7.5	57
2007	21.5	9.2	71	23.1	7.4	55
2008	21.4	9	69	22.8	7.4	53

Source: Sample Registration System Bulletin, October, 2008

Annexure 8.12: Incidence of Selected Diseases in Orissa

in '000

Sl. No.	Diseases	2006			2007			2008			2009		
		OPD	IPD	Total	OPD	IPD	Total	OPD	IPD	Total	OPD	IPD	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Acute Respiratory infector	746.14	22.3	768.44	826.08	14.37	840.45	881.34	20.31	901.65	N	N	N
2	Acute diarrhea	345.15	28.6	373.75	409.75	45.26	455.01	480.98	54.05	535.03	N	N	N
3	Enteric fever	13.38	2	15.38	23.04	3.7	26.74	34.55	5.6	40.15	N	N	N
4	Pneumonia	11.11	2.85	13.96	13.84	3.11	16.95	19.7	5.73	25.43	N	N	N
5	Pulmonary TB	9.62	1.82	11.44	11.88	1.31	13.19	16.66	2.57	19.23	N	N	N
6	Others	2113.4	126.35	2239.75	12.33	0.72	13.05	279.58	32.8	312.38	N	N	N
	Total	3238.8	183.92	3422.72	1296.92	68.47	1365.39	1712.81	121.06	1833.87	2110.91	180.17	2291.08

Source: Directorate of Health Services, Orissa, Bhubaneswar

Annexure 8.13: Distributions of all Deaths by Major Cause Groups in Orissa, 2009

Sl. No.	Major Causes	Rural		Urban		Total	
		Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8
1	Dysentry/Diarrhoea	1037	0.48	412	0.75	1449	0.53
2	TB	2554	1.17	1278	2.31	3832	1.41
3	Anemia	5235	2.41	1828	3.31	7063	2.59
4	Heart Disease	19731	9.09	6265	11.33	25996	9.54
5	Asthma	7876	3.63	1454	2.63	9330	3.42
6	Birth Injury	2281	1.05	1613	2.92	3894	1.43
7	Paralysis	8120	3.74	1405	2.54	9525	3.5
8	Senility	66426	30.59	8868	16.04	75294	27.64
9	Others	103884	47.84	32150	58.17	136034	49.94
	Total	217144	100	55273	100	272417	100

Source: Directorate of Health Services, Orissa, Bhubaneswar

Annexure 8.14: Child Birth Status in Orissa

2004	79.7	89.5	36.6	35.5	28.5	17.9	34.8	36.5
2005	85.6	95.8	37.1	35	28.7	28.9	34.2	36.1
2007	89.5	98.6	38.5	37	30.3	29.8	31.2	33.2
2008	79.3	88	38.5	38.4	30.6	29.7	30.9	31.9

Source: Directorate of Health and Family Welfare, Orissa

Annexure 8.15: Progress of Family Welfare Programme in Orissa

Figures in lakh

2002-03	0.74	1.44	2.92	1.37	0.35	1.54
2003-04	0.91	1.45	2.95	1.44	0.36	1.71
2004-05	1.01	1.63	3.05	1.79	0.39	1.95
2005-06	0.84	1.62	3.45	1.84	0.43	1.78
2006-07	0.94	1.63	3.62	1.99	0.42	1.89
2007-08	1.21	1.61	3.28	1.9	0.6	2.14
2008-09	1.2	0.34	3.02	1.8	0.34	2.01
2009-10	1.22	1.34	2.57	1.75	0.27	2

Source: Directorate of F. & W. Orissa, Bhubaneswar

Annexure 8.16: Nutritional Status of 0-3 Years Children in Orissa

Year	Total children	Children weighed	% out of Col.2	Normal	% out of col.3	Grade-I	% out of col.3	Grade-II	% out of col.3	Grade-II & IV	% out of col.3	Grade-II,III & IV	% out of col.3
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2004	2349219	2215258	94.3	871006	39.32	791999	35.75	515406	23.27	26095	1.18	541501	24.44
2005	2210798	2113830	95.61	870614	41.19	768398	36.35	447463	21.17	24254	1.15	471717	22.32
2006	2346066	2228022	94.97	942209	42.29	813313	36.5	436402	19.59	29036	1.3	465438	20.89
2007	2379699	2253376	94.69	983921	43.66	819409	36.36	418484	18.57	26699	1.18	445183	19.76
2008	2464004	2324217	94.33	1059106	45.57	847405	36.46	392849	16.9	24857	1.07	417706	17.97
2009	2488886	2386073	95.87	1107764	46.43	871227	36.51	379414	15.9	27668	1.16	407082	17.06
2010(till Oct2010)	2387617	2270502	95.1	1098817	48.4	806267	35.51	339668	14.96	25750	1.13	365418	16.09

Source: Directorate of F. & W, Orissa, Bhubaneswar

Annexure 8.17: Medical Institutions in Orissa with Beds during 2009-10 (Government Sector)

1	Angul	5	10	27	1	43	166	472
2	Balasore	3	15	66	2	86	275	636
3	Bargarh	3	14	42	5	64	204	249
4	Bhadrak	4	7	49	1	61	178	409
5	Bolangir	6	15	37	15	73	226	444
6	Baudh	1	5	10	2	18	67	167
7	Cuttack	11	18	52	0	81	332	1962
8	Deogarh	2	4	6	1	13	42	118
9	Dhenkanal	6	10	31	5	52	167	385
10	Gajapati	2	8	18	8	36	136	259
11	Ganjam	10	30	82	0	122	460	1541
12	Jagatsinghpur	1	9	36	1	47	189	268
13	Jajpur	3	12	54	1	70	260	482
14	Jharsuguda	2	6	14	1	23	66	182
15	Kalahandi	7	16	39	19	81	242	525
16	Kandhamal	6	14	34	17	71	172	494
17	Kendrapara	2	9	44	0	55	227	268
18	Keonjhar	9	17	56	12	94	351	533
19	Khurda	8	13	59	1	81	202	965
20	Koraput	3	16	46	15	80	307	354
21	Malkangiri	4	8	25	10	47	158	286
22	Mayurbhanj	11	28	74	20	133	589	852
23	Nabarangapur	2	11	37	11	61	289	236
24	Nayagarh	6	12	32	1	51	166	489
25	Nuapada	2	6	15	7	30	95	180
26	Puri	6	16	43	1	66	241	684
27	Rayagada	4	11	34	17	66	235	293
28	Sambalpur	4	11	29	4	48	167	1139
29	Sonepur	3	6	17	7	33	89	161
30	Sundargarh	6	20	54	14	94	390	635
	Orissa	142	377	1162	199	1880	6688	15668

N:B

CHC - Community Health Centre

PHC (N) - Primary Health Centre (New)

PHC - Primary Health Centre

MHU – Mobile Health Unit

Source: Directorate of Health Services, Orissa, Bhubaneswar

N:B - 116 PHC converted to CHC, 35 area hospital converted to CHC.

Annexure 8.18: Government Ayurvedic & Homoeopathic Medical Institutions & Services in Orissa

2004	Homoeopathic	4	533	494	125	79.9
	Ayurvedic	5	607	611	203	63.1
	Unani	-	9	8	-	0.93
2005	Homoeopathic	4	560	512	125	82.8
	Ayurvedic	5	607	584	258	68.6
	Unani	-	9	8	-	1.04
2006	Homoeopathic	4	560	494	125	79.2
	Ayurvedic	5	619	584	258	74.5
	Unani	-	9	9	-	1.07
2007	Homoeopathic	4	560	468	125	78.7
	Ayurvedic	5	619	563	418	73.4
	Unani	-	9	7	-	1.09
2008	Homoeopathic	4	590	488	125	75.71
	Ayurvedic	5	619	558	418	72.35
	Unani	-	9	6	-	1.13
2009	Homoeopathic	4	560	475	125	82.7
	Ayurvedic	5	619	603	418	69.07
	Unani		9	6		1

Source: Directorate of Indian Systems of Medicine and Homoeopathy, Orissa

Annexure 8.19: Family Welfare Programme & Immunisation Programme Conducted under ESI Scheme in Orissa

In numbers

Family Welfare Programme							
Vasectomy	1	4	17	2	Nil	Nil	1
Tubectomy	509	259	217	86	182	225	57
IUD	161	185	112	98	58	64	115
MTP	202	223	194	116	128	165	115
Oral Pills	5012	4500	2564	3094	2765	301	3361
Nirodh	13751	15758	10902	11564	11028	6215	11463
Immunisation Programme							
BCG	952	1408	956	961	783	710	554
Polio	4343	10658	7806	6717	5004	3090	2632
DPT	3730	2990	2120	7350	2355	2420	1563
T. Toxoid	13316	14559	11683	8872	12596	3870	4802

Source: Directorate of ESI, Bhubaneswar

Annexure 8.20: System Load in Government Hospitals of Orissa

2005-06	12.88	3.96	6.61	64.2	70.82	166.9	91.4
2006-07	12.71	3.91	6.59	64.01	70.61	168.6	92.4
2007-08	12.55	3.86	6.55	55	61.56	169.8	93
2008-09	12.39	3.81	7.3	58.04	65.34	191.5	104.93

NA: Not Available

Source: Directorate of Family Welfare, Orissa & Directorate of Health, Orissa, Bhubaneswar

Annexure 8.22: Status of IDD Survey in Orissa

1987	Sundergarh	33.5	DGHS, New Delhi
1989	Puri	19.34	-do-
1998	Cuttack	21.61	-do-
1999	Keonjhar	14.9	-do-
2001	Nuapada	14.4	VSS MC, Burla, SBP
2001	Balasore	0.83	SCB Med. College, Cuttack
1995-99	Bargarh	10.8	RMRC, Bhubaneswar
2002	-do- (Resurvey)	7.66	V SS Med. College, Burla
2003-04	Ganjam	15.79	MKCG MC, Berhampur
2003-04	Kandhamal	27.79	-do-
2004	Gajapati	21.15	-do-
2004	Bolangir	8.57	VSS MC, Burla
2005-06	Sambalpur	10.04	-do-
2006	Koraput	22.39	MKCG MC, Berhampur
2006	Jagatsinghpur	3.08	SCB Med. College, CTC
2006	Rayagada	19.7	MKCG MC, Berhampur
2006	Sundergarh (Re survey)	NR	CGS Team, DGHS, New Delhi
2007	Cuttack (Resurvey)	33.6	Central Goitre Survey Team, DGHS, New
2009	Malkangiri	48.3	MKCG MC, Berhampur
	Nawarangpur	21.7	MKCG MC, Berhampur
	Angul	28.2	SCB Med. College, Cuttack
	Dhenkanal	30.2	SCB Med. College, Cuttack
	Khurda	24.1	SCB Med. College, Cuttack

MC: Medical College

Source: Directorate of Health Services, Orissa, Bhubaneswar

Annexure 8.21: Achievement under NPCB in Orissa

Number

Student screened	3,17,897	359382	3,02,128	4,83,409	419274
Students detected with refractive error	17,662	18349	14,680	26,078	19922
Free spectacles distributed	7,965	9202	7355	10,942	9186
Health worker trained	3,734	-	-	-	NA
No. of teachers	2,222	-	-	1,464	556

Source: Directorate of Health Services, Orissa, Bhubaneswar

Annexure 8.23: Malaria Epidemiological Situation in Orissa

2004	4369409	416771	351737	283	11.32	9.54	84.4	10.79
2005	4848624	396573	342658	255	12.36	8.18	86.4	10.11
2006	4912657	372710	324893	257	12.3	7.5	87.1	9.3
2007	4829246	365593	317116	221	11.93	7.57	86.74	9.03
2008	5127127	375430	329631	239	12.82	7.32	87.8	9.38
2009	5015489	380904	336047	198	12.02	7.59	88.22	9.13

Reported deaths due to malaria in 2002 was 465

BSC&E: Blood Smear from fever cases Examined

ABER: Annual Blood Examination Rate (% of Blood slide examined in a given population) ABER more than 10% indicates good

surveillance

SPR: Slide Positivity Rate (% of slides found positive among those examined)

API: Annual Parasite Incidence (no. of Malaria positive cases per 1000 population)

Annexure 8.24: HIV Scenario in Orissa

Counseled	4287	6762	22820	54752	131671	368278	387665	435127	445933
Tested	2932	4397	5363	17058	56689	172760	231015	335395	326319
HIV +ve	312	687	595	1251	2217	3138	3635	4020	3333
AIDS cases	209	156	186	184	149	28	133	1342	119
Death cases due to AIDS	74	135	160	184	114	28	133	1125	108

Source: Orissa State AIDS Control Society

Annexure 8.25: District wise HIV Scenario in Orissa as on 31st March, 2010

Sl. No.	Districts	HIV +ve			Percen-tage	AIDS cases	Percen-tage	Death due to AIDS	Percen-tage
		Gen.	ANC	Total					
1	2	3	4	5	6	7	8	9	10
1	Angul	453	25	478	2.9	55	4.0	51	4.4
2	Balasore	425	14	439	2.6	41	3.0	41	3.5
3	Bolangir	281	10	291	1.7	38	2.7	38	3.3
4	Bargarh	160	6	166	1.0	6	0.4	6	0.5
5	Bhadrak	290	4	294	1.8	52	3.8	50	4.3
6	Baudh	4	0	4	0.0	0	0.0	0	0.0
7	Cuttack	2238	33	2271	13.6	113	8.2	40	3.4
8	Dhenkanal	102	7	109	0.7	11	0.8	10	0.9
9	Deogarh	22	3	25	0.1	0	0.0	0	0.0
10	Gajapati	310	34	344	2.1	1	0.1	1	0.1
11	Ganjam	6482	212	6694	40.0	447	32.3	377	32.3
12	Jharsuguda	101	5	106	0.6	4	0.3	3	0.3
13	Jagatsinghpur	91	8	99	0.6	12	0.9	12	1.0
14	Jajpur	234	6	240	1.4	42	3.0	40	3.4
15	Kalahandi	253	4	257	1.5	3	0.2	3	0.3
16	Kandhamal	27	0	27	0.2	15	1.1	12	1.0
17	Kendrapara	155	12	167	1.0	71	5.1	70	6.0
18	Keonjhar	135	4	139	0.8	5	0.4	5	0.4
19	Khurda	741	22	763	4.6	47	3.4	39	3.3
20	Koraput	877	36	913	5.5	155	11.2	145	12.4
21	Malkangiri	93	7	100	0.6	9	0.7	4	0.3
22	Mayurbhanj	212	11	223	1.3	11	0.8	8	0.7
23	Nabrangpur	379	7	386	2.3	14	1.0	14	1.2
24	Nayagarh	353	12	365	2.2	8	0.6	7	0.6
25	Nuapada	131	3	134	0.8	19	1.4	19	1.6
26	Puri	399	6	405	2.4	73	5.3	66	5.7
27	Rayagada	393	22	415	2.5	66	4.8	51	4.4
28	Sambalpur	603	25	628	3.8	79	2.8	33	2.8
29	Sonepur	14	0	14	0.1	0	0.0	0	0.0
30	Sundergarh	226	11	237	1.4	26	1.9	21	1.8
	Orissa	16184	549	16733	100.1	1423	100.2	1166	99.9

Source: Orissa State AIDS Control Society

Annexure 8.26: Number of HIV +ve Persons by Age, Sex and Mode of Transmission (as at the end of 2009-10)

A. Age Group					
i.	Less than 14	635	478	1113	7.00
ii.	15-24	635	936	1571	9.00
iii.	25-49	8750	4188	12938	77.00
iv.	50+	450	97	547	3.00
v.	Not specified	11	4	15	0.12
vi.	Parent to child transmission	0	549	549	3.00
	Total	10481	6252	16733	99.12
B. Routes of Transmission					
i.	Sexual	9023	4902	13925	83.00
ii.	Blood/Blood products	83	53	136	1.00
iii.	Infected syringes & needles	371	22	393	2.00
iv.	Parent to child transmission	614	470	1084	6.00
v.	No. specified	390	256	646	4.00
vi.	ANC	0	549	549	3.00
	Total	10481	6252	16733	99.00

Source: Orissa State AIDS Control Society

Annexure 8.27: Achievement of Rural Water Supply Programme in Orissa

2004-05	94	0	10475	5794
2005-06	134	0	22714	9476
2006-07	65	24	12142	3768
2007-08	1010	50	9008	754
2008-09	2020	148	13126	156
2009-10	900	-	7484	42

Source: Chief Engineer Rural Water Supply and Sanitation, Bhubaneswar

Annexure 8.28: Status of Swajaladhara Programme in Orissa

2002-03	668.29	663.35	287	33	280	599.21
2003-04	733.29	710.68	316	125	295	639.79
2004-05	863.42	834.44	275	228	251	762.43
2005-06	1807.27	1518.96	467	560	335	1230.83
2006-07	602.6	499.5	130	287	72	282.26
2007-08	-	-	-	-	-	-
2008-09*	32.77	31.47	7	7	7	33.05
2009-10	-	-	-	-	-	-
Total	4707.64	4258.4	1482	1240	1240	3547.57

* Swajaladhara programme has been discontinued by Govt. of India since 2005-06. However, out of the unspent balance, 7 schemes have been taken up in 2008-09.

Source: Rural Water Supply and Sanitation Department, Bhubaneswar

Annexure 8.29: Physical Target and Achievement under Bharat Nirman Yojana, Orissa

1	Coverage of habitation	Sinking of tube wells								
a	Not covered	do	9188	6484	4169	4264	7387	1325	1500	3357
b	Partly covered	do	4706	1627	4031	2288	1903	1018	10847	3062
2	Coverage of schools	do	4937	3536	1000	629	790	231	36	42
3	Coverage of quality affected habitations	Piped water supply	1726	314	5577	1827 + 1250 through spot sources	16435	16435	2000	2114

Source: Rural Water Supply and Sanitation Department, Bhubaneswar

Annexure 8.30: Financial Status of TSC (Total Sanitation Campaign) at the end of 2009-10.

Rs. in lakh

Central	84902.24	33668.49	22830.41	68
State	33617.43	13259.62	7978.16	60
Community	12800.37	5000.62	3911.3	78
Total	131320.04	51928.73	34719.87	67

Source: Orissa Watershed Mission

Annexure 8.31: Achievement under Total Sanitation Campaign Programme

Component	Target	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (Oct'10)	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
Individual House Hold Latrine (IHL)	7056648	13332	37588	228068	313124	298768	389802	475904	323802	539077	598169	3217634
Sanitary Complex	818	0	0	1	0	8	2	2	5	30	8	56
School Toilets	70663	2	1421	4103	1781	2369	7458	15763	16623	14262	2310	66092
Anganwadi toilets	25160	0	0	0	25	853	5207	4479	3718	4866	1180	20378

Source: Rural Water Supply and Sanitation Department, Bhubaneswar

Annexure 8.32: Status of Individual Household Latrines, School Toilets and Anganwadi Toilets by the end of 2009-10

1	Angul	186809	62145	33	2040	2039	100	795	788	99
2	Balasore	342234	100550	29	2400	2400	100	915	856	94
3	Bargarh	384003	293748	76	3787	3787	100	1849	1350	73
4	Bhadrak	315882	92250	29	2393	2393	100	361	388	100
5	Bolangir	218481	96307	44	1855	1582	85	1190	473	40
6	Baudh	92672	27172	29	1033	916	89	258	248	96
7	Cuttack	364874	126226	35	2426	2292	94	42	60	100
8	Deogarh	62958	24470	39	620	620	100	190	221	10
9	Dhenkanal	190307	71415	38	2065	2056	100	690	567	82
10	Gajapati	110192	25106	23	1438	1004	70	630	548	87
11	Ganjam	451316	231121	51	4235	3931	93	2505	2200	88
12	Jagatsinghpur	212333	101467	48	2434	2431	100	955	134	14
13	Jajpur	354399	126063	36	3414	3091	91	1355	121	9
14	Jharsuguda	67929	20512	30	811	811	100	433	433	100
15	Kalahandi	296373	86388	29	2330	2330	100	676	676	100
16	Kandhamal	155540	32069	21	1812	1678	93	937	544	58
17	Kendrapara	216192	97611	45	2583	2286	89	1064	981	92
18	Keonjhar	263448	58830	22	5428	4899	90	1590	645	41
19	Khurda	230593	111694	48	2431	1932	79	150	184	100
20	Koraput	264201	78558	30	2659	2544	96	1130	924	82
21	Malkangiri	131708	39252	30	1650	1534	93	534	522	98
22	Mayurbhanj	562768	217075	39	4642	4012	86	1698	1698	100
23	Nabrangpur	254495	42121	17	1838	1522	83	378	841	100
24	Nayagarh	207312	75355	36	1993	1761	88	34	443	100
25	Nuapada	128790	34091	26	941	834	89	585	566	97
26	Puri	231132	101801	44	2250	1785	79	1130	518	46
27	Rayagada	212204	62795	30	2931	1390	47	1001	376	38
28	Sambalpur	148615	50543	34	2217	1994	90	480	468	98
29	Sonepur	107118	40010	37	1563	1563	100	214	214	100
30	Sundargarh	291770	145918	50	2444	2627	100	1391	1257	90
	Orissa	7056648	2672663	38	70663	64044	91	25160	19244	76

Source: Rural Water Supply and Sanitation Department, Bhubaneswar

Annexure 8.33: Achievement of urban water supply and sewerage schemes under State plan during 2008-09

Urban Water Supply Programme	363	140	54.77	53.78
Urban Sewerage	69	48	2.55	2.5
Hand pump tube wells	300	278	1.5	1.5
Capacity Development of PHEO			0.5	0.5
RLTAP	12	5	10	8.93
AUWSP (State share)	34	28	1.01	0.46
AUWSP (Central share)			2.1	1.41
Total	778	499	72.43	69.08

Source: Housing and urban Development Department

Annexure 8.35: Progress of Immunization Programme in Orissa

In lakh doses

TT (PW)	7.99	8.18	8.14	8.32	8.2	8.01	6.98
DPT	8.35	8.12	8.51	8.18	7.99	7.15	6.91
Polio	8.37	8.2	8.53	8.2	7.99	7.69	6.8
BCG	8.83	8.65	9.26	8.7	8.48	8.33	6.41
Measles	7.76	7.9	8.4	7.88	7.82	6.68	6.7
DT	7.79	8.97	10.34	9.49	9.1	6.85	-
TT (10 Yrs)	7.69	7.8	8.49	8.8	8.74	8.28	-
TT (16 Yrs)	6.51	6.82	7.59	7.87	7.87	7.46	-

Source: Directorate of F. & W. Bhubaneswar, Orissa

Annexure 8.34: Beneficiaries Covered under ICDS (SNP)

In lakh numbers

Supplementary nutrition	30.86	30.86	33.86	49.85	48.79	51.36
Immunization	35.53	39.88	34.59	32.71	31.9	33.82
Health check-up	9.59	9.3	8.8	8.5	8.66	10.68
Nutrition and health Education	5.5	5.7	5.9	6.3	6.5	7.3
Referral services	6.49	6.62	6.7	6.6	6.5	7.05
Pre-school education enrolled	10.96	10.58	10.7	13	14.38	16.08

Source: Women and Child Development Department, Orissa.

Annexure 8.36: Scholarship for the Students with Disability (2009-10)

Inside the State		
a) Primary School (Class I to V)	Rs. 100/- p.m.	Rs. 200/- p.m.
b) Middle & High School (Class VI to VII & VIII to X)	Rs. 140/- p.m.	Rs. 250/- p.m.
c) College (+2 and +3 level)	Rs. 160/- p.m.	Rs. 300/- p.m.
d) College (PG level)	Rs. 190/- p.m.	Rs. 350/- p.m.
e) Technical & Vocational Training	Rs. 190/- p.m.	Rs. 350/- p.m.
Outside the State		
Students pursuing normal course of studies in technical and vocational field not available in the State. (This has been introduced for the first time)	Rs. 250/- p.m	Rs. 350/- p.m
a) Primary School (Class I to V)	Rs. 100/- p.m	Rs. 100/- p.m
b) Middle School (Class VI to VII)	Rs. 150/- p.m	Rs. 150/- p.m
c) High School (Class VIII to X)	Rs. 150/- p.m	Rs. 150/- p.m
d) Other studies	Rs. 200/- p.m	Rs. 200/- p.m
Conveyance Allowance (for students with locomotors disability (75% or above) only	Rs. 100/- p.m	Rs. 100/- p.m

Source: Women and Child Development Department, Orissa.

Annexure 8.37: Achievement under NHFDC Loan Scheme in Orissa

Rs In lakh

1998-99	40	14.40	36	13.23	-
1999-00	197	79.39	9	3.36	-
2000-01	168	84.86	147	61.73	-
2001-02	850	422.48	248	89.19	35
2002-03	204	103.64	585	281.59	69
2003-04	418	197.46	354	191.80	77
2004-05	83	33.50	343	155.20	15
2005-06	-	-	17	6.13	30
2009-10	2617	1077.78	2158	966.87	457
Total	4577	2013.51	3897	1769.10	683

Source: W & CD Department, Bhubaneswar

Annexure 8.38: Literacy Rates across Social Groups in Orissa (1991 & 2001)

				Census 1991					
Rural	45.5	60	30.8	35.4	21.6	19.4	21.3	33.4	9.3
Urban	72	81.2	61.2	47.8	62.1	32.3	40.9	52.9	27.7
Total	49.1	63.1	34.7	36.8	52.4	20.7	22.3	34.4	10.2
				Census 2001					
Rural	59.8	72.9	46.7	54.2	69.5	38.8	36.1	50.4	22.1
Urban	80.8	87.9	72.9	65.3	77.6	52.4	58.1	69.8	45.8
Total	63.1	75.3	50.5	55.5	70.5	40.3	37.4	51.5	23.4

Source: Census of India

Annexure 8.40: Sector-wise Outlay and Flow of Funds under the Women Component

Rs in crore

Agriculture & Allied activities	1.7	14.94	1.15	3.08	60.76	5.31
Rural Development	40.48	115.66	38.17	201.11	1138.97	309.88
Industry & Minerals	2.59	19.15	4.49	1.62	61.82	18.12
Social Services	544.77	1325.15	553.51	355.86	2149.2	522.52
Special area programme	0.12	1	0.15	0.27	18	2.7
Energy	-	-	-	0.51	14.04	4.17
Science, Technology & Environment	-	-	-	0.05	-	-
Total	589.66	1475.91	597.47	562.5	3442.8	862.71

Source: Planning & Coordination Department

Annexure 8.39: Distribution of Female workers

1981	25.87	24.51	1.36	11.06	10.8	0.26	42.75	44	19.12
1991	32.42	30.82	1.59	15.26	14.94	0.32	47.07	48.48	20.13
2001	44.75	42.13	2.61	9.59	9.45	0.14	21.43	22.43	5.36

*(Figures in parentheses represent percentages in total female workers)

Source: Census of India 1981, 1991 & 2001

Annexure 8.41: Scheduled Tribe Population, Growth Rate and Sex Ratio

In Orissa and India

Census	Population (in lakh)				Sex Ratio						Decadal Growth Rate (DGR)	
	Orissa		India		Orissa			India				
	R	U	R	U	R	U	T	R	U	T	Orissa	India
1	2	3	4	5	6	7	8	9	10	11	12	13
1961	41.36	0.88	291.1	7.74	1018	946	1016	989	897	987	-	-
1971	49.24	1.47	367.21	12.94	1009	958	1007	985	896	982	20.1	27.2
1981	56.42	2.73	484.28	32.01	1015	947	1012	988	912	983	16.6	35.8
1991	66.7	3.72	627.51	50.07	1006	930	1012	976	920	972	18.9	31.2
2001	76.98	4.47	773.38	69.88	1006	948	1003	981	944	978	15.82	24.5

Sources: Census data 1961-2001

Annexure 8.42: Scheduled Castes Population in Orissa

Year	Total population	Male	Female	% of SC Population	Urban population	Rural Population	Proportion of rural SC population	Sex-Ratio*	Decadal Growth Rate (%)
1	2	3	4	5	6	7	8	9	10
1961	2,764,858	1,371,410	1,393,448	15.76	126,026	2,637,832	95.4	1015	-
1971	3,310,854	1,661,038	1,649,816	15.09	207,610	3,103,244	93.72	993	19.79
1981	3,865,543	1,944,071	1,921,472	14.66	363,348	3,502,195	90.6	988	16.75
1991	5,129,314	2,596,464	2,532,850	16.2	550,645	4,578,669	89.26	976	32.69
2001	6,082,063	3,073,278	3,008,785	16.53				979	18.6

*Number of Females per 1000 males

Sources: Census data 1961-2001

Anne xure 8.43: Literacy among ST and SC population in Orissa (1961-2001)

Year	ST				SC			
	All	Male	Female	Gender Gap in Literacy (%)	All	Male	Female	Gender Gap in Literacy (%)
1961	7.36	13	1.77	11.27	11.6	19.8	3.44	16.38
1971	9.45	16.4	2.28	13.8	15.6	26	5.17	20.81
1981	14	23.3	4.76	18.51	22.4	35.3	9.4	25.86
1991	22.3	34.4	10.21	24.23	36.8	52.4	20.74	31.67
2001	37.4	51.5	23.37	28.11	55.5	70.5	40.33	30.14

Sources: Census data 1961-2001

Annexure 8.44: Achievement under Different SC & ST Development Programmes (2002-2009)

Year	Programmes							
	MADA Project		Cluster project		MICRO project		DTDP	
	Expenditures made (Rs. In lakh)	No. of families covered	Expenditures made (Rs. In lakh)	No. of families covered	Expenditures made (Rs. In lakh)	No. of families covered	Expenditures made (Rs. In lakh)	No. of families covered
1	2	3	4	5	6	7	8	9
2002-03	310.16	1,505	21	166	200	11,281	174.56	2179
2003-04	583.22	3,505	50	514	192	6680	94.69	1008
2004-05	534.08	3,795	50	136	194.55	8003	104.49	1156
2005-06	565.78	9,285	50	384	170	11773	187.75	2062
2006-07	610	10,455	55	1128	340.18	5222	344.14	7616
2007-08	585	8,347	55	581	200	4087	1409.76	9233
2008-09	700	4,889	70	593	200	2096	1179.85	9748
2009-10	610	4772	70	546	200	2038	1200	8896

Source: SC & ST Development Department, Orissa

Annexure 8.46: Institutions under SC and ST Development Department

Ekalabya Model Residential Schools	11	Primary School Hostels	1548
Higher Secondary Schools	8	(In ITDA blocks)	NA
High Schools	155	NA	NA
Girls High Schools	143	Primary School Hostels	1003
Ashram Schools	109	(ST girls & boys) KBK	NA
Secondary Teachers Training Schools	2	NA	NA
Residential Sevashrams	142	ST Girls Hostels	1003
Sevashrams	1026	NA	NA
Total	1596	Total	3197

Source: SC & ST Development Department, Orissa

Annexure 8.47: Achievement under Pre- and Post- Matric scholarship

2002-03	NA	NA	62.43	3.42	3.67	7.09	NA	NA	8.45	45.49	34.79	80.28
2003-04	11.43	56.53	67.96	3.44	3.88	7.32	6.22	5.26	11.48	45.72	39.11	84.83
2004-05	13.3	57.95	71.25	3.75	4.18	7.93	6.57	5.77	4.34	42.02	33.62	75.64
2005-06	12.36	54.8	67.16	4.09	4.43	8.52	12.11	6	18.11	49.62	30.25	79.87
2006-07	20.08	74.07	94.15	3.76	4.5	8.26	13.01	11.2	24.21	53.7	43.31	97.01
2007-08	14.11	115.82	129.93	3.81	5.47	9.28	15.86	12.24	28.1	57.01	44.69	101.7
2008-09	22.4	126.75	149.15	3.92	5.66	9.58	17.99	15.5	33.49	63.1	48.79	111.89
2009-10	29.5	181.14	210.64	5.07	6.31	11.38	13.61	17.08	30.69	69.4	62.71	122.11

NA: Not Available

Source: SC & ST Development Department, Orissa

Annexure 8.45: Progress of JBY in Orissa

2004-05	12.5	2500	10
2005-06	25	5000	20
2006-07	42.5	8500	NA
2007-08	13.61	2722	NA

NA: Not Available

Source: SC & ST Development Department, Orissa

Annexure 8.48: Coverage of SC and ST Beneficiaries under Different Poverty Alleviation Programmes during 2008-09

ame of the Programme	Number of beneficiaries				%age of SC & ST to total beneficiaries
	All Category	SC	ST	Total (SC&ST only)	
1	2	3	4	5	6
SGSY (No. of swarozgaries)	106271	26558	30156	56714	53.37
SGRY (Lakh man days)	8.99	2.85	0.22	3.07	34.15
IAY (no. of houses completed)	63197	20073	18386	38459	60.86
NREGS (P) (lakh man days)	420.64	85.26	150.83	236.09	56.13

Source: Panchayati Raj Department, Government of Orissa

Annexure 8.49: Achievement of OSFDC

Rs. In lakh

Sector	2005-06		2006-07		2007-08		2008-09		2009-10	
	No. of	Amount subsidy	No. of beneficiaries	Amount susidy	No. of beneficiaries	Amount subsidy	No. of beneficiaries	Amount subsidy	No. of beneficiaries	Amount subsidy
1	2	3	4	5	6	7	8	9	10	11
SCA to SCP (SC)	10521	1333.9	14201	1015.49	14528	1581.32	20950	2216.97	26067	2516.44
SCA to TSP (ST)	2062	187.75	7616	344.14	9233	1409.76	9914	1179.87	8896	1064.97
NSLRS/ SRMS(scavengers & dependants)	675	63.11	766	76.25	3444	403.56	8574	1054.98	1865	236.66

Source: OSFDC, Orissa, BBSR

Annexure 8.50: Coverage of OTELP (Orissa Tribal Empowerment and Livelihoods Programme)

Districts covered	4	3	7
Blocks covered	10	9	19
No. of NGOs	12	11	23
No. of Micro Watersheds	136	109	245
No. of villages	396	350	746
Treatable Area (ha)	63219	56543	119762
Beneficiaries HH	19195	14795	33990
Male beneficiaries	46505	34766	81271
Female beneficiaries	47310	35410	82720

Source: SC and ST Development Department, Orissa

Annexure 8.51: Families Below Poverty Line (BPL) (1992 and 1997 Census)

1	Kalahandi	13	2	2.41	2.07	85.77	3.08	1.93	62.71
2	Nuapada	5	-	0.94	0.79	83.64	1.27	0.99	78.31
3	Bolangir	14	-	2.39	1.81	75.82	3.3	2.01	61.06
4	Subarnapur	6	-	0.92	0.57	62.29	1.1	0.8	73.02
5	Koraput	14	14	1.88	1.63	86.59	2.65	2.22	83.81
6	Malkangiri	7	7	0.8	0.68	84.81	1.09	0.89	81.88
7	Nabrangpur	10	10	1.52	1.38	90.56	2.15	1.59	73.66
8	Rayagada	11	11	1.42	1.22	86.04	1.88	1.36	72.03
	Total	80	44	12.28	10.15	82.6	16.52	11.79	71.4

** TSP - Tribal Sub Plan Blocks

*** Total figures and figures in percentage do not tally due to rounding off

Source:* Panchayati Raj Department, Government of Orissa.

Annexure 8.52: Proposed Outlay for Annual Plan, 2009-10 under Special Plan for KBK districts

In lakhs

Agriculture	Development of 150 new micro watersheds	2137.5	821.01	347.34
Forest & Environment	Forest Watersheds Development / other forest development activities	1100	422.51	178.75
Housing & UD	Drinking water supply for urban poor	1000	384.1	162.5
ST&SC Development	I. Construction of Ekalavya Model Residential (EMR) building (school, hostel, staff quarters) in KBK districts including Rs. 300.00 lakh for Ramakrishna Mission School in Rayagada.	575	404.05	170.95
	II. Water Supply and Electrification of ST girls hostel	300	210.81	89.19
	III. Construction of additional class room and other	240	168.65	71.35
	IV. Construction of hostels for ST / SC Boys and Girls	750	527.02	222.98
	V. Infrastructure for Upgraded High Schools (+2	240	168.65	71.35
	VI. Providing amenities to ST & SC Hostels	200	140.54	59.46
Sub-Total		2305	1619.72	685.28
P&C	I. Improving connectivity by RD & Works Department through SARCA	1642.5	630.88	266.91
	II. Construction of Residential Clusters	1000	384.1	162.5
	III. Livelihood programme based on Micro-planning	415	159.4	67.44
Sub-Total		3057.5	1174.38	496.85
W&CD	Emergency Feeding Programme	2200	845.02	357.5
Water Resources	Biju Krushak Vikas Yojana (BKVY) including Rs. 130 lakh for completion of renovation work in Damayanti Sagar MIP at Kotpad, Koraput district.	1200	460.92	195
Total		13000	5727.66	2423.22

Source: P & C Dept., Orissa

Annexure 8.53: Achievements under SCA to TSP and Article 275 (I)

Rs in crore

Year	SCA to TSP				Article 275 (I)				
	Financial Achievement		Physical Achievement		Amount released			Expenditure incurred	No. of works completed
	Amount	Expenditure	Beneficiary covered	Works completed	For infrastructure	For EMRS	Total		
1	2	3	4	5	6	7	8	9	10
2002-03	64.95	64.95	53014	12121	34.42	2.00	36.42	36.42	217
2003-04	61.85	61.85	53373	1229	25.70	2.60	28.30	28.30	338
2004-05	75.79	75.79	42988	1361	35.17	8.30	43.47	43.47	1015
2005-06	66.74	66.74	69405	999	34.16	10.30	44.45	44.45	1247
2006-07	78.29	78.29	82367	1291	37.29	3.00	40.29	40.29	1312
2007-08	74.00	60.97	58516	1182	37.94	3.83	34.28	12.63	618
2008-09	102.90	102.90	67090	1174	32.07	9.22	41.30	41.30	480
2009-10	88.86	88.86	N	N	62.28	7.98	70.26	N	N

Source: SC and ST Development Department, Orissa

CHAPTER 9

Public Finance

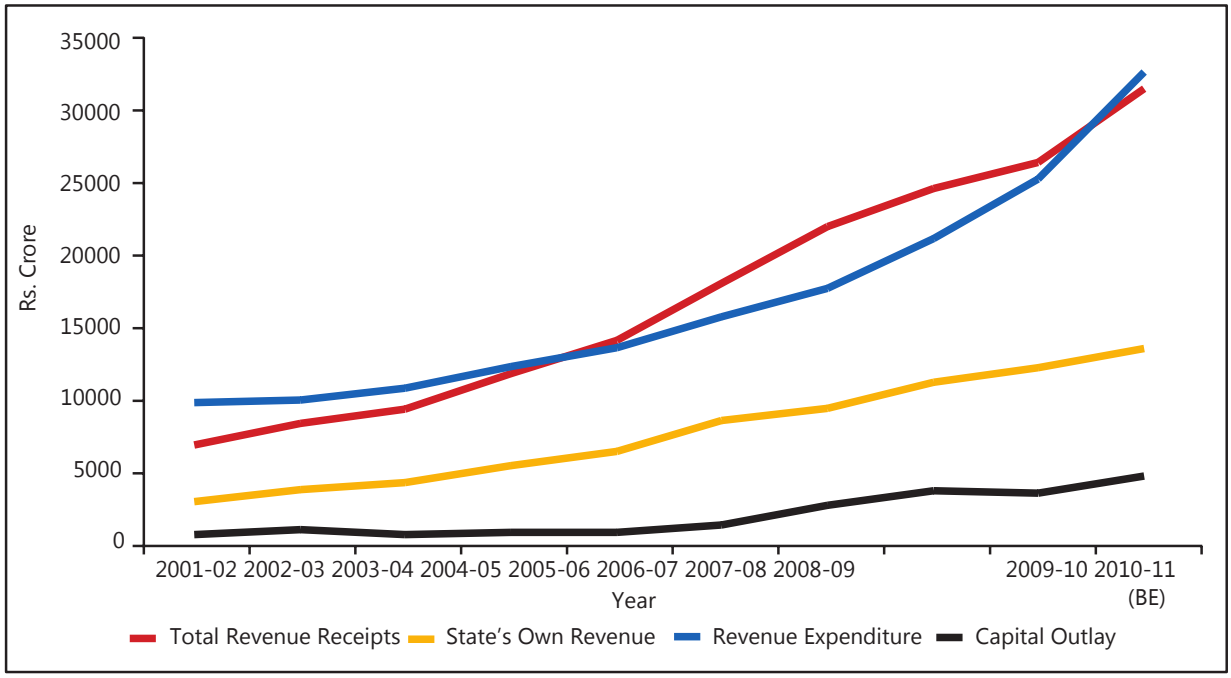
After about two decades of serious fiscal imbalance that left little scope for developmental expenditure and large public investments needed for social and physical infrastructure, public finances of the State started improving from 2004-05 through better turnaround in all sources of revenue and several fiscal reform measures. This was badly needed to create necessary fiscal space for stepping up expenditure on public services that have been crucial constraints on the efforts to bring about sustainable social and economic development of Orissa and its people. A long period of high fiscal deficits resulted in a high level of indebtedness that was feeding back into revenue and fiscal deficit through debt servicing costs. The improving fiscal balance had to be, therefore, utilised to some extent to reduce the level of indebtedness as well in the interest of fiscal sustainability. In broad terms, thus, the agenda was clearly defined. The same agenda, in fact, was the basis of the fiscal adjustment programme mandated by the 12th Finance Commission that was implemented by all but two states. This relatively satisfactory state of affairs continued till 2008-09. Thereafter, some major shocks to the system have introduced barriers in the path of the developmental agenda. Therefore, the State has responded carefully to the changed circumstances to maintain a balance between maintaining its agenda and adjusting its fiscal stance during 2009-10 and 2010-11. Further, the 13th Finance Commission submitted its report in December 2009. Most of its financial recommendations having an immediate bearing on the finances of the states have been implemented for the award period 2010-15. The inter se distribution of funds recommended by the 13th Finance Commission is less favourable to Orissa than those recommended by several previous Finance Commissions. These implications are non-negligible for a resource-constrained state like Orissa for the entire award period. This is another factor that had to be built into the budgetary policies of the State.

9.1 Overview of Public Finances

After running fiscal surpluses for two consecutive years (2006-07 and 2007-08), the fiscal year 2008-09 ended with a small fiscal deficit of Rs. 584 crore – about 0.4 percent of the GSDP. The revenue surplus was smaller than the previous year at Rs. 3,420 crore that was 2.4 percent of GSDP compared to 3.3 percent in 2007-08. This was achieved mainly on the strength of a strong own revenue performance that continued the high achievement in 2006-07 – the total own revenues as ratios of GSDP were 8.6 percent, 7.5 percent and 7.8 percent for 2006-07, 2007-08 and 2008-09 respectively. Total central transfers as a ratio of GSDP in 2008-09 were, however, a little lower at 9.4 percent than the previous year of 2007-08 at 9.8 percent. As a result, total revenue receipts dropped marginally as a ratio of GSDP in 2008-09. Revenue expenditures, on the other hand, were substantially stepped up, while the increasing trend in capital outlay since 2006-07 was continued. Thus, the developmental agenda continued to be implemented in 2008-09 despite some deterioration in the fiscal balance. Figure 9.1 depicts these trends.

The fiscal scenario materially changed in 2009-10 as a result of two major factors. The first

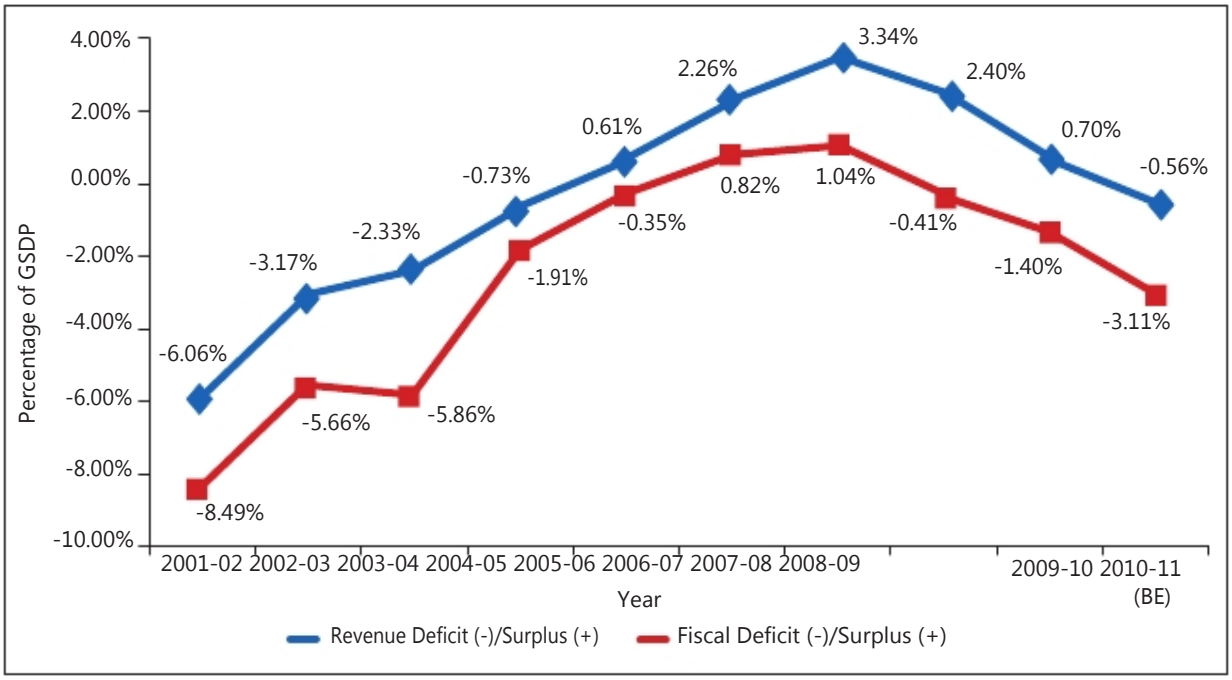
Figure 9.1: Broad Fiscal Trends in Orissa



was the worldwide recession which had its impact on the Indian economy at large, as also on the State economy in many ways. For example, there was loss of jobs in the case of migrant workers and consequent reduction in remittances into the State even though the impact on the growth of GSDP was not severe.. The relatively strong own tax performance was maintained in 2009-10 with a marginal drop in tax-GSDP ratio, but non-tax revenues dropped by about 10 percent amounting to 0.25 percent of GSDP. The impact of the recession showed up in the central transfers and the shared taxes. Orissa's receipts on this account fell from 5.80 percent of GSDP in 2008-09 to 5.25 percent in 2009-10. Keeping in mind the fact that the receipts from shared taxes are roughly as important as the own tax revenues for Orissa, this was a major setback. This reversal was not compensated by the central grants either – the total central grants to the State actually fell marginally. As a result of these changes, the total revenue receipts of the State as a ratio of GSDP fell by almost one percentage point from 17.2 percent in 2008-09 to 16.3 percent in 2009-10. The fiscal balance of Orissa over the years is depicted in Figure 9.2.

The second factor impacted materially on the expenditure side of the budget. The State implemented revision of salaries and pensions of its employees as per the recommendations of the Sixth Pay Commission with effect from the beginning of the Financial Year (FY) 2006-07. The recommendations of the University Grants Commission on increases in salaries and pensions of teachers and employees in higher education were also implemented. Similarly, revisions for the employees in the judicial services also were implemented. The arrears that were due on account of salary and pension revisions being implemented at a date later than that from which the revisions became effective were initially decided to be cleared in two installments during 2008-09 and 2009-10. In the event, only a small part of the arrears could be cleared in 2008-09. This caused a postponement of the resultant fiscal burden to 2009-10. Although part of the remaining burden was further shifted to 2010-11 in view of the relatively tighter fiscal situation, it was enough to raise the expenditures on salaries alone by about Rs. 1,400 crore in 2009-10 as compared to 2008-09. This caused a continuation of the relatively high annual growth of revenue

Figure 9.2: Fiscal Balances in Orissa



expenditure, as observed in 2008-09 and during 2009-10 as well. Although increase in interest expenditure was small in 2009-10, the fiscal space created since 2004-05 was significantly reduced, resulting in a deceleration of growth in other revenue expenditures and capital outlay. The latter actually fell in absolute terms.

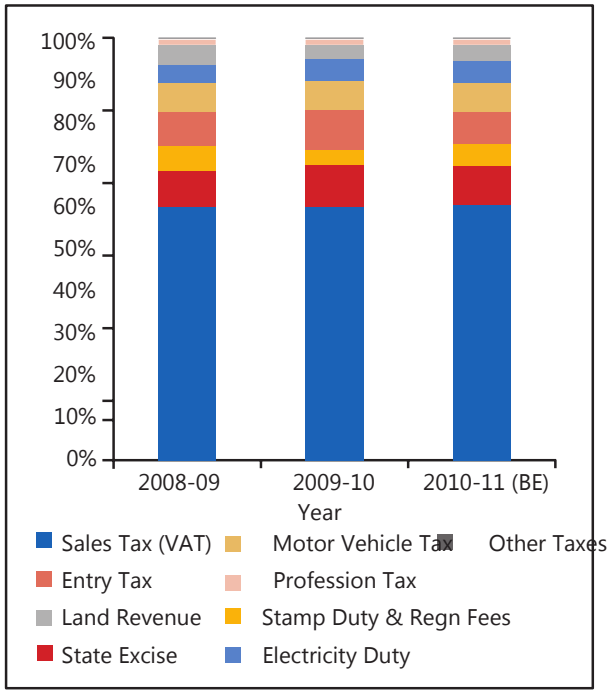
The combination of the constrained revenues and significantly higher revenue expenditures resulted in a substantial reduction in the revenue surplus that dropped to 0.7 percent of GSDP and fiscal deficit increased to 1.4 percent. Thus, despite adverse fiscal impacts during 2009-10 on revenue and expenditure sides, the net effect was not large enough to push broad fiscal indicators to injudicious levels.

In this fiscal scenario, the budget estimates call for maintaining the own tax performance roughly at the same level as during the last two financial years and an increase of about one percentage point in the central transfers to GSDP ratio with the national economy bouncing back into a high growth path after the recession. Altogether, revenue receipts are expected to rise by 0.6 percentage points in 2010-11. However, revenue expenditures are budgeted to rise, to a much greater extent by more than Rs. 7,000 crore from the 2009-10 level, primarily on account of larger salary and pension bills by about Rs. 4,500 crore. As such, the small revenue surplus of 2009-10 is expected to turn into a revenue deficit of 0.6 percent of GSDP and the fiscal deficit is expected to rise to 3.1 percent, with a marginal increase in capital outlay from the previous year. However, there is no serious cause for alarm because the broad budgetary outcomes would still be much better than the outturns recorded in the two decades ending 2003-04. Besides, the spike in expenditures, and therefore deficits, are likely to be temporary until the salary arrears are substantially cleared.

9.2 Own Revenues

Between 75-80 percent of the State's own source revenues are collected from various taxes levied by it and the rest obtained from non-tax revenues including interest receipts and dividends, various user charges for departmentally provided services, and other receipts of a commercial and non-commercial nature. Given the weight attached,

Figure 9.3: Tax Structure of Orissa



the revenue performance is largely determined by tax revenues. Within the taxes collected by the State, sales tax / VAT is the largest revenue source, consistently accounting for about 60 percent of own tax revenues. The relative revenue significances of other taxes have undergone some changes in recent years as may be seen from Figure 9.3.

The State excise has overtaken entry tax as the second largest source of own tax revenue. The growth of revenue from sales tax was below par in 2009-10 at about 13 percent. This was possibly ascribed partly to recessionary impact. The continuing uncertainty with respect to the transition to a goods and services tax system has also not helped. These two taxes have been fairly buoyant sources of revenue with annual growth of 29 and 28 percent respectively during 2009-10. The growth in electricity duty collections has also been above 25 percent. In contrast, collection of stamp duty and registration fees exhibited a significant drop, partly because of rate rationalisation and as a consequence of the recession.

The overall own tax-GSDP ratio of Orissa achieved a high of 6.05 percent in 2006-07. Though it was not possible to maintain the same momentum in subsequent years, the ratio appears to have stabilised around 5.5 percent for now. This is a substantial improvement on the ratios that were observed till the beginning of the 2000s. Orissa has to continue its efforts to improve substantially its own tax-GSDP ratio to catch up with other states. Only Bihar, Jharkhand, and West Bengal among the General Category States have lower own tax-GSDP ratios, and those in some of the southern states (e.g., Karnataka and Tamil Nadu) are above or close to 10 percent. Even allowing for the relatively low per capita income in Orissa, this clearly indicates that there is enough scope to raise this ratio substantially in Orissa and raising additional resources must remain a major fiscal objective for the foreseeable future. The 13th Finance Commission estimated the buoyancy in own tax revenue of Orissa during the period 1998-2008 to be the highest among all general category states. If this performance can be maintained in the future, the tax-GSDP ratio would by definition keep rising.

Non-tax revenues of the State increased only marginally in 2009-10 over the receipts in 2008-09 in absolute terms; as a ratio of GSDP, there was a small reduction of 0.25 percentage points. Despite a significant increase of almost 50 percent in mineral concession fees, rents and royalties, the drop was primarily because of (i) no debt relief in 2009-10 compared to Rs. 381.90 crore in 2008-09, (ii) a reduction of about 31 percent in interest and dividend receipts, and (iii) a relatively smaller reduction of about Rs. 30 crore in revenue from sales of timber and other forest produce. Total non-tax revenues are budgeted to fall in absolute terms in 2010-11 from the 2009-10 levels, reducing it from 2 percent to 1.7 percent of GSDP. However, the trend in collection of non-tax revenues during the first three quarters indicates that the actual collection will be much more than the budgeted amount.

9.3 Central Transfers

Central transfers comprise grants and tax devolution; grants are given under the dispensation of the Finance Commission, the Planning Commission and the central Ministries while tax devolutions are as per recommendations of the Finance Commission. Orissa is heavily dependent on central transfers for its resources.

I In 2009-10, central transfers constituted about 54 percent of its total revenue receipts. Of these, tax devolution is the largest component. As such, the recommendations of the Finance Commission have a significant bearing on the state finances of Orissa. Unfortunately, the strongest impact of the global recession on the State's finances was also through this route. The growth of central tax collections was relatively sluggish in 2009-10, which also meant slow growth of this source of receipts during the year. Compared to 5.8 percent of GSDP in 2008-09, which was already lower than 2007-08, tax devolutions were only 5.3 percent of GSDP in 2009-10 in Orissa. Central grants also fell marginally as a ratio of GSDP. This was one of the major contributory factors to the increase in fiscal deficit during the year.

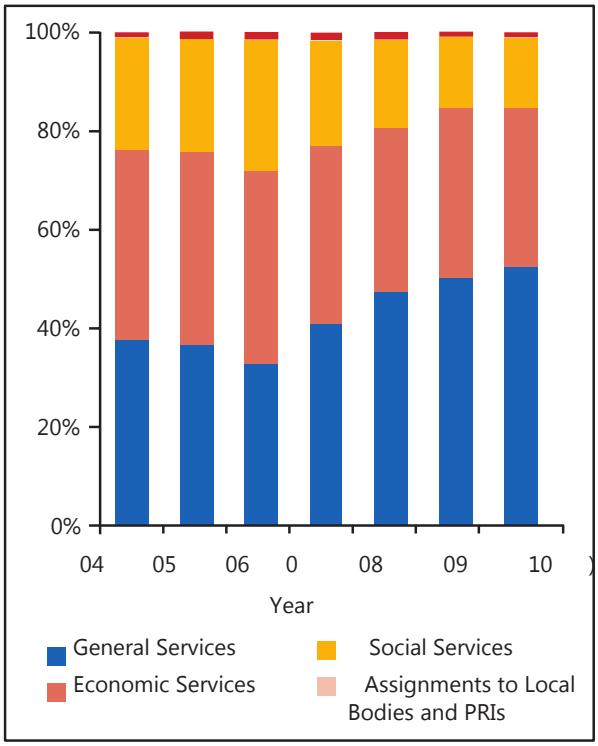
The FY 2009-10 was the last year of the implementation of the 12th Finance Commission. The 13th Finance Commission submitted its recommendations in December 2009, and its awards have been given effect from the current FY 2010-11. Tax devolution to Orissa will be impacted by two relevant factors apart from the tax collection by the central government: the divisible pool has been expanded from 30.5 percent of net central tax collections to 32 percent, and as a result of the changes in the criteria and their weights used, the inter se share of Orissa has shrunk from 5.161 percent under the 12th Finance Commission awards to 4.779 percent. No general category state has been assessed as likely to have post-devolution deficit, and so none would receive any revenue deficit grant. In terms of state-specific grants, Orissa has been awarded the second largest amount, after Bihar, among the general category states, comprising among other grants, two substantial grants for improving the power distribution system on a cost sharing basis and for construction of anganwadi centres. There are several other recommendations by the Commission that would potentially impact on state finances, but the most important among these recommendations – on the implementation of a Goods and Services Tax (GST) – is not likely to be put into practice as recommended. In fact, as things stand now, the final shape of GST to be implemented and the timeline are rather uncertain.

In FY 2010-11, both shared taxes and central grants are budgeted to increase, as expected ratios of GSDP to be 5.37 and 4.25 percent respectively. These increases are in contrast to the expected fall in the State's own revenues as a ratio of GSDP.

9.4 Revenue Expenditures

Government expenditures in Orissa are dominated by revenue expenditures compared to which capital outlay is small – in 2009-10, revenue expenditures were 15.6 percent of GSDP, while capital outlay was only 2.25 percent. However, revenue expenditures went through an extended period of compression as a part of the fiscal reforms from 2002-03 onwards. The revenue expenditures got reduced from 21.13 percent of GSDP in 2001-02 to 13.93 percent in 2007-08. Even though there has been a trend reversal in subsequent years, the 2009-10 level is well below that in 2001-02. The process of expenditure compression has improved the composition of revenue expenditures in one sense – the predomination of general services, that was roughly equivalent to non-developmental expenditures, was reduced and the share of social

Figure 9.4: Composition of Revenue Expenditure in Orissa



and economic services increased over a period of time as may be observed from Figure 9.4.

As a result of revisions of salaries of government employees, the share of general services has been rising since 2008-09, but even in the budgeted expenditures for 2010-11, the share of general services is below 40 percent of total revenue expenditures. This is much lower than their share in 2004-05. It is interesting to note that after 2008-09, the share of economic services has fallen to some extent; that of social services is roughly maintained at the same level; and the share of general services has risen. This is primarily the result of a substantially higher share of salaries and wages in both general services and social services as compared to the same in economic services.

Table 9.1 presents revenue expenditures on some selected budgetary categories. It can be seen that the growth of interest payments that is slated to jump in 2010-11 was checked till 2008-09. Pension outgo was growing slowly all through the period, but registered a sharp increase in 2009-10 primarily on account of revision of pensions as per the recommendations of the 6th Pay Commission including arrears. The increase in the pension bill in 2010-11 is expected to be of about the same magnitude in absolute terms as in 2009-10. In social services, expenditure on education dominates other budgetary heads and has been growing faster as well in recent years. In contrast, within economic services, only expenditures on agriculture and allied services show a sharp increase after 2007-08. Revenue expenditure on irrigation also shows a sharp increase in the budgeted expenditures for 2010-11 compared to the previous year, although in general, the growth of expenditures on economic services over the years is seen to be moderate.

A good indicator of the quality of expenditures is the extent of pre-emption of developmental expenditures by three categories of contractual or committed expenditures – salaries and wages, pensions, and interest payments. Since these three types of revenue expenditure do not directly contribute to enhancement of the supply of publicly provided goods or services, a smaller share of these three in total expenditures is taken to represent better quality of expenditures and the converse.

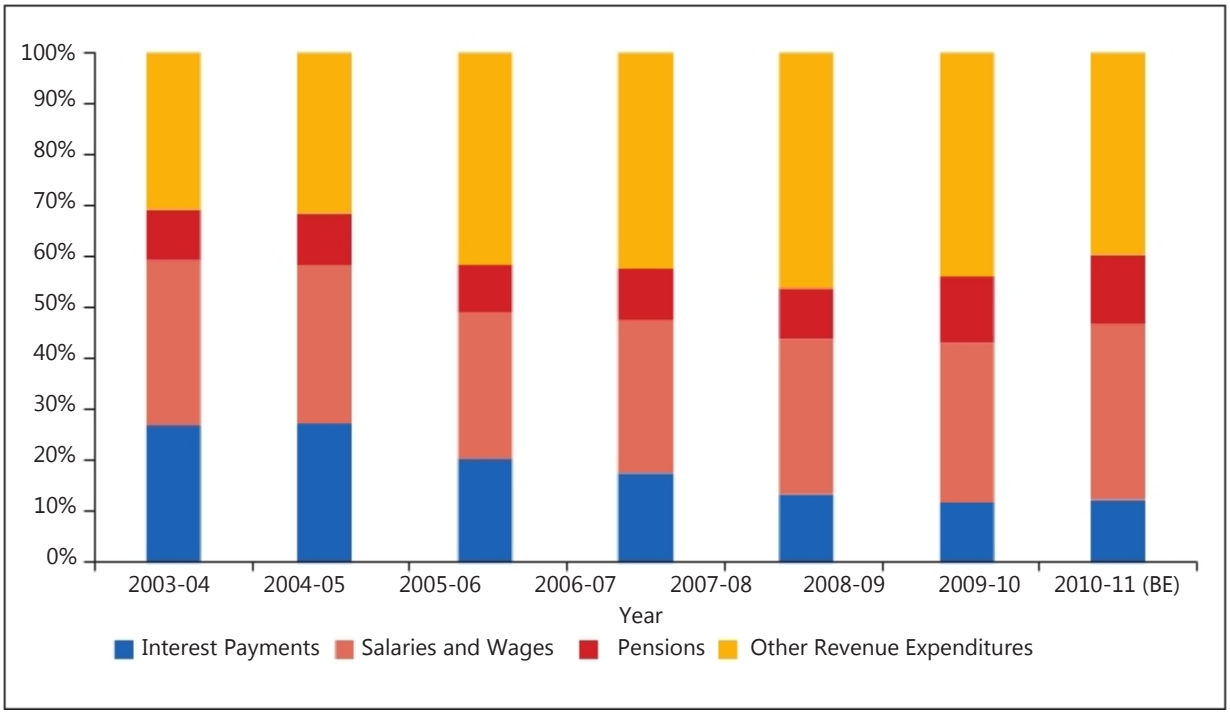
Figure 9.5 provides this information for a few recent years. It shows that primarily because

Table 9.1: Orissa - Composition of Revenue Expenditure

(Rs. crore)

Total Revenue Expenditure	12372.49	13603.52	15772.01	17723.27	21190.12	25291.60	32481.92
A. General Services of which,	6480.49	6825.66	7502.77	7227.21	6961.87	9285.15	12250.89
1. Interest Payments	3332.02	3697.10	3188.43	3169.48	2889.81	3044.17	3952.12
2. Pensions	1259.80	1338.57	1484.59	1801.36	2074.96	3283.41	4402.99
B. Social Services of which,	3980.40	4677.72	5220.54	6416.51	8284.41	9838.21	12546.39
1. General Education	1954.76	2261.79	2404.18	3171.22	4386.26	5413.18	6607.94
2. Medical and Public Health	536.61	376.16	479.5	615.37	800.2	985.9	1211.48
3. Water Supply and Sanitation	228.63	313.24	257.87	354.11	269.96	346.54	441.51
C. Economic Services of which,	1753.11	1953.28	2776.44	3728.65	5551.08	5762.4	7269.76
1. Agriculture and Allied Services	533.99	560.58	652.33	890.33	1840.8	2191.12	2843.87
2. Rural Development	467.71	513.94	610.11	861.13	1225.53	1179.91	1389.92
3. Irrigation and Flood Control	207.71	235.34	280.66	454.01	556.57	613.52	874.69
4. Roads and Bridges	138.54	197.87	558.46	749.7	884.79	940.88	1039.44
D. Assignments to Local Bodies and PRIs	158.48	146.86	272.26	350.9	392.76	405.82	414.91
Memo Item: Salaries and Wages	3977.09	4263.69	4551.50	5275.88	6426.34	7827.72	11248.10

Figure 9.5: Committed Revenue Expenditure in the Total



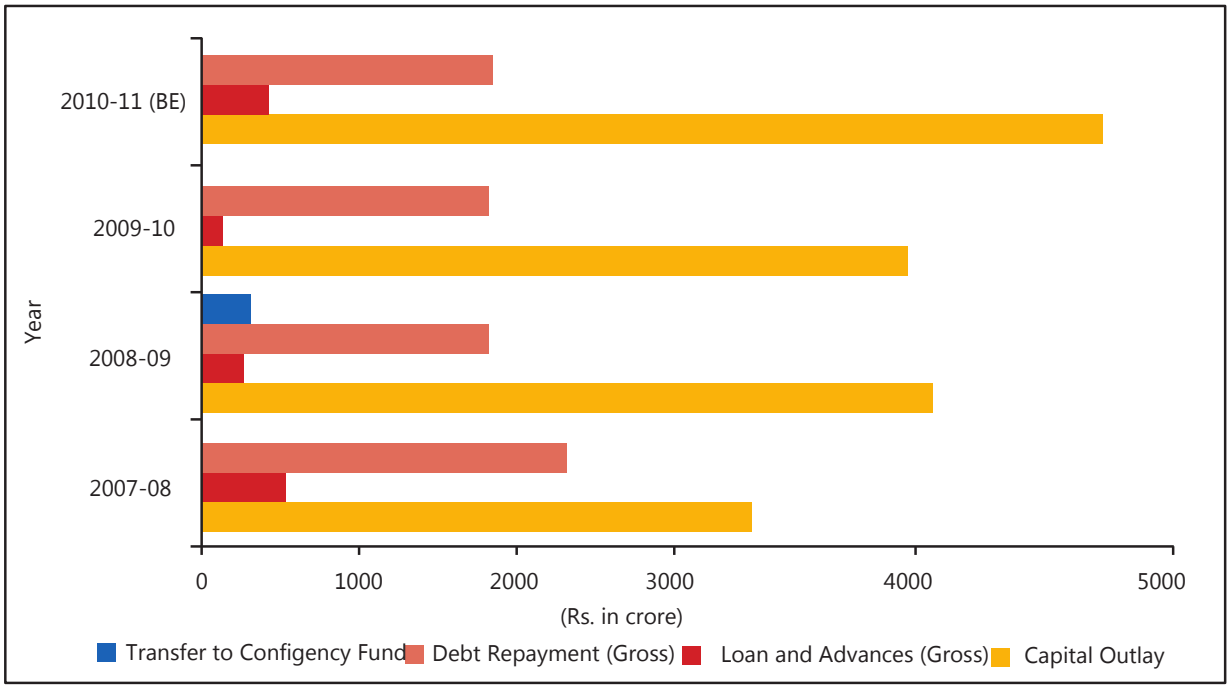
of the falling share of interest payments, the share of committed expenditures in the total revenue expenditures decreased substantially from about 70 percent in 2004-05 to about 55 percent in 2008-09. It has been rising since then, mainly because of rising wage and pension bills consequent upon their revision. In 2010-11, it is expected to reach 60 percent. However, a redeeming feature of this development is that the spurt in the share of committed expenditures should be temporary. Once all salary and pension arrears are paid out, their share should drop back to a more reasonable level.

There were no major government subsidies in Orissa till 2008-09. The decision to provide rice at Rs. 2 per kg from August 2008 introduced a substantial subsidy burden to the revenue expenditures. As a result, the small food subsidy bill of Rs. 40 crore in 2007-08 shot up to Rs. 567 crore in 2008-09. It is budgeted to reach Rs. 915 crore in 2010-11. Given that the sale price is fixed in nominal terms, every increase in the purchase, handling and transport costs of foodgrains supplied would raise the subsidy bill along with any increase in coverage or supply of foodgrains under this scheme. Thus, it has a potential of becoming the single largest expenditure item in the budget.

9.5 Capital Expenditures

Total capital expenditures comprising capital outlay on general, social and economic services, gross repayment of public debt (both internal and central), transfers to contingency fund and gross loans and advances are depicted in Figure 9.6 along with the components. Of these, capital outlay plays a significant role in the development of the State because its economic development is critically dependent on the infrastructure facilities available and their availability depends heavily on capital outlay incurred by the government. It can be seen that after a substantial rise in 2008-09 from the 2007-08 levels, capital outlays decreased a little in 2009-10; they are budgeted to rise substantially again in 2010-11. The bulk of these is for economic services representing physical infrastructure under the State Plan account. In the total capital outlay also, an overwhelmingly large part is for State Plan Schemes in the budgeted figures for 2010-11. For example, the capital outlay under State Plan Schemes accounts for about 38 percent of the total. Resource availability permitting, this is

Figure 9.6: Capital Expenditures in Orissa



an area where expenditures need to be stepped up significantly to provide developmental impetus.

Loans and advances have been reduced over the years to the presently small amounts. In fact, if net figures were to be considered taking into account repayments of the loans and advances, these would be negative. Similarly, with reduction in indebtedness, debt repayments have also become smaller over the years. However, there is a small increase in absolute terms in the budgeted figures for 2010-11. The remaining element – transfer to Contingency Fund – is a sporadic entry made as and when the Fund needs to be replenished. In the four years considered here, there is an entry only in 2008-09.

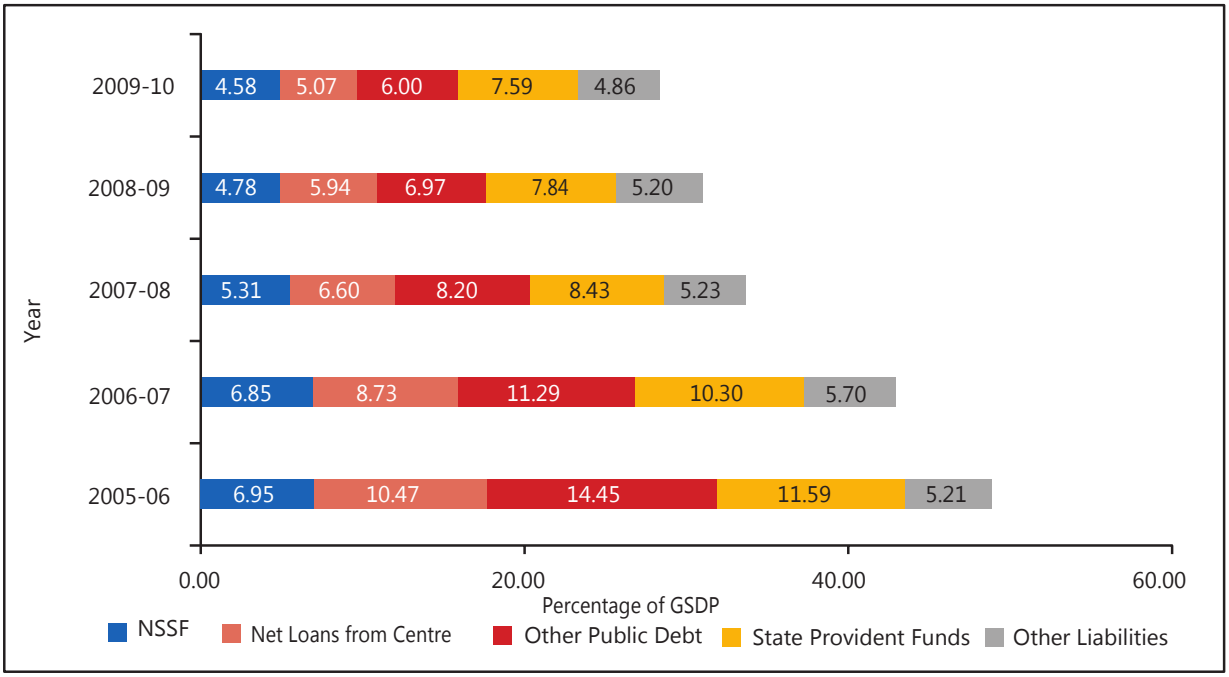
9.6 Public Debt

Orissa was considered a heavily debt-stressed state not very long ago. After successful implementation of the fiscal reforms, the burden of debt has been reduced over a few recent years to a far more manageable level. Total liabilities as a ratio of GSDP have been brought down from 55.92 percent at the end of 2002-03 to 23.24 percent at the end of 2009-10. This has become possible for two main reasons. First, the State has not resorted to market borrowings since 2006-07. Second, fiscal reform and debt write-off mandated by the Finance Commission as a reward for fiscal prudence have also helped to make this happen. Fig 9.7 shows liabilities of the State Government from 2005-06 to 2009-10.

The reduction in liabilities has been achieved in all major components of liabilities. Within the broad category of public debt, net outstanding loans from the Government of India have been reduced from 10.5 percent of GSDP in 2005-06 to a level less than half that figure in 2010-11 (BE). Special securities issued to National Small Savings Fund have fallen from about 7 percent of GSDP to 4.2 percent. Other public debt including market borrowings and institutional debt among others also exhibits a steady fall from 14.5 percent at the close of 2005-06 to 6 percent by the end of 2009-10. However, this is one category of debt that is expected to rise to 7.33 percent in the budget estimates for 2010-11.

Apart from public debt as a part of the Consolidated Fund, liabilities also arise in the Public Accounts. Among these liabilities are the State Provident Fund, Reserve Funds and Deposits. Of these, the State Provident Funds constitute the major liability; they have been reduced from 11.6 percent of

Figure 9.7: Liabilities of Government of Orissa



GSDP for 2005-06 to 7.6 percent for 2009-10 (BE). It, however, remains the largest category of liabilities for the State. Other Public Account liabilities have remained roughly unchanged till 2009-10, and are expected to fall a little in 2010-11 budget estimates.

The reduction in indebtedness achieved in Orissa has been the most significant among all states of India in recent times. Apart from a commensurate reduction in interest payments that creates larger fiscal space for developmental expenditures, it has largely allayed concerns regarding fiscal sustainability and has also made fresh borrowings easier to come by and less expensive in terms of interest costs attached. Since borrowings per se are not necessarily to be avoided, the better terms at which loans can now be had improve the prospects of debt-financing or leveraging developmental projects with reasonable financial rates of return. This would, of course, be predicated upon fairly realistic project appraisals.

Apart from the debt / liabilities included in the budgetary transactions, there can be liabilities incurred by the parastatals or special agencies (e.g., Special-purpose Vehicles or SPV). Also, there can be various contingent liabilities, of which the guarantees given by the State Government for loans raised by others constitute the most obvious, commonly observed, and often the major component. As of now, Government of Orissa do not have any outstanding off-budget loans. The outstanding amount of guarantees has been reduced from the 2004-05 level of Rs. 3,823 crore to Rs. 1,027 crore at the end of 2009-10. Of this amount, Rs. 568 crore relate to the power sector only. Guarantee Fees are being collected from the beneficiary agencies – the cumulative amount of such fees collected stood at Rs. 112 crore at the end of 2009-10.

9.7 Institutional Measures

Modernising, improving and upgrading the institutional set up for more efficient management of public finances is an ongoing process, and an integral part of improving governance. As such, except when a completely new feature or system is introduced, institutional improvements generally receive less attention. However, Orissa has recently taken several steps to strengthen appropriate institutional measures. Some of the initiatives undertaken, among others, are noted below:

- Maintenance of capital assets created is an area often considered as the Achilles' heel in the

context of government expenditure. Although inadequate maintenance reduces efficiency of assets and increases costs of operation, eventually requiring large doses of capital outlay for replacement, such expenditures are the first casualty in a resource crunch. Moreover, the annual budgeting system has a built-in tendency to ignore maintenance expenditures. To counter this, it has been decided to formulate an Annual Maintenance Plan to put in place appropriate institutional reforms for effective and productive utilisation of the budgeted provision for 'Operation and Maintenance' indicating the criteria to be followed for allocation of budgetary provision among functional and administrative units, routine and periodic maintenance, monitoring and oversight arrangement.

- For better cash management and prevention of last quarter rush of expenditures, a system of Monthly Expenditure Plan and Quarterly Expenditure Allocation has been introduced for 10 key Departments initially from FY 2010-11.
- There are certain expenditures which are classified as revenue expenditures under budgetary accounting practices. But they include expenditures in the nature of capital investment. To better account for the true nature of public expenditures, a comprehensive disclosure on total public investment for capital formation, irrespective of the budgetary classification, is being furnished in the Explanatory Memorandum in the budget documents.
- Since it is important to understand and monitor the translation of public expenditures or outlays into targeted outcomes, it has been decided to bring out Outcome Budget of four Departments initially from 2010-11.
- The initiative to undertake a Zero-based Investment Review for as many as 150 projects was undertaken in 2009-10. Emphasis is on continuing this programme and completing the work on the first batch of projects as early as possible.
- Several decisions on various routine matters – though no less significant – have been taken. These include, inter alia, attempts to bring various legal disputes to a close as early as possible, considering and carrying out legislative changes where felt necessary, monitoring of the State's loans and guarantees given, ensuring timely submission of utilisation certificates where required with respect to central grants and assistance, and attending to large balances lying unspent in Personal Ledger (PL) Accounts of various Administrators.

ANNEXURE 9

Annexure 9.1: Orissa - Monitorable Fiscal Indicators

(Rs. in Crore)

Revenue Receipt									
State's Own Tax Revenue	1127.19	1342.04	1421.73	1487.13	1704.08	2184.03	2466.88	2871.84	3301.73
State's Own Non-Tax Revenue	628.23	481.78	540.93	557.49	716.48	685.47	691.75	961.17	1094.55
State's Own Revenue	1755.42	1823.82	1962.66	2044.62	2420.56	2869.50	3158.63	3833.01	4396.28
Share Tax	1284.93	1565.98	1563.61	1694.52	1748.45	2603.97	2648.72	2805.58	3327.68
Grants from Centre	850.36	896.96	1105.76	815.26	1715.62	1428.55	1240.63	1800.17	1716.28
Total Central Transfer	2135.29	2462.94	2669.37	2509.78	3464.07	4032.52	3889.35	4605.75	5043.96
Total Revenue Receipt	3890.71	4286.76	4632.03	4554.4	5884.63	6902.02	7047.98	8438.76	9440.24
Revenue Expenditure									
Salary	1767.6	2064.03	2623.36	3399.06	3886.77	3802.84	3627.6	3814.29	3902.68
Pension	194.35	252.72	316.83	475.3	688.41	832.07	1003.22	1029.79	1158.37
Interest	929.33	1079.44	1291.81	1484.92	1237.77	2286.88	2834.96	2885.58	2860.28
Transfer to Funds - 2075					0.48	0.49	0.79	21.9	41.45
Investment in Funds - 2048									150.07
Others	1806.53	1721.06	1303.17	1457.62	2645.40	1911.71	2415.16	2263.12	2748.31
Total Revenue Expenditure	4697.81	5117.25	5535.17	6816.9	8458.83	8833.99	9881.73	10014.68	10861.16
						20.38	21.13	20.15	17.80
Revenue Deficit	-807.10	-830.49	-903.14	-2262.50	-2574.20	-1931.97	-2833.75	-1575.92	-1420.92
Recovery of Loans and Advances	51.11	27.68	124.15	106.23	102.81	76.58	131.66	177.19	273.06
Capital Outlay	446.92	878.79	856.6	913.51	799.00	834.09	887.2	1074.08	852.95
Gross Lendings	192.95	113.67	165.64	348.33	476.04	635.79	379.15	343.23	1572.01
Transfer to Contigency Fund	0.00	0.00	0.00	0.00	90.00	0.00	0.00	0.00	0.00
Fiscal Deficit	-1395.86	-1602.03	-1801.23	-2913.23	-3836.43	-3325.27	-3968.44	-2816.04	-3572.81
Primary Deficit	-466.53	-522.59	-509.42	-1428.31	-2598.66	-1038.39	-1133.48	69.54	-712.53
Debt Stock (end year)	9219.91	10493.75	12387.50	14751.15	18100.80	21001.90	24033.73	27801.19	31633.96
Monitorable Fiscal Targets/ Indicators									
Salary / SOR	100.69%	113.17%	133.66%	166.24%	160.57%	132.53%	114.85%	99.51%	88.77%
NICRE / SOR + MR	64.53%	68.34%	83.38%	103.62%	109.74%	84.68%	79.74%	72.97%	65.52%
Salary / Net Revenue. Expenditure	49.46%	54.53%	66.81%	69.99%	59.50%	66.54%	60.02%	62.54%	57.04%
RD / RR	-20.74%	-19.37%	-19.50%	-49.68%	-43.74%	-27.99%	-40.21%	-18.67%	-15.05%
DS / TRR	236.97%	244.79%	267.43%	323.89%	307.59%	304.29%	341.00%	329.45%	335.10%
Interest / RR	23.89%	25.18%	27.89%	32.60%	21.03%	33.13%	40.22%	34.19%	30.30%
GSDP at Current Prices	27118	26504	32235	35581	42986	43351	46756	49713	61008
As % of GSDP									
Revenue Deficit	-2.98%	-3.13%	-2.80%	-6.36%	-5.99%	-4.46%	-6.06%	-3.17%	-2.33%
Fiscal Deficit	-5.15%	-6.04%	-5.59%	-8.19%	-8.92%	-7.67%	-8.49%	-5.66%	-5.86%
Primary Deficit	-1.72%	-1.97%	-1.58%	-4.01%	-6.05%	-2.40%	-2.42%	0.14%	-1.17%
Debt Stock	34.00%	39.59%	38.43%	41.46%	42.11%	48.45%	51.40%	55.92%	51.85%
Capital Outlay	1.65%	3.32%	2.66%	2.57%	1.86%	1.92%	1.90%	2.16%	1.40%
Tax / GSDP	4.16%	5.06%	4.41%	4.18%	3.96%	5.04%	5.28%	5.78%	5.41%
Non-Tax / GSDP	2.32%	1.82%	1.68%	1.57%	1.67%	1.58%	1.48%	1.93%	1.79%
Total Own Revenue / GSDP	6.47%	6.88%	6.09%	5.75%	5.63%	6.62%	6.76%	7.71%	7.21%
Share Tax / GSDP	4.74%	5.91%	4.85%	4.76%	4.07%	6.01%	5.67%	5.64%	5.45%
Grant-in-Aid/ GSDP	3.14%	3.38%	3.43%	2.29%	3.99%	3.30%	2.65%	3.62%	2.81%
Total transfer from Centre/ GSDP	7.87%	9.29%	8.28%	7.05%	8.06%	9.30%	8.32%	9.26%	8.27%
Total Revenue Receipt/ GSDP	14.35%	16.17%	14.37%	12.80%	13.69%	15.92%	15.07%	16.98%	15.47%

(Contd.)

Revenue Receipt							
State's Own Tax Revenue	4176.6	5002.28	6065.06	6856.09	7995.2	8982.34	10360.01
State's Own Non-Tax Revenue	1345.52	1531.9	2588.12	2653.58	3176.15	3212.2	3165.98
State's Own Revenue	5522.12	6534.18	8653.18	9509.67	11171.35	12194.54	13525.99
Share Tax	3977.66	4876.75	6220.42	7846.5	8279.96	8518.65	10004.17
Grants from Centre	2350.41	2673.78	3159.02	4611.02	5158.70	5717.02	7915.14
Total Central Transfer	6328.07	7550.53	9379.44	12457.52	13438.66	14235.67	17919.31
Total Revenue Receipt	11850.19	14084.71	18032.62	21967.19	24610.01	26430.21	31445.30
Revenue Expenditure							
Salary	3977.09	4263.69	4551.50	5275.88	6426.34	7827.72	11248.10
Pension	1259.8	1338.57	1484.59	1801.36	2074.96	3283.41	4402.99
Interest	3332.02	3697.1	3188.43	3169.48	2889.81	3044.17	3952.12
Transfer to Funds - 2075	150.61	92.34	93.70	94.48	0.00	0.00	0.00
Investment in Funds - 2048	785.00	660.00	1488.07	700	0.00	500.0	0.00
Others	2867.97	3551.82	4965.72	6682.07	9799.01	10636.30	12878.71
Total Revenue Expenditure	12372.49	13603.52	15772.01	17723.27	21190.12	25291.60	32481.92
	16.16	16.22	15.74	13.93	14.85	15.58	17.43
Revenue Deficit	-522.30	481.19	2260.60	4243.92	3419.89	1138.62	-1036.65
Recovery of Loans and Advances	416.95	347.60	285.82	355.30	236.21	356.36	243.15
Capital Outlay	1055.55	1038.06	1451.47	2843.41	3779.17	3647.88	4652.99
Gross Lendings	205.09	67.2	271.77	432.68	210.97	112.48	351.99
Transfer to Contigency Fund	0.00	0.00	0.00	0.00	250.00	0.00	0.00
Fiscal Deficit	-1365.99	-276.47	823.18	1323.13	-584.03	-2265.38	-5798.47
Primary Deficit	1966.03	3420.63	4011.61	4492.61	2305.78	778.79	-1846.35
Debt Stock (end year)	34053.54	36456.45	37249.51	36311.61	36430.54	37730.54	43523.11
Monitorable Fiscal Targets/Indicators							
Salary / SOR	72.02%	65.25%	52.60%	55.48%	57.53%	64.19%	83.16%
NICRE / SOR + MR	55.13%	49.10%	40.58%	40.78%	43.71%	53.64%	66.52%
Salary / Net Revenue. Expenditure	51.11%	49.76%	41.01%	41.37%	39.61%	41.28%	46.62%
RD / RR	-4.41%	3.42%	12.54%	19.32%	13.90%	4.31%	-3.30%
DS / TRR	287.37%	258.84%	206.57%	165.30%	148.03%	142.75%	138.41%
Interest / RR	28.12%	26.25%	17.68%	14.43%	11.74%	11.52%	12.57%
GSDP at Current Prices	76579	83891	100221	127234	142728	162327	186356
As % of GSDP	7657856.231	8389120.198	10022118.632	12723376.676	14272817.584	16232736.097	18635600.013
Revenue Deficit	-0.68%	0.57%	2.26%	3.34%	2.40%	0.70%	-0.56%
Fiscal Deficit	-1.78%	-0.33%	0.82%	1.04%	-0.41%	-1.40%	-3.11%
Primary Deficit	2.57%	4.08%	4.00%	3.53%	1.62%	0.48%	-0.99%
Debt Stock	44.47%	43.46%	37.17%	28.54%	25.52%	23.24%	23.35%
Capital Outlay	1.38%	1.24%	1.45%	2.23%	2.65%	2.25%	2.50%
Tax / GSDP	0.05%	0.06%	0.06%	0.06%	0.06%	0.05%	0.05%
Non-Tax / GSDP	0.03%	0.03%	0.03%	0.04%	0.04%	0.04%	0.04%
Total Own Revenue / GSDP	0.08%	0.09%	0.09%	0.10%	0.09%	0.09%	0.10%
Share Tax / GSDP	0.15%	0.17%	0.18%	0.17%	0.17%	0.16%	0.17%
Grant-in-Aid/ GSDP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total transfer from Centre/ GSDP	0.05%	0.05%	0.05%	0.04%	0.05%	0.05%	0.06%
Total Revenue Receipt/ GSDP	0.02%	0.02%	0.01%	0.01%	0.01%	0.02%	0.02%

Annexure 9.2: Own Tax Revenues in Orissa

(Rs. in Crore)

Sales Tax (VAT)	4803.34	5408.76	6273.26
State Excise	660.07	849.05	950.50
Stamp Duty & Regn Fees	495.66	359.96	535.32
Entry Tax	638.32	815.25	785.90
Motor Vehicle Tax	524.42	611.23	713.42
Electricity Duty	365.03	459.96	521.77
Land Revenue	348.79	292.18	376.70
Profession Tax	112.18	135.55	145.00
Other Taxes	47.39	50.40	58.14
Total	7995.20	8982.34	10360.01

Source: Finance Accounts, 2008-09 and 2009-10 and Budget Documents, 2010-11

Annexure 9.3: Capital Expenditure in Orissa

(Rs. in Crore)

Capital Outlay*	2,843.41	3,779.17	3,647.88	4,652.99
Loans and Advances (Gross)	432.68	210.97	112.48	351.99
Debt Repayment (Gross)	1,884.97	1,492.61	1,488.69	1,509.79
Transfer to Contingency Fund	--	250.00	--	--
Total Capital Expenditure	5,121.06	5,732.74	5,249.05	6,514.77

* On general, social and economic services

Annexure 9.4: Liabilities of the Government of Orissa as on 31st March

(Rs. in Crore)

1	Consolidated Fund	26730.12	26925.27	25587.20	25246.25	25407.69	31138.82
I	Public Debt	26730.12	26925.27	25587.20	25246.25	25407.69	31138.82
a	Open Market Borrowings (Net SLR based Market borrowings)	9700.13	8910.73	8024.27	7354.01	6783.04	9823.84
b	Borrowings from Banks and FIs/ Negotiated Loans	1316.48	1413.64	1521.77	1821.44	2300.11	3277.44
c	Special Securities issued to NSSF	5826.46	6862.38	6756.24	6822.27	7432.62	7865.47
d	Bonds/ Debentures which are issued by the State Government	1102.87	992.87	882.58	772.01	662.01	551.43
e	Loans from the Centre (Net)	8783.75	8745.23	8401.92	8476.10	8229.49	9620.22
f	Others	0.42	0.42	0.42	0.42	0.42	0.42
II	Ways and Means Advances and Overdrafts from RBI or any other bank	0.00	0.00	0.00	0.00	0.00	0.00
a	-WMA	0.00	0.00	0.00	0.00	0.00	0.00
b	-OD	0.00	0.00	0.00	0.00	0.00	0.00
2	Public Accounts	13984.41	16063.73	17290.52	18234.52	20018.78	20392.76
a	State Provident Funds	9726.33	10324.24	10724.40	11184.29	12322.35	12384.29
b	Small Savings, Insurance and Pension Funds, Trust and Endowments, etc	2.62	2.45	2.15	1.04	1.04	2.01
c	Other items in Public Accounts of which:	4255.47	5737.04	6563.96	7049.19	7695.39	8006.46
i	Deposits	2120.94	2054.68	2138.02	2714.56	2859.34	3671.68
	-Bearing Interest	18.65	18.64	19.99	23.67	30.17	169.53
	-Not Bearing Interest	2102.29	2036.04	2118.04	2690.90	2829.17	3502.16
ii	Reserve Funds/ Sinking Fund	2134.53	3682.36	4425.94	4334.63	4836.05	4334.77
	-Bearing Interest	4.84	4.84	4.84	4.84	4.84	4.84
	-Not Bearing Interest	2129.69	3677.52	4421.10	4329.79	4831.21	4329.93
3	Contingency Fund	109.57	-28.09	85.58	375.85	187.95	375.85
4	Total Liabilities (1+2+3)	40824.10	42960.91	42963.30	43856.61	45614.42	51907.43
5	Memo Items	2575.10	4961.37	6582.75	6607.87	5425.40	9758.14
a	Remittances	33.06	106.92	54.34	56.65	14.84	412.24
b	Suspense and Miscellaneous	2807.66	4635.85	5855.03	6376.91	4781.24	9345.90
c	Appropriation to Contingency Fund	0.00	0.00	0.00	0.00	0.00	0.00
d	Decrease in Cash Balance	-265.63	218.59	673.38	174.31	629.33	0.00

Note: This does not include Miscellaneous Capital Receipt as in the Statement of Liabilities appearing in the Report of C&AG (Civil) and taken into consideration for computation of total liabilities in the Accounts at a Glance prepared by A.G. (A&E), Orissa

CHAPTER 10

Looking Ahead

This Survey takes note of the efforts of the State Government to bring visible improvements in State finances, to reduce the Debt-GSDP ratio from 55.92 percent in 2002-03 to a more sustainable level of 23.24 percent in 2009-10, and to create fiscal space for higher plan and capital outlays to propel growth in the economy, and development of Orissa.

Orissa's economy has grown, in real terms at 2004-05 prices, at an average rate of 9.57 percent per annum in the first three years of the 11th Plan. Orissa's real per capita income had fallen from about 90 percent of the national average in 1950-51 to about 61 percent in 2002-03. This long-term falling trend in real per capita income has not only been arrested since 2004-05, but reversed as well. The State per capita income has started rising and the gap with the national average is reducing steadily.

It is heartening to note that there has been a reduction in poverty by 7.25 percentage points between 1999-2000 and 2004-05 and a further reduction of 11.73 percentage points between 2004-05 and 2007-08. The Survey highlights several challenges faced by, and opportunities available to, Orissa.

The analysis presented in the Survey 2010-11 clearly brings out that there is a perceptible structural change in Orissa's economy. The service sector has become more and more pronounced, its share being 54 percent of GSDP as per quick estimates of 2009-10. The share of the industrial sector has increased to 28 percent, and that of the agriculture sector has come down to 18 percent, of GSDP in 2009-10. This pattern of diversification in the State economy is in line with changes at national and international levels.

However, a major concern is that though the share of the agriculture sector has been declining, the proportion of people dependent on agriculture has not been declining in the same proportion and rate. More than 60 percent population still depends on the agriculture and allied sectors for their sustenance. Major benefits of the growth in the service sector and the industrial sector flow largely to those sections of population that are educated and/or have desired skills.

This Survey has also noted that the State economy has been following a high growth trajectory from 2002-03 onwards. The economy has grown at an annual average rate of 9.51 percent during the 10th Plan and at 9.57 percent in the first three years of the 11th Plan, despite challenges posed by the "global economic slow-down". It has, however, been observed that the higher growth in the economy in recent years has been contributed largely by the industrial sector followed by the service sector. The growth in the agriculture sector has widely varied over the years. The sector has registered very low or negative growth in some years. This is a matter of concern.

There is, therefore, an urgent need to take appropriate measures to raise productivity of the agriculture and allied sectors substantially so that the incomes and employment opportunities of those who depend upon these sectors are enhanced in a sustained manner. There is also a need to raise the skill levels of large sections of the population who are dependent on agriculture and allied sectors so that they may find remunerative employment and livelihood opportunities outside these sectors. The shifting of labour away from the agricultural sectors to non-agricultural sectors would help raise people's incomes and thus reduce poverty faster.

Orissa is vulnerable to frequent natural calamities such as droughts, floods and cyclones. These calamities adversely impact the agricultural and other sub-sectors of the economy and need be adequately addressed.

Orissa witnesses acute regional, social and gender disparities. Some regions like the KBK region and some social groups, for example, SC and ST communities, are at a great disadvantage. It is heartening to note that there are several interventions in place to address these disparities.

10.1 Development Approach for Orissa

In recent years, Orissa has made significant achievements in terms of economic growth, poverty reduction and other socio-economic indicators. The State Government has been giving emphasis to the following areas which need special attention and focus on an overall development approach:

i. Orissa's economy needs to grow faster than the national average over a long period of time in order to catch up with the nation.

ii. Agriculture and allied sectors need to perform above the national average over a long period of time.

iii. Sustained efforts are needed to mitigate adverse impacts of natural calamities and other shocks on Orissa's economy and people.

iv. Special attention needs to be given to depressed regions, marginalised classes including ST, SC and women to substantially reduce regional, social and gender disparities.

v. With a view to addressing the problem of unemployment and under-employment, particularly among educated and uneducated young persons, special efforts are required to improve their employable skills, education and other soft skills to harness opportunities that may come up for them in and outside Orissa.

vi. Infrastructure including roads, ports, railways and irrigation facilities need to be adequately augmented and improved.

vii. As Orissa has a high incidence of poverty, special efforts are needed to reduce it at a faster pace.