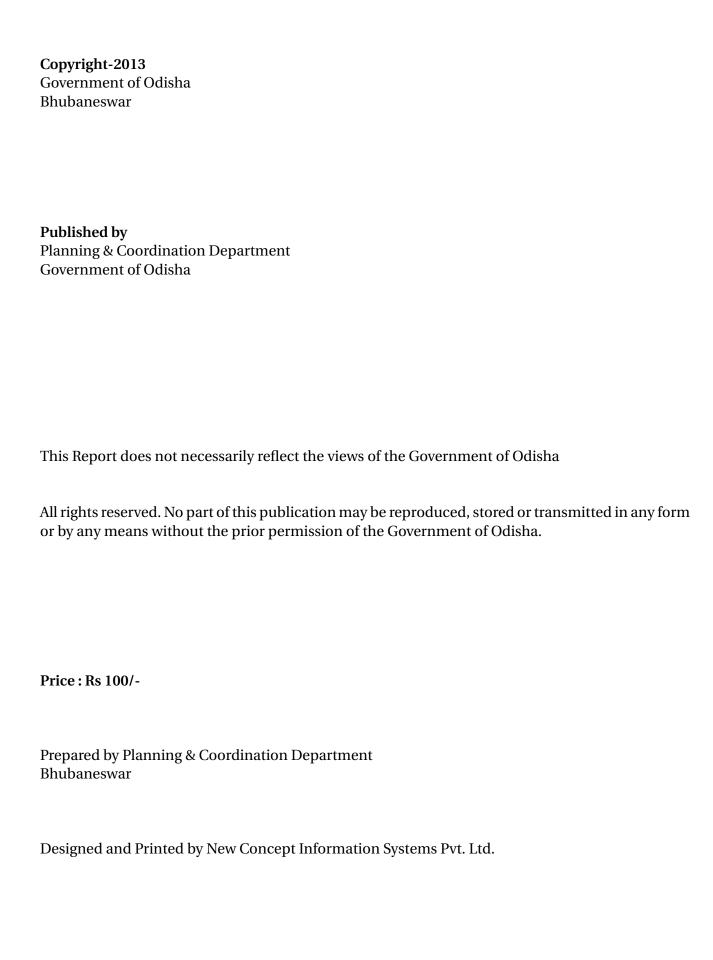


# Economic Survey 2012-13

## **ODISHA**

Planning & Coordination Department Directorate of Economics & Statistics Government of Odisha

February 2013



#### NAVEEN PATNAIK CHIEF MINISTER, ODISHA



### Foreword



I am glad to know that the Planning & Co-ordination Department has brought out the Odisha Economic Survey, 2012-13 with a view to provide a clear idea of past performance of Odisha's economy and its outlook for the future.

The Odisha Economic Survey, 2012-13 analyses various aspects of the economy of the State; provides useful information for the citizens to know the status of the State's economy and is a source of valuable feedback for

policy makers and others. The Odisha Economic Survey, 2012-13 looks at the State's finances, growth and structural change in the State's economy. It also takes note of the efforts of the State Government to bring perceptible improvements in the socio-economic conditions of the people of Odisha. The state's economy is on high growth trajectory from 2002-03 onwards. Odisha has made outstanding efforts in reducing poverty by 20.2 percentage points from 57.2% in 2004-05 to 37% in 2009-10. This is the highest reduction in poverty by any state in India from 2004-05 to 2009-10. The Odisha Economic Survey, 2012-13 also highlights the challenges faced by, and opportunities available to, Odisha.

I sincerely hope that the Odisha Economic Survey, 2012-13 will be useful to policy makers, academicians and others.

(NAVEEN PATNAIK)

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# Preface



The Odisha Economic Survey published by the Planning & Co-ordination Department is a very useful document that attracts attention of development practitioners, academics, researchers and others. It provides a clear idea of past performance of Odisha's economy and its outlook for the future.

The Odisha Economic Survey, 2012-13 highlights the structural changes in the State economy with a high growth trajectory in recent years. The

Service Sector is becoming more and more pronounced. As per "advance estimates" for 2012-13, the share of this sector in the real Gross State Domestic Product (GSDP) of the State is 58.28 percent, that of the Industry Sector 24.23 percent and Agriculture Sector 17.49 percent. This has significant implications for generating more employment and livelihood opportunities.

As per the advance estimate for 2012-13, Odisha's economy has grown, in real terms at 2004-05 prices at the rate of 9.14 percent during 2012-13 over 2011-12. In recent years, Odisha has witnessed faster poverty reduction. There has been a record reduction in poverty by 20.2 percentage points during the period from 2004-05 to 2009-10, which is highest among all States in India.

There are, however, acute regional, social and gender disparities. This is a matter of serious concern and has attracted attention of the Government. Development of backward regions and that of the marginalised sections, i.e., Scheduled Tribes, Scheduled Caste and women and children has been accorded a very high priority. Our Government has focus on accelerated development of agriculture and allied sectors, irrigation, infrastructure and human development sector including education, health, safe drinking water supply, nutrition, sanitation as well as employment generation and livelihood sectors.

I would like to place on record my deep sense of appreciation of the contributions of Prof. Tapas Kumar Sen, NIPFP, New Delhi in improving the Public Finance chapter of the Economic Survey, 2012-13. The officers and staff of Planning & Coordination Department, Finance Department and Directorate of Economics & Statistics have added their efforts to this Survey. I hope Odisha's Economic Survey, 2012-13 will be useful to various stakeholders including legislators, policy makers, academics, researchers and others.

(MAHESWAR MOHANTY)

# Acknowledgement

Several persons and institutions have contributed to the preparation of the Odisha Economic Survey, 2012-13. We are very grateful to Sj. Naveen Patnaik, Hon'ble Chief Minister, Odisha who inspired us to prepare the survey in a professional manner. We are also grateful to Sj. Maheswar Mohanty, Hon'ble Minister, Tourism & Culture, Planning & Co-ordination, who has encouraged and guided us to complete this task in a time bound manner.

Shri B.K. Patnaik, Chief Secretary and Chief Development Commissioner, guided us through the tedious process of preparation of the survey. Shri J.K. Mohapatra, Development Commissioner-cum-Additional Chief Secretary extended full support, guidance and intellectual inputs for this assignment. Their efforts and support are gratefully acknowledged.

We are also grateful to Prof. (Dr.) Tapas Kumar Sen, NIPFP, New Delhi for his support and contributions in improving the Chapter on Public Finance. Shri D.K. Jena, Joint Secretary and Shri S. Rath, Under Secretary, Finance Department provided desired data for different components of the survey, especially for the Chapter on Public Finance. We are grateful to them all for their support.

This work would not have been possible without the active co-operation of my colleagues in Planning & Coordination Department and Directorate of Economics & Statistics (DE&S). Shri H.M. Routray, Ex-Director and Shri D. Behera, Director, Shri K.D. Sahu, Joint Director, Dr. Dillip Ray, Md. Firoz Khan and Shri S.R. Mahanta, all Deputy Directors; Shri P.K. Dash and Miss Sujata P. Parida, both Assistant Directors and Shri B.K. Nayak, SA in the DE&S made untiring efforts from beginning to the end of the process of revision of the survey. Shri B.C. Mohapatra, Additional Secretary (Plan), Shri A.K. Mishra, Director (DFC)-cum-Additional Secretary, Shri J.K. Mishra, Dr. N.K. Panda, Shri G.C. Dash and Smt. J. Mohapatra, all Joint Directors, Shri D. Das Mohapatra, Shri A.C. Sarangi, Shri B.N. Dash and Smt. S. Das, all Deputy Directors and others from Planning & Co-ordination Department also assisted in varying degrees. Shri C.R. Satapathy, Deputy Director, Shri B.K. Sahu, Specialist (MIS), Shri N. Mishra, Chief Accounts Officer and others from Poverty and Human Development Monitoring Agency (PHDMA) also made untiring efforts and assisted at different stages of this task. PHDMA funded the entire exercise and shared other responsibilities for completion of the task. M/s New Concept Information Systems Pvt. Ltd. helped us in cover and layout design, typesetting and printing of this document. We sincerely thank them all 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 of this document.

(R.V. Singh)

Officer on Special Duty

Planning & Coordination Department, Government of Odisha

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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 Diseases

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 Cooperative Agricultural and Rural Development Bank

CBSE Central Board Second of Secondary Education

CC Credit Cooperatives

CCCN Crime & Criminal Cracking Network & System

C-D Ratio Credit-Deposit Ratio

CDM Clean Development Mechanism
CES Centre for Environment Studies
CESCO Central Electricity Corporation Ltd
CESU Central 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 Central Statistical Organization
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 Agency
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 Odisha
GSDP Gross State Domestic Product
HCFC High Carbon Ferro Chrome
HDI Human Development Index

HUDCO Housing & Urban Development Corporation

HYV High Yielding Variety
IAY Indira Awas Yojana

ICDS Integrated Child Development Scheme
ICSE Indian Council of Secondary Education
ICT Information & Communication Technology
ICTC Integrated Counseling & Testing Centre
IDCO Infrastructure Development Corporation

IDCOL Industrial Development Corporation of Odisha Ltd

IDDP Integrated Dairy Development Programme
 IEC Information Education & Communication
 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 Information 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, Oil palm & Maize

IT Information 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 Jawaharlal Nehru Urban Renewal Mission

KBK Kalahandi 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 Kilo 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 Multipurpose Identity Card

MIS Management Information System

MMR Maternal Mortality Rate

MOEF Ministry of Environment & Forest
MoU Memorandum of Understanding

MPCE Monthly Per Capita Consumer 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 Municipal 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 National 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 Guarantee Act

NRHM National Rural Health Mission

NRSE New & Renewable 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 Odisha Agro Industries Corporation
OCAC Odisha Computer Application Centre

OCT&SF Odisha Cooperative Tasar & Silk Federation Ltd

OERC Odisha Electricity Regulatory Commission

OF Open Forest

OFDC Odisha Forest Development Corporation
OHPC Odisha Hydro Power Corporation Ltd

OMC Odisha Mining Corporation

OMFED Odisha State Cooperative Milk Producer's Federation Ltd

OPERP Odisha Public Enterprises Reform Programme

OPGC Odisha Power Generation Corporation

OPOLFED Odisha State Poultry Producer's Cooperative Marketing Federation ltd

OPTCL Odisha Power Transmission Corporation Ltd
OREDA Odisha Renewable Energy Development Agency
ORHDC Odisha Rural Housing Development Corporation
ORMAS Odisha Rural Development & Marketing Society

ORSAC Odisha Space Application Centre

OSCARD Odisha Cooperative Agriculture & Research Development

OSCHC Odisha State Cooperative Handicraft Corporation

OSEMS Odisha State Employment Mission Society

OSFC Odisha State Finance Corporation

OSFDC Odisha State Finance Development Corporation

OSWAB Odisha State Welfare Advisory Board

OSWAN Odisha State wide Area Network

OTDC Odisha Tourism Development Corporation

OTIDA Odisha Transport Infrastructure Development Authority

OTR Own Tax Revenue

OTRAC Odisha Transport Regulatory & Advisory Council
OUAT Odisha University of Agriculture & Technology

OWDM Odisha 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 Cooperative 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
PSE 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 Electrification Corporation

REGP Rural Employment Generation Programme
RGGVY Rajiv Gandhi Gram Vidyutikaran 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 Data 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

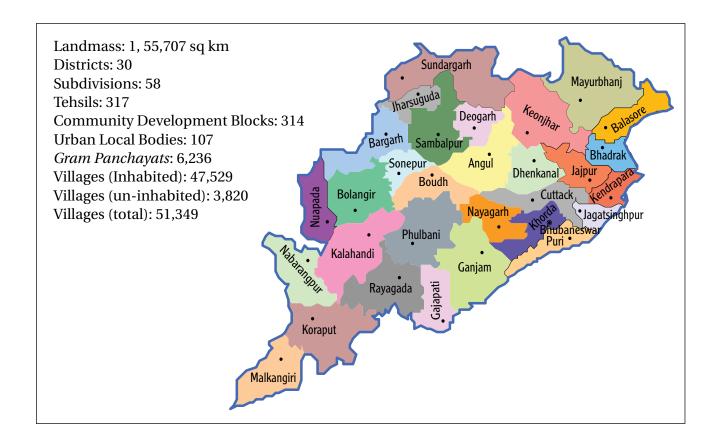
WESCO Western Electricity Supply Corporation Ltd
WODC Western Odisha Development Council
WORLP Western Odisha Rural Livelihood Project

WPR Worker Population Ratio
WSHG Women Self Help Groups

WTM World Tourism Mart

WTO World Trade Organization

## Overview



#### 1.1 Overall Macro Scenario

Odisha's economy in 2012-13 has impressively withstood the continuing slowdown in economic growth in previous years. Several factors have contributed to the continuing economic slowdown in world economy as well as in national economy since 2008-09. In India, inflation has remained high. This has raised interest costs for investors as a result of which private investment has slowed down considerably. Odisha's economy suffered a severe drought which caused negative growth of agriculture and its allied sectors during 2011-12. However, the State economy continues to be on a high

growth trajectory. Diversification of economic activities has led to a visible structural shift from an agriculture based economy to an industry-led and service-led economy in Odisha.

The State economy has witnessed high growth rates during the last decade. In real terms and at 1999-2000 prices, Odisha reported an average annual growth rate of 9.51 percent for the 10<sup>th</sup> Five Year Plan against a target of 6.20 percent. The economy grew in real terms at 2004-05 prices at the rate of 8.23 percent during the 11<sup>th</sup> Five Year Plan. The anticipated growth rate of Odisha is estimated to be 9.14 percent in 2012-13 as per advance estimates.

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

With the change in magnitude and composition of domestic product and such other related factors like employment and investment etc., Odisha's economy shows the sign of an expanding economy with sectoral shift in GSDP. There is transformation of the State's economy from agriculture based to industry and serviceled economy. As per 2012-13 advance estimates, the service sector is expected to be about 58.3 percent of the Gross State Domestic Product (GSDP) followed by industry (24.2 percent) and agriculture (17.5 percent) in real terms at 2004-05 prices. The high growth rates recorded by the State in the 10th and 11th Five Year Plans are mainly due to high growth registered by the industry sector and the service sector. The agriculture sector has also performed reasonably well though the performance of this sector continues to be highly volatile mainly due to adverse impact of natural shocks such as cyclones, droughts and floods. The service sector has been growing in a comparatively stable manner.

Among the districts, as per latest estimates of District Domestic Product for 2009-10, the share of Gross District Domestic Product (GDDP) to GSDP of Odisha in Sundargarh was highest with 8.72 percent followed by Khorda 7.34 percent & Cuttack 7.08 percent. In 2009-10, the real per capita Net District Domestic Product (NDDP) at 2004-05 prices was highest for Jharsuguda and lowest for Nabarangpur district.

As census data shows, the workers' Population rate in Odisha at 38.79 percent was slightly lower than 39.1 percent at the national level

in 2001. Compared to the 1991 Census, the share of marginal workers in the total workforce increased substantially from 14 percent in 1991 to 33 percent in 2001, while the share of main workers declined from 87 percent in 1991 to 67 percent in 2001. The share of the 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 depends on agriculture directly or indirectly, the State economy has been diversifying and there is a shift moving agricultural sectors away to non-farm sectors.

As per the NSS data, the rate of unemployment in the State has fallen lately - from the 61<sup>st</sup> round (July 2004-June 2005) to the 64<sup>th</sup> 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. However, 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 16.2 percent in 2010.

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

#### 1.2 The Agriculture Sector

The agriculture sector includes agriculture, animal husbandry, fisheries and forestry subsectors. The share of this sector in the State's GSDP has been declining over the years and is expected to be 17.5 percent in 2012-13 (advance estimate). Despite continuous reduction of the sector in Odisha's GSDP, this sector continues to be vital for the State. It still provides employment and sustenance, directly or indirectly, to more than 60 percent of the population. In this sense, the agriculture sector is still the mainstay of

Odisha's economy. It suffers from frequent natural calamities like cyclones, droughts and flash floods. Despite wide annual variations in its growth, the agriculture sector expects to grow in real terms at 2004-05 prices, at a rate of 16.1 percent during 2012-13.

The total food grains production has generally been fluctuating. It was 63.16 lakh tonnes in 2011-12 as compared to 76.19 lakh tonnes in 2010-11. Paddy still constitutes more than 90 percent of the total production of food grains and continues to be the dominant crop in Odisha, 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 21.97 quintals/ha in 2011-12, 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 till the end of 2010-11. However, during 2011-12, the area as well as production under HYV paddy has declined by 1.02 percent and 14.0 percent respectively. During 2011-12, the yield rate of HYV paddy was 23.35 qtls/ha as compared to 26.89 qtls/ha in 2010-11. The cropping intensity of Odisha has increased from 158 to 166 during the same period. Some districts such as Sonepur have reported much higher yield rates of HYV paddy to the tune of 32.87 quintals per ha. These positive developments augur well for the overall improvement of the agriculture sub-sector and increase in food grain production in Odisha.

Inadequate and erratic irrigation facilities still remain 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 on a

massive scale. 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. But fertiliser consumption in Odisha during 2011-12 has marginally decreased from to 62.24 kg/ha as against 62.80 kg/ha during 2010-11.

# 1.3 The Industry Sector

In this survey, the industry sector has been defined to include manufacturing, mining and quarrying and electricity-gas-water supply. The sector contributes about 25 percent share to Odisha's GSDP in real terms. However, the share of this sector is expected to strive to 24.2 percent as per advance estimates for the year 2012-13 as it is expected to grow at a very low rate of 2.5 percent during 2012-13. This implies that the sector has been hit hard due to the global economic slowdown, disruption and other mining activities factors. The share of the manufacturing sub-sector is expected to be 63.4 percent and that of the mining and quarrying sub-sector, 24.3 percent.

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

It is not so widely known but Odisha occupies the first place in the country in aluminium, both in terms of production capacity and actual output. This has happened after NALCO and Vedanta Aluminium Limited (VAL) have started to produce aluminium. Aluminium production in India is concentrated within four big plants, two of which are in Odisha. In 2010-11, total aluminium production in Odisha was 51

percent of the total production by all the four big plants.

The number of Micro, Small and Medium Enterprises (MSME) has been increasing over time. During 2011-12, the maximum number of MSMEs was set up in Sundargarh district followed by Cuttack, Khorda and Ganjam. Among manufacturing units, the largest number of MSME units belongs to the food and allied sector. Industrial sickness continues to be a problem among MSMEs, but during 2010-11, no new sick unit was reported. The handicraft and cottage industry in Odisha exhibits a declining trend in terms of the number of units as well as employment generation.

The mining sector contributed on average about seven percent of real GSDP of Odisha during the 11<sup>th</sup> Five Year Plan. However, its share is being streamlined during the last two years. During 2011-12, the share of this sub-sector was 6.4 percent and in 2012-13, it is expected to be only 5.9 percent. However, being a favoured investment destination of global investors, this sub-sector seems poised for rapid growth. In terms of the total value of mineral output, Odisha ranks the highest in the country and its share is increasing. 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 comprises of sub-sectors such as banking and insurance, real estate, public administration, trade, hotels and restaurants, construction, transport and communications and other services. This sector dominates the State's economy, its share in real GSDP being about 58 percent in recent years and has been growing at a higher rate in a comparatively stable manner. This sector expects to have a share of 58.3 percent in Odisha's GSDP and to grow at a rate of 9.1 percent during 2012-13 as per advance estimates.

As per quick estimates 2011-12, the community, social and personal services sub-sector

contributed 13.55 percent, the trade, hotels and restaurants sub-sector 13.61 percent, financial and insurance services sub-sectors 11.67 percent, construction 9.07 percent and other services sub-sector 9.56 percent in the State's GSDP in real terms. As per advance estimates for the year 2012-13, the trade, hotels and restaurants sub-sector is expecting to dominate the service sector contributing to it about 24 percent share. It is followed by the transport, storage and communication sub-sector that may contribute about 17 percent, construction sub-sector 15 percent and other sub-sector services about 16 percent to the service sector. The banking and insurance sub-sector is expected to contribute about 11 percent to the service sector. However, it provides invaluable indirect benefits to the economy in the form of financial infrastructure. The average population serviced by banks is roughly equal to 15,000, which is better than that in many states in India. It is a fact worth mentioning that about 79 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. Odisha is catching up with the nation in terms of per capita bank deposits in commercial banks. Co-operative banks mainly focus on rural areas and the agriculture sector. For all types of banks operating in the State, the recovery rate stands at about 62 percent in 2011-12. Recovery position of bank loans needs to be improved.

Activity in the construction sector is a symbol of capacity and infrastructure-building in a region. The share of the construction sub-sector in Odisha's GSDP in 2012-13 expected to be 8.67 percent. This sub-sector is also important from the employment perspective. It absorbs a lot of casual workers. However, despite the high growth of Odisha's economy in recent years, this sub sector recorded a modest growth rate of 4.41 percent per annum during recent years.

Tourism has a huge growth potential in Odisha, 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 the highest for tourists from within the State. The share of foreign tourist arrival to the state is negligible i.e., below one percent to total foreign tourist arrival at all India level.

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. This implies that the growth of this sector stems from a higher rate of utilisation.

## 1.5 Infrastructure

The importance of good infrastructure for accelerated development and higher economic growth is well recognised. Odisha 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*.

Odisha's pioneering power sector reforms are well known. In comparison to other states, the availability of power in Odisha is better and continues to improve though transmission and distribution losses are still a major concern. This aspect, therefore, 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 Odisha has been rising at a faster rate. Over 80 percent of villages in Odisha 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 spite of the fact that demand for power in Odisha has been rising, the state has had a consistent surplus. Seventy

percent of the power consumers belong to rural areas. They consume 23 percent of the total consumption of power. Domestic consumers comprise more than 90 percent of the total consumers and they consume about 30 percent of the total consumption.

In the transport sub-sector, road density in Odisha 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 Yojana build all-weather surface roads. 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 sq km of area, which is below the national average of 20 km. The cargo shipment activity at Paradeep Port has shown consistent growth despite the recent global recession. In May 2011, Dhamra port started commercial operations. Gopalpur Port is being operated by private developers. Commercial operation of the port has been suspended as construction work for all weather port has been started.

In the field of posts and tele-communications, though tele-density (equal to the number of telephone connections per 100 population) has grown rapidly, it is yet to catch up with the national average. The over all tele-density of the state by the end of 2011 was 63.25 percent as against the all India figures of 76.86 percent but in case of urban tele-density, Odisha is far better than the all India level (Odisha- 212.20 percent, all India-167.46 percent). By the end of 2011, the percentage of rural phones in the state was 43 percent as compared to 34 percent at an all India level. Cell phones constitute about 75 percent of total telephone connections in the State. In the State, postal density 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, Odisha has been able to reduce poverty at a faster rate in recent years. As per estimates made by the Planning Commission, poverty reduced by 7.25 percentage points from 1999-2000 (55<sup>th</sup> round of NSS) to 2004-05 (61<sup>st</sup> round of NSS, mixed recall method). This was in line with the State's development strategies that targeted a seven percentage point reduction in poverty during the 10<sup>th</sup> Plan.

It is heartening to note that as per recent estimates made by the Planning Commission poverty in Odisha has declined by 20.2 percentage points from 57.2 percent in 2004-05 (61st round of NSS) to 37 percent in 2009-10 (66th round of NSS). This is the highest poverty reduction by any state in India in 2009-10.

Poverty declined in all NSS regions and all social classes of Odisha including Scheduled Tribes, (STs) Scheduled Castes (SCs), Other Backward Classes (OBC) and others. This implies inclusive growth in Odisha. The extent of poverty in southern and northern regions as well as among ST and SC communities is still high and remains a matter of 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 Odisha Development Council (WODC). The Funding for RLTAP and BRGF has been provided by Government of India. With support from Government of India, the State has launched a new initiative, called Integrated Action Plan (IAP) in 78 blocks of 18 tribal and backward districts of Odisha. 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 2011, the overall literacy rate (73.45 percent) in Odisha was close to the national average (74.04 percent). Of late, the enrolment 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 0.43 percent in 2011-12 at the primary level and at the upper primary level from about 57 percent in 2000-01 to 3.07 percent in 2011-12. 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 establishing hostels for ST and SC students. At present, 3,448 hostels including 1,548 primary school hostels in ITDA Blocks and 1,003 ST girls' hostels are functioning in the State and another 1,383 hostels are under construction. In addition, 55 hostels (44 for SC girls and 11 for SC boys) under Babu Jagjivan Ram Chhatrabas

Yojana and 30 ST hostels for girls and boys under CSP scheme are under construction. On completion of these, about 3.5 lakh SC & ST students can be accommodated in these hostels.

A large number of vocational and technical institutions have come up during the last few years and help 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. However, there is still a lot to be done. The basic demographic variables present a mixed picture. The crude birth rate (CBR) in the State is 20.1 against the national average of 21.8 in 2011, but the crude death rate (CDR) stood at 8.5 compared to 7.1 for the country. Life expectancy at birth in the State for men was 64.3 years and 67.3 years for women during 2011-15 which is lower than the national average of 67.3 years and 69.6 years respectively. Infant mortality rate (IMR) has stepped down to 57 which is the highest at the national level along with Uttar Pradesh in 2011 while IMR at the all India level during 2011 stood at 44. The State is expected to narrow down this gap in the next projection period of 2011-15.

People of Odisha 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 to 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. A number of new health initiatives, including NRHM, ASHA and other health development programmes, have been launched in the State. 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 IMR, maternal mortality rates (MMR), institutional deliveries and immunisation services.

During 2007-09, in Odisha, MMR was 258 per 1,00,000 live births, compared to 212 in India. There has been an improvement in women's health in recent times. Increasingly, a greater number of pregnant women are receiving antenatal care (ANC) and post-natal care (PNC). Institutional deliveries have increased from about 37 percent in 2005-06 to 84.8 percent in 2010-11. The pregnancy burden of women in the State is lower than that of their counterparts in the country. During the year 2010, the General Fertility Rate (GFR) in Odisha stood at 83.9 percent compared to 75.3 percent at the all India level. Though IMR in the State declined from 96 in 2000 to 57 in 2011, it is still very high as compared to 44, at an all India level.

Initiatives and achievements taken by National Rural Health Mission (NRHM) are to be credited. Various government health programmes have brought down the disease burden in the State. Leprosy has declined to less than one percent per 10,000 population and filaria has been controlled. Malaria is endemic in some parts of the State, but malaria slide positivity rate (percentage of slides found positive among those examined) has declined from 8.18 to 5.39 between 2005 to 2012 (Oct 2012). HIV positive cases have increased alarmingly from 312 in 2002 to 24,519 in 2011-12. This is a matter of concern.

Odisha's performance has been satisfactory in respect of access to safe drinking water. The coverage of households having access to safe drinking water was 94.8 percent as per the 2011 Census. The Integrated Management Information System (IMIS) reports that 2.7 percent rural habitations in Odisha were not covered under drinking water supply programmes in 2009. As per 2011 Census, about 78 percent of all households do not have sanitation facilities in their premises. The Total Sanitation Campaign (TSC) has been implemented to instal toilets in rural areas and encourage people to improve sanitation Physical achievements under conditions. this programme have, however, not been By 2011-12, only 54 percent encouraging. households, 98 percent schools, 95 percent anganwadis and 14 percent sanitary complexes 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.1 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 Odisha with respect to several human development indicators. Only sixtyfour percent of the female population is literate, in comparison to about eighty two percent of the male population in Odisha. The male literacy rate in Odisha is little higher than the national level, while female literacy rate is marginally lower. Women constitute about 45 percent of the total workforce in Odisha. The employment of women in the organised sector has, however, been rising in recent years. The present strategy of the State to empower and develop women is a step in the right direction. About 4.69 lakh Women Self-Help Groups (WSHGs) with 56.27 lakh members have been organised with support from the Mission Shakti programme. The State Commission for Women works towards protecting the interests of women and preventing violence against them. The Odisha State Social Welfare Advisory Board (OSWAB) provides grants for welfare of women and children through voluntary organisations.

Schedule Tribes & Schedule Castes communities are large marginalised sections of society. Their development has received focused attention by the Central as well as the State governments. The Tribal Sub-Plan has been operating in the State with greater focus on tribal dominated 118 blocks of the State. Special Central Assistance (SCA) is provided for accelerated development of tribal communities including Particularly Vulnerable Tribal Groups (PVTG).

#### 1.8 Public Finance

The State has made several efforts to stablise and improve its finances. As a result, the State finances have shown considerable stability since 2004-05 despite fiscal stress because of economic slow down in recent years and the effect of revision of salary and wages of the state employees on account of the implementation of the sixth pay commission. 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 liberally finance development programmes. The main task, however, is to utilize development funds prudently and properly for faster development.

The fiscal strategy of the State aims to raise capital outlays substantially. A cautious but determined push is needed to increase capital expenditure for faster and effective economic development. The development impact of government expenditures depends heavily on these expenditures reaching the citizens. It is heartening to note that the capital expenditure has been on the rise over the period. The capital outlays have increased from 1.22 percent of GSDP in 2005-06 to 2.08 percent of GSDP in 2011-12.

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 about 17.87 percent at the end of 2011-12. 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 have been effective as a part of the fiscal prudence shown by the State.

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 tax management and treasury management, zero-based budgeting with focus on completion of projects and other measures, and introduction of outcome budgets in a phased manner and system of better monitoring of utilization of public funds for public purposes in a phased manner.

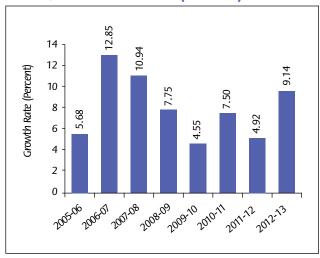


# Odisha's Economy: A Macro Glance

## 2.1 Aggregate Income

Odisha's economy is expected to rebound strongly in 2012-13 with an anticipated growth rate of 9.14 percent as per the advance estimates of Gross State Domestic Product (GSDP) of Odisha for 2012-13. The higher growth of the State's economy in the current year can be attributed to the higher estimated growth rates of 16.11 percent under the agriculture sector and 10.09 percent under the service sector estimated in real terms at 2004-05 prices during 2012-13, over the previous year. The service sector indicates robust growth rates in its sub sectors like trade, hotel and restaurants (12.41 percent), transport percent), communications percent), banking & insurance (18.57 percent) and public administration (15.39 percent) during 2012-13. Besides this, the agriculture & animal husbandry sub-sector could achieve a record growth rate of 19.87 percent in 2012-13

Figure 2.1: Real Growth Rates of GSDP of Odisha, 2005-06 to 2012-13 (Advance)



Source: Directorate of Economics and Statistics, Odisha

with bumper crop production. The growth rates of Odisha's economy between 2005-06 and 2012-13 are presented in Figure 2.1.

The bounce back in overall growth rate of Odisha's GSDP in 2012-13 could overcome the relatively sluggish growth of the State's economy during 2011-12. The slowdown of Odisha's growth in 2011-12 was mainly due to the adversely impinged growth rates of the agriculture sector and mining & quarrying sub-sector as compared to 2010-11. The State experienced the natural shock of severe drought in 2011-12 with sharp shortfall of average rainfall and recorded the lowest crop production since 2004-05. The negative growth rate of agriculture production in 2011-12 also adversely affected the non-farm activities in the State. However, the growth rates registered of manufacturing (15.17 percent), construction (5.22 percent) and public administration (6.11 percent) sub-sectors in particular increased impressively by 5.74, 3.80 and 2.07 percentage points respectively in 2011-12 over 2010-11.

During the 11<sup>th</sup> Plan period, the banking and insurance sub sector of the State grew significantly with a robust annual average growth rate of 17.94 percent followed by communication (16.60 percent), manufacturing registered 14.00 percent, transport by other means 10.93 percent, trade, hotel & restaurants 9.05 percent, storage 9.04 percent and other services 8.52 percent etc. Annexure 2.1 shows Gross and Net State Domestic Products both at current and constant (2004-05) prices from 1950-51 to 2012-13. The year-wise and sub-sector-wise GSDP at current and constant prices have been indicated at Annexure 2.2 and Annexure 2.3 respectively.

# 2.2 Relative Standards of Living

Per capita income is the single most important cardinal measure of standard of living of the people of the State. The rising trends of per capita real Net State Domestic Product (NSDP) for Odisha from 2004-05 to 2012-13 at 2004-05 prices are presented in Figure 2.2. The per capita real NSDP of Odisha is estimated at Rs.25,584 in the advance estimates of Odisha for 2012-13 with a noticeable growth rate of 6.01 percent over 2011-12. By the end of the 11th Plan in 2011-12, the per capita income of the State was Rs.24,134 as compared to Rs. 20,194 in 2006-07, at the beginning of the 11th Plan, thus registering a growth of 19.51 percent in five years. The standard of living in the State has risen over the years. However, it is still below the national average since 1950-51, when Odisha'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. The real per capita NSDP of Odisha in 2010-11 (provisional estimates) at 2004-05 prices was Rs.23,875, which was higher than that of Bihar, Uttar Pradesh, Assam, Madhya Pradesh, Jharkhand and Manipur. The state wise real per capita NSDP of states for 2010-11 is presented at Figure 2.3. The year- wise per capita NSDP at current and constant (2004-05) prices of Odisha have been indicated at Annexure 2.1.

# 2.3 Broad Sectoral Decomposition

While the growth rate of GDP denotes the index of performance of the State's economy, the sectoral performance reflects the change in the magnitude and composition of GDP of economy over time. The change in the relative sectoral shares in GDP manifests the structural change in the economy. Typically, economic activities are grouped into three broad sectors in India,viz., primary, secondary and tertiary. The primary

Figure 2.2: Per Capita Real NSDP of Odisha, 2004-05 to 2012-13

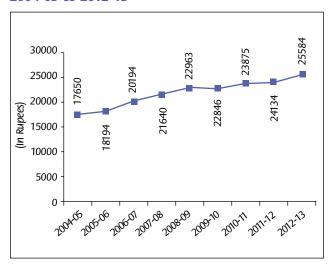
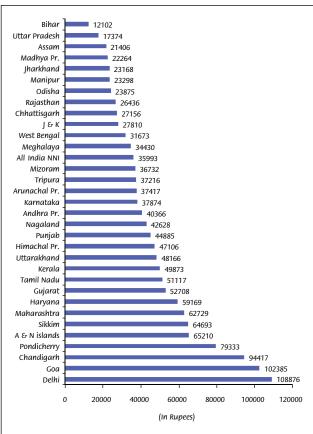


Figure 2.3: Per Capita NSDP of States at 2004-05 Prices, 2010-11



sector includes agriculture and allied sectors like agriculture and animal husbandry, forestry and fisheries, and 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, Odisha's economy has been classified as agriculture, industry and services sectors as per RBI classification instead of the traditional classification of primary, secondary and tertiary. The agriculture sector includes 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 2.4 gives the dynamics of the composition of Odisha's economy from the year 2004-05 to 2012-13. It is clearly becoming less agricultural, more industrial and more service-oriented over time. In 2011-12, agriculture represented only 16.44

percent of Odisha's GSDP. The service sector and the industry sector represented 57.78 percent and 25.78 percent respectively. During the year 2012-13, the share of the service sector is expected to be 58.28 percent, that of the industry sector 24.23 percent and the agriculture sector 17.49 percent in real terms at 2004-05 prices. Sectoral shares of GSDP in 2012-13 are presented in figure 2.5. 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.

# 2.4 Performance of Districts

Odisha also reports district incomes by way of apportioning GSDP among different districts. The Gross and Net District Domestic Products (GDDP/NDDP) for all districts for the period from 2004-05 to 2009-10 are given in Annexure 2.10 through 2.15.

Figure 2.6 depicts per capita income of all districts in 2009-10. Out of these, 10 districts

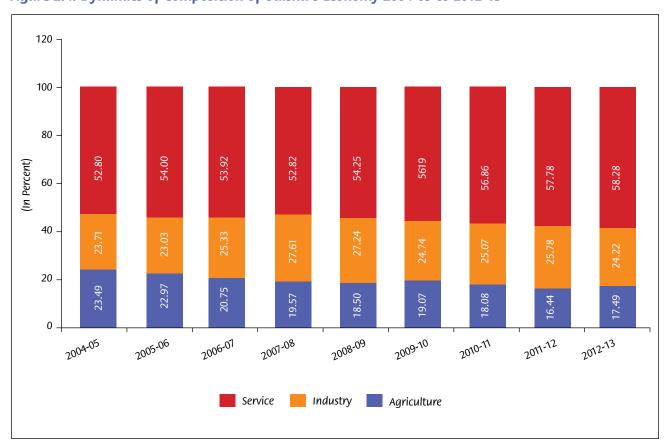
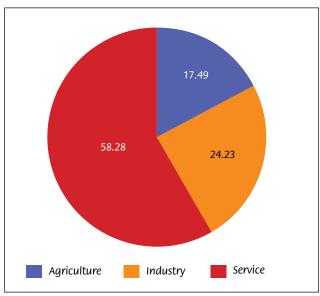


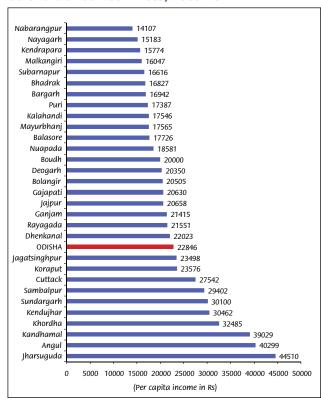
Figure 2.4: Dynamics of Composition of Odisha's Economy 2004-05 to 2012-13

Figure 2.5: Sectoral Composition of Odisha's Economy (percent) 2012-13



viz., Jharsuguda, Anugul, Kandhamal, Khorda, Kendujhar, Sundergarh, Sambalpur, Cuttack, Koraput and Jagatsinghpur have per capita income higher than Odisha with Jharsuguda reporting the highest per capita income, followed by Angul. The per capita income of Kandhamal district was higher due to the

Figure 2.6: Per Capita NDDP of Districts in Odisha at 2004-05 Prices. 2009-10



bumper crop production, particularly ginger and turmeric production during 2009-10 and the lowest population density in the State. Figure 2.7 graphs the index of real per capita NDDP and compares districts in terms of their per capita real income for the year, 2009-10 at 2004-05 prices taking per capita real NSDP as 100.

In term of percentage share of GDDP to State GSDP, Sundargarh contributed maximum to State's GSDP with 8.72 percent share followed by Khorda (7.34 percent) and Cuttack (7.08 percent) in 2009-10. Debagarh district contributed lowest to GSDP of Odisha with .028 percent GDDP share in 2009-10. Figure 2.8 presents the district-wise percentage share of GDDP to GSDP at 2004-05 prices for 2009-10.

## 2.5 Employment

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

Figure 2.7: Index of Real Per Capita NDDP, 2009-10 (Per Capita Real NSDP = 100)

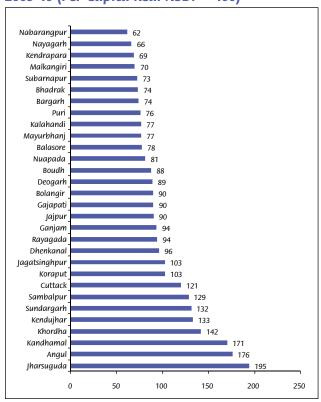
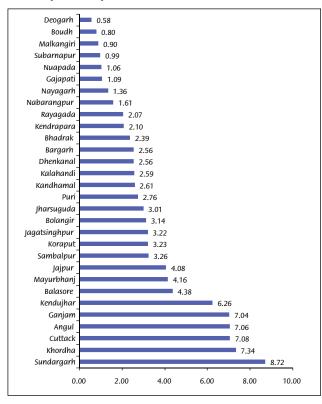


Figure 2.8: Share of GDDP to GSDP at 2004-05 Prices (Percent) 2009-10



interval of every ten 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 55<sup>th</sup> 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 who is not currently working should be counted as unemployed. Yet, there are various indicative measures of employment or unemployment.

#### 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 not 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 Odisha was 3.68 crores – about 3.58 percent of the population of the country. The total number of main and marginal workers was respectively 96 lakhs and 47 lakhs in 2001 Census. The 2011 Census data on main and marginal workers is not yet available.

Workers as percentage of population in 1981, 1991, and 2001 Censuses, relative to the all India level, are exhibited in Figure 2.9. These are not employment rates 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

**Box 2.1: Periods of Some Recent NSS Rounds** 

55 <sup>th</sup>	July, 1999 – June, 2000	56 <sup>th</sup>	July, 2000 – June, 2001
57 <sup>th</sup>	July, 2001 – June, 2002	58 <sup>th</sup>	July, 2002 – Dec, 2002
59 <sup>th</sup>	Jan, 2003 – Dec, 2003	60 <sup>th</sup>	Jan, 2004 – June, 2004
61 <sup>st</sup>	July, 2004 – June, 2005	62 <sup>nd</sup>	July, 2005 – June, 2006
63 <sup>rd</sup>	July, 2006 – June, 2007	64 <sup>th</sup>	July, 2007– June, 2008
65 <sup>th</sup>	July, 2008 – June ,2009	66 <sup>th</sup>	July, 2009 – June, 2010
67 <sup>th</sup>	July, 2010 – June, 2011	68 <sup>th</sup>	July, 2011 – June, 2012
69 <sup>th</sup>	July, 2012 - Dec, 2012		

the beginning of the reforms era (and 1981), the workers' participation rate in 2001 was higher for both Odisha and 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 among main workers has sharply declined between 1991 and 2001. There appears to be a shift of main workers away from agriculture and allied activities.

Figure 2.9: Workers Participation Ratio, Odisha and India, in Census Years

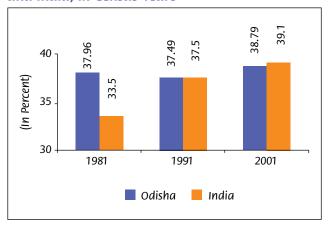


Figure 2.10: Proportions of Main and Marginal Workers in Odisha in Census Years

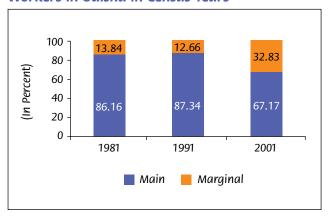
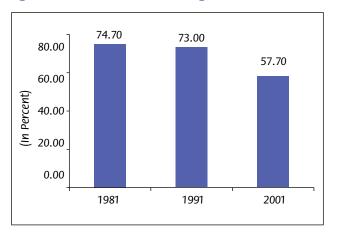


Figure 2.11: Percentage of Cultivators and Agricultural Labourers among Main Workers

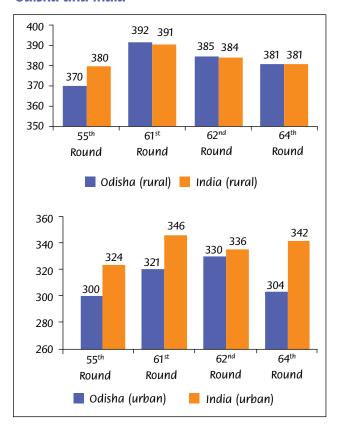


#### 2.5.2 State of Employment: NSS data

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/she was 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/she was 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 labour 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 1,000 that are in the workforce (or per 1,000 workforce days). So there are three measures of WPR, depending on which wage employment is measured. Unemployment rate is defined as the ratio of persons (or personhours) not employed to the workforce (or

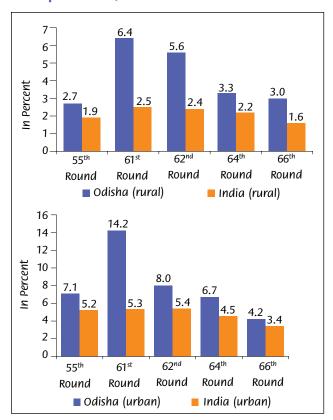
Figure 2.12: WPR (Usual Principal Status), Odisha and India



workforce hours). Accordingly, there are also three measures of the unemployment rate.

Labour Bureau, Ministry of Labour & Employment, Government of India conducted employment and unemployment survey in all states/Union Territories during 2011-12 and published various labour force parameters viz.. labour force participation Rates (LFPR), Workers Population Ratio (WPR), Unemployment Rate (UR) and proportion unemployed by using different approaches viz., Usual Principal Status (UPS), Usual Principal & Subsidiary Status (UPSS), Current Weekly Status (CWS) and Current Daily Status (CDS) for persons of age 15 years and above. It is observed that LFPR, WPR and UR for Odisha are lower than the national average in all approaches except UR using CDS, which is higher than the national level. During 2011-12, the LFPR, WPR and UR for Odisha stood at 50.3, 48.8 and 3.0 respectively by using UPS, while the corresponding figures at the all India level stood at 52.9, 50.8 and 3.8 respectively. Labour force parameters, as estimated by the

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



Labour Bureau, by using various approaches have been shown in the following Table 2.1.

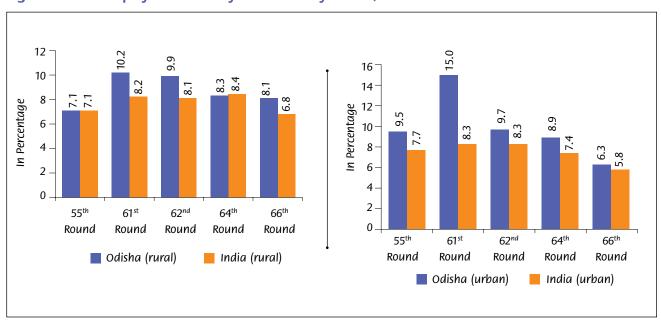
Estimating employment or unemployment is not the focus of all rounds of NSS. Among the ones listed in Box 2.1, the 55<sup>th</sup>, 61<sup>st</sup>, 62<sup>nd</sup> and 64<sup>th</sup> rounds have collected detailed information on the employment status of households. The results from these rounds are 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 55<sup>th</sup> round to the 64<sup>th</sup> round. In the case of rural areas in particular, Odisha levels the national average, while urban WPR continues to lag behind the national average for urban areas.

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  $61^{\rm st}$  and  $62^{\rm nd}$  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 the  $64^{\rm th}$  round.

Table 2.1: Labour Force Parameters Estimated by Labour Bureau, Government of India

Annuachea		Odisha			India	
Approaches	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Labour Force P	articipation Rate	(LFPR)				
UPS	51.0	45.0	50.3	54.8	47.2	52.9
UPSS	54.5	46.7	53.5	57.9	48.0	55.4
CDS	48.6	43.8	48.0	53.3	46.3	51.5
CWS	54.7	46.7	53.7	58.2	48.1	55.6
Worker Popular	tion Ratio (WPR)					
UPS	49.6	43.1	48.8	52.9	44.9	50.8
UPSS	53.3	44.8	52.2	56.3	45.8	53.6
CDS	45.4	41.5	44.9	49.9	43.4	48.2
CWS	53.1	44.7	52.0	55.7	45.3	53.0
Unemploymen	t Rate (UR)					
UPS	2.8	4.3	3.0	3.4	5.0	3.8
UPSS	2.2	4.0	2.4	2.9	4.7	3.3
CDS	6.6	5.4	6.5	6.3	6.3	6.3
CWS	3.0	4.1	3.1	4.2	5.8	4.6

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



8.5 7.98 8 In lakh numbers 7.45 7.5 7.35 7.31 7.22 7.16 7.00 7 6.88 6.5 6 2005 2007 2009 2010 2000 2006 2008 2011

Figure 2.15: Total Employment in the Organised Sector

### 2.5.3 Employment in the Organised Sector

Figure 2.15 and 2.16 shows calendar year-wise annual data on employment in organised public and private sectors. The total employment in these sectors has declined slightly over the period 2000-2011. While the share of private sector employment has been steadily increasing, it fell marginally in 2011. This sector still absorbs less than 1/5th of employment in

the public sector. These figures are based on Annexure 2.18 which also provides the breakup of men and women employment in each sector. In both sectors together, the share of women in total employment has been steadily increasing and has exceeded 16 percent by the end of 2011. During 2011, the percentage of women employees to total employees was 16.8 percent.

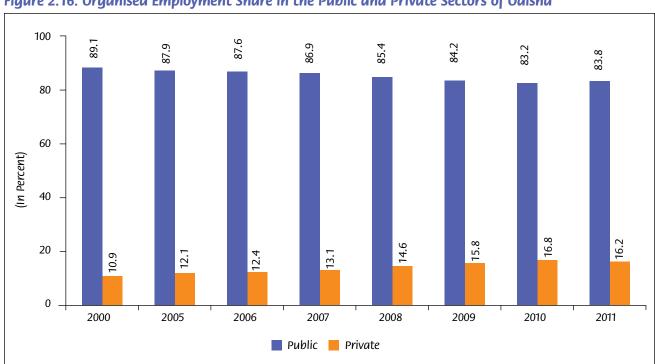


Figure 2.16: Organised Employment Share in the Public and Private Sectors of Odisha

# 2.5.4 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 2.19 through **Employment** exchanges 2.21. undertake registration of eligible unemployed persons with an aim to provide them possible placements in public sector establishments. However, registration is voluntary employment exchanges are located in urban areas. Hence, it is difficult to assess patterns of aggregate employment changes from their registers. The percentage of placement as compared to the live register strength or even to the number of fresh registrations is negligible.

#### 2.6 Child Labour and Bonded Labour

#### **Child Labour**

Though there is a law to stop child labour, children continue to work in various sectors. According to the Human Development Report, 2011 published by the Planning Commission, Government of India, child labour is more prevalent in rural areas than in urban areas and it is higher among boys than girls. Boys are traditionally and economically more active in the labour market. The agriculture sector employs the majority of child labour. Gender disparity and rural urban gap has been reduced in recent times.

According to 1991 Census, the number of working children in Odisha was reported 452,394, which was 5.9 percent of total child population in the age group of 5-14 years. The corresponding figures in 2001 Census stood at 3,77,594 and 4.7 percent respectively. As per 2001 Census, the highest number of child labour was reported in Ganjam district (38,947) followed by Mayurbhanj (32,994) and Keonjhar (31,983) while Jagatsinghpur reported the lowest (2,448). Out of the total child workers of 3,77,594 in 2001 Census, about 71 percent were marginal workers.

During 2004-05, 4.9 percent of the State's child population in the age group 5-14 years was reported as working children, while the

corresponding figures for rural and urban areas stood at 5.3 and 1.7 percent respectively. This problem is more acute among ST (8.0 percent). During 2004-05, 5.2 percent of the total, 5.6 percent of rural and 2.2 percent of urban male child population reported as working children while the corresponding figures for female child workers stood at 4.5, 5.0 and 1.3 percent respectively. However, the magnitude of child labour has sharply declined to 3.4 percent in Odisha by the end of 2007-08 as against 2.4 percent at an all Indialevel. Twenty-four National Child Labour Projects (NCLP) are operating in the State with an objective of eliminating child labour from hazardous occupations through providing non-formal education and vocational training to the identified child labourers and to bring them into the mainstream of the formal education system. During 2011-12, 28,840 child labourers were admitted into 628 special schools opened under NCLP. They are provided with educational and vocational books, materials, mid-day-meals and a stipend of Rs.100 per month per child.

#### **Bonded Labour**

During 2001-02, a survey on bonded labour was conducted in 10 districts, i.e., Koraput, Malkangiri, Raygada, Sundergarh, Cuttack, Kalahandi, Kandhamal, Mayurbhan., Bargarh and Keonjhar districts, out of which 19 bonded labourers were identified in Malkangiri district. Out of these 19 bonded labourers, 17 were rehabilitated and two others could not be traced due to migration or death, the reason is not known. During 2006-07, 35 bonded labourers of Odisha were released from Tamil Nadu (18 of Subarnapur, 13 of Jajpur, two each from Sambalpur and Ganjam districts) and rehabilitated under different poverty alleviation programmes. During 2008-09, 14 bonded labourers from Bolangir district were released in Karnataka and sent to their native villages in Odisha and the State Government released Rs 2.40 lakhs to DRDA Bolangir for their rehabilitation. Similarly, 384 bonded labourers (Bolangir - 214, Nuapada - 100, Nawarangpur - 14, Raygada - 13, Kalahandi -3, Koraput – 9, Subarnapur - 17, and Puri -14) were released in 2011-12 and an amount of Rs. 76.80 lakhs including Rs 34.80 lakhs central share has been utilised for their rehabilitation through the concerned DRDA.

# 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. Since inception, till the end of March, 2012, 61.61 lakh households have been registered and 61.37 lakh households including 11.73 lakh SC and 17.32 lakh ST have been issued job cards.

During 2011-12, about 13.91 lakh households demanded wage employment and 13.79 lakh households were provided employment worth 453.74 lakh person days. The share of SC and ST labourers was 79.42 lakhs and 173.17 lakh person days respectively. One hundred days employment was provided to 0.48 lakh households. Out of 227,600 employment generating projects taken up, 68,455 projects have been completed by the end of 2011-12. In the process, funds to the extent of Rs.1032.56 crores have been utilised out of the total available funds amounting to Rs.1371.14 crores, showing the percentage of expenditure as 75 percent. District-wise expenditure and employment generation under MGNREGS during 2010-11 and 2011-12 are given in Annexure 2.22 and 2.22(A) respectively.

### 2.7.2 Swarna Jayanti Gram Swarozgar Yojana (SGSY)

SGSY is a centrally sponsored scheme which is funded by the Centre and the State in the ratio of 75:25. This scheme envisages promotion of micro enterprises considering the potential of the rural poor. It is a holistic programme covering all aspects of self-employment. 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 organised into Self-Help Groups (SHGs). During 2011-12, a total 129,363 swarozgaries including 32,869 SC, 38,665 ST and 124,408 women were assisted under the programme with an expenditure of Rs.171.35 crores as against 138,595 swarojgaries including 35,443 SC, 38,958 ST and 19,905 women assisted during 2010-11. Annexure 2.23 shows the trend of assistance under the SGSY progragmme. Districtwise physical and financial achievement under the programme during 2011-12 are at Annexure-2.24.

# 2.7.3 Swarna Jayanti Sahari Rozgar Yojana (SJSRY)

This is a scheme sponsored by the Centre and funded on a 75:25 basis by the Centre and the State. 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 who have a 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 Wage **Employment** and Urban Programme (UWEP).

USEP aims at providing self employment to the urban poor through setting up micro enterprises relating to servicing, manufacturing and small businesses. Under this programme, skills up-gradation training relating to servicing, manufacturing as well as in local crafts is also The Development of Women & imparted. 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. TheprogressofSJSRYduring2011-12isoutlinedin Annexure 2.25.

# 2.7.4 Prime Minister's Employment Generation Programme (PMEGP)

This is a new programme, which has merged two earlier programmes, namely, Minister Rojagar Yojana (PMRY) and Rural Employment Generation Programme (REGP). This programme has been in operation in Odisha since 2008-09 and aims at generating employment opportunities through establishment of micro enterprises. The scheme is implemented through Khadi and Village Industries Commission; Khadi & Village Industry Board and District Industries Centres. The maximum cost of projects admissible under the manufacturing sector is Rs 25 lakhs, while it is Rs 10 lakhs in the service/business sector. During 2011-12, Rs.80.02 crores margin money was sanctioned for establishment of 1,338 units under PMEGP, out of which Rs.18.55 crores has been disbursed in favour of 1,132 units by DIC. An amount of Rs.12.75 crores margin money has been released in favour of 678 units by KVIB during 2011-12

### 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 and Odisha State Employment Mission Mission Society (OSEMS) in order to assist skill development. During 2011-12 till the end of January 2012, self-employment opportunities including associated wage employment for others were created for 3.11 lakh persons. Women are brought into the ambit of these opportunities via SHGs under the Mission Shakti Programme. Since April 2001 till March 2012, 3,21,665 women SHGs were formed covering 39.34 lakh members, out of which 2,29,906 SHGs credit linked and Rs.1,844.57 crores of credit advanced to them.

#### 2.7.6 State Employment Mission

State Employment Mission conducts various skill development training programmes to create employment/self employment opportunities for the youth in the State in association with various departments.

About 1.47 lakh youth have been trained so far including 908 candidates during 2012-13 in various demand driven trades. It has also organised seven job fairs in Kandhamal, Koraput, Jharsuguda, Mayurbhanj districts and at Rourkela and Bhubaneswar, in which 25,779 job offer letters have been issued to suitable candidates by the participating companies.

Defence and para-military forces have a large opening for job seekers. Employment Mission has been providing assistance for organisation of Recruitment Rallies for Defence & Paramilitary Services. Normally 10 to 12 rallies are held each year in the State. Besides, the Mission also provides specialised training programmes to the candidates where there is ample scope of immediate placement through various organisations.

As a part of new initiative, the State Employment Mission has entered into Memorandums of Understanding (MoUs) with nine selected training partners under the of National Skill Development Corporation (NSDC)/MoRD for conducting placement linked training programme as a Public Private Partnership (PPP) undertaking in the first phase. Under this programme, the training partners are to ensure at least 75 percent placement of trained youth after the completion of training. During the 12<sup>th</sup> Five Year Plan, the State aims to train at least one million employable skilled youth and provide job opportunities for them.

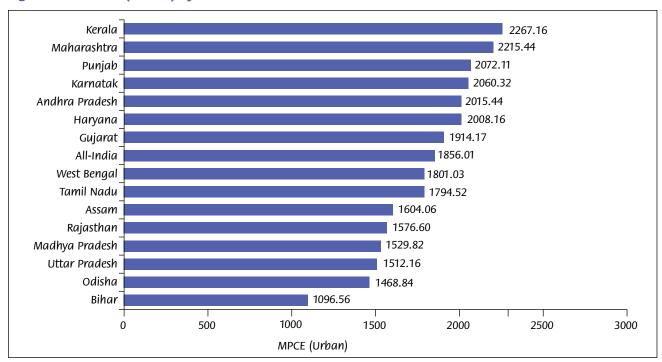
# 2.8 Consumption Expenditure

The standard of living of a region can be gauged from income measures such as per capita gross and net domestic products as well as from the levels and patterns of consumer expenditures. As households get richer, their expenditures increase. Furthermore, (a) the share of food expenditure in total expenditure declines, (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

Kerala 1765.14 Punjab 1565.53 Haryana Andhra Pradesh 1090.28 1065.4 Gujarat Maharashtra 1048.41 Rajasthan 1035.15 Tamil Nadu 1017.07 All-India 953.05 Karnataka 887.86 Assam West Bengal 859.77 Uttar Pradesh 832.18 Madhya Pradesh 802.79 Odisha 715.59 Bihar 689.37 1500 0 500 1000 2000 MPCE (Rural)

Figure 2.17: MPCE (Rural) by States: 66th NSS Round





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 selected basket of consumption items during the 66th round of NSS for the period from July 2009 to June 2010 for Odisha vis-à-vis other major states and India for rural and urban population respectively. It may be seen that the MPCE for rural and urban Odisha 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. The average MPCE in Odisha vis-à-vis some other major states with rural urban break-up in different rounds of NSS is given in Annexure 2.26 and the same with further breakup for food and non-food items in the 66th round of NSS is presented at Annexure 2.27. Annexure 2.28 shows the value of consumption of food and non-food items of a person for a period of 30 days in rural and urban areas for Odisha and all India level.

Engel's Ratio, which is the share of food expenditure in total expenditure, has been

widely used as an indicator of the standard of living. Annexure 2.29 reports this ratio for fifteen major states in different rounds of NSS. Figure 2.19 that is based on Annexure 2.29 reveals that Engel's ratio for Odisha, 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 Odisha declined distinctly between 1993 and 2008 from 15.20 kg and 11.30 kg to 13.13 kg and 10.33 kg respectively, while wheat consumption increased marginally. At the all-India level, the consumption of rice and wheat declined marginally between 1993 and 2008. Urbanites consume less rice and more wheat than rural people in Odisha.

Annexure 2.30 indicates monthly per capita rice and wheat consumption in Odisha and at all India level. Annexure 2.31 shows consumption expenditure on various sub-categories under both food and non-food items in rural and urban areas for Odisha as well as India. There are two sharp contrasts between Odisha and

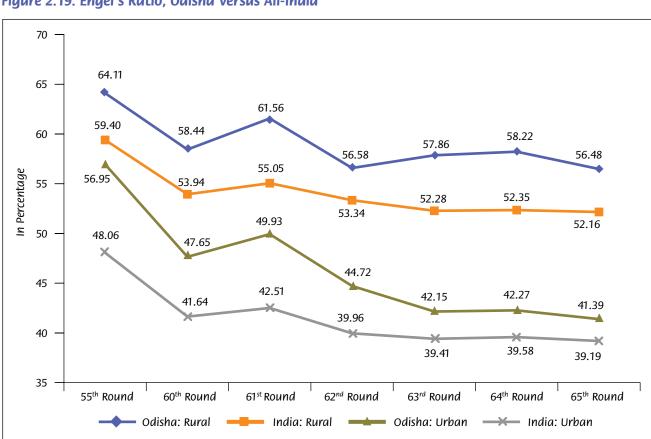
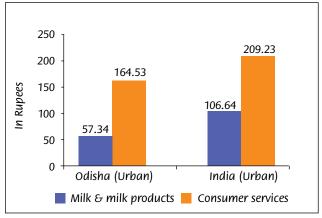


Figure 2.19: Engel's Ratio, Odisha Versus All-India

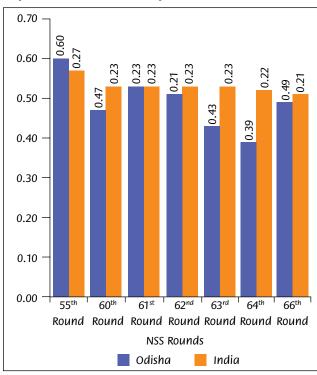
Figure 2.20: Average MPCE (Milk & Milk Products & Consumer Services), 64th Round NSS, for both Odisha and All-India



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

India: (a) in the food category, an average Indian spends more than double the amount an average person in Odisha spends on milk and milk products, and (b) in the non-food category, an average Indian spends considerably more on consumer services than does an average person in Odisha. Figure 2.20 compares average MPCE on milk and milk products for urban Odisha and India as per the 64<sup>th</sup> NSS round. These are true for both rural and urban population. These substantial differences assume special significance in the light of the

Figure 2.21: Rural-Urban Monthly Per Capita Expenditure Ratio both for Odisha and All India



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; higher spending on consumer services indicates a higher standard of living in middle and upper class populations.

Figure 2.22: Consumer Price Index for Agricultural Labourers in Select States (May 2012)

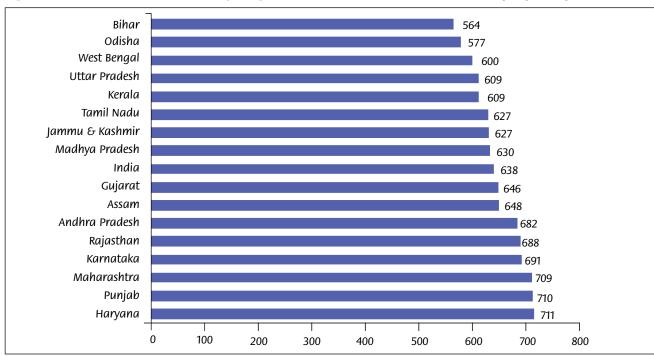


Figure 2.23: CPI (food) for agricultural labourers for Odisha and India (Base 1986-87= 100)

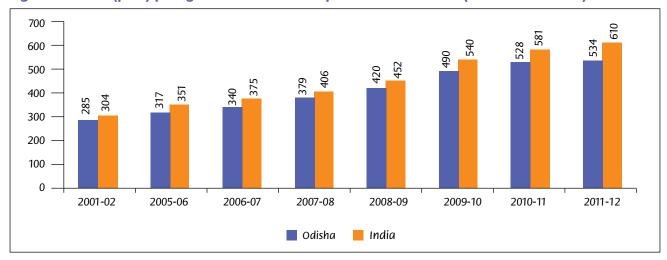


Figure 2.24: CPI for Industrial Workers, Odisha & India,1995-2005 (Base Year 1982=100)

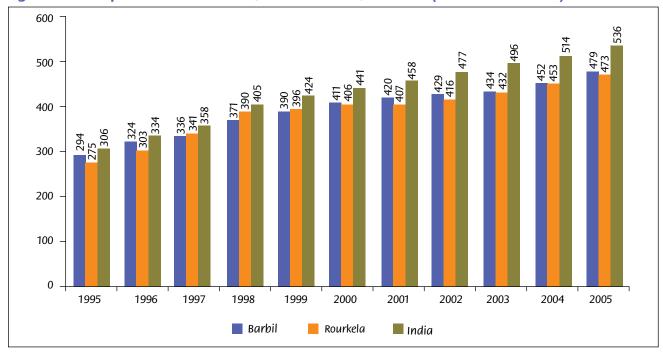
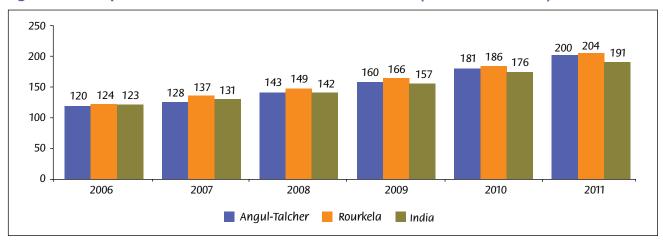


Figure 2.25: CPI for Industrial Workers, Odisha & India, 2006-11 (Base Year 2001=100)



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

According to the 64th round of NSS, the monthly per-capita consumption of cereals in rural Odisha was 13.3 kg, out of which rice constituted 94 percent and wheat four 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 Odisha 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 the Engel's ratio is more than 50 percent for rural Odisha in all the rounds of NSS, while it is less than 50 percent for urban Odisha except in the 55th round. In the 55th round, it was little above 56.95 percent. 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 Odisha and All India. It may be observed that while for India, the rural-urban

gap has increased slightly, it is much more pronounced for Odisha.

# 2.9 Cost of Living

How costly is living in Odisha, as compared to other states or India? In other words, what is the cost of living in Odisha in relative terms? The Labour Bureau in the Ministry of Labour, GoI 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 2012, among sixteen major states, the CPI for agricultural labourers in Odisha is the second lowest, higher than only Bihar. This indicates that the cost of living for agricultural labourers in Odisha is one of the lowest in the country. Figure 2.23 shows the CPI for agricultural labourers on food items in Odisha is always below the national level.

It is noteworthy that for industrial workers there has been a reversal. The Labour Bureau publishes the CPI for industrial workers by taking data from selected centres in the country. For Odisha, these centres earlier 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 Odisha have experienced substantial price increase. Recently, food inflation has been rather severe. Compared to All-India, food inflation has hit the State harder since 2008-09.



Annexure 2.1: Gross/Net State Domestic Product (GSDP & NSDP): (a) Total and Per Capita, (b) at Current and 2004-05 Prices and (c) from 1950-51 to 2012-13

			2004-0	)5 Base			
Year	GSDP (R	s. In lakh)	NSDP (R	s. In lakh)	Population	Per Capita	NSDP (Rs.)
	At Current Prices	At 2004-05 Prices	At Current Prices	At 2004-05 Prices	(in lakh)	At Current Prices	At 2004-05 Prices
1	2	3	4	5	6	7	8
1950-51	32547	1214404	29328	918011	143.560	204	6395
1951-52	38739	1337100	34965	1018265	146.460	239	6953
1952-53	40299	1389570	36320	1042238	149.360	243	6978
1953-54	42335	1410756	38190	1099323	152.260	251	7220
1954-55	43395	1414510	38512	1101762	155.160	248	7101
1955-56	44947	1454936	39633	1150948	158.060	251	7282
1956-57	47167	1473823	41803	1167163	160.960	260	7251
1957-58	44633	1327936	39265	1029180	163.860	240	6281
1958-59	50889	1486122	44986	1175848	166.760	270	7051
1959-60	52928	1558979	46711	1242442	169.660	275	7323
1960-61	58336	1629344	51407	1307121	172.800	297	7564
1961-62	63510	1730608	56051	1400285	177.200	316	7902
1962-63	77616	1896208	68909	1553608	181.600	379	8555
1963-64	88986	2097198	79504	1668622	186.000	427	8971
1964-65	97993	2219314	87712	1791686	190.400	461	9410
1965-66	98414	1996854	87670	1632540	194.800	450	8381
1966-67	119292	2156193	106606	1720356	199.200	535	8636
1967-68	131949	2113188	117841	1722661	203.600	579	8461
1968-69	147605	2393389	132761	1929814	208.000	638	9278
1969-70	153541	2314175	137622	1920915	212.400	648	9044
1970-71	159024	2391075	141898	2004548	216.970	654	9239
1971-72	162127	2205962	144049	1828190	221.920	649	8238
1972-73	196790	2406726	175525	2012623	226.670	774	8879
1973-74	240798	2556490	215369	2149287	231.150	932	9298
1974-75	256739	2270753	227316	1878328	236.130	963	7955
1975-76	268218	2605717	236033	2188443	240.770	980	9089
1976-77	265002	2494468	231687	2080461	245.320	944	8481
1977-78	321330	2863092	282676	2420995	249.770	1132	9693
1978-79	341748	3046091	299382	2587769	254.070	1178	10185
1979-80	363676	2677693	315345	2238573	258.190	1221	8670
1980-81	500087	3019766	439107	2554198	262.100	1675	9745

(Contd...)

			2004-0	)5 Base			
Year	GSDP (R	s. In lakh)	NSDP (R	s. In lakh)	Population	Per Capita	NSDP (Rs.)
	At Current Prices	At 2004-05 Prices	At Current Prices	At 2004-05 Prices	(in lakh)	At Current Prices	At 2004-05 Prices
1	2	3	4	5	6	7	8
1981-82	557397	3041237	486884	2569037	266.460	1827	9641
1982-83	595179	2898300	516318	2429381	271.250	1903	8956
1983-84	747285	3433353	652976	2923841	276.160	2364	10587
1984-85	751249	3261593	649010	2756019	281.120	2309	9804
1985-86	891212	3646900	769767	3108950	286.230	2689	10862
1986-87	967393	3694728	831764	3145510	291.480	2854	10792
1987-88	996302	3592204	848168	3039966	296.870	2857	10240
1988-89	1236741	4214647	1058901	3611833	302.420	3501	11943
1989-90	1415696	4535081	1208632	3899431	308.150	3922	12654
1990-91	1406475	3883162	1184329	3282841	314.080	3771	10452
1991-92	1774586	4263824	1501460	3625339	319.720	4696	11339
1992-93	1914974	4188390	1606568	3539943	325.150	4941	10887
1993-94	2195722	4496557	1847424	3816406	330.550	5589	11546
1994-95	2637803	4728488	2227992	4009160	335.840	6634	11938
1995-96	3200294	4923531	2712473	4164616	341.050	7953	12211
1996-97	3162811	4684672	2633170	3913538	346.180	7606	11305
1997-98	3830064	5311965	3214665	4464813	351.180	9154	12714
1998-99	4255150	5462975	3582055	4592379	356.060	10060	12898
1999-00	4789168	5932446	4314452	5372881	361.510	11935	14862
2000-01	4841484	5830376	4325303	5223400	366.230	11810	14263
2001-02	5170371	6110766	4590332	5448028	370.780	12380	14693
2002-03	5480111	6105838	4873028	5432171	375.030	12994	14485
2003-04	6610014	6889860	5855462	6078415	379.220	15441	16029
2004-05	7772943	7772943	6798702	6798702	385.190	17650	17650
2005-06	8509649	8214472	7354959	7100497	390.260	18846	18194
2006-07	10183947	9270083	8792126	7984484	395.390	22237	20194
2007-08	12927445	10284562	11110925	8669191	400.610	27735	21640
2008-09	14849071	11081178	12751620	9320665	405.900	31416	22963
2009-10	16294643	11585113	13583679	9395723	411.270	33029	22846
2010-11 (P)*	19446479	12453658	16201042	9949037	416.720	38878	23875
2011-12 (Q)*	21589944	13066866	17690653	10190663	422.250	41896	24134
2012-13 (A)*	25874409	14260674	21174328	10946409	427.860	49489	25584

Source: Directorate of Economics and Statistics

(P = Provicinal Estimate, Q = Quick Estimate, A = Advance Estimate)\*Subject to Revision

Annexure 2.2: GSDP at Current Prices by Detailed Categories

	Total GSDP	19	32547	38739	40299	42335	43395	44947	47167	44633	50889	52928	58336	63510	77616	98688	97993	98414	119292	131949	147605	153541	159024	162127	196790	240798
				_	•	_	_	~	•	_	10	-	•	10		_		_								
	Other Services	18	1930	2981	3199	3330	3507	3688	3819	3997	4125	4300	4469	4845	5224	5287	5855	6201	7013	7801	8049	8533	8829	9479	10153	11176
	Public Administ- ration	17	593	099	712	779	803	879	892	1024	1117	1305	1484	1694	2294	2579	2775	3245	3650	4158	4258	4555	5385	5658	6318	6703
	Real Estate Ownership of Dwelling	16	13450	13795	14487	14819	17303	19941	19298	19018	18722	16103	17252	18370	19509	20619	21852	26287	28594	29803	31825	33931	35948	38240	40323	44281
	Banking Bankin	15	49	25	62	73	87	101	110	124	144	152	176	191	283	373	423	518	206	671	703	823	820	1014	1128	1517
	Communi	14	06	104	115	121	129	138	142	169	181	244	242	236	288	338	367	480	457	605	501	269	640	749	747	1068
	Storage	13	9	9	6	6	6	10	10	11	Ξ	11	12	14	12	16	23	26	30	37	41	43	47	51	29	69
	Transport by Other means	12	333	372	398	422	451	473	515	571	614	637	748	839	873	1067	1355	1518	1792	2097	2333	2491	2751	3005	3422	3986
2	Railways	11	473	494	202	518	536	573	619	704	781	842	606	1009	1135	1306	1467	1587	1815	1772	1965	2048	2122	2309	2305	2354
Jepa Co-Fooz	Trade, Hotel & Restaurant	10	1485	1602	1776	1908	2220	2404	2705	2975	3218	3418	3717	3984	5002	5915	9299	6629	8541	9943	10860	12026	12466	12476	15553	19408
	Constru-	6	905	1330	1871	2382	2921	3517	4091	4661	5271	2905	6584	8566	11686	12171	12559	12724	11796	11196	10172	9290	9409	12020	17241	17399
	Electricity Gas & Water supply	8	14	20	22	27	31	39	46	26	62	89	88	162	296	307	428	358	333	514	570	638	725	1005	1106	1397
	Manufac. turing Un-Regd.	7	2559	3203	3410	3608	3794	4008	4138	4316	4455	5109	5725	5892	6084	6328	6899	7274	8489	8866	9594	9165	9025	9066	11415	14118
	Manufac. turing Regd.	9	274	437	502	579	618	728	922	877	972	904	1323	1923	2505	3452	4693	5476	5137	4151	6011	7805	8043	6893	7114	10654
	Mining & Qurrying	2	320	388	464	428	414	475	578	579	202	529	723	695	870	925	1041	1194	1264	1410	1669	1839	1980	2181	2295	2769
	Fishing	4	538	511	494	421	414	277	331	276	300	274	225	250	301	326	391	414	581	891	904	859	973	929	1080	1389
	Forestry & Logging	3	3813	3461	2423	2640	2161	2455	2450	3153	4605	2945	3705	5028	6536	7336	6261	5899	8354	5431	17961	2956	9747	9514	8651	10126
	Agriculture & Animal Husbandry	2	13669	17018	17707	18476	18022	17595	18384	14711	18112	19807	21392	22081	27805	33175	36958	33927	45186	52937	55535	61615	62577	62247	81117	101739
	Year H	1	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74

	Total GSDP	19	256739	268218	265002	321330	341748	363676	200087	557397	595179	747285	751249	891212	967393	996302	1236741	1415696	1406475	1774586	1914974	2195722	2637803	3200294	3162811	3830064	4255150	4789168	77
	Other	18	13393	15704	17012	18903	20375	23303	26151	28380	32278	35518	43962	53664	62161	73028	81415	98641	109201	134740	148507	169819	222779	257071	283619	331780	434264	556496	
	Public Administ- ration	17	9962	10050	10972	12085	13234	15196	17730	20764	25412	29854	31620	38136	48759	55575	62206	67853	74752	87827	104346	111338	124425	148542	165999	187055	250531	285314	
	Real Estate Ownership of Dwelling	16	50527	56415	59953	67467	72533	79125	89193	94350	100485	106118	110152	115445	121489	127334	138054	144821	151227	164059	177824	183614	201334	216010	239653	267353	290759	315786	
	Banking & Insurance	15	1771	2329	2728	3282	3439	3944	5210	6703	9034	10027	12929	15075	19620	19563	19436	25123	31978	38169	43553	50985	61488	29892	99023	110840	109522	139055	
	Communi cation	14	1448	1771	1965	2115	2532	2670	3206	3116	3821	4447	5513	5705	7434	8246	11358	13062	16337	18738	22312	26655	34393	36467	44195	53009	62197	96929	
	Storage	13	74	88	66	116	124	137	134	181	188	306	373	561	602	819	885	783	929	888	1188	1279	1632	1917	2412	3612	3013	3332	
	Transport by Other means	12	4722	5560	6023	6672	7368	8746	9475	10486	10591	11125	14118	16709	20062	23995	30983	36094	38045	45177	52174	63543	73945	84999	92724	116093	133079	141835	
se	Railways	11	2631	2905	3308	3414	3314	3679	3779	6583	8320	9577	9540	12998	15194	17220	19114	25028	30985	36662	42647	50277	65386	80493	73979	80140	58894	70170	
2004-05 Base	Trade, Hotel & Restaurant	10	19825	19830	18452	23798	24866	24318	35701	40567	42166	53415	55269	63458	68535	72141	96459	104987	100364	157237	172823	197342	233840	291256	298259	370489	385038	386185	
	Constru- ction	6	19301	20782	27375	23858	27117	41502	35177	35353	54650	62369	89899	83682	101270	101107	135321	142087	217775	217224	246615	268331	302635	349626	364956	417958	456143	659166	
	Electricity Gas & Water supply	8	1966	2337	2744	3131	3708	4858	6203	9089	8161	10153	9532	11643	14264	13018	15903	24999	28557	33969	35736	50893	81025	79360	72401	100290	113541	153517	
	Manufac. turing Un-Regd.	2	17069	17550	18848	20703	21717	27860	25347	24706	26850	34639	31691	34713	38040	43680	51358	54852	57089	62139	71530	74067	94197	105325	117147	138850	140783	140837	
	Manufac. turing Regd.	9	14953	13033	19959	19160	22925	28062	24471	21419	22179	24504	46994	46904	53320	59050	117720	125906	105371	141233	161941	153150	195625	240258	199527	206770	286320	329979	
	Mining & Qurrying	22	3733	5438	6192	5655	6114	2866	9602	10891	12335	14996	15658	19027	23446	28080	39081	45925	51941	57141	77855	95420	115351	147215	146556	186656	202002	204783	
	Fishing	4	1627	1977	2094	2287	3172	3513	4513	5487	2092	9379	9685	10527	12834	12328	13300	19545	19816	24245	31769	40834	49526	51099	64813	70097	69499	67721	
	Forestry & Logging	က	11636	12435	14571	16485	20252	29832	34531	39511	40745	44196	41897	55469	76168	79802	87440	93325	106284	110101	120237	123946	134877	138702	160809	178486	176576	212160	
	Agriculture & Animal Husbandry	2	99142	100469	82929	116868	118561	105461	175414	204570	203545	288630	253511	317592	311213	291357	350985	416140	347028	489757	468762	583534	683464	908011	788050	1039025	1098438	1057138	
	Year	1	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	

	DP		4	-	1	4	3	6	2	5	1	3	6	4	6
	Total GSDP	19	4841484	5170371	5480111	6610014	7772943	8509649	10183947	12927445	14849071	16294643	19446479	21589944	25874409
	Other	18	570392	587820	644741	700126	755126	854568	924842	1091866	1369495	1770991	2061046	2265474	2623870
	Public Administ- ration	17	295050	309867	305581	344137	366451	358617	395180	449410	616351	702742	817234	945927	1212080
	Real Estate Public Ownership Administ- of ration Dwelling	16	347202	391401	427986	472135	505849	551192	603947	666032	750297	989996	1162351	1337691	1545325
	Banking & Insurance	15	154973	189563	227142	246403	251808	269320	313386	365366	447467	517251	694170	804398	994678
	Communi	14	62337	61282	64251	80894	93225	103366	110205	119037	138303	165209	196374	223311	266757
	Storage	13	4088	4670	4890	5747	7392	8580	9929	11678	13873	17239	20978	26108	31496
	Transport by Other means	12	167559	190373	213106	265865	382390	463190	554277	653491	822492	1009205	1266283	1471018	1817846
ė	Railways	111	70189	72377	81931	92085	103015	106040	134853	153531	169406	165172	173326	188487	193140
2004-05 Base	Trade, Hotel & Restaurant	10	427628	470657	509576	639298	829815	994841	1288337	1485807	1746757	1986706	2424687	2813391	3391363
	Constru- ction	6	647481	631992	665674	632981	809272	865857	1086634	1291006	1454512	1578871	1731882	1996470	2236855
	Manufac. Manufac. Electricity turing turing Gas & Regd. Un-Regd. Water supply	8	157340	178789	131583	240504	319737	302148	388583	458259	346142	270640	427510	495204	527738
	Manufac. turing Un-Regd.	2	146934	143801	156544	178368	192888	208349	247843	290740	309111	331532	368921	407432	435092
	Manufac. turing Regd.	9	311342	285045	349791	448500	744091	779504	1076759	1557947	1918831	1799015	2085829	2580778	2838025
	Mining & Qurrying	D.	235808	252179	303481	433202	586186	712678	866277	1224754	1593737 1918831	1559500 1799015	2172713	2278804	2570343
	Fishing	4	86550	94209	98524	105040	107694	118525	126759	139992	169523	188907	234114	264298	269984
	Forestry & Logging	3	226368	229464	204880	278254	257627	242120	274995	324045	327073	356586	451007	426512	475251
	Agriculture Forestry & Animal & Loggin; Husbandry	2	930242	1076881	1090431	1446474	1460377	1570754	1781141	2644483	2655703	2908391	3158054	3064641	4444566
	Year	1	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (P)*	2011-12 (Q)*	2012-13 (A)*

\*Subject to Revision (P = Provicinal Estimate, Q = Quick Estimate, A = Advance Estimate)

Annexure 2.3: GSDP at 2004-05 Prices by Detailed Categories

									2004-05 Base	e,								
Year	Agriculture & Animal Husbandry	Forestry & & Logging	Fishing	Mining & Manufac. Manufac. Qurrying turing turing Regd. Un-Regd.	Manufac. turing Regd.	Manufac. turing Un-Regd.	Electricity, Gas & Water supply	Constru- ction	Trade, Hotel & Restaurant	Railways	Transport by Other means	Storage (	Communi	Banking & Insurance	Real Estate Ownership of Dwelling	Public Administ- ration	Other Services	Total GSDP
1	2	က	4	2	9	2	8	6	10	11	12	13	14	15	16	17	18	19
1950-51	1 639021	211343	18225	6507	12912	56555	8917	47598	56055	9292	6333	128	1615	1023	172091	16990	78993	1214404
1951-52	2 755238	204905	17748	8417	14440	58044	0906	68884	22209	9300	6299	135	1749	1032	132976	18190	82479	1337100
1952-53	3 757474	148087	16925	10543	14852	71715	8327	94627	65459	9267	7084	142	1912	1351	158841	19722	102658	1389570
1953-54	4 743948	158529	14443	12604	15020	76299	8138	117945	70262	9267	7491	149	2047	1603	163825	21261	107880	1410756
1954-55	5 705321	129707	14438	11536	16621	82760	9139	141626	75007	9482	7844	155	2255	1927	195223	23390	116821	1414510
1955-56	683289	138471	10383	13511	18634	90034	10475	166723	79980	10052	8434	162	2498	2276	229993	26227	126421	1454936
1956-57	7 708642	128465	13096	13845	20778	85123	11476	191874	84920	10175	8854	171	2290	2329	204876	24020	120168	1473823
1957-58	8 539861	159240	9593	13155	22690	87182	11506	216226	22888	11290	9481	185	2566	2575	197968	26470	123235	1327936
پ 1958-59	9 658025	229900	6998	13969	23986	84537	12046	241117	95090	11951	2666	178	2654	2776	184144	27477	119675	1486122
1959-60	0 736705	119914	6755	15609	26294	96957	12938	266207	100364	12826	10387	185	3438	2954	158679	30865	124759	1558979
1960-61	1 744900	181214	5542	18890	29281	102449	14526	292362	105544	13454	11354	192	3356	3185	160146	34744	122212	1629344
1961-62	2 751323	238624	5552	20363	43205	107011	18228	367827	111467	14561	13027	219	3128	3254	160773	38568	122918	1730608
1962-63	3 799823	301485	6337	25014	54753	105045	19359	467468	121425	15362	13824	226	3566	4562	161505	50520	125799	1896208
1963-64	4 919826	329814	6836	20907	69157	100901	25206	483691	137445	16931	15254	249	3890	5578	162026	54398	126477	2097198
1964-65	5 1000773	290015	8039	22937	87527	105180	28879	464154	150666	18376	17680	290	3829	5746	162479	51467	127724	2219314
1965-66	6 829849	261764	7895	26277	89914	106722	25462	390280	135440	19046	18328	290	4788	0299	163065	55995	127770	1996854
1966-67	7 942655	352951	9512	26854	71887	118721	20406	324681	151756	20574	20333	327	4194	2009	164573	55921	129128	2156193
1967-68	8 945468	219022	12013	26994	57272	134834	32963	279297	153639	19417	21623	341	5207	7456	165013	57446	128115	2113188
1968-69	9 997465	683222	13264	29249	80183	118216	39907	253892	169233	20846	23518	384	4194	2673	165612	58881	128543	2393389
1969-70	0 1036958	296313	12177	31645	98471	109829	41641	239109	175012	21334	24603	398	4693	9988	166012	61819	129008	2314175
1970-71	1 1063669	362962	13693	32498	100146	102400	49398	241885	182469	21367	26653	439	5012	8493	167051	69050	127872	2391075
1971-72	2 933241	329144	12865	32157	79146	106425	51907	291769	162771	21829	27551	439	5389	0096	172733	70138	131693	2205962
1972-73	3 1072588	279512	13629	32578	73989	111541	54085	390304	179879	21697	29336	476	5917	9703	178437	72712	134414	2406726
1973-74	4 1145945	229908	15877	32633	97658	114988	59011	366109	191812	21482	31997	526	6423	11599	184665	64395	135541	2556490
1974-75	5 907291	300992	16825	33657	111867	1111150	72745	355669	160162	22985	31901	482	6570	10547	191036	61020	138106	2270753

(Contd...)

	Total GSDP	19	2605717	2494468	2863092	3046091	2677693	3019766	3041237	2898300	3433353	3261593	3646900	3694728	3592204	4214647	4535081	3883162	4263824	4188390	4496557	4728488	4923531	4684672	5311965	5462975	5932446	5830376	6110766
	Other	18	142112	142296	142903	144861	146592	152075	147140	153618	150049	174028	197951	210470	228131	239163	276471	275264	298377	300024	318566	378319	395767	398994	435753	502659	619529	619868	640976
	Public Administ- ration	17	76730	86439	89022	95290	100477	105590	110053	124306	130409	129226	144869	170473	178000	186643	193924	193701	197920	214688	213105	216347	234349	239688	252383	298826	329195	327808	342161
	Real Estate Public Ownership Administ- of ration Dwelling	16	197596	205357	212754	220434	228567	237047	243151	249593	258085	265232	272524	279937	286109	295576	302601	311199	320293	329651	339384	348143	357451	367163	377839	389278	401644	421264	438872
	Banking & Insurance	15	12568	13816	15281	18196	20230	22991	25577	29342	29643	34784	40583	50320	56803	62464	79387	82094	81810	91169	86174	94787	99784	136250	157565	136408	166770	182091	205563
	Communi cation	14	6935	7172	7558	8131	8624	9333	9570	9921	10818	12062	12548	13635	15073	16236	18443	20301	18530	18734	20989	25037	26072	30645	36348	36180	49379	51159	49797
	Storage	13	553	604	647	647	654	702	887	944	1164	1504	1632	1689	1477	1534	1740	1255	2158	2755	2718	3020	3381	3976	5375	3822	3978	4717	5124
	Transport by Other means	12	34872	37378	38825	40225	41810	44200	45438	43668	43366	50636	61126	73535	75982	87521	89836	93182	97193	101795	1111157	120988	131734	134700	152179	157991	165037	188181	212493
e.	Railways	11	24439	24828	25050	25050	28395	29279	32649	31013	30208	31038	36704	38876	41238	41833	46277	47581	52817	59722	53875	57716	71712	2299	70980	51997	73616	75536	79752
2004-05 Base	Trade, Hotel & Restaurant	10	189185	172595	210160	224670	178098	205947	213298	202756	232307	237189	254983	261778	258049	332562	334993	281166	365461	365009	386936	408364	444460	443412	512604	515025	508552	528083	562499
	Constru- ction	6	379809	441059	386397	419024	530467	378346	343426	444326	475078	384413	458571	457028	445995	553143	527563	777959	639671	652168	689477	732006	719376	926529	770737	725836	887563	843346	793889
	Electricity, Gas & Water supply	8	86110	89386	88732	91991	69698	96284	108426	102370	120568	132522	125050	145109	162306	161875	170553	190708	214674	210113	229455	245933	207361	198980	220207	225166	235604	207923	212855
	Manufac. Manufac. turing turing Regd. Un-Regd.	7	115015	121050	126557	132297	145039	1118111	102111	103351	132759	111063	113262	117841	126149	140039	137476	129356	135542	131355	126498	146298	149709	157473	174987	169890	165514	174050	168601
	Manufac. turing Regd.	9	89729	135080	133262	156701	156785	115845	90621	87817	93049	164255	147702	164039	167496	290137	276307	218320	271350	277634	248970	290780	329056	263319	261981	333983	400350	365608	328920
	Mining & Qurrying	2	41486	44276	41427	43704	44697	47686	47631	47153	52913	53594	58876	66441	75263	94979	107269	121831	116479	144643	166426	191499	229312	243634	273232	289483	302271	324897	329758
	Fishing	4	17276	18350	18691	21352	22520	22262	23512	23412	28530	29040	32172	33510	36465	38330	46433	48829	53515	62324	70277	79817	81390	88768	100038	95730	91107	88250	99564
	Forestry & Logging	က	290291	302295	312758	312383	353979	346932	351216	347405	343319	300260	309284	300182	270904	287031	302077	247232	221826	229345	218981	224749	207090	208859	237896	214126	246661	252530	252624
	Agriculture & Animal Husbandry	2	1151594	954039	1239784	1312144	955908	1210060	1241608	1078059	1438718	1238919	1464249	1395956	1256108	1488000	1673157	1123515	1321771	1176571	1376339	1341994	1376222	1179258	1433288	1427567	1285676	1175063	1387318
	Year	1	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02

	Total GSDP	19	6105838	0986889	7772943	8214472	9270083	10284562	11081178	11585113	12453658	13066866	14260674
	Other	18	693694	725719	755126	814331	834765	898856	1025317	1175569	1226839	1249499	1308238
	Public Administ- ration	17	329329	358751	366451	341866	361126	375510	468031	472146	491362	521373	601618
	Real Estate Public Ownership Administ- of ration Dwelling	16	456471	478384	505849	537875	574051	608046	647156	060699	900969	735021	782536
	Banking & Insurance	15	236750	234712	251808	290097	346440	408039	477092	551903	683021	789365	935989
	Storage Communi cation	14	60150	79038	93225	112451	138513	162113	184805	215209	263552	297928	350349
	Storage	13	5281	6220	7392	8347	9521	9625	10393	11305	12779	14606	15770
	Railways Transport by Other means	12	230200	276667	382390	442591	498596	530192	611833	676159	766981	835688	939868
se	Railways	111	86604	94516	103015	107835	125305	134414	145912	127777	140448	141914	140891
2004-05 Base	Trade, Hotel & Restaurant	10	589014	704112	829815	950310	1154136	1264417	1376017	1500654	1673458	1778946	1999664
	Constru- ction	6	806453	740659	809272	830418	956362	1040870	1065172	1110416	1126228	1185066	1236529
	Agriculture Forestry Fishing Mining& Manufac. Electricity, Constru- & Animal & Qurrying turing turing Gas Ction Husbandry Logging Regd. Water Regd. Water Supply	8	149326	256955	319737	293841	367286	426780	318909	241776	362471	411171	425698
	Manufac. turing Un-Regd.	2	174758	187831	192888	201068	225059	252412	250108	259261	280964	288822	291027
	Manufac. turing Regd.	9	393230	477051	744091	759644	991367	1365981	1584501	1451663	1588529	839438 1829474	1898320
	Mining & Qurrying	5	420585	497396	586186	637080	764315	794420	865484	912994	889553	839438	839586
	Fishing	4	101045	111231	107694	111262	115291	122457	128469	129427	138601	141145	146754
	Forestry & Logging	က	268750	256360	257627	264465	272961	273576	276992	278878	270312	272655	268351
	Agriculture Forestry & Animal & Alusbandry Logging	2	1104198	1404257	1460377	1510990	1534989	1616855	1644986	1800886	1842554	1734755	2079486
	Year	1	2002-03	2003-04	2004-05	2002-06	2006-07	2007-08	2008-09	2009-10	2010-11 (P)*	2011-12 (O)*	2012-13 (A)*

 $*Subject\ to\ Revision\ (P = Provicinal\ Estimate,\ Q = Quick\ Estimate,\ A = Advance\ Estimate)$ 

Annexure 2.4: Annual Percent Growth Rate of GSDP/NSDP:

(a) Total and Per Capita, (b) at Current and Constant prices (c) from 1951-52 to 2012-13

2004-05 Base										
Year	GSDP		NSDP		Population	Per Capita NSDP				
	At Current Prices	At 2004-05 Prices	At Current Prices	At 2004-05 Prices		At Current Prices	At 2004-05 Prices			
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			
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			

(Contd...)

2004-05 Base											
Year	GSDP		NSDP		Population	Per Capita NSDP					
	At Current Prices	At 2004-05 Prices	At Current Prices	At 2004-05 Prices		At Current Prices	At 2004-05 Prices				
1	2	3	4	5	6	7	8				
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	22.08	14.09	1.44	20.35	12.46				
1998-99	11.10	2.84	11.43	2.86	1.39	9.90	1.45				
1999-00	12.55	8.59	20.45	17.00	1.53	18.63	15.23				
2000-01	1.09	-1.72	0.25	-2.78	1.31	-1.04	-4.04				
2001-02	6.79	4.81	6.13	4.30	1.24	4.83	3.02				
2002-03	5.99	-0.08	6.16	-0.29	1.15	4.96	-1.42				
2003-04	20.62	12.84	20.16	11.90	1.12	18.83	10.66				
2004-05	17.59	12.82	16.11	11.85	1.57	14.31	10.12				
2005-06	9.48	5.68	8.18	4.44	1.32	6.78	3.08				
2006-07	19.68	12.85	19.54	12.45	1.31	17.99	10.99				
2007-08	26.94	10.94	26.37	8.58	1.32	24.73	7.16				
2008-09	14.86	7.75	14.77	7.51	1.32	13.27	6.11				
2009-10	9.74	4.55	6.53	0.81	1.32	5.13	-0.51				
2010-11 (P)*	19.34	7.50	19.27	5.89	1.33	17.71	4.50				
2011-12 (Q)*	11.02	4.92	9.19	2.43	1.33	7.76	1.09				
2012-13 (A)*	19.84	9.14	19.69	7.42	1.33	18.12	6.01				

<sup>\*</sup>Subject to Revision (P = Provicinal Estimate, Q = Quick Estimate, A = Advance Estimate)

Annexure 2.5: Plan-Wise Average Annual Growth Rate of GSDP/NSDP in Odisha (Percent):

		2004-05			(	
Plan Period	GS	DP	NS	DP	Per capi	ta NSDP
	At Current Prices	At 2004-05 Prices	At Current Prices	At 2004-05 Prices	At Current Prices	At 2004-05 Prices
1	2	3	4	5	6	7
Ist. Plan (1951-56)	6.84	3.74	6.40	4.69	4.37	2.69
2nd. Plan (1956-61)	5.56	2.55	5.57	2.94	3.71	1.12
3rd. Plan (1961-66)	11.26	4.44	11.53	4.79	8.88	2.31
Three Annual Plans (1966-69)	14.56	6.41	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	12.38	-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)	10.53	5.58	12.07	7.09	10.53	5.63
10th. Plan * (2002-07)	14.67	8.82	14.03	8.07	12.57	6.69
11th. Plan * (2007-12)	16.38	7.13	15.23	5.04	13.72	3.67

<sup>\*</sup>Subject to Revision

Annexure 2.6: Composition of GSDP (Percent) at Current Prices by Broad Sectors

		2004-0	05 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1950-51	46.31	9.45	6.22	38.02	100.00
1951-52	47.54	10.68	5.76	36.02	100.00
1952-53	46.07	11.53	5.99	36.41	100.00
1953-54	45.78	12.27	6.08	35.87	100.00
1954-55	42.00	12.73	6.48	38.78	100.00
1955-56	38.84	13.30	6.56	41.30	100.00
1956-57	39.59	13.89	7.07	39.46	100.00
1957-58	34.56	15.75	8.22	41.46	100.00
1958-59	38.88	15.37	8.10	37.65	100.00
1959-60	40.28	16.90	8.63	34.19	100.00
1960-61	40.20	17.90	8.60	33.30	100.00
1961-62	39.01	19.53	8.55	32.91	100.00
1962-63	41.40	19.85	8.62	30.14	100.00
1963-64	43.33	19.47	9.03	28.17	100.00
1964-65	43.03	20.03	9.41	27.52	100.00
1965-66	38.49	20.88	9.59	31.04	100.00
1966-67	43.38	17.92	9.84	28.86	100.00
1967-68	44.93	16.54	10.29	28.25	100.00
1968-69	46.95	15.97	10.11	26.98	100.00
1969-70	45.71	16.28	10.55	27.47	100.00
1970-71	45.36	15.79	10.67	28.18	100.00
1971-72	43.94	16.08	10.72	29.26	100.00
1972-73	47.00	15.98	10.72	26.30	100.00
1973-74	48.69	16.52	10.81	23.99	100.00
1974-75	44.54	19.20	10.65	25.60	100.00
1975-76	43.57	17.93	10.62	27.88	100.00
1976-77	37.10	22.88	10.42	29.60	100.00
1977-78	42.31	19.13	10.59	27.97	100.00
1978-79	41.02	20.29	10.50	28.20	100.00
1979-80	36.20	24.65	10.10	29.05	100.00
1980-81	45.34	17.77	10.58	26.32	100.00
1981-82	47.66	15.34	11.13	25.86	100.00
1982-83	44.96	17.01	11.09	26.94	100.00
1983-84	49.41	16.48	10.71	23.40	100.00
1984-85	43.54	19.65	11.38	25.44	100.00
1985-86	46.08	18.40	11.29	24.23	100.00
1986-87	43.43	19.55	11.68	25.34	100.00
1987-88	40.50	20.14	12.42	26.94	100.00
1988-89	38.83	24.85	12.83	23.49	100.00

		2004-0	5 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1989-90	40.18	23.93	12.76	23.13	100.00
1990-91	35.84	25.53	13.27	25.36	100.00
1991-92	37.99	23.91	14.60	23.50	100.00
1992-93	35.68	24.86	15.20	24.26	100.00
1993-94	38.33	22.89	15.54	23.24	100.00
1994-95	37.24	24.22	15.56	22.98	100.00
1995-96	39.60	23.02	15.56	21.82	100.00
1996-97	36.76	21.98	16.30	24.97	100.00
1997-98	39.12	20.85	16.44	23.59	100.00
1998-99	36.97	22.15	15.19	25.69	100.00
1999-00	32.19	26.80	13.93	27.07	100.00
2000-01	30.55	26.09	15.12	28.25	100.00
2001-02	31.97	23.98	15.46	28.60	100.00
2002-03	30.97	23.79	15.94	29.30	100.00
2003-04	34.24	22.70	16.40	26.67	100.00
2004-05	31.03	26.58	18.21	24.18	100.00
2005-06	31.07	25.33	19.70	23.90	100.00
2006-07	29.94	27.49	20.60	21.97	100.00
2007-08	33.52	27.83	18.75	19.90	100.00
2008-09	31.96	27.13	19.47	21.44	100.00
2009-10	30.77	24.43	20.52	24.29	100.00
2010-11 (P)*	30.94	23.73	20.99	24.35	100.00
2011-12 (Q)*	27.95	25.38	21.87	24.80	100.00
2012-13 (A)*	29.99	23.33	22.03	24.64	100.00

Source: Directorate of Economics and Statistics

<sup>\*</sup>Subject to Revision (P = Provicinal Estimate, Q = Quick Estimate, A = Advance Estimate)

Annexure 2.7: Composition of GSDP (Percent) at 2004-05 Prices by Broad sectors

		2004-0	5 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1950-51	66.61	9.19	5.32	18.88	100.00
1951-52	69.93	9.48	5.19	15.41	100.00
1952-53	65.55	11.14	5.33	17.97	100.00
1953-54	63.83	12.15	5.57	18.46	100.00
1954-55	59.54	13.66	5.89	20.90	100.00
1955-56	56.13	14.89	6.08	22.90	100.00
1956-57	57.32	15.51	6.32	20.84	100.00
1957-58	50.96	18.45	7.47	23.12	100.00
1958-59	56.16	17.17	7.01	19.66	100.00
1959-60	55.88	18.55	7.23	18.34	100.00
1960-61	55.94	19.21	7.25	17.61	100.00
1961-62	54.45	21.65	7.19	16.71	100.00
1962-63	54.02	22.95	7.06	15.97	100.00
1963-64	55.61	22.44	7.20	14.75	100.00
1964-65	56.17	22.23	7.55	14.05	100.00
1965-66	53.00	23.06	7.95	15.99	100.00
1966-67	57.55	19.24	8.19	15.02	100.00
1967-68	56.32	19.40	8.63	15.65	100.00
1968-69	61.40	16.98	8.05	13.57	100.00
1969-70	57.98	18.49	8.89	14.65	100.00
1970-71	58.72	17.98	8.94	14.36	100.00
1971-72	55.70	19.48	8.94	15.89	100.00
1972-73	56.19	19.96	8.88	14.96	100.00
1973-74	56.92	20.01	8.92	14.15	100.00
1974-75	51.95	23.31	8.84	15.89	100.00
1975-76	55.71	20.49	8.88	14.92	100.00
1976-77	49.72	25.33	8.81	16.14	100.00
1977-78	54.91	21.51	8.96	14.61	100.00
1978-79	54.52	22.21	8.93	14.33	100.00
1979-80	47.50	27.20	8.76	16.54	100.00
1980-81	54.35	20.12	9.23	16.30	100.00
1981-82	55.55	18.36	9.62	16.47	100.00
1982-83	51.46	20.70	9.61	18.24	100.00
1983-84	55.65	19.79	8.89	15.67	100.00
1984-85	50.67	21.98	9.79	17.57	100.00
1985-86	52.94	20.04	9.74	17.28	100.00
1986-87	50.12	21.11	10.25	18.52	100.00
1987-88	46.83	22.45	10.63	20.09	100.00
1988-89	46.50	24.79	10.89	17.82	100.00

		2004-0	)5 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1989-90	48.69	22.59	10.48	18.25	100.00
1990-91	39.91	27.73	11.09	21.27	100.00
1991-92	41.41	26.20	12.06	20.33	100.00
1992-93	39.11	26.78	12.59	21.52	100.00
1993-94	42.05	24.96	12.36	20.63	100.00
1994-95	39.77	26.26	12.57	21.40	100.00
1995-96	39.59	25.44	13.35	21.62	100.00
1996-97	37.46	24.39	14.19	23.97	100.00
1997-98	39.56	23.32	14.33	22.79	100.00
1998-99	38.20	24.04	13.63	24.12	100.00
1999-00	32.46	28.47	13.49	25.57	100.00
2000-01	31.57	27.29	14.54	26.60	100.00
2001-02	33.86	24.62	14.89	26.63	100.00
2002-03	31.03	24.96	15.91	28.11	100.00
2003-04	32.94	24.13	16.84	26.09	100.00
2004-05	31.03	26.58	18.21	24.18	100.00
2005-06	30.72	25.38	19.74	24.15	100.00
2006-07	28.99	27.40	20.78	22.83	100.00
2007-08	27.30	30.01	20.43	22.27	100.00
2008-09	26.31	29.05	21.02	23.62	100.00
2009-10	26.95	26.44	21.85	24.76	100.00
2010-11 (P)*	25.22	26.97	22.94	24.87	100.00
2011-12 (Q)*	22.87	28.43	23.49	25.22	100.00
2012-13 (A)*	23.38	27.01	24.17	25.44	100.00

Source: Directorate of Economics and Statistics

<sup>\*</sup>Subject to Revision (P = Provicinal Estimate, Q = Quick Estimate, A = Advance Estimate)

Annexure 2.8: Composition of NSDP (Percent) at Current Prices by Broad Sectors

		2004-0	5 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1950-51	46.93	9.78	5.70	37.59	100.00
1951-52	48.15	11.02	5.19	35.63	100.00
1952-53	46.66	11.86	5.40	36.08	100.00
1953-54	46.33	12.62	5.51	35.55	100.00
1954-55	42.93	12.53	5.86	38.68	100.00
1955-56	39.77	13.19	5.92	41.13	100.00
1956-57	40.41	13.70	6.58	39.30	100.00
1957-58	35.30	15.59	7.69	41.42	100.00
1958-59	39.73	15.23	7.57	37.48	100.00
1959-60	41.22	16.84	8.08	33.86	100.00
1960-61	41.20	17.96	8.07	32.78	100.00
1961-62	39.85	19.72	8.00	32.42	100.00
1962-63	42.25	20.13	8.00	29.62	100.00
1963-64	44.31	19.66	8.45	27.59	100.00
1964-65	43.86	20.26	8.92	26.96	100.00
1965-66	39.17	21.15	9.04	30.64	100.00
1966-67	44.23	17.90	9.33	28.54	100.00
1967-68	45.87	16.33	9.80	28.00	100.00
1968-69	47.79	15.62	9.92	26.67	100.00
1969-70	46.55	15.86	10.37	27.22	100.00
1970-71	46.30	15.16	10.48	28.06	100.00
1971-72	44.86	15.32	10.49	29.32	100.00
1972-73	47.99	15.24	10.50	26.27	100.00
1973-74	49.60	15.82	10.58	24.01	100.00
1974-75	45.52	18.39	10.37	25.72	100.00
1975-76	44.66	16.80	10.33	28.21	100.00
1976-77	37.76	22.13	10.08	30.03	100.00
1977-78	43.21	18.16	10.32	28.32	100.00
1978-79	41.92	19.29	10.20	28.58	100.00
1979-80	36.90	23.84	9.72	29.53	100.00
1980-81	46.65	16.36	10.34	26.64	100.00
1981-82	49.36	13.51	10.91	26.21	100.00
1982-83	46.59	15.21	10.82	27.38	100.00
1983-84	51.16	14.85	10.47	23.52	100.00
1984-85	45.05	18.07	11.16	25.72	100.00
1985-86	47.79	16.66	11.09	24.46	100.00
1986-87	45.00	17.79	11.56	25.65	100.00
1987-88	41.97	18.18	12.40	27.46	100.00
1988-89	39.95	23.60	12.82	23.64	100.00

		2004-0	)5 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1989-90	41.50	22.43	12.74	23.33	100.00
1990-91	36.88	23.73	13.32	26.07	100.00
1991-92	39.27	21.86	14.87	24.01	100.00
1992-93	36.87	22.62	15.59	24.93	100.00
1993-94	39.83	20.44	15.96	23.78	100.00
1994-95	38.47	22.11	15.98	23.44	100.00
1995-96	41.09	20.79	15.99	22.13	100.00
1996-97	38.33	18.91	16.96	25.81	100.00
1997-98	40.82	17.87	17.11	24.20	100.00
1998-99	38.46	19.26	15.74	26.54	100.00
1999-00	33.06	24.78	14.24	27.92	100.00
2000-01	31.29	23.80	15.61	29.30	100.00
2001-02	32.95	21.23	16.15	29.67	100.00
2002-03	31.76	21.34	16.59	30.31	100.00
2003-04	35.54	19.78	17.11	27.57	100.00
2004-05	32.37	23.31	19.22	25.10	100.00
2005-06	32.55	21.21	21.14	25.10	100.00
2006-07	31.32	23.36	22.30	23.03	100.00
2007-08	35.52	23.13	20.43	20.92	100.00
2008-09	33.42	22.69	21.23	22.66	100.00
2009-10	32.68	17.55	23.10	26.67	100.00
2010-11 (P)*	32.76	16.65	23.74	26.85	100.00
2011-12 (Q)*	29.15	17.92	25.16	27.77	100.00
2012-13 (A)*	31.50	15.33	25.45	27.72	100.00

Source: Directorate of Economics and Statistics

<sup>\*</sup>Subject to Revision (P = Provicinal Estimate, Q = Quick Estimate, A = Advance Estimate)

Annexure 2.9: Composition of NSDP (Percent) at Constant Prices by Broad Sectors

		2004-0	05 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1950-51	66.39	9.65	5.29	18.67	100.00
1951-52	69.67	9.94	5.16	15.23	100.00
1952-53	65.27	11.67	5.30	17.75	100.00
1953-54	63.52	12.71	5.54	18.23	100.00
1954-55	59.23	14.29	5.85	20.63	100.00
1955-56	55.81	15.57	6.04	22.59	100.00
1956-57	56.96	16.21	6.28	20.55	100.00
1957-58	50.58	19.25	7.41	22.76	100.00
1958-59	55.76	17.92	6.96	19.36	100.00
1959-60	55.44	19.35	7.16	18.05	100.00
1960-61	55.47	20.02	7.18	17.33	100.00
1961-62	53.92	22.54	7.11	16.42	100.00
1962-63	53.46	23.87	6.98	15.68	100.00
1963-64	55.05	23.35	7.12	14.48	100.00
1964-65	55.60	23.14	7.46	13.80	100.00
1965-66	52.45	24.00	7.86	15.70	100.00
1966-67	57.05	20.06	8.11	14.77	100.00
1967-68	55.83	20.24	8.55	15.39	100.00
1968-69	60.93	17.74	7.98	13.36	100.00
1969-70	57.49	19.30	8.80	14.41	100.00
1970-71	58.24	18.77	8.86	14.13	100.00
1971-72	59.50	16.32	8.69	15.49	100.00
1972-73	59.69	17.20	8.64	14.47	100.00
1973-74	60.30	17.41	8.69	13.59	100.00
1974-75	55.18	20.79	8.57	15.46	100.00
1975-76	58.96	17.96	8.65	14.44	100.00
1976-77	52.37	23.38	8.53	15.73	100.00
1977-78	57.83	19.33	8.74	14.10	100.00
1978-79	57.22	20.27	8.71	13.80	100.00
1979-80	49.78	25.60	8.47	16.15	100.00
1980-81	57.43	17.57	9.04	15.96	100.00
1981-82	58.89	15.47	9.47	16.16	100.00
1982-83	54.53	17.93	9.45	18.10	100.00
1983-84	58.62	17.44	8.67	15.27	100.00
1984-85	53.32	19.71	9.64	17.33	100.00
1985-86	55.60	17.76	9.61	17.04	100.00
1986-87	52.52	18.95	10.15	18.38	100.00
1987-88	49.03	20.30	10.57	20.10	100.00
1988-89	48.23	23.37	10.83	17.56	100.00

		2004-0	)5 Base		
Year	Primary Sector	Secondary Sector	Tertiary Sector	Finance & Services Sector	Total GSDP
1	2	3	4	5	6
1989-90	50.59	20.97	10.39	18.05	100.00
1990-91	41.25	26.37	11.05	21.33	100.00
1991-92	42.83	24.76	12.11	20.30	100.00
1992-93	40.40	25.27	12.71	21.62	100.00
1993-94	43.40	23.61	12.42	20.57	100.00
1994-95	40.89	25.05	12.65	21.41	100.00
1995-96	40.83	23.93	13.53	21.71	100.00
1996-97	38.83	22.18	14.54	24.44	100.00
1997-98	41.17	21.00	14.71	23.13	100.00
1998-99	39.82	21.57	13.96	24.65	100.00
1999-00	33.17	27.13	13.67	26.03	100.00
2000-01	32.27	25.52	14.91	27.31	100.00
2001-02	34.96	22.27	15.42	27.35	100.00
2002-03	31.82	22.83	16.47	28.88	100.00
2003-04	34.08	21.45	17.61	26.87	100.00
2004-05	32.37	23.31	19.22	25.10	100.00
2005-06	32.16	21.27	21.18	25.40	100.00
2006-07	30.28	23.12	22.52	24.08	100.00
2007-08	28.49	24.89	22.66	23.95	100.00
2008-09	27.03	24.05	23.35	25.56	100.00
2009-10	28.55	18.45	25.16	27.83	100.00
2010-11 (P)*	26.38	18.38	26.88	28.36	100.00
2011-12 (Q)*	23.34	19.12	28.14	29.40	100.00
2012-13 (A)*	23.86	16.51	29.45	30.18	100.00

Source: Directorate of Economics and Statistics

<sup>\*</sup>Subject to Revision (P = Provicinal Estimate, Q = Quick Estimate, A = Advance Estimate)

Annexure 2.10: Gross District Domestic Product (GDDP)

SI.	District			At curre	At current prices					At 200	At 2004-05 Prices		
NO.		2004-05	2002-06	2006-07	2007-08	2008-09	2009-10	2004-05	2002-06	2006-07	2007-08	2008-09	2009-10
-	2	က	4	2	9	2	8	6	10	11	12	13	14
21	Malkangiri	80860	82525	99730	125793	131160	148299	80860	82701	88976	95362	98951	104352
22	Mayurbhanj	337809	363253	427941	547957	611711	675335	337809	354463	392502	432161	457374	481937
23	Nabarangpur	134789	142710	171377	202421	227714	261475	134789	140041	152354	163911	172670	186545
24	Nayagarh	114244	124952	146985	175823	190672	219641	114244	122448	132753	139720	145225	156983
25	Nuapada	82921	89903	107621	140246	150659	171731	82921	89206	98010	111402	116003	122451
26	Puri	240366	264139	279139	336365	376198	437836	240366	256396	259439	279231	299342	319205
27	Rayagada	154734	172290	211960	268957	298402	335915	154734	168231	189909	210341	226361	240093
28	Sambalpur	250728	281631	332973	416263	484217	521420	250728	272144	302776	340393	370840	377339
29	Subarnapur	75891	84322	100944	127386	139844	172879	75891	81443	91035	95012	102281	114779
30	Sundargarh	601481	651194	857603	1132011	1364780	1420007	601481	627172	767816	904156	1005223	1010647
Odisha	iha	7772943	8509649	10183947	12927445	14849071	16294643	7772943	8214472	9270083	10284562	11081178	11585113

Annexure 2.11: Percentage Distribution of GDDP

No.													
1		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
	2	3	4	2	9	2	8	6	10	111	12	13	14
1	Angul	7.32	7.01	98.9	06:90	7.05	99.9	7.32	7.14	7.21	7.42	7.49	2.06
2	Balasore	4.18	4.13	4.14	4.19	4.14	4.27	4.18	4.14	4.21	4.29	4.31	4.38
က	Bargarh	2.63	2.60	2.55	2.55	2.55	2.59	2.63	2.64	2.60	2.64	2.62	2.56
4	Bhadrak	2.39	2.37	2.30	2.26	2.24	2.36	2.39	2.34	2.27	2.23	2.27	2.39
2	Balangir	3.13	3.11	3.09	3.15	3.04	3.22	3.13	3.14	3.13	3.13	3.08	3.14
9	Boudh	0.83	0.86	0.85	0.86	0.81	0.84	0.83	0.83	0.81	0.78	0.78	0.80
7	Cuttack	7.41	7.09	66.9	89.9	6.62	98.9	7.41	7.14	2.08	7.10	7.03	7.08
<b>ω</b>	Deogarh	0.61	0.63	0.62	0.58	0.57	09.0	0.61	0.63	09:0	0.57	0.56	0.58
6	Dhenkanal	2.58	2.60	2.57	2.58	2.46	2.55	2.58	2.63	2.53	2.53	2.51	2.56
10	Gajapati	1.20	1.16	1.15	1.12	1.11	1.15	1.20	1.16	1.13	1.09	1.09	1.09
11	Ganjam	7.08	2.06	7.07	6.79	08.9	7.12	2.08	7.07	7.13	6.95	08.9	7.04
12	Jagatsinghpur	3.19	3.12	3.22	3.19	3.22	3.10	3.19	3.13	3.19	3.26	3.37	3.22
13	Jajpur	4.31	4.51	4.53	4.61	4.61	3.99	4.31	4.32	4.45	4.32	4.18	4.08
14	Jharsuguda	2.82	2.84	2.71	2.67	2.85	2.89	2.82	2.90	2.91	2.91	2.99	3.01
15	Kalahandi	2.64	2.70	2.53	2.64	2.64	2.73	2.64	2.67	2.56	2.53	2.58	2.59
16	Kandhamal	2.26	2.23	2.27	2.29	2.25	2.62	2.26	2.28	2.28	2.26	2.28	2.61
17	Kendrapara	2.28	2.26	2.12	2.05	1.99	2.06	2.28	2.29	2.15	2.11	2.06	2.10
18	Kendujhar	6.23	6.77	6.92	8.06	8.37	7.46	6.23	6.29	6.38	6.46	6.44	6.26
19	Khordha	7.03	7.21	7.27	82.9	6.81	6.91	7.03	7.29	7.39	7.24	7.36	7.34
20	Koraput	3.20	3.21	3.38	3.19	3.11	3.24	3.20	3.25	3.29	3.23	3.18	3.23
21	Malkangiri	1.04	0.97	0.98	0.97	0.88	0.91	1.04	1.01	96.0	0.93	0.89	06:0

SI.	SI. District			At Curre	At Current Prices					At 2004-	At 2004-05 Prices		
0		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2004-05	2002-06	2006-07	2007-08	2008-09	2009-10
1	2	က	4	വ	9	7	8	6	10	11	12	13	14
22	22 Mayurbhanj	4.35	4.27	4.20	4.24	4.12	4.14	4.35	4.32	4.23	4.20	4.13	4.16
23	Nabarangpur	1.73	1.68	1.68	1.57	1.53	1.60	1.73	1.70	1.64	1.59	1.56	1.61
24	Nayagarh	1.47	1.47	1.44	1.36	1.28	1.35	1.47	1.49	1.43	1.36	1.31	1.36
25	Nuapada	1.07	1.06	1.06	1.08	1.01	1.05	1.07	1.09	1.06	1.08	1.05	1.06
26	Puri	3.09	3.10	2.74	2.60	2.53	2.69	3.09	3.12	2.80	2.72	2.70	2.76
27	Rayagada	1.99	2.02	2.08	2.08	2.01	2.06	1.99	2.05	2.05	2.05	2.04	2.07
28	Sambalpur	3.23	3.31	3.27	3.22	3.26	3.20	3.23	3.31	3.27	3.31	3.35	3.26
29	Subarnapur	0.98	0.99	0.99	0.99	0.94	1.06	0.98	0.99	0.98	0.92	0.92	0.99
30	Sundargarh	7.74	7.65	8.42	8.76	9.19	8.71	7.74	7.63	8.28	8.79	9.07	8.72
Odisha	sha	100.00	100.00	100.00	100.00	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)

SI.	District			At Current Prices	it Prices					At 2004-05 Prices	5 Prices		
No.		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
П	2	3	4	2	9	7	8	6	10	11	12	13	14
П	Angul	446350	448021	525946	629879	783547	723330	446350	438020	501400	538791	582738	504106
2	Balasore	283124	299407	358836	458407	519912	566044	283124	290552	331705	367054	398134	402516
က	Bargarh	181903	194331	227914	288647	332109	360631	181903	190134	211098	234748	250855	247030
4	Bhadrak	167872	183137	212192	265620	302625	350044	167872	174654	190665	207088	227116	248892
2	Balangir	220378	241047	286458	372184	411106	477556	220378	235120	263375	290941	307947	327564
9	Boudh	59643	68121	80198	104207	111462	127348	59643	63784	69745	74616	79320	85837
2	Cuttack	513335	537538	631780	764416	873141	979552	513336	523031	582887	641917	686522	709169
8	Deogarh	43898	49498	57902	69750	78811	90672	43898	47411	51166	53521	57411	62293
6	Dhenkanal	179645	197516	232814	297045	324949	367244	179645	192457	207760	228643	244990	258341
10	Gajapati	86831	92147	108716	135383	153584	174671	86831	89002	97557	104156	111578	116951
11	Ganjam	501033	547684	655984	802594	922694	1063765	501034	529785	602209	648623	684170	741703
12	Jagatsinghpur	209035	217548	268560	332087	385918	372410	209036	210781	240430	262997	294236	264193
13	Jajpur	288344	324540	390886	500889	576030	529635	288344	299901	348329	364458	379768	370671
14	Jharsuguda	183708	198371	227853	283270	346862	364868	183708	194427	221513	235002	255439	253001
15	Kalahandi	186241	208193	233761	311327	356873	403786	186241	199040	214627	234313	257721	269290
16	Kandhamal	164293	177711	216151	278634	313148	399578	164293	175396	197520	216936	234328	280492
17	Kendrapara	162079	175901	197176	244173	272408	311058	162079	172645	182354	197982	208679	223710
18	Kendujhar	411949	481720	587669	867604	1027378	953502	411949	430527	491169	527537	556453	537435
19	Khordha	472595	527327	639496	749536	871262	952477	472595	515454	591532	632063	699128	710286
20	Koraput	223391	243841	303805	362324	405635	457492	223391	238682	267746	287867	305183	317198

SI.	Sl. District			At Current Prices	nt Prices					At 2004-05 Prices	5 Prices		
No.		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
П	2	က	4	വ	9	2	8	6	10	Π	12	13	14
21	Malkangiri	74454	76207	91768	116530	121069	136843	74454	76525	81824	87269	90541	95484
22	Mayurbhanj	307231	330107	388824	501156	558205	613701	307231	322473	356390	390898	413167	433480
23	Nabarangpur	124219	130001	157020	185794	208285	237566	124219	127703	139353	148877	156404	167526
24	Nayagarh	104937	114867	135056	162245	175728	202614	104937	112682	121914	127805	132918	143751
25	Nuapada	76567	82241	98795	129408	138301	156642	76567	81713	89870	101627	105458	110450
26	Puri	217806	239926	253029	305980	342794	400872	217807	233028	235116	252158	271141	289837
27	Rayagada	140657	152657	187596	238004	262881	289558	140657	149259	167606	182978	196624	202797
28	Sambalpur	218114	240113	285120	354391	413505	428865	218114	232195	258598	284968	310849	302028
29	Subarnapur	69946	78125	93308	118724	129703	160233	69946	75473	84016	87430	93910	105375
30	Sundargarh	479123	497114	657512	850716	1031694	931123	479123	478642	585009	655928	727938	614318
Odisha	sha	6798702	7354959	8792126	111110925	12751620	13583679	6798702	7100497	7984484	8669191	9320665	9395723

Annexure 2.13: Percentage Distribution of NDDP

	2009-10	14	5.37	4.28	2.63	2.65	3.49	0.91	7.55	99.0	2.75	1.24	7.89	2.81	3.95	2.69	2.87	2.99	2.38	5.72	7.56	3.38	1.02
	2008-09	13	6.25	4.27	2.69	2.44	3.30	0.85	7.37	0.62	2.63	1.20	7.34	3.16	4.07	2.74	2.77	2.51	2.24	2.97	7.50	3.27	0.97
5 Prices	2007-08	12	6.22	4.23	2.71	2.39	3.36	0.86	7.40	0.62	2.64	1.20	7.48	3.03	4.20	2.71	2.70	2.50	2.28	60.9	7.29	3.32	1.01
At 2004-05 Prices	2006-07	11	6.28	4.15	2.64	2.39	3.30	0.87	7.30	0.64	2.60	1.22	7.54	3.01	4.36	2.77	2.69	2.47	2.28	6.15	7.41	3.35	1.02
	2005-06	10	6.17	4.09	2.68	2.46	3.31	0.90	7:37	29.0	2.71	1.25	7.46	2.97	4.22	2.74	2.80	2.47	2.43	90.9	7.26	3.36	1.08
	2004-05	6	6.57	4.16	2.68	2.47	3.24	0.88	7.55	0.65	2.64	1.28	7:37	3.07	4.24	2.70	2.74	2.42	2.38	90.9	6.95	3.29	1.10
	2009-10	8	5.32	4.17	2.65	2.58	3.52	0.94	7.21	29.0	2.70	1.29	7.83	2.74	3.90	2.69	2.97	2.94	2.29	7.02	7.01	3.37	1.01
	2008-09	2	6.14	4.08	2.60	2.37	3.22	0.87	6.85	0.62	2.55	1.20	7.24	3.03	4.52	2.72	2.80	2.46	2.14	8.06	6.83	3.18	0.95
nt Prices	2007-08	9	5.94	4.13	2.60	2.39	3.35	0.94	6.88	0.63	2.67	1.22	7.22	2.99	4.51	2.55	2.80	2.51	2.20	7.81	6.75	3.26	1.05
At Current Prices	2006-07	5	5.98	4.08	2.59	2.41	3.26	0.91	7.19	99.0	2.65	1.24	7.46	3.05	4.45	2.59	2.66	2.46	2.24	6.68	7.27	3.46	1.04
	2002-06	4	60.9	4.07	2.64	2.49	3.28	0.93	7.31	29.0	2.69	1.25	7.45	2.96	4.41	2.70	2.83	2.42	2.39	6.55	7.17	3.32	1.04
	2004-05	3	6.57	4.16	2.68	2.47	3.24	0.88	7.55	0.65	2.64	1.28	7.37	3.07	4.24	2.70	2.74	2.42	2.38	90.9	6.95	3.29	1.10
District			Angul	Balasore	Bargarh	Bhadrak	Balangir	Boudh	Cuttack	Deogarh	Dhenkanal	Gajapati	Ganjam	Jagatsinghpur	Jajpur	Jharsuguda	Kalahandi	Kandhamal	Kendrapara	Kendujhar	Khordha	Koraput	Malkangiri
		2	An	Bal	Baı	Bh	Bal	Boı	Cui	De	Dh		Gai										Ma
SI.	No.	_	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21

SI.	District			At Curre	At Current Prices					At 2004-05 Prices	)5 Prices		
NO.		2004-05	2002-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
	2	က	4	5	9	2	8	6	10	11	12	13	14
22	Mayurbhanj	4.52	4.49	4.42	4.51	4.38	4.52	4.52	4.54	4.46	4.51	4.43	4.61
23	Nabarangpur	1.83	1.77	1.79	1.67	1.63	1.75	1.83	1.80	1.75	1.72	1.68	1.78
24	Nayagarh	1.54	1.56	1.54	1.46	1.38	1.49	1.54	1.59	1.53	1.47	1.43	1.53
25	Nuapada	1.13	1.12	1.12	1.16	1.08	1.15	1.13	1.15	1.13	1.17	1.13	1.18
26	Puri	3.20	3.26	2.88	2.75	2.69	2.95	3.20	3.28	2.94	2.91	2.91	3.08
27	Rayagada	2.07	2.08	2.13	2.14	2.06	2.13	2.07	2.10	2.10	2.11	2.11	2.16
28	Sambalpur	3.21	3.26	3.24	3.19	3.24	3.16	3.21	3.27	3.24	3.29	3.34	3.21
29	Subarnapur	1.03	1.06	1.06	1.07	1.02	1.18	1.03	1.06	1.05	1.01	1.01	1.12
30	Sundargarh	7.05	92.9	7.48	2.66	8.09	6.85	7.05	6.74	7.33	7.57	7.81	6.54
Odisha	sha	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Annexure 2.14: Per Capita NDDP

SI.	District			At Current Prices	nt Prices					At 2004-(	At 2004-05 Prices		
No.		2004-05	2002-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
-	2	3	4	5	9	2	8	6	10	11	12	13	14
1	Angul	37689	37419	43450	53920	63328	57824	37689	36583	41422	44026	47098	40299
2	Balasore	13341	13919	16458	20742	23208	24928	13341	13507	15213	16608	17772	17726
3	Bargarh	13076	13839	16079	20173	22993	24734	13076	13540	14893	16406	17368	16942
4	Bhadrak	12063	13000	14881	18402	20711	23665	12063	12398	13371	14347	15543	16827
2	Balangir	15319	16408	19096	24295	26280	29894	15319	16005	17557	18992	19685	20505
9	Boudh	15085	16949	19630	25091	26400	29671	15085	15870	17071	17966	18787	20000
2	Cuttack	21087	21835	25377	30362	34294	38043	21087	21246	23414	25497	26964	27542
8	Deogarh	15305	17034	19669	23387	26084	29621	15305	16316	17381	17946	19001	20350
6	Dhenkanal	16195	17608	20525	25896	28014	31307	16195	17157	18316	19933	21120	22023
10	Gajapati	16138	16948	19789	24386	27377	30812	16138	16370	17757	18761	19889	20630
11	Ganjam	15268	16511	19564	23679	26930	30714	15268	15971	17960	19137	19969	21415
12	Jagatsinghpur	19275	19916	24410	29967	34574	33123	19275	19297	21854	23733	26361	23498
13	Jajpur	17041	18956	22566	28579	32482	29517	17041	17517	20109	20795	21415	20658
14	Jharsuguda	34463	36740	41663	51134	61813	64191	34463	36009	40503	42421	45521	44510
15	Kalahandi	13171	14484	15999	20961	23637	26309	13171	13847	14689	15776	17070	17546
16	Kandhamal	24294	25961	31195	39726	44107	55599	24294	25623	28507	30930	33005	39029
17	Kendrapara	12019	12914	14331	17568	19403	21933	12019	12674	13253	14245	14864	15774
18	Kendujhar	25086	28917	34776	20609	28075	54044	25086	25844	29062	30772	31996	30462
19	Khordha	23644	25913	30867	35534	40570	43561	23644	25330	28552	29965	32554	32485
20	Koraput	17932	19275	23649	27773	30617	34003	17932	18867	20842	22066	23035	23576

SI.	District			At Current Prices	nt Prices					At 2004-05 Prices	5 Prices		
No.		2004-05	2002-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
	2	င	4	വ	9	2	8	6	10	11	12	13	14
21	Malkangiri	13795	13847	16353	20364	20748	22998	13795	13905	14581	15251	15516	16047
22	Mayurbhanj	13238	14051	16348	20813	22899	24868	13238	13726	14984	16234	16949	17565
23	Nabarangpur	11402	11729	13925	16195	17844	20004	11402	11522	12358	12977	13400	14107
24	Nayagarh	11694	12664	14731	17508	18760	21399	11694	12423	13298	13791	14190	15183
25	Nuapada	13771	14595	17301	22361	23580	26352	13771	14502	15738	17560	17980	18581
26	Puri	13890	15114	15747	18810	20817	24047	13890	14680	14632	15501	16466	17387
27	Rayagada	16082	17201	20831	26044	28348	30771	16082	16818	18611	20023	21203	21551
28	Sambalpur	22435	24428	28690	35269	40701	41749	22435	23622	26021	28360	30596	29402
29	Subarnapur	12100	13267	15555	19428	20835	25266	12100	12817	14006	14307	15085	16616
30	Sundargarh	25029	25638	33480	42766	51203	45622	25029	24686	29788	32974	36128	30100
dis	Odisha	17650	18846	22237	27735	31416	33029	17650	18194	20194	21640	22963	22846

Odisha=100

S	District			At Current Prices	rt Prices					At 2004-0	At 2004-05 Prices		
No.		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
-	2	က	4	5	9	2	8	6	10	11	12	13	14
1	Angul	214	199	195	194	202	175	214	201	205	203	205	176
2	Balasore	92	74	74	75	74	75	92	74	75	22	22	78
3	Bargarh	74	73	72	73	73	22	74	74	74	92	92	74
4	Bhadrak	89	69	29	99	99	72	89	89	99	99	89	74
2	Balangir	87	87	86	88	84	91	87	88	87	88	98	06
9	Boudh	85	06	88	06	84	06	85	87	85	83	82	88
2	Cuttack	119	116	114	109	109	115	119	117	116	118	117	121
8	Deogarh	87	06	88	84	83	06	87	06	98	83	83	89
6	Dhenkanal	92	93	92	93	89	92	92	94	91	92	92	96
10	Gajapati	91	06	88	88	87	93	91	06	88	87	87	06
11	Ganjam	87	88	88	85	86	93	87	88	89	88	87	94
12	Jagatsinghpur	109	106	110	108	110	100	109	106	108	110	115	103
13	Jajpur	26	101	101	103	103	89	26	96	100	96	93	06
14	Jharsuguda	195	195	187	184	197	194	195	198	201	196	198	195
15	Kalahandi	75	27	72	92	75	80	75	92	73	73	74	77
16	Kandhamal	138	138	140	143	140	168	138	141	141	143	144	171
17	Kendrapara	89	69	64	63	62	99	89	20	99	99	65	69
18	Kendujhar	142	153	156	182	188	164	142	142	144	142	139	133
19	Khordha	134	137	139	128	129	132	134	139	141	138	142	142
20	Koraput	102	102	106	100	26	103	102	104	103	102	100	103
21	Malkangiri	78	73	74	73	99	20	78	92	72	20	89	20

SI.	District			At Current	nt Prices					At 2004-05 Prices	)5 Prices		
No.		2004-05	2002-06	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
-	2	က	4	2	9	2	ω	6	10	Ξ	12	13	14
22	Mayurbhanj	75	75	74	75	73	75	75	75	74	75	74	22
23	Nabarangpur	65	62	63	58	57	61	65	63	61	09	58	62
24	Nayagarh	99	29	99	63	09	65	99	89	99	64	62	99
25	Nuapada	28	22	28	81	75	80	78	80	78	81	78	81
56	Puri	62	80	71	89	99	73	42	81	72	72	72	92
27	Rayagada	91	91	94	94	06	93	91	92	92	93	92	94
28	Sambalpur	127	130	129	127	130	126	127	130	129	131	133	129
53	Subarnapur	69	0.2	02	02	99	92	69	20	69	99	99	73
30	Sundargarh	142	136	151	154	163	138	142	136	148	152	157	132
Odisha	ha	100	100	100	100	100	100	100	100	100	100	100	100

Annexure 2.16: Economic Classification of Workers in Odisha

In '000

Category of Workers and Population	1981 (	Census	1991 (	Census	2001 (	Census
	Number	%	Number	%	Number	%
1	2	3	4	5	6	7
Main Workers						
Cultivators	4053	40.4	4599	38.7	3435	24.1
Agricultural Labourers	2397	23.9	2977	25.1	2098	14.7
Livestock, forest, fisheries etc.	207	2.1	193	1.6	N.C.	N.C.
Mining and quarrying	72	0.7	101	8.0	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 Source: Census of India

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

In Number

District		M	ain Workers			Marginal	Total
	Cultivators	Agricultural Labourers	House hold Industry	Other workers	Total	Workers	Workers
1	2	3	4	5	6	7	8
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	142,730	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	77,450	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
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
Odisha	3,435,170	2,098,158	404,208	3,651,733	9,589,269	4,687,219	14,276,488

Source: Census of India

Annexure 2.18: Employment in the Organised Sector 2000 to 2011

In lakh

Year	Public	Sector	Private	Sector	Total	Women	% of women
	Total	Women	Total	Women	Organised sector employment	employees in Organised sector	employees to total employees
1	2	3	4	5	6	7	8
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
2010	6.08	1.06	1.23	0.12	7.31	1.18	16.2
2011	6.05	1.09	1.17	0.12	7.22	1.21	16.8

Source: Directorate of Employment, Government of Odisha

Annexure 2.19: Registration, Notification of Vacancies and Placement Through Employment Exchanges 2000-11

Year	Registration	Vacancies		Placeme	nt made		Vacancies	Placement
	made during the year	notified	Total	SC	ST	Female	notified as % to registration made	made as % of registration made
1	2	3	4	5	6	7	8	9
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	900	1,128	1,845	0.83	2.61
2010	276249	3688	4481	915	1109	1394	1.33	1.62
2011	305032	1664	3775	632	829	1267	0.54	1.23

Source: Directorate of Employment, Government of Odisha

Year	Total Applicants	Below Matric	Matriculate and under graduate	Graduate and post- graduate (general)	Graduate and post- graduate (technical)	Other diploma holders	Total educated job seekers through exchanges (col.4+5+6+7)
1	2	3	4	5	6	7	8
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
2010	942	123	549	215	5	50	819
2011	1064	116	637	237	7	67	948

Source: Directorate of Employment, Government of Odisha

Annexure 2.21: Live Register Position of Technical Graduates and Post-Graduates (in actual numbers)

Category				Job	seekers l	y the en	d of the y	ear			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1	2	3	4	5	6	7	8	9	10	11	12
1. Technical Gradu	ıates										
a) Engineering											
i. Civil	364	359	392	396	424	366	332	281	233	283	400
ii. Electrical	938	830	873	912	687	715	654	549	511	790	1156
iii. Mechanical	430	458	672	823	907	881	778	630	472	634	853
iv. Electronic	334	306	373	499	445	474	432	412	507	31	109
v. Chemical	36	43	42	54	57	51	41	22	14	15	18
vi. Metallurgical	25	19	19	18	15	12	13	7	4	4	12
vii. Agril. Engineering	93	73	58	71	80	72	49	72	64	89	87
viii. Computers	52	81	188	281	323	346	278	250	356	531	763
ix. Others	169	229	174	185	162	134	195	157	88	875	1220
Total (a)	2441	2398	2791	3239	3100	3051	2772	2380	2249	3252	4618
b) Medical	1829	2145	2233	1937	1523	1227	1443	1550	1490	1410	1153
c) Veterinary	43	47	53	11	19	77	37	77	100	104	114
d) Agriculture	529	440	393	413	422	515	514	510	409	372	525
Total (1)	4842	5030	5470	5600	5064	4870	4766	4517	4248	5138	6410

Category				Job	seekers l	by the end	d of the y	ear			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1	2	3	4	5	6	7	8	9	10	11	12
2. Technical Post-	graduates	8									
a) Engineering	12	16	28	30	28	112	19	16	33	42	53
b) Medical	10	20	20	15	133	150	60	51	47	49	13
c) Veterinary	4	3	3	3	3	3	2	2	4	237	10
d) Agriculture	247	303	327	372	323	308	280	250	227	283	314
Total (2)	273	342	378	420	487	573	361	319	311	611	390
Grand Total (1+2)	5115	5372	5848	6020	5551	5443	5127	4836	4559	5749	6800

Source: Directorate of Employment, Government of Odisha

Annexure 2.22: District-Wise Employment Generation under MGNREGA during 2010-11

Sl. No	District	Funds Available in crores of	Total Expenditure in		Employmen (in lakh n		
		Rupees	crores of Rupees	SC	ST	OC	Total
1	2	3	4	5	6	7	8
1	Angul	48.61	40.64	3.73	3.86	15.39	22.97
2	Bolangir	55.26	49.36	5.55	8.07	16.72	30.34
3	Balasore	43.97	35.84	3.70	2.60	13.41	19.70
4	Baragarh	35.65	33.40	3.31	4.99	8.79	17.08
5	Bhadrak	43.69	31.42	3.56	0.43	12.84	16.83
6	Boudh	22.65	20.19	2.99	1.57	7.62	12.18
7	Cuttack	64.92	51.32	7.42	1.86	21.48	30.75
8	Deogarh	14.89	13.33	1.31	2.98	3.49	7.78
9	Dhenkanal	63.27	48.58	7.16	4.70	21.67	33.54
10	Gajapati	56.55	48.68	2.41	21.54	8.79	32.73
11	Ganjam	87.11	78.25	15.40	4.09	42.60	62.10
12	Jagatsinghpur	40.49	37.96	5.54	0.16	18.73	24.42
13	Jajpur	74.30	61.11	11.39	2.79	25.95	40.13
14	Jharsuguda	37.31	22.26	3.06	7.04	4.53	14.63
15	Kalahandi	65.46	57.95	6.12	12.76	17.06	35.94
16	Kandhamal	74.11	63.43	9.40	26.74	9.47	45.61
17	Kendrapara	51.31	39.26	5.99	0.17	19.77	25.93
18	Kendujhar	111.19	113.05	8.47	30.10	28.18	66.76
19	Khordha	17.39	12.85	1.07	0.58	3.34	4.98
20	Koraput	80.10	70.95	6.08	28.28	11.45	45.80
21	Malkangiri	51.06	50.12	9.43	20.09	5.20	34.72
22	Mayurbhanj	126.45	116.74	10.44	39.80	24.46	74.70
23	Nabarangpur	109.99	90.71	8.06	36.84	14.60	59.49
24	Nuapada	32.69	22.46	1.50	4.74	4.43	10.67

Sl. No	District	Funds Available in crores of	Total Expenditure in		_ ·	nt Generated nandays)	l
		Rupees	crores of Rupees	SC	ST	ОС	Total
1	2	3	4	5	6	7	8
25	Nayagarh	56.35	51.88	4.40	2.23	23.37	30.00
26	Puri	32.95	28.82	3.93	0.09	16.44	20.46
27	Rayagada	76.19	74.81	7.77	29.16	11.47	48.40
28	Sambalpur	63.38	51.94	7.82	13.49	16.19	37.50
29	Sonepur	46.56	37.84	5.19	2.38	17.07	24.65
30	Sundargarh	78.55	75.22	4.65	32.81	7.34	44.80
State	Total	1762.39	1530.35	176.84	346.91	451.83	975.59

Source: Panchayati Raj Department, Government of Odisha

Annexure 2.22 (A): District-Wise Employment Generation under MGNREGA during 2011-12

Sl. No	District	Funds Available	Total	Eı	mployment	t Generate	d	
		in crores of rupees	Expenditure in crores of		(in lakh m	andays)		
		rapecs	rupees	SC	ST	OC	Total	Women
1	2	3	4	5	6	7	8	9
1	Angul	39.55	25.94	1.38	1.62	4.93	7.92	2.63
2	Balasore	40.45	26.34	1.93	1.16	6.81	9.89	3.28
3	Bargarh	41.34	27.25	1.75	2.83	4.94	9.53	3.08
4	Bhadrak	33.87	19.09	1.47	0.15	5.50	7.12	1.85
5	Bolangir	53.57	45.67	3.74	6.21	11.10	21.45	8.20
6	Boudh	38.61	21.57	2.74	1.45	6.66	10.85	4.64
7	Cuttack	43.52	29.79	2.54	0.75	6.77	10.07	3.10
8	Deogarh	24.57	10.50	0.79	1.87	1.82	4.48	1.82
9	Dhenkanal	37.16	27.16	2.69	2.30	7.41	12.39	2.67
10	Gajapati	41.20	29.86	1.02	10.39	2.30	14.61	6.53
11	Ganjam	60.94	55.12	7.22	1.75	21.69	30.66	15.62
12	Jagatsinghpur	32.92	20.47	1.38	0.03	4.46	5.87	1.85
13	Jajpur	28.32	15.33	1.79	0.59	2.81	5.19	1.19
14	Jharsuguda	26.16	18.47	1.77	3.94	2.20	7.91	2.36
15	Kalahandi	57.64	48.52	3.70	8.36	10.22	22.28	9.63
16	Kandhamal	79.53	76.42	7.32	22.16	8.13	37.61	17.85
17	Kendrapara	38.79	22.54	1.80	0.06	5.75	7.61	1.81
18	Keonjhar	70.07	62.39	3.84	12.87	11.63	28.33	11.22
19	Khordha	19.87	10.69	0.57	0.38	2.29	3.24	0.65
20	Koraput	58.50	48.05	2.87	13.53	5.24	21.64	8.81
21	Malkangiri	31.86	22.86	3.24	7.58	1.76	12.59	5.17
22	Mayurbhanj	81.92	73.77	4.69	17.41	9.84	31.84	13.83
23	Nabarangpur	63.76	52.07	2.81	13.43	5.08	21.32	8.76



Sl. No	District	Funds Available	Total	Eı	nploymen	t Generate	d	
		in crores of rupees	Expenditure in crores of		(in lakh n	nandays)		
		Tupees	rupees	SC	ST	OC	Total	Women
1	2	3	4	5	6	7	8	9
24	Nayagarh	60.15	50.75	3.42	2.01	20.82	26.25	7.35
25	Nuapada	40.09	24.11	1.64	4.97	4.51	11.12	5.22
26	Puri	31.29	17.31	1.00	0.05	5.03	6.08	2.20
27	Rayagada	49.88	40.38	3.11	9.91	4.37	17.39	8.05
28	Sambalpur	40.59	28.77	2.33	5.05	4.77	12.41	4.23
29	Sonepur	33.31	23.77	2.11	0.87	6.30	9.28	3.06
30	Sundargarh	71.74	57.61	2.75	19.48	4.72	26.95	8.75
State	Total	1371.18	1032.56	79.42	173.17	201.15	453.74	175.41

Source: Panchayati Raj Department, Government of Odisha

Annexure 2.23: Trend of Assistance under the SGSY Programme

Year		Financial		Phy	sical
	Expenditure (Rs. in lakh)	Per capita investment (Rs.)	Subsidy Credit ratio	Target (No.)	Achievement (No.)
1	2	3	4	5	6
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
2010-11	17282.97	30246	1:2.40	143200	138595
2011-12	17134.89	31709	1:2.47	120957	129363

Source: Panchayati Raj Department, Government of Odisha

Annexure 2.24: District wise Physical & Financial Achievement under SGSY during, 2011-12

District	Target (Families)	Cove	rage of Famil (In nur		garies	(	Investment (Rs. in Crores	)
		Total	SC	ST	Women	Subsidy	Credit	Total
1	2	3	4	5	6	7	8	9
Angul	3212	3573	770	540	3563	3.05	6.04	9.09
Bolangir	5327	4874	1126	1033	4304	4.27	12.54	16.81
Balasore	7009	12292	4302	3073	12230	10.71	32.12	42.83
Baragarh	4795	2549	597	500	2498	2.25	6.01	8.26
Bhadrak	3138	3141	839	35	3084	3.08	7.07	10.15
Boudh	1956	2198	575	255	2198	1.82	4.60	6.42
Cuttack	4624	4684	2149	301	4684	4.15	6.52	10.67
Deogarh	1172	1392	318	486	1259	1.34	3.81	5.15
Dhenkanal	3755	4056	951	548	4042	3.36	7.95	11.31
Gajhapati	1854	1870	652	737	1839	1.53	2.73	4.26
Ganjam	7985	8177	2080	754	8177	7.77	15.54	23.31
Jagatsinghpur	2461	2593	922	0	2585	2.53	6.69	9.22
Jajpur	4614	6137	2243	729	6137	5.34	17.05	22.39
Jharsuguda	822	933	292	454	933	0.84	2.19	3.03
Kalahandi	5282	5914	1261	1797	5914	4.70	17.76	22.46
Kandhamal	3101	3444	888	2052	2927	3.02	6.18	9.20
Kendrapara	3370	3767	842	25	3480	3.24	8.67	11.91
Keonjhar	5856	5658	939	3552	4990	5.38	11.43	16.81
Khurda	3595	3903	1127	565	3640	3.86	8.10	11.96
Koraput	6096	6101	1270	3057	5639	6.27	11.65	17.92
Malkangiri	2425	3871	1529	2094	3871	3.86	5.79	9.65
Mayurbhanj	10211	13469	879	7692	13161	13.02	29.00	42.02
Nawarangpur	4317	4283	822	2622	3897	3.50	9.43	12.93
Nuapada	2848	2128	255	809	2128	2.04	6.12	8.16
Nayagarh	3181	3399	511	173	3166	3.12	8.87	11.99
Puri	4587	5364	1920	0	5364	5.37	11.81	17.18
Rayagada	3694	199	60	118	182	0.17	0.38	0.55
Sambalpur	2491	2581	692	994	1888	2.32	8.21	10.53
Sonepur	2119	1748	1396	174	1748	1.49	4.75	6.24
Sundargarh	5060	5085	662	496	4880	4.96	12.81	17.77
Total	120957	129363	32869	38665	124408	118.38	291.82	410.20

Annexure 2.25: Progress of SJSRY in Odisha, during 2011-12

Sl. No.	Name of the Component	Target	Achievement (No. of beneficiary)	Expenditure (Rs. in lakh)
1	2	3	4	5
1	Urban self Employment Programme	1950	2851	874.43
2	STEP-UP	7772	7364	556.00
3	Urban Women Self-Help Programme (UWSP)	1300	3088	303.97
4	Thrift & Credit Societies/Revolving fund	2600	6178	106.86
5	Urban Community Development Network (UCDN)	-	-	134.69
6	Urban Wage Employment Programme (UWEP) (lakh mandays)		1.80	532.51

Source: Panchayati Raj Department, Government of Odisha

Annexure 2.26: Average MPCE in Odisha vis-à-vis some other Major States as per 60th to 64th, 66th Rounds of NSS

Average Monthly Per Capita Consumer Expenditure (Rs.)	Capita Consu	mer Expendi	iture (Rs.)									
State	60 <sup>th</sup> Round (Jan.'04-June'04)	ound June'04)	61st Round (July'04-June'05)	ound June'05)	62 <sup>nd</sup> Round (July'04-June'06)	ound (une'06)	63 <sup>rd</sup> Round (July'06-June'07)	ound une'07)	64 <sup>th</sup> Round (July'07-June'08)	ound (une'08)	66 <sup>th</sup> Round (July'09-June'10)	und une'10)
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	2	9	2	8	6	10	111	12	13
Punjab	946.86	1058.82	846.75	1326.09	1009.79	1520.08	1198.13	1609.16	1272.53	1632.92	1565.53	2072.11
Haryana	878.68	1050.27	962.89	1142.35	742.65	1156.02	1012.73	1336.09	1034.45	1627.57	1423.27	2008.16
Maharashtra	568.85	1258.92	567.76	1148.27	82.969	1341.84	776.09	1673.48	867.91	1700.08	1048.41	2251.44
Tamil Nadu	603.40	1130.53	602.17	1079.65	687.91	1170.64	728.78	1227.19	834.12	1409.82	1017.07	1794.52
Karnataka	501.60	937.06	508.46	1033.21	573.18	1154.49	624.27	1160.16	818.97	1667.73	887.86	2060.32
Andhra Pradesh	557.11	1101.71	585.55	1018.55	704.17	1303.95	727.14	1360.68	816.17	1549.55	1090.28	2015.44
Kerala	990.22	1371.51	1013.15	1290.89	1055.61	1565.59	1250.35	1681.48	1382.92	1947.96	1763.14	2267.16
Uttar Pradesh	538.18	826.96	532.63	857.05	569.64	907.87	653.18	996.38	680.46	1120.84	832.18	1512.16
West Bengal	580.18	1133.40	562.11	1123.61	582.62	1232.82	629.86	1371.26	701.59	1452.04	857.77	1801.03
Odisha	414.08	872.09	398.89	757.31	460.32	900.20	458.56	1072.13	558.95	1438.35	715.54	1468.84
Rajasthan	580.47	994.81	590.83	964.02	200.68	1004.46	767.39	1184.70	801.23	1265.10	1035.15	1576.60
Madhya Pradesh	437.34	793.36	439.06	903.68	487.12	982.41	514.93	1001.70	633.76	1189.95	802.79	1529.82
Gujarat	613.21	1092	596.09	1115.20	683.57	1105.35	796.58	1421.96	874.70	1471.32	1065.40	1914.17
Bihar	422.49	784.02	417.11	696.27	465.48	683.60	541.33	864.96	597.64	1080.19	689.37	1096.56
Assam	531.69	1019.47	543.18	1057.99	625.99	1351.69	721.37	1368.88	798.79	1451.92	866.57	1604.06
All-India	564.70	1060.16	558.78	1052.36	624.53	1170.60	695.16	1312.50	772.36	1471.54	953.05	1856.01

Source: NSSO, Government of India

Annexure 2.27: Average MPCE of Major States in 66th Round NSS (July '09 to June '10)

In Rs.

Sl. No.	Name of the State		Average Mo	nthly Per capit	ta Consumer E	xpenditure	
			Rural			Urban	
		Food	Non Food	Total	Food	Non Food	Total
1	2	3	4	5	6	7	8
1	Punjab	707.51	858.02	1565.53	793.97	1278.14	2072.11
2	Haryana	712.21	711.06	1423.27	785.71	1222.45	2008.16
3	Maharashtra	515.16	533.25	1048.41	826.75	1424.69	2251.44
4	Tamil Nadu	50012	516.95	1017.07	716.53	1077.98	1794.52
5	Karnataka	463.45	424.41	887.86	746.12	1314.20	2060.32
6	Andhra Pradesh	571.82	518.47	1090.28	787.24	1228.20	2015.44
7	Kerala	700.09	1063.06	1763.14	826.59	1440.57	2267.16
8	Uttar Pradesh	447.20	384.97	832.18	608.48	903.68	1512.16
9	West Bengal	494.01	363.76	857.77	737.87	1063.17	1801.03
10	Odisha	404.22	311.37	715.59	607.96	860.88	1468.84
11	Rajasthan	547.69	487.46	1035.15	677.42	899.18	1576.60
12	Madhya Pradesh	411.30	391.49	802.79	562.39	967.43	1529.82
13	Gujarat	557.55	507.85	1065.40	778.64	1135.53	1914.17
14	Bihar	411.06	278.31	689.37	529.35	567.21	1096.56
15	Assam	526.09	340.48	866.57	776.82	827.24	1604.06
All-India	ı	497.09	455.96	953.05	727.49	1128.52	1856.01

Source: NSSO, Government of India

(Contd...)

Annexure 2.28: 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 Odisha and All-India Level

In Rs.

Per capita expenditure for Odisha as percentage to all-India average		Urban	15	72.34		84.48		78.91		85.84		81.38	
		Rural	14	76.76		79.30		61.75	61.75		71.80		
		Total	13	854.92	100	914.57	100	932.79	100	1012	100	1021.90	100
	Urban	Non Food	12	444.08	51.94	514	56.20	530.48	56.87	582.18	57.53	592.88	58.02
NDIA		Food	111	410.84	48.06	400.57	43.80	402.31	43.13	429.79	42.47	429.01	41.98
ALL-INDIA		Total	10	486.16	100	494.90	100	498.27	100	531.49	100	554.15	100
	Rural	Non Food	6	197.36	40.60	216.33	43.71	221.92	44.54	239.2	45.01	255.59	46.12
		Food	8	288.80	59.40	278.6	56.29	276.40	55.46	292.3	54.99	298.60	53.88
		Total	7	618.49	100	772.67	100	736.11	100	868.68	100	831.64	100
	Urban	Non Food	9	266.25	43.05	400	51.77	376.64	51.17	483.21	55.63	439.4	52.84
Odisha		Food	2	352.24	56.95	372.67	48.23	359.47	48.83	385.47	44.37	392.24	47.16
	Rural	Total	4	373.17	100	392.48	100	307.69	100	390.48	100	397.89	100
		Non Food	က	133.92	35.89	145.82	37.15	113.71	36.96	161.21	41.29	166.26	41.96
		Food	2	239.25	64.11	246.66	62.85	193.95	63.04	229.27	58.71	230.93	58.04
NSS Round &	Period		1	55 <sup>th</sup> Round (July'99- June'00)	%	56 <sup>th</sup> Round (July'00- June'01)	%	57 <sup>th</sup> Round (July'01- June'02)	%	58 <sup>th</sup> Round (July'02- Dec.'02)	%	59 <sup>th</sup> Round (Jan.'03- Dec.'03)	%

NSS Round			Odisha	sha					ALL-INDIA	NDIA			Per capita	pita
& Period		Rural			Urban			Rural			Urban		expenditure for Odisha as percentage to all-India average	liture sha as age to average
	Food	Non Food	Total	Food	Non Food	Total	Food	Non Food	Total	Food	Non Food	Total	Rural	Urban
1	2	က	4	22	9	2	8	6	10	11	12	13	14	15
60 <sup>th</sup> Round (Jan.'04- June'04)	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		
61st Round (July'04- June'05)	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 <sup>nd</sup> 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 <sup>rd</sup> 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	69.29	100		
64 <sup>th</sup> Round (July'07- June'08)	325.42	233.53	558.95	602.99	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		
66 <sup>th</sup> Round (July'09- June'10)	404.22	311.37	715.59	96.709	860.88	1468.84	497.07	455.98	953.05	727.49	1128.52	1856.01	75.08	79.14
%	56.49	43.51	100	41.39	58.61	100	52.16	47.84	100	39.20	08.09	100		
00014		:												

Source: NSSO, Government of India

Annexure 2.29: State wide Engel's ratio for Major states in 55<sup>th</sup>, 60<sup>th</sup>, 62<sup>nd</sup> to 64<sup>th</sup> and 66<sup>th</sup> round of NSS

State	55 <sup>th</sup> R	55th Round	60 <sup>th</sup> Round	pund	62nd Round	puno	63rd Round	puno	64 <sup>th</sup> Round	puno	66 <sup>th</sup> Round	punc
	(July, 99	(July, 99 - June, 00)	(Jan, 04 - June, 04)	June, 04)	(July, 05 - June, 06	June, 06	(July, 06 - June, 07)	June, 07)	(July, 07 - June, 08)	June, 08)	(July, 09 - June, 10)	June, 10)
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	9	2	8	6	10	11	12	13
Punjab	52.27	47.12	45.6	39.44	43.8	35.53	42.67	37.06	43.63	36.8	45.19	38.32
Haryana	55.51	45.87	49.98	41.71	50.91	39.78	47.4	39.37	50.04	39.31	50.04	39.12
Maharashtra	54.71	45.31	50.97	39.26	47.86	37.31	47.88	35.13	47.88	36.91	49.43	36.72
Tamil Nadu	58.73	45.61	52.42	38.67	50.35	39.95	50.5	39.64	50.31	38.89	49.17	39.92
Karnataka	59.08	46.32	54.39	43.47	51.29	38.95	52.37	39.68	50.5	36.68	52.19	36.21
Andhra Pradesh	60.5	47.44	55.89	37.81	55.31	36.4	52.34	37.31	52.02	36.85	52.44	39.06
Kerala	53.7	49.04	46.54	40.76	43.95	37.38	40.43	34.43	40.79	36.1	39.70	36.46
Uttar Pradesh	57.42	50.49	52.07	44.05	54.03	43.94	52.19	43.88	53.02	43.18	53.73	40.24
West Bengal	98.29	52.28	59.75	45.51	59.29	39.76	58.91	40.21	57.87	42.57	57.59	40.97
Odisha	64.11	56.95	58.44	47.65	56.58	44.72	57.86	42.15	58.22	42.27	56.48	41.39
Rajasthan	59.5	50.85	54.42	43.34	52.71	43.2	52.83	42.88	53.94	42.37	52.90	42.96
Madhya Pradesh	58.09	47.6	43.6	42.36	51.34	38.23	51.24	40.84	50.99	39.8	51.23	36.76
Gujarat	59.85	49.58	54.48	43.65	55.72	42.93	54.27	39.63	53.95	42.62	52.33	40.68
Bihar	66.47	57.24	58.89	47.89	61	50.99	59.68	50.36	29.66	46.88	59.65	48.27
Assam	67.63	55.38	62.4	46.8	60.13	43.99	56.76	46.23	59.92	46.66	60.71	48.43
All-India	59.4	48.06	53.94	41.64	53.34	39.96	52.28	39.41	52.35	39.58	52.16	39.19

Source: NSSO, Government of India

Annexure 2.30: Monthly Per capita Rice and Wheat Consumption in Odisha and India

In Kg.

NSS		Odis	sha			In	dia	
Round	Ru	ral	Urb	an	R	ural	Urb	an
	Rice	Wheat	Rice	Wheat	Rice	Wheat	Rice	Wheat
1	2	3	4	5	6	7	8	9
50 <sup>th</sup> (July'93-June'94)	15.2	0.4	11.3	2	7	4.4	5.3	4.7
55 <sup>th</sup> (July'99-June'00)	14.16	0.59	12.18	2.25	6.78	4.55	5.22	4.77
60 <sup>th</sup> (Jan.'03-June'04)	13.78	0.61	11.59	1.93	8.8	4.25	4.88	4.67
61st (July'04-June'05)	13.29	0.53	11.05	2.03	6.55	4.29	4.85	4.65
62 <sup>nd</sup> (July'05-June'06)	13.03	0.58	10.06	2.26	6.54	4.35	4.79	4.53
63 <sup>rd</sup> (July'06-June'07)	12.57	0.48	9.6	2.17	6.56	3.97	4.8	4.43
64 <sup>th</sup> (July'07-June'08)	13.13	0.49	10.33	2.17	6.36	4.2	4.75	4.51

Source: NSSO, Government of India.

Annexure 2.31: Average MPCE on Groups of Items of Consumption in Odisha and all India

In Rs.

Sl.	Item		64 <sup>th</sup> R	ound		63 <sup>rd</sup> Round				
No.		Odi	sha	Inc	lia	Odi	sha	Ind	ia	
		Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	
1	2	3	4	5	6	7	8	9	10	
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-f	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	

Sl. Item 64 <sup>th</sup> Round 63 <sup>rd</sup> Rou					ound				
No.		Odi	sha	Inc	lia	Odi	sha	Ind	lia
		Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10
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,	27.44	80.12	43.51	96.76	22.45	73.84	38.89	84.84
Enter	tainment & others								
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	558.95	1438.35	772.36	1471.54	458.56	1072.13	695.16	1312.5
Expe	nditure								

Source: NSSO, Government of India

Annexure 2.32: Consumer Price Index for Agricultural Labourers of Selected States (Base 1986-87=100)

State	May, 2012	May, 2011	Point to Point change in Percentage
1	2	3	4
Andhra Pradesh	682	625	9.12
Assam	648	595	8.91
Bihar	564	538	4.83
Gujurat	646	587	10.05
Haryana	711	650	9.38
Jammu & Kashmir	627	585	7.18
Karnataka	691	623	10.91
Kerala	609	580	5.00
Madhya Pradesh	630	581	8.43
Maharashtra	709	648	9.41
Odisha	577	541	6.65
Punjab	710	636	11.64
Rajasthan	688	628	9.55
Tamil Nadu	627	583	7.55
Uttar Pradesh	609	575	5.91
West Bengal	600	570	5.26
All-India	638	592	7.77

(Contd...)

Annexure 2.33: Consumer Price Index for Agriculture Labourers of Odisha and India

(Base 1986-87=100)

Year	Odi	sha	All I	ndia
	Food	General	Food	General
1	2	3	4	5
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	316	334	351	358
2006-07	351	365	384	388
2007-08	391	399	416	417
2008-09	431	438	463	461
2009-10	490	495	540	529
2010-11	528	538	581	577

Source: Labour Bureau, Shimla

Annexure 2.34: CPI for Industrial Workers as All India Level and Selected Centres in Odisha

Average over the months

Base Year 1982=100

Year	India	Odi	sha
		Barbil (1995-2005), Angul Talcher (2006-2010)	Rourkela
1	2	3	4
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	495	434	432
2004	514	452	453
2005	536	479	473
2006	123	120	124
2007	131	128	137
2008	141	143	149
2009	157	160	166
2010	176	181	186
2011 (up to June'11)	187	200	204

NB: Base year has been changed to 2001=100 from 2006

Source: Labour Bureau, Shimla

Annexure 2.35: CPI for Different Categories of items for Industrial Workers in Odisha

Base Year 2001=100 from 2006

Sl.	Group of Items		All Ind	lia			Odis	sha		
No.		April, 10	April, 11	% of variation	A	ngul-Tal	cher		Rourke	la
					April, 10	April, 11	%of variation	April, 10	April, 11	%of variation
1	2	3	4	5	6	7	8	9	10	11
1	Food	182	197	8.24	176	203	15.34	188	209	11.17
2	Pan, Supari, Tobacoo, intoxicants	160	184	11.9	138	160	15.24	134	142	5.97
3	Fuel & Light	152	171	12.5	156	172	10.26	132	149	12.88
4	Housing	189	212	12.17	236	266	12.71	248	318	28.23
5	Clothing, Bedding and food wears	131	146	11.45	164	169	3.05	141	159	12.77
6	Miscellaneous	153	162	5.88	140	152	8.57	144	151	4.86
7	General	170	186	9.41	173	194	12.14	177	199	12.43

Source: Labour Bureau, Shimla

Annexure 2.36: Average Retail Prices of Some Essential Commodities in Odisha

Rs./Kg. or Ltrs.

Commodities	2004	2005	2006	2007	2008	2009	2010	2011
1	2	3	4	5	6	7	8	9
Rice (Common)	8.47	8.93	9.11	10.73	11.34	14.58	15.18	17.02
wheat	9.31	9.72	11.51	13.85	12.67	14.31	14.60	15.13
Mung Dal	24.08	29.14	39.35	38.78	36.17	67.97	76.10	68.67
Arthar Dal	28.42	27.46	27.95	36.05	36.72	68.43	72.72	67.36
Mustard Oil	55.53	50.60	50.70	60.15	62.5	64.24	72.35	77.97
Palm Oil	50.79	45.13	48.54	54.08	58.1	48.80	49.02	59.72
Vanaspati	51.10	43.27	48.48	53.95	56.18	45.30	58.79	67.35
Sugar(free sale)	17.23	20.03	21.01	16.33	16.39	32.46	35.22	33.35
Gur (local)	17.17	18.62	18.00	14.87	15.09	33.66	37.37	35.75
Salt	2.43	2.62	2.38	2.92	2.79	4.22	9.52	10.05
Potato	6.82	7.12	8.19	8.95	9.07	13.41	8.58	8.82
Onion (Ulli)	8.44	9.75	7.51	13.29	11.93	15.37	18.40	16.36
Atta	10.50	10.83	13.05	14.07	14.16	16.34	18.95	19.57
Maida	11.50	12.16	14.39	15.67	15.8	17.86	20.71	21.23
Suji	11.99	11.87	14.95	16.48	16.52	19.20	21.07	21.83

Source: DE&S, Odisha

Annexure 2.37: Weighted Average wholesale prices of essential commodities in Odisha

Rs. Per quintal

Commodities	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
1	2	3	4	5	6	7	8	9
Paddy (Common)	453.92	490	515	547	820	891	930	994
Wheat	774.08	805	954	1046	1087	1260	1351	1344
Ragi	505.02	548	567	1029	103	891	1143	1134
Maize	406.99	453	479	960	779	950	941	961
Mung	2035.98	1968	2498	2927	2857	3140	3861	4262
Biri	1443.71	1558	2542	3123	2626	3087	3694	3925
Gram	1807.1	1694	1945	2561	2868	2974	3062	3006
Kulthy	971.75	966	1090	1265	1498	1610	1938	1981
Til	2035.54	2126	2139	2229	2878	3575	3386	3340
Mustard seeds	2181.74	2297	2688	2426	3028	3109	3153	3354
Groundnut	1721.39	1715	1751	1946	1904	2357	2519	2516
Potato	499.12	595	670	859	585	748	652	731
Jute	971.01	1019	1410	N.A.	N.R.	1400	1525	2372
Gur	1310.76	1507	1600	1672	1866	2178	2668	3140
Dry Chillies	4874.29	4306	4595	5640	5832	6062	5789	5957

Source: DE&S, Odisha

# The Agriculture Sector

The Agriculture Sector includes agriculture, horticulture, animal husbandry, fisheries, forestry and other related activities. Though Odisha's economy has been diversifying at a relatively faster pace than in the past and the share of this sector in the State's Gross Domestic Product (GSDP) has been declining over the years, this sector continues to be vital for the economy. About sixty percent population of the State draws its sustenance fully or partly from the agriculture sector. The share of this sector in the GSDP, which was more than 70 percent in the early 1950s, has come down to 17.49 percent, as per the advance estimates for the year 2012-13. The dependence of a large population on this sector, the share of which has been declining, is a matter of concern. Increasing agriculture production and productivity is necessary for ensuring food security, livelihood security and nutritional security. There is need to improve agricultural production and productivity with better technology, higher public and private investments and effective implementation of ongoing programmes in agriculture and allied sectors. Though as per advance estimates, this sector has registered a real annual growth rate of 16.11 percent for the year 2012-13, the shares and growth of the sector show wide variations from year to year.

### State's Agriculture

The climate of the State is tropical, characterised by high temperature, high humidity, medium to high rainfall and mild winters. The normal annual rainfall is 1,451.2 mm of which the southwest monsoon contributes about 80 percent. From the physiographic point of view, the State has been divided into four zones viz. (i) the Northern Plateau, (ii) the Eastern Ghat Zone,

(iii) the Central Table Land, and (iv) the Coastal Zone. On the basis of climate, soil, rainfall and topography, the State has been delineated into agro climatic zones. The State's agriculture sector frequently suffers from frequent natural shocks like cyclones, droughts and flash floods.

### 3.1 Agriculture

The land available for agricultural purposes has been declining all over the world. This trend has been witnessed for Odisha as well. The agriculture and animal husbandry sub-sector forms 83.36 percent of the GSDP share of the Agriculture Sector for the year 2012-13. Relevant statistics about the agriculture and animal husbandry sub-sector are given in Annexure 3.1 through 3.23. The State Government has constituted the State Farmer's Commission to review the current status of agriculture, its performance, strengths and weaknesses to assess conditions of different categories of farmers in various agroclimatic 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-utilisation patterns in Odisha. 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 Odisha as well. Figure 3.1 suggests that there

5845 5604 5691 6000 5407 5292 5000 3500 4000 3507 (IN '000 Ha) 3467 3392 3306 3237 2979 2953 2841 3000 2173 2000 1000 0 2001-02 2002-03 2004-05 2007-08 2008-09 2011-12 2003-04 2005-06 2006-07 2009-10 2010-11 NSA ASMO

Figure 3.1: Trends of Net Sown Area and Area Sown More than Once in Odisha

has been a decline in the net sown area in the State. The total net sown area (NSA) in Odisha that was 5,691 thousand hectare (ha) in 2005-06 declined to 5,292 thousand ha in 2011-12. In contrast, the area sown more than once (ASMO) has increased continuously till 2009-10. During 2011-12, the ASMO increased to 3,507 thousand ha from 3,158 thousand hectares in 2010-11.

In Odisha, the area under food grains has declined by 10.8 percent, from 5,319 thousand ha in 2010-11 to 4,744 thousand ha in 2011-12. The area under paddy constitutes more than 70 percent of the total cultivated area and has declined to 4,005 thousand ha in 2011-12 from 4,226 thousand ha in 2010-11. During 2011-12, the area under oilseeds has declined

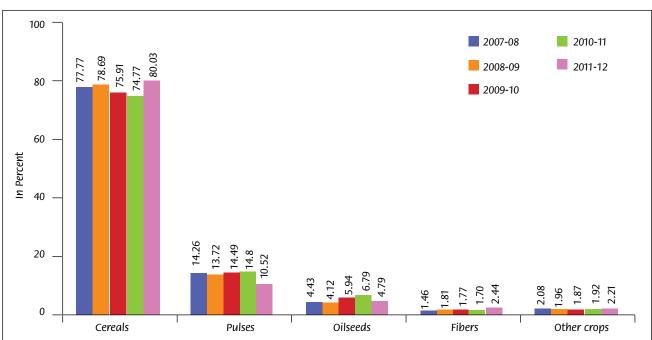


Figure 3.2: Area under Different Categories of Crops in Odisha, 2007-2012

by 38 percent over 2010-11. Figure 3.2 shows major cropping patterns in Odisha from 2007-08 to 2011-12. Annexure 3.2 classifies area by principal crop types.

### 3.1.2 Production of Major Crops

Among other factors, the production of food grains depends upon rainfall and its temporal and spatial distribution. Food grain production in Odisha has shown a secular increasing trend since 2002-03 with some year to year variations. In 2011-12, the production of food grains was 6,316 thousand metric tonnes (TMT) as indicated in Annexure 3.3, which declined by 17.1 percent over 2010-11. Rice production in the State has decreased from 6,828 TMT in 2010-11 to 5,807 TMT during 2011-12. The season-wise production of paddy in all districts is presented in Annexure 3.4.

The production of oilseeds has declined from 222 TMT in 2010-11 to 166 TMT in 2011-12. The production of groundnuts, castor and sesamum has declined in recent years. The area under cultivation of fibres increased from 101 thousand ha in 2010-11 to 128 thousand ha in 2011-12, while the production of fibres, decreased from 369

TMT in 2010-11 to 351 TMT in 2011-12. Cotton and jute are the main fiber crops in Odisha. The production of cotton and jute declined in 2011-12 to 231 and six TMT respectively compared to 241 and seven TMT in 2010-11. Cotton is a major commercial crop in KBK districts in the kharif season. Other crops include potato, chilly, ginger 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 food grains in the major states of India for the year 2010-11 are presented in Figure 3.3. Though the yield rate of food grains in Odisha has increased a little, it is below the average yield rates in the major states and at an all India level. There is, therefore, a need for greater efforts and appropriate policy interventions to increase the productivity of major crops.

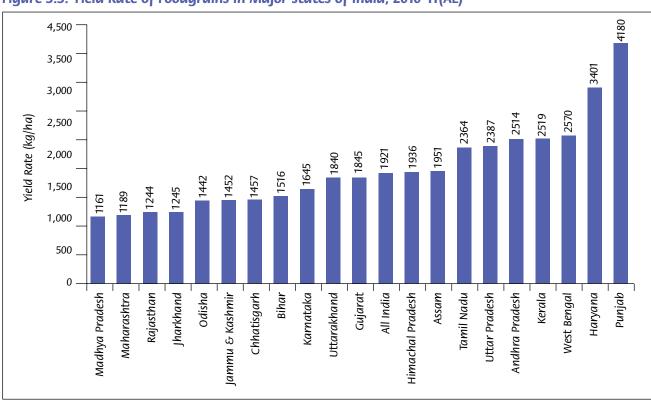


Figure 3.3: Yield Rate of Foodgrains in Major states of India, 2010-11(AE)

The average yield rate of major crops in Odisha is given in Annexure 3.5. The average yield rate of rice has declined from 16.16 quintals per hectare in 2010-11 to 14.50 quintals per ha in 2011-12. While the yield rate for groundnuts has marginally increased to 11.89 quintals per ha in 2011-12, the yield rate of jute, cotton and sugarcane has also declined in recent years.

#### 3.1.4 Cropping Intensity

There are mainly three ways of meeting the increasing demand for food and other farm products. One way is to expand the net area under cultivation, the second is to intensify cropping over the existing area and the third is to raise the productivity of production per hectare. 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 and productivity seem more viable strategies 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. A higher cropping intensity means more than one crop from the same area in an agricultural year. In the country, cropping intensity is the highest in Punjab, followed by West Bengal, Haryana and Himachal Pradesh, as may be seen from Annexure.3.6. Cropping intensity in Odisha has also increased from 135 percent in 2000-01 to 166 percent in 2011-12, as may be seen from Annexure 3.7.

#### Area under HYV Paddy

There has been an increase in the area brought under cultivation of high yielding varieties (HYV) paddy in Odisha. About 84 percent of the total area under paddy is under cultivation of HYV paddy in 2011-12, as compared to 80 percent in 2010-11. The area under cultivation of HYV paddy in different seasons and districts is given in Annexure 3.8 and Annexure 3.9. Out of the total area under HYV paddy, about 62 percent were un-irrigated area.

#### 3.1.5 Horticultural Crops

The agro-climatic conditions of Odisha 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, cashewnut, sapota, jackfruit, orange and litchi are the most favourable in Odisha. The area under fruit cultivation was 382.93 thousand ha and production of different fruit including mango and coconut was 2,154.36 TMT and 3,750 lakh nuts of coconut in 2011-12. The production and productivity of important fruits in Odisha is given in Annexure 3.10.

Odisha ranked fourth in terms of production of vegetables. The total production of vegetables was 9,521 TMT in 2011-12 as compared to 9,443 TMT in 2010-11. The per capita consumption of vegetables in Odisha has been increasing. Odisha contributed to about four percent of spice production in India. There was a significant increase in the production of spices to 478.27 TMT in 2011-12 compared to 456.80 TMT in 2010-11, as indicated in Annexure 3.11. The production of ginger and turmeric increased significantly. Odisha contributed about three percent of the total flower production of the country. Rose, gladioli, marigold and tuberose are the main flowers grown in Odisha. Annexure 3.12 provides data on area and production of different flowers in Odisha. The trend shows that the area and production of these crops has been increasing. The State Government has taken a number of initiatives to implement various programmes viz. special crop specific interventions on floriculture, coconut and banana under the horticulture sector during 2012-13.

#### 3.1.6 Agricultural Inputs

Improvement in farm yields depends upon a set of factors like technology, utilisation of quality seeds, fertilisers, 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 Odisha is very low. It implies traditional cultivation practices in which farmers rely on farm-saved seeds. During 2011-12, about 15,512 ha was covered under

the seed production programme and 5.72 lakh quintals of various kinds of seeds including 5.40 lakh quintals of paddy were procured in the State and about 6.23 lakh quintals of seeds of different crops were made available to the farmers. Soil testing is an important technical support service needed by farmers. During 2011-12, about 1.24 lakh soil samples have been tested in 15 departmental soil testing laboratories (STL) and six mobile STL.

#### **Irrigation**

Irrigation is a crucially important input for enhancing agricultural productivity and is required at different critical stages of plant growth of various crops for their optimum production. The State has cultivable land of 64.09 lakh ha. It has been assessed that 49.90 lakh ha can be brought under irrigation through major, medium and minor (lift and flow) irrigation projects. By the end of 2011-12, about 45.93 lakh ha net irrigation potential has been created and about 67 percent has been utilised. The net irrigation potential created has increased by 9.87 lakh ha from 36.06 lakh ha in 2000-01 to 45.93 lakh ha in 2011-12. Out of 45.93 lakh ha net irrigation potential created by the end of 2011-12, 19.86 lakh ha (43.3%) has been created through major and medium (flow), 6.51 lakh ha (14.2%) through minor (flow), and 8.36 lakh ha (18.2%) through minor (lift) irrigation projects. Annexure 3.14 shows the status of irrigation potential created and utilised since 2000-01. Figure 3.4 depicts the state-wise percent share of irrigated area under principal crops. During 2008-09, the percentage share of irrigation provided to principal crops in Odisha was 35, while it was 45.3 at an all India level. Punjab has the highest percent of 97.6. Annexure 3.15 presents the details.

To rationalise the irrigation development in the State, a programme was initiated during 2005-06 for providing irrigation facilities to at least 35 percent of the cultivable area of every block by 2014. To achieve the objective within the short period, new schemes with short gestation periods viz., construction of check dams, deep borewells and megalift schemes have been

started. By the end of January, 2011, 1,207 check dams were completed and 2,199 are in progress. It was programmed to complete 3,000 check dams during 2011-12.

The Jalanidhi programme, which is being implemented in the State, encourages farmers to go for creation of captive irrigation sources through shallow tube wells, bore wells, dug wells and river lift/surface lift projects by way of administering back-ended subsidy against creation of such assets. The State Government tied up funding with NABARD for providing subsidy under this programme. The subsidy is up to 50 percent on shallow tube wells, dug wells, bore wells and river lift/surface lift project limited to Rs.20,000, Rs.50,000, Rs.50,000 and Rs.40,000 respectively. During 2011-12, 15,554 Private Lift Irrigation Points (PLIPs) which include 8,676 STWs, 4,996 deep bore wells, 1,859 dug wells and 3 river lifts have been established by utilising subsidy amounting to Rs.5,163.50 lakhs by the end of January, 2012. It was programmed to complete 25,050 PLIPs during 2012-13. The State Government has accorded a very high priority to increase assured irrigation to farmers during the 12th Five Year Plan.

The mega lift scheme was launched during 2011-12 for providing irrigation to farmers in the upland areas by lifting waters from the river. Projects having irrigation command area within 500 to 2,000 ha will be taken up under this scheme. In Vanshadhara, Indrabati, Tel, Mahanadi, Brahmani, Baitarani, Budhabalanga Rivers and in the periphery of Hirakud and Rengali reservoirs, 174 sites in 15 clusters have been identified to provide irrigation to 2,14,270 ha.

It has been targeted to create additional irrigation potential of 102.28 thousand ha during 2012-13 through major and medium irrigation (46.50 th. ha), minor irrigation (17.98 th. ha), and mega and minor lift irrigation (37.80 th. ha). The State Government continues to attach high priority to create irrigation potential as well as optimally utilise available water resources during the 12th Five Year Plan.

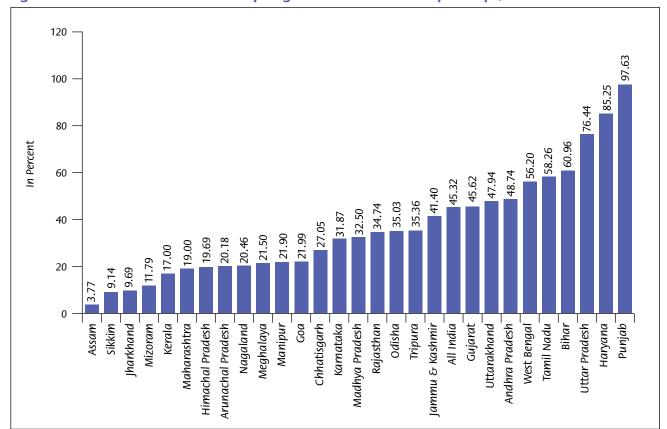


Figure 3.4: State-wise Percent Share of Irrigated Area under Principal Crops, 2008-09

#### **Fertilisers**

Chemical fertilisers play a significant role in development of the agricultural sector. Though there has been considerable improvement in the use of fertilisers and other inputs, the rate of fertiliser use in the State still remains lower than the national average, as may be seen from Annexure 3.16. The use of fertilisers in the State has increased from 41.00 kg/hain 2001-02 to 62.19 kg/ha in 2011-12, as may be seen from Annexure 3.17. This suggests a phenomenal increase of 52 percent over 10 years. Nevertheless, the present level of fertiliser use in Odisha is almost half of that observed at the all India level (128.6 kg in 2008-09). The use of fertilisers differs widely across districts. The high consuming districts include Bargarh, Balasore, Nabarangpur, Sambalpur and Bhadrak and the low consuming districts are Kandhamal, Angul and Kendrapada (see Annexure 3.18). The total consumption of pesticides in Odisha was 1.16 TMT in 2011-12, as compared to 1.18 TMT in 2010-11. On the other hand, per ha consumption of pesticide has declined from 151.50 gm/ha in 2010-11 to 148.00 gm/ha in 2011-12 (see Annexure 3.19).

### **Land Holding**

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 the total number of operational holdings has been increasing over the years but the area under holdings has been declining (see Annexure 3.20 and 3.21). The number of marginal and small land holdings has been increasing because of frequent partitions of land holdings.

#### Credit

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 second, the distribution of credit. In all, agricultural loans to the extent of Rs. 8,520 crore were advanced during 2011-12. This was significantly higher than the loans of

Rs. 6,752 crore in 2010-11. Some aspects of credit have also been dealt with in Chapter 5. Annexure 3.22 presents the amount of agricultural credit advanced in Odisha by different financial institutions from 2001-02 to 2011-12.

#### **Implement**

Provision of implements at subsidised rates to farmers helps to improve farm mechanisation and raises farm productivity. Annexure 3.23 gives data regarding farm machineries supplied to farmers in the State during 2011-12. Rs. 117.16 crores was spent by the State towards subsidies for 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.

#### 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 way of enhanced public and private investments and by public-private partnerships (PPP), particularly for post harvest management, marketing, agro-processing and value addition.

### 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 2011-12 included the promotion and technology up-gradation of the three major crops of rice, ragi and sugarcane. Demonstration on farmers' fields, training through Farmers' Field Schools (FFS) and exposure visits for transfer of technology are emphasised. During 2011-12, demonstrations on improved packages such as System of Rice intensification (SRI) were made

over 1,780 ha, with an investment of Rs.53.40 lakh. Besides, 806 FFS have been also organised at an expenditure of Rs.93.60 lakhs. In order to encourage varietal replacement and use of new HYV paddy seeds, about 65,000 quintals certified paddy seeds were sold to farmers and subsidy at the rate of Rs.500/- per quintal was released.

In order to promote ragi cultivation, 599 ragi demonstrations were conducted in farmers' fields at an expenditure of Rs.11.98 lakhs by the end of January, 2012. Besides, 70 FFS on production technology were organised in ragi growing districts and 2,100 farmers were trained. Efforts were also made to promote sugarcane cultivation. During 2011-12, 6,000 farmers were trained on Integrated Pest Management (IPM), Integrated Nutrient Management (INM) and improved methods of sugarcane cultivation in 120 farmers' training programmes. Besides, 1,300 technology demonstration (Pit method) and 2,064 intercropping demonstrations were also conducted. During 2011-12, subsidy at 25 percent of the seed cost (limited to Rs.400 per acre) is being provided to sugarcane farmers. Till the end of January, 2012, Rs.12 lakhs subsidy has been provided for commercial cultivation of sugarcane over 3,000 acres.

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

ISOPOM is a centrally sponsored scheme that started in 2004-05 with a funding pattern of 75:25 between the Centre and the State. Quality seeds of groundnut, mustard, sesamum and niger are supplied at subsidised rates. During 2011-12, 80,046 quintals of certified/TL seeds were supplied up to January 2012 to farmers at a subsidy of Rs.960.55 lakhs. Subsidy was also provided to groundnut farmers on the use of gypsum and micro-nutrients to boost productivity. A total of 28,000 ha were covered under gypsum and 8,000 ha under micronutrients during 2011-12 up to the end of January, 2012 at an expenditure of Rs.250 lakhs. Besides, 2,122 farmers' training programmes and 600 FFS on IPM have been conducted at an expenditure of Rs.454.37 lakhs.

Maize is grown on about 2.53 lakh ha of land in Odisha. Kharif maize covers about 2.36 lakh ha. The productivity of maize is about 2,570 kg/ha. Maize development activities are being taken up through the centrally sponsored ISOPOM (Maize) scheme. During 2011-12, 1542 ha block demonstration programmes and 138 farmers' training programmes were organised. Besides, 224 quintals of certified maize seeds and 4,080 plant protection equipment were supplied to maize growing farmers at a subsidised rate. Pulses and oil palm development activities have been taken up in Odisha through National Food Security Mission (NFSM) (Pulses) and Rashtriya Krishi Vikas Yojana (RKVY) programme.

### Intensive Cotton Development Programme (ICDP)

Cotton is predominately grown in the KBK districts in the kharif season. Cotton cultivation has been increasing in Bolangir, Kalahandi, Ganjam and Rayagada districts. In this programme, emphasis is being given on area expansion, use of quality/hybrid seeds, farmers' training and intensification of IPM practices.

During 2011-12, 200 Farmer's Field Schools (FFS) and 1,012 Front Line Demonstrations (FLDs) were taken up to train and demonstrate the farmers on the use of the latest production technology. Besides, to popularise the use of pheromone traps on cotton crops for control of pests, Rs 3.60 lakhs has been utilised to cover 1,200 ha area.

#### **Farm Mechanisation**

Farm mechanisation has great significance in improving agricultural productivity. In Odisha, the level of mechanisation is generally low. The State Government aims at promoting easy availability of appropriate farm machinery at substantially subsidised rates. During 2011-12, 8,897 power-tillers, 633 paddy reapers, 29 paddy transplanters, 240 power operated implements, 405 specialised power driven implements, 207 rotavators, 6,315 sets of manual and bullock drawn implements, 3,926 tractors, 2,100 power threshers 1,503 tractor drawn hydraulic trailers, 7,445 pump sets and 65 other equipment were

supplied and subsidy amounting to Rs.117.16 crores was released.

### Rashtriya Krishi Vikas Yojana (RKVY)

# National Agriculture Development Programme (NADP)

This scheme was introduced by Government of India (GoI) in 2007-08 with the objective of achieving four percent growth in agriculture. Various developmental programmes are being implemented in project mode to suit the regional priorities for agriculture and allied sectors. During 2011-12, in addition to normal RKVY, seven new sub-schemes viz., Bringing Green Revolution to Eastern India, 60,000 pulse villages, Nutricereals, Oil palm, Vegetable Clusters, Rainfed Area Development Programme and National Admission for Protein Supplements have been introduced in the State and are being implemented as State plan schemes with 100 percent central assistance. During 2011-12, Rs.356.96 crores was released under this programme and the major interventions taken up under the scheme included acid soil management, popularisation of cultivation of mustard (toria), livelihood support through up-scaling of pigeon pea, establishment of onion storage structures, construction of vermin compost, vermin hatcheries, construction of Pusa zero energy cool chambers, integrated onion cultivation, integrated disease pest management in mango, improvement of existing cashew plantations and black pepper plantations and so on.

# Agricultural Promotion and Investment Corporation Ltd. (APICOL)

APICOL was established in 1996 to promote commercial agri-enterprises, including agrobased and food processing industries in the State. Seventy-two commercial agro-enterprises have been promoted with an investment of Rs.344.67 lakhs during 2011-12. Besides, 302 agro service centres have been set up and subsidy amounting to Rs.649.91 lakhs has been utilised during 2011-12 up to December, 2011.

#### Odisha Agro Industries Corporation (OAIC)

OAIC aims at marketing various agricultural inputs and farm machinery through a wide

network of offices at district and sub-district levels. The Corporation also executes tube wells, bore wells, and lift irrigation points for individuals and communities. It provides inputs such as fertilisers, pesticides, cattle and poultry feed to farmers. During 2011-12, the Corporation had a turnover of Rs. 290.81 crores up to the end of December, 2011. So far, it has sold 3,796 tractors, 365 power tillers, 335 power reapers, 7,962 diesel pump sets, 10 sprinkler sets and 1,981 sprayers. Besides, it has also energised 11 shallow tube wells, 147 river lift/ surface water lift projects. The Corporation also sold 69,694 MT fertilisers and 1,500 MT of gypsum during 2011-12.

### **Micro Irrigation Programmes**

The Micro Irrigation programme is a Central Sector Plan (CSP) scheme 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 tube wells, medium tube wells, bore wells, dug wells and river lift irrigation projects through NABARD assisted projects. During 2011-12, 839 ha drip and 7,760 ha sprinkler irrigation has been taken up in farmers' fields up to January, 2012 at an expenditure of Rs. 621.44 lakhs. It has been programmed to take up 1,253 ha drip irrigation, 19 ha micro sprinklers, 33 ha mini sprinklers, 1,620 portable sprinklers, 79 semi permanent sprinklers and 57 large volume sprinklers with a total outlay of Rs.20.33 crores with the State share of Rs.7 crores during 2012-13.

#### **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 the soil is generally degraded due to poor resource management practices. The Mission undertakes development programmes at micro watershed level through active participation 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 Odisha Rural Livelihood Project, Revised Long Term Action Plan, National Watershed Development Project for Rainfed Areas, Drought Prone Area Programme and River Valley Project have been brought under the Mission. The State aims to treat one million ha area in cluster mode under the Watershed Development programme during the 12<sup>th</sup> plan.

# National Watershed Development Projects for Rainfed Areas (NWDPRA)

This project is a component of the MMA programme and is implemented in watershed development mode. It has been proposed to develop 237 micro watersheds with a project outlay of Rs. 119.38 crores for treatment of 1.18 lakh ha. During 2011-12, a sum of Rs.438.29 lakhs has been utilised for treating an area of 3,639 ha in ongoing 221 watersheds covering all districts against the proposed outlay of Rs.2,000 lakhs for treatable area of 16,670 ha.

# Integrated Wasteland Development Programme (IWDP)

This scheme has been implemented in 23 districts covering 1,046 micro watershed projects. The total outlay of the project is Rs.307.57 crore, for treating 5.44 lakh ha against which Rs.262.75 crore including Rs.245.45 crore from GoI have been released and Rs.232.28 crores has been utilised by treating 3.97 lakh ha. During 2011-12, about 39,955 ha area was treated by utilising Rs.23.97 crores.

### Drought Prone Area Programme (DPAP)

DPAP is operational in 47 identified blocks of eight districts viz., Bolangir, Sambalpur, Kalahandi, Nuapada, Bargarh, Boudh, Dhenkanal and Kandhamal. In all, 1,319 micro watershed projects were sanctioned under the scheme with an outlay of Rs. 380.05 crores for treatment of 6.678 lakh ha, against which an amount of Rs. 304.72 crores has been released and Rs.281.87 crores has been utilised so far for treating of 4.69 lakh ha area. During 2011-12, 38,460 ha area was treated and Rs.23.08 crores has been utilised under this scheme.

# Odisha Rural Livelihoods Programme (JEEBIKA)

This is an initiative for providing an additional livelihood component to 460 ongoing watershed projects under IWDP and DPAP covering six districts. This programme intends to address livelihood needs of the landless and marginal households that are left out under normal watershed activities. By the end of 2011-12, cumulative expenditure under the scheme was Rs. 3,564.26 lakhs including Rs. 1,319.26 lakhs spent during 2011-12. An outlay of Rs.2,213.05 lakhs has been proposed for implementation of the scheme during 2012-13.

### River Valley Project (RVP)

RVP is also implemented under the MMA programme as a centrally sponsored plan scheme in watershed development mode. It aims at treating degraded catchments of multipurpose inter-state reservoirs appropriate soil and water conservation measures to check silt into reservoirs and to enhance the productivity of degraded lands. The scheme is operational in four catchments in the State, i.e., Hirakud, Rengali-Mandira, Upper Kolab and Upper Indravati catchments in Sundargarh, Deogarh and Koraput districts. During the last four years i.e., 2007-08 to 2010-11, 76 watersheds were taken up and a sum of Rs. 1,444.64 lakhs was utilised and 22,318 ha were treated with construction of 29,623 soil conservation structures. During 2011-12, up to January 2012, a sum of Rs. 65.72 lakhs has been utilised for treating an area of 1,317 ha. constructing 580 soil construction structures against an outlay of Rs.297.50 lakhs for treating an area of 2,500 ha. in the ongoing 25 subwatersheds.

# Watershed Development under RLTAP for KBK districts

During 2011-12, a sum of Rs. 18.51 crores has been utilised for the treatment of 19,483 ha area against a target of 11,250 ha with an outlay of Rs.10.69 crores.

#### **National Horticultural Mission (NHM)**

This is a centrally sponsored scheme launched in 2005-06 and operates in 24 districts of

Odisha. 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 vines and floriculture. For the first two years, GoI provided 100 percent grant to the extent of Rs.80.62 crores and the State contributed the balance 15 percent, which is being provided from 2007-08 onwards. During 2011-12, Rs.53.55 crores has been received from GoI and Rs.9.44 crores has been provided as state share against which Rs.46.06 crore has been spent till the end of January, 2012. This programme is likely to be extended to all 30 districts of the State from 2012-13.

### **National Food Security Mission (NFSM)**

NFSM was launched 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. During 2010-11, the NFSM-Rice scheme was implemented in 15 districts and NFSM-Pulses scheme in all 30 districts of the State. Besides, a special scheme, the "Accelerated Pulse Production Programme" is being implemented in five districts, viz., Boudh, Mayurbhanj, Bargarh, Angul and Keonjhar from 2011-12. Besides, additional flood affected districts were also covered under this programme by conducting 15,000 ha demonstration of mung crop. Various interventions have been implemented in 2011-12 for increasing productivity of rice and Rs.4,534.33 lakh have been utilised during 2011-12 by the end of January 2012 against the provision of Rs.6,476.61 lakhs.

### 3.2 Animal Husbandry

Animal husbandry is an important source of livelihood for people. In periods of distress, livestock works as an insurance. In Odisha, around 80 percent of rural households depend

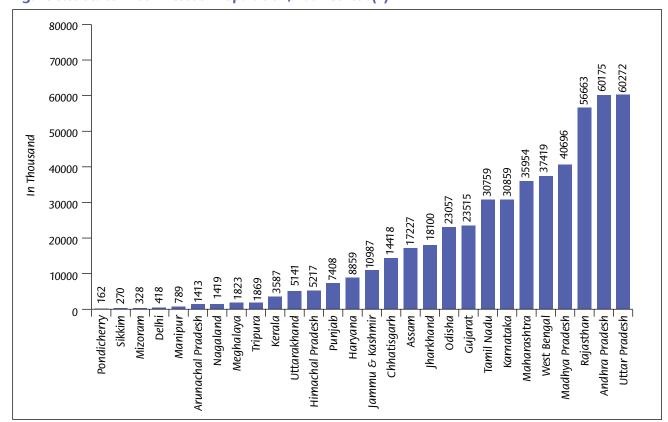


Figure 3.5: State-wise Livestock Population, 2007 Census(P)

on livestock and draw about 30 percent of their annual income or sustenance from livestock. About 85 percent of livestock are owned by the landless, marginal and small landholding families. Relevant statistics about the animal husbandry sub-sector is given in Annexure 3.34 through 3.47.

The livestock census for all states is presented in Annexure 3.34 and is depicted in Figure 3.5. Uttar Pradesh had the highest livestock population in 2007. Odisha contributed about 4.35 percent population of livestock in the country compared to 11.38 percent in Uttar Pradesh, 10.70 percent in Rajasthan and 7.06 percent in West Bengal.

According to Livestock Census 2007, the livestock population of Odisha was 230.57 lakhs. Out of 230.57 lakhs livestock, 58.5 percent were cattle and buffaloes, 38.8 percent were small ruminants and 2.7 percent were pigs. Besides, the State has also 206.00 lakhs poultry as compared to 648.83 million at an all India level. Out of the total poultry in the State, 70 percent

were local backyard breeds. Livestock Census 2007 also reveals that livestock population in the State declined by 4 percent over the previous Livestock Census, 2003, while it increased by 5.3 percent at an all India level. Annexure 3.35 and 3.36 present the livestock population in Odisha under different census. Figure 3.6 depicts the total livestock population in Odisha since Livestock Census 1982.

# 3.2.1 Production and availability of milk, eggs and meat in Odisha

Though India ranks first in the world in milk production, Odisha contributes less than two percent of the total production of milk (see Annexure.3.37). Egg production is about three percent of all India production. Figure 3.7 shows time series data on production of milk, eggs and meat in Odisha from 2006-07 to 2011-12. Production of milk increased from 1,651 TMT in 2009-10 to 1,718 TMT in 2011-12. Production of eggs has declined marginally from 2,319 million in 2009-10 to 2,300.7 million in 2011-12. Figure 3.8 gives per capita availability of milk, eggs and meat in Odisha from 2005-06 to 2011-12. It is

242.67 240.22 236.52 230.57 ın lakh 

Figure 3.6: Livestock Population in Odisha, 1982-2007

observed that while per capita availability of milk has increased from 98 gm/day in 2005-06 to 112 gm/day in 2011-12, it is still far behind the all India per capita availability of milk of 281

gm/day in 2010-11 and the world average of 284 gm/day in 2009-10. Annexure 3.39 gives targets and achievements of production of milk and eggs by districts.

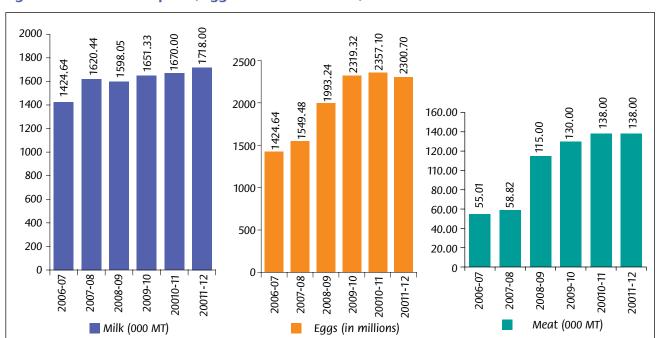


Figure 3.7: Production of Milk, Egg and Meat in Odisha, 2006-07 to 2011-12

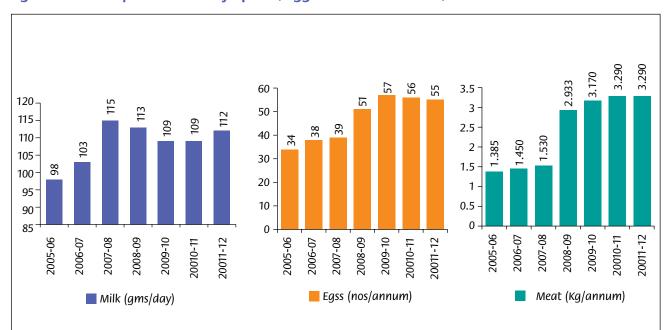


Figure 3.8: Per Capita Availabillity of Milk, Egg and Meat in Odisha, 2005-06 to 2011-12

# Odisha State Cooperative Milk Producer Federation Ltd. (OMFED)

OMFED was established in 1980 as the apex body for milk procurement and marketing in Odisha. The main objective of OMFED is to promote, produce, procure, process and market milk and milk products for economic development of rural farming communities. There are 4,835 Milk Producers Co-operative Societies (MPCS) with 2.53 lakh members under OMFED. Besides, 12 milk unions covering all districts have been affiliated to OMFED. OMFED has 11 dairy plants with 5.45 lakh litres capacity per day, six milk chilling centres with 97,000 litres capacity per day, 329 bulk coolers with 4.96 litres capacity per day; one milk powder plant of five MT capacity per day and one cattle feed plant with 200 MT per day capacity. Also, OMFED has added one food processing plant and one ice cream plant to its production infrastructure.

During 2011-12, the Federation has procured about 3.70 lakh litres of milk and marketed 4.20 lakh litres worth Rs.84 lakhs per day. In addition, it has also marketed milk products viz., *ghee, paneer,* butter, curd and milk powder and agriculture/organic products viz., turmeric powder and mustard seeds

produced by tribes in Kandhamal district. Besides, OMFED has started production and sale of fruit juice, pickles, jam, sauces and pineapple sip. Recently, it has introduced production and sale of ice cream in different sizes and flavours.

OMFED operates a number of programmes in the State as detailed below:

- Operation Flood Programme is operated in erstwhile undivided Cuttack, Puri, Dhenkanal, Keonjhar and Sambalpur districts with financial support from National Dairy Development Board (NDDB).
- OdishaWomen Dairy Project is implemented in undivided Cuttack, Dhenkanal, Puri, Sambalpur, Keonjhar, Ganjam and Balasore districts with financial assistance from W&CD Department, Ministry of HRD and AH & D Department under the Agriculture Department, GoI.
- Integrated Dairy Development Project is in operation in 20 districts in six phases (Phase-V through Phase-X).
- Clean Milk Production is in operation in Cuttack, Puri and Balasore districts in the 1<sup>st</sup> phase and Sambalpur, Koraput, Gajapati and Kalahandi district in the 2<sup>nd</sup> phase.

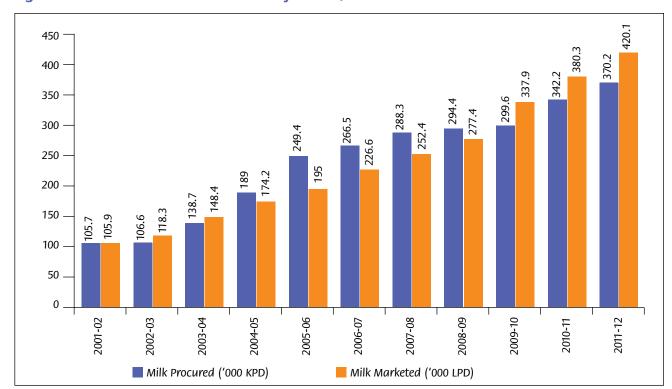


Figure 3.9: Milk Procured and Marketed by OMFED, 2001-02 to 2011-12

The turnover of OMFED during 2000-01 was Rs 57.75 crores and it increased to Rs 473.87 crores by the end of 2011-12. This reflects an eight fold increase in 11 years. During 2011-12, OMFED has earned a profit of Rs 196.52 lakhs (unaudited) as against Rs 226.26 lakhs (unaudited) profit recorded during 2010-11.

#### **RKVY-Dairy Project**

OMFED is operating RKVY-Dairy Project in six districts of the State, i.e., Puri, Balasore, Sambalpur, Keonjhar, Kalahandi and Angul. By the end of 2011-12, 350 Dairy Cooperative Societies were organised out of which 303 were functional with 15,738 members. The average daily milk procurement of the societies stood at 24,354 LPD. During 2011-12, mineral mixture and calf feed were supplied to 11,114 and 8,500 farmer members respectively and 2,203 management committee members were trained in these six districts.

### Odisha State Poultry Producers Co-operative Marketing Federation Ltd. (OPOLFED)

OPOLFED, a State level apex poultry cooperative organisation, functions at Bhubaneswar to

popularise poultry products and develop a market for them. OPOLFED has undertaken marketing of eggs and chicken meat, production of chicks and balanced premixed poultry. At present 99 PPCS/WPCSs are affiliated to OPOLFED. During 2011-12, 147.50 lakh eggs were sold at Rs.4.39 crores, including 97.13 lakh eggs valued at Rs.2.85 crores which were supplied to schools under Mid-Day-Meal programme. Besides, chicken meat, weighing 26,048.15 kg (19,118 numbers) was also marketed, valued at Rs.27.68 lakhs.

# 3.2.2 Government initiatives for livestock development

The State has devised several strategies for development of animal resources and programmes with the following objectives: (i) producing livestock vaccines under GMP compatible conditions to meet local requirements, (ii) monitoring implementation of the Livestock Disease Control programme at the district level, (iii) providing livestock disease diagnostic services at DDL through information and communication technologies, (iv) knowledge and technology appropriate for the

development of animal husbandry and dairying, (v) establishing Livestock Aid Centres at the *gram panchayat* level, and (vi) improving cattle breeds and undertaking fodder development programmes.

# Network of Veterinary Hospital and Dispensaries

Animal health care is provided through a network of 540 veterinary hospitals and dispensaries with 682 veterinary doctors and 2,939 Livestock Aid Centres (LAC) with 2,467 livestock inspectors (Annexure 3.41). The Disease Control Programmes are monitored at the Deputy Director Level. Two Biological Products Institutes function at Bhubaneswar and Berhampur to prepare adequate quantities of different vaccines needed for the Disease Control Programme in the State. During 2011-12, 60.99 lakh animals were treated, 280.93 lakh animals were vaccinated, 15.10 lakh animals de-wormed, 4.90 lakh animals castrated and 2,934 infertility camps were organised in Odisha (Annexure 3.42).

### **Livestock Breeding Farms**

There are eight Exotic Cattle Breeding (ECB)/Livestock Breeding and Dairy (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 2011-12, there were 116 milk producing cows, 61 dry cows, 102 heifers, 21 bull calves and 106 sucking calves maintained in these farms. During 2011-12, about 2.71 lakh litres of milk was produced in these farms (Annexure 3.43), against 2.64 lakh litres of milk produced in 2010-11.

#### **Poultry Development**

During 2011-12, 13,281 birds were maintained and 11.41 lakh eggs were produced in these departmental firms. Out of these, 9.40 lakh eggs were used for hatching and 6.40 lakh chicks were produced (see Annexure 3.44). Forty-eight poultry hatcheries have been established at different locations with the twin objectives

of supplying day old chicks to farmers at affordable prices and to enhance production of chicken meat and egg production through backyard poultry farming. Under Rashtriya Krishi Vikash Yojana (RKVY), a programme to induct 4,000 more layer birds at eight poultry farms has been taken up. One Layer Poultry Estate with the participation of about 100 SC and ST farmers with two lakh layer bird strength has been established at Gobardhansula near Baripada. This programme is expected to benefit 30,000 BPL families, mostly SC and ST women. A new programme, Rural Backyard Poultry Development has been introduced in the State since 2010-11. The scheme envisages establishment of 30,000 backyard poultry units, along with 104 mother units (chick rearing units).

#### Fodder Development

There are eight fodder seed development farms which supply fodder seeds to farmers at subsidised rates under the fodder minikits programme. In 2011-12, 22.97 thousand quintals of green fodder was produced (see Annexure 3.45) over 175.60 acres of land in these farms and 17,633 mini-kits were distributed to farmers (see Annexure 3.46). In addition, 17.32 lakh root slips 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. GoI released Rs.272 lakhs towards establishment of 32 units since 2007.

# National Project on Cattle and Buffalo Breeding (NPCBB)

The National Project on Cattle and Buffalo Breeding Programme (NPCBB) has been launched by GoI to improve breeding of cattle and buffaloes. This project is aimed at improving income and employment opportunities in rural areas. Odisha has established the Odisha Livestock Resources Development Society (OLRDS) to implement this programme in the State. Go-Mitras have been engaged under a self-employment programme to provide doorstep artificial insemination (AI) facilities to farmers.

Ninety-nine buffalo bulls have been supplied to different districts for natural breeding. In 2011-12, 70 VAS received refresher training under this programme.

#### Small Animal Development

There is one sheep breeding farm, four 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 95 sheep, 374 goats and 107 pigs in these farms. During 2011-12, 29 sheep, 53 goats and 176 pigs have been produced in these farms.

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

ASCAD, a scheme sponsored by the Centre with a funding pattern of 75:25 (Centre:State) has been implemented in the State. It conducts mass vaccination and diagnosis of diseases in the newly established Disease Diagnostic Laboratories (DDLs). During 2011-12, an amount of Rs.790.29 lakhs was released out of which Rs.762.71 lakhs has been utilised under this programme.

#### Kalyani Project

This is a new scheme that intends to take up integrated cattle development programme in 10 districts and goat development programme in five districts. Under this scheme, Bharatiya Agro Industries Foundation (BAIF) will open 100 cattle development centres and provide AI services in the operational areas. Government of Odisha has made an agreement with BAIF to undertake the integrated livestock development programme, Kalyani in ten districts. Under the goat development programme, 900 breeding bucks will be supplied for genetic up-gradation of the local goat. Besides, 600 farmer interest groups (goat groups) will be constituted in different localities involving farming communities and 2,000 goat keepers will be trained. The scheme will be implemented through BAIF in five districts viz., Mayurbhanj, Sundergarh, Keonjhar, Balangir and Deogarh.

#### 3.3 Fisheries

Odisha, being a maritime State, has considerable scope for development of inland, brackish water and marine fisheries. The State is endowed with a long coastline of 480 km with continental shelf area of 24,000 sq km along the Bay of Bengal. It offers tremendous opportunities for development of fresh water, brackish water and marine fisheries with scope of fish production, together with employment and income generation for socio economic prosperity. Fresh water resources of the State are estimated to be 6.73 lakh ha comprising of 1.22 lakh ha of tanks/ ponds, 2 lakh ha of reservoirs, 1.80 lakh ha of lakes, swamps & *jheels* and 1.71 lakh hectares of rivers and canals. The State's brackish water resources are of the order of 4.18 lakh ha with a breakup of 0.79 lakh ha of Chilika Lake, 2.98 lakh ha of estuaries, 32,587 ha of brackish water tanks and 8,100 ha of backwaters.

According to the Fishery Survey in India (FSI), the fisheries potential of Odisha is 513,667 MT. About 2.95 percent population (10.84 lakhs) depends upon fisheries for their livelihood. Of them, 7.51 lakhs depend on inland fisheries and 3.33 lakhs on marine fisheries. The fisheries sub-sector contributed about six percent to the GSDP share of the agriculture sector for the year 2012-13 (advance estimate). Relevant statistics about this sub-sector are given in Annexure 3.24 through 3.33.

### 3.3.1 Fish production and consumption in Odisha

Fish is a popular food item in Odisha. The State ranks ninth in terms of production of fish in India during 2010-11. Annexure 3.27 compares fish production in different states from 2004-05 to 2010-11. During 2011-12, Odisha produced 381.83 TMT of fish of which 267.53 TMT came from inland sources and 114.30 TMT from marine sources. The inland fish production included 237.47 TMT from fresh waters and 30.06 TMT from brackish waters. Crab production has also been increasing over the years. Fish production from Chilka Lake increased from 13.07 TMT in 2010-11 to 14.23

TMT in 2011-12. Out of the total fish production, about 85 percent were marketed in raw form while six - seven percent were kept for sun drying. The per capita consumption of fish has increased appreciably from 7.3 kg in 1999-2000 to 9.91 kg in 2011-12. This implies improvement in the standard of living and change in dietary patterns of the people in the State.

#### 3.3.2 Export and import of fish

As fish production increases in the State, so do its exports and imports. This trend, from 2005-06 to 2011-12, has been shown in Figure 3.10. It may be observed that fish exports are rising over the years as may be seen from Annexure 3.32 and 3.33. The trend as regards imports of fish is not clear. Imports varied from about 34 TMT to 59 TMT except in 2008-09 and 2009-10 when imports shot to 170 MT and 92 MT respectively (also see Annexure 3.32). The seafood export sector has been reporting impressive growth during the last few years. The sector reported exports of 21.08 TMT marine products valued at Rs. 792.76 crores during 2011-12 (Annexure 3.33).

### 3.3.3 State initiatives for fishery development

### Fishery Development Policy

The Fishery Development Policy has been formulated as a part of the Agriculture Policy, 2008. The main objective of the 12<sup>th</sup> Five Year Plan is to increase fish seed production and fish production in order to provide self employment opportunities which in turn will increase the per capita income and eradicate poverty by utilising unexploited water resources through application of new technologies. During 2012-13, emphasis has been on the following:

- I. to promote sustainable development of inland fisheries for doubling fish production;
- II. to enhance export earnings;
- III. to enhance contribution of the fishery sector to food and livelihood security of the people engaged in fisheries;
- IV. to develop human resources through their capacity building, training and awareness programme.

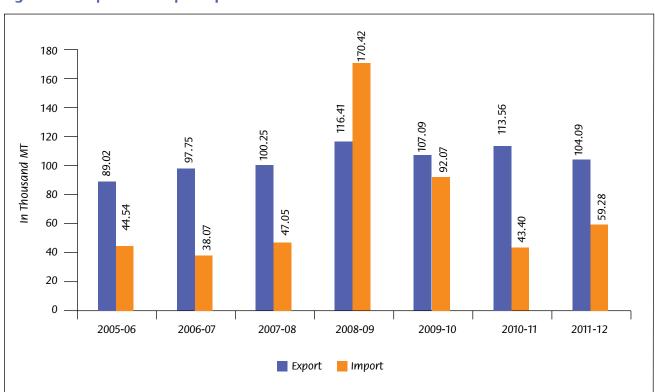


Figure 3.10: Export and Import of Fish

#### Fish Farmers Development Agency (FFDA)

This scheme sponsored by the Centre is implemented to develop pond areas and to train fish farmers in modern pisiculture techniques. There are 30 FFDAs, one in each district. By the end of 2011-12, 60,506.87 ha of tank areas had been developed and 52,821 fish farmers trained, including 469.78 ha tank area developed and 500 farmers trained during 2011-12. Two ongoing schemes, namely FFDA and BFDA, have been merged and renamed as Development of Inland Fisheries and Aquaculture, under macromanagement approach.

#### 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 introduction advanced technologies and techniques. It permits the transfer of reservoirs which have an area of 100 acres and above to the Fisheries and Animal Resources Department, Government of Odisha. The F&ARD Department, Government of Odisha has been empowered to lease out these reservoirs to Primary Fishermen Cooperative Societies registered under the Odisha State Co-operative Society Act, 2001 and preference will be given to displaced/ project affected persons.

# Brackish-Water Fisheries Development Agencies (BWFDA)

Chilika Lake with average water spread area of 906 sq km in summer and 1,165 sq km in monsoon and island area of 223 sq km are the main sources of brackish water fish. There are 132 fishermen villages with 22,032 families and 1,22,339 population around the lake. The number of fishermen engaged in fishing in the lake is 30,936. Out of 104 registered cooperative societies, 93 are in operation with 27,432 members. There are 27 landing centres at which 13,870 MT of fish/shrimp and 358.26 MT crab landed during 2011-12. BWFDA have been set up in seven coastal districts which abound in brackish water resources. The State has a total brackish water area of 4.18 lakh ha, out of which 32,587 ha is suitable for prawn culture.

These agencies have developed about 16,387 ha prawn culture area by the end of 2011-12, of which 907 ha have been leased out on a long term basis. Brackish water prawn culture was undertaken over an area of 4,971.31 ha and 11,975.77 MT brackish water shrimps were produced during 2011-12. By the end of 2011-12, about 13,096 fish farmers benefited and 5,929 farmers were trained in modern shrimp culture techniques. About 674 shrimp farmers have benefited and 211 farmers have been trained on modern shrimp culture technique during 2011-12.

#### **Marine Fisheries**

The State has six percent of the coastline and 4.7 percent of the continental shelf area of the country. Among six coastal districts, Puri has the longest coastline of 155 km and Bhadrak the shortest, with 50 km. About 114.30 TMT of fish were caught from the marine sector during 2011-12. Out of this, prawn, clupids, catfish and pomfrets are some of the important species. The State has 63 marine landing centres. Odisha Maritime Fishing Regulation Act has been implemented in the State to safeguard the coastal water areas of the State. Registration/ renewal of trawler licenses and conservation of endangered species of fish and turtles have been taken up. The work of Dhamara fishing harbour has been completed and handed over to Management Society, Dhamara and work at Hatabaredi and Balugaon is under progress.

#### Fishermen's Welfare Schemes

#### **Accident Insurance Scheme**

This scheme, which aims at insuring the lives of fishermen, was launched in 1983-84. Rupees one lakh is provided in the event of accidental death or permanent disability and up to Rs.50,000 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 2011-12, ten lakh fishermen have been covered under this scheme and Rs.24.50 lakhs was disbursed in cases of disabilities and deaths. It has been proposed to cover 10 lakh fishermen during 2012-13 with a budget provision of Rs 145.00 crores.

#### Safety of 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 while 80 percent is shared by the Centre and State. An amount of Rs 12.94 lakhs has been proposed towards 25 percent share during 2012-13 to assist 450 beneficiaries.

### Saving cum Relief

Under the scheme, benefit has been given to fishermen during the lean period of fishing and to inculcate the habit of savings among the fishermen. It has been proposed that 17,000 fishermen will be covered during 2012-13 under this programme.

### Matsyajibi Unnayan Yojana

This scheme envisages to provide awards to meritorious children of the fishermen community and financial assistance to fisherwomen self help groups (SHGs). It has been proposed to provide scholarships to 100 children of active fishermen and 1,000 fisherwomen SHGs with a proposed outlay of Rs 100.24 lakhs in 2012-13.

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

This is a scheme sponsored by the Centre 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 have been completed and 32 tube wells have been installed. Under the scheme, 1,500 low cost homes are targeted to be constructed during 2012-13.

# Odisha Pisciculture Development Corporation (OPDC)

This is the only public sector undertaking in the fishery sub-sector. OPDC aims at carrying on business in pisciculture in brackish water areas, freshwater ponds and other water sources. It has five hatcheries at Bhanjanagar, Saramanga, Chiplima, Binika and Bayasagar over an area of 103 ha land with a production capacity of 21 crores of spawn and has established 10 million capacity fish-seed hatchery at Kausalyaganga near Bhubaneswar. In 2011-12, it produced 20.50 crore quality fry and sold 18.63 crore fry valued at Rs.2.63 crores. It also sold 7,300 kg fish worth Rs. 6.58 lakhs. The Corporation has four diesel outlets to cater to the needs of fishermen operating fishing trawlers and mechanised boats. During 2011-12, the Corporation sold 11,312 kl of HSD, 20,023 litres of lubricants and 3,358 kl motor spirit worth Rs. 70.88 crores and also sold 51 MT net produced in its own net manufacturing unit valued at Rs. 1.89 crores during 2011-12. During 2011-12 the Corporation made a loss of Rs.2.19 lakh.

#### **FISHFED**

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

### 3.4 Forestry and Environment

Forests play a vital role in maintaining ecological stability and contribute significantly to the State's economy, especially to the livelihood of forest-dependent communities which are mostly STs. The share of this sub-sector is 10.76 percent in real GSDP of the agriculture sector for the year 2012-13. Some important statistics about the forestry sub-sector are given in Annexure 3.48 through 3.54.

#### 3.4.1 Forest and tree cover

Odisha is rich in forest cover and has recorded forest land of about 58,136 sq km which is 37.34 percent of the State's geographical area. The per capita recorded forest area of the State is 0.14 ha, as compared to 0.06 ha at the national level. Forest cover in Odisha is unevenly distributed.

#### Box 3.1: 11th State of Forest Report, 2011: Odisha Forest Status

- (a) Out of the 16 major forest type groups in India, four major forest types that exist in Odisha are: Tropical Dry Deciduous Forest (57.87%), Tropical Moist Deciduous Forest (39.88%), Tropical Semi Evergreen Forest (0.68%) and Littoral and Swamp Forest (0.48%).
- (b) Plantations/trees outside forests (TOF) constitute 2.76 percent of the total geographical 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-classified forests. The total recorded forest area of Odisha was 37.34 percent of its total geographical area.
- (d) The actual forest cover of Odisha in 2009 was 48,903 sq km, which constitutes 31.41 percent of the State's geographical area in terms of forest canopy density classes. The corresponding figure for 2007 was 48,855 sq km. Thus, the actual forest cover increased by 48 sq km from 2007 to 2009. This increase in forest cover is due to conservation measures and improvement in scrub area.
- (e) The State has 7,060 sq km of VDF with crown density above 70 percent, 21,366 sq km MDF with crown density ranging from 40-70 percent and 20,477 sq km of open forest (OF) with crown density ranging from 10-40 percent. Assessed separately, tree cover outside forest (TOF) ,is 4,301 sq km. The VDF, MDF, OF, TOF, scrub area constitute 4.53 percent, 13.72 percent, 13.15 percent, 2.76 percent and 3.04 percent respectively, of the total geographical area of Odisha.

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 2011-12 was the highest in Kandhamal district (71.19%), followed by Malkangiri (57.95%), Gajapati (57.09%), Deogarh, (53.07%) and Nayagarh (53.50%). Coastal districts such as Balasore, Bhadrak, Jagatsinghpur, Jajpur, Kendrapara and Puri have less than 10 percent of forest area. Detailed classification of forest area by districts in the year 2009-10 is given in Annexure 3.48.

As per the India State of Forest Report, 2011, the actual forest cover in the State was 48,903 sq km in 2009, which is 31.41 percent of the State's geographical area as against the country's 6,92,027 sq km, which is 21.05 percent of country's geographical area. From 2007 to 2009, there was an increase in forest area by 48 sq km. However, very dense forest (VDF) declined by 13 sq km and moderately dense forest (MDF) by 28 sq km. Open forests

increased by 89 sq km. Salient aspects of the 2011 report pertaining to Odisha are summarised in Box 3.1.

#### **Forest Protection**

With growing population, there has been tremendous pressure on forests, both for forest produce as well as for forest land. The State is divided into 281 ranges, 1,001 sections and 3,674 beats. The average forest area per beat comes to 15.82 sq km per Forest Section 58.7 sq km and per range 206.88 sq km. It is quite high from the management point of view. During 2010-11, 62,777 forest offence cases have been booked, 2,805 persons have been arrested, 2,352.05 cum of timber has been seized and Rs.2.19 crores has been collected as compounding fee. Besides, 1,591 vehicles were seized during 2010-11.

The following measures have been taken to strengthen forest protection during 2011-12:

• There are 208 Forest Check Gates set up at vulnerable transit points all over the State.

- 276 numbers of Forest Protection squads comprising of 10 local youth in each squad have been engaged in different forest divisions.
- There are 19 APR units deployed in 19 forest divisions to assist forest staff in protection activities.
- In the State, so far, 12,158 numbers of VSS have been formed and they have been assigned a total 11,542 sq km of forest land for protection. Besides, 462 numbers of Eco-Development Committees have been formed in the protected areas to undertake protection activities.
- There are 590 VHF stations and 880 walky-talkies operational in the State for strengthening communication network for monitoring protection activities.

#### **Forest Diversion**

By the end of December 2011, 384 numbers of diversion proposals covering an area of 39,720.186 ha forest land have been approved by ME&F for non-forest use. Out of these 148 proposals, one proposal is of the Mining sector covering an area of 16,053 ha, 83 proposals are of the irrigation sector covering 9,712 ha and the balance 153 numbers of diversion proposal covering 13,955 ha are for other sectors such as energy, roads, bridges, railways etc. During 2011-12, 13 proposals (irrigation-1, mining-9, industry-1 and others-2) have been approved for diversion of 831.18 ha forest area. In addition, 380 diversion proposals are in the pipeline for various user agencies till the end of December, 2011. Figure 3.11 illustrates the extent of diversion of forest lands for non-forest purposes. Figure 3.12 analyses the diversion of forest lands for non forest purposes by activities for 2011-12. Besides, 32.877 ha of forest land have been diverted for 66 projects under Section 3.2 of STs and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

#### **Compensatory Afforestation**

Whenever a proposal for diversion of forest land for non-forestry purpose is approved by the central Government, there is a stipulation to raise compensatory afforestation over equivalent non-forest land or over twice the degraded forest land. Against the diversion of 39,720 ha of forest land, compensatory afforestation has been raised over 39,436 ha (13,541 ha degraded forest land and 25,895 ha non forest land) by the end of December, 2011.

#### 3.4.2 Production and revenue collection

Odisha is the third largest producer of kendu leaf (KL) next to Madhya Pradesh and Chattisgarh. The annual production of KL in the state is around 4.5 to 5 lakh quintals. Sundergarh, Angul, Deogarh, Kalahandi, Keonjhar, Kandhamal, Malkanagri, Nabarangpur, Koraput, Dhenkanal, Jharsuguda, Sambalpur, Bargarh, Bolangir, Sonepur, Boudh and Nuapada are the main KL producing districts. During the 2011 crop year, about 3.82 quintals of KL were produced and employment equivalent to 12 million persondays was generated. The procurement price of green KL was enhanced from 29 paise to 35 paise per kerry (i.e., a bundle comprising 20 leaves) for 2011. The KL pluckers were paid Rs.60 each towards the cost of a pair of chappals during 2011 KL crop year.

Odisha has nine percent of the country's total bamboo forest cover and seven percent of the total growing stock of bamboo. Bamboo in forest areas of the State grows as a mixed crop associated with sal and other species. The mixed bamboo forest area is spread over 17,795 sq km, while 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 Odisha are Sal, Teak, Bija and Sissoo. During 2010-11, the total revenue receipts on the sale of timber, firewood, bamboo, cashew nut, KL and sal leaf were Rs.376.72 crores.

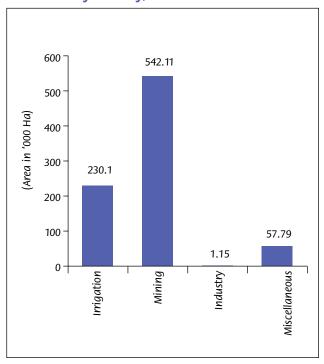
The Odisha Forest Development Corporation Limited (OFDC), a fully owned State company, operates as the commercial arm of the Forest

2.50 2.31 2.21 2.00 1.80 1.50 (In '000 Ha) 0.92 0.83 1.00 0.91 0.71 0.50 0.00 2009-10 2011-12 2006-07 2007-08 2008-09 2010-11 2005-06

Figure 3.11: Forest Area Diverted to Non-forest Use, 2005-06 to 2011-12

Department. Annexure 3.51 reports production and revenue collection from different forest sources in 2010-11 to 2011-12. KL are the

Figure 3.12: Diversion of Forest Area to Non Forest Use by Activity, 2011-12



most important forest produce that generate over 80 percent revenue from forest products (see Annexure 3.52). OFDC was a loss-making organisation till the end of 2005-06. After that it has started earning profits. During 2008-09, it recorded a profit of Rs.2.80 crores as compared to profits of Rs.94.20 lakhs in 2006-07 and Rs.68.65 lakhs in 2007-08.

OFDC trades mainly in timber, KL, bamboo, sal seeds and other non-timber forest produce. In 2011-12, production of timber and firewood from forests by OFDC was 31,912 cum of round timber and 24,305 MT of firewood. The Corporation has sold 29,230 cum of timber and timber products and 29,117 MT of firewood valued at Rs.56.77 crores during 2011-12. It has undertaken extraction of harvestable bamboo through the Raw Material Procurers (RMP) appointed by the Government. Bamboo production during 2011-12 stood at 98,413 sale units, increased by 6.2 percent from the previous year's production of 92,684 sale units. The Corporation earned Rs. 8.12 crores from bamboo trading during 2011-12.

## 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 a good forest cover. Some development initiatives include afforestation, development of village forests and introduction of social and farm forestry. During 2011-12 up to December, 2012, about 1.13 lakh ha were covered under afforestation, 356.12 lakh saplings were planted and 194.14 lakh saplings were raised for distribution. The major afforesttion programmes implemented during 2011-12 are as follows:

- About 2,000 ha have been covered under Economic Plantations.
- In Odisha, 45 Forest Development Agencies have been formed and the National Afforesttion Programme is under implementation through 3,003 VSS. During the 11<sup>th</sup> Plan period up to December, 2011, 67,674 ha have been afforested.
- Industrial plantation of 55 ha have been taken in Jharsuguda area during 2011-12 for amelioration of micro climate in the area.
- 500 ha of bald hills have been afforested during 2011-12 in four districts.
- During 2011-12, 6.80 lakh saplings have been planted under the Urban Tree Plantation programme in and around Bhubaneswar and other urban areas like Bolangir, Angul, Talcher, Kaniha, Cuttack, Sambalpur, Baripada and Balasore.

### (ii) Forestry Vision, 2020

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

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

### (iii) Forest Development Strategies

The objectives of the forestry sector are to

promote sustainable forest management in the State, with a larger goal of supporting rural livelihoods. The plan supports 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 ecodevelopment in the protected areas and
- Building the capacity of the Forest Department and village level institutions to protect and manage the assigned forests.

# (iv) Odisha Forestry Sector Development Project (OFSDP)

OFSDP is being implemented by the Odisha Forestry Sector Development Society with assistance from JICA. The total estimated cost of this seven-year project (2006-07 to 2012-13) is Rs.660 crores. The project has roped in 2,258 VSS for execution of major interventions in JFM mode in 11 Forest Divisions and 42 EDCs in three Wild Life Divisions. The total intervention under this component up to December, 2011 through 2,258 VSS is 1,83,537 ha, comprising 1,46,426 ha of ANR and 37,111 ha of Block Plantations. Similarly, AR Teak Plantation has been raised over 11,605 ha departmentally. In addition, 2,516 ha of mangrove and 92 ha of casuarina plantations were raised in Bhadrak and Balasore Wildlife Divisions under Coastal Plantation programme.

# (v) Medicinal Plant Conservation Programme

The following medicinal plant conservation programmes have been taken up in the State: (i) Conservation and resource augmentation of Dasmoola Species: This scheme is under implementation with at a project cost of Rs.3.44 crores. So far, 361 ha of Bruhat Panchamula and 102 ha of Laghu Panchamula have been planted under this scheme, (ii) Conservation and sustainable use of Ashoka: 365 ha of enriching planting and 85 ha of resource augmentation have been done and 1.75 lakh quality planting materials have been distributed, (iii) Medicinal

plant knowledge centre at Patrapada: The scheme started from 2008-09 with the aim of enhancing knowledge about medicinal plant species among foresters and interested persons. So far, 314 species have been planted in 314 plots with a separate plot for each plant species, (iv) Ekamra Vana at Bindusagar: Ekamra Vana at Bindusagar developed under Ekamra Garden Society and 232 species of medicinal plants have been planted so far, (v) Medicinal Plant Conservation Area (MPCA): Six MPCA, 200 ha each, have been established at a cost of Rs.89.16 lakh for conservation and development of medicinal plants and (vi) Odisha State Vanaspati Vana Society: Conservation of medicinal plants been in-situ conservation, 36 ha of ex-situ demonstration plots, 2 nurseries over eight ha and capacity building in 25 VSSs has been achieved at an outlay of Rs.500 lakhs during 2003-08.

#### Jagannath Ban Prakalp

This scheme was started in 2000-01 to plant the species for augmenting the supply of timber required for the Chariot of Lord Jagannath. Under this scheme, plantations over 2,326.34 ha forest land have been raised with active involvement of local communities.

#### (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. Odisha has been the first state to issue a resolution regarding Joint Forest Management (JFM) in 1988 for protection of peripheral reserve and protected forests with the 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 1,199 JFM committees in 2005, managing about 14 percent forest area. Nearly 17 million families were involved in this programme. Of these, around 0.7 million families belonged to tribal communities. By the end of 2010-11, 11,915 Vana Samrankhyan Samities (VSS) and 398 Eco-Development Committees (EDC) were formed in the State for protecting and regenerating forest areas. All 11,428 families are members of these VSS and EDC.

#### (vii) Bamboo Sector Development

The State Government is keen to address all aspects of bamboo development. The Government has constituted Odisha Bamboo Development Agency (OBDA) at the State level and District Bamboo Development Agencies (DBDA) at the District level. OBDA has taken up bamboo plantation programmes in the State. During the last three years, i.e., from 2009-10 to 2011-12, bamboo development programme has been taken up over an area of 6,211 ha at an expenditure of Rs.713.29 lakhs including 2,094 ha plantation and Rs.262.55 lakhs expenditure made during 2011-12.

One centre for Bamboo Training and Product Development is being established in partnership with the National Mission on Bamboo Applications, Govt. of India. The Centre will provide training to bamboo artisans for their skill up-gradation, product development and entrepreneurship development.

### (viii) Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

Afforestation activities like silviculture operations, nursery raising for distribution of seedlings, plantations and avenue plantation have been taken up under MGNREGS along with maintenance of forest roads. During 2011-12, about 736 RKM avenue plantation, 10,495 ha afforestation and 7.54 lakh seedlings have been distributed at an expenditure of Rs.12.16 crores under MGNREGS by the end of January, 2012.

#### **Livelihood Option Creation**

Livelihood Option Creation came into existence in 2009-10 by merging two schemes viz., (i) strengthening of JFM and (ii) decentralised nursery. By the end of 2008-09, 1,000 decentralised nurseries were established and 1,300 VSS were strengthened. During 2008-09, more VSSs and 1,000 decentralised nurseries were established. During 2011-12, Rs.90 lakhs was given to 360 individuals for raising medicinal plants and 250 VSS have been strengthened with a budget provision of Rs. 215 lakhs.

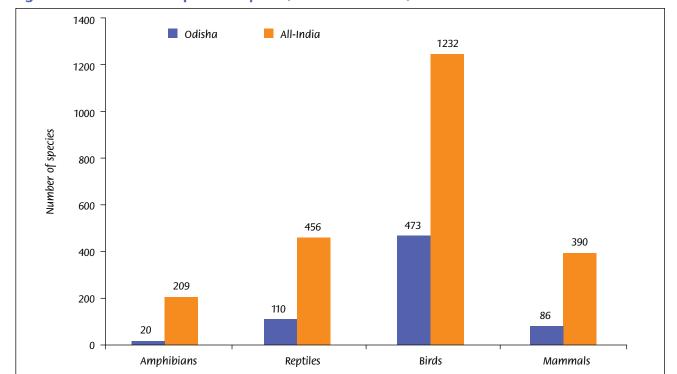


Figure 3.13: Distribution of Diverse Species, Odisha and India, 2007

#### Eco Tourism

There are excellent spots outside the sanctuaries and national parks which are potentially good eco-tourism destinations. Minimal camping, trekking and nature exploration facilities are necessary these sites. In 2009-10, a new scheme was introduced for eco-tourism development and Rs.82.30 lakhs spent to develop Anjar in Keonjhar district, Ansupa in Cuttack district and Sidhamula in Nayagarh district. During eco-tourism infrastructure 2010-11, been developed at Mahavinayak in Jajpur district and Nrusinghnath in Bargarh district. During 2011-12, development of Olasuni near Chandikhol of Jajpur district, Machhabandha in Mayurbhanj district and Pakidi hill of Ghumsur South Division in Ganjam district have been implemented with a budget provision of Rs.120.00 lakhs.

#### 3.4.4 Wildlife, ecology and environment

Odisha, with its diversified topography and climate, has been the abode of rich bio-diversity including a variety of wildlife species. Figure 3.13 compares rich biodiversity in Odisha vis-àvis India.

#### Wild Life Sanctuaries and National Parks

In Odisha, there are eighteen wildlife sanctuaries and two national parks. They are spread over 6,677 sq km, which is about 4.29 percent of the total geographical area and 10.37 percent of the forest area of the State. Two national parks are Similipal in Mayurbhanj district and Bhitarakanika in Kendrapara district. 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 accorded to it by UNESCO. The Sun Temple at Konark is the only other site in Odisha to have claimed this distinction.

#### **Tigers and Elephants**

Odisha has two notified tiger reserves: the Similipal Tiger Reserve in Mayurbhanj district and the Satakoshia Tiger Reserve in Angul district. Instead of the pug mark technique, a new method of monitoring has been introduced by the National Tiger Conservation Authority (NTCA) and Wild Life Institute of India (WLL) for studying the behaviour of tigers and its co predators and prey species by way of recorded photographic evidence. In this study, scientists calculated the presence of 45 tigers during January 2006 to February 2008. This number has come down to 32 in the census undertaken during May 2010. In order to provide better habitations to them, water bodies and fodder plantation programmes for herbivores have been undertaken. On the other hand, to protect crops and lives of villagers, the following measures have been taken:

- Fifty-four anti-poaching and antidepredation squads have been formed to reach affected spots quickly and tackle the situation,
- Forty-six elephant trackers have been engaged to keep a regular watch on the movement of elephants,
- In the elephant depredation areas, villagers have been provided with search lights, 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, and
- To address the man-animal conflict in the State, one Elephant Management Plan for five years was prepared and was under implementation from 2009-10.

Elephant Reserves (ER), Mayurbhanj ER, Mahanadi ER and Sambalpur ER, were notified in 2001 and 2002 respectively. These reserves are meant to define prime elephant launch habitats and 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. As per elephant surveys, 2011-12, there were 1,930 elephants in the forests of Odisha as compared to 1,886 counted in 2010-11.

#### **Crocodiles**

As per the annual census report of salt water crocodiles for 2011-12, there were found 1,659 crocodiles in Bhitarkanika River system and 203 mugger crocodiles in Satakosia/ Mahanadi River, River systems of Similipal Reserve and Ghodahada reservoir in Ganjam district. Besides, six *gharials* were traced in the Mahanadi River system.

#### **Turtles**

The mass nesting sites of Olive Ridley sea turtles are located at Gahiramatha Sanctuary, Rushikulya and Devi mouths. During 2011-12 nesting season, 2.68 lakh Olive Ridley sea turtles visited the Odisha coast for mass nesting as against 7.24 lakhs in 2010-11. The State Government has been according a high priority for the safety of turtles. Because of different protection measures, the turtle casuality has declined remarkably from 12,977 in 2001-02 to 2,305 in 2011-12.

### **Dolphins**

During 2011-12, the annual population estimation of the Irrawaddy Dolphin in Chilika Lagoon was 145, out of which 118 were adults, 16 were sub-adults and 11 were calves.

#### **Migratory Birds**

The winter welcomes many avian guests to Chilika, Bhitarakanika and other water spread areas in the State. The 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 pintails, gull-billed terns, common sand pipers, bar headed geese, grey log geese, spotted eagle and osprey are some of the species of migratory birds. As per the census of migratory birds conducted on 7th & 8th January, 2012, 8.69 lakh birds of 106 species, 0.53 lakh birds of 118 species and 0.47 lakh birds of 52 species visited Chilika Lagoon, Bhitarakanika wetlands and Hirakud Reservoir respectively. Increased awareness, improved protection measures and surveillance have reduced the hunting of these birds. The numbers of different wildlife species in the forests of Odisha for the

year 2006-07 to 2011-12 has been depicted in Annexure 3.55.

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 2010-11, 94 anti-poaching camps were organized, in which 490 volunteers in addition to other Government officials 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 2011-12 was 2,305. The State Government has made the use of Turtle Extruder Devices (TED) mandatory for trawlers. The law against illegal fishing in turtle congregation areas has been 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 while boating activity at Nalabana has been regulated.

It is heartening to note that in general, wildlife offences have shown a decreasing trend till 2010-11. During 2011-12, 203 wildlife offence cases were booked. Of these, 141 cases were found undetected. Sixty- two cases were filed in court and 155 offenders were arrested and forwarded to courts. Annexure 3.54 furnishes information on wildlife offences.

# Compassionate Amount for Wild Animal Depredation

Compassionate amount paid in Odisha due to wild animal depredation has been furnished in Annexure 3.56 for the period 2001-02 to 2011-12. The Annexure shows that the amount of Rs.17.45 crores compensation has been paid during the last ten years. This includes Rs.4.41 crores paid during 2011-12. For human kills, injuries, cattle kills, house damages and crop damages by elephants, Rs.14.74 crores has

been paid. This is about 84 percent of the total compassionate amount paid.

### 3.4.4.1 Policy initiatives

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

#### **Odisha Climate Change Action Plan**

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

#### **Odisha Pollution Control Board (OPCB)**

The OPCB functions under the administrative control of the State Forest and Environment Department and ensures the implementation the Environmental Acts, 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 the Hazardous Waste (Management, Handling Transboundary Movement) 2008; the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989; the Batteries (Management & Handling) Rules, 2001 and other pollution controlling rules and regulations. During 2010-11, the Board has been impleaded as a party in 39 cases on various environmental issues in different courts and 74 cases including the pending cases have been disposed of.

#### **Appellate Authority**

The Appellate authority to hear appeals preferred against orders made by the Odisha Pollution Control Board rests in the Environment Wing of the Forest & Environment Department. During 2010-11, seven cases were disposed of by the Authority.

## The Odisha State Coastal Zone Management Authority

This Authority has been constituted by the GoI to enforce the Coastal Zone Management Plan and monitor violations of coastal zone regulations. During 2010-11, out of 46 projects, the Authority recommended 12 projects to GoI and the remaining 34 projects have been considered by the Authority for grant of environmental clearance from CRZ angle. Besides, the State Government has constituted an integrated coastal zone management project in two stretches, i.e., Gopalpur to Chilika and Paradeep to Dhamara, to be funded by the World Bank through the Ministry of Environment and Forest, GoI. It has recommended six project proposals to the Ministry of Environment and Forests, GoI, for environmental clearance; namely fishing harbours at Bahabalpur (Balasore) and Chudamani (Bhadrak), fish landing centres at Penthakata (Puri) and Keshpur (Ganjam), a landing centre at Berhampur and a light house at Chandinipal (Bhadrak). Besides, the Authority has recommended the proposal for development of an all weather berthing port at Gopalpur to the Ministry of Environment and Forest, GoI for grant of environmental clearance.

### Odisha Environment Management Fund

This is a Trust constituted to take steps for rehabilitation of degraded environment. To date, Rs.4.60 crores have been spent for plantation of 644.23 ha in Rani Park as well as industrial areas of Talcher and Jharsuguda.

#### **Centre for Environmental Studies (CES)**

This is a registered society, whose aim is to promote environmental awareness in the State. It is the regional resource agency for the National Environment Awareness Campaign (NEAC) and a nodal agency for the National Green Crops Programme. During the period

2001-02 to 2005-06, CES released grants to 2,764 organisations working in the area of environmental conservation. Since 2006-07, it is working as the regional resource agency for fifteen districts namely Bolangir, Cuttack, Gajapati, Ganjam, Jagatsinghpur, Kalahandi, Kandhamal, Khurda, Koraput, Malkangiri, Nabarangpur, Nayagarh, Nuapada, Puri and Rayagada. During 2006-07 to 2010-11, it has released grants to 2,010 organisations. During 2011-12, 563 organisations were selected to undertake promotional activities out of 816 proposals received by CES.

Under the National Green Crops Programme, eco-clubs have been established in 9,500 schools in all districts of Odisha. During 2011-12, a grant of Rs.2,500 was released to each eco-club to conduct various environmental awareness activities. CES provides resource material for dissemination of environmental knowledge and facilitates activities among members of ecoclubs. These include 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 Odisha. It also maintains a website on the aspects of the state of environment in Odisha. It has been selected by the Ministry of Environment and Forest (MOEF) to prepare the Indian State Level Basic Environmental Information Database (ISBEID) in association with National Informatics Centre (NIC), New Delhi.

#### **Awards**

In order to encourage environmental protection, the State Government has awarded 243 Prakruti Mitra and 208 Prakruti Bandhu awards to voluntary organisations/villages/national institutions and individuals by the end of 2011-12.



Annexure 3.1: Land Utilisation Pattern in Odisha

(Area in '000 ha)

Year	Geogra- phical area	Forest area	Misc. tree	Perma- nent pastures	culturable waste	Land put to non- agrl. Use	Barren & uncultu- rable land	Current fallow	Other fallow	Net area sown
1	2	3	4	5	6	7	8	9	10	11
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
2010-11	15571	5813	342	494	375	1298	840	773	229	5407
2011-12	15571	5813	342	494	375	1298	840	888	229	5292

Source: Directorate of Agriculture and Food Production, Odisha  $\,$ 

Annexure 3.2: Cropping Pattern of Principal Crops

(Area in '000 ha)

Crops	200	2006-07	2007-08	-08	2008-09	3-09	2008	2009-10	2010-11	0-11	201	2011-12
	Area	% to total	Area	% to total	Area	% to total	Area	% to total	Area	% to total	Area	% to total
1	2	က	4	2	9	2	8	6	10	=	12	13
(A) Cereals												
Rice	4,451	75.70	4,452	74.76	4,455	75.84	4,365	73.00	4226	71.17	4005	76.45
Wheat	4	90.0	9	0.10	5	60.0	4	0.07	3	0.05	1	0.02
Maize	61	1.04	74	1.25	29	1.14	81	1.35	117	1.97	103	1.97
Ragi	65	1.11	89	1.14	99	1.12	29	0.99	99	1.11	22	1.05
Others	32	0.54	31	0.52	29	0.50	30	0.50	28	0.47	29	0.55
Total (A)	4,613	78.45	4,631	77.77	4,622	78.69	4,539	75.91	4440	74.77	4193	80.03
(B) Pulses												
Gram	37	0.63	39	99.0	38	0.65	45	0.75	42	0.71	39	0.74
Arhar	132	2.25	137	2.30	139	2.36	133	2.22	135	2.27	142	271
Other pulses	621	10.56	673	11.30	629	10.71	689	11.52	702	11.82	370	2.06
Total (B)	790	13.44	849	14.26	908	13.72	298	14.49	879	14.80	551	10.52
Total Food grains (A+B)	5,403	91.89	5,480	92.03	5,428	92.41	5,406	90.40	5319	89.58	4744	90.55
(C) Oil Seeds												
Groundnut	62	1.34	84	1.41	83	1.41	92	1.27	73	1.23	99	1.26
Sesamum	20	0.85	48	0.81	38	0.65	46	0.77	52	0.88	27	0.52
Rape seed and mustard	15	0.26	16	0.27	14	0.24	13	0.22	14	0.24	10	0.19
Caster seeds	17	0.29	18	0:30	17	0.29	16	0.27	15	0.25	13	0.25
Others	96	1.63	86	1.64	06	1.53	204	3.41	248	4.18	135	2.58
Total (C)	257	4.37	264	4.43	242	4.12	355	5.94	403	6.79	251	4.79
(D) Fibres												
Cotton	29	1.00	20	0.84	28	0.99	54	6.0	74	1.25	102	1.95
Jute	2	0.09	9	0.10	2	0.33	3	0.05	3	0.05	4	0.08
Other fibers	32	0.54	31	0.52	29	0.49	49	0.82	24	0.40	22	0.42
Total (D)	96	1.63	87	1.46	89	1.81	106	1.77	101	1.70	128	2.44
												(Contd)

Crops	200	2006-07	200	2007-08	200	2008-09	2003	2009-10	201	2010-11	201	2011-12
	Area	% to total	Area	% to total	Area	% to total						
1	2	အ	4	2	9	2	8	6	10	11	12	13
(E) Other Crops												
Sugarcane	20	0.34	20	0.33	11	0.19	8	0.13	13	0.22	14	0.27
Tobacco	4	0.07	4	0.07	4	0.07	က	0.05	2	0.03	2	0.04
Potato	6	0.15	6	0.15	7	0.12	8	0.13	7	0.12	9	0.11
Chillies	75	1.28	75	1.26	92	1.29	92	1.27	92	1.28	27	1.47
Ginger	16	0.27	16	0.27	17	0.29	17	0.29	17	0.29	17	0.32
Total (E)	124	2.11	124	2.08	115	1.96	112	1.87	114	1.92	116	2.21
Grand Total (A+B+C+D+E)	5,880	100	5,955	100	5,874	100	5,979	100	5938	100.00	5239	100.00

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

Annexure 3.3: Production of different crops in Odisha

(In '000 MT)

Crops	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010- 11	2011-12
1	2	3	4	5	6	7	8	9
(A) Cereals								
Rice	6,537	6,859	6,825	7,541	6,813	6,917	6828	5807
Jowar	6	6	6	6	6	6	5	-
Bajra	2	2	1	2	2	2	2	-
Maize	102	102	103	147	135	175	299	212
Ragi	41	40	43	47	41	37	47	31
Wheat	5	4	6	9	7	6	4	2
Other Cereals	11	10	9	9	8	10	7	16
Total (A)	6,704	7,023	6,993	7,761	7,012	7,153	7192	6069
(B) Pulses								
Gram	20	23	24	26	25	34	33	30
Tur	88	98	106	113	119	112	124	115
Other pulses	153	216	221	245	237	252	270	102
Total (B)	261	337	351	384	381	398	427	247
Total Food grains (A+B)	6,965	7,360	7,344	8,145	7,393	7,551	7619	6316
(C) Oil Seeds								
Groundnut	103	106	88	103	96	89	86	79
Sesamum	11	13	11	10	7	10	12	5
Rape seed and mustard	3	3	3	3	3	3	3	2
Lineseeds	8	10	11	12	11	12	12	-
Caster seeds	10	9	11	11	11	10	9	8
Other oil seeds	40	22	26	33	24	26	100	72
Total (C)	175	163	150	172	152	150	222	166
(D) Fibers								
Cotton	111	145	108	125	146	147	241	231
Jute	4	4	9	9	4	6	7	6
Mesta	105	97	94	101	95	82	77	-
Other fibres	41	43	46	43	43	40	44	114
Total (D)	261	289	257	278	288	275	369	351
(E) Other Crops								
Sugarcane	926	1,073	1,274	1,069	646	490	903	885
Tobacco	3	-	3	3	3	2	2	2
Potato	81	75	79	94	76	97	76	63
Chillies	63	63	64	64	64	64	65	74
Ginger	31	31	32	32	33	118	118	135
Total (E)	1,104	1,242	1,452	1,262	822	771	1164	1158
Grand Total (A+B+C+D+E)	8,505	9,054	9,203	9,857	8,655	8,747	9373	7991

Source: (a) Directorate of Agriculture and Food Production, Odisha.
(b) Directorate of Economics & Statistics, Odisha
© Directorateof Horticulture, Odisha

Annexure 3.4: District-wise Area and Production of Autumn, Winter and Summer Paddy (2011-12)

Area in '000 hectare Production in '000 MT

Districts	Au	tumn	W	inter	Sur	nmer
	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7
Angul	14	14	64	101	1	2
Balangir	53	21	117	77	4	14
Balasore	1	1	211	645	24	109
Bargarh	53	61	182	519	71	403
Bhadrak	S	S	168	416	6	17
Boudh	5	4	59	110	1	2
Cuttack	6	7	128	372	4	17
Deogarh	14	23	24	70	S	S
Dhenkanal	4	8	88	281	1	4
Gajapati	S	1	36	55	S	1
Ganjam	1	1	261	231	8	S
Jagatsinghpur	2	3	79	292	S	1
Jajpur	12	7	108	190	1	5
Jharsuguda	12	9	26	59	1	2
Kalahandi	56	57	146	211	12	42
Kandhamal	5	7	32	55	1	2
Kendrapara	2	3	130	295	3	10
Keonjhar	32	56	138	375	2	7
Khordha	S	S	96	223	1	3
Koraput	24	33	81	180	13	47
Malkangiri	12	7	82	73	S	S
Mayurbhanj	29	59	266	770	4	13
Nuapara	36	26	59	79	4	11
Nayagarh	1	1	85	82	S	S
Nabarangpur	26	20	114	127	S	1
Puri	S	S	120	221	30	118
Rayagada	6	7	52	101	1	3
Sambalpur	36	46	83	219	18	105
Sonepur	16	11	85	219	31	202
Sundergarh	78	140	113	372	2	5
Odisha	536	633	3233	7020	236	1146

N.B: 'S' denotes area less than 500 ha and production less than 500 MT Source: Directorate of Economics & Statistics, Odisha

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

Crops	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8	9
Rice (total)	14.55	15.34	15.34	16.94	15.29	15.85	16.16	14.50
Autumn rice	8.22	8.72	10.11	10.97	10.40	9.00	8.31	7.78
Winter rice	15.43	16.23	15.80	17.50	15.41	16.35	16.85	14.33
Summer rice	22.30	21.60	22.93	24.47	24.51	27.13	29.59	32.13
Ragi	6.40	6.15	6.63	6.93	6.24	6.38	7.09	5.62
Gram	6.07	6.45	6.51	6.59	6.63	7.48	7.80	7.80
Mung	2.64	2.57	2.43	2.45	2.60	2.71	2.95	2.87
Biri	2.63	2.52	2.91	3.11	2.88	3.02	2.96	2.66
Sugarcane	639.12	657.00	634.17	539.50	600.43	614.88	686.88	610.19
Mustard	1.91	1.91	1.70	2.03	1.84	2.13	2.10	2.12
Jute	17.66	16.28	17.72	15.42	14.74	18.62	20.56	14.77
Cotton	24.21	4.35	3.07	4.23	4.30	4.64	5.50	3.86
Potato	94.91	90.40	97.01	110.70	103.32	123.14	116.74	109.03
Groundnut	11.71	11.71	11.11	12.20	11.56	11.69	11.77	11.89
Wheat	13.10	13.69	14.83	15.72	14.02	14.48	14.61	16.40

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

Annexure 3.6: Cropping Intensity Across States

Name of the State		Cropping Intensity (%)	
	2006-07	2007-08	2008-09
1	2	3	4
Punjab	187.9	188.0	190
West Bengal	181.9	184.1	185
Harayana	179.8	179.7	181
Himachal Pradesh	174.9	179.0	173
Tripura	108.1	104.4	N.A
Uttar Pradesh	155.7	151.8	156
Jammu & Kashmir	151.9	154.5	154
Odisha	158.5	160.3	162
Kerala	138.8	132.2	129
Bihar	136.3	139.6	138
Madhya Pradesh	136.5	139.0	N.A
Arunachal Pradesh	126.3	129.8	138
Maharashtra	129.2	129.7	127
Assam	135.7	139.4	145
Rajasthan	128.5	129.9	130
Andhra Pradesh	126.3	126.1	127

(Contd...)

Name of the State		Cropping Intensity (%)	
	2006-07	2007-08	2008-09
1	2	3	4
Nagaland	125.9	126.6	N.A
Goa	125.6	126.3	N.A
Meghalaya	115.7	120.4	N.A
Gujarat	124.9	125.4	118
Jharkhand	107.0	155.7	112
Chhatisgarh	121.4	121.6	121
Tamil Nadu	114.0	114.9	115
Manipur	100.0	100.0	N.A
Mizoram	100.0	103.5	N.A
Karnataka	123.1	123.7	122
Sikkim	109.8	109.8	N.A
Uttarakhand	158.1	164.8	158
All-India	138.1	139.0	N.A

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

Annexure 3.7: Cropping Intensity in Odisha

Year	Net area sown (in '000 hect.)	Gross cropped area (in '000 hect.)	Cropping Intensity (%)
1	2	3	4
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
2010-11	5,407	8,565	158
2011-12	5,292	8,799	166

Source: Directorate of Agriculture and Food Production, Odisha

Annexure 3.8: Area under HYV Paddy

(In '000 ha)

Year	Autı	ımn	Wir	nter	Sum	mer	То	tal
	Irrigated	Un- irrigated	Irrigated	Un- irrigated	Irrigated	Un- irrigated	Irrigated	Un- irrigated
1	2	3	4	5	6	7	8	9
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
2010-11	22.72	452.42	1032.76	1606.81	292.96	-	1348.44	2059.23
2011-12	28.46	383.43	1029.38	1696.56	235.36	-	1293.20	2079.99

Source: Directorate of Economics and Statistics.Odisha.

Annexure 3.9: District-wise Estimates of Area, Production and Yield Rate of HYV Paddy (2011-12)

Districts	Area (In hect.)	Production of H	YV Paddy (in qtls.)	Yield rate	(qtl./hect.)
		Paddy	Rice	Paddy	Rice
1	2	3	4	5	6
Angul	77699	1155104	762372	14.87	9.81
Balangir	164478	1091607	720463	6.64	4.38
Balasore	201067	6936467	4578070	34.50	22.77
Bargarh	305294	9830596	6488196	32.20	21.25
Bhadrak	132327	3895637	2571123	29.44	19.43
Boudh	61142	1123718	741654	18.38	12.13
Cuttack	117338	3765372	2485144	32.09	21.18
Deogarh	37339	920765	607706	24.66	16.28
Dhenkanal	88472	2834208	1870577	32.04	21.14
Gajapati	36441	562219	371064	15.43	10.18
Ganjam	261601	2318764	1530386	8.86	5.85
Jagatsinghpur	72936	2755405	1818566	37.78	24.93
Jajpur	92533	1752753	1156819	18.94	12.50
Jharsuguda	38621	703533	464334	18.22	12.02
Kalahandi	209104	3049278	2012525	14.58	9.62
Kandhamal	11154	240458	158704	21.56	14.23
Kendrapara	89531	2528177	1668596	28.24	18.64
Keonjhar	151240	3988215	2632220	26.37	17.40
Khordha	64214	1687857	1113987	26.28	17.35
Koraput	99133	2350934	1551612	23.71	15.65
Malkangiri	58801	563190	371706	9.58	6.32
Mayurbhanj	205368	6270736	4138688	30.53	20.15
Nuapara	90791	1140549	752763	12.56	8.29
Nayagarh	62967	667984	440870	10.61	7.00
Nabarangpur	95468	1027937	678439	10.77	7.11
Puri	115193	3138130	2071165	27.24	17.98
Rayagada	54761	1060914	700203	19.37	12.79
Sambalpur	135083	3684431	2431728	27.28	18.00
Sonepur	131612	4325506	2854835	32.87	21.69
Sundargarh	111482	3402206	2245454	30.52	20.14
Odisha	3373190	78772650	51989969	23.35	15.41

Source: Directorate of Economics & Statistics, Odisha

Annexure 3.10: Area, Production and Yield Rate of Fruits

			Area in t	Area in thousand he	hectare; production in thousand MT; Yield rate in Qtl per hectare	tion in thousa	nd MT; Yield	l rate in Qtl pe	r hectare			
Fruits		2008-09			2009-10			2010-11			2011-12	
	Area	Production	Yield Rate	Area	Production	Yield Rate	Area	Production	Yield Rate	Area	Production	Yield Rate
1	2	က	4	2	9	2	8	6	10	11	12	13
Mango	164.12	479.8	29.2	177.63	577.48	32.5	190.08	642.01	33.78	197.17	715.18	36.27
Banana	24.1	307.3	127.6	24.59	429.16	174.5	26.86	488.66	181.93	27.48	506.24	184.22
Citrus	27.1	318.9	117.7	27.41	258.8	94.4	27.53	265.35	96.39	27.81	269.02	98.87
Pine apple	0.7	7.9	112.9	0.73	8.39	114.9	0.82	10.49	127.93	0.83	10.64	128.19
Papaya	1.5	28.8	192	2.09	45.73	218.8	3.62	77.60	214.36	3.71	81.53	219.76
Coconut	52.2	2939	5630	52.49	3119	0809	53.09	3567	6719	53.94	3750	6952
Others	72.0	518.6	720	69.62	554.37	9.62	71.75	564.21	78.64	71.99	571.75	79.42
Total	341.8	1661.3 & 2939 lakh nuts		354.56	1873.93 & 3119 lakh nuts		373.75	2048.32 & 3567 lakh nuts		382.93	2154.36 & 3750 lakh nuts	

<sup>\*</sup> in lakh numbers/\*\* numbers/hectare Source: Directorate of Horticulture, Odisha

Annexure 3.11: Area and Production of Some major Spices in Odisha

(Area: '000ha, Production: '000MT)

Spice	2007-08		2008	2008-09	200	2009-10	2010	2010-11	201	2011-12
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
1	2	3	4	2	8	6	9	6	10	111
Onion	28.77	262.37	31.64	278.87	33.08	297.05	34.75	385.91	35.15	418.99
Garlic	11.04	35.56	11.08	35.80	11.08	35.82	13.12	45.76	13.29	48.13
Coriander	19.07	09.6	19.10	9.14	19.09	9.45	21.38	11.20	22.00	12.05
Chilly	75.13	63.92	75.50	64.3	75.62	64.70	76.01	70.39	77.13	74.03
Ginger	16.34	32.44	16.53	33.37	16.90	118.13	17.02	126.53	17.15	134.98
Turmeric	24.82	60.34	25.11	61.50	25.52	191.02	26.83	202.92	26.88	209.08
Total	175.17	464.23	178.96	482.98	181.35	737.19	154.35	456.80	156.45	478.27

Source: Directorate of Horticulture, Odisha

Annexure 3.12: Area and Production of Floricultural Crops

Year	Mar	igold	Ro	ose	Gla	dioli	Tube	erose
	Area (ha)	Production (in Qtls.)	Area (ha)	Production (in lakh stems)	Area (ha)	Production (in lakhs spikes)	Area (in ha)	Production (in Qtls.)
1	2	3	4	5	6	7	8	9
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
2010-11	2660	243500	1790	3351	2350	2329	520	13600
2011-12	2960	246500	1930	3660	2380	2360	540	14200

Source: Directorate of Horticulture, Odisha

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

(in Lakh Qtls)

State		2008-09			2009-10			2010-11	
	Govt. Agencies	Private	Total	Govt. Agencies	Private	Total	Govt. Agencies	Private	Total
1	2	3	4	5	6	7	8	9	10
Odisha	5.19	0	5.19	6.64	0	6.64	6.73	-	6.73
India	150.73	99.62	250.35	170.81	108.92	279.72	N.A	N.A	N.A

Source: Directorate of Agriculture and Food Production, Government of Odisha

Annexure 3.14: Status of Irrigation Potential Created & Utilised in Odisha

(In '000 ha)

Year				Net Area Irr	igated		
	Irrigation I	Potential Crea	ted (th.ha.)	Pote	ntial Utilised (t	h. Ha.)	Percentage of
	Kharif	Rabi	Total	Kharif	Rabi	Total	Utilisation
1	2	3	4	5	6	7	8
2000-01	2533.83	1071.99	3605.82	1589.88	535.84	2125.72	58.95
2005-06	2731.50	1294.92	4026.42	1922.70	1042.79	2965.49	73.65
2006-07	2720.46	1318.52	4038.98	2001.98	1147.47	3149.45	77.98
2007-08	2765.73	1342.06	4107.79	2027.00	1281.46	3308.46	80.54
2008-09	2867.01	1407.18	4274.19	2081.13	1096.03	3177.16	74.33
2009-10	2962.21	1476.81	4439.02	2058.85	979.67	3038.52	68.45
2010-11	3035.85	1477.97	4513.82	2085.21	1020.70	3105.91	68.81
2011-12(p)	3063.67	1528.87	4592.54	2078.90	1008.46	3087.36	67.23

Source: Directorate of Agriculture and Food Production, Government of Odisha

Annexure 3.15: State-wise Percent Share of Irrigated Area under Principal Crops, 2008-09

State	Rice	Total Cereals	Total Pulses	Total Food grains	Total Oil Seeds	Sugarcane	Cotton	Tobaco	All Crops
1	2	င	4	5	9	2	8	6	10
Andhra Pradesh	96.8	83.4	1.6	63.9	20.6	93.5	18.2	27.3	48.7
Assam	5.3	5.1	0.1	4.9	0.1	ı	ı	•	3.8
Bihar	57.2	69.1	2.4	63.4	38.9	28.0	1	82.0	61.0
Chhatisgarh	32.7	31.4	9.1	27.6	4.7	95.5	ı	70.4	27.0
Gujarat	63.3	52.8	11.3	44.7	29.7	100.0	26.7	86.4	45.6
Haryana	6.66	0.06	30.4	9.78	77.6	99.1	99.5	100.0	85.3
Himachal Pradesh	63.5	19.7	14.1	19.5	17.1	45.8	32.1		19.7
Jammu& Kashmir	90.5	39.0	12.2	38.1	70.9	2.0.0	14.3		41.4
Karnataka	74.7	36.4	8.5	28.5	26.0	100.0	20.1	12.8	31.9
Kerala	72.2	71.2	ı	70.0	19.9	87.7	1		17.0
Madhya Pradesh	17.8	49.0	37.1	44.5	6.4	9.66	41.2	84.3	32.5
Maharashtra	26.4	20.0	9.1	16.8	4.2	100.0	2.7	16.4	19.0
Odisha	46.8	44.2	7.7	33.6	18.7	100.0	3.6	100.0	35.0
Punjab	99.5	98.2	84.0	98.1	88.5	95.4	100.0	,	92.6
Rajasthan	58.5	30.6	15.3	26.4	59.1	2.96	93.5	85.7	34.7
Tamil Nadu	93.3	74.7	5.7	63.1	56.4	100.0	27.7	8.66	58.3
Uttar Pradesh	78.8	82.8	21.0	75.9	26.2	93.2	96.3	100.0	76.4
West Bengal	48.4	49.2	13.7	48.2	68.2	44.6	100.0	91.8	56.2
All India	58.7	55.9	16.0	48.3	27.1	93.7	35.3	46.0	45.3
Course Minister of Acrientlems Courses Minister of India	dring Commons	+ of India							

Source: Ministry of Agriculture, Government of India

Annexure 3.16: Fertilizer Consumption (kg/ha) in Major States of India

State	2001-02	2002-03	2003-04	2004-05	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8
Andhra Pradesh	143.47	128.44	145.30	155.80	203.61	199.64	239.71
Assam	38.81	42.73	47.50	41.60	49.26	57.34	62.09
Bihar	87.39	87.15	81.00	85.70	152.32	162.81	178.98
Gujarat	85.52	77.76	94.70	106.80	111.07	143.60	140.71
Haryana	155.69	152.79	161.70	166.20	166.72	187.63	201.62
Karnataka	101.48	90.91	78.80	110.80	117.34	115.71	147.28
Kerala	60.72	68.17	64.20	67.40	57.00	69.76	89.41
Madhya Pradesh	39.96	36.40	51.60	56.00	47.13	66.39	70.77
Maharashtra	78.24	73.80	64.20	77.70	84.52	103.11	113.69
Odisha	39.00	39.00	37.10	40.40	47.00	52.13	61.50
Punjab	173.38	174.99	190.10	192.50	210.06	209.99	221.42
Tamil Nadu	141.55	114.00	114.50	152.90	183.67	178.29	216.54
Uttar Pradesh	130.44	126.51	125.70	125.50	140.37	149.61	156.31
West Bengal	126.82	122.23	114.10	129.00	127.50	144.21	157.69
Rajasthan	38.88	28.54	67.40	36.60	36.29	45.47	48.85
All India	90.12	84.82	88.20	96.60	104.50	117.07	128.58

Source: Ministry of Agriculture, Government of India

Annexure 3.17: Fertilizer Consumption in Odisha

#### In thousand MT

Year	Nitrogen (N)	Phosphates (P)	Potash (K)	Total	Kg./hect.
1	2	3	4	5	6
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	40.50	317.21	39.00
2004-05	223.54	77.99	53.77	355.30	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	59.78
2010-11	293.43	149.85	78.52	521.80	62.80
2011-12	323.40	135.48	55.80	514.68	62.19

Source: Directorate of Agriculture and Food Production, Odisha

Annexure 3.18: District-wise Consumption of Fertilizers, 2011-12 (P)

Name of the District		Fertilizer Consu	ımption (in MT)	
Ī	Nitrogenous	Phosphatic	Potassic	Total
Ī	(N)	(P)	(K)	Kg/ha
1	2	3	4	5
Angul	4029	1718	857	23.12
Balangir	12958	5109	3397	49.71
Balasore	23671	10031	4646	117.49
Bargarh	33338	16504	6837	127.69
Bhadrak	16188	8591	3034	121.41
Boudh	3907	1824	710	49.30
Cuttack	14019	4710	2346	67.73
Deogarh	2336	1457	510	45.41
Dhenkanal	4566	2091	887	32.00
Gajapati	2968	1352	114	33.71
Ganjam	26877	6280	1023	55.41
Jagatsinghpur	5316	2267	846	48.79
Jajpur	8451	3700	1907	54.5
Jharsuguda	4507	2256	576	89.41
Kalahandi	19749	7634	3786	57.43
Kandhamal	706	354	132	7.29
Kendrapara	4326	1958	704	27.06
Keonjhar	6654	3766	789	30.15
Khordha	7780	2702	1409	73.12
Koraput	9499	5107	2048	46.86
Malkangiri	3978	2641	698	39.17
Mayurbhanj	13469	6894	2241	50.23
Nuapada	6185	1785	1021	33.35
Nayagarh	4963	1066	812	35.89
Nabarangpur	30708	9969	5240	175.37
Puri	10970	4225	2767	68.82
Rayagada	6067	2667	630	39.90
Sambalpur	20863	10091	3764	139.59
Sonepur	5630	2623	1438	44.49
Sundargarh	8726	4111	631	38.46
Odisha	323404	135483	55800	62.19

Annexure 3.19: Pesticide Consumption in Odisha

Year	Total consumption (in thousand MT)	Consumption per hectare (In Gms)
1	2	3
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	1.22	140.06
2010-11	1.18	151.50
2011-12	1.16	148.00

Source: Directorate of Agriculture and Food Production, Odisha

Annexure 3.20: District-wise Estimates of Area of Operational Holdings for all Social Groups in Odisha, 2005-06

Area in ha.

District	All Gı	roups	Schedul	ed Caste	Schedul	ed Tribes
	No.	Area	No.	Area	No.	Area
1	2	3	4	5	6	7
Angul	141041	152548	19785	15803	19165	19582
Balasore	248021	208968	52213	34922	27479	19073
Bargarh	186738	279305	27098	23809	39833	51562
Boudh	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

(Contd...)

District	All Gı	coups	Schedul	ed Caste	Schedul	ed Tribes
	No.	Area	No.	Area	No.	Area
1	2	3	4	5	6	7
Keonjhar	219572	228552	21674	15838	113254	110773
Khordha	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
Nabarangpur	159780	199918	22236	24467	104439	134092
Nayagarh	102135	107907	10261	7993	11932	18585
Nuapada	93643	128540	12435	12820	34686	50643
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

Source: Agricultural Census, 2005-06

Annexure 3.21: District-wise & Group-wise Distribution of the Number of Operational Holdings for all Social Groups in Odisha

Size Class (Area in Ha)

Year		Marginal	Small	Semi Medium	Medium	Large	All Classes
1	2	3	4	5	6	7	8
All Social G	roup						
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 7	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

Source: Directorate of Economics & Statistics, Odisha

## Annexure 3.22: Agricultural Credit Advanced

(Rs. in crore)

Year	Commercial Banks*	Co-operative Banks	OSFC	Total
1	2	3	4	5
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
2010-11	2894.83	3856.98	0	6751.81
2011-12	3768.65	4751.02	0	8519.67

Note: \*Commercial Banks include RRBs Source: State Level Bankers Committee, Odisha

Annexure 3.23: Subsidies for Agricultural Equipments, (2011-12)

Machineries	Quantity supplied (in nos.)	Subsidy Released (Rs. In Crore)
1	2	3
Tractor	3926	35.33
Power Tiller	8897	53.38
Pump Sets	7445	6.70
Reaper/Transplanter/Rotavator	869	5.81
Hydraulic Trailer	1503	3.76
Combined harvester	65	2.60
Power thresher-cum-winnower	2100	5.04
Others	6960	4.54
Total	-	117.16

Source: Directorate of Agriculture and Food Production, Government of Odisha

Annexure 3.24: Marine Fisheries Resources of India

State/Union Territory	Approx. Length of Coastline (Kms.)	Continental Shelf area ('000 Sq. Kms.)	Number of Landing Centers	Number of Fishing Villages
1	2	3	4	5
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
Maharashtra	720	112	152	406
Odisha	480	26	57	641
Tamil Nadu	1076	41	352	581
West Bengal	158	17	44	346
Andaman & Nicobar Island	1912	35	25	100
Daman & Diu	27	-	7	22
Lakshadweep	132	4	19	20
Pondicherry	45	1	26	28
Total	8118	530	1376	3322

 $Source: Annual\ Report, Department\ of\ Animal\ Husbandry,\ Dairying\ and\ Fisheries,\ Ministry\ of\ Agriculture.\ Govt.\ of\ India.$ 

Annexure 3.25: Inland Fishermen Population, 2012 (Projection)

District	No. of	No. of House-		Fishermen	Population	
	Fishermen Villages	holds	Male	Female	Children	Total
1	2	3	4	5	6	7
Mayurbhanj	18	1261	3895	3651	1145	8691
Balasore	121	8337	15762	15468	10570	41800
Bhadrak	-	2667	7040	6306	1900	15246
Cuttack	493	12755	25059	22929	21806	69795
Jagatsinghpur	250	3622	8586	7425	5602	21612
Jajpur	267	8549	19393	15769	17340	52502
Kendrapara	-	-	21523	19320	14121	54963
Khordha	287	13032	22262	20305	27732	70300
Nayagarh	171	4204	9783	8307	5979	2469
Puri	132	8882	23248	19067	8148	50.463
Ganjam	444	17866	33236	29312	34337	96885
Gajapati	97	1086	2981	2933	2834	8748
Kandhamal	10	193	253	261	364	878
Boudh	158	1655	3043	3065	2711	8819

(Contd...)

District	No. of	No. of House-		Fishermen	Population	
	Fishermen Villages	holds	Male	Female	Children	Total
1	2	3	4	5	6	7
Koraput	159	3016	3366	3546	5972	12884
Malkangiri	98	294	930	1012	481	2423
Rayagada	40	208	289	252	221	762
Nabarangpur	24	186	236	229	594	1059
Kalahandi	19	412	925	625	-	1550
Nuapara	231	488	1207	967	114	2283
Sambalpur	-	2778	5234	2872	6415	14522
Deogarh	82	973	1559	1357	1123	4039
Jharsuguda	2	8432	8298	2919	17205	28422
Bargarh	22	1599	3599	3020	2478	9097
Keonjhar	152	983	3169	2638	2386	8193
Sonepur	-	-	7082	6165	4971	18218
Bolangir	-	3148	9074	8754	-	17828
Sundargarh	-	1714	3045	3038	2886	8969
Dhenkanal	173	3681	8097	7713	9233	25043
Angul	96	1881	3406	3110	1771	8287
Total	3546	113902	255579	222336	210440	688355
Chilika	132	22032	44125	37994	48249	218898
G.Total	3678	135934	299704	260330	258689	907253

Source: Directorate of Fisheries

Annexure 3.26: Marine Fishermen Population, 2012 (Projected)

District	No. of Villages	No. of House		Fishermen	population	
		holds	Male	Female	Children	Total
1	2	3	4	5	6	7
Balasore	213	14489	64480	58192	76987	199659
Bhadrak	109	6980	23506	20692	26329	70526
Jagatsinghpur	75	6915	23576	21885	21162	66803
Kendrapara	85	6216	16621	14495	16111	47227
Ganjam	28	7088	13599	12926	12226	38751
Puri	79	11332	15458	14218	17620	47296
Total	589	53020	94491	86140	152141	332772

Source: Directorate of Fisheries

Annexure 3.27: Fish Production by States and Union Territories

In thousand MT

States/Union	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Territories 1	2	3	4	5	6	7	9
Andhra Pradesh	853.05	891.09	856.93	1010.08	1252.78	1293.85	1349.94
Arunachal Pradesh	2.70	2.75	2.77	2.83	2.88	2.65	3.04
Assam	186.31	188.00	181.48	190.32	200.15	218.82	227.24
Bihar	267.51	279.53	267.04	319.10	300.65	297.40	299.91
Goa	990.44	104.95	102.39	33.43	86.21	84.33	93.27
Gujarat	635.21	733.82	747.33	721.91	765.90	771.52	774.90
Haryana	42.05	48.20	60.08	67.24	76.29	100.46	96.20
Himachal Pradesh	6.90	7.29	6.89	7.85	7.79	7.75	7.38
Jammu & Kashmir	19.10	19.15	19.20	17.33	19.27	18.94	19.70
Karnataka	251.23	297.57	292.46	297.69	361.85	408.05	481.58
Kerala	678.31	636.89	677.63	667.33	865.99	663.12	681.61
Madhya Pradesh	62.06	61.08	65.04	63.89	68.47	66.12	56.45
Maharashtra	548.02	580.55	595.94	556.45	523.10	538.35	576.99
Manipur	17.80	18.22	18.61	18.60	18.80	19.20	20.20
Meghalaya	5.64	4.12	5.49	4.00	3.96	4.21	4.56
Mizoram	3.68	3.75	3.79	3.76	2.89	3.04	2.90
Nagaland	4.90	5.50	5.80	5.80	6.18	6.36	6.59
Odisha	315.59	325.45	342.04	349.48	374.82	370.54	382.50
Punjab	77.70	85.64	86.70	78.73	86.21	122.86	97.4
Rajasthan	16.39	18.50	22.20	25.70	24.10	26.91	23.71
Sikkim	0.14	0.15	0.15	0.18	0.17	0.17	0.18
Tamil Nadu	459.43	463.06	542.28	559.36	534.17	534.17	596.55
Tripura	19.84	23.87	28.63	36.24	36.00	42.27	49.23
Uttar Pradesh	277.07	289.58	306.73	325.95	349.27	392.93	417.48
West Bengal	1215.00	1250.00	1359.10	1447.26	1484.00	1505.00	1615.31
A&N Island	32.68	12.09	28.68	28.68	32.49	33.19	33.92
Chandigarh	0.08	0.09	0.17	0.21	0.24	0.24	0.24
D&N Haveli	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Daman & Diu	12.51	17.79	16.41	26.36	14.14	15.88	16.98
Delhi	1.41	0.70	0.61	0.61	0.72	0.72	0.82
Lakshadweep	11.96	11.96	11.75	11.04	12.59	12.37	12.37
Pondicherry	36.75	21.45	39.66	39.01	40.30	41.94	41.95
Chhattisgarh	120.07	131.75	137.75	139.37	158.70	174.24	228.21
Uttarakhand	2.57	2.79	3.03	3.09	3.16	3.49	3.82
Jharkhand	22.00	34.27	34.27	67.89	75.80	70.50	71.89
India	6304.75	6571.62	6869.05	7126.83	7616.09	7851.61	8294.68

Source: Directorate of Fisheries.

## Annexure 3.28: Production of Fish and Crab in Odisha

In thousand MT

Year	Inland fish	production	Marine fish	Total fish	Per capita	Crab
	Fresh water	Brackish water	production	production	consumption of fish (Kg.)	Production
1	2	3	4	5	6	7
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	191.63	22.95	128.14	342.72	8.99	1.74
2007-08	195.75	22.97	130.76	349.48	9.29	1.79
2008-09	213.00	26.33	135.49	374.82	13.27	2.09
2009-10	215.80	25.51	129.33	370.64	10.86	2.43
2010-11	224.96	27.75	133.48	386.19	9.42	3.37
2011-12(P)	237.47	30.06	114.30	381.83	9.91	2.28

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

Annexure 3.29: Source-wise Fresh Water Fish Production in Odisha

In '000 MT

Year	Tanks/Ponds	Reservoirs	Lakes/Swamps/ Bheels	Rivers/Canals	Total
1	2	3	4	5	6
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	164.74	12.10	2.43	12.36	191.63
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	190.37	12.33	1.85	11.25	215.80
2010-11	197.59	14.61	1.65	11.11	224.96
2011-12(P)	211.19	13.73	1.94	10.61	237.47

Note: (P) provisional

Source: Directorate of Fisheries, Odisha

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

(In thousand MT)

Year	Chilika lake	Brackish water shrimp	Estuaries	Total Production
1	2	3	4	5
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	11.96	10.98	2.57	25.51
2010-11	13.07	11.63	3.05	27.75
2011-12(P)	14.23	11.97	3.86	30.06

Note: (P) provisional

Source: Directorate of Fisheries, Odisha

Annexure 3.31: Source-wise Crab Production in Odisha

In MT

Year	Chilika Lake	Marine Sources	Total
1	2	3	4
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	210.89	2216.10	2426.99
2010-11	285.90	3082.02	3367.92
2011-12(P)	386.01	1892.41	2278.42

Note: (P) provisional

Source: Directorate of Fisheries, Odisha

## Annexure 3.32: Export and Import of Fish

(In thousand MT)

Year	1	Fish export to other	States and Countrie	S	Import of fresh
	Marine fish	Fresh Water fish	Brackish Water fish	Total Export	water fish
1	2	3	4	5	6
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	63.02	26.85	17.22	107.09	92.07
2010-11	75.72	19.29	18.55	113.56	43.40
2011-12(P)	63.28	21.49	19.32	104.09	59.28

P: Provisional

Source: Directorate of Fisheries, Odisha

Annexure 3.33: Export of Marine Products to Foreign Countries

Year	Quantity (In '000 MT)	Value (Rs. in Crore)
1	2	3
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
2010-11	19.73	606.41
2011-12(P)	21.08	792.76

P: Provisional

Source: Directorate of Fisheries, Odisha

Annexure 3.34: State-wise Total Number of Livestock and Poultry – 2007 Livestock Census

('000 in number)

Andrich Andreading Light         3         4         5         6         7         8         9         10         11         12         13         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         15         14         14         15         14         15         14         14         15         14	States/UTs	Cattle	Buffaloes	Sheep	Goats	Pigs	Horses &	Mules	Donkeys	Camels	Yaks	Mithuns	Total	Total
Printedesh         11223         13273         2539         9629         439         26         6         7         8         1         12         10         11         12         11         12         11         12         13273         25539         9629         439         26         6         6         7         6         7         6         6         6         6         6         7         6         7         7         14         21         6         17         4         14         20         6         6         6         6         6         6         6         7         6         7         7         6         14         14         14         2         6         7         6         7         6         7         6         7         4         14         <							Ponies						Livestock	Poultry
Hyalesty         1122         13272         2539         9626         439         26         60         50         60         70         60         70         60         70         40         14         21         4143         1413         1413         1413         1413         1414         1414         1414         1418         1418         1418         1418         26         26         26         26         26         26         26         26         27         26         27<		2	က	4	2	9	2	8	6	10	Ξ	12	13	14
thall         503         3         20         356         366         6         0         0         14         219         1413           thall         1004         3         3         20         200         11         0         0         0         0         1         219         113           sgarth         3941         1604         1208         10167         622         51         0         2         0	ndhra Pradesh	11223	13272	25539	9626	439	26	0	20	0		0	60175	123981
sgarth         6990         334         4320         2000         11         0         0         0         0         0         1727           sgarth         12539         6690         218         11057         632         51         0         24         0         0         0         0         0         0         30342           sgarth         9491         1664         140         2768         413         1         0         0         0         0         0         0         0         0         1418           t         71         37         0         11         58         13         1         0         0         0         0         0         1418           t         375         867         4640         22         14         0         5         38         0         2         38         0         177         178         178         178         2         178         2         2         178         2         178         2         2         2         0         178         36         178         178         2         178         2         2         2         2         2	runachal adesh	203	8	20	292	356	9	0	0	0	14	219	1413	1348
sgarth         9491         1664         10167         632         51         0         24         0         0         9         9         9342           sgarth         9491         1664         140         2768         413         1         6         0         0         0         0         0         0         0         1418           t         71         37         6         11         58         14         0         0         0         0         0         1418           t         375         8673         601         538         134         26         11         5         39         0         0         0         0         1418           t         1552         5853         601         124         26         11         5         39         0         22         39         0         22         39         0         22         14         20         22         24         24         24         24         24         24         24         25         24         25         25         25         25         25         25         25         25         25         25         25	ssam	10041	200	354	4320	2000	111	0	0	0	0	0	17227	29060
egath         9491         1604         140         2768         413         1         0         0         0         0         0         1418           tra         71         37         0         11         58         0         1         0         0         0         0         0         0         1418           tra         7976         8774         2002         4640         22         14         26         36         36         0         0         0         0         0         177           tra         1526         5953         601         528         134         26         11         5         36         0         0         0         177           tra         2269         762         901         1241         26         11         5         36         27         24         27         36         36         371         372         40         27         40         372         40         372         40         372         40         372         40         372         40         372         40         372         40         40         40         40         40         40         4	lhar	12559	0699	218	10167	632	51	0	24	0	0	0	30342	11420
tr. 1 37	hhatisgarh	9491	1604	140	2768	413	1	0	0	0	0	0	14418	14246
tr 7976	oa	71	37	0	11	28	0	0	0	0	0	0	177	202
tat         1552         5953         601         538         134         26         11         5         39         0         9         9859           thal         2269         762         901         1241         2         13         16         7         2         13         19         7         6         9         10         1241         2         13         16         7         2         6         1         6         5         17         18         17         18         18         18         18         18         18         18         18         18	ujarat	9262	8774	2002	4640	22	14	0	20	38	0	0	23515	13352
half by the control of the control o	aryana	1552	5953	601	538	134	26	111	5	39	0	0	8859	28785
1 kg         3443         1050         4127         2068         1         167         42         24         24         24         24         42	imachal adesh	2269	762	901	1241	7	13	19	2	0	2	0	5217	810
and         8781         1506         483         6592         732         659         732         659         732         659         732         659         732         659         732         653         659         732<	mmu & ashmir	3443	1050	4127	2068	1	167	42	24	2	62	0	10987	6683
aka         10503         4327         9558         6153         281         11         0         26         0         0         0         0         0         0         0         0         0         30859           a Pradesh         1740         58         30         9014         1729         59         0         0         0         0         0         0         0         40696         3587           ashtra         16184         6073         2909         10391         327         38         0         32         0         0         0         0         0         40696         3587           art         522         9         51         314         1         0         0         0         0         0         0         0         0         0         3554         3584         3         3554         3         3554         3         3554         3         3         3554         3 <td< td=""><td>arkhand</td><td>8781</td><td>1506</td><td>483</td><td>6592</td><td>732</td><td>2</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>18100</td><td>11231</td></td<>	arkhand	8781	1506	483	6592	732	2	0	1	0	0	0	18100	11231
abrtradesh         1146         58         1         1729         59         59         60         0         0         0         0         0         3587           arbtradesh         21915         9129         3904         1939         27         32         20         4         0         4         0         40696           ashtra         16184         6073         2909         10391         327         38         0         32         0         0         0         0         35954           ur         342         62         7         32         0         0         0         0         0         35954           laya         887         23         21         314         1         0         0         0         0         0         0         1893         1823           md         470         35         1         1         1         1         0 <t< td=""><td>arnataka</td><td>10503</td><td>4327</td><td>9558</td><td>6153</td><td>281</td><td>11</td><td>0</td><td>26</td><td>0</td><td>0</td><td>0</td><td>30859</td><td>42068</td></t<>	arnataka	10503	4327	9558	6153	281	11	0	26	0	0	0	30859	42068
a Pradesh         21915         9129         939         9014         193         27         35         40         4         40         4         40         40         40696           shtrad         16184         6073         2909         10391         327         38         0         32         0         0         0         0         0         35954           ur         342         62         7         62         7         6         7         7         7         789           aya         887         23         21         365         524         2         0         0         0         0         0         1823         1823         1823         1823         1823         1823         1818         1828         1823         1819         1818         181	erala	1740	58	1	1729	29	0	0	0	0	0	0	3587	15686
shtrad         16184         6073         2909         10391         327         38         0         32         0         0         0         0         0         0         0         0         789           ut         342         23         21         314         1         0         0         0         0         0         10         789           m         35         6         1         16         267         1         0         0         0         0         0         1823           nd         470         35         4         178         698         1         0         0         0         0         3         1419           nd         470         180         1818         2127         612         0         0         0         0         0         0         33         1419           nd         1777         5062         208         250         33         1         5         7         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td>adhya Pradesh</td> <td>21915</td> <td>9129</td> <td>390</td> <td>9014</td> <td>193</td> <td>27</td> <td>3</td> <td>20</td> <td>4</td> <td>0</td> <td>0</td> <td>40696</td> <td>7384</td>	adhya Pradesh	21915	9129	390	9014	193	27	3	20	4	0	0	40696	7384
ur         342         62         9         51         14         1         6         0         0         0         0         789         789           aya         887         23         21         365         524         2         0         0         0         0         0         1823           m         35         6         1         1         1         1         0         0         0         0         0         0         0         1823         1419	laharashtra	16184	6073	2909	10391	327	38	0	32	0	0	0	35954	64756
aya         887         23         21         365         524         2         6         0         0         0         0         0         2         328         328           nd         470         35         4         178         698         1         0         0         0         0         2         328         1419           12310         1130         1818         2127         612         0         6         6         0         0         0         33         1419         7           1777         5062         208         208         26         33         1         5         6         7         7         7         7         8	lanipur	342	62	6	51	314	1	0	0	0	0	10	789	2403
m         35         6         1         16         267         1         0         0         0         0         0         2         328         328           nd         470         35         4         178         698         1         0         0         0         0         33         1419         1419           nd         12310         1180         1818         2127         612         0         6         0         0         0         0         0         23057         1           1777         5062         208         208         26         33         1         5         2         0         0         7408         7408	eghalaya	887	23	21	365	524	2	0	0	0	0	0	1823	3093
ad         470         35         4         178         698         1         6         6         0         0         0         0         3         1419           12310         1190         1818         2127         612         612         6         6         6         6         0         0         0         23057           1777         5062         208         290         26         33         1         5         2         0         0         7408	lizoram	35	9	1	16	267	1	0	0	0	0	2	328	1239
12310         1190         1818         2127         612         0         6         6         0         0         0         0         23057           1777         5062         208         290         26         33         1         5         2         0         0         7408	agaland	470	35	4	178	869	1	0	0	0	0	33	1419	3156
1777         5062         208         290         26         33         1         5         2         0         0         7408	disha	12310	1190	1818	2127	612	0	9		0	0	0	23057	20600
	ınjab	1777	2905	208	290	26	33	1	2	2	0	0	7408	10685

States/UTs	Cattle	Buffaloes	Sheep	Goats	Pigs	Horses & Ponies	Mules	Donkeys	Camels	Yaks	Mithuns	Total Livestock	Total Poultry
1	2	က	4	5	9	2	&	6	10	11	12	13	14
Rajasthan	12120	11092	111190	21503	209	25	0	102	422	0	0	26663	4946
Sikkim	135	0	3	92	35		0	0	0	2	0	270	157
Tamil Nadu	11189	2009	7991	9275	284	7	0	5	0	0	0	30759	128108
Tripura	954	14	4	633	264	0	31	0	0	0	0	1869	3701
Uttar Pradesh	18883	23812	1188	14793	1350	122	24	84	6	0	0	60272	8754
Uttaranchal	2239	1220	290	1335	20	15	0	1	0	0	0	5141	2601
West Bengal	19188	764	1577	15069	815	9	0	0	0		0	37419	86210
Andaman & Nicobar	49	10	0	29	48	0	0	0	0	0	0	174	626
Chandigarh	7	20	0	1	0	0	0	0	0	0	0	28	129
Dadar & Nagar Haveli	57	4	0	25	0	0	0	0	0	0	0	87	170
Daman & Diu	3	1	0	3	0	0	0	0	0	0	0	7	26
Delhi	92	278	9	21	20	1	0	0	0	0	0	418	2
Lakshadweep	7	0	0	92	0	0		0	0	0	0	82	167
Pondicherry	84	3	4	69	1	0	0	0	0	0	0	162	387
All India	19975	105343	71558	140537	11134	611	137	438	517	83	264	529698	648830

Source: 18h Livestock Census, Department of Animal Husbandry, Ministry of Agriculture

#### Annexure 3.35: Livestock Population in Odisha

In lakh number

Census year	Ca	ttle	Buffaloes	Goats	Sheep	Pigs	Total
	Total	Cross breed					Livestock
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	123.10	17.03	11.9	71.27	18.18	6.12	230.57

 $Source: Directorate\ of\ Animal\ Husbandry\ and\ Veterinary\ Services,\ Odisha.$ 

## Annexure 3.36: Cattle and Buffalo Population in Odisha as Per 2007 Animal Census

In lakh number

Category	All Total		Fen	ıale	Mi	lch	Breedable		
	Total	C.B.	Total	C.B.	Total	C.B.	Total	C.B.	
1	2	3	4	5	6	7	8	9	
Cattle	123.10	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	

C.B: Cross Breed

 $Source: Directorate\ of\ Animal\ Husbandry\ and\ Veterinary\ Services,\ Odisha.$ 

#### Annexure 3.37: State-wise Milk Production

('000 tones)

State	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8	9	10	11
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

(Contd...)

State	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8	9	10	11
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
Odisha	850	876	929	941	997	1283	1342	1431	1625	1598
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
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
Chhatisgarh	-	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	104845	108585

 $Source: Department \ of \ Animal \ Husbandry, \ Dairying \ and \ Fishing, \ Ministry \ of \ Agriculture, \ GoI$ 

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

Year	Production of milk (thousand MT)	Per capita Availability of Milk (gms/ day)	Production of meat (thousand MT)	Per capita Availability of meat (Kg./ annum)	Production of eggs (in millions)	Per capita Availability of eggs (nos/ annum)
1	2	3	4	5	6	7
1999-00	847.78	65	36.67	1.03	648.31	18
2000-01	875.13	67	38.38	1.07	760.10	20
2001-02	928.77	70	42.64	1.18	858.02	24
2002-03	941.00	71	44.72	1.22	909.49	25
2003-04	995.08	74	44.89	1.22	931.06	25
2004-05	1282.76	94	50.53	1.36	1215.96	33
2005-06	1342.30	98	52.04	1.39	1278.71	34
2006-07	1424.64	103	55.01	1.45	1424.64	38
2007-08	1620.44	115	58.82	1.53	1549.48	39
2008-09	1598.05	113	115.00*	2.93	1993.26**	51
2009-10	1651.33	109	128.00	3.17	2319.32**	57
2010-11	1670.00	109	138.00	3.29	2357.10	56
2011-12(P)	1718.00	112	138.00	3.29	2300.70	55

 $Source: Directorate\ of\ Animal\ Husbandry\ and\ Veterinary\ Services,\ Odisha.$ 

Annexure 3.39: Milk and Egg Production in Districts, 2011-12

Districts	Target of	Production	Achiev	vement
	Milk ('000 MT)	Egg (Mil.Nos.)	Milk ('000 MT)	Egg (Mil.Nos.)
1	2	3	4	5
Balasore	145.00	95.00	132.11	114.45
Bhadrak	70.00	57.00	32.18	19.03
Balangir	75.00	190.00	34.71	147.47
Sonepur	78.00	18.00	45.13	26.28
Cuttack	165.00	62.00	147.34	47.49
Jajpur	100.00	70.00	113.39	90.66
Kendrapara	61.00	47.00	57.32	25.04
Jagatsingpur	100.00	28.00	101.90	35.77
Dhenkanal	59.00	68.00	53.68	70.07
Angul	49.00	23.00	40.20	31.04
Ganjam	106.00	440.00	106.75	551.70
Gajapati	26.00	32.00	27.27	39.15
Kalahandi	51.00	79.00	52.81	101.53
Nuapada	40.00	15.00	21.98	19.38
Keonjhar	75.00	85.00	53.88	67.22

(Contd...)

<sup>\*</sup>include poultry meat.

<sup>\*\*</sup> include private sector production.

Districts	Target of I	Production	Achiev	ement
	Milk ('000 MT)	Egg (Mil.Nos.)	Milk ('000 MT)	Egg (Mil.Nos.)
1	2	3	4	5
Koraput	80.00	82.00	130.64	148.81
Rayagada	40.00	42.00	34.68	47.14
Nabarangpur	24.00	39.00	17.56	21.96
Malkangiri	54.00	53.00	49.77	66.23
Mayurbhanj	95.00	198.00	67.16	176.67
Phulabani	24.00	37.00	13.60	22.36
Boudh	23.00	15.00	21.25	16.18
Puri	116.00	38.00	109.30	34.97
Khordha	66.00	500.00	51.05	151.40
Nayagarh	25.00	25.00	25.52	30.69
Sambalpur	46.00	42.00	33.58	41.50
Deogarh	15.00	13.00	10.89	11.14
Jharsuguda	23.00	14.00	11.95	11.62
Bargarh	85.00	65.00	77.20	74.63
Sundargarh	50.00	78.00	43.21	59.15
Total	1966.00	2550.00	1718.00	2300.68

Source: Directorate of Animal Husbandry and Veterinary Services, Government of Odisha

Annexure 3.40: Activities of OMFED under IDDP (2011-12)

Item	Ph-V	Ph-VI	Ph-VII	Ph-VIII	Ph-IX	Ph-X
	(2005-10)	(2005-10)	(2008-13)	(2010-15)	(2010-15)	(2011-16)
District Covered	Balasore, Bhadrak, Mayurbhanj	Bolangir, Kalahandi, Nuapada	Jagatsinghpur, Kendrapara, Nayagarh	Koraput, Nawarangpur, Rayagada	Ganjam, Gajapati	Sambalpur, Bargarh,So nepur,Deog arh,Jharsug uda
1	2	3	4	5	6	7
Project cost (Rs. In Cr.)	5.56	5.64	7.02	7.30	6.00	8.00
No.of societies organized (cumulative)	37.6	262	609	366	169	469
Members enrolled (cumulative)	24085	9548	43091	11438	10510	32326
Milk procurement (LPD)	41770	19080	120640	20744	11746	43100
Average Milk Marketed(LPD)	41778	19080	120640	20744	11746	43100

Source: OMFED, Odisha

Annexure 3.41: District-wise Number of Veterinary Institutions and Personnel in Odisha, 2011-12

District	Veterinary	Live Stock	LACs doing	No. of A.l	Centres	No. of	No. of L.I.in	
	Hospitals/ Dispensaries	Aid Centres	A.I.	A.H. Deptt.	Others	Veternary Doctors in position	position	
1	2	3	4	5	6	7	8	
Angul	16	81	81	153	32	20	56	
Balasore	21	124	124	223	00	26	112	
Bargarh	19	119	119	183	175	20	48	
Bhadrak	13	98	98	166	209	16	72	
Balangir	21	118	118	163	00	33	101	
Boudh	7	28	28	36	13	8	34	
Cuttack	26	172	172	272	00	38	140	
Deogarh	4	20	20	30	00	3	12	
Dhenkanal	18	86	86	153	00	22	80	
Gajapati	11	54	54	65	41	14	43	
Ganjam	38	246	246	330	00	45	187	
Jagatsinghpur	12	92	92	156	487	16	60	
Jajpur	18	102	102	216	0	24	85	
Jharsuguda	9	35	35	53	0	11	28	
Kalahandi	21	129	129	184	0	27	146	
Kandhaml	20	87	87	75	0	24	102	
Kendrapara	14	88	88	183	0	19	60	
Keonjhar	22	113	113	169	86	27	112	
Khordha	20	98	98	177	0	28	46	
Koraput	25	129	129	131	0	32	104	
Malkangiri	13	50	50	41	65	12	58	
Mayurbhanj	42	167	167	309	0	46	187	
Nabarangpur	17	72	72	104	0	25	58	
Nayagarh	16	72	72	113	269	21	78	
Nuapada	8	47	47	82	0	13	51	
Puri	15	145	145	220	00	24	79	
Rayagada	16	101	101	104	00	22	102	
Sambalpur	18	113	113	150	00	20	59	
Sonepur	10	38	38	68	40	14	47	
Sundargarh	30	115	115	186	0	32	120	
Odisha	540	2939	2939	4495	1417	682	2467	

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

Annexure 3.42: Animal Health Care

Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	3	4	5	6	7	8	9
Treatment of animals	47.89	47.81	51.29	55.48	55.69	53.03	60.99
(in lakh nos.)							
Vaccine production	92.17	136.73	184.65	193.78	210.11	235.27	192.63
(in lakh doses)							
Vaccination done	115.98	148.18	202.35	242.70	276.34	302.14	280.93
(in lakh nos.)							
Infertility camp organised	3785	4197	3229	3508	3118	3172	2934
De-worming of animals	2.30	2.49	3.07	7.28	8.84	7.24	15.10
(in lakh nos.)							
Animal castrated	4.74	4.55	4.53	4.41	4.92	5.20	4.90
(in lakh nos.)							

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

Annexure 3.43: Animal Breeding under the LBD/ECB Farms, 2011-12

Name of the LBD	Animal Strength							Progressive	Progressive	Progressive	Milk
Farms	In milk	Dry	Heifers	Bull Calfs	Sucking Calfs	Others	Total	Progeny Born	Heifers/ Cows Supplied	Bull Calves Supplied	prodn. (in Ltrs.)
1	2	3	4	5	6	7	8	9	10	11	12
ECB Farm, Chiplima	19	12	21	6	17	0	75	22	0	1	40633.0
LBD Farm, Bhanjanagar	9	4	11	2	9	0	35	9	0	2	23181.5
LBD Farm, Boudh	7	6	8	2	6	0	29	7	0	1	18718.9
LBD Farm, Keonjhar	12	8	6	0	12	1	39	13	7	3	31761.2
LBD Farm, Kuarmunda	17	11	17	5	14	1	65	19	8	6	27563.0
LBD Farm, Khapuria	24	8	18	2	17	1	70	25	0	11	57506.0
LBD Farm, Remuna	16	8	9	4	19	0	56	18	14	0	39550.0
LBD Farm, Sundargarh	12	4	12	0	12	0	40	13	5	2	32106.0
Odisha	116	61	102	21	106	3	409	126	34	26	271020.1

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

Annexure 3.44: Production of Departmental Poultry Farms

Item	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8	9
Birds maintained (in nos.)	2709	12468	3663	2656	10588	13163	13399	13281
Egg production (in lakh nos.)	1.66	1.77	1.94	2.83	2.33	7.16	7.86	11.41
Eggs used for hatching (in lakh nos.)	0.55	0.51	0.91	1.90	4.56	7.66	8.04	9.40
Chick produced (in lakh nos.)	0.43	0.38	0.75	1.05	2.81	4.72	5.28	6.40

Annexure 3.45: Fodder Production in the Departmental L.B.D Farms, 2011-12

Name of the Farm	Area (in Ac.) for F	odder Production	Fodder Produ	ction (in Qtls)
	Target Achievement		Target	Achievement
1	2	3	4	5
LBD Farm, Cuttack	6.00	6.00	3000.00	3327.92
ECB Farm, Chiplima	39.0	36.00	5350.00	3872.50
LBD Farm, Keonjhar	32.50	33.00	3120.00	2168.00
LBD Farm, Remuna	28.00	31.00	3730.00	3923.90
LBD Farm, Bhanjanagar	11.30	14.30	1865.00	2559.04
LBD Farm, Boudh	3.50	3.50	1580.00	554.90
LBD Farm, Sundargarh	25.00	24.70	2945.00	2942.60
LBD Farm, Kuarmunda	27.00	27.10	4000.00	3620.25
Odisha	172.30	175.60	25590.00	22969.11

 $Source: Directorate \ of \ Animal \ Husbandry \ and \ Veterinary \ Services, \ Odisha.$ 

Annexure 3.46: Distribution of Minikits, 2011-12

Name of the		Perinial Roots &				
District	Kh	arif	Ra	avi	slips distributed	
	Target	Achievement	Target	Achievement	(in Nos.)	
1	2	3	4	5	6	
Balasore	500	120	500	500	29000	
Bhadrak	500	120	500	400	67000	
Balangir	300	185	300	300	0	
Sonepur	300	269	400	400	0	
Cuttack	1000	230	1000	700	106000	
Jajpur	800	120	800	550	0	
Kendrapara	500	80	500	500	21000	
Jagatsingpur	800	130	800	650	42000	
Dhenkanal	300	220	300	300	16015	
Angul	500	260	500	300	23200	
Ganjam	1000	120	1000	600	58300	
Gajapati	300	139	30	200	0	
Kalahandi	200	189	200	200	130300	
Nuapada	300	238	300	250	65000	
Keonjhar	400	229	400	400	12500	
Koraput	400	233	400	400	51800	
Rayagada	200	238	200	200	0	
Nabarangpur	300	198	300	250	0	
Malkangiri	200	80	200	250	0	

(Contd...)

Name of the		Perinial Roots &				
District	Kh	arif	Ravi		slips distributed	
	Target	Achievement	Target	Achievement	(in Nos.)	
1	2	3	4	5	6	
Mayurbhanj	500	257	500	500	590400	
Phulbani	200	185	200	200	0	
Boudh	200	180	200	200	50000	
Puri	1000	354	1000	600	260800	
Khordha	800	229	800	600	42000	
Nayagarh	300	238	300	350	30000	
Sambalpur	1000	120	1000	600	90000	
Deogarh	200	179	200	200	1200	
Jharsuguda	300	139	300	300	0	
Bargarh	1000	120	1000	800	45000	
Sundargarh	400	234	400	300	0	
Odisha	14700	5633	14800	12000	1731515	

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

Annexure 3.47: Milk and Egg Production in KBK districts in Odisha, 2011-12

Name of the KBK	Milk Product	ion (in TMT)	Egg Production (Million Nos.)		
Districts	Target	Target Achievement		Achievement	
1	2	3	4	5	
Koraput	80.00	130.64	82.00	148.81	
Malkangiri	54.00	49.77	53.00	66.23	
Nabarangpur	24.00	17.56	39.00	21.96	
Rayagada	40.00	34.68	42.00	47.14	
Kalahandi	51.00	52.81	79.00	101.53	
Nuapada	40.00	21.98	15.00	19.33	
Balangir	75.00	34.71	190.00	147.47	
Sonepur	78.00	45.13	18.00	26.28	
Total	442.00	387.28	518.00	578.75	

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

Annexure 3.48: District-wise Classification of Forest Area, 2011-12

Area in Sq. KM

Sl. No.	Name of the District	Geo- graphical	Total forest		Forest land under control of Forest Department		Forest land under control of Revenue Deptt.			
		Area	Area	Reserve forests	Un-classified forests (Forest Deptt. Buildings, Forest roads, nurseries etc.)	Demarcated Protected forests (DPF)	Undemar- cated Protected forests (UDPF)	Other forests under Revenue Deptt.		
1	2	3	4	5	6	7	8	9		
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	Khordha	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		
24	Nayagarh	3890	2080.97	1301.99	0.25	188.03	135.58	455.12		
25	Nabarangpur	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		
	Odisha	155707	58135.47	26329.12	20.55	11722.89	3838.78	16261.34		

Source: PCCF, Odisha

Annexure 3.49: Forest Area Diverted to Non-forest Use (2000-01 to 2011-12)

Year	Number of Projects	Area diverted to non-forest use (in hectare)
1	2	3
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	15	2310.16
2010-11	13	915.95
2011-12	13	831.18

Source: PCCF, Odisha

Annexure 3.50: Forest Area Diverted to Non forest Use by Activities

Project Type	No of Project	Forest Area Diverted(Ha)
1	2	3
2009-10		
Irrigation	1	3.963
Mining	9	960.785
Transmission lines (Railway)	2	51.630
Misc	3	1293.779
Total	15	2310.157
2010-11		
Industry	3	311.836
Mining	7	571.396
Transmission lines (Railway)	0	0
Misc	3	32.72
Total	13	915.952
2011-12		
Irrigation	1	230.13
Mining	9	542.1114
Industry	1	1.1535
Others	2	57.7855
Total	13	831.1804

Source: PCCF, Odisha

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

Item	Unit	2010-11			2011-12			
		Produc- tion	Quantity sold	Revenue Collected (Rs. in crores)	Produc- tion	Quantity sold	Revenue Collected (Rs. in crores)	
1	2	3	4	5	6	7	8	
Timber & Timber Product	Cum	37634	26231	44.07	31912	29230	42.25	
Fire wood	MT	29466	25999	5.92	24305	29117	14.52	
Bamboo	SU	92684	65090	13.63	98413	38698	8.12	
Kendu Leaf	Lakh Qtls.	4.55	4.48	360.84	3.82	3.90	415.96	

Source: Odisha Forest Development Corporation

Annexure 3.52: Kendu leaf Trading in Odisha

Crop year	Quantity	Sale value
	(in lakh Qtl)	(Rs. in Crore)
1	2	3
2005	3.769	142.05
2006	3.895	248.55
2007	4.454	259.32
2008	4.192	301.96
2009	4.406	326.64
2010	4.460	364.20
2011	3.760	409.87

Source: Odisha Forest Development Corporation

Annexure 3.53: Achievements of Different Afforestation Programme, 2009-10 and 2011-12

Name of Programme	Area Covere		
	2009-10	2010-11	2011-12
1	2	3	4
<b>Economic Plantation</b>	3903	1800	2000
RLTAP in KBK Districts	3491	3650	-
Compaensatory Afforation	2898	4285	4188
National Afforestation Programme through FDA,s	14980	2784	2240
Odisha Forestry Sector Development Project (JICA)	51735	78220	25745
Industrial Plantation	295	290	55
Support to VSS	611	12071	-
National Bamboo Mission	774	1040	1023
NREGS and Other Schemes	12316	9543	146935
Avenue Plantation (Running Kilometers RKMs)	133	241	769
Total	91,003 ha & 133 RKMs	113683 ha &241 RKMs	182186ha &769RKMs

Source: PCCF, Odisha

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

Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8
No. of incidents occurred	193	104	99	71	66	67	203
Cases found undetected	72	26	21	22	17	16	141
Cases filed in the court	121	78	78	51	49	51	62
Accused forwarded to the court	232	181	169	99	210	143	155

Source: Chief Warden, Wildlife, Odisha

Annexure 3.55: Wildlife Census in Odisha

SI.	Species	Census & Site	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
No.	,		Number	Number	Number	Number	Number	Number
1	Saltwater	Bhitarkanika river system	1947	1516	1596	1627	1670	1659
2	Mugger	(I )Satkoshia/ Mahanadi river	62	82	87	62	91	81
	Crocodile	(ii)River systems of Similipal Tiger Reserve	68	88	1	78	85	82
		Ghodahada Reservoir,	1	29	41	40	1	40
	;	Digapanandi, Ganjam						
က	Gharial	Mahanadi river system	05	03	03	03	03	9
4	Olive Ridley	Gahirmatha	1.46 lakh	•	1.67	3.57	4.72 lakhs	1.68 lakhs
	sea turtle	Rushikulya river mouth	Nil	1.80 lakhs	2.61	1.56	2.52 lakhs	1.01 lakhs
		Total	1.46 lakh	1.80 lakh	4.28 lakh	5.13	7.24	2.68
2	Irrawaddy Dolphin	Chilika lagoon	135	138	146	158	156	145
9	Blackbuck	Balukhand-	•	1	ī	ı	34	65
		Konark Wildlife						
		Sanctuary						
		Balipadar-	1101	1672	r	ı	2181	ı
		Bhetnoi area in	Male-306					
		Ganjam District	Female-664					
			Young-131					
7	Elephant	Entire State	•	1862	i	ı	1886	1930
ω	Tiger	Entire State	192 (census during 5 <sup>th</sup> - 10 <sup>th</sup> Jan,04 through Pug Mark Technique)	45 (as per Camera Trap Method by WII,Dehradun)	•	1	32 (as per Camera Trap Method byWII, Dehradun)	•
6	Leopard	Entire State	1	•	•	•	1	1
10	Migratory Birds	( i) Chilika lagoon	8.39 lakh of 107 species	8.92 lakhs of 111 species	8.91 lakhs 101 species	9.04 lakh 114 species	7.92 lakhs 103 species	8.68 lakhs 106 species
		( ii) Bhitarkanika Mangrove Wetland	1.26 lakh of 100 species	1.25 lakhs of 97 species	1.01 lakhs 79 species	1.05 lakh 74 species	0.53 lakhs 107 species	0.53 lakhs 118 species
		(iii) Hirakud reservoir	0.367 lakh of 24 species	0.22 lakhs of 25 species	1	0.49 lakh 26 species	0.11 lakh 34 species	0.47 lakhs 52 species
,								

Source: ChiefWarden, Wildlife, Odisha

Annexure 3.56: Compassionate amount paid in Odisha due to animal depredation

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Year		Human Kill	ın Kill			Human injury	injury			Cattle Kill	e Kill		House Damage due to elephant	)amage lephant	Crop D	Crop Damage	Total amount
	Due to	Due to Elephant	due to	due to other	Elep	Elephant	Due to	Due to other	Elephant	hant	Due to	Due to other	No.of	Amount	Crop in	Amount	paid
	No of victim	Amount paid	No of victim	No of Amount victim paid	No of victim	Amount paid											
1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18
2001-02	64	562.00	20	192.50	2	14.00	85	381.50	1	1.50	25	42.00	862	1021.19	2360.6	1404.61	3619.30
2002-03	99	743.50	13	130.00	9	15.00	26	473.50	6	16.00	24	25.50	591	757.36	3852.5	1940.06	4100.91
2003-04	32	3037.00	4	300.00	10	207.98	99	430.98	4	5.50	111	16.50	464	1034.34	50.01	20.00	5082.30
2004-05	30	2460.00	3	300.00	3	53.33	38	424.31	11	21.50	1	2.00	499	1011.38	1726.0	1656.72	5929.25
2005-06	40	3608.00	2	700.00	П	33.33	Ŋ	135.32	0	0.00	0	0.00	0	0.00	432.85	297.70	4774.35
2006-07	71	6937.00	21	2068.44	16	376.63	125	2268.78	2	9.50	15	26.00	292	1376.34	4835.6	4844.55	17907.24
2007-08	62	6110.00	10	951.56	16	63.33	122	1603.19	9	12.0	7	10.00	850	2088.37	9713.5	9713.45	20551.90
2008-09	46	4580.00	27	2610.00	13	268.64	137	2175.13	0	0.0	111	17.00	756	1713.90	8802.9	8802.85	20167.52
2009-10	69	00.0689	15	1498.00	26	551.28	107	1586.49	7	12.00	9	7.00	1066	2729.70	10219.0	10219.0 10218.72	23493.19
2010-11	62	6042.00	23	2300.00	11	207.98	93	1660.51	7	14.00	9	00.6	1139	2515.90	15656.0	15656.0 15656.40	28405.78
2011-12	61	7013.00	23	3300.00	28	289.31	118	2017.21	2	26.00	7	26.50	1149	4641.65	11092.0	11092.0 26744.84	44058.51
10	FIATO	Service Office of Wildlife Office	11:-1:-														

Source: Chief Warden, Wildlife, Odisha

# The Industry Sector

The Industry sector has been emerging as one of the prime movers of the State's economy. The share of this sector to Odisha's GSDP has been slowly rising over the years. For the purpose of this analysis, the industry sector comprises of manufacturing, mining & quarrying and electricity, gas & water supply, following RBI classification. However, the electricity-gaswater supply sub-sector is excluded from this Chapter for two reasons. First, its contribution to the industry sector is about 12.20 percent and second, electricity supply being an important component of infrastructure, it has been discussed at length in Chapter 6 under Infrastructure. As per the advanced estimates for the year 2012-13, the share of the industry sector is only 24.23 percent as against 25.78 percent for the year 2011-12. During the year 2012-13, the share of the manufacturing subsector is 63.38 percent while that of the mining and quarrying sub-sector is 24.30 percent in the industry sector, which has grown in real terms at 2004-05 prices at only 2.54 percent, the growth of the manufacturing sub-sector being 3.35 percent and of the mining and quarrying sub-sector only 0.02 percent. This indicates that this sector has been adversely impacted by the global economic slow down. The disruption in mining and quarrying activities during 2011-12 and 2012-13 has also negatively impacted this sector. Annexures 4.1 through 4.32 provide detailed information on

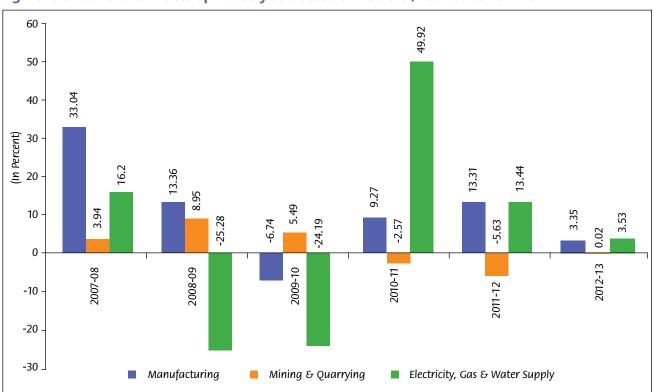


Figure 4.1: Real Growth Rates of Industry Sub-Sectors in Odisha, 2007-08 to 2012-13

the manufacturing and mining and quarrying sub-sectors. Figure 4.1 graphs real annual growth rates of Industry sub-sectors from 2007-08 to 2012-13.

### 4.1 Manufacturing

The manufacturing sub-sector is further 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 higher than 86

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

Figure 4.2: Share of Registered and Unregistered Sub-Sectors within Manufacturing, 2004-05 to 2012-13

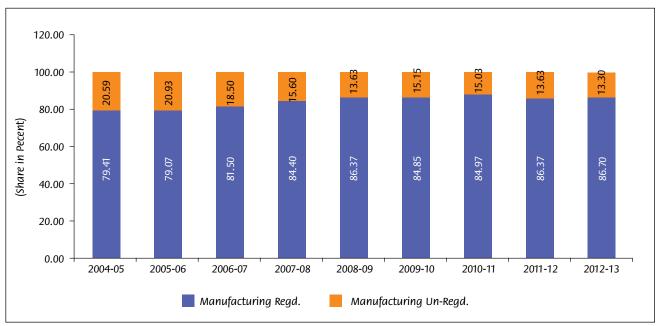
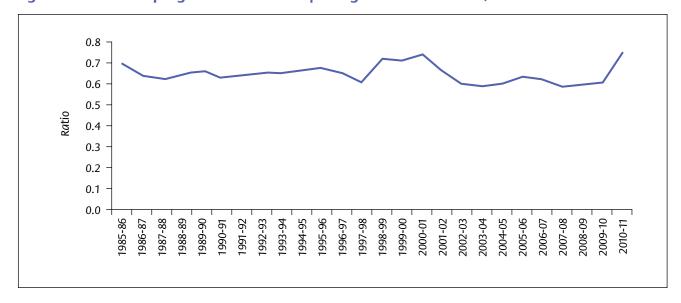


Figure 4.3: Fraction of Registered Factories Reporting to the Government, 1985-86 to 2010-11



#### 4.1.1 Large scale industries

The Central Government's portal, Know India, notes that industries in Odisha 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 and khadi and village industries. Large scale industries, heavy or otherwise, include firms that produce iron and steel, cement, aluminium, ferro-manganese, fertilisers, chemicals, aeronautical items, heavy water, textiles, refractory, ceramic glass and paper. Most large-scale industries in Odisha are mineral-based.

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

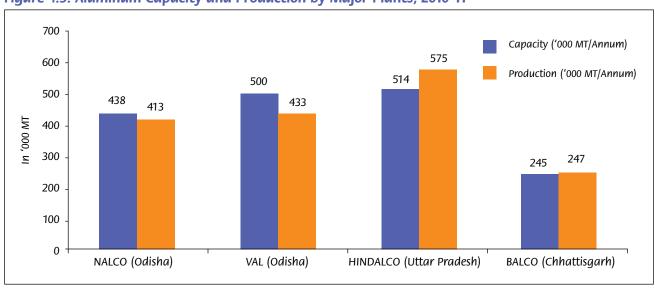
10 percent of steel production capacity in the country, while it has 25 percent of total iron ore reserves of the country. The Rourkela Steel Plant is the largest of all steel plants. There are new large-scale potential entrants into steel such as Vedanta, Jindal, Posco, Tata and Essar. By the end of 2011-12, the State Government had signed Memoranda of Understanding (MoU) with 94 reputed investors across sectors covering 50 numbers for steel, 3 for aluminium, 30 for power, 4 for cement, one each for auto components, oil refinery, titanium dioxide and four ancillary and downstream industries at an investment of Rs.4,62,768.74 crores. These industries have created employment for more than 89,340 (29,780 direct and 59,560 indirect) persons. Of 94 MoUs, 50 have been signed with

Others States
West Bengal
Chhattisgarh
Odisha
Jharkhand

Capacity: Million Tonnes/Annum

Figure 4.4 MoUs Signed and Capacity to be Added, 2011-12





Source: Ministry of Mining, Month Summary Report for March, 2012

various steel promoters with an investment of Rs. 2,30,421 crores and an estimated production of 83.66 million tons per annum (MTPA). Of these 50 MoUs, 30 projects have started partial production with an investment of Rs. 80,506.17 crores, achieving a production capacity of 12.66 MTPA of steel, 11.45 MTPA of sponge iron and 4.23 MPTA of other products. These industries have provided direct employment to 27,690 persons directly and 60,390 persons indirectly so far. Figure 4.4 lists major states which plan to expand their steel production on a massive scale.

Odisha stands number one in India with respect to aluminum production capacity and actual production, after Vedanta Aluminum Limited (VAL) and National Aluminum Corporation (NALCO) started production. Figure 4.5 shows the production capacity and actual production of four aluminum plants in India. The total aluminum production by these four plants stood at 1,667.68 TMT during 2010-11, out of which 846.05 TMT was produced by NALCO and VAL, which together comprised more than 50 percent of the total aluminum production.

# 4.1.2 Micro, Small and Medium Enterprises (MSME)

Small and medium scale enterprises grouped together are called Micro, Small and Medium

Enterprises (MSME). The Directorate Industries, Odisha is the nodal agency for promoting MSME, ancillary and down stream industries in the State. The growth of the MSME sub-sector is being emphasised not only because of its potential for generation of employment opportunities but also for its contribution to industrial output in the State. This sub-sector is the second largest employment generating sector after agriculture. During 2011-12, 5,505 MSME went into production with an investment of Rs.500.73 crores and 30,387 persons were provided employment opportunities. It is encouraging to note that the number of 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 2011-12, Sundargarh district reported the maximum number of industries followed by Khurda, Cuttack and Ganjam.

Figure 4.8 reveals that the maximum numbers of MSME belong to the repairing and services sub sector (33.1 Percent). In manufacturing, it is the food and allied sectors that have the highest number of MSMEs (21.9 Percent) and investment (26.53 Percent). In employment generation, it is the second highest employment generating sub-sector (20.14 Percent),

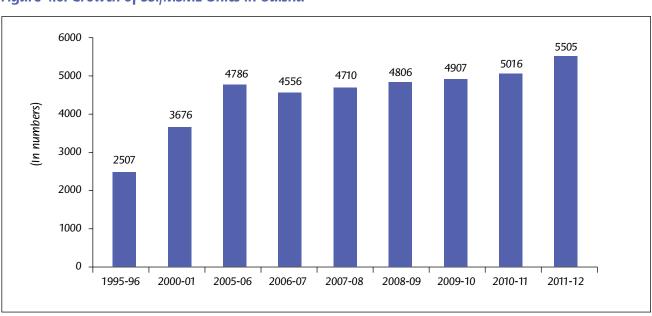


Figure 4.6: Growth of SSI/MSME Units in Odisha

Figure 4.7: Ranking of Districts of Odisha by Number of MSME, 2011-12

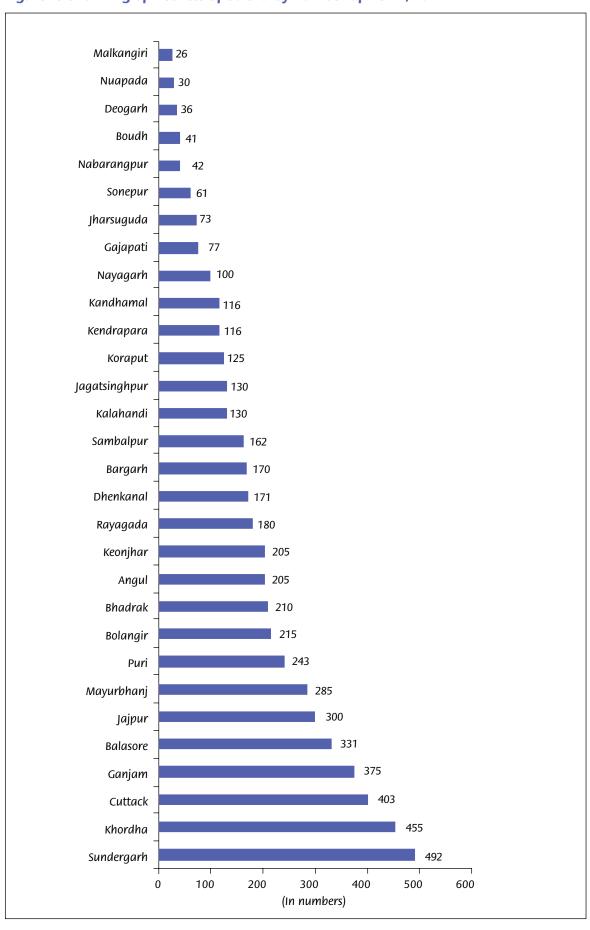
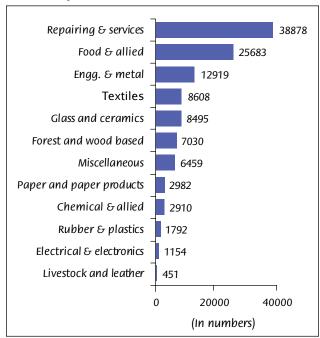


Figure 4.8: Number of MSME Units Set -up in Odisha, up to 2011-12



followed by the glass and ceramics sub-sector (20.10%). Industrial sickness among MSMEs remains a major problem. There were 1,690 units identified as sick by the end of 2009-10. However, it is encouraging to note that no new MSME unit was declared sick thereafter and 667 units have been revived by Odisha State Financial Corporation.

## 4.1.3 Some Traditional and Employmentoriented Industries

The State Government provides administrative, managerial and financial support for revival,

promotion and diversification of traditional MSME through various schemes. Some of the traditional industries are discussed below:

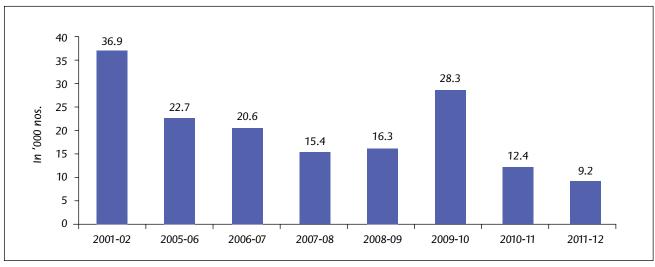
## **Handicrafts and Cottage Industries**

Odisha is considered the land of handicrafts which are an integral part of our cultural heritage. As many as 50 different crafts are practised by about 1.30 lakh artisans, dispersed throughout the State. The handicrafts sector has been recognised as a potential sector for providing self- employment, both in rural and urban areas with less capital investment. The State has several crafts in which many artisans have been honoured with national awards including the Padma Awards. During 2011-12, 7,293 cottage industries have been established and gone into production with an investment of Rs.30.31 crores, providing employment to 9,187 persons (see Annexure 4.5). Employment generated by these industries in different years has been shown in Figure 4.9.

### Assistance to Handicraft & Cottage Industries

The State Government accords high priority to Rehabilitation of Handicraft Artisans (RHA), promotion of handicraft enterprises and strengthening of cooperative societies in the sector. During 2011-12, Rs.65.00 lakhs margin money was provided to 1,407 artisans under the RHA scheme to set up their own units and 31 clusters covering 1,144 artisans of 77 SHGs have been assisted under the Clusters Development Programme.

Figure 4.9: Employment Generation through Cottage Industries in Odisha



Under the skills training programme, 569 trainees completed training at different handicraft training centres during 2011-12. In addition, 225 artisans under the Master Crafts Man (MCM) training programme and 60 artisans under Gurusishya Parampara were trained during the year. Besides, 69 artisans have been deputed to Jaipur (Rajasthan), Moradabad (UP) and IITF, New Delhi for exposure visits to acquaint them with new knowledge, technology and to assess market demand.

Marketing assistance is provided to cooperatives /SHGs /individual artisans through exhibitions organised inside and outside the State. During 2011-12, 901 artisans participated in 18 district level and six state level exhibitions with a sales turnover of Rs.4.27 crore. Besides this, 160 artisans participated in different exhibitions organised by ORMAS with a sale turnover of Rs.0.64 crores. M/s. Odisha State Co-operative Handicraft Corporation, Ltd., achieved a sales turnover of Rs.6.20 crores through Utkalika branches and exhibitions. Further, 42 foreign buyers and buying agents participated in international Handicraft and Handloom fairs in which orders worth Rs.2.84 crores were generated. During 2011-12, financial assistance amounting to Rs.10 lakhs was sanctioned in favour of four Handicraft Co-operative Societies for construction of work sheds and revolving fund.

#### 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 small, this sector has good employment generating potential. Salt land is leased out to cooperatives and private sector firms by Government of India and the State Government. More details of salt production are given in Annexure 4.7. Out of a total production of salt, the private and co-operative sectors contribute 77 percent and 23 percent respectively. The total salt production in Odisha during 2011 was only 7,400 MT valued at Rs. 1.10 crores which is much lower than in other states like Tamil Nadu and Gujarat.

#### Assistance to Salt industries

In order to improve the salt production in the State, one MoU has been signed with the Central Salt and Marine Chemical Research Institute (CSMCRI), Bhavanager to survey and identify potential areas for salt production. CSMCRI has submitted the interim report. A delegation of salt society workers as well as the field staff of the Directorate of Industries visited Tuticorin in Tamil Nadu as a part of an exposure visit to acquire advance knowledge on solar salt production.

In order to ameliorate the living conditions of the State workers, Namak Mazdoor Awas Yojana (NMAY) has been implemented in the State. The cost of each house under this scheme is Rs.50,000 on 90:10 share basis (Centre and State). By the end of 2011-12, 244 houses were taken up under this programme and 229 houses have since been completed. Besides, different development works for welfare of salt workers as well as salt industries have been implemented with assistance from the Salt Commission.

#### Coir

Odisha is a major coconut producing state and is ranked fifth at all India level. The coastal districts of Odisha account for more than 90 percent of the production in the State. It is a labour intensive industry and 80 percent of workers engaged in spinning of coir yarn are women. During 2010-11, 1,115 coir industries were operating in the State. They produced coir products valued at Rs.110.64 lakhs and provided employment to 10,106 persons. Out of 115 Registered Coir Cooperative Societies, only 31 were operational in 2010-11 with 7,262 members and they produced 1,320 MT of coir products, valued at Rs. 105.17 lakh.

#### **Assistance to Coir Industries**

The State Government has laid emphasis on skills development of coir artisans, upgradation of coir technology, development of infrastructure and marketing promotion. Assistance is also provided to coir co-operatives and small scale units to organise field level programmes at exhibitions and fairs both inside and outside the State and for infrastructure

facilities like construction of common work sheds. Besides, financial assistance is provided to Co-operative and Public Sector enterprises to undertake market development programmes. The following achievements were made during 2011-12:

- Twenty-eight coir artisans participated in five districts/state level exhibitions with a sales turnover of Rs.6.83 lakhs.
- One hundred thirty nine students completed training in four departmental coir training centres.
- Twenty-four artisans of SHGs of Kendrapara district have visited Kerala to acquire knowledge of modern technology.
- Seven clusters covering 240 artisans of 16 SHGs have been taken up during the year, under the coir cluster development programme.
- Seventy artisans have been assisted with margin money of Rs.4.70 lakhs to avail bank finance for setting up their units.

#### Handloom and Sericulture

This sector occupies an important place in preserving the State's heritage and culture. The handloom products of Odisha have got wide recognition from all over the country

and abroad for their highly artistic designs, craftsmanship and durability. As per the Census conducted in 2009-10, there were 40,683 weaver households having 43,652 looms, with a population of 192,339 weavers in the State. There were 1,164 Primary Weavers Co-operative Societies (PWCS) by the end of 2011-12 of which 516 were working PWCS, 122 were dormant and the remaining 526 were under liquidation. During 2011-12, out of 43,652 looms, 31,728 were working looms that produced 123.95 lakh sq metres of handloom products valued at Rs.153.46 crores, sold 124.57 lakh sq metres valued at Rs. 151.30 crores and employed about 63,456 persons. During 2011-12, productivity per loom, per annum was 519 sq metres in the co-operative fold as against 527 sq metres in 2010-11, while the average earning per annum in the co-operative fold increased from Rs.19,446 to Rs.22,428 during the same period. Odisha 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 2011-12. More details are given in Annexure 4.6.

Figure 4.10: Production of Tassar Reeling Cocoon

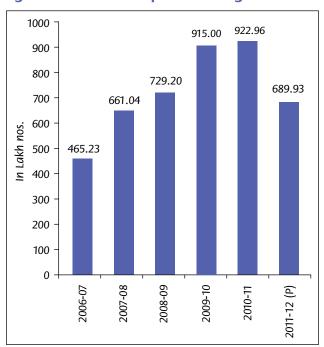


Figure 4.11: Production of Mulberry Reeling

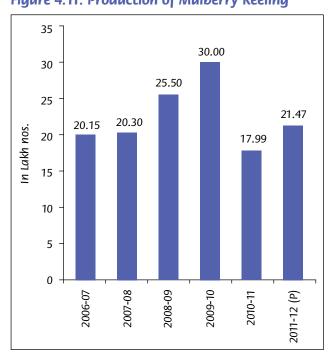
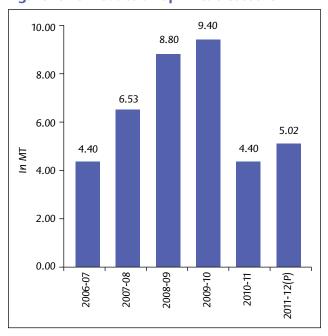


Figure 4.12: Production of Eri Cut Cocoons



#### Assistance to the Handloom Sector

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

- **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 2011-12, Rs.1,094.35 lakhs was provided and utilised, under this scheme.
- Capacity building through training and technological intervention: This scheme was launched in 2007-08. During 2011-12, Rs. 25.55 lakhs was released for supply of different improved machines to weavers/ PWCS of eight zones to facilitate higher efficiency in pre-loom, on-loom and quality control processes.
- Self-Employment Programme: In order to provide regular and sustainable employment to weavers for development of their socioeconomic status, skill up-gradation training has been provided under this scheme. During 2012-13, there is a programme to conduct 32 training camps at an expenditure of Rs.173.39 lakhs.

- Cluster Development Programme: This is a Centrally Sponsored Scheme introduced in 2007-08. In 2011-12, 30 clusters have been sanctioned at a project cost of Rs.490.79 lakhs out of which Rs.88.53 lakhs has been released. Besides, 15 clusters have been sanctioned with Rs.291.28 lakhs and Rs.37.83 lakhs with assistance from the Government of India and Government of Odisha respectively, for implementation of activities in the second/ third year.
- **Group Approach**: Weavers who are not covered under the cluster development programme are benefitted by a group approach scheme. During the 11<sup>th</sup> Five Year Plan, 91 proposals involving Rs.516.10 lakhs have been sanctioned and funds released.
- Marketing Incentives: Rs. 923.60 lakhs has been sanctioned and released towards marketing incentives in favour of 379 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 2011-12, 24 district level exhibitions, two special expos at Puri and Bargarh district and a national expo at Bhubaneswar were organised. Handloom fabric worth Rs.1,431.66 lakhs was sold.
- One-time Rebate of 10 percent on the Sale of Handloom Clothes: This scheme, was introduced in 2006-07 and was under implementation till the end of 2008-09. 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 2011-12, Rs. 600.00 lakhs was sanctioned in favour of 214 PWCS and three 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 of medical facilities up to Rs. 15,000 per annum by paying a premium amount of Rs.939.76.

For this scheme, the Central Government provides Rs.769.36, the State Government contributes Rs.120.40 while the remaining Rs.50 is borne by the beneficiary. During 2011-12, 46,531 handloom weavers were enrolled under this scheme.

Mahatma Gandhi Bunakar Bima Yojana: This is another weaver's welfare scheme, implemented by the Central Government in collaboration with LIC of India. Under this scheme, a weaver can get Rs.60,000 in the event of natural death, Rs.1.5 lakhs on accidental death/total disability and Rs.75,000 on partial disability. Besides, student scholarships to the children of enrolled member weavers,, studying in classes IX to XII at the rate Rs. 600/- per six months is being provided. During 2011-12, 32,595 weavers were enrolled and 299 weavers benefitted with a total claim of Rs.180.30 lakhs towards natural and accidental deaths. Similarly, 9,572 children of weavers' families have been provided scholarships worth Rs.57.43 lakhs under the Sikhya Sahayaka Yojana.

#### Support to the Textile Sector

At present, eight co-operative spinning mills, one ginning unit and ten power looms exist under the Odisha State Co-operative Spinning Mills Federation Ltd. Out of these, one spinning mill was privatised in 1993. The production activities of the remaining six cooperative spinning mills and all power loom societies have been closed for a long time. These units are in the process of privatisation/liquidation. The State has liquidated ten Odisha State Power Looms Weavers Servicing Societies and transferred ten power looms to SPINFED, a semi-Government organisation.

#### Assistance to the Sericulture Sector

Odisha is a traditional tassar state. Tassar farming is done in 14 districts. Mulberry cultivation, which is relatively new, is practised in 10 districts and eri cultivation, which is traditional, has been practised in 14 districts. The State Government and the Central Government promote sericulture as a sustainable livelihood programme. During 2011-12, Rs.584.44 lakhs

was received from the Central Silk Board under the Catalytic Development Programme and utilised. One hundred thirty-four tassar seed rearers have been assisted for procuring rearing equipments. Four hundred and fourteen bioltine mulberry rearers have been assisted for procurement of rearing equipment and construction of rearing houses. Funds have been provided for irrigation of 100 ha of mulberry gardens. Two hundred farmers were assisted in constructing eri rearing houses and 1,300 farmers have been assisted in raising caster/ tapioca plantations. Several other schemes have been implemented. These schemes include the following programmes and support:

- During 2011-12, Rs.3 crores was sanctioned and utilised under the State Plan scheme for promotion of sericulture. About 1,293 mulberry rearers, 13,233 tassar rearers and 2,027 eri rearers benefitted.
- The State Government provides subsidy to the Odisha Cooperative Tassar and Silk Federation Ltd. (OCT&SF). At present, 62 Primary Tassar Rearers' Cooperative Societies, 36 Primary Mulberry Rearers' Cooperative Societies and one Primary Eri Rearers' Cooperative Society are affiliated to OCT & SF/SERIFED Ltd. During 2011-12, 3,000 rural tribal tassar, mulberry and eri rearers benefitted from his scheme.
- A micro project for development of sericulture has been implemented in Udayagiri and Mohana blocks of Gajapati district during the 11th Plan period. In 2011-12, Rs.1.crore has been released to Micro Project, Chandragiri. The Micro Project has utilised 38,610 DFLS covering 587 beneficiaries and 10,900 kg of mulbery cocoon.

#### 4.1.4 Exports

At the end of 2011-12, there were 344 exporters in Odisha and 22,012 industry units including 2,285 small scale registered units. During 2011-12, 20 small scale industrial (SSI) units have been registered with the Directorate and Rs.14,100/- has been collected as registration fee. Nearly 12,206 samples were tested in six testing laboratories and Rs.32.86 lakh testing fee was collected in 2011-12. Figure 4.13

Figure 4.13: Value of Goods Exports from Odisha to Foreign Countries

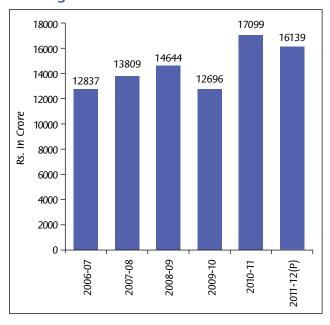
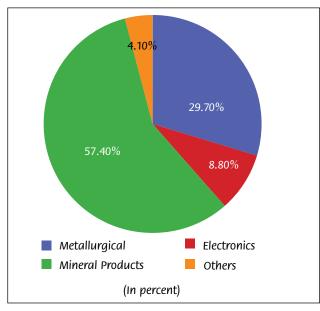


Figure 4.14: Composition of Exports from Odisha, 2011-12



shows that the total value of exports from Odisha has been showing a rising trend. The export composition in terms of values during 2011-12 is shown in Figure 4.14. Mineral and metallurgical products constituted 57 percent and 30 percent shares respectively of exports from Odisha. Further details are given in Annexure 4.8. Exports of goods by items to foreign countries during 2011-12 are detailed in Annexure 4.9.

#### 4.1.5 Policy initiatives

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

# Odisha 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, biotechnology, 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 Industry 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 Odisha Industries (Facilitation) Act, 2004 has been enacted and the Odisha 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 Odisha 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 (SEZ) 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, Odisha 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.

#### 4.1.6 Public Sector Enterprises (PSE)

Public sector firms in Odisha are generally administrative and management units. They do not belong to the large-scale industry category. At the end of 2011-12, there were 64 Public Sector Companies, of which 32 are operational and the rest are closed. The total investment in these 32 PSUs 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 PSUs is given in Annexure 4.10 and the list of 24 profit making PSU, seven loss incurring and one no profit no loss making PSE is given in Annexure 4.11.

## **Public Enterprise Reform**

# Memorandum of Understanding (MoU) with State PSU, 2010-11

Public Enterprises Department has encouraged different public sector undertakings to sign Memorandum of Understanding (MoUs) to improve their accountability and efficiency. Seventeen PSUs have already signed MoU with their administrative departments.

### **Empanelment of Independent Directors**

Short-listing of independent directors has been completed and placed on the website. The State PSUs are intimated to appoint required number of independent directors from the panel with the approval of the administrative departments.

# Selection through Public Enterprise Board (PSEB)

The Government is keen to professionalise the management of PSUs. This is also a requirement under Corporate Governance Manual. Till now, nine posts have been filled through PSEB.

### **Categorisation of PSUs**

The categorisation process for State PSUs has been completed and approved by the State Government. All operating PSUs have been intimated for its implementation.

### Listing of PSUs on the Stock Exchange

The State Government has been encouraging PSUs for their listing on the stock exchange. The Odisha Hydro Power Corporation (OHPC) has been authorised to take appropriate steps to get listed at the stock exchange. Necessary steps have also been taken for listing of Odisha Mining Corporation Ltd.

#### **Privatisation**

Three spinning mills - Kalicospin, Oricospin and Gopispin are in different stages of privatisation.

#### Restructuring

Restructuring of the Odisha Financial Corporation and Odisha Forest Development Corporation have been taken up. Proposals for creation of Special Purpose Vehicle (SPV) to transfer the stressed and doubtful loans for early settlement are under consideration.

### Social Safety Net Project

For management of SSNP, the Department of Public Enterprises has created a Programme Implementation Agency for developing and implementing Social Safety Net Programmes for Voluntary Retirement Scheme/ Voluntary Separation Scheme (VRS/VSS) retirees of different PSUs.

### VRS/VSS

The Public Enterprises Department has taken a number of steps and created a mechanism including audit and disbursement procedure for smooth implementation of VRS/VSS for the State PSU under the Odisha State Renewal Funds Society (OSRFS). Action has been taken to release VRS/VSS assistance to different PSUs against the claims raised.

### **Audit of PSU**

The P.E. Department, in association with the Accountant General, Odisha has reviewed the audit position of PSUs and finalised a time-bound audit completion plan for individual PSUs.

# 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 lakhs and in the business/service sector, it is Rs.10 lakhs. During 2011-12, against the target of Rs.16.88 crores fixed for all DICs as subsidy, Rs.18.55 crores was utilised against the physical target of 1,206 units, Out of these, 1,132 units received subsidy. Annexure 4.12 gives details under PMEGP in Odisha.

#### **Ancillary and Downstream Industries**

The Directorate of Industries coordinates with large industries for promotion of ancillary and downstream industries. During 2011-12, out of a total purchase of Rs.610.47 crores, the Central Public Sector Undertakings (CPSU) operating in the State procured spares and consumables worth of Rs.336.06 crores from inside the state. The list of nine PSUs along with numbers of ancillary units/ vendors granted by them is provided in Annexure 4.14.

### 4.1.7 Major State-level Institutions

# Odisha Industrial Infrastructure Development Corporation (IDCO)

IDCO has been entrusted with the responsibility of creating infrastructure facilities in Industry estates across the State. This is an ISO 9001 and ISO 14001 certified corporation and has established and managed 86 industry estates in Odisha. It is also the nodal agency for identifying

and acquiring land from the Government and private parties at strategic locations for industry promotion. Land so acquired is allotted for industry and infrastructure projects.

- During 2011-12, over 3,857.971 acres of land was acquired and allotted to 42 upcoming MoU/non-MoU projects. While 216.759 acres of land was allotted to 63 small and medium units and sheds in different industry estates/areas and Rs.46.37 crores was realised from the sale of land.
- A bio-pharma IT Park at Bhubaneswar has been established, under the PPP over an area of 64.68 acres. A Special Purpose Vehicle (SPV), M/s Konark Knowledge Park, has been formed for implementation of the project while One Auto Park is being developed at Maria, near Chowdar.
- Under the Petrolium, Chemicals Petrochemicals Investment Region (PCPIR) scheme, an SPV, M/s Paradeep Investment Region Development Ltd., has been formed for development of petroleum and petrochemicals industries in Paradeep region and the project has been approved by the Government.
- Under the Industrial Infrastructure Upgradation (IIU) scheme, the proposal for developing plastic, polymer and allied clusters at Balasore has been approved by the Government of India, which has released Rs.17.48 crores as the first instalment, while the State Government have also contributed Rs.2 crores in matching grants for infrastructure development work.
- The Base-cum-Development agreement has been signed with M/s Forum Project Pvt. Ltd., for establishment of an IT and commercial complex over 3.12 acres of Industrial Development Corporation of Odisha (IDCO) land in the civil township of Rourkela.
- An MoU has been signed between IDCO and National Aluminium Company Limited (NALCO) to develop an ancillary and downstream aluminum park at Angul over 450 acres of land, close to NALCO smelter plant. Ac.65 Government land has been taken as advance possession.
- A sector-specific SEZ for IT/ITES/BPO industries at Bhubaneswar, named InfoValley

(Infocity-II), has been developed by IDCO over 500 acres of land as a PPP mode. Formal approval for the SEZ status has been obtained from Government of India and construction of the boundary wall is in progress.

 Government of Odisha has decided to establish a Mega Food Park near Bhubaneswar over 282 acres as a PPP mode. IDCO is the nodal agency for establishment of this park. A Government of India grant up to Rs. 50 crores will be available for the project.

The Corporation achieved a turnover of Rs.470.62 crores during 2011-12 with a net surplus of Rs.53.32 crores.

# Industrial Promotion and Investment Corporation of Odisha Ltd. (IPICOL)

IPICOL is the key promotional institution with the main objective of accelerating the pace of industrial development and promoting large and medium scale industries in Odisha. It is also a State Level Nodal Agency for the industry 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 Odisha, which is a broad institutional framework of the State Government engaged in industry facilitation and investment promotion.

IPICOL is the single-point contact for investors with an investment of Rs.50 crores 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 2011-12 are given below:

- IPICOL signed an MoU with the Central Bank of India on 23.10.2009 for credit flow to the MSME sector. The Central Bank of India has sanctioned Rs.7,297.83 crores and released Rs.4,291.42 crores in favour of 8,073 MSME units by the end of January, 2012.
- During the current year, IPICOL has received 42 CAF with a proposed investment outlay of Rs. 27,154.51 crores.
- During 2011-12, 13 projects involving Rs.65,016.71 crores and 13 projects involving Rs.1,59,812.62 crores 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 and training to youth for enhancing their skills and employability.
- During 2011-12, IPICOL participated in several workshops/seminars and put up common stalls at the Indian Chem. 2010 exhibition at Mumbai, Enterprise Odisha, 2011 organised by Confederation of Indian Industry (CII) at Bhubaneswar, IITF, 2011 at New Delhi, Seven needs of Industries by CII at Bhubaneswar, 5th & 6th Rice Milling campaign at Baripada and Angul, and many others.
- A three day Invest Bhubaneswar Symposium was conducted where entrepreneurs from Silicon Valley, USA, Japan, Taiwan and Spain participated.

During 2011-12, IPICOL recovered Rs.368.99 lakhs including Rs.72.80 lahks interest while no loan disbursement was made. A 13 member delegation had come from Washington State India Trade Relation Action Committee led by its Governor, Washington State and interacted with senior Government officials, entrepreneurs from the hotel, education, health, infrastructure and green energy sectors.

# Industrial Development Corporation of Odisha Ltd. (IDCOL)

IDCOL supports some large and medium scale industries in the State. It has set up 15 industry 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.
- Due to the adoption of strict regulations, operations in many mines were suspended and manufacturing activity of IDCOL was badly affected. However, the Corporation provides employment to about 2,919 employees (directly 1,354 and indirectly 1,565) in 2011-12.

#### Odisha Small Industries Corporation (OSIC)

The OSIC was established in 1972 with main objective to aid and assist SSI units for their all-round growth and development. Its major activities are as follows:

- Raw Material Assistance Scheme: OSIC provides various types of raw materials to SSI units through twelve raw material depots spread all over the State. Presently, it deals with raw materials like iron and steel, TISCON bars, aluminum ingots, plastics, bitumen and coal and has appointed 136 dealers to spread its TISCON bar business. The Corporation achieved a turnover of Rs. 399.60 crores during 2011-12 against the expected turnover of Rs.326.65 crores.
- Marketing Assistance Scheme: It provides product and project marketing assistance to small-scale units and participates in tenders and liaison 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. 73.92 crores during 2011-12.
- **Sub-Contract Exchange Scheme**: The Corporation provides marketing support to SSI units through its Contract Exchange Scheme. In 2011-12, it achieved a business of Rs. 7.69 crores under this scheme against the projected turnover of Rs.16.28 crores.

# Odisha 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 industry co-operative societies and extended financial support to 358 individuals under the 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 crores in the form of margin money was provided to 3,842 units under REGP up to 2007-08, creating employment for 36,259 individuals.

In 2008-09, Khadi & Village Industries Commission introduced the Prime Minister's Employment Generation Programme (PMEGP) merging the earlier PMRY and REGP. The scheme has been implemented in the State through KVIC, OK&VI Board and District Industries Centre (DIC). The Board has extended financial assistance margin money amounting to Rs.12.75 crores in favour of 678 units during 2011-12 and created employment for 5,333 persons. It aims to assist 1,036 units, during 2012-13 with Rs.23.81 crores margin money and to generate employment for 8,278 persons.

### **Odisha State Financial Corporation (OSFC)**

OSFC, established in 1956, has played a pivotal role in extending credit support and financial services to first generation entrepreneurs to set up MSME in the State and thereby ushered in an era of industrialisation in the State. It has completed more than five decades of dedicated service in financing MSMEs and has contributed to the process of economic development of the State in terms of value addition, employment generation, mobilisation of capital, entrepreneurship, skill development and export earning. Due to structural changes in the economy, many of the MSMEs in the State could not cope up with the emerging competition and became sick. This adversely affected the financial health of OSFC. Now OSFC is being revived, restructured and rejuvenated with support from the State Government and other stakeholders like Small Industries

Development Bank of India (SIDBI), IDBI and others.

Since its inception till the end of March, 2012, OSFC has sanctioned Rs.1,314.31 crores in favour of 28,223 units and disbursed Rs.1,306.67 crores to 28,216 units. During 2011-12, OSFC sanctioned Rs.4.11 crores in favour of eight units and disbursed Rs.0.84 crores. During 2011-12, OSFC recovered Rs.36.55 crores and repaid Rs.11.22 crores to SIDBI and Rs.0.86 crores towards capital investment subsidiary and interest subsidy. The net worth of the Corporation has improved from (-) Rs.282.41 crore to Rs.18.19 crore and Capital Adequacy Ratio from (-) 94.23 percent to 9.50 percent from the Financial Year 2004-05 to 2011-12. During 2012-13, OSFC has laid emphasis on providing credit assistance to new industries and targeted a sanction of Rs.35.00 crores, disbursed Rs.15.00 crores and set recovery target at Rs.35.00 crores.

# 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 industry units and rendering technical assistance for promoting exports. Export promotion is made through the following activities:

- Creating better infrastructure like an Export Promotion Industry Park (EPIP) for boosting exports.
- Providing overseas marketing information and overseas trade enquiries to potential exporters
- Liasoning with Central Government/State Government departments and export promotion agencies to sort out difficulties encountered by exporters of the State.
- Presenting export awards annually to the best exporters to generate competitiveness among exporters of the State.
- Conducting workshops and seminars in collaboration with recognised national level institutions like Indian Institute of Foreign Trade (IIFT), Director General of Foreign Trade (DGFT), Export Credit Guarantee Corporation (ECGC) and Export Promotion Councils (EPC).

Assisting potential exporters in providing know-how to enter the export market.

# 4.2 Mining and Quarrying

Odisha is richly endowed with large varieties of minerals which include chromite, bauxite, graphite, iron ore, manganese ore, limestone, clay, quartz and quartzite, nickel, copper, lead, coal and many precious stones. The State occupies a prominent place in the minerals map of the country, both in term of deposits and production. Endowed with rich minerals, Odisha has huge potential for a rapid industrialisation process. Figure 4.15 and Annexure 4.16 depict the deposit of four major minerals in the State and major minerals deposits in Odisha vis-a-vis other states respectively.

In recent years, the mining and quarrying subsector has been contributing about 7.5 percent towards Odisha's real GSDP at 2004-05 prices. The contribution of this sector to Odisha's real GSDP for the period from 2004-05 to 2012-13 is shown in Figure 4.16. Its contribution to the industry sector is to the order of 25 percent. This sub-sector has grown, in real terms at 2004-05 prices, at an average annual rate of 4.86 percent except during the year 2012-13.

In terms of value of output of minerals, Odisha ranks the highest in India in recent years and its share has been increasing. Figure 4.17 compares Odisha with other major states in 2010-11

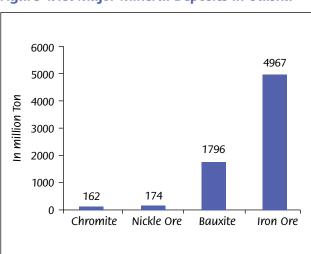


Figure 4.15: Major Mineral Deposits in Odisha

Figure 4.16: Share of Mining & Quarrying in Odisha's Real GSDP Sector, 2004-05 to 2012-13

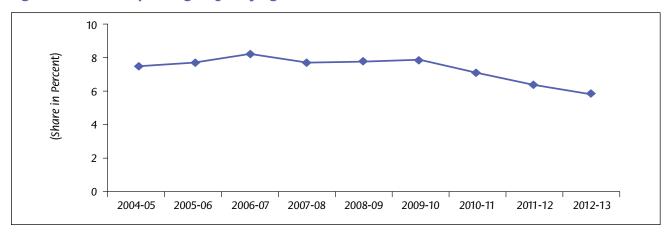
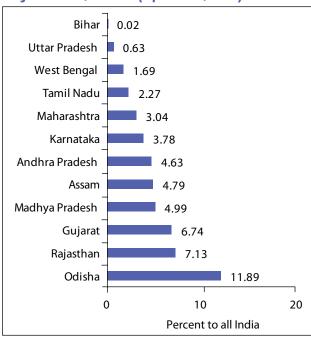


Figure 4.17: Value of Mineral Production of Major States, 2010-11 (Up to Feb, 2011)



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 2000-01 to 2011-12.

# 4.2.1 Deposits, Production and Exports of Minerals

Within the State, coal constitutes the lion's share (88%) 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.

Production of major minerals in Odisha during 2011-12 is illustrated in Figure 4.20 and reported in Annexure 4.21. It may be observed that about 51 percent of coal has been extracted in Angul district and the rest from Jharsuguda, Sundargarh

Figure 4.18: Value of Mineral Production in Odisha

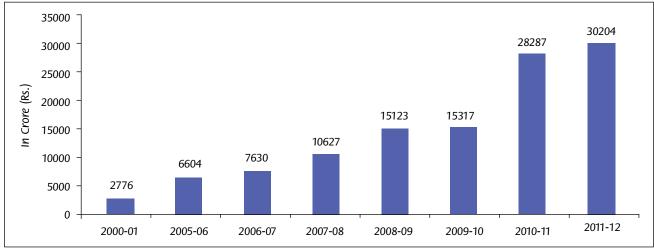
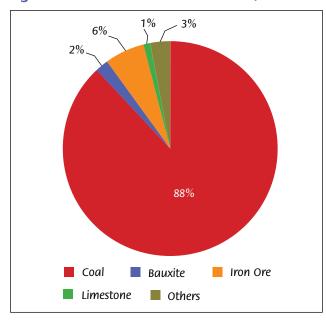


Figure 4.19: Mineral Reserve in Odisha, 2011-12



and Sambalpur districts. Iron ore extraction is mostly confined to Keonjhar district which accounts for 68.4 percent of total extraction, followed by Sundargarh (27 percent). Most bauxite mining takes place in Koraput district.

Annexure 4.22 shows data on production and value of minerals from 2000-01 to 2011-12, while Annexure 4.23 lists the break-up of production and value of different minerals from 2009-10 to 2011-12. Not only extraction or production, the exports of minerals and ores from the State showing a fluctuating trend 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 96.2 percent in 2011-12, as may be seen from Figure 4.22. The domestic use and exports of total

Figure 4.20: Production of Major Minerals in Odisha, 2011-12

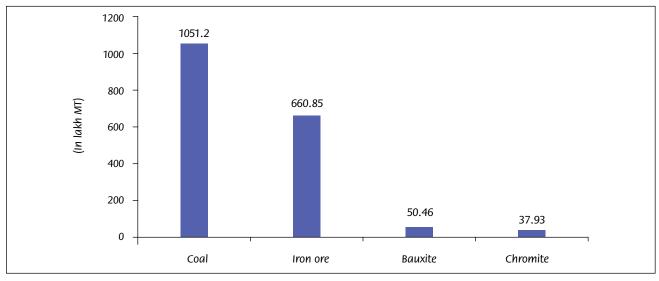


Figure 4.21: Total Exports of Minerals and Ores, 2000-01 to 2011-12

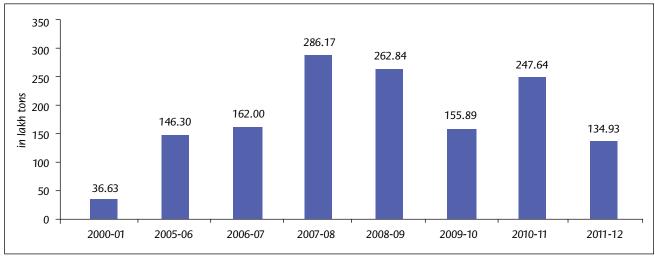
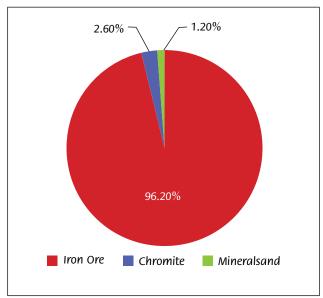


Figure 4.22: Percentage Composition of Exports of Minerals & Ores, 2011-12



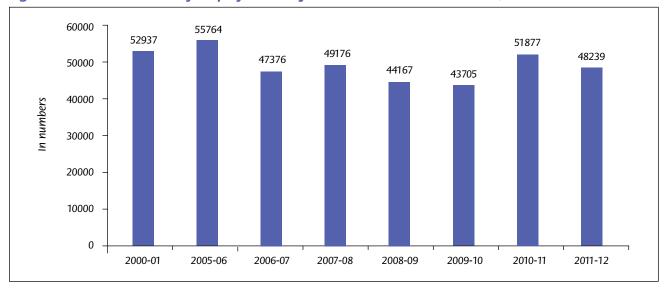
production of minerals and ores has also been examined. Analysis suggests that the division of total production into domestic use and exports has not varied much.

## 4.2.2 Employment in Mining Sector

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

The sector has been increasingly employing labour-saving and capital-intensive production techniques and technology over the years. The total employment in the sector has displayed a poor figure as this sector has become more

Figure 4.23: Workers directly employed in major mineral activities in Odisha, 2000-01 to 2011-12



mechanised. However, employment, which touched 48,239 by the end of 2011-12, decreased by 7.01 percent over 2010-11. Further, nearly 70 percent of employees are engaged in the iron ore and coal sub-sectors, as may be seen from Figure 4.24.

#### 4.2.3 Mining Leases

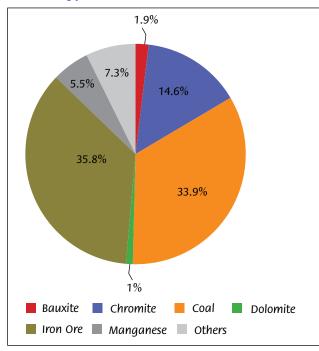
There were 600 mining leases in 2011-12, covering an area of 98.438 thousand ha. Of these, 128 leases, over an area of 64.457 thousand ha, were in operation. Mineral-wise leases, both

working and non-working during 2011-12 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 2011-12, given that the total area has decreased while the production of minerals and ores has increased steadily.

#### 4.2.4 Odisha Mining Corporation (OMC)

Established in 1956, the Odisha Mining Corporation Limited (OMC) is today the largest State public sector unit in the country's mining sector. In 2011-12, out of 600 mining leases,

Figure 4.24: Composition of Employment by Mineral Type, 2011-12



35 leases covering an area of 17,483 ha have been sanctioned to OMC. Of these, six are in operation, covering an area of 5,930 ha. Mineral-wise number of leases held by OMC by the end of 2011-12 is given in Annexure 4.29. After showing an increasing trend, the production of minerals by OMC started declining from 2009-10. Its total production in 2009-10 was about

79.89 lakh MT which came down to 48.14 lakh MT during 2011-12. Iron ore constituted about 89 percent (Annexure 4.30).

OMC has considerably increased its internal sales and exports of different minerals over the years. During 2011-12, it sold 42.85 lakh MT of ores/minerals worth Rs. 2141.81 crores. Of these, 2.74 lakh MT minerals/ores valued at Rs.163.04 crores were exported. The turnover of OMC during 2011-12 was Rs. 2142 crores and it earned a profit of Rs.1,881 crores before tax deductions. The annual turnover, profit and dividend paid to the State Government from 2003-04 to 2011-12 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 2011-12, it has undertaken 14 explorations for minerals like coal, iron ore, bauxite, limestone, diamond, heavy minerals in beach sand as well as geophysical and geochemical investigations. Major observations for 2011-12 are as follows:

Iron and manganese investigations succeeded in locating 13 small iron ore occurrences and eight small manganese

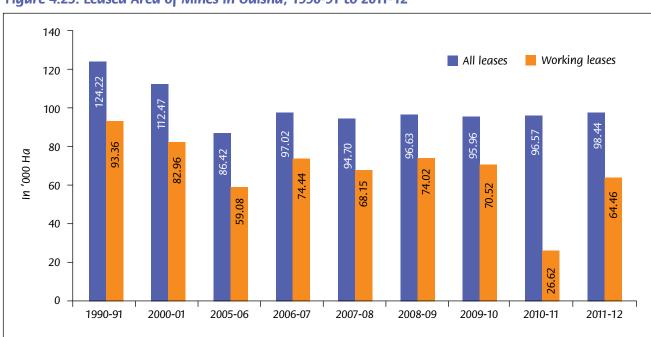


Figure 4.25: Leased Area of Mines in Odisha, 1990-91 to 2011-12

- occurrences in parts of Sundergarh and Keonjhar districts and assessed availability of 3.76 million tonnes of iron ore and 0.06 million tonnes of manganese ore.
- Bauxite investigation projects identified 10 bauxite bearing plateaux in which the thickness of the bauxite profile varies from 3 to 12 m variable dimension. Investigation for limestone and dolomite in parts of Sundargarh district brought to light limestone and manganese occurrences.
- Exploration for primary source of diamonds in Kalmidadar area of Nuapada district establishes a thickness of the diamondiferous olivine lamproite body available between 0.85 m to 16.05 m.
- Exploration for heavy Industry minerals like limonite, rutile, zircon and garnet in Puri district was taken up. Four heavy mineral bearing areas have been identified.
- Of the earlier explorations, 25 investigation reports have been finalised where 0.82

- million tonnes of heavy minerals, 0.279 million tonnes of iron ore, 0.68 million tonnes of manganese ore and 16.45 lakh cubic metres of dimension stone have been reported.
- Petro-graphical studies of 171 rock specimens were conducted.
- The gem testing laboratory characterised and certified 4,851 coloured precious, semi precious and organic stones and generated Rs.8.18 lakhs revenue.

Odisha 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 Odisha Mining Corporation and Directorate of Mines have resulted in identifying 52 gem belts with 16 mining blocks in western districts of Odisha. A sophisticated gemstone laboratory has been set up at Bhubaneswar with UNDP assistance.



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

Period	Total no. of registered factories	Closed	Defaulted	Repoted	Total employment (number)	Value of output (Rs. In cr.)	Value of input (Rs. In cr)	Value of depreclation (Rs. In cr.)	Net value added by manufacture (Rs. In cr.)
1	2	3	4	5	6	7	8	9	10
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
2009-10	3375	NA	NA	2052	227525	65662.34	47712.68	3149.92	14799.74
2010-11(p)	3396	N.A	N.A	2536	282,860	92147.54	70697.89	4512.28	16931.37

Annexure 4.2: SSI/MSME Industries in Odisha

Year	SSI/MSME units setup (cummulative)	SSI/MSME units setup during the year	Investment made (Rs. in Crore)	Employment generated (persons)
1	2	3	4	5
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
2010-11	111856	5016	395.02	24451
2011-12	117361	5505	500.73	30387

P: Provisional

Source: Directorate of Industries, Odisha

Annexure 4.3: District-Wise Break-up of MSMEs, 2011-12

Districts	No. of MSME	Investment	F	Employme	nt Generate	d	Employment
	units set up	(In crores of Rs.)	SC	ST	General	Total	of women
1	2	3	4	5	6	7	8
Bargarh	170	9.57	144	97	599	840	87
Jharsuguda	73	10.64	49	119	194	362	4
Sambalpur	162	6.19	101	98	452	651	49
Deogarh	36	18.36	17	57	99	173	19
Sundergarh	492	75.38	199	795	1428	2422	234
Keonjhar	205	7.77	195	300	587	1082	189
Mayurbhanj	285	10.21	180	521	554	1255	174
Balasore	331	18.23	379	284	1104	1767	250
Bhadrak	210	7.58	74	12	790	876	33
Kendrapara	116	5.39	72	2	380	454	56
Jagatsinghpur	130	43.69	421	9	1777	2207	105
Cuttack	403	56.10	204	11	1798	2013	247
Jajpur	300	11.05	178	29	1008	1215	121
Dhenkanal	171	13.72	164	101	822	1087	0
Angul	205	12.87	134	14	718	866	44
Nayagarh	100	7.30	65	29	522	616	134
Khordha	455	52.55	127	21	2309	2457	157
Puri	243	13.41	463	2	1159	1624	490
Ganjam	375	18.00	142	7	1533	1682	275
Gajapati	77	9.21	54	113	271	438	185
Kandhamal	116	2.88	130	131	194	455	61
Baudh	41	0.99	28	5	104	137	1
Sonepur	61	8.37	135	53	207	395	89
Bolangir	215	17.38	238	151	681	1070	75

(Contd...)

Districts	No. of MSME	MSME Investment Employment Generated					Employment
	units set up	(In crores of Rs.)	SC	ST	General	Total	of women
1	2	3	4	5	6	7	8
Nuapada	30	1.22	13	16	90	119	3
Kalahandi	130	24.59	132	104	556	792	45
Rayagada	180	12.50	139	178	547	864	30
Nabarangpur	42	3.82	45	82	430	557	279
Koraput	125	20.10	203	1011	580	1794	825
Malkangiri	26	1.40	39	25	53	117	2
Total	5505	500.73	4464	4377	21546	30387	4263

Source: Directorate of Industries, Odisha

Annexure 4.4: Sector-wise MSME Units in Odisha by the end of 2011-12

Category	No. of units setup	Investment (Rs. in crore)	Employment (persons)
1	2	3	4
Food & Allied	25683	1203.53	136814
Chemical & Allied	2910	217.70	22391
Electrical & Electronics	1154	66.70	7353
Engineering & Metal Based	12919	921.93	95989
Forest & Wood based	7030	79.89	44167
Glass & Ceramics	8495	547.01	136523
Livestock & Leather	451	7.53	2559
Paper & Paper Products	2982	118.02	16497
Rubber & Plastics	1792	192.57	10817
Textiles	8608	134.05	50634
Misc. Manufacturing	6459	193.77	31489
Repairing & Services	38878	853.98	124005
Total	117361	4536.69	679238

Source: Directorate of Industries, Odisha

Annexure 4.5: Growth of Handicraft and Cottage Industry in Odisha

Year	No. of units established during the year	Investment (Rs. in Crore)	Employment Generated (no. of persons)
1	2	3	4
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
2010-11	7884	26.29	12431
2011-12	7293	30.31	9187

P. Provisional

Source: Directorate of Handicrafts and Cottage Industries, Odisha

Annexure 4.6: Achievements of Tassar, Mulberry and Eri Sectors

Activities	2007-08	2008-09	2009-10	2010-11	2011-12 (p)
1	2	3	4	5	6
(A)Tassar Sector					
Tassar Food Plants (Ha)	8458	9115	10487	11035	11440
Production of Dfls (lakh nos.)	10.90	14.40	18.70	15.43	17.76
Procurement of Dfls (lakh nos.)	2.82	3.70	4.17	4.36	4.61
Consumption of Dfls (lakh nos.)	13.72	18.10	22.87	19.79	22.37
Production of reeling cocoons (lakh nos.)	661.00	729.20	915.00	922.96	689.93
Production of raw silk (M.T.)	47.60	57.00	71.00	77.57	89.70
Production of silk waste (M.T.)	2.20	4.40	14.20	15.50	17.00
No. of farmers covered (Nos.)	8872	9570	16343	12500	13233
(B)Mulberry Sector					
Mulberry area in Acre	669	774	762	772.50	946.90
Production of Ds (lakh nos.)	-	-	-	-	-
Procurement of Dfls (lakh nos.)	0.79	0.86	100	0.84	0.96
Consumption of Dfls (lakh nos.)	0.79	0.86	100	0.84	0.96
Production of reeling cocoons (lakh nos.)	20.30	25.50	30.00	17.99	21.47
Production of raw silk (M.T.)	2.03	2.50	3.30	2.02	2.70
Production of silk waste (M.T.)	0.02	0.65	0.75	0.24	0.23
No. of farmers covered (Nos.)	1406	1400	1094	1187	1208
(C) Eri Sector					
Existing Castor Plantation (Ac)	938	1300	845	1282	1033
Consumption of Dfls (lakh nos.)	0.96	1.32	1.35	0.78	1.48
Production of cut cocoons (M.T.)	6.53	8.80	9.40	4.40	5.02
Production of raw silk (M.T.)	4.90	6.60	7.00	3.30	3.80
No. of farmers covered (Nos.)	1545	2140	2250	2264	2027

P: Provisional

Source: Directorate of Handloom and Textile Industries, Odisha

### Annexure 4.7: Salt Production in Odisha

In MT

Year (salt production season)	Producti	Total	
	Cooperative sector	Private sector	
1	2	3	4
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
2010	3354	11262	14616
2011	1690	5710	7400

Source: Directorate of H & CI, Odisha

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

Rs. in crore

Items	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)
1	2	3	4	5	6	7	8
Metallurgical products	4036.75	5134.26	5057.74	5673.49	4561.77	4807.98	4793.94
%	37.57	39.99	36.63	38.74	35.93	28.12	29.70
Engineering, chemical and allied products	440.90	452.53	405.77	470.34	718.70	612.62	151.69
%	4.10	3.53	2.94	3.21	5.66	3.58	0.94
Mineral products	5392.74	6085.42	7088.06	6900.06	5740.14	9836.84	9257.42
%	50.19	47.40	51.33	47.12	45.21	57.53	57.36
Agriculture and forest products	20.94	10.10	6.25	2.02	4.17	8.77	0.02
%	0.25	0.08	0.05	0.01	0.03	0.05	0.00
Marine products including Fish & shrimps products	373.00	401.24	387.25	413.67	446.80	541.47	521.34
%	3.47	3.13	2.80	2.83	3.52	3.17	3.23
Handloom and textile products	9.24	13.97	20.83	15.26	19.43	28.96	0.01 (Textile)
%	0.03	0.11	0.15	0.10	0.15	0.17	0.00
Handicraft products	0.93	1.01	0.81	0.42	0.43	0.71	NA
%	0.01	0.01	0.01	0.00	0.01	0.00	0.00
Electronics	465.04	734.70	837.44	1162.80	1198.84	1254.24	1414.78
%	4.34	5.72	6.06	7.94	9.44	7.34	8.77
Others (Computer software & pharmaceutical etc.)	4.18	4.09	4.46	7.00	6.15	7.29	0.00
%	0.04	0.03	0.03	0.05	0.05	0.04	0.00
Total	10743.97	12837.32	13808.63	14644.33	12696.43	17098.88	16139.20
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00

P: Provisional Source: Directorate of Export Promotion and Marketing, Odisha

Annexure 4.9: Item-Wise Exports of Goods from Odisha, 2011-12

Sl. No.	Item exported	Value of Exports (Rs. in crore)	Destination Countries
1	2	3	4
1	Agriculture & Forest Products: - Tamarind Juice, Spices	0.02	Malayasia
2	Engg./Chemical & Allied Products: D.I/C.I Castings, Machinery, Granite, Paper, Pesticides, refractory materials, transformers, Tyers, Tubes etc.	151.69	USA, Newszealand, Behrain, West Indies, Japan, Singapore, Sweden, Malaysia, Cyprus, UAE, Australia, China, Bhutan etc.
3	Electronics: Software	1414.78	USA, UK, Canada, Japan, ,China,Australia, Spain, Germany, Brazil, Europe, South Africa etc.
4	Handicrafts: Stone, Painting, Applique Brass	N.A.	
5	Marine Products: Forzen Shrimps, Other marine products	521.34	USA, UK, Canada, Germany, Japan, France, UAE, Kuwait, Netherland, Belgium etc.
6	Metallurgical Products: Pig iron, Sponge iron, Ferro Chrome, Ferro Manganese, Charge Chrome, Aluminium, Aluminium utensils/circles.	4793.94	Bangladesh, Hongkong, China, Japan, Thailand,South Koria,Indonesia, Taiwan, Vietnam, Turkey, Singapore,USA,Russia etc.
7	Mineral products: Iron Ore, Chrome Ore, Concentrate, Ilmenite	9257.42	China, Japan, ,Malayasia Singapore, Spain,UAE, Australia etc.
8	Textile Products: Jute twine, Jute Products,.	0.01	Italy, Australia
9	Pharmaceutical Products Surgical dressings	N.A.	

Source: Directorate of Export Promotion and Marketing, Odisha

# Annexure 4.10: Lists of Closed PSUs, 2011-12

	•
1	Konark Detergent & Soap Ltd.
2	Premier Bolts and Nuts Ltd.
3	Kalinga Steel( India )Ltd.
4	Gajapati Steel Industries Ltd.
5	Odisha Electrical Manufacturing Corporation Ltd.
6	Hira Steel and Alloy Ltd.
7	Modern Malleable Casting Corporation Ltd.
8	IDCOL Piping and Engineering Works Ltd.
9	Odisha State Electonics Development Corporation Ltd.
10	Manufacturing Electro Ltd.
11	Modern Electronics Ltd.
12	Odisha Instrument Company
13	IPITRON Times Ltd.
14	Konark Television Ltd.
15	ELCO Communication & System Ltd.
16	ELCOS MOS Ltd.
17	Mayurbhanj Textile Ltd.
18	New Mayurbhanj Textile Ltd.
19	Odisha Textile Mills Ltd.

(Contd...)

20	Odisha State Textile Corporation
21	ABS Spinning Odisha Ltd.
22	Odisha State Handloom Development Corporation
23	Odisha State Commercial Transport Corporation
24	Odisha Fisheries Development Corporation
25	Eastern Aquatic Product Ltd.
26	Odisha Boat Builder Ltd.
27	Odisha Board Mills Ltd.
28	Odisha State Leather Corporation
29	Odisha Leather Industries Ltd.
30	K. S. Refractories Ltd. (Kanti Sharma)
31	ORICHEM Ltd.
32	General Engineering & Scientific Works Ltd.

Source: Public Enterprise Department, Government of Odisha

# Annexure 4.11: List of Profit-Making and Loss-Incurring Operating PSUs during 2011-12

Sl. No.	Corporations	Profit/Loss
1	2	3
1	Odisha Agro Industries Corporation Ltd.	Profit making
2	Odisha State Seeds Corporation Ltd.	Profit making
3	Odisha State Cashew Development Corporation Ltd.	Profit making
4	APICOL	Profit making
5	IDCOL Software Ltd.	Profit making
6	Odisha Forest Development Corporation Ltd.	Profit making
7	Odisha Mining Corporation Ltd.	Profit making
8	Odisha Construction Corporation Ltd.	Profit making
9	Odisha Bridge and Construction Corporation Ltd.	Profit making
10	Odisha State Civil Supply Corporation Ltd.	No Profit/No Loss
11	Odisha Tourism Development Corporation Ltd.	Profit making
12	Odisha Power Generation Corporation Ltd.	Profit making
13	Odisha Hydro Power Corporation Ltd.	Profit making
14	GRIDCO	Loss Incurring
15	Odisha Power Transmission Corporation Ltd.	Loss Incurring
16	IPICOL	Profit making
17	Odisha State Police Housing and Welfare Corporation Ltd.	Profit making
18	Industrial Development Corporation of Odisha Ltd.	Profit making
19	Odisha Small Industries Corporation Ltd.	Profit making
20	Odisha Film Development Corporation Ltd.	Profit making
21	Kalinga Studio Limited	Loss Incurring
22	Konark Jute Limited	Loss incurring
23	Odisha Lift Irrigation Corporation Ltd.	Loss making
24	Odisha Rural Housing and Development Corporation Ltd.	Loss incurring
25	Odisha State Beverage Corporation Ltd.	Profit making

(Contd...)

Sl. No.	Corporations	Profit/Loss
1	2	3
26	IDCOL Kalinga Iron Works	Loss making
27	IDCOL Ferrochrome and Alloys Ltd	Profit making
28	Odisha Pisciculture Development Corporation	Profit making
29	Odisha State Road Transport Corporation Ltd.	Profit making
30	Odisha State Ware Housing Corporation	Profit making
31	Odisha State Financial Corporation	Profit making
32	IDCO	Profit making

Source: Public Enterprise Department, Government of Odisha

Annexure 4.12: Activities under the PMEGP Scheme in Odisha

Sl. No.	Target	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6
1	Target				
(i)	Number	982	982	1271	1206
(ii)	Amount* (Rs. In crore)	11.79	Rs.11.79	17.79	16.88
2	Application received	6148	12045	9726	10950
3	Cases sanctioned				
(i)	Number	1054	1,341	1572	1338
(ii)	Amount* (Rs. In crore)	11.59	22.78	93.38	80.02
4	Cases released				
(i)	Number	889	928	1368	1132
(ii)	Amount* (Rs. In crore)	9.93	15.42	23.09	18.55

\* Involved margin money (Government subsidy) Source: Directorate of Industries, Government of Odisha

Annexure 4.13: Progress under PMEGP Scheme by KVIB

Year		Target		Achievement			
	No.	Margin money (Rs. in lakh)	Employment Genertaed (No.)	No.	Margin money (Rs. in lakh)	Employment Genertaed (No.)	
1	2	3	4	5	6	7	
2008-09	736	884	7366	553	709.92	3900	
2009-10	736	884	7366	603	1183.11	5404	
2010-11	953	1334.78	9530	796	1518.33	7962	
2011-12	905	1226.26	9050	678	1274.85	5333	

Source: KVIB, Odisha

Annexure 4.14: SSI units granted ANC status / Vendors by PSUs in Odisha, 2011-12

Name of the Central PSUs	No. of Ancillary status awarded	No. of Vendors
1	2	3
Rourkela Steel Plant (RSP)	-	206
National Aluminium Company (NALCO), Anugul & Damonjodi	53	-
Mahanadi Coalfields Ltd. (MCL),Sambalpur.	51 (Proven Ancillary Status)	-
Hindustan Aeronautics Ltd. (HAL),Sunabeda,Koraput	06	-
Indian Rare Earths Ltd. (IRE), Chhatrapur	-	35
Nilachal Ispat Nigam Ltd (NINL) Duburi, Kalinganagar	-	65
NTPC, Kaniha/ Talcher	-	-
IOF, Saintala	-	-
PPT, Paradeep	-	-

Source: Directorate of Industries, Odisha

Annexure 4.15: District-wise Loans Sanctioned, Disbursement Recovery and Outstanding Position of OSFC by the end of 2011-12.

Rs. In lakh

Sl. No.	District	Sanct	Sanctioned		rsement	Recovery	Outstanding
		No.	Amount	No.	Amount	made	
1	2	3	4	5	6	7	8
1	Angul	359	1317.99	359	1317.49	2925.93	292.22
2	Bolangir	1068	4048.52	1068	4047.23	3567.99	988.20
3	Balasore	1330	10045.40	1328	10004.80	15557.28	2934.19
4	Bargarh	414	1636.76	414	1636.76	1619.61	2481.92
5	Bhadrak	488	2284.74	488	2284.22	1103.42	966.00
6	Baudh	225	522.84	225	522.84	610.90	69.36
7	Cuttack	4155	21380.54	4154	21331.48	26994.44	4791.97
8	Deogarh	80	287.39	80	287.39	3351.58	160.31
9	Dhenkanal	1130	2524.01	1130	2524.01	3659.12	663.42
10	Gajapati	86	651.20	86	651.20	4060.25	525.78
11	Ganjam	1693	6886.66	1693	6632.58	7099.59	1569.09
12	Jagatsinghpur	2246	3246.73	2246	3246.52	3418.05	342.40
13	Jajpur	656	7318.35	656	7317.09	3466.50	1697.67
14	Jharsuguda	395	2048.51	395	2048.51	2772.70	312.84
15	Kalahandi	736	2103.49	736	2103.49	2383.23	376.99
16	Kandhamal	515	1619.39	515	1619.06	1448.66	481.94
17	Kendrapara	1182	2533.61	1182	2533.10	11909.89	615.52
18	Keonjhar	962	4369.02	962	4369.02	5859.00	490.60
19	Khordha	2629	19474.24	2625	19111.78	30728.74	6004.84
20	Koraput	687	2601.78	687	2576.46	3039.81	461.75
21	Malkangiri	128	179.92	128	179.92	1275.61	28.45

(Contd...)

Sl. No.	District	Sanctioned		Disbur	sement	Recovery	Outstanding
		No.	Amount	No.	Amount	made	
1	2	3	4	5	6	7	8
22	Mayurbhanj	1263	4099.83	1263	4098.57	6030.50	892.32
23	Nabarangpur	224	701.83	224	701.83	1492.22	106.06
24	Nuapada	124	422.06	124	422.06	1427.81	88.30
25	Nayagarh	1266	2169.88	1266	2169.88	1057.18	791.53
26	Puri	1188	5061.69	1188	5061.69	9160.08	581.25
27	Rayagada	288	1586.78	288	1586.78	2256.61	179.49
28	Sambalpur	735	5672.73	735	5662.73	9063.03	832.58
29	Sonepur	149	65.52	149	65.52	2049.20	21.32
30	Sundargarh	1822	14570.13	1822	14553.14	22801.79	363.54
	Total	28223	131431.54	28216	130667.15	192184.72	30111.85

Source: OSFC

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

In million tons

State	Bauxite	Coal*	Chromite	Lime stone	Manganese ore	Fireclay	Nickel ore	Iron ore
1	2	3	4	5	6	7	8	9
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
Odisha	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

State	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (up to Feb.)
1	2	3	4	5	6	7
Andhra Pradesh	4695.16	5292.40	6831.87	8896.60	9203.97	7588.10
	(6.20)	(6.03)	(6.63)	(5.76)	(5.73)	(4.63)
Assam	3088.24	3088.51	3156.20	8588.94	8751.23	7857.46
	(4.08)	(3.52)	(3.06)	(5.56)	(5.45)	(4.79)
Bihar	7.97	16.09	15.10	16.98	21.98	27.12
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Gujarat	5346.13	5704.48	5703.75	12050.12	12056.85	11050.27
	(7.06)	(6.50)	(5.53)	(7.80)	(7.51)	(6.74)
Karnataka	2817.98	3619.15	6198.20	6283.57	5385.68	6195.48
	(3.72)	(4.12)	(6.01)	(4.07)	(3.35)	(3.78)
Maharashtra	3713.86	4045.27	4777.58	5751.63	5708.23	4983.88
	(4.91)	(4.61)	(4.63)	(3.72)	(3.55)	(3.04)
Madhya Pradesh	5900.08	6648.47	7937.91	9147.51	9261.68	8177.90
	(7.79)	(7.57)	(7.70)	(5.92)	(5.77)	(4.99)
Odisha*	6622.00	7629.63	10627.05	17642.18	17034.03	19488.58
	(8.75)	(8.69)	(10.86)	(11.42)	(10.60)	(11.89)
Rajasthan	1432.70	2084.28	2470.44	2731.74	4042.98	11687.80
	(1.89)	(2.37)	(2.40)	(1.77)	(2.52)	(7.13)
Tamil Nadu	2347.20	2794.40	2961.15	3907.50	4029.24	3728.62
	(3.10)	(3.18)	(2.87)	2.53	2.51	2.27
Uttar Pradesh	1292.60	925.20	891.86	884.26	1041.37	1040.52
	(1.71)	(1.05)	(0.87)	0.57	0.65	0.63
West Bengal	3174.56	3467.00	3072.02	3285.74	3324.60	2777.31
	(4.19)	(3.95)	(2.98)	2.13	2.07	1.69
All India	NA	NA	103104.39	154514.08	160649.56	163907.85
	NA	NA	(100.00)	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, Odisha (for Odisha Figure);

## Annexure 4.18: Production and Value of Minerals Produced in Odisha & India

Production: In lakh tonne Value in crores of rupees

Mineral		Odi	isha		India			
	2010-11		2011-12		2010-11		2011-12	
	Prodn.	Value	Prodn.	Value	Prodn.	Value	Prodn.	Value
1	2	3	4	5	6	7	8	9
All Minerals	2079	28287	1852	30204	9875	108672	N.A	N.A
Fuel Minerals (coal)	1111	5844	1052	5580	5136	47480	N.A	N.A
Metallic Minerals	909	23235	755	24418	2242	40245	N.A	N.A
Non-metallic minerals	59	236	46	207	2497	20947	N.A	N.A

Source: Directorate of Mines, Government of Odisha

<sup>(2)</sup> Regional Controller of Mines – Bhubaneswar, Government of India

Annexure 4.19: Mineral Reserves in Odisha by the End of 2011-12

Minerals/Ores	Total Reserve (in million tons)	% of Total State Reserve of All Minerals
1	2	3
Bauxite	1795.813	2.22
China clay	313.931	0.39
Chromite	162.292	0.20
Coal	71447.41	88.19
Dolomite	327.011	0.40
Fire clay	175.462	0.22
Graphite	4.331	0.01
Iron ore	4966.969	6.13
Lead & Zinc ore (Base metal)	4.98	0.01
Lime stone	997.616	1.23
Manganese ore	119.861	0.15
Heavy minerals	226.00	0.28
Nickel ore	174.00	0.21
Pyrophy lite	8.315	0.01
Mineral Sand	222.082	0.27
Vanadium ore	2.500	Neg.
Quartz and Quartzite	70.114	0.09
Tin ore (tons)	0.000347	Neg.
Total	81018.69	100.00

Source: Directorate of Geology, Odisha

# Annexure 4.20: Rates of Exploitation of Important Minerals

In million tons

Minerals/Ores	Total reserves in	Exploitation during			Rate of Exploitation to total reserves (%)			
	2011-12	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12	
1	2	3	4	5	6	7	8	
Iron ore	4966.97	79.68	81.15	81.15	1.57	1.45	1.63	
Chromite	162.29	3.41	4.30	3.79	2.00	2.59	2.33	
Coal	71447.41	105.49	111.10	105.12	0.16	0.17	0.15	
Bauxite	1795.81	4.88	4.86	5.05	0.27	0.27	0.28	
Lime stone	997.62	2.71	3.81	3.14	0.27	0.38	0.31	
Dolomite	327.01	1.32	1.49	1.11	0.40	0.45	0.34	
Fire clay	175.46	0.06	0.1	0.00	0.04	0.06	0.00	
Quartz, quartzite and silica sand	70.11	0.14	0.032	0.07	0.20	0.04	0.10	
Mineral sands	222.08	0.25	0.26	0.24	0.11	0.12	0.11	
Graphite	4.33	0.02	0.02	0.03	0.58	0.46	0.69	
Manganese ores	119.86	0.60	0.63	0.54	0.51	0.53	0.45	

Sources: Directorate of Mines, Odisha, and Directorate of Geology, Odisha

Annexure 4.21: District-wise Break-up of Exploration and Value of Major Minerals in Odisha during 2011-12

Quantity in lakh MT, Value in crores of rupees

District	Chi	omite	Co	oal	Iro	n-ore	Manga	nese ore	Bau	xite
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9	10	11
Angul	-	-	538.59	2832.98	-	-	-	-	-	-
Dhenkanal	0.24	29.54	-	-	-	=	-	-	-	-
Jajpur	36.18	4453.39	-	-	19.88	574.73	-	-	-	-
Jharsuguda	-	-	366.59	1928.26	-	-	-	-	-	-
Keonjhar	1.51	185.86	-	-	452.08	1369.63	4.37	359.25	-	-
Koraput	-	-	-	-	-	-	-	-	50.03	194.84
Mayurbhanj	-	-	-	-	10.78	311.65	-	-	-	-
Sundergarh	-	-	123.44	649.29	178.11	5149.16	1.06	87.14	0.43	1.67
Sambalpur	-	-	22.59	118.82	-	-	-	-	-	-
Bolangir	-	-	-	-	-	-	-	-	-	-
Rayagada	-	-	-	-	-	-	-	-	-	-
Total	37.93	4668.79	1051.20	5529.35	660.85	7405.17	5.43	446.39	50.46	196.51

Source: Directorate of Mines, Odisha

Annexure 4.22: Production and Value of All Minerals/Ores in Odisha, 2000-01 to 2011-12

Year	Production (in lakh tons)	Value (Rs. in Crore)
1	2	3
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
2010-11	1995.46	28286.87
2011-12(p)	1852.20	30204.38

P: provisional

Source: Directorate of Mines, Odisha

Annexure 4.23: Production and Value of Various Minerals/Ores in Odisha, 2009-10 to 2011-12

Minerals/Ores	2009	9-10	201	0-11	2011-12		
	Production (in lakh MT)	Value (Rs. in crore)	Production (in lakh MT)	Value (Rs. in crore)	Production (in lakh MT)	Value (Rs. in crore)	
1	2	3	4	5	6	7	
Bauxite	48.78	190.24	48.57	189.38	50.46	196.52	
China clay	0.18	0.28	0.13	0.2	0.01	0.02	
Chromite	34.08	1166.56	43.02	4064.09	37.93	4669.40	
Coal	1054.88	5548.66	1110.95	5843.59	1051.20	5579.58	
Dolomite	13.15	41.03	14.9	46.49	11.14	34.76	
Fireclay	0.65	1.6	-	-	0	0	
Gemstone	N	0.46	-	-	N	NA	
Graphite	0.25	1.14	0.19	0.89	0.31	1.3	
Iron ore	796.79	7975.87	811.45	17129.71	660.85	19105.33	
Lime stone	27.08	75.01	38.09	105.51	31.35	86.84	
Manganese ore	6.04	213.15	6.29	809.77	5.43	446.54	
Mineral sand	2.47	83	2.6	87.37	2.44	88.99	
Pynophilite	0.18	0.34	0.05	0.09	0.09	0.16	
Pyroxenite	2.42	15.29	1.98	9.42	0.23	1.09	
Quartz	0.4	8.0	0.05	0.1	0.02	0.09	
Quartzite	0.99	3.56	0.26	0.52	0.15	0.73	
Silica sand	0.03	0.08	-	-	0.54	NA	
Soap stone	0.003	NA	-	-	-	-	
Kyanite	0.02	0.03	-	-	-	-	
Total	1988.4	15317.1	1995.46	28286.87	1852.20	30204.38	

N-Negligible (for 2009-10, 846.145 Kg, for 2011-12, 14.400 Kg) Source: Directorate of Mines, Odisha

Annexure 4.24: Production, Dispatch and Revenue Collection from Minor Minerals, 2004-05 to 2011-12

Year	Production (in cum)	Dispatched (in cum)	Revenue collection (Rs. In crore)
1	2	3	4
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
2010-11	NA	NA	226.56
2011-12	NA	NA	255.69

Source: Directorate of Mines, Odisha

Annexure 4.25: Exports of Minerals/Ores from Odisha

Quantity in lakh tons, Value in crores of rupees

Items	2007-08		2008-09		2009-10		2010-11		2011-12	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9	10	11
Chromite	9.07	1096.00	4.09	811.00	4.66	464.11	4.34	669.31	3.50	430.69
Iron Ore	167.00	5334.00	147.53	4017.24	148.68	4224.00	241.02	15155.22	129.67	3748.68
Mineral sand	2.00	49.40	1.08	26.65	2.55	72.32	2.25	63.81	1.56	52.42
Manganese	0.10	1.60	0.07	1.04	-	-	0.03	5.95	0	0
Others (thermal coal, Hardcoal and Ferrochrome)	108.00	1852.00	110.07	2232.45	-	-	-	-	-	-
Total	286.17	8333.00	262.84	7814.64	155.89	4760.43	247.64	15894.29	134.73	4231.79

Directorate of Mines, Odisha

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

Mineral Ores/District	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8	9
Bauxite (Koraput, Sundergarh)	775	839	866	678	634	664	564	932
Chromite (Dhenkanal, Jajpur, Keonjhar)	6607	8236	8452	9816	6528	7826	7571	7053
Coal (Angul, Jharsuguda, Sundergarh, Sambalpur)	17624	14500	13985	12747	13467	13875	15389	16330
Dolomite and lime stone (Bargarh, Bolangir, Koraput, Sundergarh)	1626	2378	1822	1843	2206	2312	2441	496
Iron ore (Jajpur, Keonjhar, Mayurbhanj, Sundergarh)	19592	20782	16677	18912	16838	14679	20071	17257
Manganese ore (Keonjhar, Sundergarh, Rayagada, Bolangir)	1513	1505	2612	2655	2294	2538	4069	2641
Others (china clay, quartz & quantity, graphite, mineral sand, gem stone, pyrophilite et.)	2100	7524	2962	2525	2200	1811	1772	3530
Total	49837	55764	47376	49176	44167	43705	51877	48239

Source: Directorate of Mines, Odisha

Annexure 4.27: Mineral-Wise Leases, 2011-12

Minerals/Ores	То	tal Leases	Working Leases			
	Nos.	Area in Hectares	Nos.	Area in Hectares		
1	2	3	4	5		
Asbestos	1	117.350	-	-		
Asbestos & Pyroxenite	1	49.22	-	-		
Bauxite	7	6630.404	3	16482.939		
Chinaclay	16	1557.352	0	0		
Chinaclay and F. Clay	2	93.163	-	-		
Chromite	24	6906.781	12	1908.902		
Chromite & Pyroxenite	1	406.000	1	406.000		
Serpentinite,Manganese & Chromite	1	187.03	-	-		
Coal	30	18684.972	27	17413.465		
Dolomite	5	521.649	3	408.405		
Fireclay	24	2675.984	-	-		
Fireclay & Sandstone	1	192.175	-	-		
Fireclay & Sillicasand	1	255.160	-	-		
Galena	1	5.261	-	-		
Gemstone	15	246.895	2	3.895		
Gemstone (Aquamarine)	1	24.289	-	-		
Graphite	103	2834.076	2	112.142		
Iron ore & Manganese	65	15455.330	19	7399.011		
Iron ore	75	20444.360	30	13223.218		
Iron ore & Bauxite	2	480.163	2	480.163		
Iron, Dolomite & Lime stone	1	134.733	1	134.733		
Iron Ore,Quarzite & soap stone	1	92.895	-	-		
Kyanite	1	55.49	-	-		
Limestone	9	2850.404	2	787.644		
Limestone & Dolomite	37	5330.075	5	1912.165		
Manganese ore	40	5954.535	10	1180.721		
Manganese & Bauxite	2	95.243	-	-		
Mineral Sand	1	2464.054	1	2464.054		
Nepheline Syenite	1	14.277	-	-		
Pyrophlite	3	198.294	-	-		
Pyrophlite & Quartzite	6	299.978	1	3.920		
Quartz	67	1131.452	-	-		
Quartz & Felshper	1	8.127	-	-		
Quartz & Gemstone	4	115.638	-	-		
Quartz & Quartzite	7	148.583	1	4.653		
Quartz & Silica sand	1	111.980	-	-		
Quartzite	24	541.254	5	112.794		

(Contd...)

Minerals/Ores	Total 1	Leases	ases Working Leases	
	Nos.	Area in Hectares	Nos.	Area in Hectares
1	2	3	4	5
Sand (stowing)	5	502.885	0	0
Sand stone	2	9.921	1	0
Silica sand	1	7.446	-	-
Soapstone	6	465.377	-	-
Soapstone & Pyroxenite	1	50.646	-	-
Soapstone, Stiatite & Talc	1	3.640	-	-
Talc	1	62.483	-	-
Tin ore	1	20.855	-	-
Total	600	98437.879	128	64456.629

Source: Directorate of Mines, Government of Odisha

Annexure 4.28: Number of Mining Leases, 1990-91 to 2011-12

	Total 1	Leases	Working Lea	
	Nos.	Area in '000 hectares	Nos.	Area in '000 hectares
1	2	3	4	5
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	96.626	376	74.024
2009-10	597	95.957	330	70.520
2010-11	600	96570	78	26.622
2011-12	600	98.438	128	64.457

Source: Directorate of Mines, Odisha

Annexure 4.29: Leases Held by OMC at the End of 2011-12

Minerals/Ores	Lease	d held	Leases in	operation
	Nos.	Area (in hect.)	Nos.	Area (in hect.)
1	2	3	4	5
Chromite	11	5829.304	2	935.166
Iron	11	5786.914	2	2609.176
Iron & Manganese	5	4166.668	2	2385.57
Manganese	3	685.241	-	-
Lime stone	1	859.99	-	-
Gemstone	4	154.756	-	-
Total	35	17482.874	6	5929.912

Source: Odisha Mining Corporation, Odisha

#### Annexure 4.30: Production of Minerals by OMC

In lakh MT

Minerals/Ores	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8
Iron ore	34.19	44.31	56.45	78.37	74.51	53.36	42.73
Chrome ore	6.46	12.39	11.58	9.35	5.07	10.22	4.34
Manganese ore	0.81	0.08	0.03	-	-	-	-
Chrome concentrate	1.81	1.83	1.03	0.51	0.36	0.92	1.07
Total	43.27	58.61	69.09	88.23	79.89	64.50	48.14

Source: Odisha Mining Corporation, Government of Odisha

#### Annexure 4.31: Minerals/Ores Sold by OMC

(Quantity in lakh MT) Value in crores of rupees

Sl.	Minerals/Ore	2008	B- <b>0</b> 9	2009	9-10	201	0-11	201	1-12
No.		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1	2	3	4	5	6	7	8	9	10
1	Iron Ore								
	Domestic	50.09	1164.35	60.24	963.36	47.76	1664.17	36.97	1549.28
	Export	2.00	48.87	1.86	49.01	0.20	9.69	2.74	163.04
	Total	52.09	1213.22	62.10	1012.37	47.96	1673.86	39.71	1712.32
2	Chromite								
	Domestic	6.60	786.99	7.92	494.43	9.13	997.45	2.59	362.90
	Export	-	NA	0.29	38.36	-		-	-
	Total	6.60	786.99	8.21	532.79	9.13	997.45	2.59	362.90
3	Chrome concent	rate							
	Domestic	-	NA	0.28	22.79	1.03	76.37	0.55	66.38
	Export	0.39	79.18	0.09	9.90	0.07	8.14	-	-
	Total	0.39	79.18	0.37	32.69	1.10	84.51	0.55	66.38
4	Manganese								
	Domestic	0.05	5.88	-	-	-	-	-	-
	Export	-	NA	-	-	-	-	-	-
	Total	0.05	5.88	-	-	-	-	-	-
5	Gemstone								
	Domestic	-	NA		-	-	-	16.19	0.21
	Export	-	NA		-	-	-	-	-
	Total	-	NA		-	-	-	16.19	0.21
6	Aggregate								
	Domestic	56.74	1957.22	68.44	1480.58	57.92	2737.99	40.11	1978.77
	Export	2.39	128.05	2.24	97.27	0.27	17.83	2.74	163.04
	Total	59.13	2085.27	70.68	1577.85	58.19	2755.82	42.85	2141.81

Source: Odisha Mining Corporation, Odisha

Annexure 4.32: Turnover, Profits and Dividends Paid by OMC

#### In crores of rupees

Year	Turnover	Profit before tax	Dividend paid to Government
1	2	3	4
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	100
2010-11	2755.82	1369.00	NA
2011-12	2141.81	1880.59	500

NA-Not Available

Source: Odisha Mining Corporation, Odisha

### The Service Sector

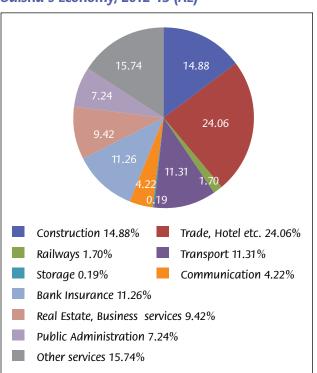
The service sector includes construction, trade, hotels and restaurants, transport, storage, communication, banking and insurance, real estate, other services and public administration. The share of the Service Sector has been rising over the years. The composition of the service sector at constant prices for the year 2012-13 (advance estimates) is shown in Figure 5.1. As per advance estimates for the year 2012-13, the share of this sector stands at 58.3 percent at constant prices of 2004-05 of the State's GSDP. This sector has been recording impressive growth over the years and as per advance estimates, the growth rate of this sector for the year 2012-13 is expected to be 10.1 percent.

The most important sub-sector of the service sector is trade, hotel and restaurants (24.06 percent), followed by other services (15.74 percent), construction (14.88 percent), transport including railways (13 percent) and banking and insurance (11.26 percent) sub-sectors, as per advance estimates for the year 2012-13. Though the share of each sub-sector reflects their direct contributions to the service sector, some of them have huge indirect contributions and multiplier effects. For instance, transport and communication add to infrastructure (discussed in Chapter 6), which is crucially important for any economy. 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 only 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, which have been directed to open many rural and semi-urban branches, have shouldered the responsibility for mobilising public savings. At constant prices (2004-05), the banking and insurance sector expects to contribute 11.26 percent of GSDP of the service sector and a real growth rate of 18.57 percent in 2012-13 in Odisha over the previous year.

Figure 5.1: Composition of the Services Sector in Odisha's Economy, 2012-13 (AE)



Box 5.1: Bank Branches in Odisha, 2011-12

Number and Types of Banks	Number of Branches
Public Sector Banks (25)	2,157
Private Sector Banks (11)	216
Regional Rural Banks (5)	885
Total Commercial Bank Branches	3,258
State Cooperative Banks	332
State Cooperative Agriculture and Research Development (OSCARD) Bank and others	5
Total Number of Bank Branches	3,595

#### **5.1.1 Banking Network**

Box 5.1 summarises the extent of the banking network in Odisha at the end of 2011-12. If one defines 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 13,000.

Figure 5.2 compares commercial bank density among different States. Odisha has improved its commercial bank density from 16,000 in 2001-02 to 12,861 by the end of 2011-12 and fares better than several other states including West Bengal, Rajasthan and Utter Pradesh. Figure 5.3 shows that nearly 54.5 percent of all bank branches are located in rural Odisha.

Figure 5.2: Population per Commercial Bank Branch, March, 2011

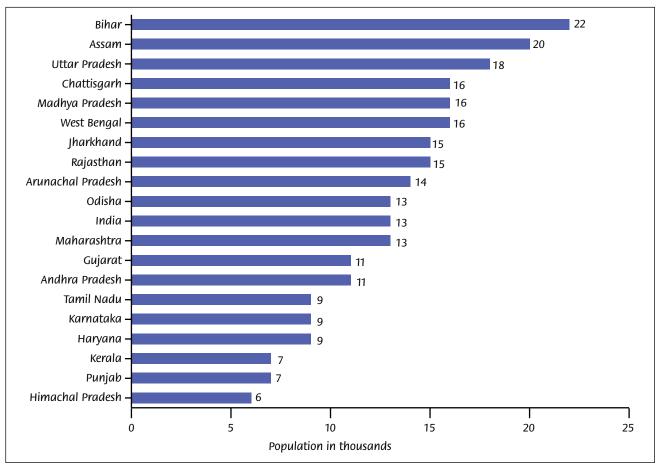


Figure 5.3: Distribution of Bank Branches in Rural, Semi Urban and Urban Odisha, 2011-12

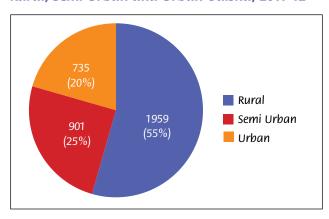
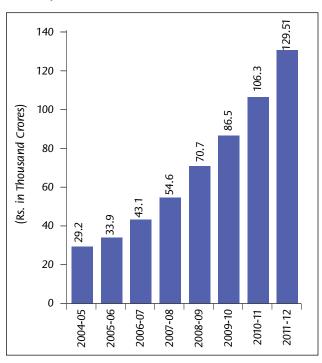


Figure 5.4: Trend of Total Bank Deposits in Odisha, 2004-05 to 2011-12



#### 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 acceleration in the volume of total bank deposits. From 2005-06 to 2006-07, they grew by 27 percent and from 2010-11 to 2011-12, their growth rate was about 22 percent. Furthermore, as Figure 5.5 illustrates, more than 96 percent bank deposits were with commercial banks during 2011-12. However, cooperative banks also play a major role as they concentrate in rural areas and support agriculture in a major way.

Figure 5.5: Share of Commercial Banks in Total Deposits, 2003-04 to 2011-12

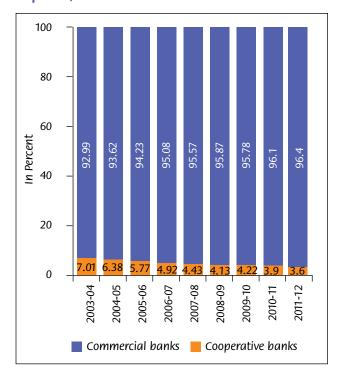


Figure 5.6: Per capita Deposits at Commercial Banks, Odisha and All India

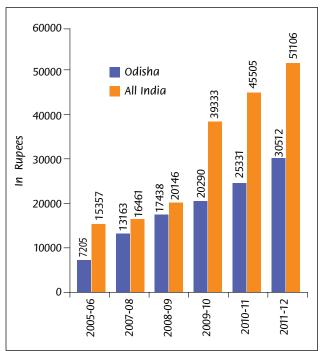


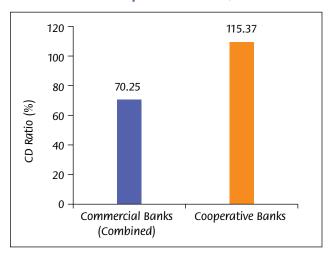
Figure 5.6 compares per capita bank deposits in commercial banks in Odisha, relative to the all-India level. It is observed that though the percapita bank deposit in Odisha has increased by 20 percent over 2010-11, it is far behind the national average of Rs. 51,106.

#### 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 riskaverse. 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 cooperative and commercial banks. In comparison to cooperative 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 private sector and public sector banks respectively.

Although public-sector banks have been generally liberal among commercial banks, over time they have become more conservative. This may be seen from Figure 5.9 that compares credit-deposit ratios for public sector 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. During 2011-12, credit-deposit ratio of public sector banks has already increased to 68.33 percent as against 56.67 in 2010-11.

Figure 5.7: Credit-Deposit Ratio, Within Commercial Vs Cooperative Banks, 2011-12



Furthermore, between commercial banks and cooperative banks, it is the latter who take the lead in advancing loans to agriculture, micro and small scale enterprises (MSEs) and to the weaker sections of the community. Figure 5.10 suggests that out of total advances made by cooperative banks, 82 percent advances were

Figure 5.8: Credit-Deposit Ratio of Commercial Banks, 2011-12

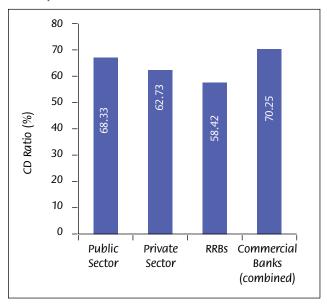


Figure 5.9: Credit-Deposit Ratio of Public Sector Banks in Odisha, 2006-07 to 2011-12

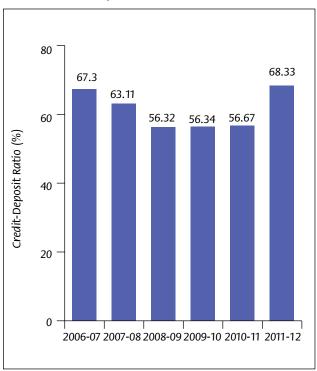


Figure 5.10: Advances to Agriculture, MSME and Weaker sections by Commercial and Cooperative Banks, 2011-12

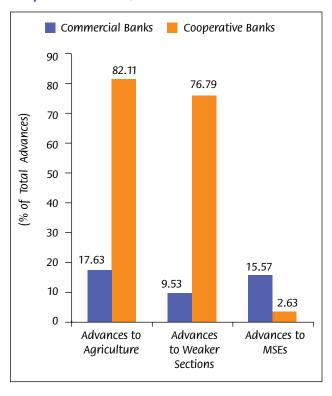
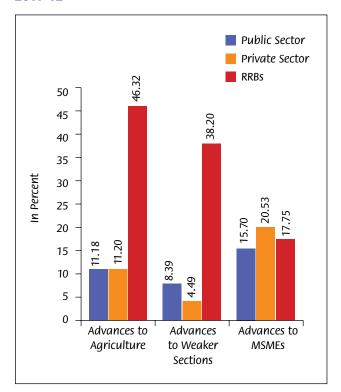


Figure 5.11: Advances to Agriculture, MSME and Weaker sections by Commercial Banks, 2011-12

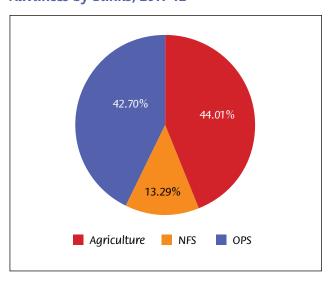


for the agriculture sector, while agriculture accounted for 18 percent advances out of the total loans advanced by commercial banks. For commercial banks, distribution of advances by sub-category is shown in Figure 5.11. It may be observed that private sector banks hardly advance any loans to weaker sections. Even the role of public sector banks for these sections is limited. In this regard, regional rural banks take the lead.

#### 5.1.4 Annual Credit Plan (ACP)

Banks in the State are not totally unregulated in granting loans. There is a District Level Coordination 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 2011-12, Rs. 19,359.20 crores of loan assistance was provided through banks, which is about 77 percent of the target fixed under ACP for the year. The performance of all districts except Dhenkanal, Gajapati and Malkangiri was impressive. The sectoral distribution of loans advanced in 2011-12 is shown in Figure 5.12.

Figure 5.12: Sectoral Distribution of Loans Advances by Banks, 2011-12



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. 27,789.28 crores during 2012-13. Of this amount, Rs 14,178.86 crores have been earmarked for the agricultural

sector, Rs.3,368.10 crores for the non-farm sector and Rs. 10,242.38 crores for other priority sectors. Annexure 5.4 presents sectorwise targets and achievements of banks in priority sectors under the Annual Credit Plan from 2005-06 to 2011-12.

#### **5.1.5 Cooperative 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 institutional networks namely, (a) short-term co-operative credit, (b) long-term co-operative credit, and (c) urban co-operative banks.

#### 5.1.5.1 Short-term Cooperative Credit Sector

The short term cooperative credit structure 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 Odisha State Cooperative Bank with 14 branches at the apex level. This sector provides agricultural credit to member farmers for carrying out agricultural operations including purchase of agricultural inputs like 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. The recommendations of the Vaidyanathan Committee have been implemented for revitalisation of this sector.

The revitalisation package envisaged financial assistance in the shape of recapitalisation to the Primary Agricultural Cooperative Societies (PACS), and District Cooperative Central Banks. The total quantum of assistance to the Short Term Credit Cooperative Sector in Odisha has been to the tune of Rs.794.42 crores. The share of Government of India, Government of Odisha and PACS under this assistance scheme was respectively 83.59 percent, 9.27 percent and 7.14 percent. The short-term cooperative credit sector commands a market share of 66 percent in the dispensation of short-term agricultural credit vis-à-vis commercial banks and regional rural banks in 2011-12. PACS,

LAMPS and Farmer Service Cooperative Society with their vast outreach provide easy access of credit to small and marginal farmers and the marginalised sections of society. Their activities are summarised below:

#### (i) Coverage of Agricultural Families

Priority has been accorded to enrol agricultural families as members of Primary Agriculture Cooperative Societies. By the end of 2011-12, there were 55.00 lakh members, of which cooperatives enrolled 51.15 lakhs of the total membership.

#### (ii) Seasonal Agricultural Operations

The share of agricultural credit by cooperatives has declined at the national level to 27 percent. However, 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 providing crop loans is described in Annexure 5.7. From 2006-07 to 2011-12, it has gradually increased from 62.3 percent to 66 percent. In 2011-12, 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. 4,415.89 crores to 23.46 lakh members during 2011-12, (Annexure-5.8) registering a growth of 26.62 percent in respect of the amount of finance and 11.13 percent in respect of the number of farmers as compared to 2010-11.

#### (iii) Agricultural Term Loan

The Cooperative Credit Sector provides term loans for agricultural and allied purposes, for capital investment, asset creation, land improvement, farm mechanisation, plantations, horticulture and other activities. This is known as investment credit, open to both scheme-based farm sector and non-farm sector. Such investment credit activities from 2006-07 to 2011-12 are summarised 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 2011-12, 1,858 PACS have participated in the procurement of paddy as commissioned agents of the Odisha State Civil Supply Corporation and have procured 28.80 lakh MT of paddy from 6,32,278 farmers.

#### (v) Credit Linkage to SHGs

To extend institutional credit to the poor and marginalised sections, a bank linkage programme for Self Help Groups (SHGs) has been put in place since 2003-04 through PACS and DCCB branches. By the end of 2011-12, 76,437 such groups with about eight lakh members have been organised. Credit support of Rs 258.60 crores has been provided to 60,817 groups.

### (vi) Credit Linkage to Tenant Farmers Groups (TFG)

For providing access of share croppers and oral lessees to institutional credit for agricultural operations, Odisha has taken the lead in organising exclusive Self Help Groups (SHGs) for them with a 1:10 deposit credit ratio facility, in place of the regular 1:4. At the end of 2011-12, 9,626 such groups were formed and 7,786 groups were provided credit, amounting to Rs. 42.06 crore.

#### 5.1.5.2 Long-term Cooperative Credit Sector

The long-term credit cooperative structure is two-tiered, consisting of the Odisha State Co-operative Agriculture and Research Development (OSCARD) Bank at the helm and 56 Primary Cooperative Agricultural and Rural Development (CARD) Banks. The CARD banks operate at the sub-divisional level and provide long term credit support for capital investment for 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 crores.

#### 5.1.5.3 Urban Cooperative Banks

At present, 12 Urban Cooperative Banks function in the State and provide finances for self employment to un-employed youth and other minimum banking services like acceptance of deposits in urban and semi urban areas. 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 2011-12, 51.63 lakh Kisan Credit Cards (KCC) have been issued to farmers. This includes 10,74,529 cards issued during 2011-12. Out of 51.63 lakh KCC, 40.84 lakh (78.36 percent) were issued by cooperative banks and the balance by commercial banks. It has been targeted to issue 5.00 lakh KCC during 2012-13 by cooperatives banks.

#### 5.1.6.2 Kalinga Kisan Gold Cards (KKGC)

With a view to motivate members for timely repayment of loans, Kalinga Kisan Gold Cards (KKGC), an innovative scheme, was designed by the Odisha State Cooperative Bank, and introduced in 2001. Farmers who are members of PACS with a default-free status for at least two years are eligible under this scheme. Through KKGC, a farmer gets facilities like consumption and educational loans with less interest, free personal accident insurance up to Rs. 25,000, concessions on share linkages in respect of all loans, educational loans for their children, the provision to purchase fertilisers and pesticides from any retail outlets of their choice and exposure visits to advanced agricultural farms. At the end of 2011-12, KKGC were issued to 2,00,557 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 2011-12, against a target of 3,350 cards, 8,046 Swarozgar Credit Cards amounting to Rs. 30.20 crores were issued. Of these 3,182 cards (39.5%) valued at Rs. 12.32

crores were issued by different commercial banks. During 2011-12, 1,165 artisan credit cards amounting to Rs 6.77 crores were issued by different commercial banks.

### 5.1.7 Implementation of National Agricultural Insurance Scheme (NAIS)

NAIS has been implemented in the State since Rabi 1999-2000. During the last 24 Crop Seasons since Rabi1999-2000 till Kharif, 2011,12,895.24 lakh farmers were covered under the crop insurance scheme and premium amounting to Rs.390.00 crores was collected. Insurance claims of Rs.1,338.34 crores have been settled in favour of 25.34 lakh farmers till Kharif 2011. *Gram Panchayats* have been adopted as units of insurance since Rabi - 2010-11 under NAIS. Modified NAIS was implemented in two districts, viz., Balasore and Bhadrak during 2011-12.

Anewcrop insurance scheme, known as Weather Based Crop Insurance Scheme was introduced in the State on a pilot basis in eight blocks of Bargarh, Bolangir and Nuapada districts since Kharif 2008. During 2011-12 (Kharif, 2012), 13 blocks of two districts namely Bolangir and Nuapada have been included under the weather based crop insurance scheme.

### 5.1.8 Bank Assistance to Non-Agricultural Sectors

#### (i) Housing

Banks also provide loans under different housing loan schemes. For 2011-12, these are summarised in Annexure 5.12.

#### (ii) Fisheries

Financial assistance for pisciculture development is being given in the State through Fish Farmers' Development Agencies (FFDAs). By the end of 2010-11, out of 4,897 proposals, loans amounting to Rs.1,105.28 lakhs were sanctioned in favour of 697 proposals and Rs.782.49 lakhs was disbursed to 623 beneficiaries. It has been estimated that Rs.106.53 crores will be required for development of the fishery sector by different banks, of which the credit requirement will be Rs.81.65 crores during 2012-13.

### (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 (RRBs). By the end of 2011-12, 1,36,770 loan applications were sanctioned and disbursements were made with respect to 1,29,363 cases showing an achievement of 107 percent of the physical target.

# (iv) Swarna Jayanti Shahari Rojgar Yojana (SJSRY)

Under this scheme, 3,296 applications were sponsored by banks during 2011-12 and 2,631 were sanctioned. Credit worth Rs. 25.96 crores was disbursed to 2,515 beneficiaries. This included Rs. 8.14 crores disbursed in favour of 908 SC/ST and Rs.7.32 crores to 646 women beneficiaries.

#### **5.1.9 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 banking, 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 Odisha State Finance Corporation has the poorest recovery record (10.8%). The proportion of loans handled by private sector banks and Small Industries Development Bank of India (SIDBI) is very small. In this regard, cooperative banks perform better. For the whole State, the recovery rate in 2011-12 is only 61.8 percent which is better than the last year recovery of 49.6 percent. By the end of 2011-12, 18,468 cases were filed with the competent authority for recovery of dues worth Rs. 104.72 crores. It includes 13,986 cases amounting to Rs. 38.03 crores pending over three years. A total of 114 cases have been settled for recovery of Rs 49.87 crores as on 31st March 2012. In addition, 3,072

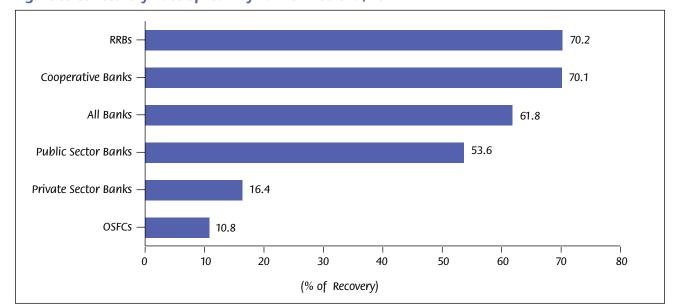


Figure 5.13: Recovery Rate of Loan by Banks in Odisha, 2011-12

cases have been filed for recovery of Rs.3.17 crores under the provision of Odisha Agriculture Credit Operation and Miscellaneous Provision (Banks) Act, as on 31st March 2012 and no case was settled.

### 5.1.10 State-level non-banking financial institutions

### 5.1.10.1 Odisha 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. By the end of 2011-12, OSFC sanctioned loans amounting to Rs 1,314.54 lakhs in favour of 28,223 cases and disbursed Rs.1,306.15 lakhs to 28,216 units. Out of this, Rs.411.35 lakhs was sanctioned in favour of eight units and Rs.83.55 lakh disbursed to six units during 2011-12. The Corporation recovered Rs 36.55 crores during 2011-12 and Rs.302.20 crores remained outstanding by the end of March 2012. The activities have been detailed in Chapter 4.

### 5.1.10.2 Odisha Rural Housing and Development Corporation (ORHDC)

The ORHDC was established in 1994. By the end of 2010-11, it disbursed loans amounting to

Rs.566.85 crores in favour of 1,62,458 applicants under six housing finance schemes. Out of a total demand of Rs. 818.00 crores, Rs. 186.13 crores (22.75 percent) was recovered. Annexure 5.16 presents the activity-summary of ORHDC.

# 5.1.10.3 Odisha SC & ST Development Finance Cooperative Corporation Ltd., (OSDFC)

In 2011-12, OSFDC financed Rs 24.91 crores under various programmes to 23,925 beneficiaries belonging to SC and ST scavengers and other minorities. The physical and financial achievements of OSFDC during 2011-12 are presented in Annexure 5.17.

### 5.1.10.4 Private Non-Banking Financial Companies (NBFCs)

Non-banking Financial Companies are an important part of the Indian financial system. At present, there are 16 registered NBFC, which function under the overall supervision of the Reserve Bank of India, Bhubaneswar. Micro Finance Limited (MFL) is the only deposit-taking (category-A) NBFC in the State. As the company has been non-compliant with the Principal Business Criterion on Financial Income for three consecutive years from 2008-2009 to 2010-2011, it has been advised to submit an Action Plan for improving its financial Income to 50 percent or more of the total income. It has also been prohibited from accepting deposits.

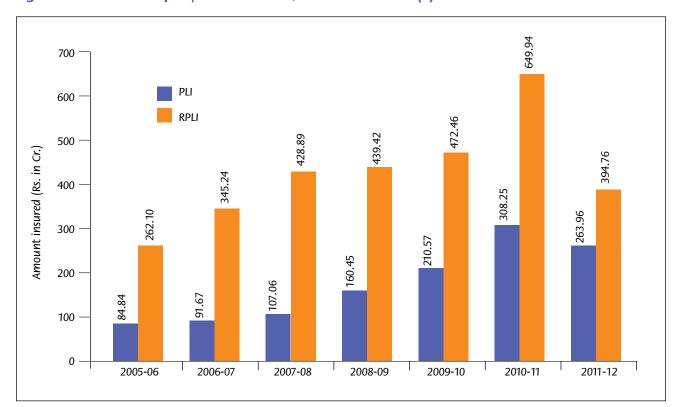


Figure 5.14: Activities of PLI/ RPLI in Odisha, 2005-06 to 2011-12(P)

The compulsorily convertible preference share holding of the company has increased from 861.36 lakhs as on March 31, 2008 to 4,161.33 lakhs as on June 30, 2012. The company has since applied for conversion to non-deposit taking NBFC.

### 5.1.11 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 significantly between 2005-06 to 2010-11, but declined in 2011-12. During 2011-12, 11,975 PLI polices with an assured sum of Rs. 263.96 crores and 1,65,401 RPLI policies with an assured sum of Rs. 394.76 crores was collected.

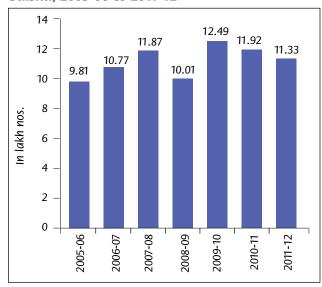
#### (ii) Life Insurance Corporation of India (LIC)

The business of LIC in Odisha has been increasing. During 2011-12, LIC issued 11.33 lakh policies and collected Rs. 657.54 crores towards first year premium through its 56 branch offices all over the State. Figure 5.15 indicates the growth of its business from 2005-06 to 2011-12. Details are given in Annexure 5.19.

#### (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

Figure 5.15: Total Policies Marketed by LIC in Odisha, 2005-06 to 2011-12



activities. During 2011-12, SIDBI sanctioned loans amounting to Rs.304.54 crores to 271 MSME units and disbursed Rs.296.24 crores in favour of 262 units. 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, NABARD has been working for rural prosperity through effective credit support, institutional development and other innovative initiatives. It has brought 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 provided by NABARD to various schemes/sectors from 2005-06 to 2011-12 is listed in Annexure 5.21. Efforts made by NABARD to support different schemes and sectors are summarised below:

• The development financial support extended by NABARD to the State during the year 2011-12 aggregated at Rs. 3,357 crore, recording a growth rate of 33 percent over the year 2010-11. This amount comprises

of loans provided to the banking system by way of refinance of Rs.2,545 crores and loans to the tune of Rs. 812 crores to the State Government under Rural Infrastructure Development Fund (RIDF).

- The support under RIDF was utilised by the State Government for increasing irrigation potential, enlargement of road and bridge network, drinking water supply system, setting up of veterinary dispensaries and livestock aid centres. NABARD sanctioned RIDF assistance of Rs.1,271.16 crores in the year 2011-12, under RIDF XVII. The fund would be utilised by the State Government for construction of 102 Road and Bridge Projects, 30,641 Minor Irrigation Projects, 44 Projects for Flood Protection and Drainage System Improvement and one drinking water supply system. The allocation under Rural Infrastructure Development Fund was higher by 14 percent during the year 2011-12 as compared to that of 2010-11. NABARD has planned to provide RIDF support on priority basis to the flagship programmes of the State Government in the current financial year 2012-13.
- Financial Inclusion has been receiving priority of NABARD with the objective of providing banking services at the door steps of rural households. NABARD so far has sanctioned Rs. 35 cores support to banks and other institutions for providing high end banking services and related activities.
- NABARD is continuing its efforts to spread the message of Development through Credit among farmers and has promoted 2,311 new Farmers' Clubs during this year taking the total number of clubs to more than 8,000 in the State.
- The micro finance sector continues to be the thrust area of NABARD in the State. During the year 2011-12, 56,000 new SHGs were formed taking the total number of the SHGs to 5.4 lakhs.

- Focused attention was given for promotion of Tenant Framers' Groups/Joint Liability Groups for the benefit of share croppers and oral lessees and 180 training programmes were conducted for promotion/formation of Joint Liability Groups. So far with the support of NABARD, 30,000 Joint Liability Groups have been formed and they have availed bank loans.
- NABARD has started supporting Primary Agricultural Cooperatives Societies (PACS) to develop as Multi Service Centres where farmer members would get the hiring facilities of advanced farm equipments, tractors, transport facilities for farm inputs and outputs. These services extended by PACS will benefit farmers as well as create additional avenues of income for PACS.
- NABARD has been implementing model tribal development projects in various tribal regions of Odisha. Multiple horticultural crops are grown very successfully in Wadis on wastelands for tribal farmers to provide them with sustainable income. There are 27 ongoing projects in 14 districts supporting 22,000 tribal families in the State. During the year, grant assistance of Rs.10.81 crores was released in respect of these projects. The farmers of the first Wadi project in Jashipur block of Mayurbhanj district have formed Amrapali Self Help Cooperative and started value addition and collective marketing of their produce.
- To encourage localised seed production, NABARD provided hand holding support to seed farmers in 84 villages through its Seed Village programme. A total of 27 Seed Village programmes are undertaken in 19 districts of the State with coverage of 2,288.5 acres of seed plot area. The total project cost involved in respect of these projects is Rs. 1.3 crores.
- Under the watershed development programme, NABARD has sanctioned 60 projects including 21 new projects sanctioned during the year 2011-12. A total

- area of 42,500 ha is being treated under the programme. NABARD has provided a grant support of Rs. 5.36 crores during the year 2011-12.
- Considering the potential of the Non-Farm sector in generating employment and ensuring additional income in the rural areas, NABARD has taken a series of initiatives for promotion of the sector by providing support for skill formation, capacity building, marketing of rural products and bringing innovation to products and production processes to enhance income and reduce drudgery. In 2012-13, NABARD sponsored 137 such training programmes benefiting more than 3,500 youth/artisans/SHG women on varied activities in handloom, handicraft, cottage industries and service sector activities.
- As part of intervention strategies to improve marketing of rural products, NABARD has been supporting infrastructure development of rural *haats*, running of sales outlets for SHG products and rural crafts. During 2011-12, five rural *haats* and 13 rural markets have been set up in the state with NABARD assistance. NABARD also gave a platform to rural producers and artisans of the State to project artefacts of representative artisans at the State level and at national exhibitions.
- During the year, NABARD started a number of innovative projects for technology transfer to farmers. NABARD has also sponsored visits of nearly 700 farmers to various research institutes of repute, including CRRI, CIFA, OUAT and some in other states like Tamil Nadu, Andhra Pradesh and Maharashtra. Besides, NABARD provided support to 6,500 farmers for promoting the SRI method of cultivation for better productivity.
- NABARD took a lot of initiatives to upscale credit dispensation by banks and increase the credit absorption capacity in the rural sector. Banks have been provided with

unit cost and profiles for various activities. State level and district level workshops were conducted for banks to avail concessional refinance and for financing under Warehousing Schemes and Dairy Enterprise Development Schemes.

• With the resolve for enhancing productivity in agriculture and other rural sectors, NABARD has set a target of Rs. 29,927.41 crores financing by banks in priority sectors in the financial year 2012-13, including Rs. 14,838.91 crores (49.6 percent) earmarked for agriculture.

#### (v) Housing and Urban Development Corporation (HUDCO)

Financial assistance is available from HUDCO for housing as well as for infrastructure transportation development, and power projects. HUDCO has so far sanctioned 456 schemes in the State with a loan commitment of Rs. 2,510.11 crores. Besides, HUDCO has been acting as the appraising agency for GoI sponsored Integrated Housing and Slum Development Programme (IHSDP) and Basic Services to Urban Poor (BSUP) projects. HUDCO has so far appraised 38 IHSDP and six BSUP projects in Odisha. As a part of its corporate social responsibility (CSR) policy, HUDCO has sanctioned four night shelter schemes for Cuttack and Bhubaneswar city with a grant assistance of Rs 107.60 lakhs and released Rs 12.50 lakhs during 2011-12. HUDCO has sanctioned loans amounting to Rs 434.97 crores and disbursed Rs 189.12 crores during 2011-12.

#### (vi) Bhubaneswar Stock Exchange

The Bhubaneswar Stock Exchange was established in 1989 as a public limited company, in order to mobilise 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. By the end of 2011-12, 47 companies were listed with 176 members and 18 corporate members. Member-brokers of the stock exchange conduct trading in the National Stock Exchange (NSE) segment of ISE security and services Ltd. (ISS),

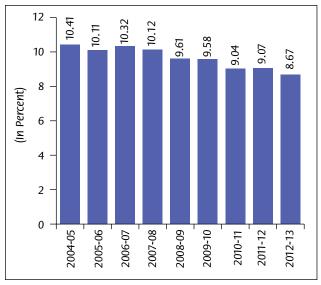
a wholly owned subsidiary company of Interconnected Stock Exchange of India Ltd. (ISE) wherein Bhubaneswar Stock Exchange is a promoter member at an average daily turnover of Rs.1.90 crores. Its annual turnover for 2011-12 was Rs.504.00 crores.

#### 5.2 Construction

The construction sub-sector builds the capacity of the economy for achieving higher rates of growth. This sub-sector is a major component of the service sector and is expected to contribute 14.88 percent to the share of the sector in real terms at 2004-05 prices in 2012-13. This sub-sector adds about nine percent to the State's GSDP at 2004-05 prices and expects to grow in real terms, at a rate of 4.34 percent growth during the 2012-13 (advance estimate).

Figure 5.16 depicts the share of the construction sector in the State from 2004-05 to 2012-13. It is seen that the share of this sector at the State level has remained higher than that at the national level. The sector had a share of 7.93 percent and 7.71 percent in the real GDP respectively in 2005-06 and 2011-12 at the national level. In contrast, the share of the sector in Odisha's GSDP was 10.11 percent in 2005-06 and 9.58 percent in 2009-10. During the year 2011-12, its share in Odisha's GSDP was 9.07 percent and 8.67 percent in 2012-13.

Figure 5.16: Share of Construction in GSDP of Odisha, 2004-05 to 2012-13



#### 5.3 Tourism

Odisha has a rich cultural heritage and offers fascinating tourist attractions, including a myriad of monuments, beach resorts, eco-tourism, adventure tourism, flora and fauna and national parks and sanctuaries. Tourism is a highly labour intensive sector and has the potential to generate high employment growth through a mix of activities of hotels, transport, shopping, food, entertainment It is the hospitality sector and other areas. which binds together a lot of other employment generating sectors through backward and forward linkages. It not only creates direct employment but also creates opportunities for indirect employment. About 92,206 persons are directly engaged and 2,76,618 persons are indirectly engaged in this sector in Odisha. The ratio of indirect jobs to direct jobs is approximately 3:1 in Odisha.

The State has several sources and triggers for attracting tourists. Bhubaneswar, the city of temples, the ancient sun temple of Konark, Lord Jagannath Temple at Puri, the Buddhist monastic complexes at Ratnagiri, Lalitgiri and Udayagiri are vestiges of a rich cultural heritage. The sanctuaries and wildlife parks viz., Bhitarkanika, Similipal National Park, Chandaka Elephant Reserve, Nandankanan and Chilika Lake with migratory birds are some of the major natural tourist attraction points of Odisha.

It may be observed from Figure 5.17 that Odisha used to get more than one percent share of foreign tourists till 2000 and since then, it has become less than one 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 5.18. As can be seen in Annexure 5.23, between 2001-2011, the number of tourists from within the State has tripled, while it has more than doubled from the rest of India and abroad.

Most tourists to Odisha come from West Bengal and Andhra Pradesh. During 2010-11, they constituted 14 percent and 3.50 percent of all tourists respectively from India, including those from Odisha. France, UK and USA were the major tourist generating markets from overseas during 2011, and nearly 54 percent foreign tourists came from Western Europe. The trend in the composition of tourists is depicted in Figure 5.19.

As per the tourist profile survey 2008-09, the average duration and spending of a domestic tourist is 3.7 days and Rs.1,357 per day respectively. While the duration and spending of foreign tourist s is 14.2 days and Rs. 2,255 per day. Based on this, the estimated inflow of money to Odisha during 2011-12 has been assessed at Rs.4,454.95 crores, which is an increase of 9.4 percent over 2010-11. Annexure 5.24 gives detailed information on this subsector since 2004-05.

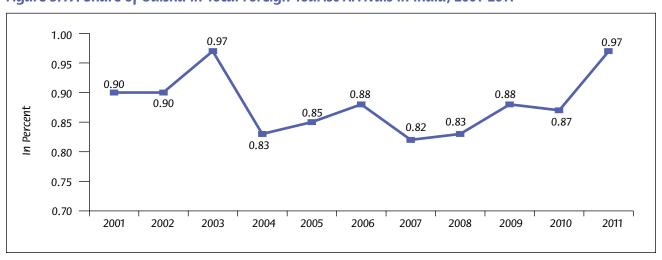
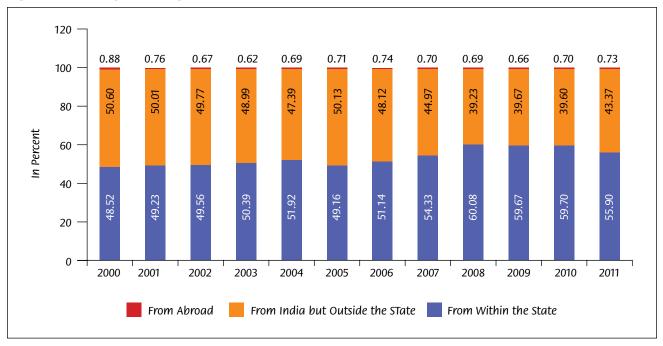


Figure 5.17: Share of Odisha in Total Foreign Tourist Arrivals in India, 2001-2011

Fourists ('000 nos.) 

Figure 5.18: Tourist Arrival in Odisha, 2001-2011

Figure 5.19: Composition of Tourists in Odisha, 2000-2011



# 5.4 Trade, Hotel and Restaurant Industry

This sub-sector has been growing consistently since 1950-51. Its share in the State domestic product increased from 4.85 percent in 1950-51 to 12.7 percent in 2008-09 at 1999-00 base. Figure 5.20 shows that the share of the sector in real GSDP has increased from 10.68 percent in 2004-05 to 13.61 percent in 2011-12 at 2004-05 prices. This sub-sector is expected to contribute 14.02 percent share in the real GSDP of Odisha

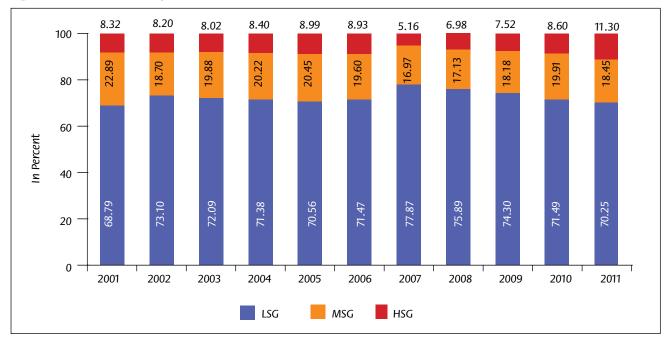
and is expected to grow at 12.41 percent in 2012-13 in real terms at 2004-05 prices.

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 22 years, the number of hotels has grown 2.77 times, with a compound annual growth rate of 5.21 percent. Thus, it is not keeping pace with the growth rate of the State during the same period. From 2000

16 14.02 13.61 13.44 14 12.95 12.45 12.42 12.29 11.57 12 10.68 In Percent 10 8 6 4 2 2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13

Figure 5.20: Share of the Trade-Hotel-Restaurant Industry in GSDP, 2004-05 to 2012-13





to 2011, the number of hotel rooms has grown at an annual rate of 6.7 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 found to be high because of the 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 2001 to 2011 can be seen from Figure 5.21. The trend and extent of total hotel beds is shown in Figure 5.22. From 2001 to 2011, the number of beds increased by 66 percent. During 2011, there were 1,328 hotels with 27,291 rooms and 52,867 beds, of which, 150 catered to high-spending groups (HSG), 245 to middle-spending groups (MSG) and 933 to lower-spending groups (LSG).

60 · In '000 Nos. 10 -0 -

Figure 5.22: Trend and Extent of Hotel Beds in Odisha, 2001-2011

# 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 Odisha. During the 10th Five Year Plan, the State spent public funds of Rs. 38.45 crores on this sector. During the 11th Plan, Rs. 157.49 crores was spent for this purpose. In all, 320 tourist centres have been identified for their development and promotion in Odisha.

# 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 Odisha 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 organisations 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, of which, 972 acres of land has already been acquired in the first phase. Electrification of the project has been entrusted to OPTCL and CESU at an estimated cost of Rs 44.61 crores. The State Government has released Rs 8.30 crores during the last two years.

#### 5.5.3 Tourist Units

At present, 19 tourist units, i.e., Panthasala, Panthika, Tourist Complex and Yatri nivas, with 91 rooms and 262 beds function under the Tourism Department, while 24 tourist units with 526 rooms and 1,150 beds are in operation under the Odisha Tourism Development Corporation (OTDC).



in crores of rupees

Annexure 5.1: Bank-Wise Key Indicators at the end of 2011-12

Banks	Total branches	Deposit	Advance	CD Ratio	Total Adv. to Agrl.	Adv. to MSME	Adv. to services sector	Adv. to weaker section	Adv. to DRI	Adv. to women	Adv. to SC/ST
1	2	က	4	D.	9	2	8	6	10	11	12
Public Sector	2157	101220.65	69167.25	68.33	7731.71	10856.15	6143.32	5804.88	164.46	3048.50	1676.35
Private Sector	216	13933.25	8740.26	62.73	979.13	1794.57	496.04	392.14	9.12	547.32	607.88
RRBs	885	9672.47	5620.95	58.42	2617.31	1002.78	1273.81	2158.46	'	1419.96	1091.43
RIDF (NABARD)	1	•	4132.37	ı	4132.37	ı	1	1	,	1	,
Total commercial bank	3258	124826.37	87690.83	70.25	15460.53	13653.50	7913.17	8353.48	173.58	5015.78	3375.66
Co-operative Bank	337	4683.99	5404.02	115.37	4437.45	141.88	414.08	4149.67	1	248.00	805.90
OSFC	1	1	ı	1	ı	ı	1	ı	'	1	'
SIDBI	1	1	ı	1	,	1	1	1	,	1	,
Grand Total	3595	129510.36	93094.85	71.88	19897.98	13795.38	8327.25	12503.15	173.58	5263.78	4181.56
Rural	1959	26893.11	26970.99	100.29							
Semi Urban	901	35822.12	16823.22	46.96							
Urban	735	66517.71	48847.14	73.43							

Source: State Level Bankers' Committee, Odisha

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

Rupees in crores

Year	Commercial Banks	Coop. Banks	Total Deposit	Share of Coop. Banks (%)	Share of Commercial Banks (%)
1	2	3	4	5	6
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
2010-11	102176.87	4148.32	106325.19	3.90	96.10
2011-12	124826.37	4683.99	129510.36	3.62	96.38

Source: State Level Bankers' Committee, Odisha

Annexure 5.3: Individual Bank-Wise Total Deposits and Advances at the end of 2011-12

**Rs.in Crore** 

Bank	Number of Branches	Total Deposits	Total Advances
1	2	3	4
Allahabad Bank	75	3810.62	3053.46
Andhra Bank	116	3578.36	2355.33
Bank of Baroda	73	3705.64	214.71
Bank of India	172	5522.09	3314.91
Bank of Maharashtra	3	58.53	22.00
Canara Bank	80	4198.17	2822.50
Central Bank of India	84	2187.48	1114.55
Corporation Bank	14	703.84	433.24
Dena Bank	8	338.73	478.99
Indian Bank	69	1842.12	1545.31
Indian Overseas Bank	109	4008.05	2487.80
Oriental Bank of Commerce	35	2258.89	1671.36
Panjab National Bank	112	4674.90	3589.09
Panjab & Sind Bank	5	446.87	198.12
State Bank of India	678	40559.78	27408.68
State Bank of Bikanar & Jaipur	3	74.46	78.21

(Contd...)

Bank	Number of Branches	Total Deposits	Total Advances
1	2	3	4
State Bank of Hyderabad	10	388.54	1033.83
State Bank of Travancore	1	113.78	65.89
State Bank of Mysore	1	261.01	204.37
Syndicate Bank	62	1967.21	877.21
Union Bank	81	5473.81	3285.49
United Bank of India	119	3115.19	1929.62
UCO Bank	206	9770.05	7895.17
Vijaya Bank	9	311.93	116.35
IDBI Bank	32	1850.60	1171.06
Total Public Sector Banks	2157	101220.65	69167.25
Laxmi Vilas Bank Ltd.	1	48.21	5.74
Federal Bank	7	381.26	104.79
HDFC Bank	59	2022.74	1313.01
ICICI Bank	49	2844.91	2285.87
The South Indian Bank Ltd.	2	468.35	9.51
Karnataka Bank Ltd.	5	156.12	354.09
Kotak Mahindra Bank Ltd.	6	132.19	128.38
ING Vysya Bank	7	307.28	19.49
Axis Bank	59	5081.89	3760.60
Indus Ind Bank	18	2279.56	615.64
Karur Vysya Bank	3	210.73	143.44
Total Private Sector Banks	216	13933.25	8740.26
Baitarani Gramya Bank	108	1317.13	745.28
Utkal Gramya Bank	336	2819.18	1819.06
Kalinga Gramya Bank	183	1815.01	1144.50
Neelachala Gramya Bank	174	2684.18	1453.37
Rushikulya Gramya Bank	84	1036.97	488.74
Total of RRBs	885	9672.47	5650.95
RIDIF (NABARD)	-	-	4132.37
Total Commercial Banks	3258	124826.37	87690.83
Odisha State Co-Op.Bank	332	4683.99	5377.01
OSCARD Bank	5	0	27.01
Total of Co-operative Bank	337	4683.99	5404.02
Grand Total	3595	129510.36	93094.85

Source: State Level Bankers' Committee, Odisha

Annexure 5.4: Sector-Wise Target and Achievements of Banks in Priority Sectors under the Annual Credit Plan (2005-06 to 2011-12)

Sector	Target (Rs. in crore)	Achievement (Rs. in crore)	% of achievement
1	2	3	4
Agriculture Sector			
Crop Loan			
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
2010-11	6152.51	5448.78	88.56
2011-12	8700.83	6851.91	78.75
Term Loans			
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
2010-11	1640.68	801.46	48.85
201112	2273.81	1121.28	49.31
Allied Sectors			
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
2010-11	1372.61	5010.57	36.54
2011-12	1949.36	546.48	28.03
Total Agriculture			
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
2010-11	9165.80	6751.81	73.66
2011-12	12924.00	8519.68	65.92
Non Farm Sector (NFS)			
2005-06	339.52	386.76	113.91
2006-07	486.10	497.26	102.30

(Contd...)

Sector	Target (Rs. in crore)	Achievement (Rs. in crore)	% of achievement
1	2	3	4
2007-08	775.54	642.21	82.81
2008-09	814.34	650.50	79.88
2009-10	1121.70	1514.47	135.02
2010-11	1400.02	2759.50	197.10
2011-12	2785.23	2573.71	92.41
Other Priority Sector (OP	PS)		
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
2010-11	6337.88	7099.92	112.02
2011-12	9524.21	8265.81	86.79
<b>Total Loans</b>			
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
2010-11	16903.70	16611.23	98.27
2011-12	25233.44	19359.20	76.72

Source: SLBC, Odisha

Annexure 5.5: Progress of the Cooperative Movement in Odisha

Year	Number of Cooperative Societies Functioning	Membership in lakhs	Working Capital (in crores of rupees)	Per Capita Working Capital (in rupees)
1	2	3	4	5
2000-01	4886	57.65	7565.33	4549.68
2002-03	4723	57.00	8396.47	5912.37
2003-04	4657	59.40	9457.43	6268.40
2004-05	4636	62.18	1952.27	5844.08
2005-06	4626	62.94	11459.73	6235.82
2006-07	4565	63.55	12748.33	6706.73
2007-08	4336	64.85	14043.22	7334.07
2008-09	4276	66.88	16097.58	7728.86
2009-10	4260	70.22	20198.52	8832.86

Source: Registrar, Co-operative Societies, Odisha P: Provisional

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

Year		ership usands)		g Capital of rupees)		dvanced of rupees)		tstanding of rupees)
	Agri	Non-Agri	Agri	Non-Agri	Agri	Non-Agri	Agri	Non-Agri
1	2	3	4	5	6	7	8	9
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
2009-10	5924	1082	442962	175383	277038	168144	234610	89221

Source: Registrar, Co-operative Societies, Odisha

Annexure 5.7: Market Share of Cooperatives in Dispensing Crop Loan

Rs. In crores

Year	Commercial Banks	Cooperative Banks	Total	Market share of Cooperative Banks (%)	Market share of Commercial Banks (%)
1	2	3	4	5	6
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
2010-11	1877.52	3396.39	5273.64	64.40	35.60
2011-12	2270.31	4415.89	6686.20	66.04	33.06

Source: SLBC, Odisha

Annexure 5.8: Season-wise Dispensation of Short-Term Credit by Cooperative Banks in Odisha

Members in lakhs and amount in crores of rupees

Year	Kharif Members	Kharif Amount	Rabi Members	Rabi Amount	Total Members	Total Amount
1	2	3	4	5	6	7
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
2010-11	11.26	1811.09	9.10	1585.30	20.36	3396.39
2011-12	13.07	2381.37	10.39	2034.52	23.46	4415.89

Source: SLBC, Odisha

Annexure 5.9: Investment Credit in Odisha

Year	Farm sector (Nos.)	Farm sector amount (in crores of Rs.)	Non-farm sector (nos.)	Non-farm sector amount (in crores of Rs.)	Total (nos.)	Total amount (in crores of Rs.)
1	2	3	4	5	6	7
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
2010-11	27542	151.34	22181	109.77	49723	261.11
2011-12	21677	114.79	17621	121.00	39298	235.79

Source: SLBC, Odisha

Annexure 5.10: Deposits Mobilised and Loan advances by Urban Cooperative Banks in Odisha

Year	Deposits mobilized (in crores of Rs.)	Loan advanced (in crores of Rs.)
1	2	3
2006-07	625.23	421.23
2007-08	615.02	415.43
2008-09	840.52	495.37
2009-10	944.48	566.21
2010 -11	992.92	533.13
2011-12	953.80	542.41

Source: SLBC, Odisha

Annexure 5.11: Bank Assistance to the Handloom and Handicraft Sector during 2010-11

Category	Handloo	m Sector	Handicraft Sector		
	No.	Amount (in lakhs of Rs.)	No.	Amount (in lakhs of Rs.)	
1	2	3	4	5	
Self Help Groups	283	231.57	280	192.62	
Individuals	936	538.97	469	295.37	
Artisan Credit Card (ACC)	343	235.19	290	169.70	
Swarozgaries Credit Card	326	117.35	215	125.47	
Total	1,888	1123.08	1,254	783.16	

Annexure 5.12: Bank Loans for Housing during 2011-12

Scheme	Number of Beneficiaries	Amount Disbursed (in crores of rupees)
1	2	3
Home Loan Scheme	441	13.88
Golden Jubilee Rural Housing Scheme	2,094	75.76
National Housing scheme	819	12.54

Source: SLBC, Odisha

Annexure 5.13: Credit Cards issued by Commercial Banks during 2011-12

Credit Card	Credit Card issued	Amount (Rs. in crore)
1	2	3
Artisan Credit Cards	1,165	6.77
Swarozgar Credit Cards	8,046	30.20
Kissan Credit Cards	10,74,519	1154.93
Total	10,83,730	1191.90

Source: SLBC, Odisha

Annexure 5.14: Recovery Position of Banks as on 31.3.2012

In crores of rupees

Banks	Total Demand	Amount Collected	% of Recovery	Amount overdues
1	2	3	4	5
Public Sector Banks	6595.09	3532.59	53.6	3062.50
Private Sector Banks	11.89	1.95	16.4	9.94
Regional Rural Banks	1358.67	953.32	70.2	405.35
Total Commercial Banks	7965.65	4487.85	56.3	3477.80
Cooperative Banks	5274.73	3698.25	70.1	1576.48
Grand Total	13240.38	8186.10	61.8	5054.28

Source: SLBC, Odisha

Annexure 5.15: Sector and Bank-Wise Loan Recovery Position in Odisha (Rs. In lakh)

Sector/Item	Total Public sector Banks		RRBs		Co-operative Banks		Grand Total	
	At the end of 2010-11	At the end of 2011-12	At the end of 2010-11	At the end of 2011-12	At the end of 2010-11	At the end of 2011-12	At the end of 2010-11	At the end of 2011-12
1	2	3	4	5	6	7	8	9
A. Agricultural Short Term	Loan							
Total demand for recovery	83428	130312	44778	51467	391485	521941	519691	703720
Amount collected	50414	74804	28346	35410	271700	366909	350460	477123
Overdue amount	33014	55508	16432	16057	119785	155032	169231	226597
% of overdue to demand	39.57	42.60	36.70	31.20	30.60	29.70	32.56	32.20

(Contd...)

Sector/Item		l Public sector RRBs Co-operative Banks Banks				Total		
	At the end of 2010-11	At the end of 2011-12	At the end of 2010-11	At the end of 2011-12	At the end of 2010-11	At the end of 2011-12	At the end of 2010-11	At the end of 2011-12
1	2	3	4	5	6	7	8	9
B. Agricultural Term Loan								
Total demand for recovery	116967	143057	19398	21063	1853	1437	138224	165629
Amount collected	69316	79581	12734	14142	129	113	82183	93848
Overdue amount	47651	63476	6664	6921	1724	1324	56041	71781
% of overdue to demand	40.74	44.37	34.35	32.86	93.04	92.14	40.54	43.34
C. Other Priority Sector								
Total demand for recovery	455530	386140	28943	63337	3556	4095	760309	454690
Amount collected	244754	198874	17626	45780	2432	2803	270668	247640
Overdue amount	210776	187266	11317	17557	1124	1292	489641	207050
% of overdue to demand	46.27	48.50	39.10	27.72	31.61	31.55	64.40	45.54
TOTAL (A+B+C)								
Total demand for recovery	655925	65959	93119	135867	396894	527473	1418224	1324039
Amount collected	364484	353259	58706	95332	274261	369825	703311	818611
Overdue amount	291441	306250	34413	40535	122633	157648	114913	505428
% of overdue to demand	44.43	46.44	36.96	29.83	30.90	29.89	50.41	38.17

Source: SLBC, Odisha

Annexure 5.16: Activity-Summary of Odisha Rural Housing Development Corporation (ORHDC) at the end of Feb, 2011

(In crores of rupees )

Scheme	No. of cases financed	Amount Disbursed	Demand for recovery	Amount received	% of Recovery
1	2	3	4	5	6
EWS Housing (Kalinga Kutir scheme)	28521	59.20	78.77	0.31	0.39
Credit linked Housing scheme	102286	296.71	354.03	2.07	0.58
Loan to PSU/Govt. Employees	28364	126.36	127.58	88.29	69.20
Individual Housing Finance Scheme	3195	58.88	102.73	69.23	67.39
Builder/Project Finance	25	19.74	146.32	25.24	17.25
Building Centre Finance	67	5.96	8.57	0.99	11.55
Total	162458	566.85	818.00	186.13	22.75

Source: ORHDC

Annexure 5.17: Activity Summary of Odisha SC & ST Development Finance Corporation, 2011-12

Programme	Activities					
	Beneficiaries	Amount Directly Financed by OSFDC (in crores of Rs.)	Amount Financed Through Bank loan (in crores of Rs.)			
1	2	3	4			
SCA to SCP (SC Sector)	17543	19.40	24.75			
SCA to TSP (ST Sector) (DTDP)	6367	5.50	10.22			
Scavenger & Dependants	-	-	-			
Term Loan Scheme	15	0.01	0.14			
Total	23925	24.91	35.11			

Source: OSFDC

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

Year	PLI		RF	PLI
	Number of new policies	Amount Insured (in crores of Rs.)	Number of new policies	Amount Insured (in crores of Rs.)
1	2	3	4	6
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
2010-11	15820	308.25	261081	649.94
2011-12	11975	263.96	165401	394.76

Source: PMG, Odisha

Annexure 5.19: Business of LIC in Odisha

Year	Total policies	Total sum insured (in crores of Rs.)	First year premium (in crores of Rs.)
1	2	3	4
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	11968.13	960.13
2010-11	1192204	13256.84	991.82
2011-12	1132735	13517.53	657.54

Source: Life Insurance Corporation Ltd. Central Office, Mumbai

Annexure 5.20: Performance Summary of SIDBI ( 2005-06 to 2011-12 )

Year	Loan sanctioned		Loan disbursed		
	No.	Amount (in crores of Rs.)	No.	Amount (in crores of Rs.)	
1	2	3	4	5	
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	
2010-11	16	12.27	13	16.11	
2011-12	271	304.54	262	296.24	

Source: SIDBI

Annexure 5.21: Refinance Assistance Provided by NABARD in Odisha

Scheme	Assistance (Rupees in Crores) provided during					
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7
Minor Irrigation	5.96	5.28	1.22	1.74	0.97	0.10
Land Development	11.96	4.14	5.04	2.17	0.24	0.03
Farm Mechanization	39.42	26.51	26.75	26.63	47.33	2.11
Plantation &Horticulture	3.45	12.06	3.09	9.68	1.01	0.08
Fishery (Inland)	4.31	5.59	1.64	1.16	2.03	0.44
Dairy Development	3.30	6.47	3.34	2.63	9.13	4.89
Poultry	1.92	4.51	1.43	1.14	1.18	0.00
IRDP/ITDP/SC & ST Action Plan/ PMRY/ SGSY etc.	40.85	25.09	37.21	6.74	10.57	11.58
Non farm Sector	135.17	256.53	221.55	215.14	87.31	80.46
Sheep/Goat/Piggery	0.43	12.21	2.05	7.52	5.82	0.00
Other Farm Sector	95.89	-	107.53	27.61	56.20	245.69
Animal Husbandry/Forestry & others	1.46	0.12	0.09	0.28	0.55	0.00
Storage Godown Market Yards	0.03	-	-	0.49	1.96	1.52
Total	344.12	358.51	410.94	302.44	224.30	346.90

Source: NABARD

Annexure 5.22: Number of Foreign Tourist Arrival, Odisha and All-India (2001 to 2011)

Year	India	Odisha	Odisha's share (%)
1	2	3	4
2001	2649378	23723	0.90
2002	2537282	22854	0.90
2003	2384364	23034	0.96
2004	3457477	28817	0.83
2005	3918610	33310	0.85
2006	4447167	39141	0.88
2007	5081504	41880	0.82
2008	5282603	43966	0.83
2009	5167699	45684	0.89
2010	5775692	50432	0.87
2011 (P)	6290319	60722	0.96

Source: Department of Tourism, Government of Odisha.

Annexure 5.23: Tourist Composition in Odisha (1999 to 2011)

Year	From Within the State	From India but Outside the State	From Abroad
1	2	3	4
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	4562742	3028873	50432
2011	4657402	3613855	60722

Source: Tourism Department, Government of Odisha.

Annexure 5.24: Inflow of Money via Tourist Spending in Odisha (2004-05 to 2011-12)

In crores of rupees

Year	Domestic tourists	Foreign tourists	Total	Growth rate
1	2	3	4	5
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	9.66
2010-11	3901.61	170.39	4072.00	9.53
2011-12	4253.81	201.14	4454.95	9.40

Source: Department of Tourism, Government of Odisha

Annexure 5.25: Number of Visitors and Revenue Collected by Nandankanan (2001-02 to 2011-12)

Year	No. of visitors (in lakh)	Revenue collection (Rs. In Crore)
1	2	3
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
2010-11	24.01	5.27
2011-12	24.69	5.75

Source: Directorate of Nandankanan

Annexure 5.26: Hotel Position in Odisha (1990 to 2011)

Year	Number of Hotels				Number of	Number of
	HSG	MSG	LSG	Total	Rooms	Beds
1	2	3	4	5	6	7
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
2010	114	263	942	1319	26531	51233
2011	150	245	933	1328	27291	52867

 $Source: Tourism\ Department,\ Government\ of\ Odisha.$ 

# Infrastructure

An extensive and good quality infrastructure network is the prime requirement sustainable economic growth. For the purpose this document, infrastructure includes power, transport, telecommunication and science and technology. These components not only facilitate functioning of the economy and social sectors but also accelerate economic growth with better competitiveness. Besides, adequate infrastructural support to industry, agriculture, trade and commerce, infrastructure like water supply, sanitation, sewerage disposal, education, health and allied activities are also essential for accelerated growth. The State Government is continuing in its effort to improve the spread and quality of infrastructure through several programmes and projects. This Chapter focuses mainly on power, transport, mail and telecommunications and science and technology.

## 6.1 Power

The power sub-sector, along with gas and water supply sub-sectors, contributes in real terms at 2004-05 prices, about three percent of Odisha's GSDP. The share of this sub-sector in the industry sector in real terms at 2004-05 prices is about 12 percent. The growth of this sector has fluctuated from year to year due to several factors including availability of inputs, environmental constraints and natural shocks. This sub-sector has grown in real terms at an annual average rate of 5.18 percent during the 11th Five Year Plan and in 2012-13, this subsector is expected to grow in real terms at 3.5 percent. It is a vital sub-sector of the economy, since all other sub-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.

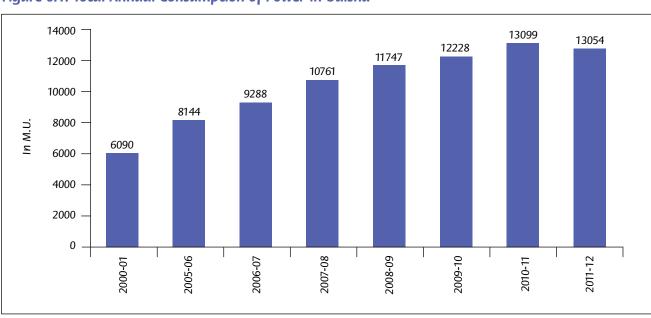


Figure 6.1: Total Annual Consumption of Power in Odisha

## **6.1.1 Power Consumption**

Keeping pace with growth in major sectors, power consumption in the State has been increasing over the years. It is seen from Figure 6.1 that during 2000-01 and 2011-12, Odisha's power consumption has more than doubled. Annexure 6.1 provides power consumption data by sectors such as domestic, commercial, industrial, railways, irrigation, agriculture and others. Figure 6.2 graphs the share of the two largest consumption categories - the industrial sector and the domestic (household) sector. The share of the domestic sector has shown a declining trend till 2008-09 and an increasing trend thereafter, when in 2011-12, it touched 30.43 percent of the total consumption of power in the State.

As per the report of distribution companies, there were 39.25 lakh power consumers in the State during 2011-12, of which 35.35 lakh (90.6%) were domestic consumers. Sector-wise distribution of consumers in 2011-12 is given in Annexure 6.2. Out of a total 39.25 lakh power consumers, about 70.5 percent were from rural Odisha, including more than 70 percent domestic consumers. Figure 6.3 graphs the estimated demand for power in Odisha from 2001-02 to 2011-12. 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 doubled from 2001-02 to 2011-12.

## 6.1.2 Power Supply

The supply of power to a region is measured by installed capacity and availability of consumption. Figure 6.4 depicts the time series of installed capacity and availability of power from different power projects. It is heartening to note that the installed capacity of the State has already doubled from 2005-06 to 2011-12, while the availability of power stood far behind the installed capacity. During 2011-12, availability of power has declined by 8.4 percent over 2010-11. 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 utilisation, transmission and distribution losses. The ratio shows a declining trend 2007-08 onwards.

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 2011-

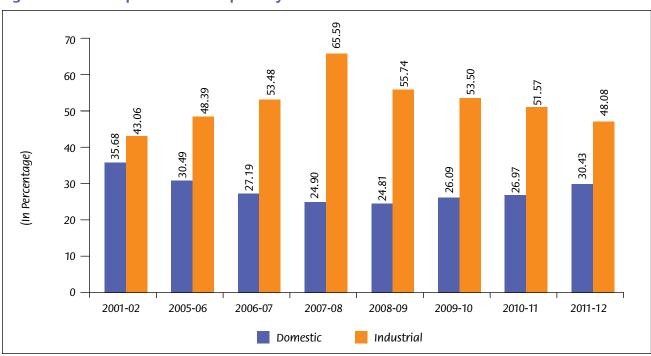


Figure 6.2: Share of Power Consumption by Domestic and Industrial Sectors

3000 2674 2398 2500 2240 2107 1997 2000 1760 1649 (In M.W.) 1500 1334 1000 500 0 2001-02 2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12

Figure 6.3: Estimate Demand of Power, 2001-02 to 2011-12

12, the peak demand was 3,300 net megawatts while the amount met during peak hours was 2,600 megawatt net, resulting in a deficit of 21.2 percent, which is higher than the All-India average of peak-period deficit of 9.81 percent.

As regards supply of power, there are three sources: the State, the Centre and captive power plants by major industries. In 2011-12,

the State's share was 44 percent and that of the Central sector was nearly 45 percent. The remaining 11 percent came from captive power plants and other sources. In Odisha, electricity supply is mostly hydro and thermal based. Out of a total power supply from the State sector in 2011-12, 26 percent was from thermal sources, 51 percent from hydro based and the balance 23 percent was purchased from CPPs and other

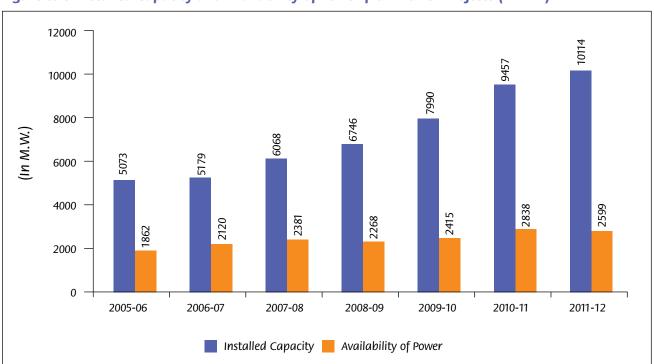


Figure 6.4: Installed Capacity and Availability of Power from Power Projects (in MW)

50 40.9 39.2 40 36.7 33.6 30.2 30.0 In Percentage 30 25.7 20 10 0 2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12

Figure 6.5: Ratio of Availability of Power to Installed Capacity

sources. Details of the State sector and its breakup into hydro and thermal as well as details of plants in sectors under the Centre from which the State gets some power are given in Annexure 6.4. Annexure 6.5 lists the major industries that have captive plants and power supplied to GRIDCO. During 2011-12, the State purchased 225.13 MW power from captive power plants installed by industries such as NALCO, ICCL, RSP, INDAL, NINL, NBVL (Meramundali), Jindal Steel and others.

## **6.1.3 Rural Electrification**

Compared to 2000-01, the State's total consumption of power has increased by 115 percent by the end of 2011-12 but rural-urban disparity in consumption remains high. By the end of March, 2012, out of 47,529 inhabited villages, 39,347 villages were electrified. Nearly 17 percent of villages are yet to be electrified. During 2011-12, out of a total power consumption of 13,054 MU in the State, 2,974 MU (22.8 percent) was consumed

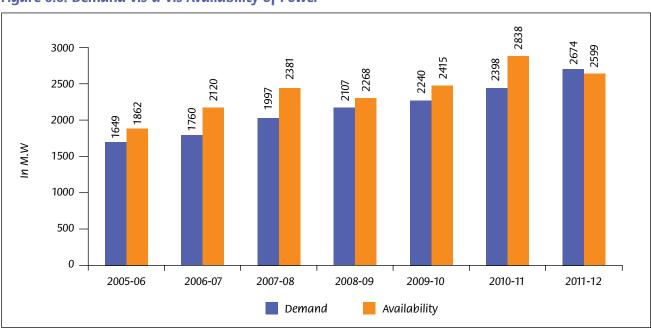


Figure 6.6: Demand vis-à-vis Availability of Power

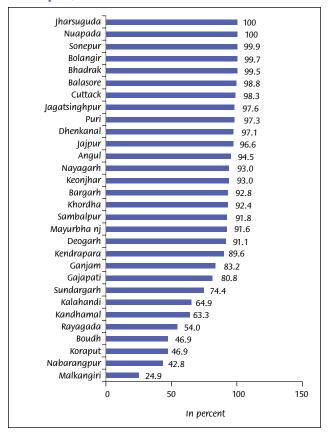
in rural Odisha, while out of a total 39.25 lakh consumers, 27.66 lakhs (70.5%) were from rural areas. Further, out of a total 2,974 MU power consumed in rural Odisha, 73 percent was used by domestic consumers.

District-wise village electrification data by the end of March, 2012 is presented in Annexure 6.6. District-wise percentage of electrified villages is shown in Figure 6.7. Village electrification rates in districts like Malkangiri, Koraput, Rayagada, Boudh, Kandhamal and Nawarangpur are very low. In Jharsuguda and Nuapada districts, 100 percent village electrification has been done. Figure 6.8 compares the extent of village electrification across states by the end of 31st March, 2012.

# 6.1.4 Government Institutions and Initiatives in the Power Sector

The State Government has taken up a series of measures for creating additional power generation capacity, demand-side management, reduction of transmission and

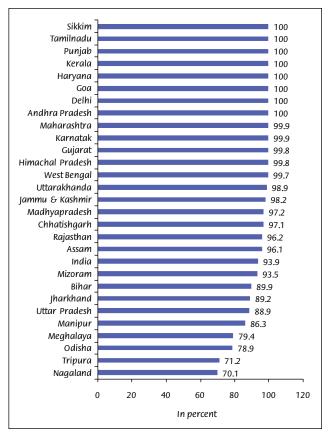
Figure 6.7: District wise Percentage of villages Electrified, 2011-12



distribution (T&D) losses and modernisation/ renovation of old units. There are currently three general sources of power generation including the Central-sector, the state-sector and private-sector units. Transmission lines are provided and maintained by the Odisha Power Transmission Corporation Ltd (OPTCL). The distribution task has been handed over to privately managed companies: WESCO, NESCO, SOUTHCO and CESU. The State has entrusted the commercial side to the Grid Corporation of Odisha (GRIDCO). They negotiate bulk buying from generators and bulk selling to distributing companies. GRIDCO and OPTCL are both owned by the Government of Odisha. These two institutions are at the centre of the power sector in the State.

Although the distribution companies are private, they are not totally independent. The Odisha Electricity Regulatory Commission (OERC), established in 1996, is a critical intermediary between these companies and consumers. It determines tariff rates and is entrusted with

Figure 6.8: Percentage of Villages Electrified Across States as on 31.03.2012



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 Odisha (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, Kahalgaon and Kaniha through the Eastern Region Electricity Board (EREB) system. It is also involved in trading of surplus power in the Availability Best Tariff (ABT) regime. Being the designated State Government agency, GRIDCO has executed a Power Purchase Agreement (PPA) with 29 private power generators for procuring 6,538 MW power. Besides, GRIDCO has signed nine PPAs with NTPC for 4,750 MW power; with OHPC for 322 MW power for its upcoming projects at Sindol; and with OPGC for 50 percent of power from units 3 and 4 having an installed capacity of 660 MW each. During 2011-12, GRIDCO procured 2,599 MW of power from various sources and met the demand of 2,674 MW. Due to poor hydro-power availability, GRIDCO procured 293 MW power from different CPPs and other states and sold 49 MW power to other states. The Captive Generating Plants (CGPs), which have a total installed capacity of 6,053 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 crores by the end of 2004-05 has been reduced to Rs.1,829.98 crores by the end of 2008-09. During the last three years, i.e., 2009-10,2010-11 and 2011-12, GRIDCO incurred continuous losses of Rs.146.43 crores, Rs 587.86 crores and Rs.938.61 crores respectively.

### **Capex Programme**

In order to improve the T&D system, establishment of reliable systems, reduction of AT&C loss to a sustainable level and improvement of quality power, the State Government has approved an investment of Rs.2,400 crores by the end of 2013-14. Of this,

the State Government will provide Rs.1,200 crores (including the 13<sup>th</sup> Finance Commission Grant) to DISCOMs as loans through GRIDCO with counterpart funding of Rs.1200 crores from DISCOMs. During 2010-11 Rs.205 crores has been released to GRDICO and budget provision of Rs.295 crores has been made during 2011-12 including the 13<sup>th</sup> finance grant of Rs.125 crores for the project and the achievements so far are as follows:

- Monitoring Committee meeting was held eight times to review the progress of the project.
- A tota of 13 meetings of the Technical Committee were held and specification of 30 equipment to be procured have been finalised.
- Works orders worth Rs.300 crores are expected to be issued for turn key contracts and supplies under the programme.

During 2011-12, construction of 33 KV line over River Mahanadi from Sonepur Grid substation to Maharajpur primary sub-station and construction of 33/11 KV sub-station at Charvata under Sonepur sub-division were in progress.

In addition, the work of conversion of 33 KV conductor from Komana to Nuapada and Nuapada to Khariar Road was completed in 2011-12 with an investment of Rs.3 crores.

# Special Programme for KBK Districts, Grid Up-gradation in Sonepur District

With a view to improving the power supply position and solving the low voltage problem in Birmaharajpur and Charvata areas in Sonepur district, the State Government has provided Rs.650 lakhs during 2010-11 and 2011-12 under a special programme for KBK districts (RLTAP scheme) out of Special Central Assistance.

# Odisha Power Transmission Corporation Ltd (OPTCL)

OPTCL is a separate entity that was created in 2005. It ensures the development of an effective and economical system of intra-state and inter-state transmission lines for smooth flow of electricity from generating stations to load

centres. It has commissioned many grid substations and transmission lines during 2011-12. The infrastructure of OPTCL networks is as follows:

- 100 Grid sub-stations including switching station with transmission capacity of 10,000 MVA.
- ii) 11,293.563 circuit km of transmission lines of 400 KV, 220 KV and 132 KV rating.

Some major activities of OPTCL during 2011-12 are given below:

- In order to improve the low voltage problem in 20 grid sub-stations, action has been initiated to install 275 MVAR shunt capacitor at an expenditure of Rs.12.71 crores.
- It has taken up construction of Grid substations at Barbil and Bonei including transmission lines of Bidanasi-Cuttack, Paradeep-Jagatsinghpur, Mendhasala-Bidanasi and Ib-Meramundali.
- OPTCL has engaged PGCIL for construction of six grid sub-stations and 400 KV transmission lines from Meramundali to Duburi.
- OPTCL has taken up the construction work of grid sub-stations at four different places along with associated line for which the tender work has been entrusted to NTPC-BSCL.
- Capacity augmentation of 16 grid substations and 220 KV DC line circuit-II from Burla to Bolangir (117.847 km) have been executed during 2011-12.
- Tender activities of two 220 KV grid substations at Puri, Pratapsasan along with 132 KV DC line from Baripada PGCIL grid substation to Jaleswar grid substation with two 132 KV bay extension is in progress.
- Besides, OPTCL has taken up steps for upgradation of sub-station capacities at 12 different places during 2012-13.

### Odisha Hydro Power Corporation (OHPC)

At present, OHPC has six ongoing projects and one joint hydro-electric project with total 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 and 4 of the hydro power station at Burla, thereby raising the installed capacity to 275.5 MW.
- Installation of two units of Balimela hydro electric projects of 150 MW.

The achievements of OHPC during 2011-12 are as follows:

- OHPC has an installed capacity of 2,062 MW, which is an improvement over 1,272 MW at the time of incorporation i.e., (1st April, 1996).
- During 2011-12, OHPC has sold 4,837 MU to GRIDCO valued at Rs.358.68 crores as against 4,622 MU power valued at Rs.338.72 crores sold during 2010-11, showing an increase of six percent in turnover.
- During 2011-12, OHPC earned a profit of Rs.76.31 crores, as against Rs.37.57 crore profit made in 2010-11.
- Renovation and modernisation of Unit-5 and 6 of Burla Power House, Unit-3 of Chipilima Power House, Unit-1 of Rengali and six units of BHEP, Balimela are in different stages of progress.
- Baitarani west coal block with coal deposit of 602 MT has been allotted to OHPC, Kerala State Electricity Board and Gujarat Power Corporation with one third share each. Administrative approval of the State Government for acquisition of land is in progress.
- OHPC and Odisha Mining Corporation Ltd., have together floated a joint venture company namely Odisha Thermal Power Corporation Ltd. for setting up a thermal power plant of 2,400 MW capacity. The processes for land acquisition, establishing coal linkages and water allocation are under progress.

# Odisha Power Generation Corporation (OPGC)

The Odisha Power Generation Corporation (OPGC) is jointly managed by the Government of Odisha and AES, a private US company. The paid-up share capital of OPGC is Rs.490.22 crores, of which, the share of the Government of Odisha is 51 percent. The company has set

up two thermal power plants of 210 MW each in Ib valley area of Jharsuguda district at a project cost of Rs.1,135 crores. It has also undertaken the construction of seven mini hydel stations with a total capacity of 5,075 KW.

During 2011-12, the Corporation generated 2,950 MU power with PLF capacity of 79.97 percent as against 3,185 MU power generations and PLF capacity of 86.56 percent during 2010-11. The Corporation paid a dividend of Rs.1,205 crores to the shareholders, out of which the State Government received Rs.648 crores.

OPGC is presently pursuing a capacity addition plan of 2x660 MW supercritical units (units 3 and 4) at its existing 2 x 210 MW power plant location at Jharsuguda. The project entails development and operation of captive coal blocks located in Sundargarh district with estimated reserves of 530 MMT. In addition, a dedicated 47 km railway line is also under development for transportation of coal. Fifty percent of power to be generated has been tied up for supply to GRIDCO at regulated tariffs and the balance 50 percent will be sold outside the State. The commissioning of the power plant is in progress. Effective pollution control measures as well as better safety performance is being taken for better plant performance. OPGC has received many awards viz., the State Base Safety Award and Green Tech Excellence Gold Award. During 2011-12, OPGC earned a net profit of Rs.137.08 crores after tax as against a profit of Rs.115.04 crores during 2010-11. Annexure 6.7 indicates the total turnover and net profit of OPGC since 1999-2000.

### **Investments**

Year-wise investment in the energy sector in Odisha 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 10<sup>th</sup> Five Year Plan (2002-07), Rs.1,206 crores was spent on the energy sector, which is 8.67 percent of the total State Plan expenditure made during this period. The approved outlay of the energy sector during the 11th Plan period (2007-12) was fixed at Rs. 4,306.88 crores, out of

which Rs.1,458.64 crores has been spent during 2007-08, 2008-09 and 2009-10. The provisional expenditure for 2010-11 is Rs.683.93 crores and the expenditure for 2011-12 is anticipated to be Rs.688.40 crores. Thus, the anticipated expenditure in the energy sector during 2007-12 comes to Rs.2,830.97 crores which is about 65.73 percent of the approved outlay for this sector during the 11<sup>th</sup> Plan period (2007-12).

### **Initiatives Towards Rural Electrification**

Both the Government of India and the State Government have stressed the urgent need for expeditious electrification in rural areas. As per the MoU signed with GoI, 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)

Launched in April 2005, this Central Scheme aims to provide electricity to all villages which have a population of 100 and more in five years. It envisages 90 percent as capital subsidy and 10 percent as loan to the State Government. The scheme has been executed in Odisha by Central PSUs such as NTPC, NHPC and PGCIL. By the end of 31.12.2011, GoI released a sum of Rs.3,098.35 crores through REC in favour of CPSUs, of which an amount of Rs.2,549.49 crores has been utilised.

The target of RGGVY is to electrify 14,697 un-electrified/de-electrified villages, 29,420 partly electrified villages and 32,27,152 BPL households in all the districts. Against this, 34,008 villages, 25,97,683 nos. of BPL kits have been installed and 10,65,039 BPL houses have been electrified.

## Biju Gram Jyoti Yojana

In order to ensure Electricity to All, the State Government has launched the above flagship scheme in 2007-08 with a target to cover during the11<sup>th</sup> Plan period, 10,000 habitations with population less than 100 and BPL households in these habitations, which are not covered under the RGGVY scheme. Against this target, 9,732 habitations have been electrified and

electrification works in 2,692 habitations are in progress at an expenditure of Rs.235 crores by the end of 31st January 2012.

# Biju Saharanchala Vidyutikaran Yojana (BSVY)

For providing access to electricity to the people living in unelectrified areas of urban local bodies, the State Government has launched Biju Saharanchal Vidyutkaran Yojana in 2010-11. The State Government has provided Rs.60.40 crores during 2010-11 and 2011-12 at the rate of Rs.1 crores per Municipal Corporation, Rs.50 lakhs per municipality and Rs.30 lakhs per NAC. The maximum cost of electrification per habitation is Rs.3.50 lakhs and Rs.2000 per BPL household. Under this programme, 2,261 habitations of three Muncipal Corporations, 37 Municipalities and 63 NAC were identified, out of which so far, 440 habitations have been electrified and works in 633 habitations are in progress.

# 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 Odisha Renewable Energy Development Agency (OREDA) is the apex agency under the Department of Science and Technology, Government of Odisha. It looks after renewable and alternative energy projects.

# Remote Village Electrification Programme (RVEP)

This programme targets electrification by non-conventional energy sources of those unelectrified 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. So far, 6,050 villages have been covered under this programme.

# 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. Biogas can be used for cooking and lighting purposes. It also provides rich organic manure. During 2011-12, a total 2,452 domestic biogas plants have been constructed till the end of December 2011 against a target of 8,000 plants.

### Wind Energy

Odisha has a wind power potential of 800 MW. Wind resource assessment is being taken up at 15 sites by C-Net, Chennai, an organisation under the Ministry of New and Renewable Energy, GoI and Suzlon and Epuron wind power majors in the 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 eleven projects for a cumulative capacity of 138 MW. Of these, nine developers have signed power purchase agreements (PPAs) with GRIDCO for a total capacity of 118 MW. The first 20 MW project in Dhenkanal has been set up and is in operation since December 2011. This project will supply about 651 MU to the GRID which covers the non-solar renewable obligation of the State.

### **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. During 2011-12, the Solar Power obligation of the State is about 24 MU. Nine developers have signed PPA for a total generation of about 20.8 MU. More solar power developers have been encouraged to set up power plants in the State. So far, four MW at one MW each solar power plant and one five MW solar power plant have been commissioned in the state.

### **SPV Programme**

During 2011-12, against the sanction of 80 sets of SPV street lighting system by the Ministry of New and Renewable Energy (MNRE), GoI, 55 sets have been commissioned in Sundargarh and Keonjhar district. One 650 KWP-SPV Power

plant has been commissioned at Badatamera of Nawarangpur district. Two KWP power plants have been commissioned at Palia sevashram of Nawarangpur district. In addition, 13 SPV power plants in 13 sevashrams are under progress in Nawarangpur district.

## The 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**

Transport is the crucial component of infrastructure needed for the development process. It plays a pivotal role in improving efficiency and productivity of various economic activities, social sector development, human settlements and overall performance economic growth. The State Government has therefore, accorded high priority to develop transport and communication infrastructure promoting development of backward areas and to connect remote habitations to growth and service centres. Improving *bijli* (i.e., electrification, particularly to and within villages), sadak (i.e., improving the quality and number 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) is one of the core development strategies of the State Government.

#### **6.2.1 Roads**

India's road network is 3.3 million km long and carries 65 percent of freight and 80 percent of passenger traffic. In the absence of an adequate rail network in Odisha, roads are crucial in providing connectivity to all habitations. The State has a total road length of 2,50,328 km by the end of 2011-12. The road networks of the state consist of national highways, state highways, major/district roads and village/rural roads.

Box 6.1: Road Length in Odisha by Types, 2011-12

Type of Roads	Length (km)
National Highways	3,594.162
Express High ways	38.400
State Highways	3,616.728
Urban Roads	18,590.689
Rural Roads	28,158.737
Major District Roads	4,260.046
Other District Roads	7,116.19
Panchayat Samiti Roads	25,702.51
Gram Panchayat Roads	1,45,367.77
Forest Roads	7,518.128
Irrigation Roads	6,277.00
GRIDCO Roads	88.00
Total	2,50,328.189

By the end of 2011-12, the State had 18,590.69 km of urban roads, of which 2,139.44 km belonged to three Municipal Corporations, 8,386.45 km to 37 Municipalities and the balance to 63 Notified Area Councils. However, only 27.30 percent of urban roads were blacktopped, 17.83 percent were cement concrete and 16.80 percent were metalled roads.

# Road Density, Surfaced Road Density and Highway Works

Road density is a measure of the extent of road networks in a region. It is usually defined as the total length of all roads per 100 sq km of area. Odisha fares much better than the all-India average with respect to road density. However, road density does not take into account quality of roads. The total length of roads includes national highways, metalled roads of varying standards and un-surfaced roads. The Ministry of Road Transport and Highways maintains data on length and types of roads that are surfaced and un-surfaced.

In 2004, the total road length per 100 sq km in the State was 137.3 km as compared to 81.2 km at the national level. The road length per million population in the State was 58.1 km which was also higher than the all India average of 25.9 km. During 2011-12, road length per 100 sq km in Odisha increased to 160.77 km per million population.

One can define surface road density as the percentage of length of roads that is surfaced. For India, it has always remained above 50 percent, while for Odisha, it remained in 20-30 percent range. During 2010-11, the surface road density in the State was about 28.6. A massive programme has been undertaken by the Central and State Governments to improve and extend roadways in Odisha.

The National Highways constitute only about two percent of the road network but carry about 40 percent of the total road traffic. Through Odisha,16 National Highways measuring 3,594.162 km in length traverse, of which 2,523.863 km are under the control of the N.H. wing of the State PWD and the remaining 1,070.299 km have been transferred to the National Highway Authority for improvement under the Golden Quadrilateral, NHDP and Port Connectivity Programme. During 2011-12, widening of 74.3 km roads to two lanes, strengthening 50 km of existing pavements, improving the riding quality of 81 km and periodical renewal of 238.4 km of road was completed. In addition, the following NH programmes are in the pipeline:

- The State Government has submitted proposals to the Ministry of Road Transport and Highways, GoI for consideration of five state roads, measuring 1023.7 km as new National Highways.
- A portion of NH-200 from Kanaktora to Jharsuguda measuring 68 km in length has been identified for improvement to two lanes with paved shoulders as a PPP undertaking.
- Construction of nine by-passes/by-passcum-ROBs near congested towns has been proposed and project report for the seven has been received.
- A total of 249.37 km of 8 NH projects have been identified for improvement to two lanes with extra budgetary support under a special project.
- A proposal for improvement of 557.485 km of 8 NH projects (354.604 km of single lane, 112.558 km of intermediate lane) and 90.323 km two lanes under the World Bank assisted State Road Project.

Annexure 6.10 shows allotments and expenditures for development of National Highways 2001-02 onwards. Annexure 6.11 shows the achievement during 2011-12 while Annexure 6.12 shows the proposal for improvement of National Highways during 2012-13.

## **Rural Roads and Connectivity**

Rural connectivity is needed for socioeconomic development of the State. The State had 3,762 rural roads of 28159 km length by the end of 2011-12, of which 17,430 km (61.9%) are blacktopped and 2,365 km (8.4%) are cement concrete roads. Pradhan Mantri Gram Sadak Yojana (PMGSY), Rural Infrastructure Development Funds (RIDF), Constituency-wise Allotment (CWA), Finance Commission Award works (R&B) and Special Repair schemes are the major rural connectivity programmes which are under implementation in the State.

# Pradhan Mantri Gram Sadak Yojana (PMGSY) and Bharat Nirman Yojana

Since the inception of PMGSY in 2000-01, rural road connectivity has remained a benchmark policy objective. Under PMGSY, out of 9,184 roads of 36,071 km length sanctioned, 6,156 roads that were 23,081 km in length have been completed at an expenditure of Rs.8,532.01 crores as on 31st March, 2012. Out of 21,398 km of completed roads, 15,841 km were blacktopped and 4,073 km were concrete roads. These roads provided all-weather connectivity to 8,168 habitations. During 2011-12, 934 roads that were 3,167 km in length were completed at an expenditure of Rs.1,235.78 crores. Figure 6.9 through 6.11 show the status of the PMGSY scheme in Odisha. Annexure 6.13 shows the details of progress of the PMGSY programme since 2000-01.

Maintenance of PMGSY roads rests with the State Government after creation of assets. The State Government has released Rs.98.75 crores during the last seven years i.e., from 2005-06 to 2011-12, out of which, Rs.65.58 crores have been utilised for maintenance of PMGSY roads including Rs.27.80 crores utilised during 2011-12.

2000 1486 1500 (In Numbers) 934 1000 685 596 464 451 500 432 403 364 341 0 2005-06 2009-10 2002-03 2003-04 2007-08 2008-09 2001-02 2006-07 2010-11 2000-01 2004-05

Figure 6.9: Number of Roads Completed in Odisha under PMGSY, 2000-01 to 2011-12

PMGSY became a part of Bharat Nirman in 2005-06 with modified targets to provide all-weather connectivity to unconnected habitations with a population of 1,000 or more in plain areas and 500 or more in hilly and tribal areas. The target under Bharat Nirman was to connect 5,680 unconnected habitations (i.e.,3,604 with 1,000 or more population in plain areas and 2,076 with 500 or more population in hilly and tribal areas)

by constructing 29,289.43 km of road by March, 2012. During 2012-13, it is targeted to connect 391 unconnected habitations by constructing 3,000 km of roads.

Against this target, about 4,654 habitations were covered under this programme with 24,914 km of roads from 2005-06 to the end of Feb 2012, (i.e., new connectivity 13,806 km

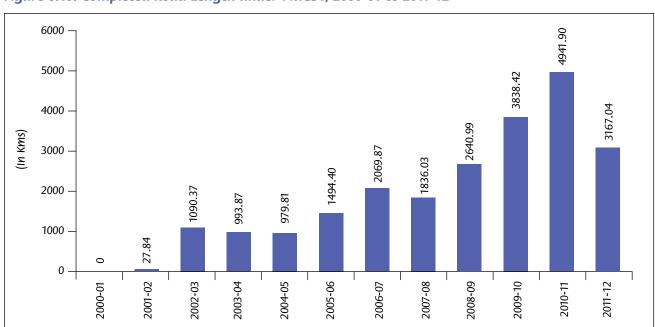


Figure 6.10: Completed Road Length under PMGSY, 2000-01 to 2011-12

2500 1924.3 2000 1500 1163.0 in crore 1000 677.4 S. 377.4 238.6 267.4 500 133.8 36.3 0 2005-06 2011-12 2007-08 2008-09 2000-01 2001-02 2002-03 2003-04 2006-07 2009-10 2010-11 2004-05

Figure 6.11: Amount utilised under PMGSY, 2000-01 to 2011-12

and up- gradation of 11,108 km) which shows an achievement of 82 percent. Annexure 6.14 records the achievement of this programme from 2006-07.

# 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. At a project cost of Rs.242.43 crores, one hundred thirty two roads and at a project cost of Rs.570.01

crores, two hundred seventy five bridges have been completed by the end of 31st March, 2012, out of which six roads of length 54 km and 21 bridges have been completed during 2011-12 at an expenditure of Rs.166.55 crores. Besides, another 105 projects (15 roads and 90 bridges) under different tranches of RIDF are in progress. Figure 6.12 and 6.13 show the progress of the RIDF programme from 2007-08.

In addition to the above, during 2011-12, NABARD sanctioned a loan amounting to

Figure 6.12: Roads and Bridges Completed under RIDF, 2007-08 to 2011-12

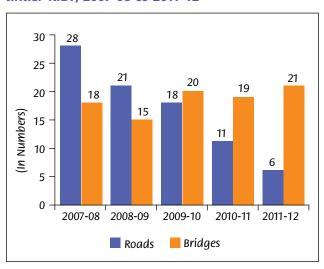
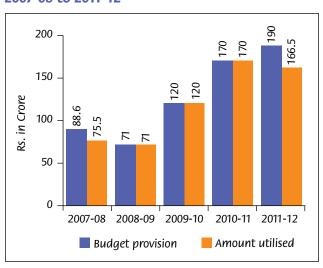


Figure 6.13: Financial Status of RIDF Projects, 2007-08 to 2011-12



3454.44 3033.94 3500 3000 2307.15 2500 884.58 1667.56 (IN '000 Nos.) 2000 1500 1000 500 2007-08 2008-09 2004-05 2005-06 2006-07 2009-10 2010-11 2011-12

Figure 6.14: Vehicles on Roads in Odisha: 2004-05 to 2011-12

Rs.270.37 crores against the project cost of Rs.315.65 crores for construction of 60 projects in its xvii tranche.

In addition, rural connectivity programmes are also funded under RLTAP, Biju KBK Plan, Gopbandhu Grameen Yojana (GGY), Biju Kandhamal O Gajapati Yojana and Backward Regions Grant Fund (BRGF). The RLTAP and BRGF are funded by GoI. The Biju KBK Plan, Gopbandhu GGY, Biju Kandhamal O Gajapati Yojana and Biju Setu Yojana (rural bridges) of the State Government focus, amongst other things, on *bijli*, *sadak* and pani. The status of the GGY scheme from 2006-07 to 2011-12 is given in Annexure 6.9.

During 2011-12, a sum of Rs.28.40 crores was provided to 142 Assembly Constituencies under the constituency-wise allotment (CWA) programme to address the immediate needs of the locality. Under this programme, 751 roads and 192 CD works were completed by utilising Rs.27.43 crores during 2011-12.

Under the 13<sup>th</sup> Finance Commission (TFC) Grant, there is a provision of Rs.395 crores for maintenance of rural roads spread over a period of four years i.e., from 2011-12 to 2014-15. During 2011-12, 223 projects were taken

up and completed by utilising Rs.81.29 crores under this programme. Besides, out of a budget allocation of Rs.383.95 crores, Rs.377.90 crores has been utilised for repair and maintenance of roads and a special repair programme.

### **Overall Rural Road Connectivity**

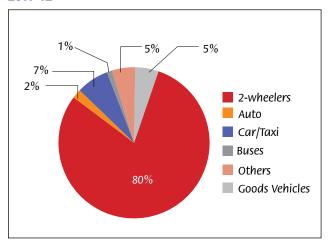
The extent of rural road connectivity in Odisha is far less than the requirement. So far, only 62 percent villages have all-weather connectivity, as compared to the national average of 60 percent. Annexure 6.15 presents the status of rural connectivity vis-à-vis habitations in the State.

# Number and Composition of Vehicles on Roads

As roads have expanded, so have their uses. The total number of vehicles on roads in Odisha from 2004-05 to 2011-12 is shown in Figure 6.14. As illustrated in Figure 6.15, two-wheelers alone constitute 80.6 percent of total vehicles on roads, followed by car/taxi and jeep 6.6 percent and goods vehicles 5.5 percent. The number of vehicles plying on roads in Odisha has increased significantly in recent years.

Buses are a major means of road transport for common people in the State. During 2011-12, 13,565 buses, both public and private,

Figure 6.15: Composition of Vehicles on Road, 2011-12



were plying. This indicates 29 buses per one lakh population. From 2000-01 to 2011-12, the number of public sector buses plying on roads increased from 230 to 367. Figure 6.16 shows, the number of passengers served during 2005-06 to 2011-12 by these buses. This indicates a huge expansion in private-sector bus services. During 2011-12, a sum of Rs.791.20 crores motor vehicle revenue was collected against a target of Rs. 870.00 crores and the same has increased by 8.4 percent over the previous year.

Motor vehicle offences show an increasing trend in the State. During 2011-12, about 1,07,965 offences were detected and Rs.43.19

crores revenue collected, as against 96,637 cases detected and Rs.40.11 crores collected during 2009-10, showing an increase of 11.7 percent and 7.7 percent respectively.

# Policy and Administration of Road Transport

Odisha is the leading State in India to enunciate the State Transport Policy, 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 institutional and regulatory mechanisms like the Odisha Transport Infrastructure Development Authority (OTIDA) and Odisha 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 to administer and manage the road transport sector. The Odisha State Road Transport Corporation is the provider of transport services and amenities to passengers. The activities of the Corporation include revenue collections from motor vehicles and those from motor vehicles related offences, outlined in Annexures 6.16 to Annexure-6.19.

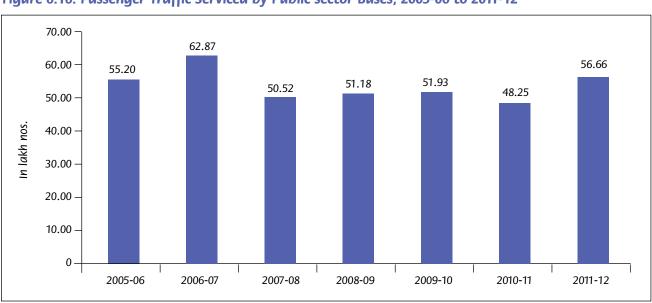


Figure 6.16: Passenger Traffic Serviced by Public sector Buses, 2005-06 to 2011-12

# Road Accidents and Safety Measures Undertaken

High growth of vehicles and human mobility, a 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 2011, 9,398 road accidents were recorded, claiming 3,802 lives and injured 11,248 persons as against 9,395 road accidents and 3,773 deaths recorded in 2010. The fatality rate of Odisha remains high with 40.46 deaths per 100 accidents in 2011.

The State Government implements a series of road safety measures with support from the Odisha Road Safety Society, Ministry of Road Transport and Highways, Police Department, voluntary organisations and State truck and bus owners association. During 2011-12, STA implemented the following measures on road safety:

- To shift road accident victims to the nearest hospitals, nine 24X7 accident helplines are in operation.
- For clearance of road and shifting of road accident victims after an accident has occurred, 20 ambulances and 15 cranes have been deployed on highways.
- For deployment on Fire Stations on highways,10 ambulances have been provided to the D.G. Fire services.
- On highways,15 Highway Interceptors fitted with speed detection radars and breath analysers have been deployed.
- Health check-up camps have been organised for drivers.
- To check overloading, 15 portable weigh bridges have been deployed.
- Refresher Training for 34,000 drivers have been conducted.
- The police department has been provided funds for purchase of road safety equipment.
- Awareness programmes on road safety have been conducted through print and electronic media.
- Throughout the year, the enforcement staff conducts checks on highways.
- Steps have been taken to implement radio frequency based identification of driving skill tracks in the state.

- In Anugul, Berhampur, Sambalpur, Keonjhar, Koraput and Bhubaneswar, six heavy motor vehicle training schools will be established.
- Steps are being taken to paste retro reflective tapes on the sides of transport vehicles.

# Odisha State Road Transport Corporation (OSRTC)

OSRTC functions to provide safe and dependable transport facilities to the public. During 2011-12, the Corporation had 307 buses on road with a fleet strength 381 and regular staff strength of 878 with a bus staff ratio 1:2.82. Passengers serviced by public sector buses during 2011-12 has increased by 17.4 percent over 2010-11. Vehicle position and income performances of OSRTC during 2011-12(up to Dec'11) are given below:

- Vehicles on road 309
- Off road vehicles 74
- Average fleet utilisation 82 percent
- Average vehicle utilisation 310 km
- Income Rs.5,108.75 lakhs
- Expenditure Rs.5,065.52 lakhs
- Per km income- Rs.19.84
- Per km expenditure Rs.19.67
- Parking fees collection Rs.50.94 lakhs

By the end of 2011-12, 2,023 employees retired under VRS whie 314 employees retired under VSS from OSRTC. Out of a total claim of Rs.44.19 crores, Rs.41.64 crores have already been paid.

## **Relative Efficiency of OSRTC**

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 per km per 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 Odisha State Transport Corporation is about the same as the national average.

### 6.2.2 Railways

Railway routes pass through 23 districts of the State excluding Boudh, Deogarh, Kandhamal,

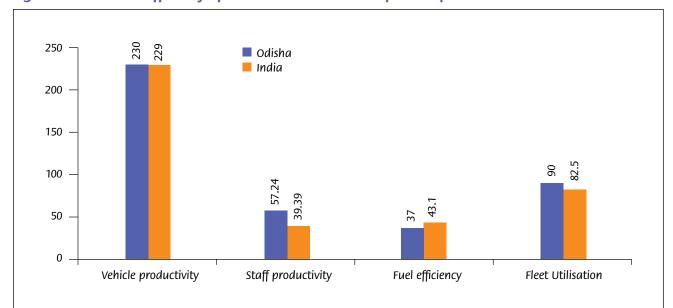


Figure 6.17: Relative Efficiency of Odisha State Road Transport Corporation

Kendrapara, Malkangiri, Nabrangpur and Nayagarh. The density of coverage is relatively high in some 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. During 2011-12 the following new trains have been introduced.

- Bhubaneswar Koraput Hirakhanda
   Express has been extended up to Jagdalpur.
- Puri Dhenkanal Passenger has been extended up to Talcher.
- Puri Palasa Passenger has been extended up to Paralakhemundi.
- As detailed below, seven new trains have been introduced:
  - i) Bhubaneswar–NewDelhi-Bhubaneswar Weekly (Duronto Express).
  - ii) Bhubaneswar Rameswaram Weekly Express
  - iii) Puri Howrah Duronto Express
  - iv) Sambalpur Howrah Weekly Express
  - v) Puri Digha Weekly Express
  - vi) Baripada Shalimar Express
  - vii) Khurda Road Bhubaneswar Passenger
- A new rail link from Jaleswar to Digha (41 km) has been announced in the Railway Budget 2010-11.

By the end of 2010-11, the State had 2,417 km of railway lines including 54 km of narrow gauge

lines. Overall, railway coverage is poor and this is one of the factors that has 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 16 km, while the national railway density is around 20 km.

## Paradeep Port

Paradeep Port is the only major port in the State. GoI declared Paradeep Port as the 8<sup>th</sup> major port of India in April, 1966 making it the first major port on the East Coast commissioned in independent India. The port is situated 210 nautical miles south of Kolkata and 260 nautical miles north of Visakhapatnam at Latitude 20<sup>0</sup>-15' - 58.63' N and longitude 86-40'-27.34" E on the east coast. It has an artificial type lagoon 500 m length,160 meters wide and one Turning Circle of 520 m diameter.

The port is equipped with 14 berths, one single point mooring and one RO jetty for handling various cargoes. Of this, five berths are fully mechanised for handling of iron ore, thermal coal and POL, two are captive berths in which fertilisers are handled, one berth has been allotted to M/s ESSAR for handling of iron-ore pellets on captive basis and the others are multi-purpose in nature and semi mechanised. The port has 80 million tonnes of cargo handling capacity. During 2011-12,

Koraput 281.00 Sundargarh 262.00 Bolangir 176.57 Keonjhar 164.82 Sambalpur 162.40 154.00 Rayagoda 131 66 Jajpur Khordha 117 39 Mayurbhanj 112.10 111.37 Cuttack 107.69 Balasore Angul 105.51 85.64 Ganjam 68 12 Jagatsinghpur 54.33 Bargarh 54.00 Gajapati Jharsuguda 52.38 Dhenkanal 50.60 38.43 Kalahandi Bhadrak Nuapada Sonepur 12.12 0.00 50.00 100.00 150.00 200.00 250.00 300.00 In Km.

Figure 6.18: District-wise Railway Coverage in Odisha, 2010-11

54.25 million tonnes of cargo (35.99 million tonnes of import and 18.26 million tonnes of export) were handled through this port with an average of 1.17 hours pre-berthing detention, 2.69 days turn-around time and 15,995 MT ship berth-day output. POL, iron-ore and thermal coal together constituted 70.1 percent of the

total cargo handled through this port during 2011-12. Though the import through Paradeep Port during 2011-12 has increased by 15.3 percent over the previous year 2010-11, the total traffic handled through this port shows a declining trend from the last two years (Annexure- 6.21). However, for the first time

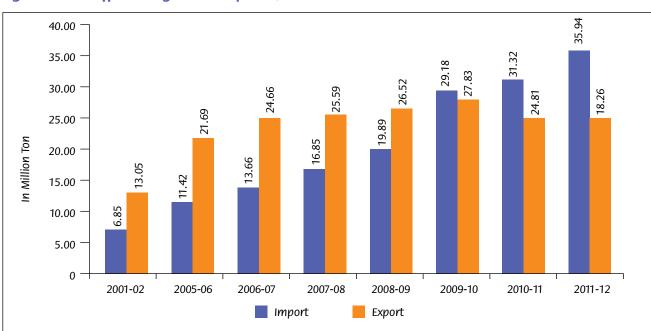


Figure 6.19: Traffic through Paradeep Port, 2001-02 to 2011-12

about 80.66 TMT of new cargoes (10 TMT of Betonite, 33 TMT of hot briquetted iron, 33 TMT of Pyroxenite and 4.66 TMT of iron-ore pellets) were imported through this port during 2011-12.

During 2011-12, the total income of the port touched Rs.809.85 crores with Rs.227.28 crores surplus after tax. The port is in the process of modernising and mechanising all the existing berths in a phased manner and has embarked on a very ambitious plan to achieve 237 million tonnes capacity by the end of 2020.

#### Other Ports

Odisha is a maritime state with 480 km of coastline. It has 14 potential sites for development of minor ports. Of these sites, Gopalpur is the second largest port in Odisha which has been in operation since January 2007. This port has been handed over to Gopalpur Port Ltd. for development as an all weather port. Besides, Dhamara Port, a Green Field Project, has been undertaken by the Dhamara Port Company Ltd. for establishment of a mega port of international standards. In addition to these, the State Government has signed a concessional Agreement/MoU with M/s Creative Port Development Pvt. Ltd., M/s Navayuga Engineering Company Ltd. and M/s Aditya Birla Groups for the establishment of ports at Kirtania, in Balasore, Astarang in Puri and Chudamani in Bhadrak districts respectively.

# 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, GoI. 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:

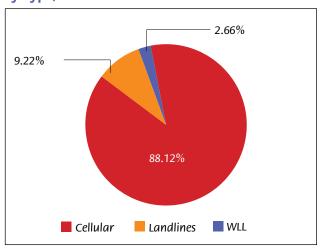
- Chandabali sector provides launch services from Chandabali to Aradi, Talachuan and Rajnagar through nine motor launches.
- Balugaon sector provides services from Balugaon to Krushnaprasad, Kalijai, Nuapada and Satapada through eight motor launches.
- Astaranga sector provides services from Nayagarh to Sribantapur with the help of one motor launch and five country boats. But after the super cyclone of 1999, 14 motor launches are plying on these routes after necessary repairs. Four motor launches of Chandbali sector were damaged.

Annexure 6.22 provides data on passengers and revenues raised from 2005-06 to 2011-12. One 50 seater FRP boat was procured in 2010-11, for which tenders were floated. Further, there is a budgetary provision of Rs.1.30 crores in 2012-13 for procurement of one 50 seater and three 30 seater FRP boats. The Odisha Boat Rules, 2004 is implemented in the State. It provides for registration and proper checking of all types of boats. During 2010-11, Rs. 2.88 crores has been collected from 291 boats towards survey, registration and renewal charges.

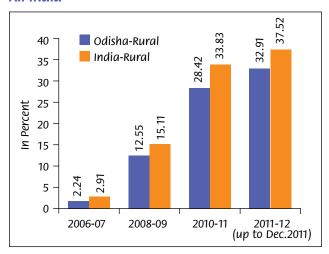
A Crew Training Institute functions at Chandabali, under the control of the Directorate of Ports and Inland Water Transport. It conducts examinations for granting certificates of competency to Serangs, Masters, Engine Drivers and Inland Engineers. During 2010-11, 124 candidates appeared in these examinations and 103 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 twelve airstrips and sixteen helipads. A proposal for procurement of new aircraft is under consideration. A Government Aviation Training Institute, set up as a PPP undertaking, has started functioning since November, 2008. During 2010-11, pilot training was provided to 138 candidates.

Figure 6.20: Number of Telephone Connections by Type, 2011-12



## Figure 6.21: Rural Tele-density, Odisha vis-à-vis All India

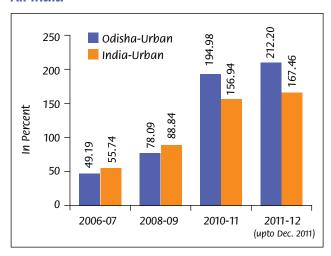


# 6.3 Mail and Telecommunication

During 2011-12, there were 8,163 post offices in Odisha comprising 35 HO, 1,158 SO, One EDSO and 6,969 EDBO. Among these, 7,576 (93%) were in rural areas. 88 post offices (including 35 head post offices) have been covered under the 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 was deputed for training abroad at the Asia Pacific Postal College, Bangkok for a week under the Reward and Recognition scheme. 140 post offices have been identified under core banking for issue of ATM. The project will start in 2014.

The effect of telecommunications on the productivity in various sectors of an economy is enormous. The telecommunication network in Odisha has vastly expanded over the years. During 2011-12, there were 1,157 telephone exchanges (all electronic) and telephone facilities were available in 48,162 villages, which is about 95 percent of the total number of inhabited villages in the state. The total number of telephone connections during 2010-

Figure 6.22: Urban Tele-density, Odisha vis-à-vis All India



11 was 43.92 lakhs which increased to 48.96 lakhs by the end of 2011-12. The distribution of telephone connections by types is illustrated in Figure 6.20.

Cell phones constitute 88 percent, while landlines represent nine percent of all connections. Public Telephone Subscriber Trunk Dialing (STD) services are available at 11,297 stations, along with 1,585 Local PTS and 273 Highway PTS. During 2011-12, there were 1,053 STD stations in the State with 4,46,155 subscribers. Besides, 157 internet *dhabas* were in operation during 2011-12.

Odisha stands above the national average in postal density. However, it is below the national

Assam Bihar Jammu & Kashmir Madhya Pradesh Uttar Pradesh) West Benaal Odisha Rajasthan Maharashtra Andhra Pradesh Guiarat Harvana Karnataka Punjab Tamil Nadu Himachal Pradesh 118.64 50 150

Figure 6.23: Tele-density Across States, 2011-12

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 Odisha vis-àvis all India levels. Figure 6.23 graphs the teledensities across select 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 electronics. telecommunication, IT and IT-enabled services as priority sectors. Establishments and enterprises in these sectors have been declared as public utility services. Use of IT in the private sector has been improving in India. In Odisha, 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)**

National Informatics Centre (NIC) is a premier Science and Technology Organisation under the Department of IT of GoI actively working for the last three decades in the areas of Information and Communication Technology (ICT) application in the Government Sector. NIC, Odisha State Centre, has been playing a catalytic role in promoting IT culture for effective governance at the state and district level. Both the State Government and NIC have taken several initiatives in this regard.

The major achievements of NIC, Odisha Centre during the 2010-11 are:

- E-Collectorate-File Management & Monitoring Suite for Dist. Administration (G2G.G2C)
- Energy
- Electricity Duty (ED) Collection and Monitoring System for different categories of consumers.
- Standard Testing Laboratory (STL)-Monitoring status of Equipments/Oil tested at STL office as well as at fields.

- Electrical License Board Odisha (ELBO)
- ST&SC Dev. And Minorities & Backward Classes Welfare
- Prerana Post-Matric e-Scholarship system
- I&PR
- E-Advertisement-Digital delivery of Advertisement to Newspaper Agencies for publication in Newspapers and Periodicals by I & P.R. Department
- Home
- Arms Licensing Information System (ALIS)
- Transport
- Dealer point registration
- Agriculture Fertiliser Regd. Certificate system (issuance of FRC)
- Pesticides Licensing system (issuance of pesticide license)
- Seed Processing (generation of purchase bill for farmers)
- Commercial Pest Control Operation licencing system (CPCO) (issuance of license)
- Agro Telemarketing
- Farm Mechanisation (issuance of permit, subsidy release)
- Farm Pond Registration system (issuance of work order)
- Department of Information Technology

A standardised district portal framework which is citizen centric, disseminates information about district and sub-district level is put in place across the country. with Odisha as a pilot state. It acts as a single window platform for all categories of information satisfying G2C, G2B, G2E and G2G services. The standardisation of the district portal initiative is based on the content architecture of the National Portal of India (http://india.gov.in), a mission mode project of GoI, under the National e-Governance Plan (NeGP). The IT Department has undertaken the following programmes in Health, WCD and Finance Department in 2011-12.

- Health
- MCTS (Mother & Child Tracking System)
- WCD National Social Assistance Programme (NSAP)
- Finance Automation of local fund auditbudget execution technique automation.

## **IT Department**

The State Information Technology Department entrusted with matters relating computer communication and electronics, both software and hardware. It also acts as the nodal department for the NIC. In 2004, it formulated the Information and Communication Technology (ICT) Policy to help IT reach the common man. The Odisha 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 2011-12 were as follows:

### 1. National E-Governance Plan (NeGP)

The National e- Governance Programme envisions a three pillar model for delivery of web-enabled anytime, anywhere access to information and services in rural India. These are: (a) Odisha State Wide Area Network (OSWAN), Common Service Centres (CSC) and (c) State Data Centre (SDC).

**OSWAN**:OSWANisacomprehensive programme initiated by GoI, which envisages creating a core and computerisation infrastructure for the entire State.

**CSC**: The scheme is being implemented as a PPP undertaking in association with three private agencies viz., M/s Zoom Developers, M/s SREI Infrastructure Finance Ltd. And M/s Bharatiya Samrudhi Finance Ltd. who in turn, are appointing village level entrepreneurs (VLEs) to carry out the job. About 5,151 numbers of CSC have been opened by the end of January, 2012.

### State Data Centre

State Data Centre (SDC) is to be set up at State Head Quarters which will be connected through OSWAN for public delivery system through CSCs.

In the meantime, the infrastructural work of SDC has been completed and was inaugurated by the Hon'ble Chief Minister of Odisha on 3<sup>rd</sup>

November 2011. The process of migration of applications is being started.

#### e-Procurement

IT Department through OCAC has taken steps to make the procurement process transparent and efficient. A committee under the chairmanship of Chief Secretary, Odisha has been constituted for implementation of this project. Initially it had been decided to implement this work in four departments viz., Works Department. H & UD Department. Rural Development Department. and Water Resources Department. Currently, the same facilities are extended to other PSUs. Tender value for Rs.20 lakhs and above are being hosted in this system.

# Student Academic Management System (SAMS)

OCAC has implemented this project as an extension of e-College Project for Higher Education Department to introduce the e-Admission procedure. This year, students have taken admission in 1,284 junior colleges and 162 degree colleges of Odisha. In this project, the students have taken the advantage of applying online to listed colleges without visiting the colleges.

## e-Registration

This project has been implemented to modernise computerised registration and delivery across 176 registration offices of the State, which would improve administrative effectiveness and efficiency and accelerate the overall development of the State through improved Government interfaces. Recently the Hon'ble Chief Minister of Odisha has inaugurated the e-Registration Process in the State. The project is being implemented by Odisha e-Governance Services Ltd., (A SPV of OCAC & IL & FS) as a PPP undertaking.

#### e-Municipality

e-Municipality is one of the Mission Mode Projects that has significant citizen interaction, since municipalities provide a large number of basic services for millions of citizens living in India's urban centres. The vision for the National Mission Mode Project for e-Governance in Municipalities is to leverage the ICT opportunities for sustained improvement in efficiency and effectiveness of delivery of municipal service to citizens. The key objectives of the MMP include:

- Provide single window services to citizens on any time, any where basis
- Increase the efficiency and productivity of ULB
- Develop a single and integrated view of ULB information system across all ULB in the state.
- Provide timely and reliable management information relating to municipal administration for effective decision making.
- Adopt a standards-based approach to enable integration with other related applications. The project is being implemented through M/s TCS and in first phase, 44 ULBs are covered. Initially issue of death and birth certificates are being made available to the public and other services will be added shortly.

# Odisha Secretariat Workflow Automation System

The objective of this scheme is to provide automated functions at all levels of the administrative hierarchy of any Governmental department. Most of the work done by the Government departments is workflow-intensive; that is, there is a lot of information flow in the form of files. Some of this work necessitates the creation and maintenance of databases that hold data, which is critical to the decision-making process. It also provides Document Management, Management, Collaborative Workflow Environment and Knowledge Management in an integrated fashion and delivers an Electronic Workplace. The achievements during 2011-12 iare as follows;

- The core application of OSWAS is under trial run in the departments of RD, Excise, IT, Law, Science & Technology, Co-operation, CM's Office, *Panchayati Raj* Department FS&CW Department and GA (AR) Section.
- File Nomenclature in the Application for e-File has been modified as per notification of GA Department.

- M/s TCS is providing handholding support to the users of the departments where the application is under trial run.
- Interaction with Finance, Works, ST & SC and Home Departments etc., is ongoing for collection of relevant information for implementation of the Core Application.
- Tender process is completed and Government approval is awaited for procurement of hardware to be supplied to different departments under OSWAS.

### **OCAC Incubation Tower**

To promote BPO units in the state, the Government has approved the estimate of Rs.28.97 crores for construction of an IT tower named OCAC Incubation Tower adjacent to the existing OCAC Building, Bhubaneswar. This building will provide incubating facilities to BPO units and cater to the need of MSME software exporters. Besides accommodating the ancillary activities under NeGP, a training centre for VLEs will be established. This has been approved in the meeting of the SLEPC on the ASIDE scheme. In the meantime, the core construction work of the building is completed and the air conditioning, electrical and lift work are in progress.

#### e-District

The scheme is implemented by OCAC in Ganjam and Mayurbhanj districts to cater to the 23 citizen centric services. The pilot has already been implemented in both the districts. The DPR for state wide rollout of this project has already been sent to DIT for approval. After approval by SIT, it will be implemented in the coming financial year.

## Modernisation of Record Rooms of Tehsils

The project is funded by Land Records & Survey, Board of Revenue, Odisha for modernisation of record rooms of 33 *tehsils*. This includes renovation and up-gradation of infrastructure for computerisation of *tehsil* record rooms. The delivery of hardware, furniture, other accessories and training to *tehsil* staff have been completed.

### e-Despatch

OCAC has signed the MoU with its software partner M/s Cybertech Software and Multimedia Pvt. Ltd. for copyright of the software for implementing the e-Despatch system in different Government departments. The implementation in 22 departments has been completed and the rest of the departments will be covered soon. As per request of Himachal Pradesh, the same has been implemented there successfully.

## 6.4.2 Science and Other Technologies

While adopting IT 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. Their activities are summarised below:

# 1. Odisha University of Agriculture and Technology (OUAT)

Odisha University of Agriculture and Technology is the second oldest agricultural university in the country. It has ten constituent colleges. During 2011-12, the University made several contributions in terms of developing technologies on crop improvement, production and protection of crops, animals, fish and land management. A few of its important research findings are listed below:

- The University has so far developed 139 promising high yielding varieties of different crops, many of which are acclaimed at the national and international level.
- During the year 2011-12, eleven crop varieties (04-rice, 1-blackgram, 2-sugarcane, 1- mesta, 2-sesame and 1-toria) were released by the University.
- The pond based Integrated Farming System comprising 3.2 ha (1.3 ha crop + 1.5 ha pond + fruits and agro forestry) at Kendrapara yielded a net return of Rs.3,37,250 with a BCR of 2.58.

- The GPS and GIS based soil fertility maps of five districts have been prepared for 577 villages comprising 51 blocks.
- Value added products of ginger such as oleoresin extract, ginger honey, beverages and dried ginger products have been prepared and standardised by the University.
- During the year 2011-12, the University has produced 1,161 qtls Breeder seeds, 6,911 qtls Foundation seeds, 3,364 qtls. certified seeds of different crops and vegetables, 40 lakh vegetable seedings, 15,700 cashew grafts, 31,400 mango grafts, 37,600 forest and medicinal plants, 42,000 tissue culture plantlets of banana, sugarcane and gerbera, 24.65 lakh fish spawn and fry which were distributed to Government organisations, NGOs and interested farmers of the state as well as neighbouring states.
- The transfer of technological knowledge is made by the University through its 31 Krishi Vigyan Kendras (KVKs) established in 30 districts of the state.
- The University has conducted 1,790 trainings involving participation of 44,878 farmers and farm women, 404 training for 7,001 rural youth and 252 trainings for 3,881 extension functionaries.

During 2011-12, on-farm testing's (OFTs) involving 2,801 farmers and 557 frontline demonstrations (FLDs) involving 4,050 farmers were conducted through KVKs. I n Distance Education Programme, 982 farmers were trained in 10 different courses during 2011-12. So far, 16,090 farmers have been given certificates for this programme.

#### 2. IIIT, Bhubaneswar

The Government of Odisha has established International Institute of Information Technology (IIIT Bhubaneswar) to provide a world class Information Technology Institution. It has been registered as a Society under Society Registration Act 1860, with affiliation to the Biju Patnaik University of Technology (BPUT). The Institution primarily aims at meeting quality faculty requirement

in the IT disciplines of Engineering Colleges, to cater to the needs of Industries including IT & ITES sectors. IIIT-Bhubaneswar is also mandated to nurture academic research in cutting edge technologies and industry sponsored research programmes.

IIIT,Bhubaneswar started the M.Tech programme in the Academic session 2007-08 and the B.Tech programme in 2009-10. It has already enrolled five batches of students in M. Tech (Computer Science & Engineering) and three batches of B. Tech students in four disciplines.

The State Government has already disbursed Rs.50 crores to IIIT, Bhubaneswar for creation of infrastructure out of which Rs.16.60 crores has been disbursed in the financial year 2011-12. The entire amount is expected to be utilised during the year. The academic/administrative buildings have already been constructed and are in operation. The first phase of the hostel is also operational. Construction of the second phase of the hostel building is in progress and is expected to be completed by Aug 2012.

## 3. Central Rice Research Institute (CRRI)

The main objective of CRRI 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 during 2011-12 are as follows:

- About 96 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 2012, the institute introduced 11 new high yielding varieties of seed. The duration of these varieties are about 110 to 160 days and the yield potential varies from 4 to 5 MT per ha.

- The farmers of Odisha 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-cumrecycling 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.

## 4. Software Technology Park of India (STPI)

STPI is an autonomous society under the Ministry of Communication and Information Technology, GoI. It aims to promote the export of IT software and services. There are two STPI centres in Odisha, 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 services to software industries. A second International Gateway at Bhubaneswar and Rourkela has been installed facilitate reliable data communication at good speed. STPI also offers customised solutions in network design and architecture, international connectivity, local loops, facility management, feasibility studies, project management and implementation. Bhubaneswar has designed a comprehensive course module in various fields to keep abreast of 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 and extension activities in fresh water aquaculture. Among several research projects, the following are directed towards increasing productivity in the fresh

water fishery sector. Some salient research achievements made during 2011-12 are given below:

- Research on "Utilisation pattern of water and energy during the operational cycle of Indian major carp spawning in the hatchery water requirement in carp hatchery" and "Impact of aquaculture on environment possible impact of climate change on toxicity of pollutants to fishes" were conducted.
- Feed enhancement and larval growth and survival of pungasius. Practical diets for fry and fingerlings were developed, tested repeatedly of its acceptability, survival and growth of fry and fingerlings in farmers' ponds. Finally, two feeds namely Pangas grow I and Pangas grow II were released.
- Feed technology development for Pond and cage culture of Indian Major carps/ Peninsular carps.
- Suitable feed formulae were developed and refined for Indian major carps and peninsular carps by incorporating locally available feed ingredients. Over 14 awareness programmes were conducted in Odisha, West Bengal and Karnataka and 392 farmers were trained to use farm-made feed in carp culture as supplementary feeds. Six hands-on training was imported to the farm women to prepare, store and utilise farm-made feeds on their pond sites.
- Biotechnological Information system
  Network for aquaculture (BTIS)
  BTIS at CIFA provided hardware/software
  information to research workers/students
  working in the area of bioinformatics.
  During 2011-12, 15 students were provided
  one month training in the area of database
  development, software development and
  statistical computing of biological data.
  Besides, five students completed their
  project work at the bio-informatic centre,
  three students on data base development
  and on modelling.
- Aquaculture in changing climate- A study based on perceptions of fresh water aqua culturists was made in which more than half of the respondents agreed that climate

change had affected fish breeding. The parameter under the study were changes in seasonality, decrease in spawn survival, early maturity, abnormality in hatching etc. The survey revealed that the climate change would result in the following changes with regard to seed rearing e.g.,

- (i) poor survival of fish seed (68%)
- (ii) frequent stress (72%)
- (iii) deterioration of water quality (67%)
- (iv) deterioration of the soil quality (60%)

The study also reveals that flooding of ponds, less rain, disease out break, deterioration of the soil quality etc., are the main risks associated with aquaculture as perceived by aquaculturists while pond water refreshment, bamboo fencing, use of net to support pond embankment, use of disinfectants etc., are the measures suggested by the aquaculturist to mitigate the risks.

- vi Three hundred ninety eight fish farmers and farm women benefitted through exposure visits and field interaction.
- Vii Two hundred sixty two fish farmers and farm women participated in the "workshop-cum- training programme on community aquaculture field schools & CIFA campus.

### 6. Odisha Space Application Centre (OSAC)

OSAC is an apex organisation promoting remote sensing technology in the State. Remote sensing data is used in forecasting in agriculture, transport, land use, revenue, urban development, drinking water, flood mapping, wetland and wasteland development, block level resource mapping, forest and environment sectors. OSAC has undertaken several projects for the Central and State Governments. Important activities of OSAC during 2010-11 are as follows:

 District-wise acreage estimation and production forecasts have been made for kharif paddy. The paddy acreage has been estimated through the analysis of multidate RADARSATSAR data and yield forecasts are based on agro-meterological models.

- 65 interactive training programmes have been conducted by user departments during 2011-12(up to Dec 2011). One hundred fifty episodes each of news programmes Sunar Odisha and 153 episodes of Swapnara Odisha have been produced and transmitted through the electronic media.
- The web version of block level GIS atlas of Odisha under Odisha Sampada has been released and ortho image generation for Ganjam, Keonjhar and Khurda districts is in progress.
- Urban mapping for Bolangir, Bhawanipatna, Badbil, Rayagada and Bhadrak town has been completed.
- Maps have been prepared on soil, drainage, road, rainfall and temperature for Mahanadi and its adjacent river basin.
- The State Government has recognised ORSAG as the nodal agency for DGPS survey of mining leases area. So far, survey of 128 mining leases areas has been completed.

## 7. Institute of Material Sciences (IMS)

The IMS was established in 1996-97 to provide research facilities in material science and conducting inter-disciplinary research on special materials. The Institute is dedicated to experimental research by young researchers in Colossal Magneto Resistance (CMR) and Diluted Magnetic Semiconductors Multifarious Materials. The activity of IMS for the year 2011-12 is as follows:

- Well equipped electro-ceramic laboratory has been developed to prepare new materials and to study its electronic properties.
- IMS is continuing its inhouse collaboration researches with other laboratories outside India.
- IMS has organised a two day national workshop on New and Nano Materials at Bhubaneswar and has completed the scientific exposure visit programme of 253 SC & ST school students of TSP area who have made this exposure visit to stimulate their minds about the need of science.
- Steps have been taken for creation of a laboratory for young researchers to work in the frontier field of material science.

#### 6.4.3 Other Government Initiatives

# State Council on Science and Technology (SCST)

The SCST is the apex policy-making body for development of science and technology and overseeing the implementation of various programmes. It extends financial support for application-oriented research projects, publicity, seminars, workshops and conferences. Major activities undertaken by the Council during 2011-12 are highlighted below:

- To promote and encourage meritorious students to pursue their post graduate studies in basic science (physics, chemistry, mathematics, botany, zoology and geology), a scholarship programme for Rs 2,000 per month for 100 students has been introduced during 2011-12 under the State Council on Science and Technology, with support from the ST SC Development Department.
- The 60<sup>th</sup> anniversary of UNESCO Kalinga Prize was celebrated in Jan12 at KIIT campus, Bhubaneswar.
- Action has been taken for setting up Regional Science Centre at Nrusinghnath in Bargarh district, Jeypore in Koraput district and at Keonjhar in Keonjhar district. Besides, the state council on S&T is taking steps for establishment of District Science Centre.
- The State Council on Science & Technology has taken steps for establishment of patent information centre (PIC) in Odisha. The project will run for a period of five years with financial support from Department of Science & Technology (DST), GoI. Department of Science & Technology has sanctioned Rs.28.43 lakhs and released Rs.7.37 lakhs during 2011-12.

## **Development of Biotechnology**

Biotechnology is a frontier area of technology with immense benefits to society in diverse areas such as food security, nutritional supplementation, healthcare production etc. Major activities taken during 2011-12 are given below:

 Research grant has been sanctioned for 11 research & development projects.

- The State Government is developing a State of the Art Biotech Pharma IT Park over an area of 64.613 acres in Bhubaneswar as a PPP undertaking. A Biotechnology Incubation Centre (BTIC) will be developed in this park over an area of 10 acres.
- Steps have been taken for development of two more Biotech parks: one at Deras, Khurda and another Marine Biotechnology park in Ganjam district.

## Odisha Biqyan Academy

Its aim is to popularise science and technology in the State. Some of its activities in 2011-12 are listed below:

- By the end of Jan 2012, 10 issues of Bigyan Diganta (a Monthly Odiya Science Magazine, specially designed for school students, their parents and general public) have been released and distributed free of cost to Government high schools.
- It also published an abridged version of Bigyan Diganta on a quarterly basis for visually handicapped students. Three issues at Bigyan Diganta were printed in Braille in Odia. The academy is publishing a monthly science magazine for Science Horizon.
- Odisha Bigyan Academy organised a seminar on Biomass Energy System: Challenges and Opportunities workshop on New and Nanomaterials and GIS & Remote Sensing for Rural & Urban Development in collaboration with Science & Technology Department of Government of Odisha.

#### 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 people and young students in particular. Since its inception in 1990, the Planetarium has increased its activities many fold and attracts about one lakh visitors every year. The number of visitors and revenue collected by it since 2004-05 are given in Annexure 6.25. During 2011-12, the following activities have been taken:

 Night sky watch programme was held after the new moon day of every month for three days.

- People observed celestial objects like Venus, Mars, Saturn and Moon through telescopes.
- Seven zonal camps of Young Astronomers Talent Search (YATS-2011) were organised, in which, about 500 students from different schools were invited to display their model on May Dram Space Craft.
- State level camp of Young Astronomer Talent Search was held at PSP in December, 2011 in which 112 students displayed their models on May Dram Space Craft and 20 of them were awarded. Many dignitaries, scientists and students attended the function.



Annexure 6.1: Power Consumption in Odisha

In million unit

Year	Total	Consumption Sector							
	consumptiion	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
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	12228	3190	944	6542	56	154	735	172	435
	(100.00)	(26.09)	(7.72)	(53.50)	(0.46)	(1.26)	(6.01)	(1.40)	(3.56)
2010-11	13099	3533	1113	6755	58	179	797	189	475
	(100.00)	(26.97)	(8.50)	(51.57)	(0.44)	(1.37)	(6.08)	(1.44)	(3.63)
2011-12	13054	3946	1349	6246	61	151	891	200	210
	(100.00)	(30.23)	(10.33)	(47.85)	(0.47)	(1.16)	(6.82)	(1.53)	(1.61)

Figure in bracket indicates percentage to total consumption

Sources: CESU (Central Electricity Utility Office of Odisha), previously CESCO, Bhubaneswar SOUTHCO (South Electricity Supply Company of Odisha), Berhampur NESCO (North Electricity Supply Company of Odisha), Balasore

WESCO (West Electricity Supply Company of Odisha), Sambalpur

Annexure 6.2: Sector-wise Distribution of Power Consumers, 2011-12

Consumer (in lakh)

Sector	Rural	Urban	Total	% of rural consumer to total consumers
1	2	3	4	5
Domestic	25.78	9.56	25.35	72.93
Commercial	1.14	1.59	2.73	41.76
Industrial	0.04	0.24	0.28	14.29
Others	0.70	0.19	0.89	78.65
Total	27.66	11.58	39.25	70.47

Source: All the distributing Companies

# Annexure 6.3: Demand and Availability of Power

In Mega Watt

Year							Installed	Sold to
	(estimated)	State sector	Central sector	Other Sources	Purchase from captive plants of the State	Total	Capacity*	other states / UT
1	2	3	4	5	6	7	8	9
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	6067.90	311
2008-09	2107	1375	763	-	130	2268	6745.75	32
2009-10	2240	1157	773	-	485	2415	7990.25	50
2010-11	2398	1295	814	-	729	2838	9456.60	128
2011-12	2674	1136	1170	68	225	2599	10114.00	49

 $<sup>^{\</sup>ast}$  Includes installed capacity of the state's share in central sector projects and captive power plant capacities Source: Odisha Power Transmission Corporation Ltd (OPTCL)

Annexure 6.4: Installed Capacity and Power Generation from Different Power Projects, 2011-12

In Mega Watt.

Sl.No.	Power Project	Installed Capacity	State's share in installed capacity(%)	State's share in installed capacity	State's share in Power Generation			
1	2	3	4	5	6			
A. STATE SECTOR								
(a) Hydro Power Projects								
i)	Burla	275.500	100%	275.500	73.967			
ii)	Chipilima	72.000	100%	72.000	37.214			
iii)	Balimela	51.000	100%	51.000	116.236			
iv)	Rengali	25.000	100%	25.000	96.394			
v)	UpperKolab	32.000	100%	32.000	67.532			
vi)	Upperindrabati	600.000	100%	600.000	157.439			
vii)	Machakund	114.750	50%	57.375	25.501			
	Sub-total(a)	2142.250		2084.875	574.284			
(b) Thermal Power Projects								
i)	Ib TPS	420.000	100%	420.000	300.032			
	Sub-total(b)	420.000		420.000	300.032			
(c) Indipendent Power Produ	icer							
(i)	Arati Steel Ltd.	50.000	12%	6.000	7.378			
(ii)	Sterlite Energy Ltd.	1800.000	32%	642.000	222.923			
	Sub-total©	1850.000		648.000	230.3			
(d) New & Renewable Energy	Sources							
(i)	SHEP,Bio-mass & Solar	90.000	100%	90.000	31.543			
	Sub-total(d)	90.000		90.000	31.543			
(e) Captive Generating Statio	ons (CGPs)							
(i)	CGP	5327.000			225.133			
	Sub-total(e)	5327.000			225.133			
	SUB-TOTAL (a+b+c+d+e)	9829.250		3242.875	1361.292			

(Contd...)

Sl.No.	Power Project	Installed Capacity	State's share in installed capacity(%)	State's share in installed capacity	State's share in Power Generation			
1	2	3	4	5	6			
B. CENTRAL SECTOR								
(a) Hydro Power Projects								
(i)	Chukha HEP	270.000	15.190%	41.013	29.644			
(ii)	Tala HEP	1020.000	4.25%	43.350	16.483			
(iii)	Teesta-V HEP	510.000	20.59%	105.009	59.226			
	Sub-total(a)	1800.000		189.372	105.352			
(b) Thermal Power Projects								
i)	TTPS	460.000	100%	460.000	380.483			
ii)	Talcher STPS,Stage-I	10,000.00	31.80%	318.000	240.302			
iii)	Talcher STPS,Stage-II	2,000,000	10.000%	200.000	165.6			
iv)	Farakka STPS	16,000.00	13.625%	218.000	166.337			
V)	Kahalgaon STPS,Stage-I	840.000	15.238%	127.999	93.171			
vi)	Kahalgaon STPS,Stage-II	150,000.00	2.050%	30.750	18.581			
	Sub-total(b)	74,000.00		1,354.749	1,064.47			
	Sub-total(a+b)	9,200.00		1,544.12	1,169.83			
C.OTHER POWER SOURCES								
i)	Regional UI Pool				53.427			
ii)	Power banking				1.051			
iii)	Trading through IEX				3.573			
iv)	Trading through PXIL				0.743			
	Sub-total				67.794			
	TOTAL(A+B+C)	19,29.250		4,787.00	2,598.91			

Source: GRIDCO

Annexure 6.5: Major Industries Having Captive Power Plants and Power Supplied to GRIDCO

In Mega Watt

Sl.No.	Captive Power Plant	Installed Capacity	Power supplied GRIDCO
1	2	3	4
1	Arati Steels Ltd.,Ghantikhal,Cuttack	40.000	8.968
2	Action Ispat & Power(p)Ltd,Jharsuguda	37.000	2.863
3	Aryan Ispat & Power Ltd,Sambalpur	18.000	6.493
4	Bhusan Power &Steel Ltd,Jharsuguda	376.000	9.843
5	Bhusan Steel Ltd,Dhenkanal	410.000	12.268
6	Dinabandhu(Yadani),Duburi	10.000	0.135
7	FACOR Power Ltd,Bhadrak	45.000	0.009
8	HINDALCO Industries Ltd, Hirakud	367.500	4.487
9	ICCL,Choudwar	138.000	0.386
10	IFFCO Ltd,Paradeep	11.000	1.972
11	Jain Steels & Power, Jharsuguda	8.000	0.361
12	Jindal Stainless Ltd,Duburi	250.000	20.111
13	JSPL,Meramunduli,Dhenkanal	270.000	51.506
14	Maheswari Ispat,Khuntuni,Cuttack	24.000	0.466
15	Maithan Ispat,Duburi,Jajpur	30.000	2.053
16	MSP Metallics Ltd, Jharsuguda	24.000	3.062
17	NALCO,Angul	1200.000	5.159
18	Narbheram Power & Steel, Dhenkanal	8.000	1.638
19	NBVL,Duburi	95.000	12.162
20	NINL,Duburi	62.500	11.877
21	OSISL,Polaspanga	36.000	1.571
22	Patnaik Steel & Alloys Ltd,Polashponga	15.000	2.168
23	Rathi Steel & Power Ltd,Sambalpur	2.000	1.643
24	RSP,Rourkela	220.000	2.120
25	SMC Power Generation Ltd, Jharsuguda	33.000	1.712
26	Shree Ganesh Metallics Ltd, Jharsuguda	32.000	0.779
27	Shree Mahavir Ferro Alloys Pvt.Ltd,Sundargarh	12.000	0.559
28	Shyam Metallics,Rengali, Sambalpur	30.000	4.951
29	TATA Sponge Iron Ltd,Joda	26.000	10.047
30	Vedanta Aluminium, Jharsuguda	1215.000	18.561
31	Vedanta Aluminium,Langigarh	90.000	2.717
32	VISA Steel Ltd,Jhakhapur,Jajpur	75.000	22.487
		5327.000	225.133

Sources: OPTCL and GRIDCO

Annexure 6.6: District-wise Status of Village Electrification as on 2011-12

Sl. No.	Name of the Districts	Total Inhabited Villages (2001 census)	Villages declared electrified as on 31.3.12	Balance number of un-electrified villages as on 31.3.12	Percentage of villages electrified	
1	2	3	4	5	6	
1	Angul	1661	1569	92	94.5	
2	Cuttack	1856	1825	31	98.3	
3	Dhenkanal	1076	1045	31	97.1	
4	Jagatsinghpur	1227	1198	29	97.6	
5	Jajpur	1575	1522	52	96.6	
6	Kendrapara	1407	1261	146	89.6	
7	Khordha	1358	1255	103	92.4	
8	Nayagarh	1531	1424	107	93.0	
9	Puri	1591	1548	43	97.3	
10	Balasore	2587	2557	30	98.8	
11	Bhadrak	1243	1237	6	99.5	
12	Keonjhar	2069	1925	144	93.0	
13	Mayurbhanj	3748	3432	316	91.6	
14	Bargarh	1180	1095	85	92.8	
15	Bolangir	1764	1758	6	99.7	
16	Deogarh	711	648	63	91.1	
17	Jharsuguda	346	346	0	100.0	
18	Kalahandi	2099	1363	736	64.9	
19	Nuapada	648	648	0	100.0	
20	Sambalpur	1238	1137	101	91.8	
21	Sonepur	829	828	1	99.9	
22	Sundargarh	1723	1282	441	74.4	
23	Baudh	1115	523	592	46.9	
24	Koraput	1922	901	1021	46.9	
25	Rayagada	2467	1332	1135	54.0	
26	Gajapati	1512	1222	290	80.8	
27	Ganjam	2812	2340	472	83.2	
28	Kandhamal	2379	1507	872	63.3	
29	Malkangiri	979	244	735	24.9	
30	Nabarangpur	876	375	501	42.8	
	Odisha	47529	39347	8182	82.8	

 $Source: EIC, Rural\ Electrification\ Programme,\ Odisha$ 

Annexure 6.7: Turnover and Net Profits of Odisha Power Generation Corporation (OPGC)

In crores of rupees

Year	Energy Generated (in MU)	PLF (%)	Turnover	After-Tax Net Profit
1	2	3	4	5
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
2009-10	2961.11	80.48	399.88	81.19
2010-11	3184.70	86.56	453.03	115.04
2011-12	2950.15	79.97	572.78	137.08

Source: Odisha Power Grid Cooperation

Annexure 6.8: Investment in Power and Renewable Energy in Odisha

In crores of rupees

Year	Expenditure on power and Renewable energy	Total State Plan expenditure/outlay	Col.(2) as percentage of Col.(3)
1	2	3	4
10 Plan Period (2002-07)	1206.22	13919.99	8.67
2007-08(Actual)	342.26	6015.34	5.69
2008-09 (Actual)	433.88	7506.25	5.78
2009-10(Actual)	682.50	7859.74	8.68
2010-11 (PE)	683.93	10105.67	6.77
2011-12(A.E)	688.40	12300.00	5.60

AE: Anticipated Expenditure; P.E. Provisional Expenditure Source: Plan Document

Annexure 6.9: Gopabandhu Gramina Yojana, 2006-07 to 2011-12

Sl. No.	Achievement	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8
Physical							
A	Works taken up						
i	Bijli	280	2046	241	201	440	198
ii	Sadak	5882	7344	7961	7520	12587	13745
iii	Pani	378	389	212	115	280	183
iv	Other	31	14	30	10	24	281
	Total	6571	9793	8444	7846	13331	14407
В	Works completed	4693	8119	7096	4960	10303	12213
С	Man days generated (in lakh)	63.03	62.13	67.73	26.28	51.74	47.02
D	Villages covered	5713	6165	6317	6197	9365	9400
Financial							
A	Total funds available (Rs. In crore)	110.27	136.01	146.86	162.21	251.42	251.78
В	Expenditure (Rs. In crore)	84.43	99.15	119.01	75.91	165.12	207.88

Source: Panchayati Raj Department, Odisha

Annexure 6.10: Allotment of Funds and Expenditure for the Development of National Highways in Odisha

In crores of rupees

Year	Origin	al works	orks Renewal works Flood Damage repair Ordinary re		wal works Flood Damage repair		ry repair	
	Allotment	Expenditure	Allotment	Expenditure	Allotment	Expenditure	Allotment	Expenditure
1	2	3	4	5	6	7	8	9
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
2010-11	328.42	328.42	42.40	42.40	16.66	16.66	21.72	21.72
2011-12	273.70	273.70	22.12	22.12	5.03	5.03	8.16	8.16

Source: Chief Engineer, National Highways

Annexure 6.11: Achievements of Roads/Bridges in 2011-12 and under progress in 2012-13

Tasks	Achievement during 2011-12 (in km)	Work under progress, 2012-13 (in km)
1	2	3
Widening to Two Lanes,	74.3	210
Strengthening of existing pavement	50.2	42.6
Improving Riding Quality,	80.9	26.681
Periodical Renewal	238.4	215

Source: Chief Engineer National Highways, Odisha

Annexure 6.12: Improvement Proposals under Annual Plan, 2012-13

Tasks	Road (in km)
1	2
Widening to Two Lanes	41.34
Strengthening of existing pavement	1.48
Improving Riding Quality	123.16

Source: Chief Engineer National Highways, Odisha

Annexure 6.13: Progress of PMGSY in Odisha, 2000-01 to 2011-12

Year	Funds received (Rs. In crore)	No. of roads completed	Habitation covered	Length completed (km)	Expenditure (Rs. In crore)
1	2	3	4	5	6
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	985	3838.42	1895.26
2010-11	2245.10	1486	1199	4941.90	1924.25
2011-12		934	207	3167.04	1235.78
Total		6156	8168	23080.63	8532.01

Source: Chief Engineer, Rural Works

Annexure 6.14: Rural Connectivity through Bharat Nirman

Sl. No.	Item	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8
1	Villages habitation Connected						
	a) More than 1000 Population	259	250	1768	438	253	78
	b) More than 500 Population Scheduled area	63	71	437	206	399	137
	Total	322	321	2205	644	652	215
2	New Connectivity (km.)	1602	1398	2064	2801	3158	1392
3	Upgradation /Renewal	970	1400	2079	2451	2291	1814

Source: Chief Engineer, Rural Works

## Annexure 6.15: Status of Rural Connectivity in Odisha by the End of 2006-07

(Based on 2001 Population Census)

Items/Population	1000+	500-994	250-499	< 250	Total
1	2	3	4	5	6
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 2006-07	29	2,978	6,417	9,468	18,892

Source: Chief Engineer, Rural Works PMGSY: Pradhan Mantri Gram Sadak Yojana ADB: Asian Development Bank assisted PMGSY

Annexure 6.16: Motor Vehicles Registered and on Road in Odisha

Vehicles	Vehicles	Number of vehicles on road as on						
	registered on 31.3.2011	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8	9
Goods vehicle (truck to tempo)	240199	94,130	109,738	115,108	136,174	159881	169032	188974
Public/Private bus	24345	6,395	6,699	6,877	7,647	8908	12264	13565
Motor car/jeep/taxi	272147	114,469	136,792	134,960	152,213	164614	189197	228921
Auto rickshaw	78240	23,610	27,314	31,700	37,784	55364	55364	66847
Motorcycle/scooter/ mopeds	2941675	1,368,209	1,537,758	1,691,684	1,870,020	2132508	2453347	2784485
Others (tractor, trailor, trecker, & Others)	209844	60,751	66,279	89,887	103,307	120792	154740	171644
Total	3766450	1,667,564	1,884,580	2,070,216	2,307,145	2639576	3033944	3454436

Source: State Transport Authority, Odisha

Annexure 6.17: Activities of Odisha State Road Transport Corporation (OSRTC)

Year	Fleet strength	No. of buses	Capital	Employment/	Number of
		on road	investment	Staff strength	passengers
			(Rs. In crore)	(Regular)	carried (in lakh)
1	2	3	4	5	6
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	55.20
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
2010-11	359	283	176.29	940	48.25
2011-12(p)	381	307	176.29	878	56.66

Source: Odisha State Road Transport Corporation

Annexure 6.18: Motor Vehicle Revenue Collection

In crores of rupees

Year	Target	Collection	% of collection	Growth rate
1	2	3	4	5
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
2010-11	725.00	730.12	100.02	19.48
2011-12	870.00	791.20	90.94	8.36

Source: State Transport Authority, Odisha

Annexure 6.19: Revenue receipt from Motor Vehicle Offenses

Year	No. of offences detected	Revenue collected (Rs. In crore)
1	2	3
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
2010-11	107116	42.65
2011-12	107965	43.19

Source: State Transport Authority, Odisha

## Annexure 6.20: District-wise Length of Railway Routes and Railway Stations /Passenger Halts in Odisha, 2010-11

In Km

District		Single line	:	]	Double line			Railway	Railway
	Broad	Narrow	Total	Broad	Narrow	Total	stations	passenger	Routes
	Gauge	Gauge		Gauge	Gauge			halt	Electrified
1	2	3	4	5	6	7	8	9	10
Angul	90.13	0	90.13	15.38	_	15.38	11	1	31.51
Balasore	0	0	0	107.69	_	107.69	14	4	107.69
Bargarh	54.33	_	54.33	0	_	0	3	0	
Bhadrak	0-	_	0	35.82	_	35.82	5	2	32.41
Bolangir	165.46	_	165.46	11.11	_	11.11	13	1	
Boudh	0	_	0	0	_	0	0	0	
Cuttack	28.82	_	28.82	82.55	_	82.55	15	5	111.37
Deogarh	0	_	0	0	_	0	0	0	
Dhenkanal	0	_	0	50.60	_	50.60	5	4	50.60
Gajapati *	0	54.00	54.00	0	_	0	0	8	
Ganjam	0	_	0	85.64	_	85.64	9	3	85.64
Jagatsinghpur	0	_	0	68.12	_	68.12	7	2	68.12
Jajpur	66.05	_	66.05	65.61	_	65.61	16	1	131.66
Jharsuguda	7.14	_	7.14	45.24	_	45.24	9	1	45.24
Kalahandi	0	_	0	38.43	_	38.43	5	0	0
Kandhamal	0	_	0	0	_	0	0	0	
Kendrapara	0	_	_	0	_	0	0	0	
Keonjhar	164.82	_	164.82	0	_	0-	16	0	126.95
Khordha	0	_	0	117.39	_	117.39	14	9	117.39
Koraput	281.00	_	281.00	0	_	0	26	1	178.00
Malkangiri	0	_	0	0	_	0	0-	0	
Mayurbhanj	112.10	_	112.10	0	_	0	13	1	
Nabarangpur	0	_	0	0	_	0	0	0	
Nayagarh	0	_	0	0	_	0	0	0	
Nuapada	31.67	_	31.67	0	_	0	3	0	
Puri	28.05	_	28.05	14.51	_	14.51	7	3	42.56
Rayagada	42.00	_	42.00	112.00	_	112.00	12	1	
Sambalpur	128.72	_	128.72	38.68	_	38.68	16	2	24.38
Sonepur	12.13	_	12.13	0	_	0	1	0	
Sundargarh	153.88	_	153.88	108.12	_	108.12	30	0	261.92
Odisha	1366.30	54.00	1420.30	996.89	_	996.89	250	49	1422.73

\*Under Conversion Broad Gauge Source: All Railway Division, South Eastern Railway

## Annexure 6.21: Traffic through Paradeep Port

In million tones

Year	Import	Export	Total	Growth (%)
1	2	3	4	5
2000-01	6.85	13.05	19.90	_
2001-02	6.66	14.47	21.13	6.18
2002-03	6.99	16.91	23.90	13.11
2003-04	6.71	18.60	25.31	5.90
2004-05	8.44	21.66	30.10	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
2009-10	29.18	27.83	57.01	22.84
2010-11	31.22	24.81	56.03	(-)1.75
2011-12	35.99	18.26	54.25	(-)3.17

Source: Paradeep Port Trust

Annexure 6.22: Passenger Traffic and Revenue Collected from Inland Water Transport Services

Year	No. of Passengers (in lakh)	Fare Collected (in lakhs of rupees)
1	2	3
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
2010-11	1.42	24.96
2011-12	1.26	21.22

Source: Directorate of Inland Water Transport, Odisha

Annexure 6.23: Availability of Postal Services, Odisha and All-India

Year	Odisha				India	
	Rural	Urban	Total	Rural	Urban	Total
1	2	3	4	5	6	7
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	139182	15797	154979
2010-11	7583	578	8161	139040	15825	154865
2011-12	7582	581	8163	NA	NA	NA

Source: Chief Postmaster General, Odisha

Annexure 6.24: HYV Seeds Introduced by CRRI, 2012

Year	Name of the variety	Duration (days)	Yield (MT/Ha.)	Remarks
1	2	3	4	5
2012	Satyabhama	110	4.7	Recommended for upland areas, resistance to stem borer, leaf folder;
2012	Pyari	115-20	4.5	Recommended for aerobic situations resistant to leaf blast, neck blast, brown spot,stem borer dead heart & white ear head damage.
2012	Hue	135	5.5	Recommended for irrigated areas resistance to gall midge and to sheath rot.
2012	Improved Lalat	130	5.0	Recommended for irrigated areas, resistant to major pest like gall midge stem borer.
2012	Improved Tapaswini	130	5.0	Recommended for irrigated areas resistant to major pest like BPH,YSB,WBPH etc.
2012	Sumit	145-150	5.2	Recommended for shallow low land areas resistance to leaf blast stem borer, leaf folder.
2012	Poorna Bhog	140-145	5.0	Shallow Low land resistant to neck blast, gall midge and sheath rot and stem borer.
2012	Jalamani	160	4.6	Recommended for deep water area. Moderately tolerant to leaf folder, green leaf hopper, leaf blast, neck blast brown spot, gall midge, dead heart, stem borer etc.
2012	CR Dhan 502	160	4.6	Recommended for deep water areas. Moderately tolerant to leaf blast neck blast sheath bight sheath rot rice tungro
2012	Luna Barial	150-155	4.1	Recommended for coastal saline area tolerant to leaf blast .
2012	Luna Sankhi	105-110	4.6	Recommended for coastal saline area. For dry season cultivation in coastal saline area, is tolerant to leaf blast and moderate tolerance to sheath blight.

Source: Central Rice Research Institute, Cuttack

Annexure 6.25: Visitors and Revenue Collected at Pathani Samant Planetarium

Year	No. of visitors	Revenue collection (in Rs.)
1	2	3
2004-05	92903	854652
2005-06	93522	848580
2006-07	133289	1219350
2007-08	112056	1336369
2008-09	90019	1097609
2009-10	88341	1116183
2010-11	47934	581657
2011-12	27166	32,98,851

Source: Pathani Samant Planetarium

# 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. 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 (IMR), Life Expectancy at Birth (LEB), 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. Odisha was the ninth 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 Odisha is discussed in this chapter.

## 7.1 Poverty: Its Multiple Dimensions

The concept of poverty has been evolving gradually. It is no longer associated with only material deprivation. It has acquired several dimensions and forms an integral component of human development. Odisha has committed itself to address poverty in its multiple dimensions. In 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 being 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 Odisha and India from 1973-74 to 2009-10. The estimates of poverty from 1973-74 to 2004-05 are based on NSS data and Lakdawala Committee Methodology and those for the year 1993-94, 2004-05 and 2009-10 are based on NSS data and Tendulkar Committee Methodology. Poverty estimates for 2009-10 are obtained by using the 66th NSS round data based on estimated poverty lines at Rs.567.10 and Rs.736.00 for rural and urban Odisha respectively. It may be observed from Table 7.1 that poverty has declined by 20.2 percentage points from 57.2 percent in 2004-05 (61st NSS round) to 37.0 percent in 2009-10 (66th NSS round). This shows a welcome sign of drop in poverty incidence during 2004-05 to 2009-10. The fall of 20.2 percentage points, consisting of 21.6 percentage points in rural Odisha

Table 7.1: Poverty Head Count Ratio (Percent) for Odisha and India, 1973-74 to 2009-10

Year	Reference		Odisha (%)			India (%)	
	period	Rural	Urban	Total	Rural	Urban	Total
1	2	3	4	5	6	7	8
Lakdawala Co	ommittee Meth	odology					
1973-74	URP	67.28	55.62	66.18	56.44	49.01	54.88
1977-78	URP	72.38	50.92	70.07	53.07	45.24	51.32
1983	URP	67.53	49.15	65.29	45.65	40.79	44.48
1987-88	URP	57.64	41.53	55.58	39.09	38.20	38.36
1993-94	URP	49.72	41.64	48.56	37.27	32.36	35.97
2004-05	URP	46.80	44.30	46.40	28.30	25.70	27.50
Tendulkar Co	Tendulkar Committee Methodology						
1993-94	MRP	63.00	34.50	59.10	50.10	30.80	45.30
2004-05	MRP	60.80	37.60	57.20	41.80	25.70	37.20
2009-10	MRP	39.20	25.90	37.00	33.80	20.90	29.80

and 11.7 percentage points for urban Odisha respectively, is the highest among all the major states of India.

The Tendulkar Committee, appointed by the Planning Commission, has revised the methodology for poverty estimation and recommended, among other things, two main departures from the previous methodologies. First, the Tendulkar Committee has enlarged the consumption basket and, thus, increased the poverty lines for both rural and urban areas for which different consumption baskets have been suggested. For example, the poverty line of the Tendulkar Committee for the year 2004-05 was Rs. 407.78 for rural Odisha, in comparison to Rs. 325.79 for rural Odisha, as per the Lakdawala Committee methodology. This implies that the proportion of the rural poor estimated by using the poverty lines suggested by the Tendulkar Committee would be higher than those estimated by using the previous methodologies. Second, the Tendulkar Committee recommended the use of the Mixed Recall Period (MRP) methodology over the Uniform Recall Period (URP) methodology for estimation of poverty. The trends in poverty of the State for the year 1993-94, 2004-05 and 2009-10 as per the Tendulkar Committee methodology may be seen in Figure 7.1.

Poverty estimates for rural Odisha by social groups and by NSS regions are presented in Tables 7.2 and 7.3 respectively for 2004-05 and 2009-10. Scheduled Tribe (ST) communities are poorer than other social groups followed by Scheduled Caste (SC) communities. It is heartening to note that in recent years, poverty among ST and SC communities has been reducing at a faster rate.

The southern region has the highest incidence of poverty followed by the northern region. From 2004-05 to 2009-10, all three regions have witnessed substantial reduction of poverty.

Figure 7.1: Tends in Poverty Head Count Ratio (%) for Odisha as per Tendulkar Committee Methodology

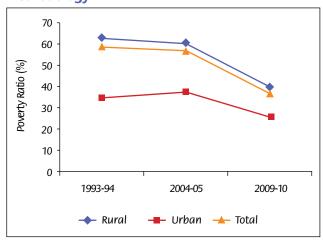


Table 7.2: Head Count Ratio (Percent) by Social Groups as per Tendulkar Committee Methodology for Rural Odisha, 2004-2010

NSS Round	Head Count Ratio (%) by Social Classes					
	ST	SC	OBC	Others	Total	
1	2	3	4	5	6	
2009-10	66.0	47.1	25.6	24.5	39.2	
2004-05	84.4	67.9	52.7	37.1	60.8	

Table 7.3: Head Count Ratio (Percent) by NSS Regions, Rural Odisha by Tendulkar Committee Methodology, 2004-2010

NSS Round	Head Count Ratio (%) by NSS Regions				
	Southern	Northern	Coastal	Total	
1	2	3	4	5	
2009-10	52.4	41.7	25.3	39.2	
2004-05	73.4	70.5	41.6	60.8	

Among the regions, the northern region has recorded the highest reduction of poverty with 28.8 percentage points, followed by the southern region with 21.0 percentage points and the coastal region with 16.3 percentage points. 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 Odisha in general and particularly among the most backward social groups and regions. Odisha's development strategies and developments, which are aimed at faster poverty reduction, are discussed in section 7.4.

Table 7.4: Incidence of Poverty in Odisha vis-à-vis other Major States, 1973-74 to 2009-10

S.	State		Head Count Ratio (percent)					
No.		1973-74	1977-78	1983	1987-88	1993-94	2004-05*	2009-10*
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	48.86	39.31	28.91	25.86	22.19	29.9	21.1
2	Bihar	61.91	61.55	62.22	52.13	54.96	54.4	53.5
3	Gujarat	48.15	41.23	32.79	31.54	24.21	31.8	23.0
4	Haryana	35.36	29.55	21.37	16.54	25.05	24.1	20.1
5	Karnataka	54.47	48.78	38.24	37.53	33.16	33.4	23.6
6	Kerala	59.79	52.22	40.42	31.79	25.43	19.7	12.0
7	Madhya Pradesh	61.78	61.78	49.78	43.07	42.52	48.6	36.7
8	Maharashtra	53.24	55.88	43.44	40.41	36.86	38.1	24.5
9	Odisha	66.18	70.07	65.29	55.58	48.56	57.2	37.0
10	Punjab	28.15	19.27	16.18	13.20	11.77	20.9	15.9
11	Rajasthan	46.14	37.42	34.46	35.15	27.41	34.4	24.8
12	Tamil Nadu	54.94	54.79	51.66	43.39	35.03	28.9	17.1
13	Uttar Pradesh	57.07	49.05	47.07	41.45	40.85	40.9	37.7
14	West Bengal	63.43	60.52	54.85	44.72	35.66	34.3	26.7
	All India	54.88	51.32	44.48	38.36	35.97	37.2	29.8

<sup>\*</sup> Based on MRP consumption of Tendulkar Committee Methodology

The incidence of poverty in Odisha vis-à-vis other major states, from 1973-74 to 2009-10 has been given in Table 7.4. Poverty estimates for the period from 1973-74 to 1993-94 have been made on the basis of the Lakdawala Committee methodology, whereas from 2004-05 to 2009-10, poverty reduction estimates have been made on the basis of the Tendulkar Committee methodology.

## 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. Odisha has done reasonably well on the literacy front. In Odisha, literacy has increased 4.6 times from 15.80 percent in 1951 to 73.45 percent in 2011, growing at an annual compound rate of 2.59 percent, as against 2.35 percent per annum at the national level, from 18.33 percent in 1951 to 74.04 percent in 2011. Whereas male literacy has increased 3.02 times from 27.32 percent in 1951 to 82.40 percent in 2011, female literacy has grown much faster (i.e., 14.24 times) from a low base of 4.52 percent in 1951 to 64.36 percent in 2011. Though both male and female literacy rates are fast approaching national averages, there is still a gender gap of 18 percentage points in literacy. School attendance rates in Odisha and India are respectively 83.5 percent and 85.2 percent in 2007-08, as per an analysis of NSS data for the 64th round.

There are substantial social, regional and gender disparities in literacy. Scheduled Tribes communities have very low levels of literacy. ST female literacy has increased from a very low level of 4.76 percent in 1981 to 23.23 percent in 2001, which is significantly lower than SC and general female literacy. Though ST male literacy 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. In comparasion, SC communities have done better. SC male literacy has almost bridged the gap with the general male literacy in 2001. SC females are also catching up fast. Though 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, Odisha 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. Odisha has the potential to perform better than the national average, provided greater attention is paid to improve delivery of educational services and to effectively convert outlays to outcomes.

Table 7.5: Some important demographic indicators of Odisha

Indicators	Rate
Crude Birth Rate (CBR), 2011 (2012-SRS)	20.1 per 1,000 population
Crude Death Rate, 2011 (2012-SRS)	8.5 per 1,000 population
Infant Mortality Rate, 2011 (2012-SRS)	57 per 1,000 live births
Infant Mortality Rate – Urban, 2011 (2012-SRS)	40 per 1,000 live births
Infant Mortality Rate - Rural, 2011 (2012-SRS)	58 per 1,000 live births
Natural Growth Rate, 2011 (2012-SRS)	11.6%
Total Fertility Rate, (2009)	2.40%
Couple Protection Rate (NFHS-3)	47%
Life Expectancy at Birth (2011-15 projection)	Male 64.3 years, Female 67.3 years
Maternal Mortality Ratio (MMR) (2007-09 SRS)	258 per 1,00,000 live births

Table 7.6: Inter-State Comparisons of IMR 1991–2011

State	Infant Mortality Rate								
	1991	2001	2002	2004	2005	2008	2009	2010	2011
1	2	3	4	5	6	7	8	9	10
Andhra Pradesh	73	66	62	59	57	52	49	46	43
Assam	81	74	70	66	68	64	61	58	55
Bihar	69	62	61	61	61	56	52	48	44
Gujarat	69	60	60	53	54	50	48	44	41
Haryana	68	66	62	61	60	54	51	48	44
Karnataka	77	58	55	49	50	45	41	38	35
Kerala	16	11	10	12	14	12	12	13	12
Madhya Pradesh	117	86	85	79	76	70	67	62	59
Maharashtra	60	45	45	36	36	33	31	28	25
Odisha	124	91	87	77	75	69	65	61	57
Punjab	53	52	51	45	44	41	38	34	30
Rajasthan	79	80	78	67	68	63	59	55	52
Tamil Nadu	57	49	44	41	37	31	28	24	22
Uttar Pradesh	97	83	80	72	73	67	63	61	57
West Bengal	71	51	49	40	38	35	33	31	32
India	80	66	63	58	58	53	50	47	44

Source: SRS Bulletins

## 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 Odisha are given in Table 7.5.

Key health indicators such as Infant Mortality Rate and Life Expectancy at Birth are compared across major states in Tables 7.6 and 7.7 respectively. Recently, Odisha has made notable achievements in reducing IMR to 57 by the end of 2011 as per the SRS report published in 2012. The SRS survey reveals that the rate of decline in IMR in both rural and urban areas in Odisha was better than the national averages.

Threefactors explain a high level of IMR in Odisha: (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 in fant deaths

are attributed to neo-natal mortality. Premature deliveries result in 38.5 percent infant deaths. Pneumonia, respiratory infections in new born babies, 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). Odisha 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 Odisha. 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 a health budget deficit and neglected public health institutions. Health conditions

Table 7.7: Inter-State Comparisons of Life Expectancy at Birth, 2002-2015

State	2002	2002-06		2006-10		2011-15*	
	Male	Female	Male	Female	Male	Female	
1	2	3	4	5	6	7	
Andhra Pradesh	62.9	65.5	65.4	69.4	66.9	70.9	
Assam	58.6	59.3	61.6	62.8	63.6	64.8	
Bihar	62.2	60.4	67.1	66.7	68.6	68.7	
Gujarat	62.9	65.2	67.2	71.0	69.2	72.5	
Haryana	65.9	66.3	67.9	69.8	68.9	71.3	
Karnataka	63.6	67.1	66.5	71.1	68.0	72.3	
Kerala	71.4	76.3	72.0	76.8	73.2	77.6	
Madhya Pradesh	58.1	57.9	62.5	63.3	64.5	65.3	
Maharashtra	66.0	68.4	67.9	71.3	68.9	72.5	
Odisha	59.5	59.6	62.3	64.8	64.3	67.3	
Punjab	68.4	70.4	68.7	71.6	69.7	72.8	
Rajasthan	61.5	62.3	66.1	69.2	67.6	70.7	
Tamil Nadu	65.0	67.4	67.6	70.6	68.6	71.8	
Uttar Pradesh	60.3	59.5	64.0	64.4	66.0	66.9	
W. Bengal	64.1	65.8	68.2	70.9	69.2	72.1	
India	62.6	64.2	65.8	68.1	67.3	69.6	

\*Projected figures. Source: - SRS Bulletins & National Commission on Population

Table 7.8: Comparison of Health Indicators: National Family Health Surveys, Odisha

Sl. No.	Particulars	NFHS-I (1992-93)	NFHS-II (1998-99)	NFHS-III (2005-06)
1	2	3	4	5
1	Infant Mortality Rate (IMR)	112	81	65
2	Total Fertility Rate (TFR)	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	17	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, Odisha

of women need substantial improvement. Institutional deliveries are lower in the case of tribal women. PNC of mothers and infants need greater attention. There is, however, some improvement in recent years. Table 7.8 compares results of the reports of National Family Health Surveys - 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, 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 healthcare system. Odisha has been making sustained efforts to improve its health situation. The private healthcare 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.

## 7.4 Development Approach for Odisha

In recent years, Odisha has made significant achievements in terms of economic growth, poverty reduction and other socio-economic indicators. An analysis of NSS data has indicated reduction of poverty by 20.2 percentage points in 2009-10 over 2004-05. Some of key elements of the State's development approach are as follows:

- Odisha'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 grow at higher rates over a long period of time.
- iii. Sustained efforts are needed to mitigate adverse impacts of natural calamities and

- other shocks on Odisha's economy and people.
- iv. Special attention needs be given to depressed regions, marginalised classes including ST, SC and women in order to substantially reduce regional, social and gender disparities.
- w. 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 Odisha.
- vi. Infrastructure including roads, ports, railways and irrigation facilities need to be adequately augmented and improved.
- vii. 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 variouspovertyreductionprogrammesincluding SGSY, MGNREGA and other programmes for generation of wage employment and gainful self-employment. In addition, food security is being provided through heavily subsidised rice at the rate of Rs.2 a kg for all BPL households in non- KBK and KBK regions, 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. 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 as social security intervention and maintenance of critical irrigation projects have been undertaken to improve social and economic conditions of rural people.

For improving the livelihood of tribals and other vulnerable communities, several schemes have been implemented with active support from a number of external donors. These schemes include the Odisha Tribal Empowerment and Livelihood Programme (OTELP), Western Odisha Rural Livelihood 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 (i.e., 103.78 lakhs in the 1991 Census to 95.78 lakhs in the 2001 Census), although the number of total workers has increased from 118.83 lakhs (1991 Census) to 142.76 lakhs (2001 Census). This indicates that thereisperhapsanincreaseinunder-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 State aims to generate 10 lakh employment and self-employment opportunities during the 12th Five Year Plan.

## 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 enrolment, retention and quality of education. Similarly, for reduction of the gender gap and greater participation of girls in education, two special schemes, 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**

Five major diseases, also called Panchvyadhi (i.e., malaria, leprosy, diarrhoea, acute respiratory

infections and scabies) contribute to about 70 percent of the patient load in primary health institutions and affect a large number of poor people. Odisha 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 Odisha in 2005. NRHM seeks to provide effective healthcare to rural population throughout the State with 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 Odisha, as indicated in the NFHS-3 survey, shows that about 41.4 percent of women have a body mass index 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 while 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. Odisha 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. The percentage coverage of households in the State using tap water, tube well water and well water were 13.8 percent, 61.5 percent and 19.5 percent respectively in 2011 as against 8.7 percent, 55.5 percent and 28.6 percent in 2001. In rural areas, 7.5 percent, 66.9 percent and 19.8 percent households use tap water, tube well water and well water respectively, in 2011. In urban areas, 48 percent, 31.7 percent and 18.4 percent households are covered with tap water, tube well and well facilities respectively, in 2011. Khurda, Cuttack, Sambalpur, Ganjam and Gajapati are leading districts in Odisha, where more than 20 percent households are using tap water as a major source of safe drinking water in 2011 whereas Bhadrak, Boudh, Kandhamal and Kalahandi districts have coverage less than five percent. However, about 22 percent households have safe drinking water facilities within their premises. In many pockets, water quality is a serious issue. In some areas such as Nuapada, the content of fluoride in the ground water is higher than the recommended safe level. Frequent breakdown in tube wells and rural piped water supply units is another problem. Rural people in many parts still do not appreciate the value of safe drinking water.

Sanitation habits of people in many districts are also poor. As per the 2011 Census estimates, only 22 percent of total households in Odisha had access to basic sanitation facilities like toilets within the premises. Out of the remaining 78 percent households, 1.4 percent households use public latrines while the rest defecate in the open. As a result, the incidence of diarrhoea in interior Odisha is generally high and it is 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 Odisha 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 Odisha 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.

Nine key initiatives, which have been taken to address problems of under-development and regional disparities, 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 (BRGF), (v) Integrated Action Plan (IAP), (vi) Gopabandhu Gramin Yojana (GGY), (vii) Western Odisha Development Council (WODC) for backward western districts, (viii) 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 (ix) 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. Special Central Assistance to the extent of Rs.2,093.95 crores has been received from 1998-99 to 2011-12 and Rs.250.00 crores has been approved by the Planning Commission for the year 2012-13.

The implementation of the special plan has brought several benefits to this region. As per the Tendulkar Committee methodology, rural poverty in this region came down by 21.0 percentage points from 73.4 percent in 2004 -05 to 52.4 percent in 2009 -10. Enrolment rate in primary schools in KBK districts has gone up to 103.81 percent in 2010 -11 from 75.89 percent in 1996 -97. Similarly, the enrolment rate in upper primary schools has risen from 56.39 percent in 1996 -97 to 99.09 percent in 2010 -11. The dropout rate in primary schools in KBK districts has been reduced to 2.3 in 2010 -11 and female literacy rate has increased to 45.49 perc ent in 2011 while the overall literacy rate has increased to 57.17 percent in 2011. The State Government has submitted a new Eight Year Perspective Plan for KBK districts for Rs.4,550.00 crores for approval of the Planning Commission. Besides, the Government of India has been requested for extension of the Special Plan for KBK districts for at least ten more years with effect from 2012-13, with higher allocation.

#### Biju KBK Plan

This scheme was launched in the KBK districts in the financial year 2006-07 out of the State's own funds to fill critical gaps in development of the region. An annual outlay of Rs.120 crores has been envisaged for the region 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. During 2012-13, Rs.120 crores have been sanctioned under this plan.

## 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 crores in order to accelerate the development process and expedite poverty reduction in tribal dominated Kandhamal and Gajapati districts. The scheme aims to improve human development indicators in these districts at an accelerated pace. During 2012-13, Rs. 28.50 crores have been sanctioned under BKGY.

# Western Odisha Development Council (WODC)

The State Government has constituted a Western Odisha Development (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 crores has been made for the Council for the year 2012-13.

## **Backward Regions Grant Fund (BRGF)**

This central scheme has been implemented in Odisha in 20 districts viz., Bargarh, Bolangir, Boudh, Deogarh, Dhenkanal, Gajapati, Ganjam, Jharsuguda, Kalahandi, Kendujhar, Koraput, Malkangiri, Mayurbhani, Nabrangpur, Nuapada, Phulbani, Rayagada, Sambalpur, Sonepur and Sundergarh during the year 2012-13. The main objectives of this scheme are: (i) to bridge critical gaps in local infrastructure and other development requirements that are not being adequately met through existing inflows, (ii) to strengthen local level governance with appropriate capacity building of PRI and facilitate participatory planning, making, implementation and monitoring, (iii) to provide professional support to local bodies for planning, implementation and monitoring their plans, and (iv) to improve the performance and delivery of critical functions assigned to PRI and counter possible efficiency and equity losses on account of inadequate local capacity.

## **Integrated Action Plan (IAP)**

A special scheme, called Integrated Action Plan (IAP), has been introduced by the Government of India from the year 2010-11 for selected tribal and backward districts to bring about perceptible improvement. In Odisha, initially, 15 districts i.e., Bolangir, Deogarh, Gajapati, Kalahandi, Kandhamal, Kendujhar, Koraput, Malkangiri, Mayurbhanj, Nabrangpur, Nuapada, Rayagada, Sambalpur, Sonepur and Sundergarh were covered under the ambit of this scheme in 2010-11. Three more districts viz., Ganjam, Jajpur and Nayagarh districts have been included under the scheme with effect from 2011-12. In total, 18 districts have been covered under Integrated Action Plan (IAP). Under this programme, public infrastructure and services which have a short gestation period are undertaken with the apparent of District Level Committee (DLC). The IAP has been implemented with a per district block grant of Rs.25 crores during 2010-11 and Rs.30 crores in 2011-12 and 2012-13.

## Gopabandhu Gramin Yojana (GGY)

The Government of Odisha 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, Khordha, Nayagarh, and Puri. As the Government of India included Bargarh district under BRGF in 2012-13, the GGY has been implemented in ten districts viz., Angul, Balasore, 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 has received development assistance to the extent of Rs.15 crores per annum up to the year 2012-13.

## 7.5 Human Development in Odisha

Asper UNDP methodology, human development index (HDI) is an average of health index, education index and income index. Health index is based on IMR and life expectancy at birth. Education index is a weighted average of adult literacy rates with 2/3rd weightage and combined gross enrolment ratio (GER) with 1/3rd weightage. Income index is based on some acceptable measure of per capita income. Odisha published its first Human Development Report in 2004-05 and has prepared District Human Development Reports for Ganjam, Kandhamal, Mayurbhanj Kalahandi, Sundergarh districts. Wide variations have been observed in human development across districts in Odisha.

Odisha 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 Odisha. The UNDP sponsored Legislators' Forum has also been exposed to human development concerns in Odisha, 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 (vii) develop a global partnership for development. Odisha is also a participant in implementing the GoI-**UNDP** Project.



## Social Sector

With mainstreaming of the concept of human development, the social sector has assumed greater importance. Odisha 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 disadvantaged and marginalised groups such as Schedule Castes (SCs), Schedule Tribes (STs) and women. Figure 8.1 shows the revenue expenditure of the State on economic and social services from 2007-08 to 2012-13. In absolute terms, revenue expenditure on social services far exceeds that on economic services. However, their annual compound growth rate differs.

## 8.1 Education

Education is an important input as well as output outcome indicator, influencing other

development indicators, viz., health, nutritional status, income, family welfare and others. The Right of Children to Free and Compulsory Education Act, 2009 is a Central act which came into force from 1st April, 2010. The State has promulgated the Odisha Right of Children to Free and Compulsory Education Rules, 2010 on the basis of the model rules made by the GoI. The Right to Education cell is being set up with support from UNICEF. Insert 1. space between period after Rs. and 2. in, i small letter c in Crores

## 8.1.1 Literacy

The literacy rate of Odisha has increased by 10 percentage points from 63.08 percent in 2001 to 73.45 percent in 2011, while at the national level, it increased by nine percentage points to touch 74.04 percent. While male literacy rate of 82.40 percent in the State in 2011 is marginally higher than the national average of 82.14 percent, female literacy rate stands at 64.36 percent,

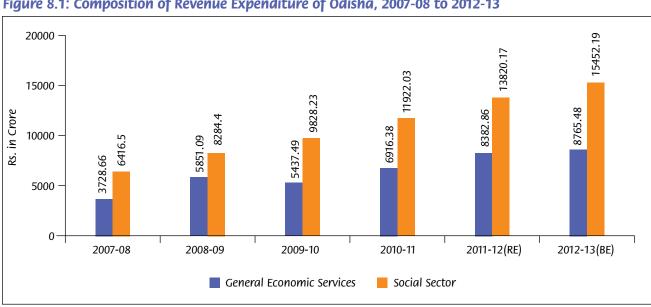


Figure 8.1: Composition of Revenue Expenditure of Odisha, 2007-08 to 2012-13

Figure 8.2: Literacy Rates for Odisha & All India, 1951 to 2011(p)

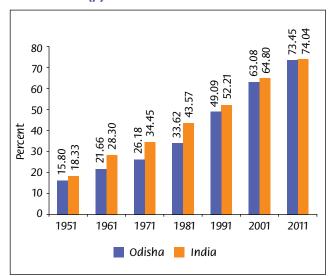
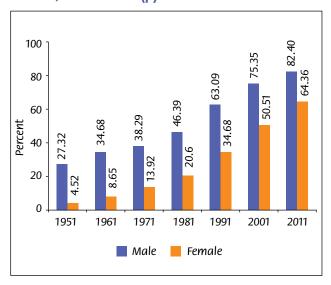


Figure 8.3: Male & Female Literacy Rates in Odisha, 1951 to 2011(p)



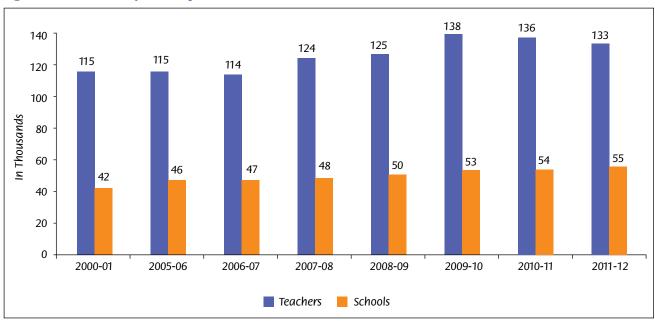
which is lower than the national average of 65.46 percent. The gender gap in literacy rate has come down from 24.84 percent in 2001 to 18.04 percent in 2011. Female literacy has shown considerable improvement by 50 percent from 7.84 million in 2001 to 11.78 million in 2011. Figure 8.2 shows the literacy rate of Odisha and all India since 1951 to 2011 while Figure 8.3 shows literacy rate in Odisha by gender.

Though the gender gap in literacy levels has been declining over the years, there are still wide social, regional and gender disparities. As per 2001 Census, the ST communities are least literate (37.4%) while SC communities report 55.5 percent literacy rate. Literacy rate vary widely from 48.20 percent in Nabarangpur district to 87.51 percent in Khorda district. The highest male literacy rate of 93.20 percent is recorded in Jagatsinghpur district, whereas the highest female literacy rate of 82.06 percent is recorded in Khorda district.

## 8.1.2 Primary Education

Primary and upper primary education has been expanding in the State, especially in

Figure 8.4: Growth of Primary Schools & Teachers in Odisha, 2000-01 to 2011-12



rural and backward areas. The State aims at providing primary schools within one km and upper primary schools within three km of habitations which have 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 State. Efforts in eradication of illiteracy in the last five years resulted in setting up 4,604 new schools and appointing 9,497 more teachers. During 2011-12, there were 55,106 functional primary schools/sections. This includes 51,163 schools of Government and local bodies: 346 aided schools and 3,597 other schools. These schools have 1.33 lakh teachers and 44.33 lakh students. Out of a total 55,106 schools, 49,744 were under the control of School & Mass Education Department, 1,416 were under SC/ST Development Department, and 3,946 others. Growth in the number of schools and teachers from 2000-01 to 2011-12 has been shown in Figure 8.4. The position of primary school teachers shows a declining trend since last two years. In 2011-12, there was one primary school per 2.8 sq km on an average. The average teacher pupil ratio is 1:30 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 42,747 sikhya sahayaks and 22,421 gana sikhyaks.

With the view of 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, drop-out rates have significantly fallen over the years. At the primary level, the drop-out rate declined from 41.80 percent in 2000-01 to 0.43 percent in 2011-12. The drop-out rates of boys fell from 42.30 percent to 0.25 percent and those for girls from 41.40 percent to 0.62 percent over this period. The trends in drop-out rates at the primary school level are shown in Figure 8.5.

Though the drop-out rates at the primary level have fallen, such rates still remain high among SC and ST at 2.41 percent and 3.10 percent respectively. It is the highest (9.3%) in Jagatsinghpur district and the lowest (0.01%) in Cuttack, Bolangir and Bargarh districts. Infrastructure facilities in schools have a direct bearing on enrolment and drop-out rates.

Gross enrolment ratio (GER) and net enrolment ratio (NER) are the two most important indicators of enrolment. It is observed from Annexure 8.2 that the GER at primary education level has increased marginally from 98.27 percent in 2001-02 to 99.69 percent in 2011-12

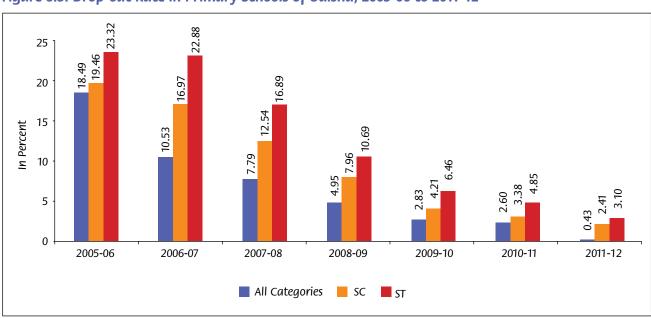


Figure 8.5: Drop-out Rate in Primary Schools of Odisha, 2005-06 to 2011-12

56.8 55.8 60 54.0 53.3 49.4 50 In Thousands 30 24.4 23.2 22.2 19.1 18.2 20 10 2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12 No. of Schools No. of Teachers while NER has increased from 87.25 percent to 12. Figure 8.6 traces the trend in the number of

Figure 8.6: Growth of Upper Primary Schools & Teachers, 2005-06 to 2011-12

93.27 percent during the same period.

## 8.1.3 Upper Primary Education

There were only 286 upper primary schools with 1,483 teachers and 32,000 enrolments in the State in 1947-48. Due to sustained efforts of the Government, the number of upper primary schools/sections increased to 23,239. This includes 19,302 Government and local body schools, 1,649 aided schools and 2,288 other schools. These schools had 53,264 teachers and 20.87 lakh enrolment by the end of 2011-

schools and teachers at upper primary schools in Odisha, while further details are given in Annexure 8.4. During 2011-12, GER and NER at upper primary levels stood at 104.93 and 90.84 percent respectively.

The overall drop-out rate in UP schools of the State declined substantially from 28.39 percent in 2005-06 to 3.07 percent in 2011-12 (see Figure 8.7) but it is higher than that in primary schools (0.43%). The drop-out rates for SC, ST and girl students were relatively higher. According to the

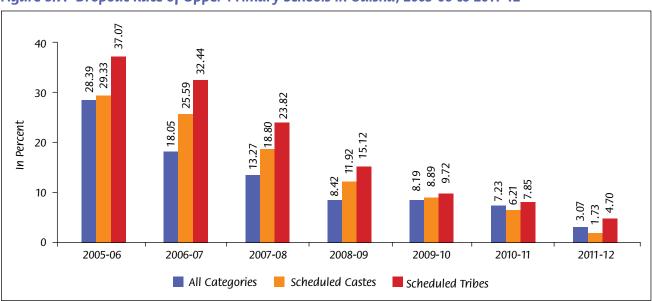


Figure 8.7: Dropout Rate of Upper Primary Schools in Odisha, 2005-06 to 2011-12

Odisha Primary Education Programme Authority (OPEPA), the overall drop-out rate at the UP level is the highest in Koraput district (16.98%) and the lowest in Nayagarh district (1.11%). The relevant data is presented in Annexure 8.5.

In 2000-01, there were 27 primary and about eight upper primary schools per 100 sq km of area. The respective numbers increased to 35.4 and 15.7 in 2010-11. The teacher-pupil ratio for upper primary schools was 1:39 during 2011-12. 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.

Out of 53,094 functional government elementary schools in the State, 12,621 (23.8%)

schools did not have common toilets, 31,824 (59.9%) had no girls toilets, 2,922 (5.50%) schools had no drinking water facilities and 8570 (16.14%) schools had no electricity. Besides, 521 government elementary schools do not have buildings. The Government has taken initiatives to improve school infrastructure facilities.

## Sarva Sikshya Abhiyan (SSA)

SSA is a national flagship programme launched in 2001-02 and has been implemented in a mission mode to achieve the constitutional goal of universalisation of elementary education. The cost of the programme is shared by the Centre and the State in the ratio 65:35. The programme supports infrastructure development, viz., construction of new school buildings and class rooms, toilets, drinking water facilities, free

## Box 8.1: Major Initiatives for Promotion of Elementary Education, 2011-12

- In order to improve access to elementary education and to achieve 100 percent enrolment, the Government has relaxed the norm for opening of new primary schools.
- Government provides Block Grant to the 916 eligible upper primary schools.
- Block grant for the teaching staff of 74 madrasas at the primary level has been provided.
- 65 lakh children of 6 to 14 year age group are in schools.
- In 6 to 14 years age group, 0.31 lakh children are out-of-school and from these 0.05 lakh are from SC while 0.20 lakh from ST communities.
- Grant-in-aid released to 1,568 teaching & non-teaching staff of 691 privately managed, aided upper primary schools.
- Grant-in-aid has been provided to 687 teachers of 220 Minority and Mission Managed Primary Schools.
- Free text books have been supplied to all students in the primary level in the year 2011-12.
- Under SSA/NPEGEL/KGBV, a total of 8713 new primary schools were opened, 9,319 primary schools upgraded to UP level and 9,412 UP (ME) schools have been upgraded to Class-VIII.
- A total number of 17,232 sikhya sahayaks who have completed six years of continuous service have been regularised as primary school teachers under zilla parishads.
  - Recruitment of 17,543 sikhya sahayaks is process in all districts.
  - About 9.13 lakh children in 1,518 UP Schools have been included in Computer Aided Learning Programme under SSA.
  - Under SSA, 15,942 primary and UP school buildings have been constructed and construction of 1,585 school buildings is in progress.

supply of school uniforms for girls and supply of text books.

The National Programme for Education of Girls at Elementary Level (NPEGEL) and Kasturba Gandhi Balika Vidyalaya (KGVB) are two components of SSA. While NPEGEL provides additional support for enhancing girl education, KGBV is a residential school programme at the elementary level. At present, 3,159 model cluster schools and 157 KGBV function in the State. The achievement of SSA/ NPEGEL/ KGVB as on 31st March 2012 are as follows:

- 8,713 new primary schools, have been opened and 9,319 primary schools have been upgraded to UP level and 9,412 UP (ME) schools have been upgraded to Class-VIII.
- Through Home Based Education, 2,777 outof-school children addressed.
- To enhance knowledge in various subjects, 1,37,823 teachers have been trained.
- Free text books have been supplied to all students of Class-VIII of government and government aided schools.
- Computer Aided Learning (CAL) programme has already been implemented in 1,518 UP schools and about 9.13 lakh students have benefited under this programme.
- School uniforms are being provided to all girl students of government. schools from class I-VIII.
- Out of KGBVs,182,have been operationalised and 16,631 girls enrolled in these schools are availing the benefits of the scheme.
- Out of Model Cluster Schools, 3,159 have been functioning in 27 districts of Odisha.
- Out of Model Cluster School buildings, 2,606 have been completed by the end of March, 2012.
- Out of Early Childhood Care & Education (ECCE) under SSA, 385 centres are functioning, while under NPEGEL, 779 centres are functioning with 24,280 enrolment.
- Mother tongue based education is operational in 544 schools of eight tribal districts covering 61 blocks of Odisha in 10 tribal languages.
- A community based child centered drive has been taken up in 180 blocks covering

- 2,264 Cluster Resource Centre (CRC) in the state.
- Out of 1.31 lakh Children with Special Need (CWSN), 1.26 lakh were enrolled and 1.05 lakh CWN provided with aids and appliances. 5,476 sets of braille books were supplied to visually impaired children.
- Under SSA, 15,942 primary and upper primary school buildings have been constructed while 1,585 school buildings are in progress.
- Also under SSA, 46,241 additional class rooms (ACR) have been completed and construction of 7,410 ACR is in progress.

## 8.1.4 Secondary Education

In 1947-48, the State had only 106 high schools with 15,000 enrolments. By the end of 2011-12, there were 8,280 high schools including 6,111 government and aided schools, 848 recognised high schools,1,087 upgraded high schools, 81 taken over high schools and 1001 other high schools with 64,815 teachers and 15.03 lakh enrolments including 7.14 lakh girls. Out total of 8,280 high schools, 819 were girls' high schools. Computer literacy has been popularised at high school level.

The Rastriya Madhyamik Sikhya Abhiyan (RMSA) is a national flagship programme initiated in 2009-10 to universalise secondary education by making quality education available, accessible and affordable to all children within the age group of 14-18 years with focus on gender, equity and justice. The salient aspects of RMSA are summarised in Box 8.2. Inclusive Education for Disabled Children at Secondary State (IEDSS) scheme has been implemented in 91 blocks of 25 districts through 38 NGO in 2011-12. The objective of the scheme is to provide an opportunity to disabled children to complete four years of secondary schooling in an inclusive and enabling environment. During 2011-12, total 4,032 disabled children of 1,307 schools have been covered and 528 special teachers have been engaged under this scheme. Box 8.3 gives an account of different non Odia medium secondary schools in the State. The growth of schools and teachers at high school level is shown in Figure 8.8 (A) for the period from 2005-06 to 2011-12. Figure 8.8 (B) analyses growth

#### Box 8.2: Universalisation of Secondary Education, 2011-12

- Building construction of 300 upgraded schools is under process to provide secondary education in the GP having no secondary schools.
- Secondary Education Management Information System (SEMIS) 2010-11 has been completed and for 2011-12, it is under progress.
- Subject specific training imparted to 26,030 teachers in Samarthya-IV.
- 20 girl hostels in the backward blocks, and an amount of Rs.850 lakh has been proposed for 2012-13.
- A proposal in respect of 58,899 eligible girl students has been furnished to Government of India under National scheme of incentive to girl students.
- Government of India have approved the proposal for construction of 111 model schools in educationally backward blocks.

of students at the high school level during the same period.

Drop-out rates at the high school level have been declining at a slower pace. The overall drop-out rate declined from 62.0 percent in 2005-06 to 49.5 percent in 2011-12. Drop-out rates for STs and SCs are still higher. Further details regarding drop-out rates are given in Annexure 8.6. There is a need for special attention to address this problem. Figure 8.9 gives drop-out rates at high school level by year and by social classes from 2005-06 to 2011-12.

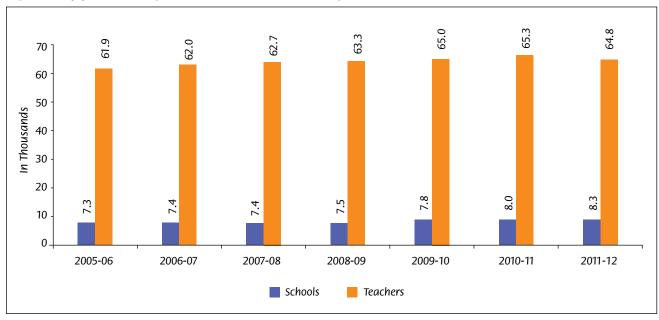
Box 8.3: Non Odia Medium Schools, 2012

Туре	Number
CBSE (English medium)	187
ICSE (English medium)	85
Sanskrit Tolls	314
Navodaya Vidyalaya	30
Madrasa	197

The major initiatives taken for promotion of Secondary Education are given below:

• Out of the private high schools,1,982 have been notified to receive block grants.

Figure 8.8(A): Growth of Schools and Teachers at High School Level, 2005-06 to 2011-12



1550 1503 1500 1442.6 In Thousands 1450 1400 1350 1300 1250 2005-06 2007-08 2008-09 2009-10 2010-11 2011-12(P) 2006-07 No. of Students

Figure 8.8(B): Growth of Students at High School Level, 2005-06 to 2011-12 (P)

- Steps have been taken to include 224 high schools of *Gram Panchayat* under block grant.
- On contract basis, 8,994 qualified teachers have been engaged.
- Of the contract teachers who have completed six years of satisfactory service 684 have been regularised.
- In order to enhance the retention rate at Class-X level, the State Government have introduced a new scheme "Pathani Samanta Mathematics Talent Scholarship" from 2011-12.

The Board of Secondary Education (BSE), Odisha regulates various types of examinations. These

include high school examination, teachers' certification, Hindi teachers' certification and certificate course for physical education. It also grants recognition to institutions that provide education through correspondence courses. In all 5.11 lakh students enrolled, 5.04 lakh students appeared in the Annual HSC examination conducted by the Board of Secondary Education, Odisha in 2012. Out of 5.04 lakh students 3.35 lakh passed the examination. The pass rate was 67.90 percent. The percentage of success among SC, ST and girl students stood at 57.3, 57.5 and 65.4 percent respectively. Figure 8.10 gives an account of the results of high school level examinations. Further details are given in Annexure 8.7. In addition, during

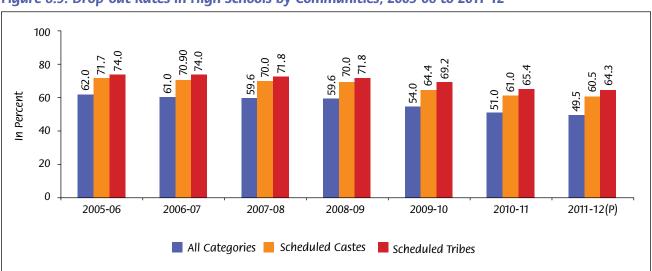


Figure 8.9: Drop-out Rates in High Schools by Communities, 2005-06 to 2011-12

120 95.5 98.0 8.66 99.5 98.5 94.8 95.1 98.0 100 66.17 67.90 80 59.6 58.67 In Percent 47.90 60 40 20 n 2008 2009 2010 2011 2012 BSE CBSE ICSE

Figure 8.10: Success Rate at Annual High School Examination by Boards, 2008 to 2012

2012, 19,589 students appeared for the Class-X examination from 272 English medium schools conducted by CBSE/ICSE, New Delhi, out of which 19,439 students passed the examination. The percentage of success was 99.2 percent. The success rate among girls, SC and ST was 99.8, 99.2 and 98.2 percent respectively.

## 8.1.5 Higher Secondary Education

There are 1,176 general colleges including 50 Government colleges providing Higher Secondary level education. The Council of Higher Secondary Education (CHSE), Odisha, regulates the Higher Secondary education. The overall percentage of success rate in examinations conducted by CHSE in 2012 was 70.79 percent. The success rate was the highest for the Science stream (72.5%) followed by Arts (70.6%) and Commerce streams (67.03%). In addition, 126 schools affiliated to CBSE/ICSE also provide +2 level education. Figure 8.11 shows the success rate of higher secondary level Board of Examinations from 2008 to 2012. 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 education has been provided at the +2 level in 231 government vocational junior colleges (GVJC) in 20 different vocational courses with a view to produce semi skilled

personnel and to prepare students for self reliance and gainful employment. Out of 231 GVJC, 60 are in tribal areas. During the year 2012, 8,136 students including 3,368 girls appeared at +2 level examination for vocational courses, of which 3,994 passed out, yielding 49.09 percent success rate. Training programme has been conducted for full time resource persons to update their knowledge. Steps have been taken for strengthening the existing 231 GVJCs. GoI has been moved for financial assistance for additional 100 GVJC during the current five year plan. State Government has decided to open 30 GVJCS, one in each district, and passed orders to the district administration for follow up action.

## 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 vocational oversees education, promotes professional courses and provides grants to institutes for development studies. In 1947, there were only 12 colleges in Odisha with an enrolment of 4,104 students. In 2011-12, there were 96 government colleges, 605 aided colleges, 200 block grant colleges, 1001 non-government (unaided) colleges, 287 self-financing colleges and 14 other colleges in the State. At the time of independence, there was only one university. Now there are, eleven universities including a Central University at Koraput and a National

120 94.2 100 70.52 62.45 80 In Percent 60 40 20 0 2008 2009 2010 2011 2012 CHSE CBSE ICSE

Figure 8.11: Success Rate at High Secondary Education, 2008 to 2012

Law University at Cuttack. The Government has permitted the establishment of Sri Sri University, Vedanta University, ICFAI University and Sambalpur University Institute of Information & Technology (SU-IIT) in the State.

The State Government has provided 1,85.97 acre of government land at Naraj, Cuttack, for the establishment of Sri Sri University and 3,277.73 acre of land in Puri district for Vedanta University, that is 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, and has started functioning in the campus of Institute of Physics from the academic session, 2007-08. The Government has agreed in principle to establish the Xavier University of Management, Amrita Viswa Vidyapitham University and Odisha State Open University. Besides, 16 more proposals for establishment of universities in the private sector are under active consideration of the State Government. The Government have decided to establish eight model degree colleges on each in Boudh, Deogarh, Malkangiri, Nawarangpur, Nayagarh, Nuapada, Rayagada and Sonepur districts keeping in view their low gross enrolment ratios.

The 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 four universities in the State have been accredited by NAAC. Autonomous status has been accorded to 19 government colleges and 12 non-government 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 enhance the quality of technical manpower. Technical education is imparted through engineering colleges, engineering polytechnics, industrial training schools, institutes (ITI), industrial training centres (ITC) and vocational educational institutions and universities. The Directorate of Technical Education and Training (DTET) functions as the nodal agency to 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.

At present, there are two Technical Universities under the administrative control of the State Government (i)Veer Surendra Sai University of Technology, Burla offering B.Tech in seven disciplines, M.Tech in five disciplines and MCA and (ii) Biju Patnaik University of Technology (BPUT), Rourkela has six constituent colleges under its jurisdiction and one aided autonomous college affiliated to the University.

During 2011-12, total 149 colleges offer courses in 23 disciplines to of 93,000 students. During 2011-12, admission was conducted through e-counselling and 20,860 students were admitted. Twenty eight colleges offer post graduate courses in 25 disciplines. In addition, six colleges with intake capacity of 750 including three private medical collages are provide medical education in the State. Implementation of World Bank assisted TEQIP-II for up-gradation of CET-Bhubaneswar, VSSUT, Burla and IGIT, Sarang.

Thirteen government and 79 private schools/polytechnics engineering provide education in diploma engineering courses with 28,905 sanctioned strength. During 2011-12,14,712 students were admitted in these schools/polytechnics through e-counselling. The Ministry of Human Resource Development (MHRD), Government of India has considered the proposal to provide100 percent central financial assistance at the rate of Rs.12.30 crores for infrastructure development of 22 new government polytechnics in 22 un- covered districts and the release of Rs.154.47 crores during 2011-12. Besides, the MHRD, has released Rs.7.08 crore for different developmental works in the existing 13 polytechnics and 161 lecturer posts have been sanctioned for the existing Polytechnics and 770 posts have been sanctioned for the new 22 polytechnics. Besides, the State Government have placed proposal with AICTE, New Delhi for establishment of 19 new polytechnics as PPP undertakings.

Box 8.4: Technical Institutions in Odisha, 2010-11

Institution	No. Sanctioned		Institution	No.	Sanctioned
		Intake			Intake
Government Engineering College	8	2,223	Odisha University of Agriculture and Technology	1	1,250
Private Engineering College	141	35,670			
Government Engineering Schools/Polytechnics	13	3,376	Government Medical Colleges	3	450
Private Engineering Schools/ Polytechnics	79	25,289	Government Dental Colleges	1	50
Architecture	2	200			
Film &TV Institute	1	200	Private Medical Colleges	3	300
Government MCA Colleges	13	472	Private Dental Colleges	3	250
Private MCA Colleges	47	3,345	Government Pharmacy Colleges	1	60
Government MBA Colleges	10	505	Government Nursing Colleges	1	50
Private MBA College	61	4,920	Private Pharmacy Colleges	32	1,840
ITI/TTC	610	67,251	Private Nursing Colleges	11	510
National Institute of Technology	1	360	Nursing Schools (Govt.)	5	270
Indian Institute of Handloom & Textiles	1	60	Nursing Schools (Pvt.)	36	1,355
			ANM Training Centre (Govt.)	16	640
			ANM Training Centre (Pvt.)	50	1,490

In addition to the above, 610 ITI/ITC with 67,251 sanctioned intake capacity provides craftsmanship training for skill development of youth. During 2011-12, 72,849 students were admitted in these institutions.

# 8.1.9 Important Government Policies and Programmes

#### **Mass Education**

"Sakhyar Bharat", a centrally sponsored scheme has been launched in September, 2009 by GoI as a new variant to the National Literacy Mission (NLM). It aims at imparting functional literacy to non literates aged 15 years and above. In Odisha, 19 low female literacy districts were identified under this programme in 2009-10. In the first phase, the programme has been started in 820 GP covered in 44 blocks of three districts viz., Kalahandi, Bolangir and Sundargarh., The MHRD has redesigned NLM to inculcate new enthusiasm into it. The restructured programme, known as Lok Talim with the motto of education through productive work and self-reliance, has been implemented in the 11th Five Year Plan. The expenditure-sharing pattern between the Centre and the State is 75:25 for normal districts and 90:10 for educationally backward districts. There are 15 Jana Sikhvana Sansthans (JSS) that impart training under different skill development programmes and conduct need-based surveys.

## Mid-Day Meal (MDM) Scheme

In order to increase the enrolment, reduce the drop-outs and improve the nutritional status of children in schools, Mid-Day Meal (MDM) programme was introduced in the State in 1995. As per the directions of the Hon'ble Supreme Court, cooked meal at noon time has been provided to all students of all Government aided primary schools with effect from 1<sup>st</sup> September 2004. Further, this has been extended to upper primary school children with effect from 1<sup>st</sup> October, 2007. The coverage under the scheme during 2011-12 was 38.43 lakh students in 47,453 primary schools and 16.00 lakh UP students in 23,217 upper primary schools.

The ration cost has been enhanced from Rs.2.02 to Rs.2.17 for primary school children and

Rs.3.25 for upper primary students from the year 2011-12. The calorific value of the meal is now 459 kcalories and 13.gm of protein for Primary Classes and 736 kcalories and 18.48 gm of protein for UP Classes.

# 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. Educational programmes on subjects like mathematics, science, social studies, health and hygiene have been developed. During 2010-11, SIET has transmitted 468 video programmes through Regional Doordarshan Kendra on DD-1 at 10.00 AM to 10.30 AM from Monday to Friday. SIET won award for the best programme and best script at all India Children's Educational Audio & Video Festival, 2011.

## **Quality Improvement in Education**

The State Government have 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 Social 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 2011-12, Rs.2.30 crores was provided in the State budget for the programme. Volunteers were involved in activities like blood donation, plantation and AIDS awareness programmes. The Central Government has enhanced the rate of expenditure for the NSS volunteers.

## **National Cadet Crops (NCC)**

At present, 53,179 students of 135 colleges and 522 high schools have been enrolled under the

NCC programme. Cadets take part at national-level camps as well as in annual training camps. They are also involved in social welfare activities like plantations, sanitation, blood donation and awareness generation programme on HIV & AIDS etc. During 2011-12, Rs 1,010.84 lakh was provided for the programme. During 2011-12, two NCC units have been opened in the KBK area of Nawarangpur and Rayagada.

## **Scholarships**

Various scholarships have been awarded by the State Government and GoI to meritorious and poor students of Odisha for pursuing higher studies including studies in technical and professional education. From the year 2010-11, the State Government has revised the rate and number of scholarships. The rates for junior merit scholarship, senior merit scholarship and P.G. merit scholarship have been enhanced to Rs.300, Rs.500 and Rs.1000 per month respectively, while the number of scholarships were raised to 5,000, 1,000 and 500 respectively.

## Teacher's Education and Training

There are 78 (63 elementary and 15 Secondary level) Teachers Education Institutions (TEI) under the S&ME Department. All Teachers' Education Institutions are government institutions. The intake capacity of elementary teachers training institutions is 3,150 and intake capacity of secondary teachers training institutions is 1,140.

## 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 CBR and CDR for Odisha vis-à-vis India are shown in Figure 8.12 from 2005 to 2011. As in 2011, the CBR for Odisha was 20 against the national average of 21.8. The CBR for urban and rural Odisha stood at 14.7 and 21.0 respectively against the corresponding national averages of 17.6 and 23.3. The CDR declined from 13.1 in 1981 to 8.5 in 2011 as against 7.1 at the national level. Odisha still has the highest CDR in the country followed by Madhya Pradesh (8.2), Assam (8.0) and Uttar Pradesh (7.9). The CDR for rural and urban Odisha stood at 8.8 and 6.5 respectively as against 7.6 and 5.7 at the national level.

People of Odisha 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 Odisha during 2006-2011. 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

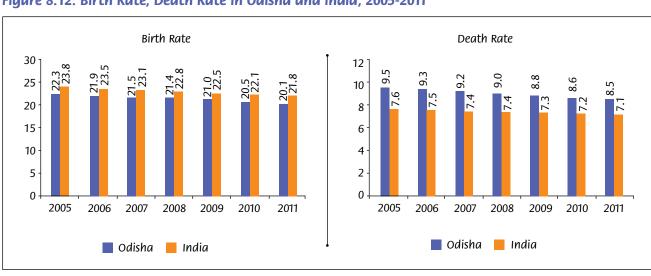


Figure 8.12: Birth Rate, Death Rate in Odisha and India, 2005-2011

3500.0 3238.8 3000.0 2500.0 In Thousands 2109.4 2056.0 2000.0 1712.8 1500.0 1296.9 1322.6 1000.0 429.6 500.0 180.2 183.9 121.1 68.5 48.9 0.0 2006 2007 2008 2009 2010 2011 OPD IPD

Figure 8.13: Indoor & Outdoor Patients Treated in Odisha, 2006 to 2011

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 Odisha, also called *Panchavyadhi* are: malaria, leprosy, scabies, acute respiratory infection and diarrhoea, which account for more than 70 percent patient load.

The major causes of reported deaths in Odisha in 2010 are presented in Annexure 8.13. The single most important cause of death is senility (36.52 percent), followed by heart disease (3.60 percent), paralysis (6.04 percent) and asthma (3.60 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 59.5 years and 59.6 years respectively, between 2002 - 2006. As per the report of the Technical Group on Population Projection, the projected level of life expectancy at birth in Odisha will be 66.3 years for males and 69.6 years for females between 2016 - 20, as against 68.8 for males and 71.1 years for females at the national level.

## 8.2.2 Maternal Health and Family Welfare

MMR for Odisha and All-India average from 1997-98 to 2007-09 are shown in Figure 8.14. In case of Odisha, the decline in MMR from 346 in 1997-98 to 258 in 2007-09 is moderate as compared to the corresponding figures at All-India level of 398 in 1997-98 to 212 in 2007-09.

It is targeted to reduce MMR to 119 in Odisha and 100 at the All-India level by the end of the 11<sup>th</sup> Plan period. ANC and PNC is necessary for healthy motherhood and safe child birth. The number of women and infants who receive these health services has been increasing over the years. Figure 8.15 reveals that institutional deliveries have significantly increased from 64.68 percent in 2008-09 to 84.8 percent in 2011-12.

The pregnancy burden of women can be judged from the General Fertility Rate (GFR) and the order of deliveries of eligible women. As shown in Figure 8.16, GFR in Odisha was less than the all-India rate, and has declined marginally from 79.3 in 2008 to 78.1 in 2009. However, in 2010 GFR in Odisha increased to 83.9 as against 75.3 at All-India level. Higher birth orders indicate a longer reproductive span and associated childbearing problems. About one-fourth (26.4 percent) of deliveries in the State were of third and higher orders in 2010 as against 28 percent at all India level. The proportion of such deliveries has recently declined from 34.8 percent in 2004 to 26.4 percent in 2010. Details of birth orders as well as GFRs in Odisha vis-a-vis India are reported in Annexure 8.14. Various family welfare programmes are in place in Odisha 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 (FP) methods. It seeks to promote responsible

Figure 8.14: Maternal Mortality Rates in Odisha & India, 1997-98 to 2007-09

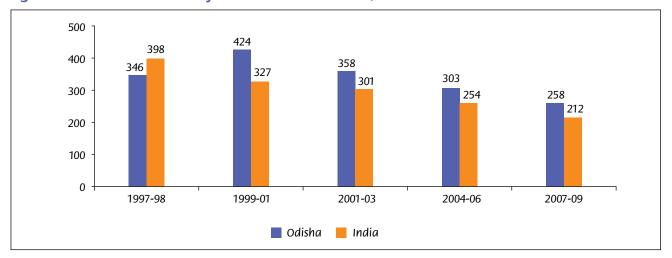
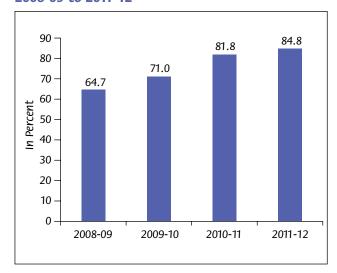


Figure 8.15: Institutional Deliveries in Odisha, 2008-09 to 2011-12



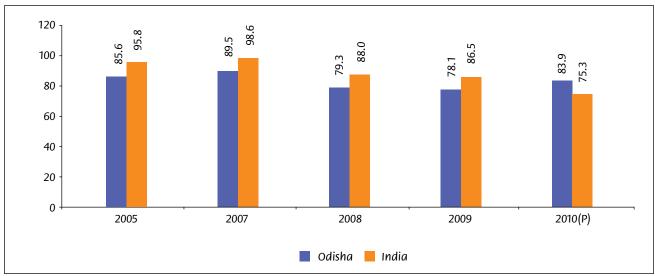
parenthood with focus on the one child norm. Annexure 8.15 shows the progress of the family welfare programmes in Odisha from 2002-03.

In Odisha, IMR has continuously declined from 75 in 2005 to 57 in 2011. As per the Annual Health Survey 2010-11 by Census of India, the district-wise CBR, CDR and IMR in Odisha are given in Figure 8.17(A). According to the survey results, the IMR of Odisha in 2010-11 is 61. Bolangir recorded the highest IMR of 100 and Angul has the lowest IMR of 50.

## 8.2.3 Child Health

The status of child health is indicated by the Infant Mortality Rate, Nutritional status of

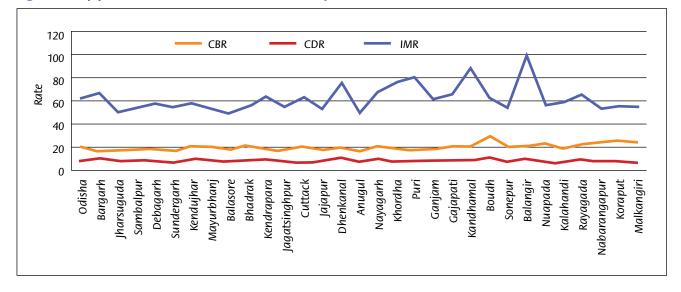
Figure 8.16: General Fertility Rates in Odisha & India, 2005-10



Odisha India

Figure 8.17: IMR in Odisha and India, 2005 -11





children and prevalence of diseases among them.

## **Infant Mortality**

As is evident from Figure 8.17, IMR has shown a considerable decline from 75 per 1000 live births in 2005 to 57 in 2011, IMR in rural Odisha was 58 as compared to 40 in urban areas in 2011. At the national level, IMR stood at 44 and varied from 48 in rural areas to 29 in urban areas in 2011. Though the decline in IMR in Odisha 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 69 percent of infant deaths are attributed to neonatal mortality. Premature deliveries cause 38.5 percent infant deaths. Pneumonia, respiratory infection, tetanus and diarrhoea in new born babies account for 34.1 percent of infant deaths. Anaemia, caused by malnutrition suffered by pregnant mothers and infants, accounts for 8.1 percent infant deaths. Odisha has mounted an Infant Mortality Reduction Mission with a view to reducing IMR at an accelerated rate.

47.55 46.43 43.66 50.00 42.29 41.19 36.34 36.36 36.51 40.00 Percentage (%) 30.00 20.00 10.00 0 2004 2010 Normal Grade-I (Malnourished) Grade-II (Malnourished)

Figure 8.18: Nutritional Status of Children in Odisha, 2004-2010

#### Child malnutrition

Figure 8.18 shows that child malnutrition in Odisha is high, i.e., more than 50 percent children are malnourished. 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 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 2011-12, 1,944, medical institutions, comprising 140 hospitals, 378 community health centres (CHCs), 1,227, primary health centers (PHCs) and 199 Mobile Health Units (MHUs) were functional in the public sector. In addition,1,625 private sector medical institutions with 12,882

beds were functional in the state as on 2011-12. Thus 3,569 allopathic medical institutions provided medical care in the State. There are 6,688 sub-health centres in the public sector. At the end of 2011-12, there were about eight medical institutions per lakh population and one medical institution per 44 sq km. The bed-population ratio is1:1,435. District-wise medical institutions and hospital beds, in both public and private sectors in Odisha, are given in Annexure 8.17.

While public health institutions are spread all over the State, private institutions are located mainly in cities. Of 1625 private institutions, 158 (9.7 percent) are in Bhubaneswar. 256 (15.8 percent) in Cuttack city and 64 (3.9 percent) in Berhampur city.

### **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 have been successfully treated at affordable cost through ISM&H. By the end of 2011-12, there were 4,033 registered ayurvedic doctors and 4,261 registered homeopathic doctors in the state. At present, five ayurvedic hospitals with 468 beds and four homoeopathic hospitals with 125 beds provide health services in the

State. Besides, 619 ayurvedic, 561 homoeopathic and nine unani dispensaries provide primary healthcare services. During 2011-12, about 116.12 lakh patients availed treatment facilities in these hospitals and dispensaries. Annexure 8.18 shows the status of public homoeopathy, ayurvedic and unani hospitals in Odisha. 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 homeopathic disciplines. Post-graduate courses in two new subjects were introduced in Dr. Abhin Chandra Homeopathic College, Bhubaneswar in 2009-10 under a scheme sponsored bt the Centre.

#### System Load of Government Hospitals

The system load of the healthcare infrastructure can be assessed from Annexure 8.20. Indicators of system load in Government hospitals have remained the same between the years 2005-06 to 2010-11. There are eight doctors per lakh population and less than four beds per 10,000 population. However, the proportion of patients in the total population of the State declined from 73.88 in 2005-06 to 70.80 percent in 2010-2011. 70.8 percent in 2005-06 to 73.88 percent in 2010-11.

### 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 2,50,350 insured persons and their dependents through five ESI hospitals and 45 ESI dispensaries. There are 297 beds and 195 doctors engaged to provide medical services to employees. There is also one 50 bed ESIC Model hospital at Rourkela.

The ESI Corporation has prescribed an expenditure ceiling of Rs.1,500 on medical care per insured person per annum from 1<sup>st</sup> April, 2012. 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 entirely borne by the State Government. During 2011-12, about 7.56 lakh patients including 6,455 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 in ESI hospital, Bhubaneswar since 2004-05 has been upgraded to VCTC. As per the guidelines of Odisha Pollution Control Board hospital waste management in ESI hospital at Choudwar and Bhubaneswar has been entrusted to M/s Saniclean (P) Ltd. on a contract basis since 2004. Besides, for super specialist treatment to IPS, tie-up arrangement with private hospitals have been made for providing hostel free and cash less super specialist treatment to indoor patients.

# 8.2.6 Government Health Programmes and Projects

# Revised National Tuberculosis Control Programme (RNTCP)

The Revised National Tuberculosis Control Programme is implemented in Odisha since 1997 with the objective to detect 70 percent of infectious sputum TB cases and cure at least 85 percent of them. The programme is implemented as per the technical, operational and financial guidelines of the Revised National TB Control Programme (RNTCP) with Directly Observed Treatment Short Course Chemotherapy (DOTS) strategy.

This programme has been implemented through 31 implementing units, 109 TB units and 549 Microscopy centres. In addition, 46,839 DOT centres function under the programme. The Anti-TB demonstration and Training Centre (ATD&TC), Cuttack conducts External

Quality Assessment (EQA) to maintain good quality sputum microscopy. The Intermediate Reference Laboratory (IRL) has been established at ATD&TC, Cuttack for culture and drug susceptibility test to diagnose MDR-TB.

The Lepra-India, an international NGO also provides support under Sahayog and Axshaya project to information, education, communicationbehaviour change communication (IEC-BCC) activities in 12 districts of Odisha. Since the inception of RNTCP till the third quarter of 2012, a total of 5,00,575 TB cases have been detected and treated. In all Of these, 3,81,424 cases have been cured and successfully completed treatment while 22,756 cases reported death. In the third quarter of 2012, the annualised new sputum positive cases detection rate of Odisha was 59 percent against the norm of 70 percent and the success rate 87 percent as against the norm of 85 percent.

#### National Filaria Control Programme (NFCP)

Next to malaria, filariasis is one of the major public health problems under vector borne diseases. Filariasis is more prevalent in the coastal district of Odisha. Considering the magnitude of the problem, GoI launched the National Filaria Control Programme (NFCP) in 1963, catering to a limited population of a few urban and semi-urban areas. At present, 15 filaria control units and 15 filaria clinics function in the State. These centres conduct night blood survey in a confined area and undertake treatment of microfilaria carriers as well as of the diseased. Table 8.1 shows the epidemiological trend in the State since 2004.

Considering the magnitude of the disease burden, Mass Drug Administration (MDA) programme has been implemented in twenty endemic districts of the State, since 2004 for elimination of lymphatic filariasis. Under this programme, all beneficiaries except pregnant women, children below two 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 assistance from the Centre. During 2011-12, 1,07,975 cataract operations were performed as against 1,20,852 in 2010-11. The cataract operation rate during 2011-12 was 257 per one lakh population in Odisha. Besides, the school eye screening programme is also operational in the State. The achievements made under the programme during 2005-06 to 2011-12 are given in Annexure 8.21.

#### **Eye Donation**

Eye donation has been popularised and implemented in the State through three medical colleges and one private organisation. Figure 8.19 shows an increasing trend of eyes collected and utilised since 2007-08. The figure depicts that eye collection in the state has increased significantly by more than five times from 2007-08 to 2011-12.

# National lodine Deficiency Disorders Control Programme

Iodine is an essential micronutrient and 100-150 gm of it is required daily for normal body and mental development. The disorders due to deficiency of iodine in the diet are called iodine deficiency disorders (IDD). Nutritional iodine

Table 8.1: Epidemiological Data of NFCP, 2009-11

Year	BSC/BSE	MF	MF rate	Disease	Disease rate
2009	40,067	322	0.8	4004	9.99
2010	36,238	245	0.6	3251	8.97
2011	24,501	159	0.6	1821	7.43

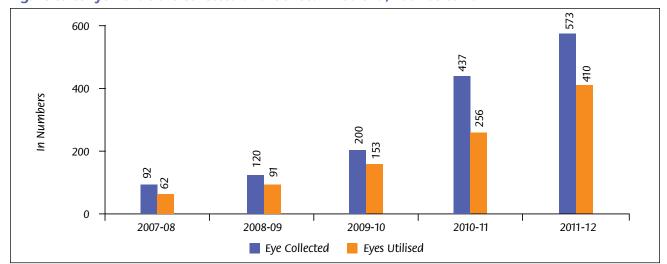


Figure 8.19: Eye Donation: Collected and Utilised in Odisha, 2007-08 to 2011-12

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.

IDD survey is periodically conducted in the State to assess its prevalence. By the end of 2010-11, twenty districts have been surveyed and three districts were re-surveyed. Annexure 8.22 shows the results of the IDD surveys conducted in Odisha since 1987. Out of the 20 surveyed districts, 16 districts are taken as endemic areas of Iodine Deficiency related disorders. Presently the IDD survey is being conducted in four more districts. Under the School Health Programme, 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 analysed 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 0.99 in 2012. At the national level, it has come down from 55 to 0.65 per 10,000 population during the same period.

By the end of March, 2012, 15 districts have achieved the leprosy elimination goal while in the remaining districts, it is still to be achieved. Twelve districts such as Mayurbhanj (1.29), Jharsuguda (1.41), Koraput (1.04), Bargarh (1.90), Angul (1.55), Kalahandi (1.11), Dhenkanal (1.51), Sonepur (3.02), Sambalpur (1.66), Bolangir (2.15), Boudh (2.55) and Nuapada (1.79). Except to achieve the goal by 2015.

During the last five years, 1,241 reconstructive surgeries have been made on deformed leprosy cured persons with more than 95 percent success rate. Disability care services are provided along with free MDT to all inmates living in 69 leprosy colonies in the State.

During 2011-12, 50 very high endemic blocks were identified to conduct Intensive Care Detection Drive (ICDD) through house to house visits. During a month long campaign, 953

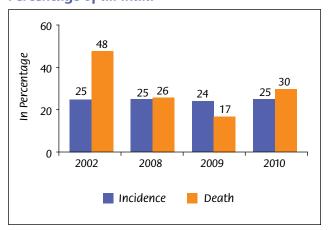
new leprosy cases were detected in 41,37,414 population in 50 blocks. During the last four years, 42,000 accredited social health activists (ASHAs) have been given training in leprosy. Besides, medical and para-medical staff have been provided orientation and re-orientation training every year to improve the quality of programme management in the State.

# 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 have been implemented within the existing healthcare system with exclusively employed supporting human resources. In addition, resources are given by GoI. Odisha also gets funding support from the Global Fund for AIDS, TB and Malaria (GFATM) as a grant for 16 districts. Odisha 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 NVBDCP, the 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 15<sup>th</sup> among 109 countries and contributed around two percent of global cases in 2006. In Odisha, 48 lakh fever cases are screened for malaria annually and 3 to 4

Figure 8.20: Incidence of Malaria in Odisha as Percentage of all India



lakhs 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 is covered with forests and hills and prone to vector breeding. The majority of the population in these districts is tribals. 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 to mobility of their population to high malaria prone districts in search of livelihood and other purposes.

As shown in Figure 8.20, Odisha accounted for 25 percent of malaria cases and 48 percent of malarial deaths in India in 2002 and 25 percent and 30 percent respectively in 2010. The number of malaria positive cases per 1,000 population has come down from 12.7 in 2002 to 7.1 in 2010 in the State, but the number varies widely across districts. Fatal cases due to malaria are higher among females than males and among children rather than adults. Figure 8.21 traces a declining trend in malaria positive cases from 2008 to 2012. Further details are given in Annexure 8.23.

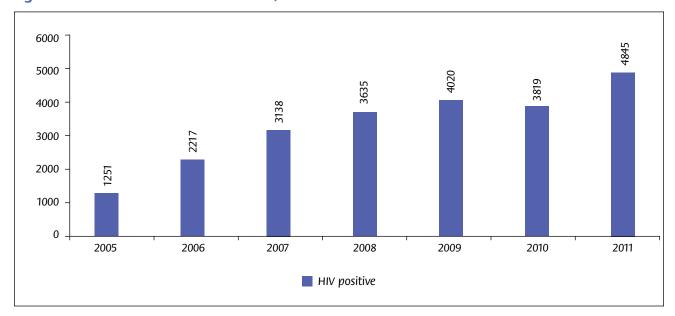
#### National AIDS Control Programme (NACP)

The incidences of HIV and AIDS in the State and by districts are given in Annexure 8.24 and 8.25 respectively. The highest number of HIV+ve cases (9,313) has been detected in Ganjam district, followed by Cuttack (3,242). Boudh is credited with the minimum number of positive cases - 24. Out of 1,330 deaths due to AIDS, the highest number was registered in Ganjam (431) followed by Koraput (148). No death case has been recorded in Sonepur district so far. Annexure 8.26 indicates HIV+ve persons in the State by age, sex and mode of transmission, by March, 2012. At present, NACP-III has been 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

500 395.7 380.9 375.4 350.4 336.0 309.0 400 In Thousands (Nos.) 209.4 300 200 100 0 2008 2009 2010 2011 2012 Positive Cases

Figure 8.21: Malaria Positive Cases and PF in Odisha, 2008-2012

Figure 8.22: HIV Positive cases in Odisha, 2005-2011



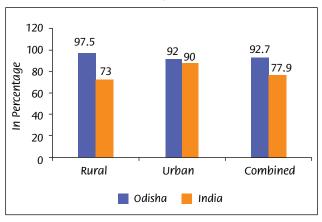
system (MIS). In order to institutionalise services at district and sub-district levels, 184 Integrated Counselling and Testing Centres (ICTCs) have been set up in the State with 187 counsellors and 136 laboratory technicians (LT). The trend of HIV positive cases has been traced in Figure 8.22. Annexure 8.24 shows the HIV scenario in Odisha since 2004.

### 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 in Odisha and India as per the 2001 Census. In both rural and urban areas, the coverage in Odisha was higher than national averages.

However, Odisha lags far behind the national averages as regards access to toilet facilities as may be seen from figure 8.24. As per 2011 population Census, out of a total 96.6 lakh households in the State, 78.0 percent households do not have latrines within their premises and 76.6 percent households are still in the habit of open defecation. The corresponding figures for SC and ST households stood at 66 percent

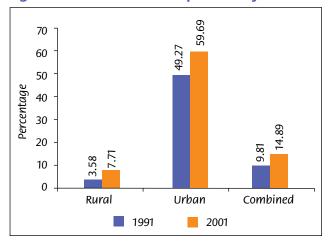
Figure 8.23: Household Access to Safe Drinking Water in Odisha & India, 2001



and 77.4 percent respectively. This is more acute in rural areas. Figure 8.25 depicts districtwise distribution of households having access to toilets/ latrine facilities within their own premises in 2011.

As per 2011 census, out of a total 96.61 lakh house-holds in the State, only 13.8 percent households use tap water, while 19.5 percent use wells and 61.5 percent use hand pump/tube wells for drinking water purposes. In the case of SC house-holds, the corresponding figures stood at 41.3 percent, 8.3 percent and 47.3 percent respectively and in the case of ST house-holds, these figures were 24.8 percent, 21.1 percent and 47.0 percent respectively. Besides this, out of a total 96.61 households, 22.4 percent households have drinking water sources in their own premises while 42.2 percent households have useable water sources near their premises.

Figure 8.24: Assess to toilet facilities by HH



#### 8.3.1 Rural Water Supply

The Rural Drinking Water Supply sector started in 1972-73 with the launch of Accelerated Rural Water Supply Programme (ARWSP) by the Government of India. Subsequently, Rajiv Gandhi National Drinking Water Mission and Swajaldhara Programme were launched in order to achieve substainability of water availability in terms of potability, adequacy, convenience, affordability and equity with decentralised approach which is National Rural Drinking Water for all, at all times in rural areas was started. By the end of 2007, 1,113 pipe water system (PWS) schemes, 2,57,768 spot sources, 160 spring based water supply projects and 1228 Swajaldhara projects were in operation in the State.

As per IMIS report, there were 1,41,928 rural habitations in the State as on 1<sup>st</sup> April 2011 of which, 73,011 were partially covered habitations. During 2011-12, priority was given to quality affected habitation and partially covered habitations. Accordingly, 92 partially covered habitations and 1,544 quality affected habitations have been provided with drinking water facility during 2011-12 and partially covered habitations reduced to 67,919. Figure 8.26 shows the percentage of households covered with different sources of safe drinking water while Figure 8.27 shows the coverage of habitation with rural drinking water supply for 2011-12.

At the end of 2011-12, there were 3,16,281 functional spot sources and 7693 piped water supply projects in the state including 16,795 spot sources and 850 pipe water supply projects commissioned during 2011-12. Here it may be mentioned that the average life span of a hand pump tube well is about 10 years and four to five percent of the total tube wells become permanently defunct annually. In addition to the above, 3,592 schools and 1,743 *anganwadi* centres (AWCs) have been provided with safe drinking water facilities during 2011-12.

#### **Bharat Nirman**

Provision of safe drinking water in rural areas is one of the activities under Bharat Nirman.

Deogarh 9.2 Malkangiri 9.3 Nawarangpur Sonepur 10.3 Boudh 10.8 Kandhamal 11.1 Kalahandi 11.7 Nuapada 14.5 Rayagoda Bolangir 15.1 Keonjhar 15.1 Baragarh 16.1 Koraput Kendrapara 17.8 Gajapati 18.1 Dhenkanal 18.3 Mayurbhanj 18.6 Nayagarh 19.0 Bhadrak 20.1 Odisha 22.0 Jajpur 22.9 Sambalpur 22.9 Puri 23.8 Anugul 24.1 Jagatsingh pur 24.5 Jharsuguda Balasore 27.5 Sundergarh 28.0 Ganjam 28.5 Cuttack 36.3 Khurda 47.1 0 10 20 30 40 50 In Percent

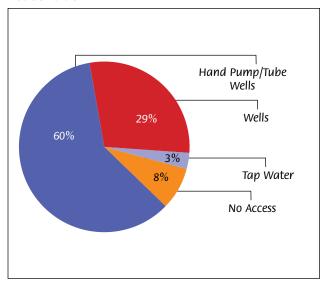
Figure 8.25: District-wise Household Access to Toilets/Latrines within their premises, 2011

Physical targets and achievements under this programme from 2007-08 to 2011-12 are presented in Annexure 8.29 which indicates that 5,238 partly covered habitations, 3,592 schools and 1,544 quality affected habitations were covered in 2011-12.

### **Total Sanitation Campaign (TSC)**

The TSC under National Sanitation and Water Mission is a 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.1,562.05 crores, out

Figure 8.26: Drinking Water Supply to Rural Households



of which the share of the Centre is Rs.1.045.09 crores, the State's share is Rs. 378.42 crores and beneficiaries' contribution amounts to Rs.138.54 crores. 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 for 2011-12 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 Balasore district has performed the best with an achievement of 89 percent target, while Kandhamal district has the lowest achievements (25 %). Under the school toilet programme,17 districts have reported 100 percent achievements. Under the anganwadi toilet programme also, 17 districts have reported 100 percent achievements.

### Nirmal Gram Puraskar (NGP)

To encourage full sanitation coverage, there is a need to eradicate the habit and practice of open defecation and maintain cleanliness. GoI has launched the Nirmal Gram Puraskar (NGP) where awards are given to GPs, *panchayat samitis* and *zilla parishads* that are free of open defecation and to all households as well as institutions like schools, AWCs and ICDS centres that have access to toilets. By the end of 2011-12, 284 GPs of Odisha were awarded "Nirmal Gram Puraskar", as against 28,002 GP awarded at All-India level. The highest number of GP awarded belong to Balasore district (104) followed by Cuttack (36) and Puri district (26).

Figure 8.27: Coverage of Habitations with Rural Drinking Water Supply, 2011-12

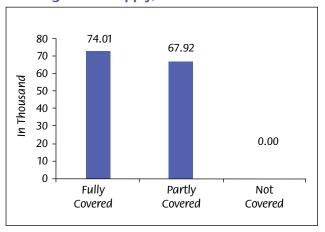
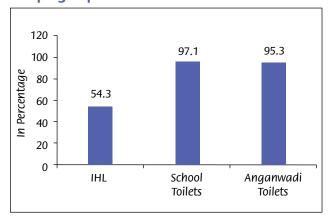


Figure 8.28: Achievement under Total Sanitation Campaign up to 2011-12



# 8.3.2 Urban Water Supply and Sanitation Programmes

The Public Health Engineering Organisation (PHEO) and the Odisha 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 in Paradeep. During 2010-11, 522 water supply schemes have been taken up with a budget provision of Rs.28.29 crores. Out of these, 160 schemes have been completed. Besides, 176 of hand pump tube wells have been completed in drinking water scarcity pockets of different ULBs during 2010-11. During 2010-11, a total of 113 sewerage schemes have been taken up with an outlay of Rs.1.89 crores, and 87 works have been completed.

#### Revised Long Term Action Plan (RLTAP)

A total of 23 schemes have been approved of under this programme, with estimated project cost of Rs. 160.77 crores. Out of these, seven schemes (i.e. augmentation of water supply to Khariar Road, Bolangir, Titilagarh, Nabrangpur, Jeypore, Koraput and Rayagada) have been completed and another 12 schemes are in different stages of execution with a budget provision of Rs.6.64 crores. From alternative sources at Tarave, Subarnapur, Patnagarh and

Umarkote, with a budget provision of Rs.3.36 crores, four new schemes for improvement of water supply to Bolangir Town will be started shortly.

### Jawaharlal Nehru National Urban Reform Mission (JNNURM)

This is a scheme sponsored by the Centre with a funding pattern of 80:20 between GoI and Odisha. Bhubaneswar and Puri town have been considered in this programme. Puri water supply scheme has been sanctioned for Rs.166.90 crores and work is in progress.

# Urban Infrastructure Development Scheme for Small & Medium Towns (UIDSSMT)

A total of 23 schemes for 22 ULB have been under this programme sanctioned improvement of drinking water supply. Out of these, eleven schemes have been funded by GoI with a funding pattern of 80:20 between GoI and the State Government, and the work is in different stages of execution. The State Government has authorised Rs.2.crores each for Kendujhar, Baripada and Berhampur Ph-II Projects for which detailed project reports (DPR) are under preparation. Twelve schemes have sanctioned under this programme, with a funding pattern of 80:20 between GoI and the State Government. Out of these 12 schemes, three schemes (Berhampur Ph-I, Koraput and Sambalpur and a new scheme at Jharsuguda have been added recently. Out of a total sanctioned cost of Rs.128.61 crores for 11 schemes, Rs.110.55 crores have been released and Rs.64.10 crores have been spent so far.

### 8.4 Welfare Programmes

#### 8.4.1 Child and Women Welfare

As per 2011 Census, child population in Odisha in the age group of 0-6 years has been reported as 50.36 lakhs (26.03 lakhs male and 24.33 lakhs female), comprising 12 percent of the State's population. A number of schemes/programmes have been implemented for overall development of children and women.

### Integrated Child Development Scheme (ICDS)

This programme was launched in 1975 and now

covers all blocks and twelve urban local bodies of the State through 60,918 Anganwadi Centres and 10,216 mini Anganwadi Centres. It is a centrally sponsored scheme with a funding pattern of 90:10 between the Centre and the State respectively. The scheme provides a package of six services to children below the age of six years, pregnant women and nursing mothers. These are: (i) supplementary nutrition, (ii) immunisation, (iii) health check-ups, (iv) referral services, (v) non-formal pre-school education, and (vi) nutrition and health education. Since ICDS has been universalised, all eligible beneficiaries are registered under the scheme. Figure 8.29 shows the trend of coverage of beneficiaries between 2007-08 and 2011-12. Annexure 8.34 gives more details. During 2011-12, Rs.564.20 crores was made available for this programme (including Rs.56.42 crores as the State share and Rs.507.78 crores as the share from the Centre) of which. Rs.206.74 crores expenditure was incurred up to 31.1.2012. By Dec 2011, 69,038 AWC/mini AWC have been operationalised with coverage of 52.77 lakh beneficiaries, comprising of about 44.19 lakh children (0-6 years) and 8.58 lakh pregnant and lactating mothers.

#### **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 scheme sponsored by the Centre with cost sharing between the Centre and the State in the proportion of 50:50. Each beneficiary is given nutritious food. From the year 2009-10, the ration costs under this programme have been revised upwards to Rs.4, Rs.6 and Rs.5 for normal, mild and moderately malnourished children, severely malnourished children and pregnant and lactating mothers, respectively.

The SNP Programme has been implemented by 69,038 functional AWC covering 45.51 lakh beneficiaries during 2011-12. During 2011-12, against the provision of Rs.546.03 crores, expenditure to the tune of Rs.375.22 crores has been incurred and 45.5 lakh children (6 months – 6 years) and targeted women have been covered under this programme.

60 51.36 49.9 47.9 45.5 50 40 in lakh numbers) 33.8 31.9 32. 30. 30 20 8.7 10 2007-08 2008-09 2009-10 2010-11 2011-12 (Up to Dec.11) Supplementary Immunization Health Check-up Nutrition and Referral services health education

Figure 8.29: Coverage of ICDS Beneficiaries in Odisha

#### **Immunisation**

Six diseases, viz., poliomyelitis, diphtheria, pertussis, tetanus (DPT), tuberculosis and measles are major causes of child mortality, disabilities, morbidity and related malnutrition. In order to protect children below 6 years from these diseases and pregnant women against tetanus, an immunisation programme has been implemented in the State as per the national immunisation schedule. The immunisation programme has been further strengthened through ICDS. The National Pulse Polio programme has also been implemented throughout the State with the goal of making the State Polio free by immunising infants and children aged 0-5 years. During 2011-12 up to December 2011, 4.48 lakh children have been immunised against DPT, 4.33 lakh against polio, 4.41 lakh against Bacillus Calmette-Guérin (BCG), and 4.57 lakhs against measles. Besides, 5.01 lakh pregnant women have been covered under Tetanus Toxoid (TT) immunisation.

#### **Nutrition & Health Education (NHEd)**

NHEd disseminates information on basic health, nutrition, child care and development, infant feeding practices, utilisation of health services. FP 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 years 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. During 2011-12 up to December, 2011 about 8.72 lakh women per month have been covered under this programme.

#### **Health Checkups**

This includes: (i) ANC of expectant mothers, (ii) PNC of nursing mothers and care of newborns and (iii) care of children under six years of age. Various health services provided by *anganwadi* workers (AWWs) and primary health centre (PHC) staff include regular health check-ups, recording of weight, immunisation, addressing malnutrition, treatment of diarrhoea, deworming and distribution of simple medicines. At AWCs, children, adolescent girls, pregnant women and nursing mothers are examined at regular intervals by health functionaries like the lady health visitor (LHV) and auxiliary nurse midwife (ANM) who diagnose minor ailments and distribute medicines. During 2011-12, up to

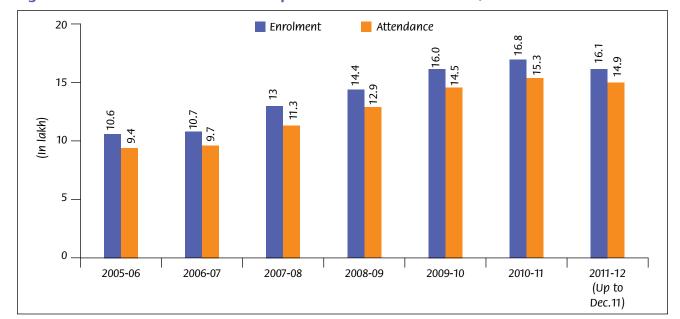


Figure 8.30: Enrolments and Attndance of Pre-School Children in Odisha, 2005-2012

December, 2011, 14.56 lakh children, pregnant women and nursing mothers were covered under the programme.

### **Referral Services**

During health check-ups and growth monitoring, the identified sick or malnourished children in need of prompt medical attention are provided referral services. The AWW is oriented to detect disabilities in young children. They enlist all such cases in a special register and refer them to the medical officers (MO). The effectiveness of this service depends on timely action, co-operation from health functionaries and willingness of families to avail of these services. In 2011-12, 4.86 lakh children, pregnant women and nursing mothers were provided referral services through AWC. Coverage of the programme since 2005-06 has been shown in Annexure 8.34.

#### **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.1,000 per kit. During 2011-12, 16.05 lakh children in the age group 3 to 6 years were enrolled in pre-schools and 14.94 lakhs attended. Figure 8.30 indicates the achievements of the programme from 2005-06 to 2011-12.

# Odisha State Council for Child Welfare (OSCCW)

The Odisha State Council for Child Welfare is the nodal agency of the State to coordinate schemes, programmes and activities relating to children in difficult circumstances. It scrutinises applications relating to adoption of deemed orphans under the guidelines prescribed by the Central Adoption Resource Agency. There are six *balashrams* (orphanages) and nine *anganwadi* training centres in the State, under the supervision of the council.

#### **Orphanages**

Children under the category of 'in need of care and protection' are admitted and maintained in childcare institutions (orphanages) to be mainstreamed into society. In addition to general education, they are imparted different kinds of vocational training. Steps are taken their overall development: physical, mental, intellectual and moral. They are taught yoga, music and sports. Retired headmasters and experienced teachers are engaged in orphanages to supervise their home tasks and clarify doubts from text books,. One hundred-thirty-two child care institutions that accommodate 8,428 inmates, both boys and girls, are managed by different NGO and OSCCWs all over the State.

#### Juvenile Justice

GoI has amended the Juvenile Justice (C&P of Children) Act, 2000 and enacted more child friendly Juvenile Justice (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 NGO and the rest by the State Government. Two special homes and observation homes have been established, in which children are kept till they are released.

Under statutory support services, there are 30 juvenile justice boards (JJB), 30 child welfare committees (CWCs) and 30 Special Juvenile Police Units (SJPU) function all over the State. JJB take up issues of children in conflict with the law, while CWC are responsible for handling issues of children who are in need of care and protection. The SJPU are constituted to coordinate and upgrade police interface with children. The juvenile justice fund has been created in the State for welfare of juveniles. The State-level juvenile justice advisory board and state adoption advisory committee are also active in the State.

#### **Adoption**

A State adoption cell has been constituted for promotion and monitoring of child adoption activities in the State. Grant-in-aid is given by the GoI to NGO for running homes for infants (*Sishu Grihas*) to promote adoption within the country. There are 14 specialised adoption agencies to promote in-country adoption, three recognised Indian placement agencies (RIPA) to promote other in-country and intercountry adoption, one State level adoption coordinating agency and five child lines in the State for care, protection, development and rehabilitation of children.

#### 8.4.2 The Handicapped

As per 2001 Census, there were 10.21 lakhs disabled persons in Odisha, out of which 5.14 lakhs (50.34 percent) were visually impaired, 2.81 lakh (24.58 percent) orthopaedically handicapped, 1.03 lakhs (10.09 percent) mentally retarded, 0.84 lakhs (8.23 percent)

hearing impaired and 0.69 lakhs (6.76 percent) defective speech. Disabled women numbered 4.52 lakhs (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 (2,493 per lakh female population). The corresponding figures at an All-India level were 2,130, 2,399 and 1,974 respectively. The highest incidence of handicapped, 0.66 lakhs (6.46%) is recorded in Cuttack district, followed by 0.63 lakhs (6.17%) in Khorda district and the lowest, 0.10 lakh (0.98%) in Deogarh district. The 58th round of NSSO estimates in 2002 indicated a lower figure of disabled in Odisha at 2,459 per lakh population. A number of welfare schemes are implemented in the State with financial support from GoI and the State Government to bring the handicapped into the mainstream of society. Some welfare schemes include: (i) disability pension under Madhu Babu Pension Yojana, (ii) special schools for children with disabilities, (iii) distribution of special aids and appliances, (iv) Banshree scholarships to students with disabilities, (v) training centres for teachers for the handicapped, (vi) rehabilitation of cured leprosy patients, and (vii) loan assistance scheme under National Handicapped Financial Development Cooperation (NHFDC).

#### 8.4.3 Emergency Feeding Programme

The objective of this food- based intervention is to provide one square meal a day to old, infirm and indigent persons on a sustained basis to help the poorest and most vulnerable sections of rural population to cope with food insecurity and food distress periods, to break the food insecurity cycle.

The programme has been implemented in eight KBK districts under the Revised Long Term Action Plan (RLTAP). Under the programme, 2,00,000 old, infirm and indigent persons are provided cooked meals daily through AWCs. The district-wise breakup is given below.

The daily ration consists of 250 gm of rice, 36 gm of *daal*, vegetables, oil, salt and condiments comprising 812 kcalories of energy and 21.6 gm

### Emergency Feeding Programme in KBK Districts under RLTAP

Sl.No.	Name of the District	Beneficiaries
1	Koraput	37,315
2	Malkangiri	14,990
3	Nawarangpur	19,270
4	Rayagada	22,840
5	Bolangir	33,860
6	Sonepur	13,525
7	Kalahandi	37,200
8	Nuapada	21,000
	Total	200,000

of protein. The daily ration cost has been fixed at Rs.5.50 with nutritional value of 1,060 kcalories 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 2011-12, Rs.20,632.01 lakhs was allocated and Rs.19,557.81 lakhs was released. During 2011-12, an amount of Rs.4015.00 lakhs was provided for the scheme.

#### **8.4.4 Social Security Measures**

# Indira Gandhi National Old Age Pension Scheme (IGNOAP)

This programme has been implemented in the State since 1995 to provide social security to the poor and destitute. It is a 100 percent Central scheme supported under 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. During 2011-12, an amount of Rs.42,107.73 lakhs was provided under this programme to cover 17,77,083 beneficiaries.

### **National Family Benefit Scheme (NFBS)**

The Scheme is another component of NSAP that has been implemented in the State since August, 1995. Under this scheme, financial assistance of Rs.10,000 is given to a BPL family

on the death of the 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. During 2011-12, Rs.1,569.10 lakhs has been provided under this programme, against the allocation of Rs. 3,020.00 lakhs.

#### Madhu Babu Pension Yojana (MBPY)

In January 2008, the State introduced Madhubabu Pension Yojana (MBPY) by merging two pension schemes: State Old Age Pension Rules, 1989 and Odisha Disability Pension Rule, 1985. All beneficiaries of these schemes are covered under MBPY since 2008. During 2011-12, 16.08 lakh beneficiaries were covered under the scheme and an amount of Rs. 398.26 crores was provided for this purpose.

# 8.5 Women's Development and Welfare

Many women suffer from discrimination, illiteracy, obscurantism poverty, exploitation in Odisha. 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 2011 Census. As per 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 in 2001. Figure 8.32 graphs the proportion of women in the total workforce in Odisha from 1971 to 2001. Their share in the total workforce has been consistently increasing. Further analysis indicates that the proportion of women in the 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 declined 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 16.8 percent in 2011. Their proportion in the public sector increased from 4.1 percent in 1972 to 18.0 percent in 2011, but decreased from 18.7 percent to 10.3 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 has appointed Sub-Divisional Magistrates as Dowry Prohibition Officers to act against dowry offenders. Advisory Boards have been appointed to assist them. A Committee with a senior lady officer as the chairperson has been set up at the district level to monitor the problems of sexual harassment of women in the workplace. NGO 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**

The State Commission for Women is a statutory body, constituted in 1993 to sort out family disputes and problems concerning women. It also monitors conditions of women in prisons. Besides, the Commission intervenes in instances of complaints of sexual harassment and trafficking in women. During 2011-12, it received 2,635 complaints including 84 dowry deaths, 790 dowry tortures, 50 rapes, 58 kidnapping and 35 suspected deaths. Besides, there were 524 non-dowry and 1,094 other cases. Out of a total of 2,635 cases, 1,248 have been disposed of.

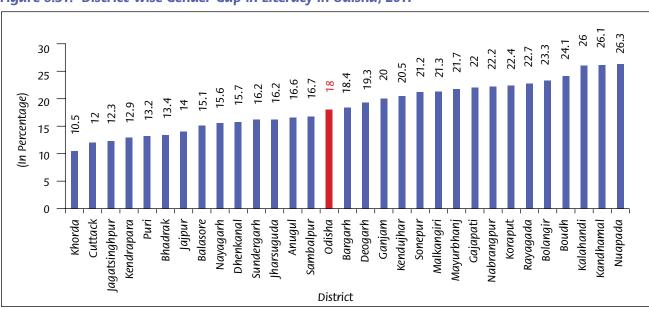
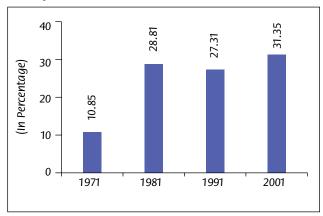


Figure 8.31: District-wise Gender Gap in Literacy in Odisha, 2011

Figure 8.32: Proportion of Women in Total Workforce in Odisha, 1971-2001



#### **Odisha State Social Welfare Board (OSSWB)**

This Board was set up in 1954. It receives grants from the Centre and State Government for various welfare programmes, some of which are detailed below.

### Rajiv Gandhi National Creche for Children of Working & Ailing Mothers

Registered voluntary organisations are provided with 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, immunisation and sleeping facilities. During 2011-12, 290 voluntary organisations with 475 units (439 rural units and 36 urban units) with 11,875 beneficiaries received advantages in this programme involving an amount of Rs. 2.01 crores.

## Condensed Course of Education for Adult Women

This course aims to facilitate social welfare and economicempowermentofwomenaged 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. During 2011-12, 19 institutions (all in rural areas) with 475 beneficiaries received advantages in this programme involving an amount of Rs. 22.75 lakhs.

#### **Awareness Programme**

This programme provides a platform for the rural and poor women to come together to exchange their experience and ideas. This enables them to know their problems and needs and ways to tackle them and fulfil their needs. During 2011-12, 56 institutions, all in rural areas having 103 camps, received financial support amounting to Rs.10.30 lakhs under this scheme.

#### **Family Counselling Centres**

These centres provide preventive, curative and rehabilitative services to women who are victims of atrocities, exploitation and maladjustment. They create awareness about prevailing laws relating to women and children. Referral services like free legal aid, police assistance, short-stay homes, medical treatment and vocational training are also provided. During 2011-12, 36 family counselling centres function in the State and an amount of Rs. 49.91 lakhs was sanctioned in favour of 30 institutions involving 2,681 beneficiaries.

#### **Working Women's Hostels**

This scheme provides hostel facilities through NGO 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. At present, 832 women stay in these hostels. During 2010-11, three NGO with 65 inmates received advantages in this programme.

#### **Anti Human Trafficking Measures**

The problem of trafficking of women and children for the purpose of commercial sexual exploitation has assumed serious proportions in recent years. Commercial exploitation of women and children takes place in various forms including brothel based prostitution, sex tourism, entertainment industry and pornography in print and electronic media. Taking the above into consideration, the State Government has decided on policies for combating trafficking of women and children. During 2011-12, six Anti-Human Trafficking units function in the State. In addition, 22

Ujjawala homes were also function through NGO in the State for combating trafficking.

### Short Stay Homes and Swadhar

Short stay homes provide institutional services like counselling and guidance, medical and psychiatric check ups and treatment facilities for development skills and relationships of women in distress and difficult circumstances arising out of family disturbances, emotional disturbances and moral danger. This is a programme which is totally sponsored by the Centre. During 2011-12, 36 short stay homes and 51 *swadhar* homes provided for the welfare of destitute women.

### Mahila Vikas Samabaya Nigam (MVSN)

The Nigam, an apex co-operative society working 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 WSHGs 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.

#### **Mission Shakti**

This campaign was launched in 2001 for holistic empowerment of women by organising two lakh women SHG covering all revenue villages in the State by 2008. As this target was achieved by 2006, it was revised upwards to three lakhs during the mission period. The Mission Shakti is an umbrella organisation extending support to different stakeholders such as banks, NGO, WSHG and other Institutions, which work in the field of woman empowerment. It has also provided opportunities to women for self-employment by making use of their own and acquired skills. Information about WSHGs in the State is given in Box 8.5.

Box 8.5: Status of WSHGs in Odisha, 2011-12

i) No. of WSHG formed 4,72,387ii) No. of members 56,68,644

iii) Credit advanced Rs.2,94,096.86 lakhs iv) Amount of savings Rs.36,551.71 lakhs

v) No. of WSHG credit linkedvi) Federations formedvii) No. of SHG with repeat finance2,25,592

viii) Amount of repeat finance Rs.1,36,957.99 lakhs

#### Other achievements

- MDM programme is managed by WSHG in 43,692 of 59,603 schools.
- 7,907 WSHGs are engaged as PDS agents for retailing and sub-whole selling of kerosene.
- Out of 15,000 GP tanks in the State, about 6,520 tanks have been leased to WSHG.
- 2,137 WSHGs involved in LPG gas distribution under "Shakti Gaon" Project.

By the end of 2011-12, Seed Money amounting to Rs.131.25 crore have been provided to 2,62,496 WSHG under the micro-credit support programme including Rs.38.75 crores provided to 77,496 WSHG during 2011-12.

- Under Shakti Project 2011, nos. of WSHGs through HLL core operating as Shakti Dealers.
- The role of 627 SHGs for successful implementation of total sanitation campaign is indispensable and credible.
- Under Mission Shakti banner, 7,957 federations at the *panchayat* level, 314 federations at the block level and 22 at the district level have been formed.

# 8.6 Welfare of Scheduled Castes and Scheduled Tribes

STs and SCs constitute about 38.66 percent of the State's total population. (STs - 22.13 percent and SCs - 16.53 percent as per 2001 Census). Out of 635 tribal communities in India, 62 are found in Odisha and 13 are particularly vulnerable tribal groups (PVTG). There are 93 SC communities in the State. The State Government implements several programmes for economic, educational and social development of the communities.

#### 8.6.1 Status of STs

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. In Odisha, PVTGs 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. PVTGs 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 Odisha increased from about 42.24 lakhs in 1961 to 81.45 lakhs in 2001. However, their proportion in the total population decreased from 24.07 percent in 1961 to 22.13 percent in 2001. Odisha has the third largest concentration of tribal population comprising 9.66 percent of the total tribal population of our country. The decadal population growth rate of STs since 1961 has been less than that of the total population. About 94.5 percent of STs in Odisha reside in rural areas as against 91.7 percent in India. As per 2001 Census, the sex ratio among STs at 1,003 is higher than the State average of 972 and the national ST ratio of 973.

The decadal growth rate of the ST population in Odisha is lower (15.82 percent) than that at the all-India level (24.5 percent). Annexure 8.41 provides further demographic and other details.

Nine districts having 45 percent or more ST population as per the 2001 Census are Malkangiri, Mayurbhanj, Rayagada, Nabrangpur, Kandhamal, Gajpati, Sundergarh, Koraput and Kendujhar. 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 Odisha. Although Mayurbhanj district has the maximum ST population (12.58 lakhs), the proportion of ST population in the total population is the highest in Malkangiri district (57.43 percent). There is a wide inter-district variation in the decadal growth rate of ST population, which was the highest in Jagatsinghpur district (72.7 percent) and the 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 the ST population to coastal districts in search of better livelihood opportunities. The decadal growth rate of the ST population in rural areas of Odisha is 30.3 percent and in urban areas it is 14.1 percent. As per 2011 population Census, there were 2.33 crore ST households in Odisha, out of which 2.01 crores (86.3 percent) were in rural areas. Out of a total of 2.33 ST households, 53.1 percent households were in livable conditions and 32.7 percent house roofs were of handmade tiles. Further, 82.4 percent households do not have any latrine and 78.4 percent households used fire-wood for their cooking. About 34.8 percent households possess telephones /mobiles.

As per 2011 population Census, there were 4.42 lakh SC households in the State, of which 74.4 percent belong to rural Odisha. Out of a total 4.42 lakh households, 49 percent were in livable condition and the roofs of 35.9 percent households were made of grass/thatch/

polythene or were made of handmade tiles. About 98.5 percent households used either electricity or kerosene for lighting. About 62.1 percent households do not have their own latrine and 62.9 percent households use firewood for cooking.

#### 8.6.2 Status of Schedule Castes (SCs)

The SC population in Odisha increased from 27.65 lakhs (15.76 percent) in 1961 to 60.82 lakhs (16.53 percent) in 2001. In 1961, among SCs females outnumbered males but the situation reversed in the 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 Odisha. Most SC 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 high concentration of SC population are Ganjam (5.87 lakhs), Cuttack (4.47 lakhs), Balasore (3.81 lakhs) and Jajpur (3.74 lakhs), while Gajapati district (0.39 lakhs) has the minimum concentration. The proportion of SC population to the total district population is the 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 Odisha 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).

#### 8.6.3 Literacy

The literacy levels by gender and social groups have been analysed in Chapter 7. As indicated in Figure 8.33, the ST communities had the lowest literacy rate of 37.37 percent in 2001. The SC communities in Odisha 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 the literacy rates of the SCs and overall literacy rates has been declining at a faster rate than that between the literacy rates of the STs and total literacy rates. The difference between literacy rates of SC and ST has increased from about four percent in 1961 to around 18 percent in 2001. Figure 8.33 compares literacy rates in Odisha by communities from 1961 to 2001.

There are wide inter-district differences in the ST literacy rates. Performance of the northern districts has been better than that of the

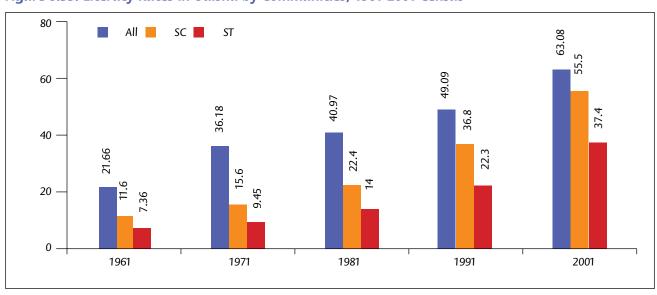


Figure 8.33: Literacy Rates in Odisha by Communities, 1961-2001 Census

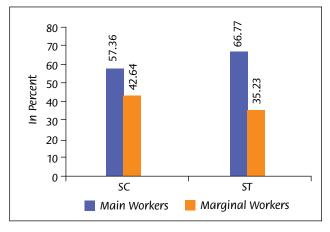
southern districts. As against 57.23 percent literacy rate of STs in Jharsuguda, the ST literacy rate for Malkangiri district was only 14.69 percent in 2001. It may be seen that the literacy rate of ST women was very low at 23.37 percent in 2001, as compared to 40.33 percent literacy rate of SC women and 50.51 percent literacy rate of all women in Odisha. 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 the male and female literacy rates of ST increased from 11.27 percent in 1961 to 28.11 percent in 2001. In the case of SC, the gap kept increasing from 16.38 percent in 1961 to 31.67 percent in 1991 but declined to 30.14 percent in 2001.

#### 8.6.4 Occupational Patterns

As per 2001 Census, there were 39,90,007 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 23,92,067 out of which 66.77 percent were main workers, the rest marginal workers. Figure 8.34 shows that there are proportionately more main workers among SC and ST than marginal workers.

Among tribals, cultivators account for 33.35 percent and agricultural labourers 46.85 percent 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

Figure 8.34: Distribution of Main & Marginal Workers by Communities in Odisha, 2001



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 SC, there are de-notified communities identified as Special Vulnerable Groups (SVGs).

### **8.6.5 Government Projects and Programmes**

Development of ST and SC communities, elimination of all forms of exploitation and improvement of their quality of life has been the prime objectives of development policies of both GoI and the State Government. A number of special programmes have been launched to uplift the socio-economic status of both ST and SC communities. Some of these programmes are briefly described below.

#### Tribal Sub-Plan (TSP)

About 44.70 percent area of Odisha has been notified as scheduled area. It extends over 118 blocks in twelve districts which covers 55.46 lakhs ST population (about 68 percent) of the total tribal population of the State. There are twenty-one Integrated Tribal Development Agencies (ITDAs) in the State to implement various tribal welfare programmes in tribal subplan areas. Box 8.6 shows the scheduled area in Odisha.

#### Box 8.6: Scheduled Areas in Odisha

The entire districts of Mayurbhanj, Koraput, Malkangiri, Nabrangpur, Rayagada, Sundergarh and Kandhamal, R. Udayagiri *tehsil*, Gumma and Rayagada blocks, Sorada *tehsil* excluding Gajalbadi and Gochha *panchayats* of Ganjam district, Kuchinda *tehsil* of Sambalpur district, Telkoi, Kendujhar, Champua and Barbil *tehsils* of Kendujhar district, Th. Rampur and Lanjigarh blocks of Kalahandi district and Nilagiri block of Balasore district.

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 areas at par with the rest of the State and raise the level of welfare of ST. The original strategy of the TSP approach has

64.67 62.29 70 60 50 39.77 (Rs. in Crores) 40 30 20 10.3 10 2006-07 2005-06 2007-08 2009-10 2010-11 2008-09 Amount released for infrastructure Amount released for EMRS

Figure 8.35: Flow of Funds (Amount released) to Odisha under Article 275 (1), 2005-2011

been reoriented to focus on employment and income generating activities and to bring about incidental infrastructure development.

### Ministry of Tribal Affairs (MOTA)

The Ministry of Tribal Affairs provides Special Central Assistance as additionality to the TSP for carrying out programmes to assist tribal households with income generation schemes and for creation of infrastructure in the TSP areas to support economic activities.

During the 10<sup>th</sup> plan period (2002-07), a total of Rs.347.62 crores was received under SCA to TSP and 3.01 lakh tribal BPL families were assisted under various income generating schemes. During the first four years of the 11<sup>th</sup> plan period (2007-08 to 2010-11), an amount of Rs. 401.12 crores has been released and utilised under this programme. Details of achievement are in Annexure 8.53.

# Integrated Tribal Development Agency (ITDA)

ITDAs were 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 2011-12 Rs. 117.43 crores was released as SCA to ITDA and

618 projects were completed covering 31,662 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 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. 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. During 2011-12, an amount of Rs.83.61 crore was released and Rs.32.40 crores spent under Article 275 (1) and 488 projects were completed.

# Modified Area Development Approach (MADA)

Adopted during the sixth Plan, this programme aims at 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 lakhs population. Individual family oriented incomegenerating 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, including officials and nonofficials, local MLA and MP as members. The committee draws up programmes and oversees their implementation. During 2011-12, 8,241 ST families were assisted and 415 projects were completed under this programme at an expenditure of Rs.7.66 crore.

#### **Clusters**

This approach was introduced during the seventh 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 in addition to normal programmes, SCA is provided for the implementation of income generating schemes in group mode and through community benefit oriented programmes and 47 projects were completed under the scheme.

#### **Micro Projects**

Seventeen micro projects have been implemented in the State for all round development of 13 PVTG recognised by GoI, with 78,519 population residing in parts of 20 blocks of 12 districts. these 17 micro projects, 13 are located the scheduled areas remaining four outside the TSP area. During 2011-12 an amount of Rs. 2.26 crores was utilised out of SCA to TSP under micro project and 108 projects were completed covering 2,262 families. The GoI has re-evaluated the

strategy for development of PVTG during the 11th Plan period (2007-12) and formulated conservation-cum-development (CCD) plan. This is a modest attempt for holistic development of PVTG. It addresses the critical needs of the PVTGs 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 crores. For this purpose, the Centre's grant of Rs.64.46 crores have been posed to Ministry of Tribal Affairs, GoI for financial assistance over a period of five years. Balance Rs.19.80 crores will be spent by various other line departments. Government of India has already released Rs.46.98 crores towards CCD plan during 2007-08 to 2010-11, including Rs.1226.68 lakh for 2010-11. A sum of Rs.9.19 crores has been released during 2011-12, out of which Rs.8.02 crore has been spent under the CCD plan and 351 projects have been completed covering 7,357 beneficiaries.

# Dispersed Tribal Development Programme (DTDP)

About 27 percent tribal population is dispersed all over the State outside the concentrated areas and is at different stages of socio-economic development. For this population, DTDP has been 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. 0.75 crore was utilised and 1,119 families were covered during 2011-12 Figure 8.36 shows the number of families covered under different programmes between 2005-06 and 2011-12. Details achievements of different programmes are given in Annexure 8.44. A strong focus has been given for skill up-gradation and placement linked employability training and 3,748 youth were trained in 2011.

14,000 12,000 10,000 in numbers) 8,000 6,000 4,000 2096 2038 2015 2,000 546 791 581 0 2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12 (Up to Dec.11) MICRO MADA DTDP Cluster

Figure 8.36: Number of Families Covered under Different Programmes

#### 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 STs and SCs 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. During 2011-12, an amount of Rs. 28.00 crores was released to the KBK districts for implementation of 144 projects. Out of these, 64 projects have been completed and Rs.12.94 crores has been utilised.

#### **Education**

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 2011-12, 1,619 schools and 3,448 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 function under the administrative control of the ST and SC development department as 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* are located in thickly populated areas and in places where upper primary,M. E. schools are not available within three km OPEPA provides *sikhya sahayaks* for upgraded classes and allots funds for construction of classrooms in these schools. To encourage teaching of tribal dialects, tribal language teachers have been appointed to teach 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 class VI to X in 52 tribal blocks in 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 PVTGs, 19 educational complexes have been opened in micro project areas.

The State Government has, targeted for construction of 1,000 hostels/hostel complexes with 100 seats each for ST girls/boys during 2011-12 Out of these, 700 are meant for ST

girls and 936 ST girls/boys have already been sanctioned to hostels in different districts; Rs.150.75 crores has been sanctioned under the State Plan and Rs.12.75 crores under the special plan for KBK district during 2011-12. Besides, the Ministry of Tribal Affairs (MOTA) has sanctioned Rs.25.50 crores for construction of 30 new *ashram* schools in TSP areas. In addition to this, 30 new *ashram* schools with facilities for girls' education from Class VI to X is being taken up under the Centre's plan in TSP areas. This will facilitate provision of secondary schooling facilities for 250 children in each school. These schools are targeted to be operational in 2013 academic session.

### 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 in the schools managed by the ST and SC development department 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 postmatric scholarships at different rates for different courses. Annexure 8.47 indicates that during 2011-12, Rs. 51.03 crores has been released towards the payment of post matric scholarships to 1,46,004 SC/ST students (Rs.26.62 crores to 81,776 SC and Rs. 24.41 crores to 64,228 ST students). Similarly, during 2011-12, Rs. 253.86 crores has been released towards the payment of pre-matric scholarships to 13,47,278 SC/ST students (Rs.31.00 crore to 5,68,968 SC and Rs. 222.86 crores to 7.78.310 ST students).

### Protection of Civil Rights of SC and ST

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 lakhs for one beneficiary in 2009-10. An

- amount of Rs.8.82 lakhs has been released for payment of legal aid semics to SC/ST litigants.
- Inter-Caste Marriages: Cash incentives of Rs.3,000 per married couple is provided for inter-caste marriages between SCs and other castes in Hindu communities for social integration and removal of untouchability. This incentive has been revised upward to Rs. 50,000 since December 2007. During 2011-12, 348 couples received this incentive amounting to Rs.160.98 lakhs as against Rs.165.96 lakhs released in favour of 376 beneficiaries in 2009-10. Achievements under this programme during the last four years are given in Table 8.2.

Table 8.2: Status of Inter-Caste Marriages in Odisha, 2008-09 to 2011-12

Year	No. of Couples	Amount Released
		(Rs. In lakh)
1	2	3
2008-09	85	45.29
2009-10	197	82.60
2010-11	376	165.96
2011-12	348	160.98

Monetary Relief to SC/ST victims of atrocities: During 2011-12. monetary benefit of Rs.121.63 lakhs was released for 1,169 SC and ST victims of atrocities, while Rs.129.45 lakh was released in favour of 799 SC and ST victims in 2009-10. The number of beneficiaries and the amount released during the last four years are given in Table 8.3.

Table 8.3: Assistance to Victims of Atrocities, 2008 -09 to 2011-12

Year	No. of Beneficiaries	Amount Released (Rs. In lakhs)
1	2	3
2008-09	474	55.90
2009-10	353	45.35
2010-11	799	129.45
2011-12	1,169	121.63

- Land Alienation: The State Government has amended the Odisha Scheduled Areas Transfer of Immovable Property (by Scheduled Tribes) Regulation, 1956, in which transfer/alienation of land belonging to ST persons to non-ST persons has been completely banned. Since its inception till 2008-09,,1,07,903 land alienation cases were instituted, out of these 1,07,467 cases were disposed off and 57,103 acres of land was restored to tribal families. During 2010-11, 7,307 cases have been instituted and 1,341 involving 1,455.204 acres of land have been disposed of till the end of December, 2010.
- As per sections 22, 23 and 23 (A) of the Odisha Land Reform (OLR) Act, 1960, the transfer of land from SC and ST people to non-SC/ST without prior permission of the competent authority has been declared void and restoration of such lands to the respective recorded tenant has been allotted. So far land to the extent of 13,183.432 acres has been restored in favour of 14,084 ST and 17,805.684 acres of land restored in favour of 25,271 SC beneficiaries.
- Fake Caste Certificates: Vigilance cells have been established at the State level as well as at the district level for verification of fake caste certificates. About 2,035 complaints of fake caste certificates have been received up to December, 2011. Enquiry reports in respect of 997 cases have been received and 377 cases have been finalised.

### Poverty Alleviation Programmes for SC & ST

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 2010-12.

# Distribution of Waste Land/Ceiling Surplus Land to Landless Families

As a part of land reform measures for agricultural development and social equity, ceiling surplus land up to 0.7 acre has been allotted free of *salami* to landless agricultural families. Since its

inception, 1,60,559.92 acres of ceiling surplus land was distributed among 1,43,382 landless families. Out of this, 51,313.73 acres land was distributed among 49,076 SC families, 66,424.06 acre among 53,149 ST families and 42,831.94 acre among 41,157 other caste families. During 2011-12 (up to Jan.12), 2.52 acres land was distributed among 55 beneficiaries.

In addition, the State Government also allotted government wasteland up to one standard acre to landless poor families for agricultural purposes. From 1974-75 to 2010-11, 7,44,854 acres of Government wasteland has been distributed among 4,88,167 landless families, including 3,88,756 acres for 2,36,506 ST and 1,77,126 acres for 1,06,091 SC landless families. During 2011-12, 319.729 acre wasteland was distributed among 356 landless families for agricultural purpose comprising 118 acres for 138 ST families, 82 acres for 92 SC families and 119.71 acres for 126 other caste families in the State.

### Odisha SC and ST Development Finance Cooperative Corporation (OSFDC)

Established in 1979-80, OSFDC aims at implementing various economic development programmes for the benefit of SC, ST, scavengers and minorities in the State. In 2011-12, OSFDC financed Rs. 24.91 crores and 23,925 families were benefited. The amounts financed and families benefited during 2007-08 to 2011-12 are given in Annexure 8.49. Programmes implemented by OSFDC include:

- SCA under Special Component Plan for 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 the National SC and ST Finance Development Corporation (NSFDC), National Scheduled Tribes Finance Development 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 their dependents in the State. Later 1,147 more scavengers were identified and the number of scavengers to be rehabilitated was raised to 17,533. To rehabilitate this group, self employment schemes for rehabilitation of scavengers have been implemented in the State since January, 2007. During 2007-08, OSFDC received Rs. 19.65 crores under bankable income generating schemes (IGS) and Rs. 7.92 lakhs for selfemployment training programmes. this amount, Rs..4.crores 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 crores was utilised under the bankable IGS for rehabilitation of 8,531 scavengers and Rs. 5.25 lakhs to organise training programmes for 43 scavengers and their dependents.

# Odisha Tribal Empowerment and Livelihood Programme (OTELP)

Odisha 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 livelihood 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 tribal communities through off-farm/non-farm enterprise development.

The programme has been implemented in 30 backward tribal blocks of seven tribal dominated districts in a phased manner. In Phase-I, 10 blocks in four districts covering 19,481 households in 390 villages were covered. Phase-II is in operation since 2008-09 covering 36,699 households in the remaining 20 blocks of seven districts. This scheme has covered 2,55,661 beneficiaries, of which 1,27,979 are men and 1,27,682 are women. As the scheme adopted a complete inclusion strategy, all

people from the targeted villages have been included. Operations 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. In order to develop 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 "Academy of Tribal Language and Culture" (ATLC).

Major activities of ATLC for the year 2011-12 are as follows;

- Published BANAJA, 2012 based on tribal girls' education.
- Published 'Sargiphula, 2010 collecting creative writings from tribal students.
- ATLC has sponsored four tribal dance groups to different State level exhibitions and festivals.
- The Academy has successfully organised four tribal language training programmes in Saora language at Paralakhemundi in Gajapati district.
- Development of Languages Hand Books in four Tribal languages.

# SC/ST Research & Training Institute (SCSTRTI)

This is the premier and oldest tribal research institute in the country established in 1952 which publishes the research journal titled 'the ADIVASI' (bi-annual) under the theme-Tribal Festivals of Odisha and PVTG and Tribal Development along with five books on tribals. Its activities during 2010-11 are summarised below:

 Three research studies were undertaken and completed: (i) selected tribal communities recording population decline in 2001 Census. (ii) diagnostic study on low performing schools in SC/ST development department and (iii) magnitude of food insecurity in tribal areas and food security measures implemented by Government and its impact.

- The Institute has undertaken evaluation studies of 17 Micro projects titled Mid Term Evaluation of CCD plan on functioning of Micro projects and its impact on livelihoods of the PVTG of Odisha.
- During 2011-12, the Institute conducted a number of training programmes, workshops and seminars which were attended by various government officials, teachers, students, NGO functionaries and PRI members.
- The Institute has a tribal museum on 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 Odisha Ltd (TDCCOL)

This is the apex organisation that functions mainly in the TSP area since 1971-72. Its field outlets include 15 branch offices located in tribal areas of 10 districts. It has 97 storage go-downs with 38,029 MT capacity 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 consumptioncum-production loans to tribals in order to protect them from money lenders. During the period 1971-72 to 2010-11, the corporation purchased goods worth Rs.544.36 crores and sold articles worth Rs.558.49 crores. Though the Corporation has shown profit since the last four years, its accumulated loss was Rs.57.87 crore by the end of 2010-11.



Annexure 8.1: Growth of Literacy in Odisha vis-à-vis India

Year		Odisha (lit	eracy in %)		India (literacy in %)				
	Male	Female	All	Growth	Male	Female	All	Growth	
1	2	3	4	5	6	7	8	9	
1951	27.32	4.52	15.80	-	27.16	8.86	18.33	-	
1961	34.68	8.65	21.66	5.86	40.40	15.35	28.30	9.33	
1971	38.29	13.92	26.18	14.52	45.96	21.97	34.45	6.15	
1981	46.39	20.60	33.62	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	64.80	13.20	
2011	82.40	64.36	73.45	10.37	82.14	65.46	74.04	9.24	

Source: Census of India 1951-2011

Annexure 8.2: Number of Primary Schools, Enrolment, Teachers and Gross/Net Enrolment Ratio in Odisha

Year	Number of primary schools	No. of Teachers	Primary school / 100 sq. km.	Teacher Pupil Ratio	Enrollment ('000)	Gross Enrollment Ratio (%) (6-11 years)	Net Enrollment Ratio (%) (6-11 years)
1	2	3	4	5	6	7	8
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	114,791	27.0	1:41	4,710	NA	NA
2001-02	42,824	116,231	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	115,351	29.5	1:40	4,602	83.59	78.58
2006-07	46,722	114,105	30.01	1:39	4,485	93.49	92.02
2007-08	48,402	123,765	31.1	1:37	4,513	96.66	84.23
2008-09	50,062	125,434	32.1	1:37	4,587	97.48	92.72
2009-10	52,972	137,833	34.0	1:33	4,493	98.04	92.88
2010-11	54,144	136,407	34.8	1.32	4,489	99.60	91.83
2011-12	55,106	133,262	35.4	1:30	4,433	99.69	93.27

NA: Not Available Source: OPEPA

Annexure 8.3: Dropout Rates in Primary Schools of Odisha

Year	All Categories			Scl	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	42.30	41.40	41.80	50.50	54.30	52.40	61.70	66.50	64.10	
2001-02	42	40	41	50	52	51	61	65	63	
2002-03	32.30	36.50	34.40	35.80	38.70	37.20	49.30	57.40	53.30	
2003-04	31.90	35.40	33.60	34.60	36.60	35.60	48.20	56.60	52.40	
2004-05	31.40	32.70	32	34	35.60	34.80	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	
2010-11	2.35	2.86	2.60	3.08	3.89	3.38	4.12	5.35	4.85	
2011-12	0.25	0.62	0.43	2.15	2.68	2.41	3.51	2.80	3.10	

<sup>\*2005-06</sup> year data based on Odisha Child Census, 2005

Source: OPEPA

Annexure 8.4: Position of Upper Primary Schools in Odisha

Year	No. of Upper Primary Schools	No. of Teachers	Upper Primary School/100 sq.km.	Teacher Pupil Ratio	Enrollment ('000)	Gross Enrollment Ratio (GER)	Net Enrollment Ratio (NER)
1	2	3	4	5	6	7	8
1947-48	286	1,483	0.18	1:26	32	NA	NA
1950-51	501	2,569	0.32	1:16	40	NA	NA
2000-01	12,406	40,706	7.69	1:26	1,057	NA	NA
2001-02	11,510	38,914	7.14	1:27	1,055	NA	NA
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	1,363	79.37	65.96
2004-05	15,893	31,393	10	1:44	1,383	81.29	69.04
2005-06	15,737	32,985	10	1:37	1,225	83.30	71.84
2006-07	17,322	39,832	11.11	1:47	1,817	100.31	73.11
2007-08	18,224	49,413	11.11	1:40	1,997	104.28	76.62
2008-09	19,057	55,832	12.50	1:38	2,128	99.06	85.52
2009-10	22,209	56,758	14.20	1:37	2,128	104.11	85.68
2010-11	24,377	53,994	15.70	1.39	2,090	105.45	83.84
2011-12	23,239	53,264	15.70	1:25	2,087	104.93	90.84

Source: OPEPA

Annexure 8.5: Dropout Rates in Upper Primary Schools in Odisha

Year	All Categories			Scl	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	52.90	61.10	57	49.70	69.70	59.70	70.90	77.10	74	
2001-02	52	60.50	56.20	49	68	58.50	70	76	73	
2002-03	57.70	60.50	59.10	45.70	49.20	47.50	75	80.30	77.70	
2003-04	56.50	58.60	57.50	60.90	65.30	63.10	73	78.50	75.80	
2004-05	48.20	50.10	49.10	47	63	55	67	72	69.50	
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	18.80	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	9.61	8.89	8.47	6.82	9.72	
2010-11	7.15	7.31	7.23	6.86	6.05	6.21	7.18	6.96	7.85	
2011-12	3.85	2.23	3.07	2.20	1.23	1.73	3.20	6.31	4.70	

Source: Director, Elementary Education, Odisha and Director, OPEPA

Annexure 8.6: Dropout Rates in High Schools of Odisha

Year	A	All Categorie	s	Sc	Scheduled Castes			Scheduled Tribes		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
1	2	3	4	5	6	7	8	9	10	
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	59.6	69	71	70	74.6	71	72.8	
2008-09	58	60.6	59.3	68.5	70.7	69.6	73	70	71.6	
2009-10	52.8	55.2	54.0	65.3	67.5	64.4	70.6	67.7	69.2	
2010-11	49.9	52.1	51.0	60.0	63.0	61.0	66.7	64.0	65.4	
2011-12	47.2	51.8	49.5	59.2	61.8	60.5	65.9	62.7	64.3	

Source: Director, Elementary Education, Odisha

Annexure 8.7: Results of Secondary Level Examination (Appeared, Passed and % of success) in Odisha (In '000)

Year	BSE, Odisha			СВ	SE, New De	lhi	ICS	E, New Del	hi
	Appeared	Passed	% of success	Appeared	Passed	% of success	Appeared	Passed	% of success
1	2	3	4	5	6	7	8	9	10
2003	376.3	166.18	44.20	7.17	6.05	84.30	4.73	4.41	93.20
2004	395.01	182.74	46.20	7.58	6.53	86.10	5.02	4.64	92.40
2005	350.41	183.37	52.30	7.91	7.07	89.30	5.15	4.8	93.20
2006	411.37	204.54	49.72	8.4	7.48	88.60	5.41	5.19	95.90
2007	394.32	223.23	56.62	9.34	8.78	94	5.43	5.37	98.90
2008	433.14	207.57	47.92	10.16	9.63	94.85	5.64	5.55	93.30
2009	397.23	236.62	59.56	10.09	9.59	95.08	5.51	5.40	98
2010	423.76	291.57	66.17	10.82	10.33	95.50	5.50	5.40	98.00
2011	532.98	312.69	58.67	12.26	12.23	99.80	5.84	5.75	98.50
2012 Annual	504.00	334.73	67.90	13.65	13.57	99.40	5.94	5.87	98.8

NR: Not Reported

Source: Board of Secondary Education, Odisha; CBSE, India and ICSE, India

Annexure 8.8: Results of Higher Secondary Education (+2) under CHSE

Year		Appeared				Passed			Perce	Percentage of success	sess	
	Arts	Science	Comm	Total	Arts	Science	Comm	Total	Arts	Science	Comm	Total
1	2	3	4	5	9	2	8	6	10	11	12	13
2004	100090	43388	12500	1,55978	79393	33189	9803	122,385	62	76.50	78.40	78.50
2002	103320	42322	12083	157725	72988	30119	9055	112162	71	71.20	74.90	71.10
2006	105600	45561	12102	163263	64288	31389	9143	104812	61	70.40	76.70	64.20
2007	114597	49120	13065	176784	65427	29555	9080	103664	22	60.20	69.50	58.60
2008	121676	54751	15340	191767	73811	34848	11090	119749	61	63.70	72.30	62.50
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	69.02	73.92	74.40	71.82
2011	159866	26280	22760	238906	109230	41359	15553	166142	68.32	73.48	68.33	69.54
2012	172895	62869	25029	267303	122132	50325	16777	189234	70.63	72.50	67.03	70.79
		,										

N.B.-Besides, the result in vocational (+2) were 5955 students appeared, 4680 passed with 78.6% success

Annexure 8.9: Results of Higher Secondary Education in Odisha, CBSE and ICSE

Year			CE	CBSE					ICSE	ш		
	Total Schools	Stud	Students appeared	Students passed	ents sed	% of	Total schools	Students appeared	ents ared	Students passed	s passed	% of success
		Total	Girls	Total	Girls			Total	Girls	Total	Girls	
1	2	က	4	2	9	2	8	6	10	Π	12	13
2001	51	2172	298	1772	718	81.6	15	840	325	745	283	89
2002	54	2676	1108	2140	872	80	16	973	398	888	368	91
2003	28	2859	1127	2266	925	79.3	16	1069	400	926	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	06
2007	72	4012	1620	3605	1462	89.9	22	1173	474	1142	461	26
2008	77	4525	1860	4046	1694	89.4	21	1388	621	1342	609	26
2009	77	5429	2279	4903	2089	90.3	21	1458	584	1407	570	26
2010	88	6186	2579	5551	2341	89.7	22	1593	693	1501	999	94.22
2011	95	6468	2735	5855	2490	90.5	24	1522	646	1445	622	94.94
2012	100	7051	3028	6249	2696	88.6	26	1486	229	1401	642	94.28
					,							

N.B.-Besides, the result in vocational (+2) were 5955 students appeared, 4680 passed with 78.6% success

### Annexure 8.10: Financial Position of SSA and NPEGEL

Rs. In Crore

Year	Total	receipt	Expend	diture
	SSA	NPEGEL	SSA	NPEGEL
1	2	3	5	6
2001-02	1.50	0	0.54	0
2002-03	56.96	0	25.42	0
2003-04	151.97	3.59	157.93	0
2004-05	296.64	21.20	251.90	18.80
2005-06	392	27.91	343.26	28.39
2006-07	561.63	45.90	613.87	43.92
2007-08	903.01	34.48	739.57	30.01
2008-09	701.86	15.14	796.68	22.10
2009-10	1026.12	17.63	1035.62	23.95
2010-11	1271.10	0.31	1095.88	28.52
2011-12	1732.89	13.49	1566.91	22.50

Source: Director, Elementary Education, Odisha and Director, OPEPA

Annexure 8.11: Birth rate, Death Rate and Infant Mortality rate in Odisha/All India

Year		Odisha			All India	
	Birth rate	Death rate	IMR	Birth rate	Death rate	IMR
1	2	3	4	5	6	7
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
2009	21.0	8.8	65	22.5	7.3	50
2010	20.5	8.6	61	22.1	7.2	47
2011	20.1	8.5	57	21.8	7.1	44

Source: Sample Registration System Bulletin

Annexure 8.12: Incidence of Selected Diseases in Odisha

In '000

Sl.	Diseases		2009			2010			2011	
No.		OPD	IPD	Total	OPD	IPD	Total	OPD	IPD	Total
1	2	3	4	5	6	7	8	9	10	11
1	Acute Respiratory infector	1005.04	27.11	1032.15	1324.63	16.45	1341.08	791.76	80.44	872.20
2	Acute diarrhea	576.95	86.48	663.42	651.02	25.59	676.61	357.65	274.84	632.49
3	Enteric fever	43.27	7.06	50.33	43.14	2.20	45.33	34.74	25.16	59.90
4	Pneumonia	37.71	7.19	44.90	28.56	4.26	32.82	26.19	18.11	44.30
5	Pulmonary TB	143.98	21.59	165.57	NA	NA	NA	NA	NA	NA
6	Others	302.40	30.72	333.12	8.6	0.42	9.02	112.31	31.06	143.37
	Total	2109.35	180.15	2289.50	2055.95	48.91	2104.86	1322.65	429.61	1752.26

Source: Directorate of Health Services, Odisha, Bhubaneswar

Annexure 8.13: Distributions of all Deaths by Major Cause Groups in Odisha, 2010 (Provisional)

Sl.	Major Causes	Ru	ral	Urb	an	To	otal
No.		Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8
1	Dysentry/Diarrhoea	1024	0.55	422	0.90	1446	0.62
2	TB	2429	1.30	888	1.89	3317	1.42
3	Anemia	4313	2.32	2092	4.45	6405	2.75
4	Heart Disease	18701	10.04	6788	14.44	25489	10.93
5	Asthma	7189	3.86	1221	2.60	8410	3.60
6	Birth Injury	2288	1.23	1255	2.67	3543	1.52
7	Paralysis	11216	6.02	2871	6.11	14087	6.04
8	Senility	74813	40.16	10388	22.10	85201	36.52
9	Others	64303	34.52	21079	44.84	85382	36.60
	Total	186276	100.00	47004	100.00	233280	100.00

Source: Directorate of Health Services, Odisha, Bhubaneswar

Annexure 8.14: Child Birth Status in Odisha

Year	G)	FR			Birth	Order			
	Odisha	India	1 <sup>st</sup>		$2^{ m nd}$		3 <sup>rd</sup> & Higher		
			Odisha	India	Odisha	India	Odisha	India	
1	2	3	4	5	6	7	8	9	
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	
2009	78.1	86.5	39.8	39.1	31.1	30.6	29.1	30.3	
2010	83.9	75.3	43.1	41.5	30.5	30.5	26.4	28.0	

Source: Directorate of Health and Family Welfare, Odisha

# Annexure 8.15: Progress of Family Welfare Programme in Odisha

Figures in lakh

Year	Sterilizations	IUD insertion	Conventional Contraceptive users	Oral pill users	Medical Termination of pregnancy	No. of equivalent Sterilization
1	2	3	4	5	6	7
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	1.90	0.60	2.14
2008-09	1.22	1.37	3.02	1.8	0.44	2.01
2009-10	1.24	1.36	2.57	1.75	0.27	2.03
2010-11	1.40	1.50	2.17	1.74	0.26	2.21
2011-12	1.45	1.43	1.94	1.88	0.21	N.A

Source: Directorate of F. & W, Odisha, Bhubaneswar

Annexure 8.16: Nutritional Status of 0-3 Years Children in Odisha

<b>4</b>								
% out of col.3	14	24.44	22.32	20.89	19.76	17.97	17.06	16.09
Grade-II, III & IV	13	541501	471717	465438	445183	417706	407082	365418
% out of col.3	12	1.18	1.15	1.30	1.18	1.07	1.16	1.13
Grade-II & IV	111	26092	24254	29036	26699	24857	27668	25750
% out of col.3	10	23.27	21.17	19.59	18.57	16.90	15.90	14.96
Grade-II	6	515406	447463	436402	418484	392849	379414	339668
% out of col.3	8	35.75	36.35	36.50	36.36	36.46	36.51	35.51
Grade-I	2	791999	768398	813313	819409	847405	871227	806267
% out of col.3	9	39.32	41.19	42.29	43.66	45.57	46.43	48.40
Normal	2	871006	870614	942209	983921	1059106	1107764	1098817
% out of Col.2	4	94.30	95.61	94.97	94.69	94.33	95.87	95.10
Children weighed	3	2215258	2113830	2228022	2253376	2324217	2386073	2270502
Total children	2	2349219	2210798	2346066	2379699	2464004	2488886	2387617
Year	1	2004	2002	2006	2007	2008	2009	2010(till Oct2010)

Source: Directorate of Family Welfare, Odisha, Bhubaneswar

Annexure 8.17 (A): Medical Institutions in Odisha with Beds as on 31st March 2012 (Government Sector)

Sl. No.	Districts	Total Hospital	СНС	PHC (N)	MHU	Total Med. Instn.	Health sub-centres	Beds
1	2	3	4	5	6	7	8	9
1	Angul	4	10	31	1	46	166	472
2	Balasore	3	16	68	2	89	275	636
3	Bargarh	2	14	46	5	67	204	249
4	Bhadrak	4	7	50	1	62	178	409
5	Balangir	5	15	42	15	77	226	444
6	Boudh	1	5	12	2	20	67	167
7	Cuttack	13	18	57	0	88	332	2440
8	Deogarh	2	4	7	1	14	42	118
9	Dhenkanal	7	10	32	5	54	167	385
10	Gajapati	2	8	20	8	38	136	259
11	Ganjam	5	30	89	0	124	460	1722
12	Jagatsinghpur	1	9	37	1	48	189	268
13	Jajpur	4	12	56	1	73	260	482
14	Jharsuguda	2	6	15	1	24	66	182
15	Kalahandi	4	16	43	19	82	242	525
16	Kandhamal	6	14	36	17	73	172	494
17	Kendrapara	2	9	45	0	56	227	268
18	Keonjhar	8	17	61	12	99	351	533
19	Khordha	21	13	46	1	81	202	965
20	Koraput	2	16	48	15	81	307	354
21	Malkangiri	4	8	25	10	47	158	286
22	Mayurbhanj	8	28	82	20	138	589	852
23	Nabarangpur	2	11	39	11	63	289	236
24	Nayagarh	1	12	37	1	51	166	489
25	Nuapada	1	6	17	7	31	95	180
26	Puri	6	16	45	1	68	241	684
27	Rayagada	4	11	36	17	68	235	293
28	Sambalpur	4	11	31	4	50	167	1349
29	Sonepur	3	6	18	7	34	89	161
30	Sundargarh	8	20	56	14	98	390	635
	Odisha	140	378	1227	199	1944	6688	16537

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, Odisha, Bhubaneswar

 $\mbox{N:B}$  - 116 PHC converted to CHC, 35 area hospital converted to CHC

Annexure 8.17 (B): Medical Institutions in Odisha with Beds as on  $31^{\rm st}$  March 2012 (Private Sector)

Sl. No.	Districts	Medical Institution	Nos. of Beds
1	2	3	4
1	Dhenkanal	20	116
2	Angul	36	191
3	Bhadrak	18	224
4	Balasore	40	275
5	Khorda	180	3174
6	Boudh	1	6
7	Kandhmal	15	80
8	Cuttack	533	4398
9	Ganjam	83	720
10	Jajpur	23	151
11	Kalahandi	131	320
12	Koraput	45	6
13	Malkangiri	13	0
14	Jagatsinghpur	24	66
15	Keonjhar	24	90
16	Mayurbhanj	26	152
17	Nawarangpur	13	70
18	Gajapati	9	146
19	Nayagarh	20	87
20	Sonepur	16	9
21	Nuapada	9	164
22	Puri	47	195
23	Kendrapada	13	60
24	Rayagada	19	284
25	Jharsuguda	14	142
26	Sambalpur	71	396
27	Bolangir	66	130
28	Bargarh	45	267
29	Sundargarh	71	963
30	Deogarh	-	-
	Total	1,625	12,882

Annexure 8.18: Government Ayurvedic & Homoeopathic Medical Institutions & Services in Odisha

Year	Type of institution	Hospitals	Dispensaries	Doctors in position	Bed	Patient treated (in lakh)
1	2	3	4	5	6	7
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	79.20
	Ayurvedic	5	619	584	258	74.50
	Unani	-	9	9	-	1.07
2007	Homoeopathic	4	560	468	125	78.70
	Ayurvedic	5	619	563	418	73.40
	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	82.70
	Ayurvedic	5	619	603	418	69.07
	Unani	0	9	6	0	1.02
2010	Homoeopathic	4	561	475	125	71.56
	Ayurvedic	5	619	603	468	65.99
	Unani	0	9	6	0	1.15
2011	Homoeopathic	4	561	401	125	56.34
	Ayurvedic	5	619	577	468	58.98
	Unani	-	9	5	-	0.80

Source: Directorate of Indian Systems of Medicine and Homoeopathy, Odisha

Annexure 8.19: Family Welfare Programme & Immunisation Programme Conducted under ESI Scheme in Odisha
In numbers

Name of the programme	Achievement During										
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12			
1	2	3	4	5	6	7	8	9			
Family Welfare	Family Welfare Programme										
Vasectomy	4	17	2	Nil	Nil	1	13	14			
Tubectomy	259	217	86	182	225	57	65	72			
IUD	185	112	98	58	64	115	72	48			
MTP	223	194	116	128	165	115	100	65			
Oral Pills	4500	2564	3094	2765	301	3361	9805	7445			
Nirodh	15758	10902	11564	11028	6215	11463	3320	11292			
Immunisation	Programme										
BCG	1408	956	961	783	710	611	1122	1242			
Polio	10658	7806	6717	5004	3090	3779	7285	6239			
DPT	2990	2120	7350	2355	2420	2080	5663	6053			
T. Toxoid	14559	11683	8872	12596	3870	8608	11787	10089			
Measels	NA	NA	NA	NA	NA	736	728	NA			

Source: Directorate of ESI, Bhubaneswar

Annexure 8.20: System Load in Government Hospitals of Odisha

Year	Doctors per lakh population	Beds per 10,000 population	In patient to total population	Out patient to total population	Total patient to total population	Bed turnover rate	Bed occupant rate
1	2	3	4	5	6	7	8
2005-06	12.88	3.96	6.61	64.20	70.82	166.90	91.40
2006-07	12.71	3.91	6.59	64.01	70.61	168.60	92.40
2007-08	12.55	3.86	6.55	55	61.56	169.80	93
2008-09	12.39	3.81	7.30	58.04	65.34	191.50	104.93
2009-10	10.56	3.76	8.78	60.62	67.41	233.39	127.84
2010-11	8.24	3.71	9.45	64.42	73.88	254.26	139.32

Source : Directorate of Family Welfare, Odisha & Directorate of Health, Odisha, Bhubaneswar

Annexure 8.21: Achievement under NPCB in Odisha

Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8
Student screened	317897	359382	302128	483409	419274	564225	38873
Students detected with refractive error	17662	18349	14680	26078	19922	22906	19705
Free spectacles distributed	7965	9202	7355	10942	9186	11624	11787
Health worker trained	3734	-	-	-	-	309	Nil
No. of teachers	2222	-	-	1464	556	277	316

Annexure 8.22: Status of IDD Survey in Odisha

Year of survey	Name of the District	IDD prevalence rate	Survey conducted by
1	2	3	4
1987	Sundergarh*	33.50	DGHS, New Delhi
1989	Puri *	19.34	-do-
1998	Cuttack *	21.61	-do-
1999	Keonjhar*	14.90	-do-
2001	Nuapada*	14.40	VSS MC, Burla, SBP
2001	Balasore*	0.83	SCB Med. College, Cuttack
1995-99	Bargarh*	10.80	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	Balangir*	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*	19.70	MKCG MC, Berhampur
2006	Sundergarh (Re survey)*	NR	CGS Team, DGHS, New Delhi
2007	Cuttack (Resurvey)*	33.60	Central Goitre Survey Team, DGHS, New Delhi
2009	Malkangiri*	48.30	MKCG MC, Berhampur
	Nabarangpur*	21.70	MKCG MC, Berhampur
	Angul*	28.20	SCB Med. College, Cuttack
	Dhenkanal*	30.20	SCB Med. College, Cuttack
	Khordha*	24.10	SCB Med. College, Cuttack

NB:- \* Identified as endemcity of Iodine Deficiency related disorder area MC: Medical College

Source: Directorate of Health Services, Odisha, Bhubaneswar

Annexure 8.23: Malaria Epidemiological Situation in Odisha 2004 to 2012

Year	BSC&E	Positive cases	PF	Death	ABER	SPR	Pf%	API
1	2	3	4	5	6	7	8	9
2004	4369409	416771	351737	283	11.32	9.54	84.40	10.79
2005	4848624	396573	342658	255	12.36	8.18	86.40	10.11
2006	4912657	372710	324893	257	12.33	7.59	87.17	9.35
2007	4945551	371819	323150	221	12.22	7.52	86.90	9.19
2008	5029677	375430	329631	239	12.23	7.46	87.80	9.13
2009	5015489	380904	336047	198	12.00	7.59	88.22	9.12
2010	5240458	395651	350428	247	12.30	7.55	88.57	9.29
2011	4650799	308968	281577	99	11.13	6.41	91.47	7.13
2012	3885470	209443	193805	51	NA	5.39	92.53	NA

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)

Source: Directorate of Health Services, Odisha, Bhubaneswar

Annexure 8.24: HIV Scenario in Odisha

Particulars	2004	2005	2006	2007	2008	2009	2010	2011
1	2	3	4	5	6	7	8	9
Counseled	22820	54752	131671	368278	387665	435127	532790	NA
Tested	5363	17058	56689	172760	231015	335395	367691	NA
HIV +ve	595	1251	2217	3138	3635	4020	3819	4845
AIDS cases	186	184	149	28	133	308	131	67
Death cases due to AIDS	160	184	114	28	133	297	108	97

Source: Odisha State AIDS Control Society

Annexure 8.25: District wise HIV Scenario in Odisha as on 31st March, 2012

Sl. No.	Districts		HIV +ve		Percentage	AIDS	Percentage	Death due to	Percentage
110.		Gen.	ANC	Total		cases		AIDS	
1	2	3	4	5	6	7	8	9	9
1	Angul	717	65	782	3.2	60	3.9	56	4.2
2	Balangir	486	36	522	2.1	55	3.5	55	4.1
3	Balasore	706	34	740	3.0	52	3.4	52	3.9
4	Bargarh	301	17	318	1.3	7	0.5	7	0.5
5	Boudh	21	3	24	0.1	4	0.3	4	0.3
6	Bhadrak	456	23	479	2.0	73	4.7	71	5.3
7	Cuttack	3185	57	3242	13.2	118	7.6	45	3.4
8	Deogarh	44	7	51	0.2	2	0.1	2	0.2
9	Dhenkanal	159	12	171	0.7	15	1.0	13	1.0

(Contd...)

Sl.	Districts		HIV +ve		Percentage	AIDS	Percentage	Death	Percentage
No.		Gen.	ANC	Total		cases		due to AIDS	
1	2	3	4	5	6	7	8	9	9
10	Gajapati	456	49	505	2.1	6	0.4	5	0.4
11	Ganjam	8895	418	9313	38.0	501	32.3	431	32.4
12	Jagatsinghpur	133	12	145	0.6	18	1.2	18	1.4
13	Jajpur	283	11	294	1.2	46	3.0	44	3.3
14	Jharsuguda	148	12	160	0.7	6	0.4	5	0.4
15	Kalahandi	367	9	376	1.5	4	0.3	4	0.3
16	Kandhamal	49	2	51	0.2	15	1.0	12	0.9
17	Kendrapara	241	21	262	1.1	74	4.8	73	5.5
18	Keonjhar	200	11	211	0.9	6	0.4	6	0.5
19	Khordha	1076	48	1124	4.6	52	3.4	44	3.3
20	Koraput	1305	60	1365	5.6	158	10.2	148	11.1
21	Malkangiri	130	9	139	0.6	11	0.7	6	0.5
22	Mayurbhanj	370	24	394	1.6	15	1.0	12	0.9
23	Nabarangpur	488	19	507	2.1	21	1.4	19	1.4
24	Nayagarh	522	20	542	2.2	8	0.5	7	0.5
25	Nuapada	258	7	265	1.1	19	1.2	19	1.4
26	Puri	522	12	534	2.2	73	4.7	66	5.0
27	Rayagada	503	37	540	2.2	67	4.3	52	3.9
28	Sambalpur	1029	44	1073	4.4	39	2.5	33	2.5
29	Sonepur	35	1	36	0.1	0	0.0	0	0.0
30	Sundergarh	335	19	354	1.4	26	1.7	21	1.6
	Odisha	23420	1099	24519	100.0	1551	100.0	1330	100.0

Source: Odisha State AIDS Control Society

Annexure 8.26: Number of HIV +ve Persons by Age, Sex and Mode of Transmission (2002-12)

Sl. No.	Particulars	Male	Female	Total	Percentage
1	2	3	4	5	6
A. Age Gro	up				
i.	Less than 14	912	711	1023	7.00
ii.	15-24	949	1219	2168	9.00
iii.	25-49	12438	6054	18492	76.00
iv.	50+	875	227	1102	4.00
v.	Not specified	30	5	35	0.00
vi	ANC	0	1099	1099	4.00
	Total	15204	6996	20596	100.00
B. Routes	of Transmission				
i.	Sexual	13191	7072	20263	82.64
ii.	Blood/Blood products	139	99	238	0.97
iii.	Infected syringes & needles	455	33	488	1.99
iv.	Parent to child transmission	873	689	1562	6.37
v.	No. specified	546	323	869	3.54
vi.	ANC	0	1099	1099	4.48
	Total	15204	9315	24519	100.00

Source: Odisha State AIDS Control Society

Annexure 8.27: Achievement of Rural Water Supply Programme in Odisha

Year	PWS commissioned	Spot sources (TW+CS)	Drinking water in schools
1	2	3	4
2004-05	94	10475	5794
2005-06	134	22714	9476
2006-07	65	12142	3768
2007-08	1010	9008	754
2008-09	2020	13126	156
2009-10	900	7484	42
2010-11	907	12297	3207
2011-12	850	16795	2901

Source: Odisha State AIDS Control Society

Annexure 8.28: Status of Swajaladhara Programme in Odisha

Year	Funds allocated (Rs. in lakh)	Funds released (GoI) (Rs. in lakh)	Schemes sanctioned	Completed during the year	Schemes completed	Expenditure (Rs. in lakh)
1	2	3	4	5	6	7
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	499.50	130	287	72	282.26
2007-08	-	-	-	-	-	-
2008-09*	32.77	31.47	7	7	7	33.05
2009-10	-	-	-	-	-	-
Total	4707.64	4258.40	1482	1240	1240	3547.57

 $<sup>^*</sup>$  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, Odisha

Sl.	Scheme	Item	2	2007-08	2008	8-09	2009	-10	2010	-11	201	1-12
No.			Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Coverage of habitation	Sinking of tube wells										
a	Not covered	do	4169	4264	7387	1325	1500	3357	353	353	0	0
b	Partly covered	do	4031	2288	1903	1018	10847	3062	3420	5591	4635	5238
2	Coverage of schools	do	1000	629	790	231	36	42	5453	3207	4000	3592
3	Coverage of quality affected habitations	Piped water supply	5577	1827 + 1250 through spot sources	16435	16435	2000	2114	1721	1581	1692	1544

Source: Rural Water Supply and Sanitation Department, Bhubaneswar

# Annexure 8.30: Financial Status of TSC (Total Sanitation Campaign) at the end of 2011-12

Rs. in lakh

Share	Total outlay	Released	Expenditure	% of against release
1	2	3	4	5
Central	10,4,509.1	51,676.92	35,006.21	67.7
State	37,841.95	17,558.52	13,277.91	75.6
Community	13,853.78	5,508.63	5356.82	97.4
Total	156,204.83	74,744.07	53,647.94	71.8

Source: Odisha Sewerage Watershed Mission

Annexure 8.31: Achievement under Total Sanitation Campaign Programme

Component	Target	2001-	2002-	2003-	2004-	2005-	2006-	2007-	2008-	2009-	2010-	2011-	Total
		02	03	04	05	06	07	08	09	10	11	12	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Individual	7056648	13332	37588	228068	313124	298768	389802	475904	323802	539077	853303	359171	3831939
House Hold													
Latrine													
(IHL)													
Sanitary	818	0	0	1	0	8	2	2	5	30	18	45	111
Complex													
School	70663	2	1421	4103	1781	2369	7458	15763	16623	14262	3418	1984	69184
Toilets													
Anganwadi	25160	0	0	0	25	853	5207	4479	3718	4866	1459	3320	23977
toilets													

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 2011-12

Sl.	District	Individual	Household	Latrine	5	School Toi	lets	Ang	anwadi To	ilets
No.		Target	Cum. Ach.	% of Cum. Ach.	Target	Cum. Ach.	% of Cum. Ach.	Target	Cum. Ach.	% of Cum. Ach.
1	2	3	4	5	6	7	8	9	10	11
1	Angul	186809	90057	48.2	2040	2040	100.0	795	795	100.0
2	Balasore	342234	322708	94.3	2400	3795	158.1	915	1632	178.4
3	Bargarh	384003	154186	40.2	3787	2393	63.2	1849	388	21.0
4	Bhadrak	315882	115901	36.7	2393	1770	74.0	361	630	174.5
5	Balangir	218481	133539	61.1	1855	2400	129.4	1190	885	74.4
6	Boudh	92672	35893	38.7	1033	946	91.6	258	248	96.1
7	Cuttack	364874	185335	50.8	2426	2328	96.0	42	72	171.4
8	Deogarh	62958	34256	54.4	620	635	102.4	190	221	116.3
9	Dhenkanal	190307	90006	47.3	2065	2065	100.0	690	591	85.7
10	Gajapati	110192	35633	32.3	1438	1060	73.7	630	607	96.3

(Contd...)

Sl.	District	Individual	Household	Latrine	5	School Toi	lets	Anganwadi Toilets		
No.		Target	Cum. Ach.	% of Cum. Ach.	Target	Cum. Ach.	% of Cum. Ach.	Target	Cum. Ach.	% of Cum. Ach.
1	2	3	4	5	6	7	8	9	10	11
11	Ganjam	451316	260842	57.8	4235	4112	97.1	2505	2331	93.1
12	Jagatsinghpur	212333	149481	70.4	2434	2434	100.0	955	144	15.1
13	Jajpur	354399	175810	49.6	3414	3368	98.7	1355	155	11.4
14	Jharsuguda	67929	33992	50	811	811	100.0	433	433	100.0
15	Kalahandi	296373	147660	49.8	2330	2330	100.0	676	676	100.0
16	Kandhamal	155540	37194	23.9	1812	1730	95.5	937	579	61.8
17	Kendrapara	216192	126228	58.4	2583	2583	100.0	1064	1026	96.4
18	Keonjhar	263448	87373	33.2	5428	5010	92.3	1590	654	41.1
19	Khordha	230593	129505	51.7	2431	2431	100.0	150	184	122.7
20	Koraput	264201	96157	36.4	2659	2587	97.3	1130	977	86.5
21	Malkangiri	131708	75476	57.3	1650	1545	93.6	534	522	97.8
22	Mayurbhanj	562768	270425	48	4642	4268	91.9	1698	1698	100.0
23	Nabarangpur	254495	77332	30.4	1838	1733	94.3	378	961	254.2
24	Nayagarh	207312	75018	45.8	1993	1911	95.9	34	552	1623.5
25	Nuapada	128790	44166	34.3	941	878	93.3	585	578	98.8
26	Puri	231132	117087	50.6	2250	1869	83.1	1130	52	4.6
27	Rayagada	212204	68015	32	2931	1622	55.3	1001	421	42.1
28	Sambalpur	148615	63990	43.1	2217	2207	99.5	480	473	98.5
29	Sonepur	107118	56684	52.9	1563	1563	100.0	214	214	100.0
30	Sundargarh	291770	162819	55.8	2444	2776	113.6	1391	1490	107.1
	Odisha	7056648	3472768	49.2	70663	67200	95.1	25160	20657	82.1

Source: OSWSM

Annexure 8.33: Achievement of urban water supply and sewerage schemes under State plan during 2011-12

Scheme	No. of p	rojects	Budget provision	Expenditure
	Sanctioned	Completed	(Rs. Crore)	(Rs. in crore)
1	2	3	4	5
Urban Water Supply Programme	721	321	49.21	49.21
Urban Sewerage	82	67	1.92	1.92
Hand pump tube wells	210	209	1.46	1.46
Capacity Development of PHEO	-	-	1.00	1.00
RLTAP	23	7	3.37	3.26
SLB	-	-	0.20	0.20
Total	1036	604	57.12	57.02

Source: Housing and urban Development Department

#### Annexure 8.34: Beneficiaries Covered under ICDS Programme

#### In lakh numbers

Programme/ Scheme	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8
Supplementary nutrition	30.86	33.86	49.85	48.79	49.10	49.10	45.51
Health check-up	9.3	8.8	8.5	8.66	10.68	12.65	14.56
Nutrition and health Education	5.7	5.9	6.3	6.5	7.3	8.70	8.70
Referral services	6.62	6.7	6.6	6.5	7.05	7.10	4.90
Pre-school education enrolled	10.58	10.7	13	14.38	16.08	16.80	16.05
Immunisation							
i. D.P.T	0	6.93	8.00	6.30	6.91	5.73	4.48
ii. Polio	0	6.86	6.79	6.40	6.80	5.63	4.33
iii. BCG	0	7.20	6.95	6.60	6.41	5.61	4.41
iv. Measles	0	6.75	6.77	5.80	6.72	5.67	4.57
v. T.T	0	6.85	6.59	6.80	6.98	7.41	5.01

# Annexure 8.35: Progress of Immunization Programme in Odisha

In lakh doses

Programme	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8
TT (PW)	8.14	8.32	8.2	8.01	7.83	7.67	7.73
DPT	8.51	8.18	7.99	7.15	8.10	7.17	7.27
Polio	8.53	8.2	7.99	7.69	8.00	7.2	6.61
BCG	9.26	8.7	8.48	8.33	8.19	7.85	8.02
Measles	8.4	7.88	7.82	6.68	7.99	6.98	7.08
DT	10.34	9.49	9.1	6.85	9.27	5.68	5.53
TT (10 Yrs)	8.49	8.8	8.74	8.28	8.77	8.74	7.62
TT (16 Yrs)	7.59	7.87	7.87	7.46	8.14	8.15	7.22

Source: Directorate of F. & W, Bhubaneswar, Odisha

# Annexure 8.36: Scholarship for the Students with Disability (2011-12)

Rs In lakh

Sl.No.	Scholarship (for students with disability)	Existing Rate	Revised Rate
1	2	3	4
Inside th	ne 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. 120/- 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		
not avail	s pursuing normal course of studies in technical and vocational field lable in the State. (This has been introduced for the first time) Readers' ce (for students with visual impairment only)	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, Odisha

Annexure 8.37: Achievement under NHFDC Loan Scheme in Odisha

Year	Sanct	ioned	Disb	ursed	No. of cases
	No.	Amount	No.	Amount	refunded
1	2	3	4	5	6
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 Odisha (1991 & 2001)

		All category		Sc	heduled Cas	ste	Sc	cheduled Tri	be
	Person	Male	Female	Person	Male	Female	Person	Male	Female
1	2	3	4	5	6	7	8	9	10
Census 19	91								
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 20	001								
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
Census 20	)11								
Rural	70.8	80.4	61.1	NA	NA	NA	NA	NA	NA
Urban	86.4	91.8	80.7						
Total	73.5	82.4	64.4	NA	NA	NA	NA	NA	NA

Source: Census of India

Annexure 8.39: Distribution of Female workers

Census Year	Female	Workers (i	n Lakh)	Female W	orkers in Aş (in Lakh)	griculture		emale work ture to total workers	
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
1	2	3	4	5	6	7	8	9	10
1981	25.87	24.51	1.36	11.06	10.80	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 8.40: Sector-wise Outlay and Flow of Funds under the Women Component

Rs in crore

Sector	Annual Plan 2011-12 (AE)	Annual Pla	an 2012-13	11 <sup>th</sup> plan AE expenditure		Plan 2012-17 d out lay
	under women component	Total outlay	Flow to women component	under women component (2007-12)	Total outlay	Expected Flow to women component
1	2	3	4	5	6	7
Agriculture & Allied activities	152.47	971.60	181.14	339.34	5430.66	958.71
Rural Development	70.50	195.00	66.80	260.00	206.00	70.50
Industry & Minerals	2.01	67.80	123.26	10.25	247.32	50.19
Social Services	1018.63	378005	1415.39	2287.47	26807.37	12129.26
Special area programme	0.32	0.00	0.00	0.69	0.00	0.00
Gen.Services	1.38	25.00	0.69	1.51	9.50	1.38
Science, Technology & Environment	0.00	0.00	0.00	0.00	0.00	0.00
Total	1245.30	5039.45	1676.29	2899.27	32700.86	13210.04
			(33.26%)			(40.39%)

Source: Planning & Coordination Department

Annexure 8.41: Scheduled Tribe Population, Growth Rate and Sex Ratio In Odisha and India

Census		Populatio	Population (in lakh)				Sex Ratio	Ratio			Decadal	ecadal Growth
	Odi	Odisha	Inc	India		Odisha			India		Rate (DGR)	DGR)
	R	Ω	R	n	R	n	Τ	R	n	T	Odisha	India
1	2	3	4	2	9	7	8	6	10	11	12	13
1961	41.36	0.88	291.1	7.74	1018	946	1016	686	897	286		
1971	49.24	1.47	367.21	12.94	1009	958	1007	985	968	982	20.10	27.20
1981	56.42	2.73	484.28	32.01	1015	947	1012	886	912	983	16.60	35.80
1991	66.70	3.72	627.51	50.05	1006	930	1012	926	920	972	18.90	31.20
2001	76.98	4.47	773.38	88.69	1006	948	1003	981	944	826	15.82	24.50

Sources: Census data 1961-2001

Annexure 8.42: Scheduled Castes Population in Odisha

Decadal Growth Rate (%)	10	1	19.79	16.75	32.69	18.60
Sex-Ratio*	6	1,015	993	988	926	626
Proportion of rural SC population	8	95.40	93.72	09.06	89.26	88.44
Rural Population	7	2,637,832	3,103,244	3,502,195	4,578,669	5,378,788
Urban population	9	126,026	207,610	363,348	550,645	703,275
% of SC Population	2	15.76	15.09	14.66	16.20	16.53
Female	4	1,393,448	1,649,816	1,921,472	2,532,850	3,008,785
Male	3	1,371,410	1,661,038	1,944,071	2,596,464	3,073,278
Total population	2	2,764,858	3,310,854	3,865,543	5,129,314	6,082,063
Year	1	1961	1971	1981	1991	2001

\*Number of Females per 1000 males Sources: Census data 1961-2001

Annexure 8.43: Literacy among ST and SC population in Odisha (1961-2001)

	Gender Gap in Literacy (%)	16.38	20.81	25.86	31.67	30.14
SC	Female	3.44	5.17	9.4	20.74	40.33
S	Male	19.80	26	35.30	52.40	70.50
	All	11.60	15.60	22.40	36.80	55.53
	Gender Gap in Literacy (%)	11.27	13.80	18.51	24.23	28.11
T	Female	1.77	2.28	4.76	10.21	23.37
ST	Male	13	16.40	23.30	34.40	51.48
	All	7.36	9.45	14	22.30	37.37
Year		1961	1971	1981	1991	2001

Sources: Census data 1961-2001

Annexure 8.44: Achievement under Different SC & ST Development Programmes 2002-2003 to 2011-12 (up to Dec.'11)

Year				Progra	ammes			
	MADA Pro	oject	Cluster pr	oject	MICRO p	roject	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	4,772	70	546	200	2038	1200.00	8896
2010-11	843.4	5104	130.9	791	260.02	2015	1012.50	7088
2011-12	766.37	8241	56.30	172	242.03	2621	74.94	1119

Source: SC & ST Development Department, Odisha

Annexure 8.45: Progress of JBY in Odisha

Year	Funds released by MOTA (Rs. In lakh)	PTG families covered under JBY	No. of death claims settled by LIC
1	2	3	4
2004-05	12.50	2500	10
2005-06	25	5000	20
2006-07	42.50	8500	NA
2007-08	13.61	2722	NA

NA: Not Available

Source: SC & ST Development Department, Odisha

Annexure 8.46: Institutions under SC and ST Development Department 2011-12

Category of Schools	No. of schools	Category of hostels	No. of hostels
1	2	3	4
Ekalabya Model Residential Schools	13	Primary School Hostels(in ITDA Blocks)	1548
Higher Secondary Schools	8	Primary School Hostel in (ST Boys& Girls) KBK dists.	400
High Schools	156	Residential Ashram School in TSP	52
Girls High Schools	143	0	0
Ashram Schools	766	Special Adivasi hostel	7
Secondary Teachers Training Schools	2	Hostels for SC girls & Boys	438 existing 55 under Constn
Residential Sevashrams Educational Complex for PTGs	5 19	ST Girls Hostels	1003 existing & 1040 under construction
Sevashrams	506	ST Boys Hostel in 5 LWE districts	288(under constn.)
B.Ed. Training Colleges	1	0	0
Total	1619		3448 existing & 1383 under Construction

Source: SC & ST Development Department, Odisha

Annexure 8.47: Achievement under Pre- and Post- Matric scholarship

Year		Pi	re-Matric s	cholarship	)		Post-Matric Scholarship						
	Ar	nount rele (Rs in cro		Students benefited (In lakh nos.)			Amount released (Rs in crore)				Students benefited (In 000' No.)		
	SC ST Total		SC	ST	Total	SC	ST	Total	SC	ST	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13	
2002-03	NA	NA	62.43	3.42	3.67	7.09	4.98	4.34	9.32	45.49	34.79	80.28	
2003-04	11.43	56.53	67.96	3.44	3.88	7.32	6.23	5.26	11.49	45.72	39.11	84.83	
2004-05	13.30	57.95	71.25	3.75	4.18	7.93	6.52	5.83	12.35	42.02	33.62	75.64	
2005-06	12.36	54.8	67.16	4.09	4.43	8.52	8.25	5.95	14.20	49.70	39.90	89.60	
2006-07	20.08	74.07	94.15	3.76	4.5	8.26	14.14	11.99	26.13	52.16	42.97	95.13	
2007-08	14.11	113.05	129.93	3.81	5.47	9.28	15.53	12.71	28.24	57	46.78	103.78	
2008-09	22.40	126.75	149.15	3.92	5.67	9.59	17.99	15.50	33.49	63.10	48.79	111.89	
2009-10	29.50	181.14	210.64	5.07	6.31	11.38	13.61	17.08	30.69	69.40	52.71	122.11	
2010-11	26.97	176.41	203.38	5.16	6.93	12.09	28.72	18.96	47.68	78.73	60.48	139.21	
2011-12	31.00	222.86	253.86	5.69	7.78	13.47	26.62	24.41	51.03	81.78	64.23	146.01	

NA: Not Available

Source: SC & ST Development Department, Odisha

Annexure 8.48: Coverage of SC and ST Beneficiaries under Different Poverty Alleviation Programmes during 2011-12

Name of the Programme		Number of	beneficiaries		%age of SC
	All Category	SC	ST	Total (SC&ST only)	& ST to total beneficiaries
1	2	3	4	5	6
SGSY (No. of swarozgaries)	129363	32869	38665	71534	55.30
IAY houses completed (Normal+Naxal+Mokudia)	143275	48781	34450	83231	58.09
MGNREGS(cumulative person days generated in lakh)	453.74	79.42	173.17	252.59	55.67

Source: Panchayati Raj Department, Government of Odisha

#### Annexure 8.49: Achievement of OSFDC

Rs. In lakh

Sector	200	7-08	200	8-09	200	9-10	2010	-11	201	1-12
	No. of benefi ciaries	Amount subsidy								
1	2	3	4	5	6	7	8	9	10	11
SCA to SCP (SC)	14528	1581.32	20950	2216.97	26067	2516.44	19992	2110.24	17543	1939.64
SCA to TSP (ST)	9233	1409.76	9914	1179.87	8896	1064.97	7411	903.74	6367	550.48
NSLRS/SRMS (scavengers & dependants)	3444	403.56	8574	1054.98	1865	236.66	257	32.13	15	0.70
Term Loan Scheme	-	-	-	-	-	-	-	-	-	-

Source: OSFDC, Odisha, BBSR

Annexure 8.50: Coverage of OTELP (Odisha Tribal Empowerment and Livelihoods Programme) 2010-11

Particulars	Ph-I 2004-2007	Ph-II 2008-2011	Total
1	2	3	4
Districts covered	4	3	7
Blocks covered	10	20	30
No. of FNGOs	12	22	34
No. of Micro Watersheds	135	223	358
No. of villages	390	644	1034
Treatable Area (ha)	63219	112149	175368
Total Households	19481	36699	56180
ST Households	16301	25900	42201
SC Households	2360	5709	8069
BPL Households	16277	23197	39474
Landless households	4990	7405	12395
Vulnerable/ destitute Households	3101	3020	6121

Source: SC and ST Development Department, Odisha

Annexure 8.51: Families Below Poverty Line(BPL) (1992 and 1997 Census)

Sl.	District	Blo	ocks		1992 Cens	sus	1997 Census			
No.		(nur	nber)	Total	BPL	Percent	Total	BPL	Percent	
		Total	TSP	(lakh f	amilies)	(%)	(lakh families)		(%)	
1	2	3	4	5	6	7	8	9	10	
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	Balangir	14	-	2.39	1.81	75.82	3.30	2.01	61.06	
4	Subaranpur	6	-	0.92	0.57	62.29	1.10	0.80	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	Nabarangpur	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	82.60	16.52	11.79	71.40	

Source: \* Panchayati Raj Department, Government of Odisha

<sup>\*\*</sup> TSP - Tribal Sub Plan Blocks
\*\*\* Total figures and figures in percentage do not tally due to rounding off

Annexure 8.52: Proposed Outlay for Annual Plan, 2012-13 under Special Plan for KBK districts

In lakhs

Department	Scheme / Programme	Proposed	Flor	w to
		outlay	TASP	SCSP
1	2	3	4	5
Agriculture	Development of new micro watersheds	890.50	342.04	144.70
Housing & UD	Drinking water supply for urban poor	1000.00	384.10	162.50
ST&SC Welfare Development	Construction of hotels for ST/SC Girls/ Boys	1675.10	1675.10	-
	Construction of hotel for SC Girls/ Boys	324.90	-	324.90
	Water supply $\&$ electrification of ST girls hostels under 1000 girls hostel scheme.	300.00	210.00	90.00
	Providing amenties to Tribal Hostels	150.00	105.00	45.00
	Infrastructure for up graded high schools to +2 Colleges	215.00	150.50	64.50
	Sports activities in ST Girl's Schools	100.00	70.00	30.00
	Differential cost of Post-Matric schoarship	35.00	24.50	10.50
Sub-Total		2800.00	2235.10	564.90
W&CD	Emergency Feeding Programme	4015.00	1542.16	652.44
Water Resources		1000.00	384.10	162.50
i) Biju Krushak	Vikas Yojana(BKVY)	1630.50	619.74	262.19
ii) Construction Sub-total	of Check Dams	2613.50	1003.84	424.69
Works	Connectivity Programme	1681.00	645.67	273.16
Total		13000.00	6152.92	2222.39

Source: P & C Dept., Odisha

# Annexure 8.53: Achievements under SCA to TSP and Article 275 (I)

Rs in crore

Year	SCA to TS	P			Article 275 (I)				
	Financial	Achievement	Physical Ac	hievement	Amoun	t released	l	Expenditure	No. of
	Amount released	Expenditure	Beneficiary covered	Works completed	For infrastructure	For EMRS	Total	incurred	works completed
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	85.43	85.43	58516	1182	39.77	2.00	41.77	41.77	618
2008-09	102.90	102.90	74111	1348	32.07	9.22	41.30	41.30	480
2009-10	88.86	88.86	70368	1178	62.28	7.98	70.26	70.26	1206
2010-11	123.93	123.93	77722	21362	64.66	31.78	96.44	96.44	1026

Source: SC and ST Development Department, Odisha

# **Public Finances**

#### 9.1 Introduction

State finances of Odisha exhibit some stability since 2004-05 despite the fiscal stresses introduced by the depression years and the effect of revision of salary and wages of the state employees including payment of arrears. The much-needed fiscal consolidation for the fiscal space necessary to boost developmental expenditures in the State has not been sacrificed despite the abovementioned unfavourable events. With the fiscal space expanding, most of the fiscal indicators continue to show changes for the better. The main task at hand now is to properly utilise the same for faster development, by identifying the right strategy for public interventions to this end and to ensure that the maximum benefit is derived out of the still limited resources that the State can afford to spend. This would entail an emphasis on social and physical infrastructure as possibly the mostneeded input into the development process, while carefully appraising investment projects for the highest social returns. Thus, a cautious but determined push for higher levels of capital expenditure is on, even though no spectacular spurt may be expected in the same. Further, there are also limits imposed by the fiscal responsibility legislation, as explained later.

Infrastructure projects that can yield reasonable financial returns can be implemented as in the public private partnership (PPP) mode to conserve limited public resources. This is yet to become a major instrument for infrastructure building in Odisha as compared to several other states but the State Government now intends

to increasingly rely on this mode of project implementation. A beginning in this direction has already been made and some details are provided later in this chapter.

#### 9.2 Overview

The broad fiscal indicators generally show trends consistent with the fiscal reform strategy adopted by the State as may be seen from Table 9.1 and Figure 9.1. The total revenue receipts show reasonable growth since 2005-06, the largest contribution coming from nontax revenues, a relatively untapped source that has grown from 1.8 percent of the GSDP in 2005-06 to 2.98 percent in 2011-12. This figure rose by 0.5 percentage points in 2011-12 alone, but is expected to drop to 2.01 percent in 2012-13. The State's own tax revenues have exhibited relatively small increase of about 0.5 percentage points in 2011-12 over 2010-11. But this apparently small increase in percentage point denotes a much bigger contribution in absolute terms because of their larger weight in the State's own revenue receipts. The central transfers as a whole have increased marginally as a percentage of GSDP between 2005-06 and 2011-12, and the increase in grants from the Centre is more than making up for the falling tax devolutions. In the process, the dependence of the State on transfers from the Centre has been reduced as may be seen from Figure 9.1, with the gap between the State's own resources and central transfers being continuously reduced since 2007-08 and being almost eliminated in 2011-12. If this trend persists into the future, it will help bolster the State autonomy and should

Table 9.1: Odisha Finances - Broad Trends

(Percent of GSDP)

Item		2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (BE)
A. To	otal Revenue Receipts	16.55	17.71	16.99	16.57	16.22	17.11	18.65	16.94
	1. Own Tax Revenue	5.88	5.96	5.30	5.38	5.51	5.76	6.23	6.03
	2. Own Non-tax Revenue	1.80	2.54	2.05	2.14	1.97	2.46	2.98	2.01
	3. Share of Central Taxes	5.73	6.11	6.07	5.58	5.23	5.40	5.66	5.21
	4. Grants from Centre	3.14	3.10	3.57	3.47	3.51	3.50	3.78	3.69
B. To	otal Revenue Expenditure	15.99	15.49	13.71	14.27	15.52	15.10	16.05	16.01
C. C	apital Outlay	1.22	1.43	2.20	2.55	2.24	2.20	2.08	2.72
D. Revenue Surplus		0.57	2.22	3.28	2.30	0.70	2.01	2.60	0.93
E. Fi	E. Fiscal Deficit(-)/Surplus(+)		0.81	1.02	-0.39	-1.39	-0.34	0.29	-1.84
F. Pr	imary Surplus	4.02	3.94	3.48	1.55	0.48	1.24	1.48	-0.09

help the State in charting its own path in terms of public expenditure policy.

Total revenue expenditures have been kept under check, particularly in relation to the revenue receipts, to generate revenue surplus throughout the reference period. Apart from meeting the zero revenue deficit requirement of the fiscal responsibility legislation, these surpluses have allowed the State to boost capital outlays without resorting to debt financing for the entire increase. The fiscal strategy of

the State aims to raise this substantially and on a sustained basis – the achievement of an increase from 1.22 percent of GSDP to 2.08 percent between 2005-06 and 2011-12 is only a small one from that perspective. The capital outlay in 2011-12 actually decreased from the 2010-11 level of 2.2 percent of GSDP, but is slated to go up substantially in 2012-13 to 2.72 percent. The drop in 2011-12 was not caused by any resource constraint as evidenced by the rising revenue surplus and the small fiscal deficit of the previous year changing into a

Figure 9.1: Broad Fiscal Trends in Odisha

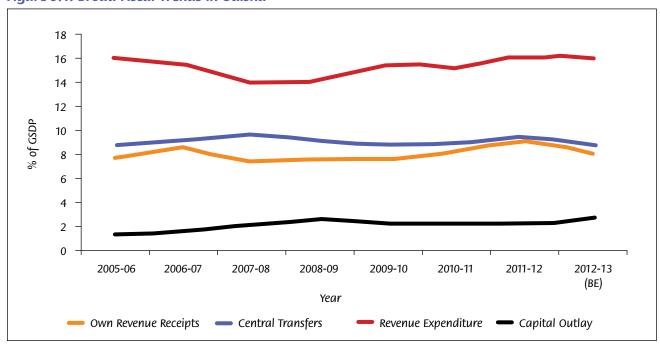
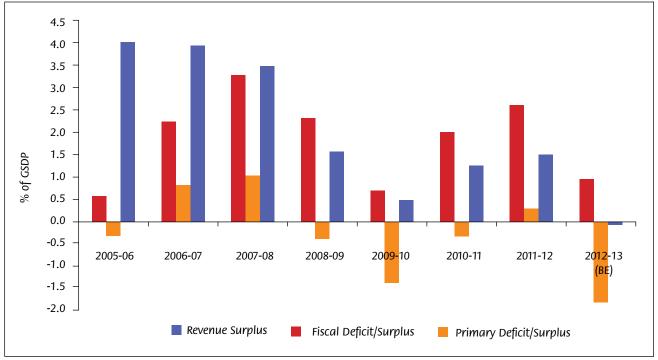


Figure 9.2: Fiscal Blances in Odisha



small surplus (the third year of fiscal surplus in the State); capacity constraint was the more likely reason.

The trends in deficits depicted in Figure 9.2 clearly show that primary surpluses in recent years have not been as large as during the period 2005-08. In fact, a small primary deficit is expected in 2012-13 against surpluses in all the rest of the years in the reference period. The difference between the fiscal balance and the primary balance shows the extent of interest payments borne by the State and the shrinking gap between the two indicates progressively smaller interest burden. Clearly, the State does not need to worry about the fiscal sustainability for the present; developmental efforts in terms of public expenditures should now get due attention. While revenue expenditure is slated to decline, capital expenditure is expected to increase as percentages of GSDP in 2012-13 and hence, the downturn in primary deficit and fiscal deficit. However, the actual outcome will depend on the extent of realisation of the expected higher levels of expenditure, as also of the expected downturn in revenue receipts. These in turn would depend on the performance of the national and the State economy; available indicators suggest that while the national economy continues to perform below planned levels of growth, the State economy could exhibit reasonable growth, and thus the actual fiscal outturn in the State may be better than expected.

#### 9.3 Own Revenues

As noted earlier, the total own revenues of the State as a ratio of GSDP have been rising steadily since 2007-08 and further improved the high revenues of 2006-07 in 2011-12 at 9.21 percent. A greater part of this increase was ascribable to non-tax revenues that exhibit substantial increase in two consecutive years of 2010-11 and 2011-12. These increases can be traced largely to increase in receipts from mining. Own tax revenues as percentage of GSDP have been somewhat flat at a level just below six percent with a little dip in the four-year period of 2007-08 to 2010-11 (the recession years). But in 2011-12, it has crossed the threshold of six percent. Given the healthy growth in GSDP, a roughly constant tax-GSDP ratio would still mean a reasonable growth in own tax collections too, but the buoyancy would turn out to be around unity taking the entire reference period.

Compared to the tax performance of Odisha in the 1990s and earlier, a tax-GSDP ratio of around six percent is an improvement but compared with other states of India, it is actually on the lower side, and could stand a steady increase. Only Bihar and West Bengal had a lower tax-GSDP ratio as compared to Odisha; the two contiguous states of Chhattisgarh and Andhra Pradesh had ratios well above seven percent, while the highest ratio (Karnataka) was above nine percent. Obviously, there is plenty of scope to raise the same in Odisha. With this in mind, the Government of Odisha appointed an Expert Committee on Revenue Enhancement Measures in March 2010: this Committee submitted its report in April 2011. The Committee has made useful recommendations that are to be taken up for implementation after careful consideration by the Government.

The composition of own tax revenue in the State has been fairly unchanging. Figure 9.3 shows that sales tax (VAT) contributed a steady 60 percent of the total, a pattern observed in most other states of India. Its revenue collections have exhibited a steady growth of around 20 percent

per annum. For a few years now, introduction of a Goods and Services Tax (GST) integrating taxation of both goods and services at the Centre and state level has been imminent. But lack of consensus about the its structure and administration has not allowed its introduction so far, although continuous dialogue between the Centre and the states as also among the states has thrashed out agreements on certain issues. The uncertainty of this major change has been one of the factors preventing a thorough overhaul of the sales tax/VAT system, holding back possible revenue gains in the process.

In recent years, excise duty – the tax with the second highest revenue contribution – has exhibited accelerated revenue growth (above 25%per year during the period 2009-12), but revenue from some other major taxes (stamp duty and registration fees as also motor vehicle tax) do not appear to be particularly buoyant. While litigations challenging its validity are holding up growth of entry tax revenue for the present, the growth of revenue from profession tax has been rather poor (even negative in some years including 2011-12) in terms of tax collection.

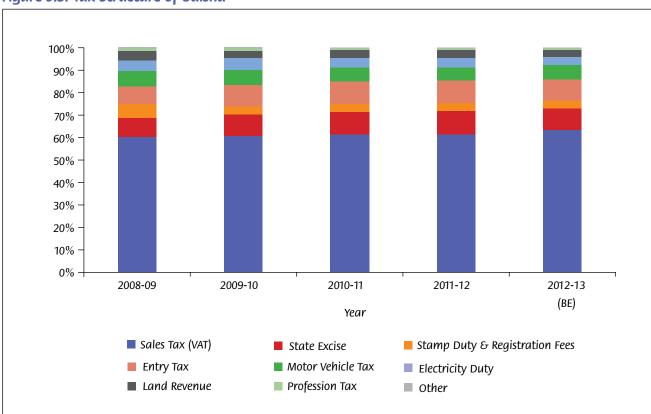


Figure 9.3: Tax Structure of Odisha

#### 9.4 Central Transfers

Central Transfers include those mandated by the Finance Commission including devolution of central taxes, grants through the Planning Commission and other specific purpose grants from various central ministries. The latter. although growing fast in terms of the amounts involved, have increasingly bypassed the State budget and are mostly directly provided to special agencies created for the purpose. In recent years, neither the shared taxes, nor the grants received from the Centre by the State have been very buoyant with respect to GSDP, probably reflecting the relatively low level of growth at the national level. On the whole, central transfers received by the State Government were at a lower level of 9.44 percent of the GSDP in 2011-12 compared to the peak of 9.64 percent in 2007-08, although it was higher than the three previous years. However, the slowdown of the national economy during 2012-13 with an expected growth of only five percent is expected to reverse the trend and the budget estimates put the figure at 8.90 percent of GSDP.

The direct Central transfers to state implementing agencies are now fairly large at about 15 percent of the revenue receipts of the State Government. The major amounts are under schemes such as Pradhan Mantri Gram Sadak Yojana, National Rural Employment Guarantee Scheme, Indira Awas Yojana, Sarva Shiksha Abhiyan and National Rural Health Mission. In 2011-12, such transfers were reckoned at Rs. 6,229 crore, a level lower than Rs. 6,258 crore for the previous year. Despite reservations expressed in some quarters regarding this mode of (refer Audit report on the State Finances for 2011-12), the State Government has been taking steps to ensure accountability and smooth flow of funds with respect to these transfers.

# 9.5 Revenue Expenditures

Revenue expenditures have been the focus of fiscal reforms in Odisha, partly because they constitute the overwhelmingly larger part of total expenditures and also because the fiscal responsibility legislation required a zero revenue deficit. This has led to the level of revenue expenditure in 2012-13 (BE) remaining at roughly the same level of 16 percent as in 2005-06 as a ratio of GSDP, after a trough of about 14 percent in 2007-08.

Figure 9.4 shows the composition of revenue expenditure by broad groups, where social and economic services together constitute the developmental expenditures. In 2004-05, these constituted less than 50 percent of the total revenue expenditures, but the composition changed dramatically by 2008-09, when developmental expenditures accounted for more than 70 percent of the total. A similar pattern as in 2008-09 was observed in 2011-12. Salary revisions and payment of arrears thereof of State employees has been a factor influencing this pattern, since expenditures on general and social services include a much larger share of compensation to employees as compared to economic services.

As against this, the steadily falling interest payments have not only contributed substantially to lower levels of revenue expenditure as a whole, but also to a lower share of general services. In general, a higher share of developmental expenditures is considered to be an improvement; in that sense, the composition revenue expenditures has improved considerably since 2004-05. However, the focus on controlling revenue expenditures has imposed some constraints on administrative capacity; the budgeted rise in the share of general services in 2012-13 possibly reflects the need to attend to this aspect, in addition to an increase in expected interest payments. It may be noted that physical infrastructure sectors are included in economic services, and in these, there is as much need for revenue expenditures mainly on maintenance and repairs as for fresh investments, i.e., capital expenditures.

The developmental impact of government expenditures depend heavily on the extent of these expenditures actually reaching the citizens – in cash or in kind, largely the latter. However, any government is committed to certain types of expenditures, primary among

2012-13 (BE) 2011-12 2010-11 2009-10 2008-09 2007-08 2006-07 2005-06 2004-05 0% 20% 40% 60% 80% 100% General Services Social Services Economic Services Assignments to Local Bodies and PRIS

Figure 9.4: Composition of Revenue Expenditure in Odisha

them compensations to employees and interest payments. These are contractual in nature, and thus, are primary charges on public expenditure. It follows that the pre-emption of public expenditure by such contractual expenditures also reduces the policy manoeuverability of the government, particularly relating to provision of various services for its citizens.

Figure 9.5 depicts the extent of such pre-emption by contractual expenditures with respect to revenue expenditures. It shows that the share of

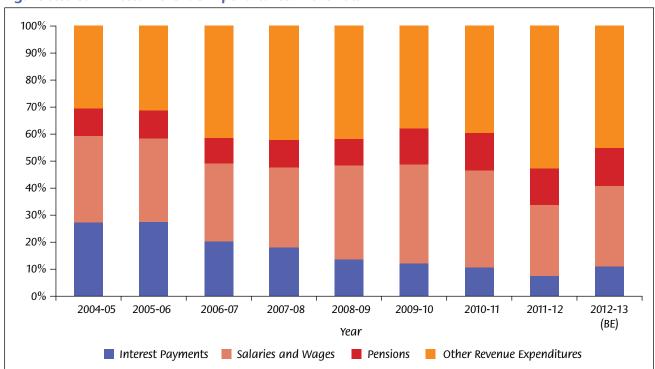


Figure 9.5: Committed Revenue Expenditures in the Total

contractual expenditures decreased from 2004-05 till 2007-08, thanks mainly to lower interest payments. While the share of interest payments continued to fall, that of salaries and wages and pensions rose during the years 2008-09 to 2010-11, taking the share of contractual expenditures to above 60 percent of the total. These were the years when the financial impact of the salary revisions and the payment of related arrears were particularly heavy. As soon as the arrear payments were cleared, the share of contractual expenditures dropped to below 50 percent in 2011-12, the lowest level since the turn of the century. In 2012-13, this percentage is budgeted to increase somewhat to about 55 percent, caused by expected increases in both interest payments and salaries.

Table 9.2 provides some disaggregated information on revenue expenditures. Within

social services, the shares of the three social infrastructure services remain roughly unchanged, with education accounting for the bulk of public expenditures on social services. Health and related services have emerged as a major concern in recent years; even though schemes like NRHM are expected to supplement the state's own efforts in this area, there is perhaps need to accord a substantially higher priority to these areas in the state's own policies.

Among the economic services, expenditure on agriculture and allied services as well as on rural development increased substantially in 2010-11 and again in 2011-12. The big jump in these two areas were, of course, in the year 2008-09 as a part of the 'pump priming' type of policy adopted across India. Between the two physical infrastructure services, expenditure on roads and bridges has increased faster than on irrigation

Table 9.2: Odisha's - Composition of Revenue Expenditure

(Rs. crore)

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (BE)
Total Revenue Expenditure	13603.52	15772.01	17723.27	21190.12	25291.60	29367.95	34660.23	41431.97
A. General Services	6825.66	7502.77	7227.21	6961.87	9285.15	9936.77	10928.58	15840.35
of which,								
1. Interest Payments	3697.1	3188.43	3169.48	2889.81	3044.17	3061.46	2576.43	4511.59
2. Pensions	1338.57	1484.59	1801.36	2074.96	3283.41	4011.00	4740.76	5800.00
B. Social Services	4677.72	5220.54	6416.51	8284.41	9838.21	11922.01	14338.07	15452.18
of which,								
1. General Education	2261.79	2404.18	3171.22	4386.26	5413.18	6279.84	6647.48	7684.95
2. Medical and Public Health	376.16	479.5	615.37	800.2	985.9	1033.07	1129.34	1686.95
3. Water Supply and Sanitation	313.24	257.87	354.11	269.96	346.54	512.47	563.16	609.42
C. Economic Services	1953.28	2776.44	3728.65	5551.08	5762.4	7077.56	8732.47	9493.37
of which,								
<ol> <li>Agriculture and Allied Services</li> </ol>	560.58	652.33	890.33	1840.8	2191.12	2777.58	3165.99	3691.87
2. Rural Development	513.94	610.11	861.13	1225.53	1179.91	1483.36	1836.96	2231.26
3. Irrigation and Flood Control	235.34	280.66	454.01	556.57	613.52	765.06	860.24	1154.78
4. Roads and Bridges	197.87	558.46	749.7	884.79	940.88	1044.34	1177.1	1447.12
D. Assignments to Local Bodies and PRIs	146.86	272.26	350.9	392.76	405.82	431.61	661.11	646.08
Memo Item:								
Salaries and Wages	4263.69	4551.50	5275.88	7375.50	9288.98	11219.93	9081.77	12342.76

2012-13 (BE) 2011-12 2010-11 2009-10 2008-09 2007-08 1000 2000 3000 4000 5000 6000 7000 0 8000 (Rs. in crore) ■ Transfer to Contingency Fund ■ Debt Repayment (Gross) ■ Loan and Advances (Gross) Capital Outlay

Figure 9.6: Capital Expenditures in Odisha

and flood control. In fact, the expenditure on food subsidies alone, at Rs.976 crore in 2011-12, was higher than that on irrigation. This is mainly the outcome of the scheme of providing rice at Rs.2/- per kg and at present at Rs.1 per kg. While this has been introduced as a social safety net, it has the potential of pre-empting a substantial part of the resources of the State.

# 9.6 Capital Expenditures

Total capital expenditures consist largely of three main components – capital outlay on various goods and services, repayment of debt and loans and advances given. Figure 9.6 depicts the quantities of these components in the last few years. While capital outlay is a crucial determinant of economic growth of the State, its level is quite low at around two percent of GSDP, as we saw in Figure 9.1. In 2012-13, this is budgeted to go up substantially; it must be conceded, however, that there can be several constraints in pushing up capital outlays so much within one year.

Loans and advances by the State Government have been quite small, even in gross terms, in recent years. This amount saw some increase in 2010-11 after dwindling to Rs.112 crore in 2009-10. There has been further increase in 2011-12 to Rs.621 crore, budgeted to be brought down again by about 50 percent in 2012-13. Amounts spent towards repayment of debt, after reaching a recent low in 2009-10 at Rs.1,489 crore, increased to Rs.2,328 crore in 2011-12. This is budgeted to go up substantially to Rs.3,196 crore in 2012-13.

#### 9.7 Indebtedness

The true level of indebtedness of a state is generally much higher than the stock of public debt indicated in the budget because there are several other liabilities in the nature of debt, particularly in the public account. A holistic view, therefore, requires a consideration of all financial liabilities of the state recorded in the accounts. Though debt - GDDP ratio is 17.87 in 2011-12, the ratio of all fiscal liabilities including debt stands at around 22 percent of GSDP at the close of 2011-12. This is already below the level of 25 percent recommended by the 13<sup>th</sup> Finance Commission for 2014-15. This is undoubtedly a good position to be in since

2011-12 3.93 3.37 4.10 6.47 4.30 2010-11 3.90 6.97 3.52 2009-10 2008-09 4.59 6.70 2007-08 2006-07 6.74 10.14 5.61 2005-06 6.85 10.32 14.24 11.43 5.13 10.00 20.00 30.00 40.00 50.00 60.00 0.00 Percentage of GSDP NSSF Other Public Debts State Provident Funds Net Loans from Centre Other Liabilities

Figure 9.7: Liabilities of Government of Odisha

the attendant interest liabilities are also likely to be commensurately low. There is a certain amount of loan from the NSSF that the State is obliged to take a specified percentage of the small savings deposits during the year collected in the state; without this, the indebtedness would be even lower.

Among the various categories of liabilities, provident funds of the State Government employees constitute the largest one at around seven percent of GSDP, down substantially from a level of about 11.5 percent in 2005-06. This is likely to fall further because the State Government shifted to a system of contributory pensions for employees recruited after January 1, 2005, with the amounts involved being remitted to the bank designated by the fund manager. All other elements of fiscal liabilities also show steady decline, mainly thanks to continuous revenue surpluses in recent years. In fact, there has been a large cash build-up that should be utilised before borrowing and adding to the indebtedness, since this cash earns a lower rate of interest as compared to the lowest interest rate payable on the loans. Quite prudently, the State did not resort to any market borrowing during 2011-12. It also prepaid relatively high-interest loans from HUDCO and REC. Further utilisation of cash balances to liquidate relatively high-cost loans was on the cards.

A government usually has, apart from the accounted fiscal liabilities, some amount of contingent liabilities too. Guarantees provided by the Government for loans of other agencies constitute a major component of such liabilities. At the end of 2011-12, the maximum amount for which guarantees were given stood at Rs.10,579 crore, while the outstanding amount of guarantees were Rs.2,510 crore. Guarantee Redemption Fund has been established by the Government to take care of the contingent liability arising out of invocation of guarantee extended by the State Government.

#### 9.8 Institutional Measures

Institutional reforms and innovations constitute an important element of any fiscal reform package and Odisha has not been an exception. It has tried to assess, and if found suitable, adopt institutional reforms recommended by various agencies, implement observed best practices and evolve its own reforms over several years in the recent past. Application of information technology has been an important element of such reforms: examples can now be found in various areas including tax administration, budget preparation, treasury management, tendering and Local Fund Audit. The system of outcome budgets has also been introduced on a limited basis to begin with for a selected few departments, but additional departments are regularly being brought under this system.

The fiscal responsibility legislation was amended to conform to the suggestions by the 13<sup>th</sup> Finance Commission. An independent monitoring agency has also been appointed. Prioritisation of projects is being implemented since 2002-03 through the system of zero-based investment review.

State enterprises reform has been an ongoing process that has included alternative strategies including closure, privatisation, and mergers. All existing public sector undertakings have been brought under an MoU system, and steps have been taken to make their management more professional. The most important strategic shift in this area, relating to physical infrastructure in particular, has been the renewed emphasis on PPP. This is not a new concept, nor is it being resorted to for the first time now in the State. But the extent of reliance on this mode of infrastructure delivery has dramatically increased in recent years, deserving a quick review of the developments relating to PPP in Odisha.

Odisha was a relatively late starter with respect to introduction of PPP in infrastructure. Although it did not have too many PPPs at that point of time, it put in place a PPP policy for the State in 2007. This was followed up by setting up an Empowered Committee on Infrastructure (ECI) that is chaired by the Chief

Secretary and a High Level Clearance Authority (HLCA) chaired by the Chief Minister. A society by the name of Odisha PPP Technical Society was registered to act as a technical secretariat. A shelf of possible PPP projects has been prepared and some of them are in various stages of the initial processes before an agreement is signed. There is a State level Odisha Infrastructure Project Development Fund to facilitate smaller initial expenses on surveys, appointing consultants or engaging transaction advisers. There is a State level VGF also, but the maximum contribution of the public sector (State and Centre combined) is pegged at 40 percent of the total investment. For the road sector, there is a separate Project Development and Facility Fund which can be tapped, not necessarily for PPP projects alone. The PPP cell established at the State level is meant for institutional facilitation, while project monitoring units in infrastructure departments keep tabs on the progress of projects right from the conception stage.

There is no clear regulatory structure as of now, though this is a matter which is being discussed in the State Government for the eventual setting up of an appropriate institutional structure. There are no State level fiscal incentives for PPP in Odisha, and the State's contribution to PPP is confined to land and facilitation, other than possible VGF. In fact, the State's approach is to proceed cautiously in the matter of setting up PPP, although the idea of putting in place badly needed infrastructure without having to put up the financial resources required is rather attractive for a resource-starved state like Odisha. Because of the cautious approach, the number of completed projects at the present juncture is small, and the biggest of them in terms of investment is the Dhamra Port project. Apart from this and some road projects, a major infrastructure project in the PPP mode (under implementation) is the Ib-Meramandali power transmission corridor.



**Annexure 9.1: Odisha Finances - Broad Trends** 

(Rs. in Crore)

Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (BE)
A. Total Revenue Receipts	14084.71	18032.62	21967.19	24610.01	26430.21	33276.16	40267.02	43842.74
1. Own Tax Revenue	5002.28	6065.06	6856.09	7995.20	8982.34	11192.66	13442.77	15610.28
2. Own Non-tax Revenue	1531.90	2588.12	2653.58	3176.15	3212.20	4780.37	6442.96	5200.00
3. Share of Central Taxes	4876.75	6220.42	7846.50	8279.96	8518.65	10496.87	12229.09	13481.00
4. Grants from Centre	2673.78	3159.02	4611.02	5158.70	5717.02	6806.25	8152.19	9551.46
B. Total Revenue Expenditure	13603.52	15772.01	17723.27	21190.12	25291.60	29367.95	34660.23	41431.97
C. Capital Outlay	1038.06	1451.47	2843.41	3779.17	3647.88	4285.1	4496.09	7042.97
D. Revenue Surplus	481.19	2260.60	4243.92	3419.89	1138.62	3908.21	5606.78	2410.77
E. Fiscal Deficit(-)/Surplus(+)	-276.47	823.18	1323.13	-584.03	-2265.38	-657.76	621.76	-4751.93
F. Primary Surplus	3420.63	4011.61	4492.61	2305.78	778.79	2403.70	3198.19	-240.34
GSDP	85096	101839	129274	148491	162946	194465	215899	258744
		19.68	26.94	14.87	9.73	19.34	11.02	19.84

#### Annexure 9.2: Own Tax Revenues in Odisha

(Rs. in Crore)

	2008-09	2009-10	2010-11	2011-12	2012-13 (BE)
Sales Tax (VAT)	4803.34	5408.76	6806.80	8196.85	9800.00
State Excise	660.07	849.05	1094.26	1379	1500.00
Stamp Duty & Regn Fees	495.66	359.96	415.82	498.15	586.50
Entry Tax	638.32	815.25	1111.37	1312.36	1417.28
Motor Vehicle Tax	524.42	611.23	727.58	787.99	969.45
Electricity Duty	365.03	459.96	458.06	551.65	575.00
Land Revenue	348.79	292.18	390.66	521.47	531.10
Profession Tax	112.18	135.55	133.28	126.90	171.00
Other Taxes	-7947.81	-8931.94	54.84	68.39	59.95
States Own Tax Revenue	0.00	0	11192.67	13442.76	15610.28

Source: Finance Accounts (various issues) and Budget Documents (2012-13)

Annexure 9.3: Odisha - Composition of Revenue Expenditure

(Rs. in Crore)

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (BE)
Total Revenue Expenditure	12372.49	13603.52	15772.01	17723.27	21190.12	25291.60	29367.95	34660.24	41431.97
A. General Services	6480.49	6825.66	7502.77	7227.21	6961.87	9285.15	9936.77	10928.58	15840.35
of which,									
1. Interest Payments	3332.02	3697.1	3188.43	3169.48	2889.81	3044.17	3061.46	2576.43	4511.59
2. Pensions	1259.8	1338.57	1484.59	1801.36	2074.96	3283.41	4011.00	4740.76	5800.00
B. Social Services	3980.4	4677.72	5220.54	6416.51	8284.41	9838.21	11922.01	14338.07	15452.18
of which,									
1. General Education	1954.76	2261.79	2404.18	3171.22	4386.26	5413.18	6279.84	6647.48	7684.95
2. Medical and Public Health	536.61	376.16	479.5	615.37	800.2	985.9	1033.07	1129.34	1686.95
3. Water Supply and Sanitation	228.63	313.24	257.87	354.11	269.96	346.54	512.47	563.16	609.42
C. Economic Services	1753.11	1953.28	2776.44	3728.65	5551.08	5762.4	7077.56	8732.47	9493.37
of which,									
1. Agriculture and Allied Services	533.99	560.58	652.33	890.33	1840.8	2191.12	2777.58	3165.99	3691.87
2. Rural Development	467.71	513.94	610.11	861.13	1225.53	1179.91	1483.36	1836.96	2231.26
3. Irrigation and Flood Control	207.71	235.34	280.66	454.01	556.57	613.52	765.06	860.24	1154.78
4. Roads and Bridges	138.54	197.87	558.46	749.7	884.79	940.88	1044.34	1177.1	1447.12
D. Assignments to Local Bodies and PRIs	158.48	146.86	272.26	350.9	392.76	405.82	431.61	661.11	646.08
Memo Item:									
Salaries and Wages	3977.09	4263.69	4551.50	5275.88	7375.50	9288.98	11219.93	9081.77	12342.76

Source: Finance Accounts (various issues) and Budget documents, 2012-13

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (BE)
General Services	6480.49	6825.66	7502.77	7227.21	6961.87	9285.15	9936.77	10928.58	15840.35
Social Services	3980.4	4677.72	5220.54	6416.51	8284.41	9838.21	11922.01	14338.07	15452.18
Economic Services	1753.11	1953.28	2776.44	3728.65	5551.08	5762.4	7077.56	8732.47	9493.37
Assignments to Local Bodies and PRIs	158.48	146.86	272.26	350.9	392.76	405.82	431.61	661.11	646.08
Interest Payments	3332.02	3697.1	3188.43	3169.48	2889.81	3044.17	3061.46	2576.43	4511.59
Salaries and Wages	3977.09	4263.69	4551.50	5275.88	7375.50	9288.98	10587.08	9081.77	12331.87
Pensions	1259.8	1338.57	1484.59	1801.36	2074.96	3283.41	4011.00	4740.76	5800.00
Other Revenue Expenditures	3803.58	4304.16	6547.49	7476.55	8849.85	9675.04	11708.41	18261.27	18788.51

Source: Audit Reports on State Finances (various issues) and Budget documents, 2012-13  $\,$ 

# Annexure 9.4: Capital Expenditure in Odisha

(Rs. in Crore)

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (BE)
Capital Outlay*	2843.41	3779.17	3647.88	4285.10	4496.09	7042.94
Loans and Advances (Gross)	432.68	210.97	112.48	314.69	621.01	360.05
Debt Repayment (Gross)	1884.97	1492.61	1488.69	2083.58	2327.76	3195.74
Transfer to Contingency Fund		250.00				
Total Capital Expenditure	5121.06	5732.74	5249.05	6683.38	7444.86	10598.73

<sup>\*</sup> On general, social and economic services

# Annexure 9.5: Liabilities of the Government of Odisha as on 31st March

(Rs. in Crore)

		2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Actuals	2012 Actuals
1	Consolidated Fund	26730.12	26925.27	25587.20	25246.25	25407.69	25592.15	24617.83
I	Public Debt	26730.12	26925.27	25587.20	25246.25	25407.69	25592.15	24617.83
a	Open Market Borrowings (Net SLR based Market borrowings)	9700.13	8910.73	8024.27	7354.01	6783.04	6160.15	5114.12
b	Borrowings from Banks and FIs/ Negotiated Loans	1316.48	1413.64	1521.77	1821.44	2300.11	2831.03	3300.68
c	Special Securities issued to NSSF	5826.46	6862.38	6756.24	6822.27	7432.62	8455.95	8482.39
d	Bonds/ Debentures which are issued by the State Government	1102.87	992.87	882.58	772.01	662.01	551.44	441.43
e	Loans from Centre (Net)	8783.75	8745.23	8401.92	8476.10	8229.49	7593.13	7279.20
f	Others	0.42	0.42	0.42	0.42	0.42	0.45	0.00
II	Ways & Means Advances & Overdrafts from RBI or any other bank	0.00	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	0.00
b	- OD	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	<b>Public Accounts</b>	13984.41	16063.73	17290.52	18234.52	20018.78	20387.92	22872.07
a	State Provident Funds	9726.33	10324.24	10724.40	11184.29	12322.35	13545.21	13971.68
b	Small Savings, Insurance and Pension Funds, Trust and Endowments, etc	2.62	2.45	2.15	1.04	1.04	0.79	0.71
c	Other items in Public Accounts	4255.47	5737.04	6563.96	7049.19	7695.39	7866.64	8899.69
	of which:							
i	Deposits	2120.94	2054.68	2138.02	2714.56	2859.34	3013.76	3567.93
	- Bearing Interest	18.65	18.64	19.99	23.67	30.17	57.94	78.36
	- Not Bearing Interest	2102.29	2036.04	2118.04	2690.90	2829.17	2955.82	3489.57
ii	Reserve Funds/ Sinking Fund	2134.53	3682.36	4425.94	4334.63	4836.05	4852.88	5331.76
	- Bearing Interest	4.84	4.84	4.84	4.84	4.84	27.33	296.14
	- Not Bearing Interest	2129.69	3677.52	4421.10	4329.79	4831.21	4825.55	5035.62

(Contd...)

		2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Actuals	2012 Actuals
3	Contingency Fund	109.57	-28.09	85.58	375.85	187.95	11.92	384.11
4	Total Liabilities (1+2+3)	40824.10	42960.91	42963.30	43856.61	45614.42	45991.99	47874.00
5	Memo Items	2575.10	4961.37	6582.75	6607.87	5425.40	5676.71	6902.94
a	Remittances	33.06	106.92	54.34	56.65	14.84	18.13	10.15
b	Suspense and Miscellaneous	2807.66	4635.85	5855.03	6376.91	4781.24	5589.87	6880.33
c	Appropriation to Contingency Fund	0.00	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	68.71	12.46

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), Odisha

# Looking Ahead

This Survey takes note of the efforts of the State Government to bring visible improvements in the State's finances, to reduce in the Debt-GSDP ratio from 55.92 percent in 2002-03 to a more sustainable level of about 22 percent in 2011-12. This has created fiscal space for higher plan and capital outlays to propel higher growth in the economy of Odisha. In fact, the State Government has been allocating progressively higher allocations for socio-economic development of Odisha.

As per advance estimates, the State economy is expected to grow in real terms at 2004-05 prices, at a rate of 9.14 percent in 2012-13. Odisha'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. Odisha's per capita income has started rising and the gap with the national average has been reducing steadily.

It is heartening to note that there has been a reduction in poverty by 20.2 percentage points between 2004-05 and 2009-10. The Survey highlights several challenges faced by, and opportunities available to, Odisha.

The analysis presented in the 2012-13 Survey clearly shows that there is a perceptible structural change in Odisha's economy. The Service Sector has become increasingly pronounced in recent years. Its share is expected to be 58.28 percent of the State GSDP and that of the Industry Sector 24.23 percent in 2012-13. The share of the Agriculture Sector is expected to rise to 17.49 percent in 2012-13. 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 reducing in the same proportion. More than 60 percent of the population still depends on 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 the 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 Service Sector has reported high growth on sustained basis. The Industry Sector reported growth during the 10<sup>th</sup> Plan and has varied from year to year during the 11<sup>th</sup> Plan. The growth in the Agriculture Sector has also varied widely over the years. This is a matter of concern. This Sector needs to grow at higher rates in a sustainable manner.

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 the Sector are enhanced in a sustained manner. There is also need to create opportunities from them to earn their livelihoods from profitable avenues that are available outside the Agriculture Sector. This will facilitate shifting away additional labour from the Agriculture

Sector to other sectors and help reduce poverty at a faster rate.

Odisha is vulnerable to frequent natural calamities such as droughts, floods and cyclones. These calamities in particular and climate change in general adversely impact the agricultural and other sub-sectors of the economy and need to be adequately addressed.

Odisha 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 Odisha

In recent years, Odisha has made significant achievements in terms of economic growth, poverty reduction and other socio-economic indicators. The State Government has been emphasizing on the following areas which need special attention and focus for an overall development approach:

Odisha's economic needs to grow at rates higher than the national average over a long period of time in order to catch up with the nation.

Agriculture and allied sectors need to perform above the national average over a long period of time. There is also a need to improve significantly assured irrigation facilities in all parts of the State in general and in rain-fed and drought prone areas in particular.

Sustained efforts are needed to mitigate adverse impacts of natural calamities, climate change and other shocks that affect Odisha and its people.

Special attention needs to be given to depressed regions and marginalized classes including ST, SC and women to substantially reduce regional, social and gender disparities.

Focused efforts are required to improve employable skills, education and other soft skills of youth to harness opportunities that may come up for them in and outside Odisha.

Infrastructure including roads, ports, railways and irrigation facilities need to be adequately augmented and improved.

Odisha has to sustain its efforts to continuously reduce poverty at a faster pace.

There is an urgent need to improve human development indicators including quality education, affordable healthcare, food security and improved nutrition levels and safe drinking water.

Enabling policy and institutional measures to promote private sector investment.



