



EMPOWERED ODISHA • PROGRESSIVE ODISHA



ODISHA ECONOMIC SURVEY 2022-23

PLANNING AND CONVERGENCE DEPARTMENT, GOVERNMENT OF ODISHA

ODISHA ECONOMIC SURVEY

2022-23

February 2023



Planning and Convergence Department
Directorate of Economics and Statistics
Government of Odisha

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FOREWORD

Suresh Chandra Mahapatra, IAS

Chief Secretary
Government of Odisha

Odisha Economic Survey of 2022-23 provides a comprehensive picture of the State's Economy with its challenges, opportunities, strategies and a broad analysis of sectoral performances. The report presents the growth trajectory under different sectors, emerging trend in services sector, prospects in tourism sector and development in health and sports infrastructure. The survey provides a view of state's significant transformation in the field of healthcare, education, skill development, women empowerment, urban initiatives like Jaga Mission and Drink from Tap mission, Child protection measures and safety measures for weaker section.

The economy grew at 7.82 per cent in 2022-23 which is higher than pre-COVID average growth of 7.1 percent (2012-13 to 2019-20). Industry and service sectors have been the major engines of economic growth in the State in the recent years. Odisha has achieved impressive growth in the last two decades. First, the State has grown faster than many states and all-India. Second, economic growth has been steady. Third, industry has been the engine of growth and the services sector is picking up. The Government of Odisha has prudently managed the state's finances to have a very comfortable fiscal position.

Effective tackling of natural disasters, high capital spending, increasing receipts from minerals, low inflation relative to neighbouring states, moderate unemployment, power and manufacturing sector reforms, promotion of start-ups and fiscal prudence have helped the state to rise to new peaks over the years. The State witnessed significant growth in the air transport sector with opening of new airports, new routes. Odisha has considerable potential in tourism sector which will have positive impact on jobs and investments in other sectors such as transport, hotels, construction.

There is steady growth of the economy over last 20 years with reduction in poverty increase in per capita income and financial sustainability. The state came up with infrastructure development in the field of health, education, sports, tourism, irrigation and rural connectivity. A robust health care system with the message "Accessible healthcare for all" shows the commitment of State for its

citizens. In order to promote quality education the State has embarked upon High School Transformation Programme and establishment of Odisha Adarsha Vidyalayas (OAVs). We have given utmost priority for skill development of youth through World Skill Center and Skilled in Odisha –tag has now received global recognition. Investment in youth has been the priority of the State.

Integrated development of heritage, monument and tourist destinations has been undertaken through ABHADA, EKAMRA and SAMALAI. Tourism is identified as a sector with enormous potential for employment and livelihood opportunities. Recently, the State successfully hosted Men's Hockey World Cup 2023 in Odisha. Sports infrastructure as well as training facilities have also been expanded in a big way.

The State focuses on women empowerment through Mission Shakti and also provided nutritional health support to children. Odisha is emerging as the investment hub of Eastern India. Recently, Government have organized Make In Odisha Conclave 3.0 in 2022 to attract private investment.

The State is committed to achieving the SDGs and has been taking strategic initiatives to localize the SDGs so that no one is left behind and the development undertaking is relevant to local need and aspiration.

The various data on important socio-economic indicators referred to in the Report will be of use to researchers, policy planners, academicians and members of the civil society.

I compliment the efforts of Planning and Convergence Department and Directorate of Economics and Statistics for preparation of the Odisha Economic Survey 2022-23 and wish the publication all success. I hope this document with various socio economic indicators will serve as a useful reference material for policy makers, academicians, researchers and other stakeholders.



(S.C. Mahapatra)



PREFACE

Pradeep Jena, IAS

Development Commissioner-
cum- Additional Chief Secretary
Government of Odisha

The Odisha Economic Survey 2022-23 highlights the performance and structural changes writ large in the state's economy. It offers a comprehensive assessment of all sectors of the economy with challenges faced and responses thereto of the Government in terms of new policy initiatives as well as implementation of development schemes and programmes. The report embodies the macro view of the economy, fiscal performance and progress across major sectors of State's economy.

Odisha economy continued the remarkable upsurge post-pandemic, growing at a rate of 11.5 per cent in 2021-22 and 7.8 per cent in 2022-23. These growth rates have not only been significantly higher than that at the national level for the corresponding years, but also surpassed the pre-pandemic trend of performance. As a consequence, the state's per capita income has risen to INR 1,50,676 in 2022-23(AE) thereby dramatically shrinking the gap vis-à-vis the national level to half of what it used to be in 2011-12.

State's fiscal performance remained satisfactory during 2021-22 and the trend is expected to persist in 2022-23. The State has consistently reported a revenue surplus and has maintained gross fiscal deficit within FRBM limits. Debt to GSDP ratio in the State has been maintained below the threshold limit of 25 percent consistently over the last 15 years. The capital outlay of State in 2022-23(BE) is almost 8.6 times of its value in 2011-12 and is 5.1 percent of GSDP.

Development expenditure of the State has increased more than four times in 2022-23(BE) over 2011-12 with a view to achieving sustainable and inclusive growth and development. The transformative shift from Agriculture to Industry and service sector have been quite visible with the shares of Industries and Services sector in GSDP expected to increase to 41.3 percent and 36.2percent respectively. Government's proactive initiatives in the industry sector, like "Make in Odisha Conclave", "Industrial Policy 2022", "Odisha Apparel and Textile Policy", "Odisha Logistic Policy 2022" and "Export Promotion Policy 2022" is expected to give a fillip to development of a robust industrial ecosystem in Odisha. On the other hand, critical strategic shifts have taken place in agriculture. While crop production and productivity has shown steady improvement, crop diversification has progressed apace with a focus on climate-resilient crops. Comprehensive and innovative interventions have been taken up in various sub-sectors by several

Missions (e.g., “Jackfruit Mission”, “Spices Mission”, “Mushroom Mission”, “Floriculture Mission”, etc.). Odisha Millet Mission, launched in 2017-18 to develop a sustainable food system of millets ensuring nutritional security for vulnerable rainfed areas of the State, has been very successful in increasing area under millets apart from promoting healthy food habits in the communities.

Performance in the education sector has shown major strides. The multi-pronged push for quality human resources, infrastructure and institution development and governance through “Mo-School”, “Mo-College” & “Adarsha Vidyalaya” as well as the across-the-board adoption of the 5T transformation Approach has been very effective. Similarly in health, performance has been nothing less than transformative. With the universalised Health Assurance under the Biju Swasthya Kalyan Yojana (BSKY), access to quality preventative and curative health services including critical care has been achieved for all on the ground. Special attention has been given to nutrition security and eradication of anaemia under Anaemia Mukta Lakhya Abhiyan (AMLAN) for all affected people including pregnant women, lactating mothers, women of reproductive age group, adolescents and children.

Empowerment of youth and women is bringing about societal metamorphosis. The makeover of youth into a powerhouse of change through sports, creativity and animation has been palpable. The construction of World’s largest Hockey Stadium in Rourkela and hosting of the Men’s Hockey World Cup 2023 are only the tell-tales signs of a deeper transformation happening in the state. With the support of Mission Shakti, women are continuously scaling new heights in terms of economic and social entrepreneurship and leadership. From participating in Self-Help Groups to being captains of growing number of small and medium enterprises women have been championing electrifying change touching all rungs of society and development. The vision for SHGs is to become SMEs in future .

The Government of Odisha has wholeheartedly embraced and integrated the Sustainable Development Goals in all aspirations and actions for development and transformative change. Quality of life for everyone with equity, equality and planetary sustainability is innate to the Dharma of the State and Government. The Hon’ble CM’s call of “Every Life is precious for us...” has been the guiding Mantra for all the initiatives for the New Odisha, Empowered Odisha. This Mantra has been successfully demonstrated in mitigating the impacts of various disasters, effectively arresting the COVID-19 pandemic, and reaching the benefits of development to people of all social groups Leaving No One Behind. This is the essence of the transformative governance and development agenda of the State.

This document throws light on multiple aspects of the governance and development agenda of the state in action. It is the result of the combined efforts of all departments of State Government, Officers and Staff of Planning and Convergence Department, Directorate of Economics and Statistics and PwC team.

I hope the Odisha Economic Survey Report 2022-23 will serve as a useful reference document for the policy makers, researchers, academicians and also as a pathfinder for students and all those who have abiding interest in the State’s economy as well as the public in general.



(Pradeep Jena)



INTRODUCTION

Vishal Kumar Dev, IAS

Principal Secretary,
Finance Department
Government of Odisha

Economic Survey provides the basic data on the State's economy, various fiscal indicators and efforts of State Government to bring fiscal discipline in the State. Economic Survey also provides an overview of the State's finances and ability to provide resources for social and economic development of the State.

Government of Odisha is known for its prudent fiscal management. Odisha has been fully compliant with the FRBM act 2005 right since its enactment. It is among the handful of State that have posted revenue surplus for several years during this period. The State continuously strives to enhance fiscal sustainability and improve budget performance by strengthening medium-term fiscal framework and improving budgetary transparency. With the objective of further improving budget credibility, the State has introduced 'Strategic Budget making process' in preparation of the budget for the ensuing years. The developmental revenue expenditure of the State has increased more than four times in 2022-23 (BE), from its level in 2011-12.

The Revenue account has been in surplus for more than 15 years now. Primary deficit has been below 2 percent of GSDP during the last five years except 2019-20. Debt-GSDP ratio is being maintained below 25 percent, the statutory benchmark.

The State has taken various fiscal risk management measures to address the risks arising out of termination of GST compensation to States, volatile revenues from mining, decline in Odisha's share in tax devolution, state's contingent liabilities in power sector and public private partnerships especially infrastructure and the frequent natural disasters.

The Economic Survey provides a detailed account of the prudent management of state's finances and public financial management reform measures and other sectoral reforms undertaken by Government, which I hope will receive wider appreciation.

(Vishal Kumar Dev)



Debendra Kumar Jena, I.A.S. (Retd.)

OSD-cum-Special Secretary,
Planning & Convergence Department
Government of Odisha

Odisha Economic Survey 2022-23 presents a macro picture of the State's economy, development scenario, new policy measures and possible opportunities of the State. The Report is the collective effort of Planning & Convergence Department, Directorate of Economics & Statistics and contribution of all Departments of State Government.

We are extremely grateful to Shri Suresh Chandra Mahapatra, I.A.S, Chief Secretary & Chief Development Commissioner for his valuable guidance, support and intellectual inputs. He chaired the meeting of the Steering Committee and shared his views for further refinement of the draft report.

Our sincere gratitude to Shri Pradeep Kumar Jena, I.A.S., Development Commissioner & Additional Chief Secretary as a mentor at every step, sharing his vision and guided the team throughout in preparation of the report. His concerted efforts culminated in bringing the report in the present form.

We are profoundly grateful to the guidance and support of Smt. Anu Garg, I.A.S., Additional Chief Secretary at the last mile and as a Member of the Contract Monitoring Committee. We are also thankful to other Members of the Committee Sri Hemant Sharma, I.A.S., Principal Secretary, Industries, Shri Vishal Dev, I.A.S., Principal Secretary, Finance, Sri Dhaneswar Mallik, O.S.J.S., Principal Secretary - in - Charge, Law and Sri Manoj Kumar Mishra, Principal Secretary, E&IT for their guidance in on boarding the team from PwC India for professional support.

We are also grateful to Smt. Chitra Arumugam, Special secretary, Planning & Convergence Department for substantially enriching it with recent developments in SDG and overall review.

We express our special gratitude to the Additional Chief Secretaries, Principal Secretaries and Secretaries of different Departments for their personal involvement in providing up to date inputs and feedback in preparing an analytical and useful document.

We thankfully appreciate the contribution of Prof. Asit Mohanty, Chair Professor, CEFT, Xavier University, Bhubaneswar for his valuable inputs. Our special thanks to the resource person Dr. R. N. Patra, Retired Reader (Economics) and Honorary Prof, Council of Analytical Tribal Studies, Koraput, Dr. Manoj Kumar Das, Senior Assistant Professor, (Economics), Ravenshaw University, Dr. Siba Sankar Mohanty, Reader, Department of A&A Economics, Utkal University, in drafting various Chapters. Their valued contributions are highly acknowledged. Dr. Satya Priya Rath IAS, Director, Budget and Smt. Supriya Prusty, Deputy Director(Statistics) of Finance Department, Dr. Sujata Priyambada Parida, Deputy Director, (Statistics), Agriculture & Farmers Empowerment Department, Sri D.K. Bariha, Deputy Director, WR Department, Dr. Kailash Chandra Pani, ex-Joint Director, Dr. B.N. Mohapatra, ex-Joint Director, (SR), DE&S being part of the resource team for drafting the respective chapters. Their valued contributions have enriched the document in many ways.

The untiring work of the Officers & Staff of DE&S needs special mention. Dr. B. B. Nanda, Director, Economics and Statistics and his team of Officers and staff : Ms. Prabhati Rani Pradhan, Joint Director-I, Dr. B. N. Mohanty, Joint Director, Sri B. K. Tripathy, Deputy Director, Smt. Jayashree Rath, Deputy Director, Smt. Kabita Pattnaik, Deputy Director, Sri Laxmidhar Biswal, Deputy Director, Smt. Sarojini Routray, Asst. Director, Sri Rankanidhi Nayak, Asst. Director, Sri S. M. Panda, Asst. Director, Smt. Bela Jena, Asst. Director, Sri Kshiroda Kumar Sahoo, Statistical Officer, Abdul Amir Khan, Statistical Officer, Sri B. P. Rath, Statistical Officer, Sri Sarat Chandra Sahoo, OSD and Smt. Bidyutlata Patasani, Artist contributed significantly in data collection, compilation and drafting of different chapters of the Economic Survey 2022-23 throughout. Their diligent effort to bring out this publication is praiseworthy.

Our appreciation go to to the dedicated team of Planning & Convergence Department. Smt. Sudhapriya Das, Additional Director, Smt. Manasi Satpathy, Additional Director, Smt. Sudha Panda, Deputy Director, as resource person and overall co-ordination of the report. Commendable work done by Sri Nabhendru Mallik, Asst. Director, Sri Debashis Mishra, S.O., and Ms. Subhasree Priyadarsini, A.S.O. who supported generously from inception stage to preparation of chapters and in printing of the report through timely coordination with all stakeholders for publication of the report in time.

We greatly appreciate the support of PwC Team, who put in their best effort in bringing out the report in the present form. The PwC Team including Dr. Manoranjan Pattanayak, Executive Director, Mehul Gupta, Team Leader, Pradeep Kumar Sahoo, Economist, Dr. Anirudh Barik, Economist, Devanand Yadav, Socio-Economic Expert, Sayandeep Chattopadhyay, Socio-Economic Expert, Debayan Hazra, Data Analyst, Dr. Biswajit Mondal, GIS Expert, Shantanu Sharma, Specialist, Dr. Suman Chakraborti, Specialist and Ipsit Rath, Specialist have special contribution in editing, reviewing and developing infographics to make the Odisha Economic Survey, 2022-23 a comprehensive reader friendly document.

We extend our thanks to Shri Jyoti Ranjan Swain of “Third Eye” and his Team for the cover design, layout and preparation of printable format of the document with a new look and feel.

The support of Officers and staff of Odisha Government Press, Cuttack is highly acknowledged for producing high quality print of the Highlights and Executive Summary of the document. We gratefully acknowledge the contribution of all those persons who are directly and indirectly associated with this publication.

Comments or suggestions are invited from our valued readers for further improvement of the Report which will be highly appreciated.



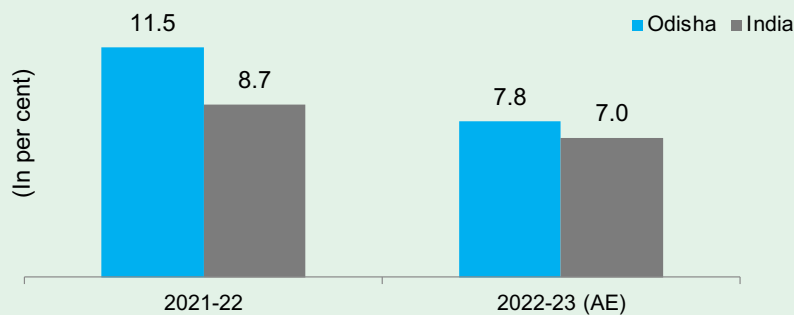
(Debendra Kumar Jena)



ECONOMIC GROWTH, PER CAPITA INCOME, PRICE AND EMPLOYMENT

Figure 1 ▶ Economic Growth Rate- Odisha and India at Constant Prices

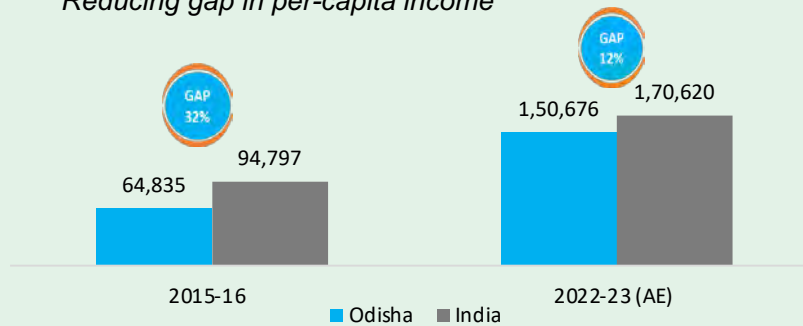
Odisha is growing at higher rate than India



Source: DE&S, GoO; MoSPI, Gol

Figure 2 ▶ Per Capita Income at Current Prices (INR) - Odisha and India

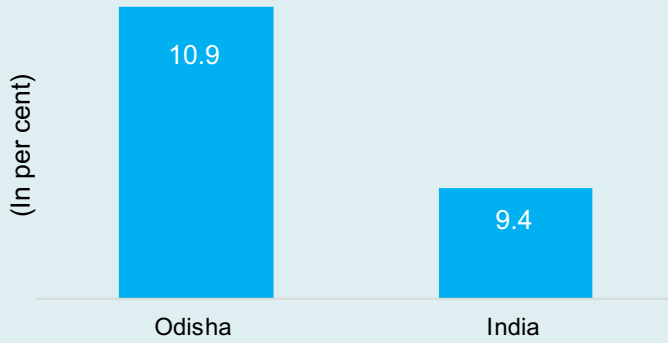
Reducing gap in per-capita income



Source: DE&S, GoO; MoSPI, Gol



Figure 3 ▶ Per Capita Income Growth between 2011-12 to 2022-23- Odisha and India (CAGR)



Source: DE&S, GoO; MoSPI, Gol

Note: CAGR is calculated for per capita income at current prices.

Figure 4.A ▼ Inflation in Odisha

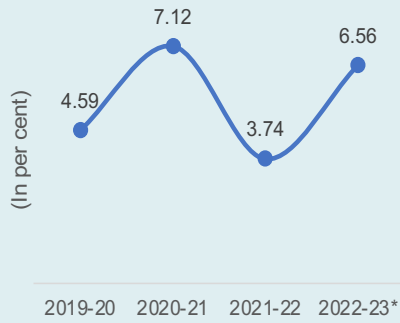
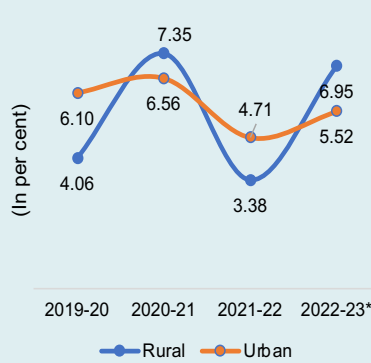


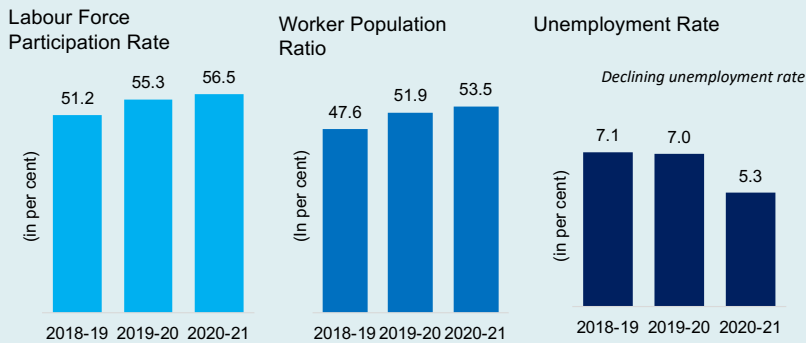
Figure 4.B ▼ Rural and Urban Inflation in Odisha



Source: MoSPI, Gol

Note: Over year figures. *April to December 2022

Figure 5 ▶ Labour Force Participation, Worker Population Ratio and Unemployment Rate - Odisha

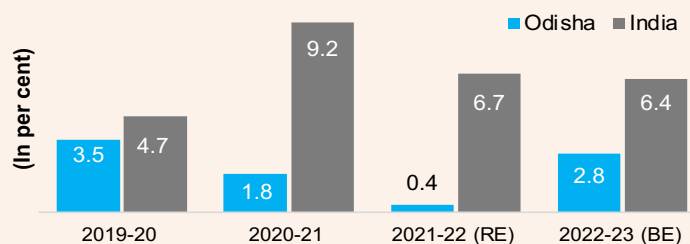


Source: Periodic Labour Force Survey (PLFS), NSSO, MoSPI, Gol (multiple rounds - 2018-19, 2019-20, 2020-21)



FISCAL MANAGEMENT

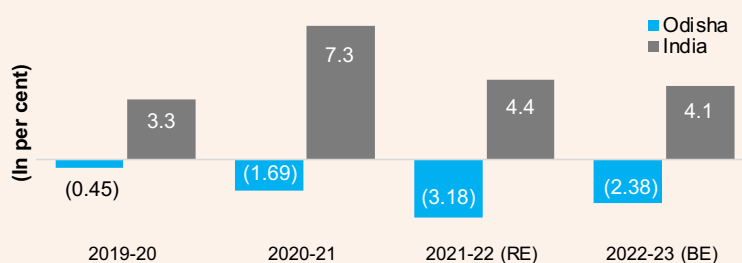
Figure 6 ▶ Fiscal Deficit to G(S)DP - Odisha and India



Source: Annual Budget documents, GoO; Budget at a Glance, GoI

Note: For 2021-22, India's figures are actuals

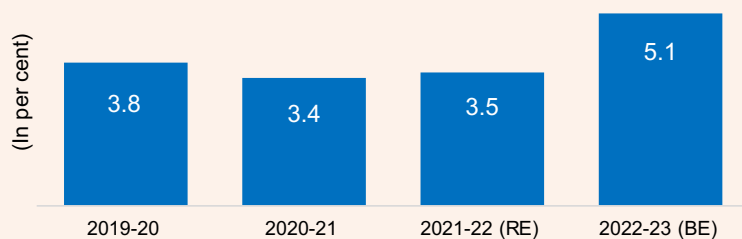
Figure 7 ▶ Revenue Deficit to G(S)DP - Odisha and India



Source: Annual Budget Documents, GoO; Budget at a Glance, GoI

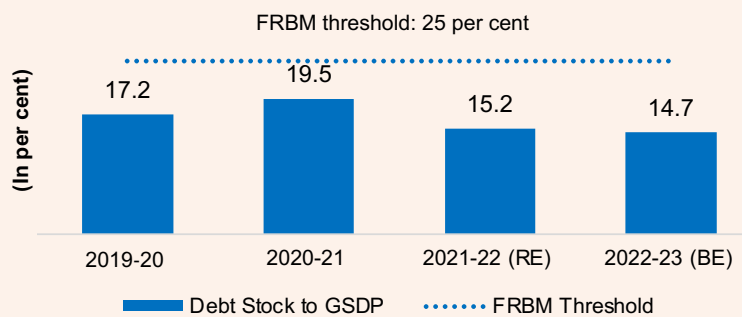
Note: Parenthesis () indicates surplus. For 2021-22, India's figures are actuals

Figure 8 ▶ Capital Outlay as per cent of GSDP - Odisha



Source: Annual Budget Documents, GoO

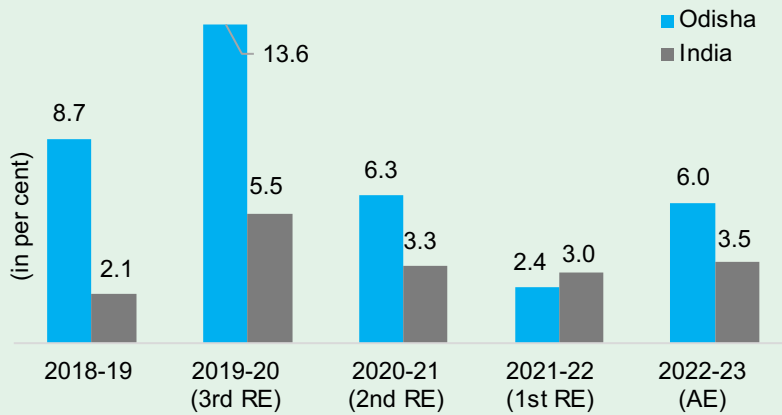
Figure 9 ▶ Debt to GSDP Ratio - Odisha



Source: Annual Budget Documents, GoO

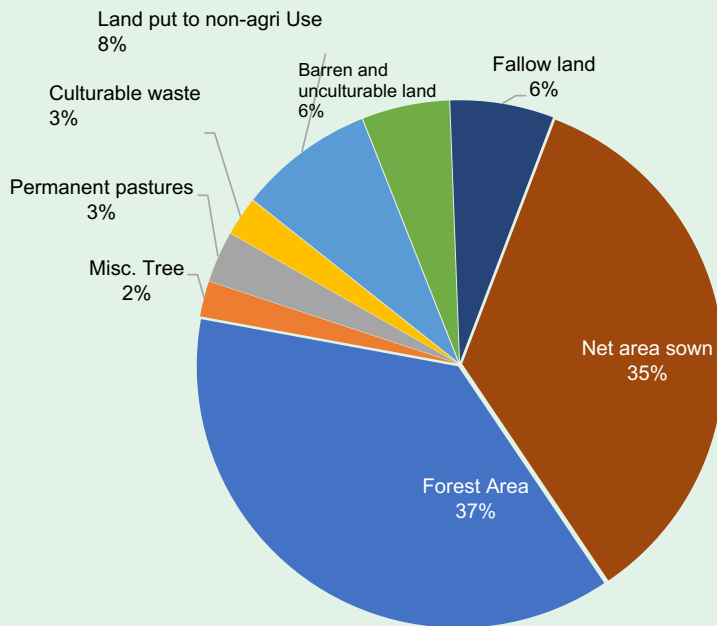
AGRICULTURE AND ALLIED SECTOR

Figure 10 ▶ Growth of Agriculture & Allied Sectors at Constant Prices - Odisha and India



Source: DE&S, GoO & MoSPI, GoI

Figure 11 ▶ Distribution of Land Use Pattern - Odisha, 2021-22

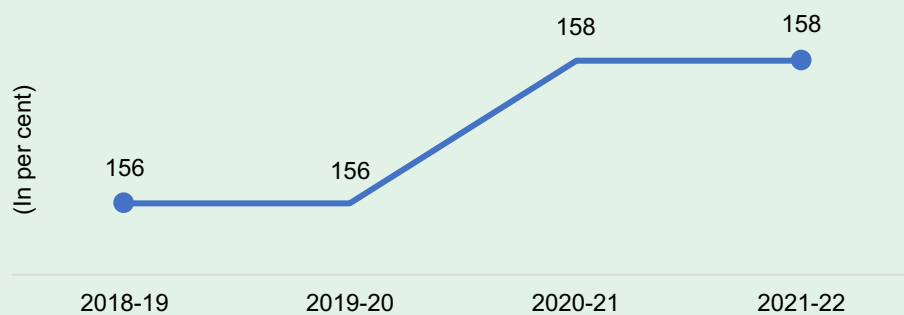


Source: Directorate of Agriculture and Food Production, GoO





Figure 12 ▶ Trend of Cropping Intensity - Odisha



Source: Directorate of Agriculture & Food Production, GoO

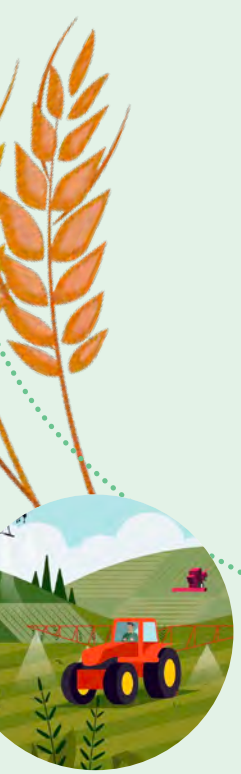
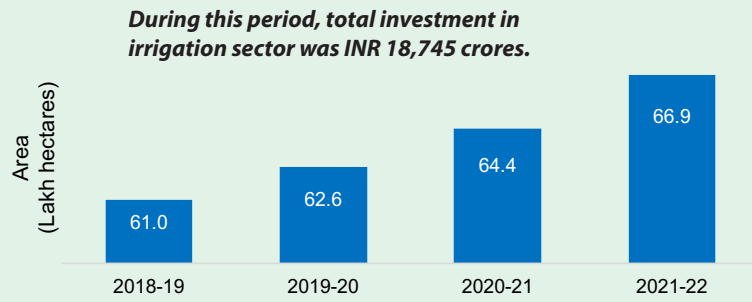
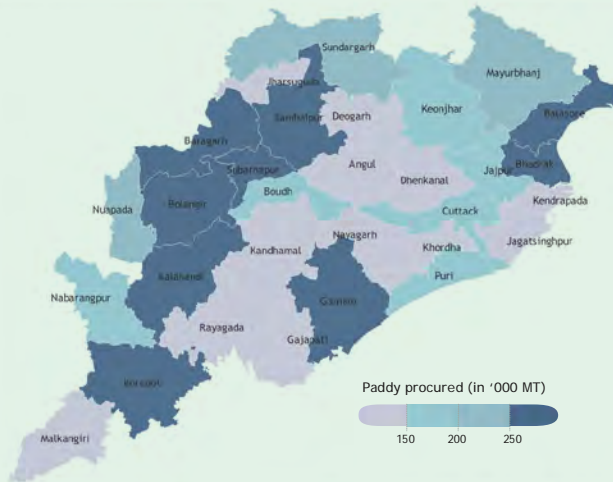


Figure 13 ▶ Irrigation Potential Created (IPC) - Odisha



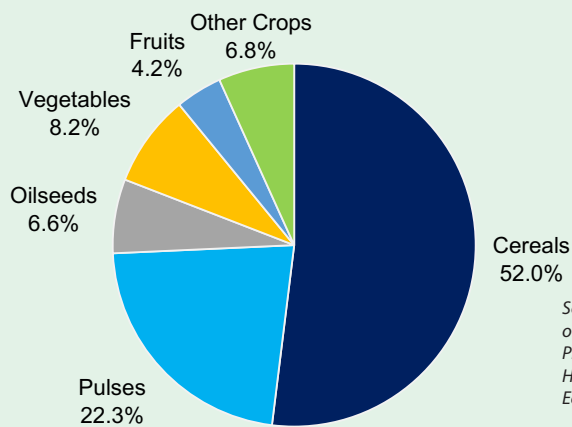
Source: Water Resource Department, GoO

Figure 14 ▶ District wise Paddy Procurement - Odisha, 2021-22



Source: FS & CW Department, GoO

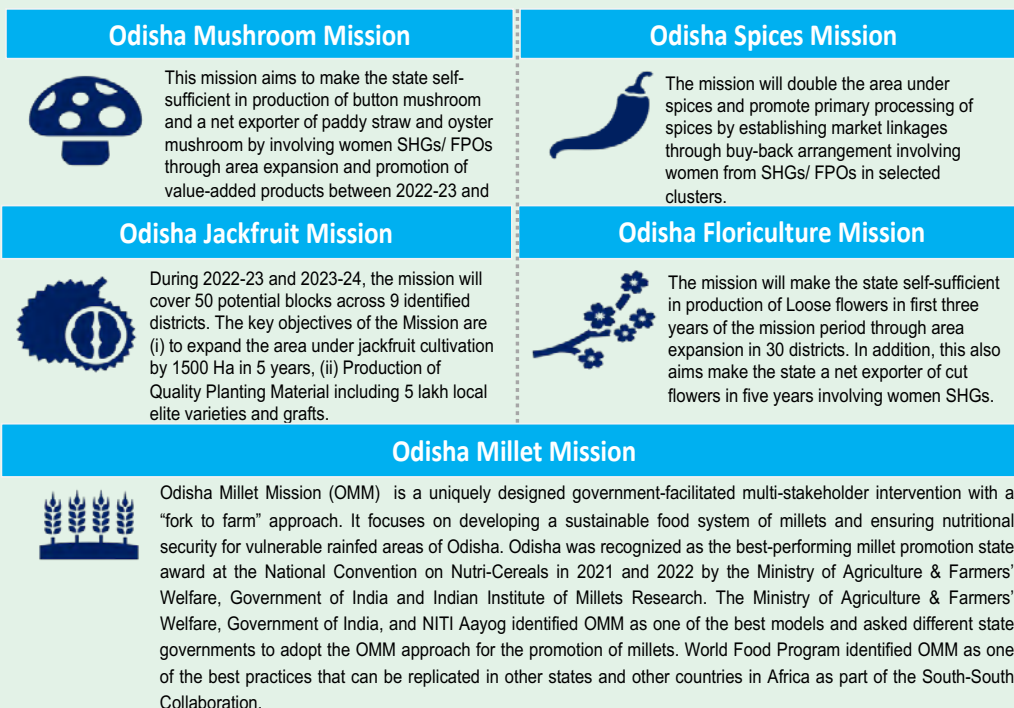
Figure 15 ▶ Distribution of area under Cereals, Pulses, Oilseeds, Vegetables and Fruits for the year 2021-22- Odisha



Source: Directorate of Agriculture & Food Production, Directorate of Horticulture & Directorate of Economics & Statistics, GoO



Figure 16 ▶ New Policy Initiatives in the Crop sector



Source: Directorate of Agriculture & Food Production, Directorate of Horticulture, GoO



FISHERIES, ANIMAL HUSBANDRY AND DAIRYING

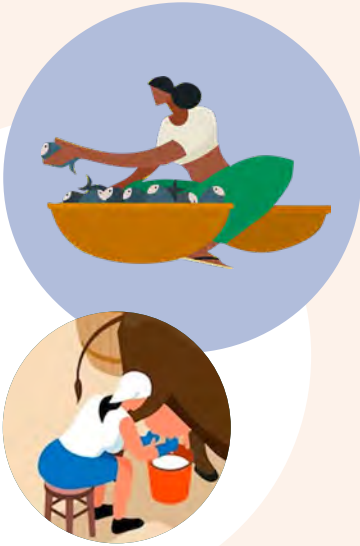
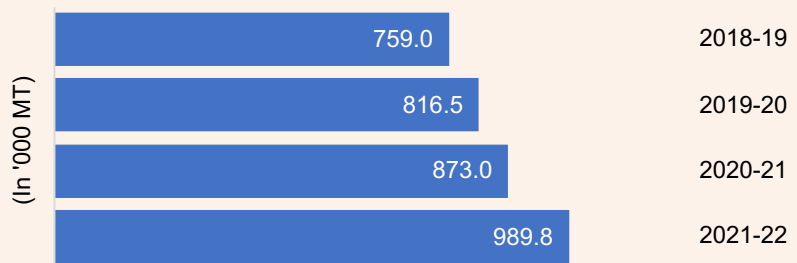
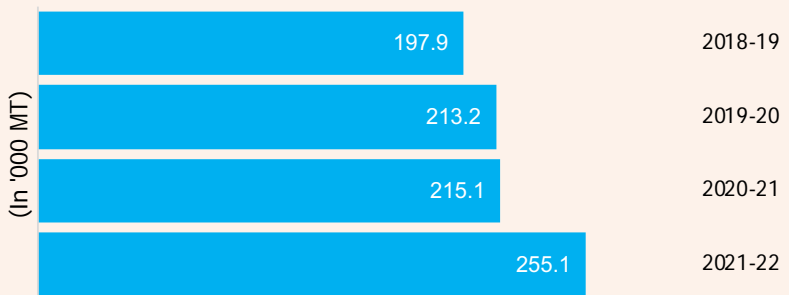


Figure 17 ▶ Production of Fish - Odisha



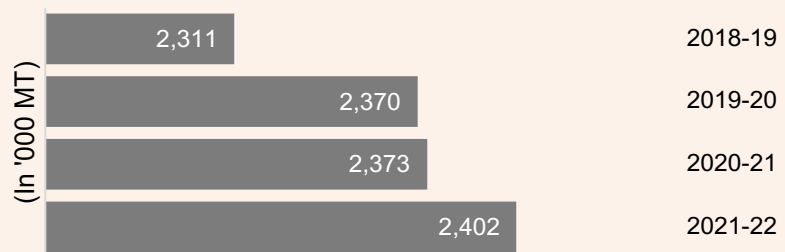
Source: Directorate of Fisheries, GoO

Figure 18 ▶ Export of Fish (to other states/countries) - Odisha



Source: Directorate of Fisheries, GoO

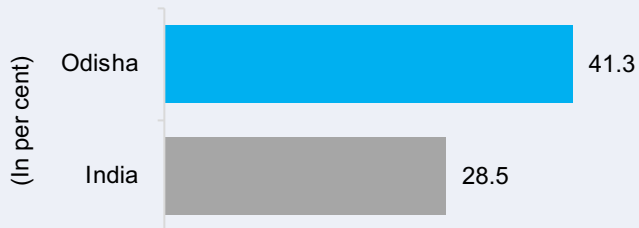
Figure 19 ▶ Milk Production - Odisha



Source: F&ARD Department, GoO

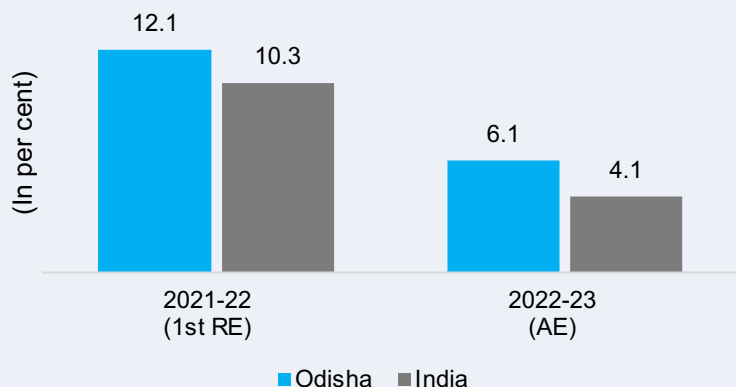
INDUSTRY SECTOR

Figure 20 ▶ Share of Industry Sector in G(S)VA - Odisha and India (2022-23 AE)



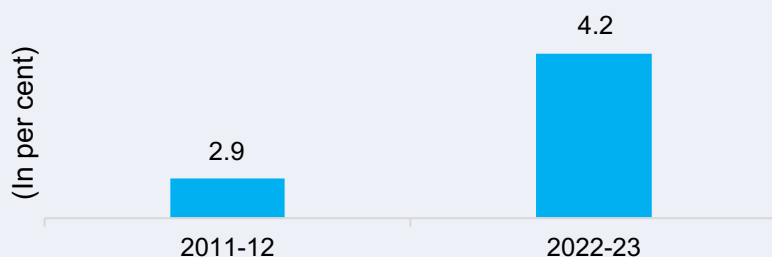
Source: DE&S, GoO, MoSPI, Gol
 Note: Share is calculated at current prices.

Figure 21 ▶ Annual Growth of Industry Sector at Constant Prices - Odisha and India, 2022-23 AE



Source: DE&S, GoO, and MOSPI, Gol

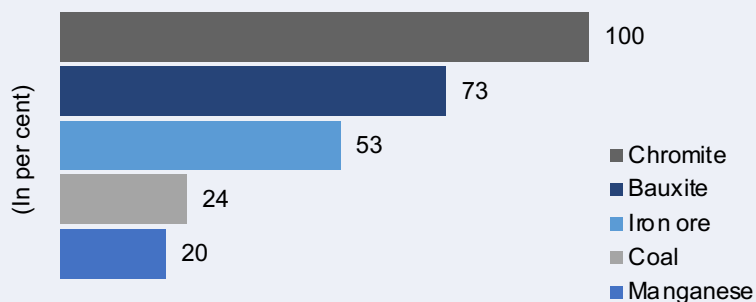
Figure 22 ▶ Share of Odisha in India's Manufacturing GVA at Current Prices



Source: DE&S, GoO, and MOSPI, Gol

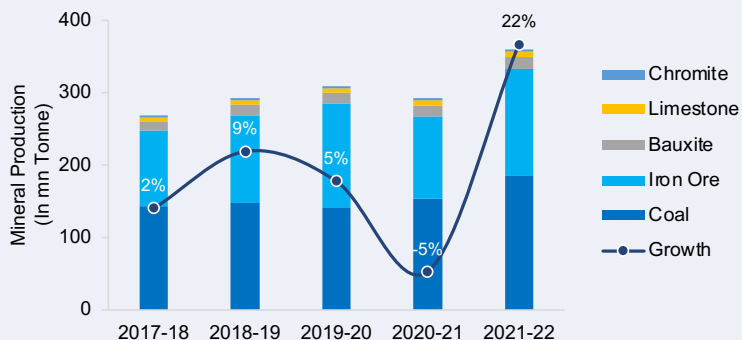


Figure 23 ▶ Share of Odisha in Major Mineral Production in India, 2021-22



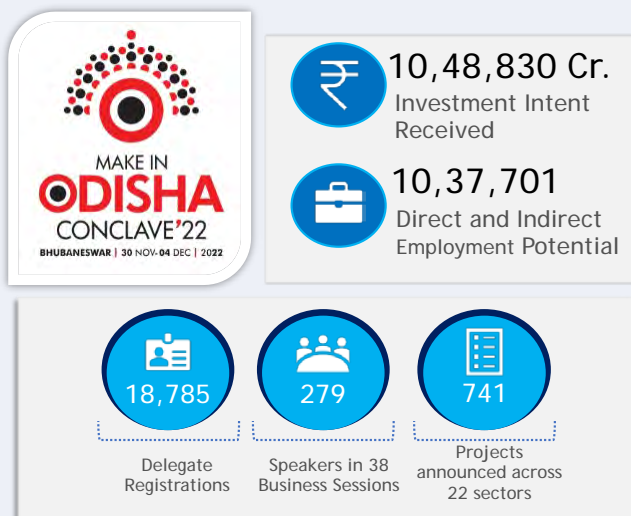
Source: Directorate of Mines, GoO

Figure 24 ▶ Mineral Production - Odisha



Source: Directorate of Mines, GoO

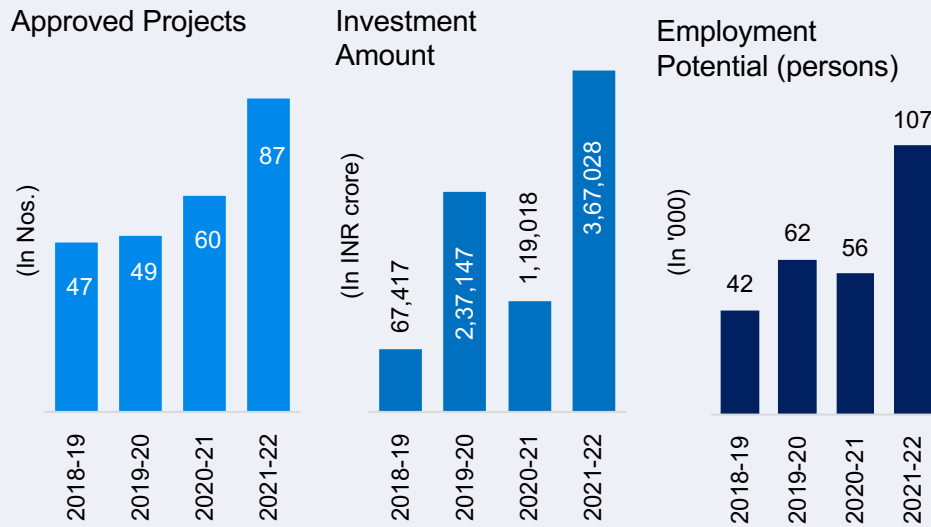
Figure 25 ▶ Make in Odisha Conclave 2022



Source: IPICOL, Odisha

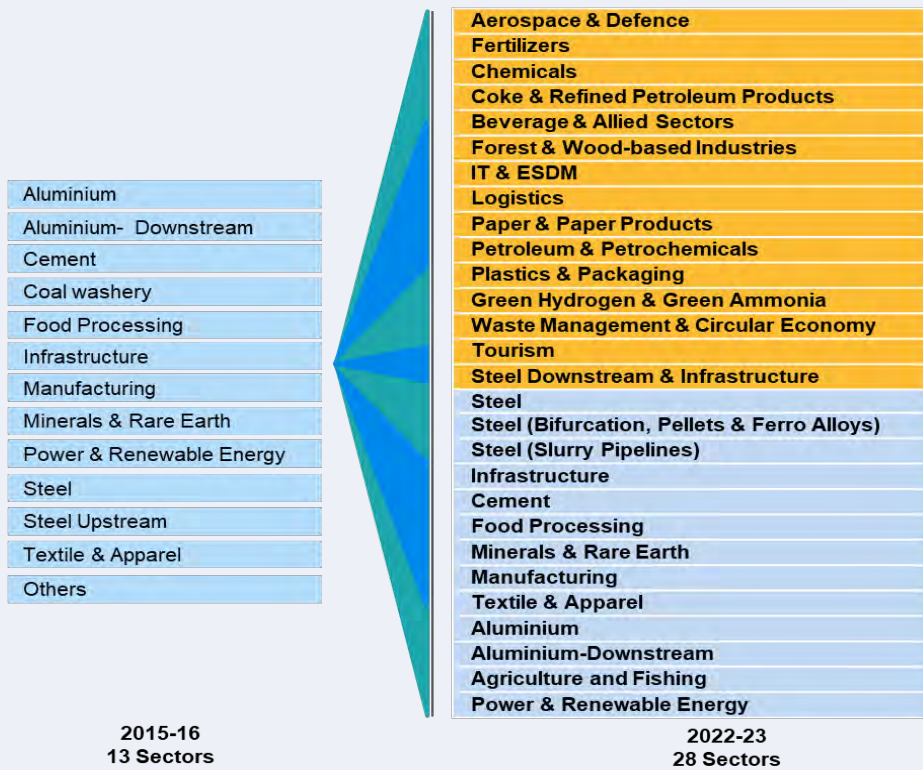


Figure 27 ▶ Number of Projects Approved, Investment Received and Employment Potential - Odisha



Source: IPICOL, GoO

Figure 28 ▶ Sectoral Diversification (Number of sectors with approved projects)



Source: IPICOL, GoO



Figure 29 ▶ Category wise cumulative number of MSME units set up in Odisha (up to 2021-22)



msme

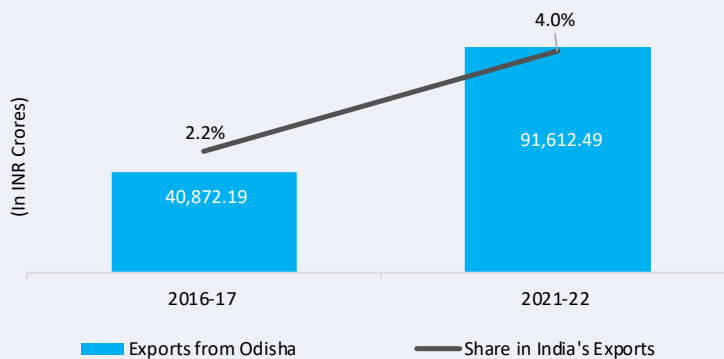
MICRO, SMALL & MEDIUM ENTERPRISES



Source: Directorate of Industries, GoO



Figure 30 ▶ Odisha's Exports and its share in India's Exports



Source: State-wise Export Data, Monitoring Dashboard, Ministry of Commerce and Industry, Gol

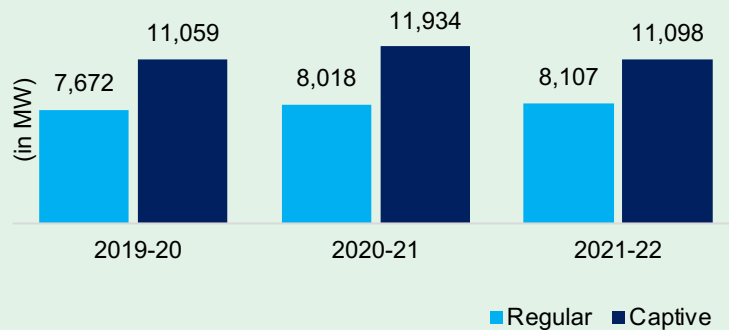


Table 1 ▶ Major Export Products from Odisha (Values in INR crore)

Products	2019-20	2020-21	2021-22	Share in Value of Exports for 2021-22 (per cent)
Metallurgical	24,811	8,123	86,727	68.02
Engineering, Chemical and Allied	4,434	7,855	15,496	12.15
Minerals	14,627	26,190	19,374	15.20
Agriculture and Forest	187	178	469	0.37
Marine	3,029	3,114	4,462	3.50
Handloom	1	0	2	0.00
Handicraft	3	8	9	0.01
Textile	132	206	930	0.73
Pharmaceutical	6	9	16	0.01
Others	12	37	11	0.01
Total (Merchandise)	47,242	75,718	127,498	-
Electronics and software	4,500	4,701	-	0.00
Total	51,742	80,419	127,498	100

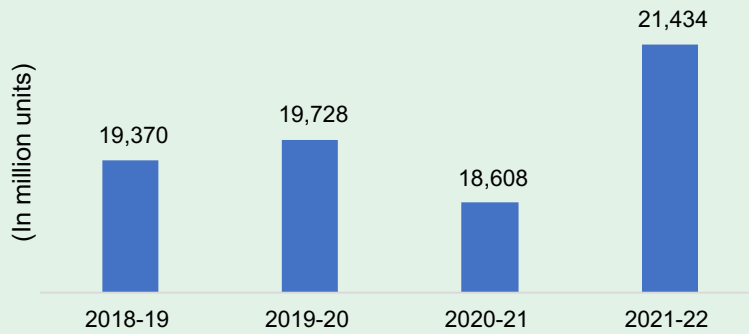
Source: Directorate of Export Promotion and Marketing, GoO

INFRASTRUCTURE SECTOR

Figure 31 ▶ Installed Capacity of Power Plants

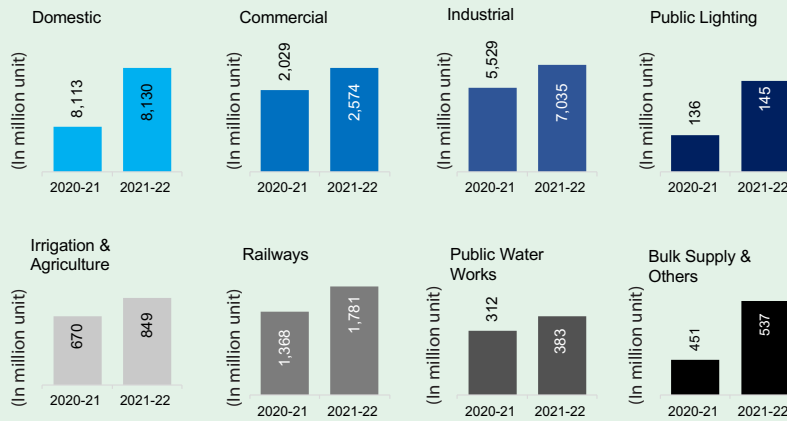
Source: GRIDCO, Odisha; Office of EIC-cum-Principal Chief Electrical Inspector, GoO

Figure 32 ▶ Total Power Consumption - Odisha



Source: GRIDCO, GoO

Figure 33 ▶ Sector wise Power Consumption - Odisha



Source: GRIDCO, GoO

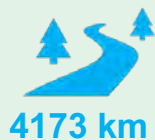
Figure 34 ▶ Types of Road Length in Odisha (2021-22), Total and Navigable Length of Waterways in (2020-21) and Total Number of Bridges in Odisha (2022-23)

Total road length 338,450 Km

National highway



State highway



Total length of river/ canals/ lakes

2425 km



Navigable river

1555 km



Total number of bridges completed under 'Biju Setu Yojana' between 2011-12 to 2022-23 (up to January 2023)

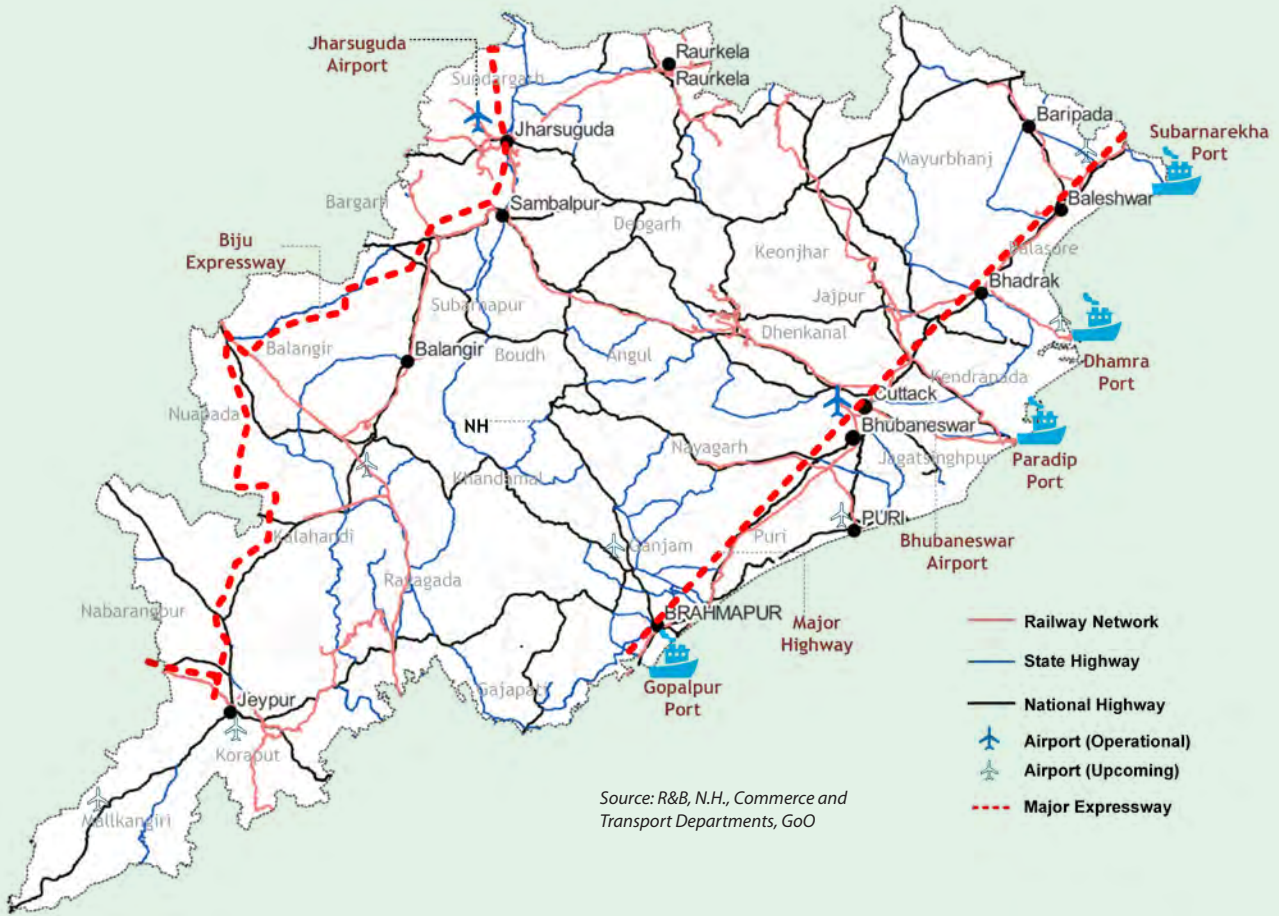
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Source: C.E, NH, C.E R&B, GoO; Statistics of Inland Water Transport 2020-21, GoI; Rural Development Department, GoO

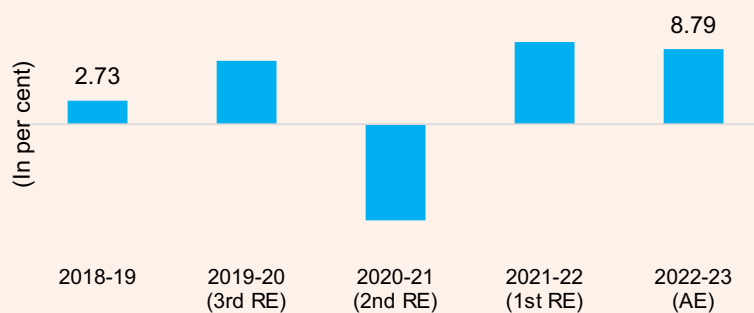


Figure 35 ▶ Key Transport and Connectivity Network - Odisha



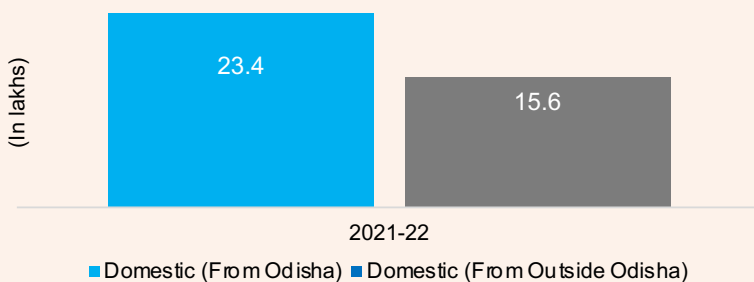
SERVICES SECTOR

Figure 36 ▶ Growth of Services Sector - Odisha at Constant Prices



Source: DE&S, GoO, and MOSPI, GoI

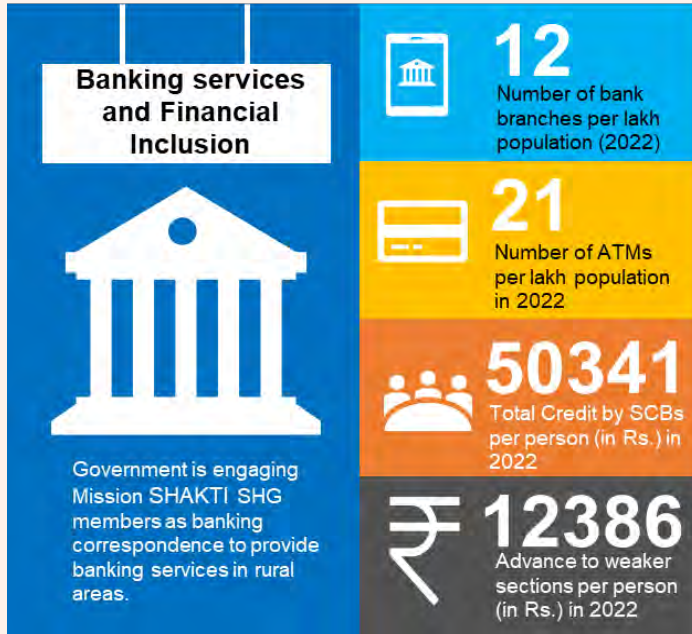
Figure 37 ▶ Tourist Arrival in Odisha



Source: Department of Tourism, GoO



Figure 38 ▶ Level of Banking Services and Financial Inclusion - Odisha



Source: SLBC 167th Issue, Odisha



BSKY HIGHLIGHTS

- 96.5 lakh families covering over 3.3 crore people of Odisha are provided with annual cashless health coverage of Rs 5 lakh for family and additional Rs. 5 lakh for female member after exhaust of initial limit.
- A total 604 hospitals (498 within and 106 outside the State) empanelled, 2056 packages covered under BSKY.
- Around 90,000 claims amounting to Rs. 200 cr cashless treatment is being provided under BSKY per month with 97% positive patient feedback.

SOCIAL SECTOR

Figure 39 ▶ Increasing Life Expectancy- Odisha and India

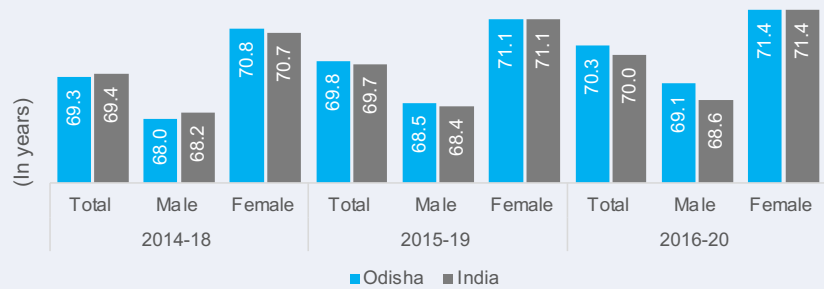


Figure 40 ▼ Budgetary Allocation to Health and Family Welfare Department - Odisha

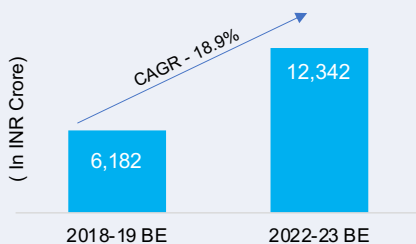


Figure 41 ▼ Share of Health and Family Welfare Department in Total Budget - Odisha

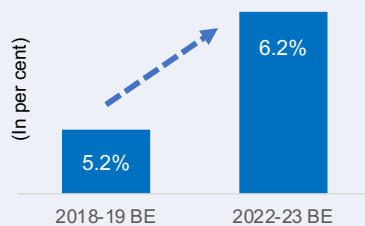
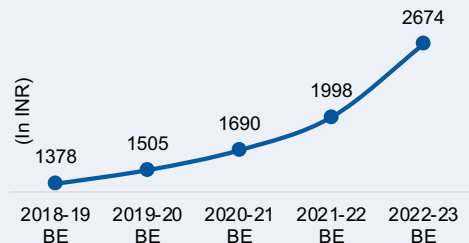


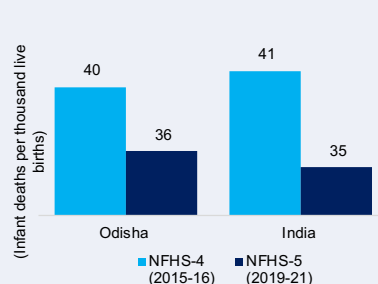
Figure 42 ▼ Per capita budgetary allocation to Health and Family Welfare Department - Odisha



Source: Department of Health and Family Welfare, GoO

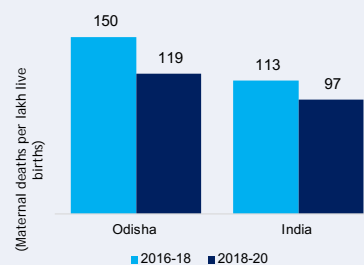


Figure 43.A ▾
Infant Mortality Rate - Odisha and India



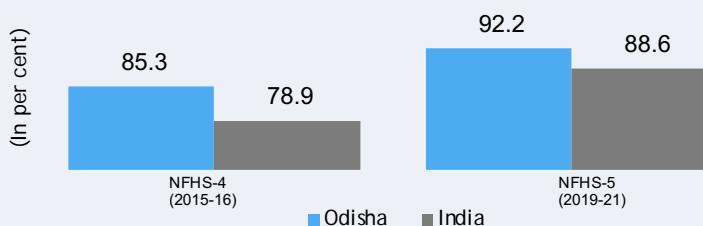
Source: NFHS-4 (2015-16) and NFHS-5 (2019-21), State Fact Sheet – Odisha, MoHFW, GoI

Figure 43.B ▾
Maternal Mortality Ratio - Odisha and India



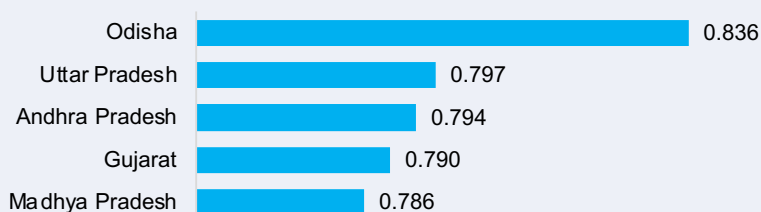
Source: SRS, RGI, GoI

Figure 44 ▶ **Institutional Births - Odisha and India**



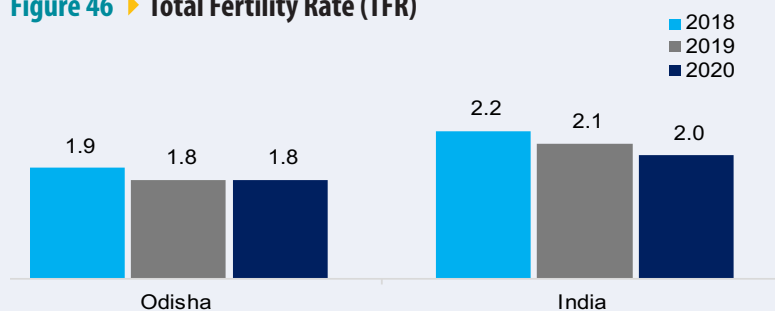
Source: NFHS-4 (2015-16) and NFHS-5 (2019-21), State Fact Sheet – Odisha, MoHFW, GoI

Figure 45 ▶ **Top Five States in NFSA Index, 2022**



Source: Ministry of Consumer Affairs, Food and Public Distribution, India

Figure 46 ▶ **Total Fertility Rate (TFR)**

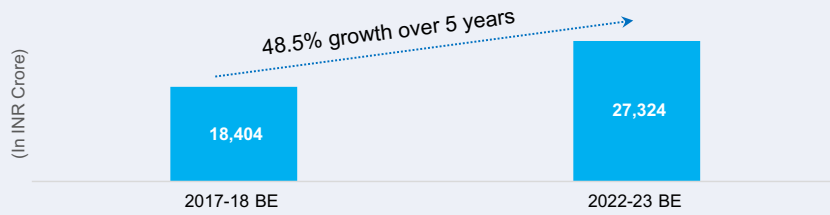


Source: SRS bulletin, RGI, GoI

Note: Total Fertility Rate is defined as the average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the three years before the survey, based on detailed birth histories provided by women.

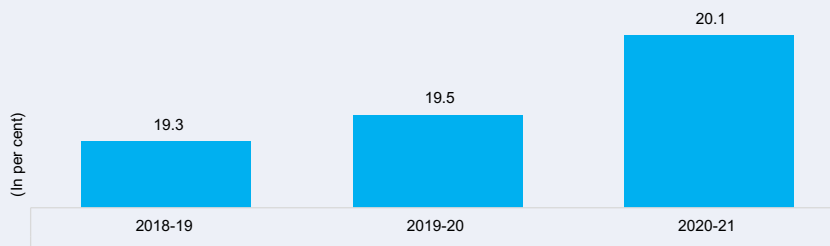


Figure 47 ▶ Budgetary Allocation for School Education, Higher Education, ST, SC and Technical Education Departments - Odisha



Source: Finance Department, GoO

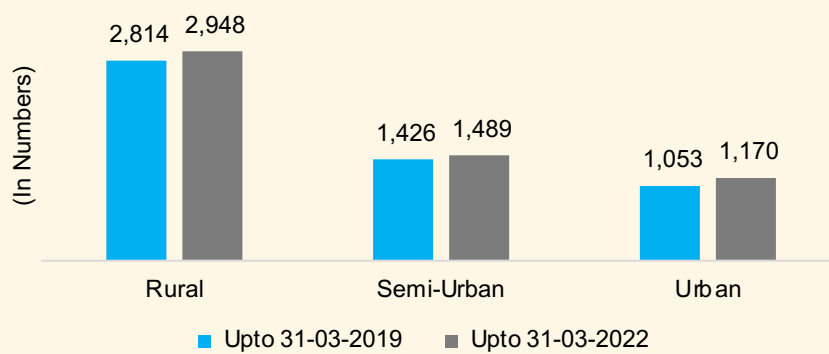
Figure 48 ▶ Increasing Female Enrolment in Higher Education - Odisha



Source: AISHE 2020-21

RURAL AND URBAN DEVELOPMENT

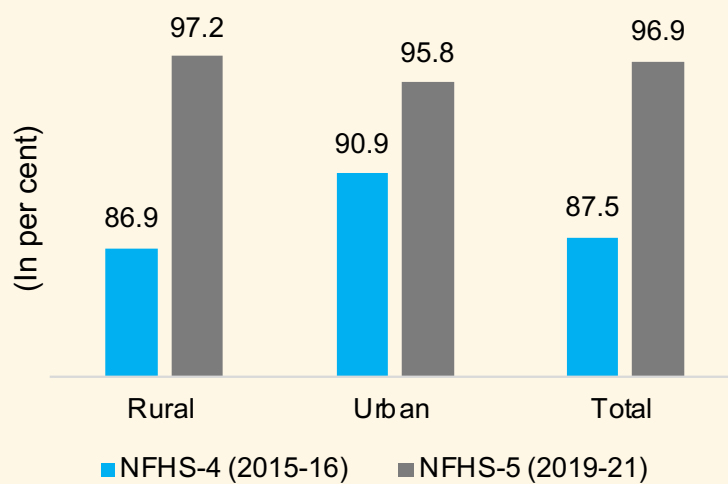
Figure 49 ▶ Growth in the Number of Bank Branches - Odisha



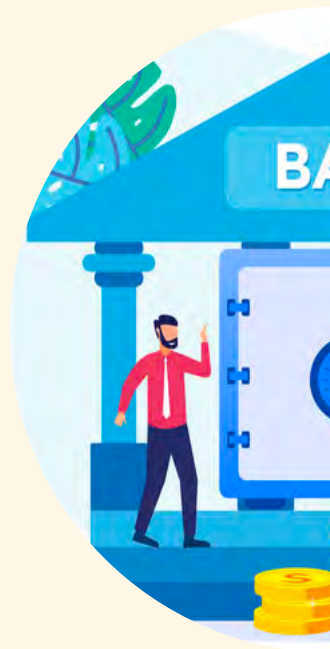
Source: SLBC, Odisha



Figure 50 ▶ Percentage of Households having an Account in Bank/ Post Office - Odisha



Source: NFHS 4 & 5, MoHFW, GoI



CONTENTS

Chapter 1: State of the Economy: A Macro View	1
1.1. Macroeconomic Scenario- Global and National	3
1.2. Macroeconomic Development in Odisha	4
1.3. Conclusion	23
Chapter 2: Agriculture and Allied Sectors	25
2.1. Introduction	27
2.2. Broad overview of Agriculture in Odisha	27
2.3. Gross value added and growth of Agriculture & Allied Sector	27
2.4. Crops	30
2.5. Livestock	60
2.6. Fishing and Aquaculture	65
2.7. Forestry	74
2.8. Conclusion	83
Chapter 3: Industry	85
3.1 Introduction	87
3.2 Key Initiatives to promote Industrialisation in Odisha	91
3.3 Mining and Quarrying Activities in the State	96
3.4 Manufacturing Industry in Odisha	109
3.5 Industrial Promotion in Odisha	114
3.6 Skill Development	118

3.7 Micro, Small and Medium Enterprises (MSMEs)	119
3.8 Handicrafts, Handlooms, Sericulture, and Textiles	122
3.9 Export Promotion & Marketing	134
3.10 Construction sector	137
3.11 Odisha Start-up Ecosystem	138
3.12 Conclusion	141
Chapter 4: Infrastructure	143
4.1. Infrastructure development is the bedrock for the progress of an economy	145
4.2. Energy sector: the core component of State Infrastructure	146
4.3. Transport: Lifeline of Infrastructure	155
4.4. Science and Technology	167
4.5. Delivery of Public Services (G2C/G2G/G2B)	169
4.6. Social Protection Delivery Platform (SPDP)	170
4.7. ICT Infrastructure	173
4.8. Institutions	174
4.9. Conclusion	176
Chapter 5: Rural and Urban Development	177
5.1. Introduction	179
5.2. Demographic Profile of Rural and Urban Odisha	180
5.3. Selected Educational Outcomes in Rural and Urban Odisha	182
5.4. Health & Nutrition Status in Rural and Urban Odisha	183
5.5. Infrastructure in Rural and Urban Development	185
5.6. Urban Development Initiatives by Government of Odisha	194

5.7. Urban Night Sky & City Landscape	195
5.8. Urban Governance	203
5.9. Awards and Recognitions Received by the Government of Odisha for the Initiatives in Urban Development	204
5.10. Rural Development Initiatives by Government of Odisha	205
5.11. Conclusion	212
Chapter 6: Services Sector Pathway to Sustainable Growth	213
6.1. Introduction	215
6.2. Share and Growth of Services Sector	215
6.3. Employment in Services Sector	217
6.4. Tourism	217
6.5. Financial Services	231
6.6. Financial Inclusion	236
6.7. Conclusion	246
Chapter 7: Social Protection and Empowerment	247
7.1. Introduction	249
7.2. Education	268
7.3. Empowerment of Scheduled Castes and Scheduled Tribes	280
7.4. Women and Children Development Initiatives	284
7.5. Welfare of Disabled and Elderly Persons	300
7.6. Conclusion	304
Chapter 8: Governance Reforms - Empowering Citizens	305
8.1. Introduction	307

8.2. Public Service Delivery	308
8.3. Tackling Corruption: Vigilance	308
8.4. Law & Order	309
8.5. e-Governance	311
8.6. Responsive Governance through 5T	319
8.7. The 5T Impact	319
8.8. 'Jana Sunani' -A Citizen Friendly & Responsive Platform	324
8.9. The Centre for Modernizing Government Initiative (CMGI)	326
8.10. State Commitment to Leave No One Behind	326
8.11. A Model State in Disaster Management	327
8.12. Conclusion	328
Chapter 9: Fiscal Development and Management	329
9.1. Introduction	331
9.2. Major Fiscal Indicators	332
9.3. Revenue receipts of the State	333
9.4. Expenditure of the state	339
9.5. Quality of Expenditure	343
9.6. State's Liabilities	344
9.7. Debt Stock	346
9.8. Debt Sustainability	347
9.9. Impact of Goods and Services Tax	348
9.10. Reforms in the budget-making process	349
9.11. In conclusion	351
Annexure	353
Bibliography	425

ACRONYMS

Acronym	Definition
AAI	Airports Authority of India
ADP	Aspirational Districts Programme
AHP	Affordable Housing in Partnership
AISHE	All India Survey on Higher Education
AJY	Ama Jungle Yojana
AMB	Anaemia Mukta Bharat
AMLAN	Anaemia Mukta Lakhya Abhiyan
AMRUT	Atal Mission for Rejuvenation Urban Transformation
ANM	Auxiliary Nurse Midwife
APC	Agricultural Production Clusters
APEDA	Agricultural and Processed Food Products Export Development Authority
APICOL	The Agricultural Promotion and Investment Corporation of Odisha Limited
APO	Annual Plan of Operation
APY	Atal Pension Yojana
ARUA	Artificial Recharge to Underground Aquifer
ASEAN	Association of Southeast Asian Nations
ASHA	Accredited Social Health Activist
ASI	Annual Survey of Industries
ASMGCs	Advance Surface Movement Guidance Control System
ATDC	Apparel Training & Design Centre
ATO	Assistant Treasury Officer
AWAAS	Odisha Urban Housing Mission
AWC	Anganwadi Centres
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BAIF	Bharatiya Agro Industries Foundation
BALARAM	Bhoomihina Agriculturist Loan and Resources Augmentation Model
BALCO	Bharat Aluminium Company Limited
BALIA	Bunakar Assistance For Livelihood and Income Augmentation
BASUDHA	Buxi Jagabandhu Assured Water Supply to Habitations
BBNL	Bharat Broadband Network Limited
BBSA	Bhima Bhoi Bhinnakhyama Samarthya Abhiyan
BBSY	Baristha Bunakar Sahayata Yojana
BCA	Business Correspondent Agents
BDA	Bhubaneswar Development Authority
BFSI	Banking, Financial Services and Insurance
BKVY	Biju Krushak Vikas Yojana
BLIS	Bank Credit Linkage and Interest Subvention
BLUIS	Bhubaneswar Land Use Intelligence System
BMC	Bhubaneswar Municipal Corporation
BNRGSK	Bharat Nirman Rajiv Gandhi Seva Kendra
BOBRN	Bogie Open Bottom Rapid Discharge
BPAV	Biju Pattnaik Adarsha Vidyalaya
BPGY	Biju Pucca GharYojana
BRAP	Business Reforms Action Plan
BSF	Budget Stabilization Fund
BSKY	Biju Swasthya Kalyan Yojana
BSY	Biju Setu Yojana
CACP	Commission for Agricultural Costs and Prices
CAGR	Compound Annual Growth Rate
CAMPA	Compensatory Afforestation Fund Management and Planning Authority
CARE	CSR Administration and Responsive Engagement
CCEA	Cabinet Committee on Economic Affairs
CCTNS	Crime and Criminal Tracking Network and Systems

CDB	Coconut Development Board
CDC	Cattle Development Centre
CFL	Centres for Financial Literacy
CHC	Community Health Center
CHCDS	Comprehensive Handicrafts Cluster Development Scheme
CHHATA	Community Harnessing & Harvesting Rainwater Artificially from Terrace to Aquifer
CIF	Central Inspection Framework
CMAM	Community-Based Management of Acute Malnutrition
CMGI	Centre for Modernizing Government Initiative
CPI	Consumer Price Index
CRUT	Capital Region Urban Transport
CRZ	Costal Regulation Zone
CSOC	Cyber Security Operation Centre
CSR	Corporate Social Responsibility
DAFE	Department of Agriculture & Farmer Empowerment
DAFP	Directorate of Agriculture and Food Production
DAMAN	Durgama Anchalare Malaria Nirakarana
DAY	Deendayal Antyodaya Yojana
DBT	Direct Benefits Transfer
DCCB	District Co-operative Central Bank
DEIC	District Early Intervention Centres
DFT	Direct Fund Transfer
DGCA	Directorate General of Civil Aviation
DGT	Directorate General of Training
DIC	District Industries Centre
DIGITALL	Digital Skilling for All
DIPA	District Investment Promotion Agency
DMF	District Mineral Foundation
DPIIT	Department for Promotion of Industry and Internal Trade
DUHS	District Urban Housing Societies
EBC	Economically Backward Class
EBT	Electronic Benefit Transfer
EDC	Eco Development Committees
EESL	Energy Efficiency Services Limited
EHV	Extra High Voltage
EIACP	Environmental Information Awareness Capacity Building and Livelihood Programme
EMAS	Emergency Medical Ambulance Services
EMC	Electronic Manufacturing Clusters
EMRS	Eklavya Model Residential Schools
EPF	Employees' Provident Fund
EPI	Export Preparedness Index
ERNET	Education & Research in Computer Networking
ERP	Enterprise Resource Planning
ESDM	Electronics System Design and Manufacturing
ESI	Employees' State Insurance
EWDS	Early Warning Dissemination System
EWS	Economically Weaker Section
FIF	Financial Inclusion Funds
FPO	Farmer Producer Organizations
FRA	Forest Rights Act
FRBM	Fiscal Responsibility and Budget Management
FSCS	Farmers' Service Cooperative Societies
FSL	Forensic Science Laboratory
FSR	Financial Service Representative

FSSAI	Food Safety Standards Authority of India
FSTP	Faecal Sludge Treatment Plant
GAIS	Group Accident Insurance Scheme
GATI	Govt. Aviation Training Institute
GBK	Gopalpur-Bhubaneswar-Kalinganagar
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GFD	Gross Fiscal Deficit
GGI	Good Governance Index
GIFT	Genetically Improved Farmed Tilapia
GJPA	Group Janata Personal Accident Policy
GKY	Grameen Kaushalya Yojana
GMM	Green Mahanadi Mission
GO CARE	Government of Odisha Administration and Responsive Engagement
GOiPLUS	Govt. of Odisha Industrial portal for Land use and Services
GO-SWIFT	Single Window for Investor Facilitation and Tracking
GPI	Gender Parity Index
GPON	Gigabit Passive Optical Network
GRIDCO	Grid Corporation of Odisha
GRS	Grievance Redressal System
GSDP	Gross State Domestic Product
GSS	Grid Sub-station
GSVA	Gross State Value Added
GVA	Gross Value Added
HWC	Health and Wellness Centre
IAP	Integrated Action Plan
ICDS	Integrated Child Development Scheme
ICPS	Integrated Child Protection Scheme
ICT	Information and Communications Technology
IDCO	Industrial Development Corporation of Odisha Ltd.
IEC	Information Education and Communication
IFA	Iron Folic Acid
IFMS	Integrated Financial Management System
IFS	Integrated Farming System
IGNDP	Indira Gandhi National Disability Pension Scheme
IGNOAP	Indira Gandhi National Old Age Pension
IGNWP	Indira Gandhi National Widow Pension
IHF	International Hockey Federation
IIC	Integrated Infrastructure Complex
ILMS	Integrated Legal Monitoring System
IMF	International Monetary Fund
IMNCI	Integrated Management on Neonatal and Childhood Illness
IMR	Infant Mortality Rate
INAP	India New-born Action Plan
INAPH	Information Network for Animal Productivity & Health
IPA	Investment Promotion Agency's
IPHS	Indian Public Health Standards
IPICOL	Industrial Promotion and Investment Corporation of Odisha Ltd.
IPM	Integrated Pest Management
IPR	Intellectual Property Rights
IRMS	Integrated Recruitment Management System
ISRO	Indian Space Research Organisation
ITDA	Integrated Tribal Development Agencies
ITEES	ITE Education Services

ITI	Industrial Training Institute
IWMP	Integrated Watershed Management Programme
IWT	Inland Water Transport
JFM	Joint Forest Management
JJM	Jal Jeevan Mission
JLG	Joint Liability Groups
JNPT	Jawaharlal Nehru Port Trust
JSSK	Janani Sishu Surakshya Karyakram
JSSY	Janani Shishu Suraksha Karyakram
JSY	Janani Suraksha Yojana
KALIA	Krushak Assistance for Livelihood and Income Augmentation
KBK	Kalahandi Balangir Koraput Region
KCC	Kisan Credit Card
KVIC	Khadi and Village Industries Commission
LAMPSCS	Large Area Multi- Purpose Cooperative Societies
LARRMS	Land Acquisition, Rehabilitation and Resettlement Management System
LEADS	Logistics Ease Across Different States
LFPR	Labour Force Participation Rate
LPI	Logistic Performance Index
LRMS	Land Records Management System
MBPY	Madhu Babu Pension Yojana
MBR	Mahendragiri Biosphere Reserve
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee scheme
MIDH	Mission for Integrated Development for Horticulture
MIO	Make in Odisha
MKUY	Mukhyamantri Krushi Udyog Yojana
MMDR	Mines and Mineral Development and Regulation
MMR	Maternal Mortality Rate
MNAIS	Modified National Agricultural Insurance Scheme
MOSPI	Ministry of Statistics and Programme Implementation
MPEDA	Marine Products Export Development Authority
MSK	Mo Seba Kendra
MTFF	Medium-Term Fiscal Framework
MUKTA	Mukhyamantri Karma Tatpara Abhiyan
MVU	Mobile Veterinary Unit
NABARD	National Bank for Agriculture and Rural Development
NABH	National Accreditation Board for Hospitals & Healthcare Providers
NADCP	National Animal Disease Control programme
NAFED	National Agricultural Co-operative Marketing Federation
NAIP	Nationwide Artificial Insemination Programme
NAIS	National Agriculture Insurance Scheme
NCAP	National Civil Aviation Policy
NCDC	National Cooperative Development Corporation
NEFT	National Electronic Fund Transfer
NEP	New Education Policy
NER	Net Enrollment Ratio
NFBS	National Family Benefit Scheme
NFCL	Nagarjuna Fertilizers and Chemicals Limited
NFFBB	National Fresh Water Fish Brood Bank
NFHS	National Family Health Survey
NFSA	National Food Security Act
NFSM	National Food Security Mission
NHAI	National Highway Authority of India
NHED	Nutrition and Health Education

NHM	National Horticulture Mission
NIMZ	National Investment Manufacturing Zone
NLM	National Livestock Mission
NNMR	Neonatal Mortality Rate
NOFN	National Optical Fibre Network
NPA	Non-Performing Asset
NPCB&VI	National Programme for Control of Blindness & Visual Impairment
NPK	Nitrogen, Phosphorus and Potassium
NPP	National Panchayat Portal
NPRPD	National Programme for Rehabilitation of Persons with Disabilities
NRDWP	National Rural Drinking Water supply Programme
NRLM	National Rural Livelihood Mission
NRULM	National Rural Livelihood Mission
NSAP	National Social Assistance Programme
NSO	National Statistical Office
NSPGY	Nirman Shramik Pucca Ghar Yojana
NSS	National Sample Survey
NSSF	National Social Security Fund
NSSO	National Sample Survey Office
NSWS	National Single Window System
NTFP	Non-Timber Forest Product
NULM	National Urban Livelihoods Mission.
NWMP	National Water Quality monitoring Programme
OBB	Odisha Biodiversity Board
OBDA	Odisha Bamboo Development Agency
OBM	Odisha Maritime Board
OCAMP	Odisha Central Audit Management Portal
OCZMA	Odisha Coastal Zone Management Authority
ODF	Open Defecation Free
ODMF	Odisha District Mineral Foundation
ODSSP	Odisha Distribution System Strengthening Project
ODWM	Odisha Watershed Development Mission
OECBC	Odisha Energy Conservation Building Code
OECD	Organisation for Economic Co-operation and Development
OEM	Original Equipment Manufacturer
OFDC	Odisha Forest Development Corporation Limited
OFSDP	Odisha Forestry Sector Development Project
OGB	Odisha Gramya Bank
OGIP	Odisha Girls Incentive Programme
OHPC	Odisha Hydro Power Corporation
OJWAS	Odisha Judicial Workflow Automation System
OKH	Odisha Knowledge Hub Lecture Series portal
OLM	Odisha Livelihoods Mission
OMBADC	Odisha Mineral Bearing Areas Development Corporation
OMC	Odisha Mining Corporation
OMM	Odisha Millets Mission
OMMAS	Online Management, Monitoring and Accounting System
OMTES	Odisha Model Tribal Educational Society
OPDC	Orissa Pisciculture Development Corporation Ltd
OPELIP	Odisha PVTG Empowerment and Livelihood Improvement Programme
OPGC	Odisha Power Generation Corporation
OPOLFED	Odisha State Poultry Products Co-operative Marketing Federation Limited
OPSC	Odisha Public Service Commission
OPTCL	Odisha Power Transmission Corporation Limited
OREDA	Odisha Renewable Energy Development Agency

OREP	Odisha Renewable Energy Policy
ORIDL	Odisha Rail Infrastructure Development Limited
ORMAS	Odisha Rural Development and Marketing Society
ORS	Oral Rehydration Solution
ORSAC	Odisha Space Applications Centre
ORTPS	Odisha Right to Public Service Act
ORTPSA	Odisha Right to Public Services Act
OSAM	Odisha State Agricultural Produce Marketing
OSCB	Odisha State Cooperative Bank
OS CSC	Odisha State Civil Supplies Corporation
OSDA	Odisha Skill Development Authority
OSDC	Odisha State Data Centre
OSDFC	Odisha Scheduled Caste and Scheduled Tribe Development Finance Co-operative Corporation
OSDI	Odisha Spatial Data Infrastructure
OSDMA	Odisha State Disaster Management Authority
OS EDC	Orissa State Electronics Development Corporation
OSEPA	Odisha School Education Programme Authority
OSFDC	Odisha Scheduled Caste and Scheduled Tribe Development Finance Co-operative Corporation
OSIF	Odisha State Indicator Framework
OSRTC	Odisha Road Transport Corporation
OSSC	Odisha State Seeds Corporation
OSSC	Odisha Staff Selection Commission
OSTF	Odisha State Treatment Fund
OSWAN	Odisha State-wide Area Network
OSWAS	Odisha State Workflow Automation System
OTDC	Odisha Tourism Development Corporation
O UHM	Odisha Urban Housing Mission
OUIDF	Odisha Urban Infrastructure Development Fund
O UWEI	Odisha Urban Wage Employment Initiative
O UWSS	Odisha Unorganised Workers' Social Security
O WDM	Odisha Watershed Development Mission
PACS	Primary Agriculture Cooperative Societies
PAMIS	Project Accounting and Monitoring Information System
PCPIR	Petroleum, Chemical and Petrochemical Investment Regions
PDA	Pension Disbursing Authority
PDS	Public Distribution System
PFMS	Public Financial Management System
PGI	Performance Grading Index
PHC	Primary Health Care
PHEO	Public Health Engineering Organisation
PKDS	Paradeep-Kendrapada-Dhamara-Subarnarekha
PLFS	Periodic Labour Force Survey
PM-AASHA	Pradhan Mantri Annadata Aay Sanrakshan Abhiyan
PMAGY	Pradhan Mantri Adarsh Gram Yojana
PMAY	Pradhan Mantri Awas Yojana
PMAYG	Pradhan Mantri Awas Yojana-Gramin
PMEGP	Prime Minister Employment Generation Programme
PMFBY	Pradhan Mantri Fasal Bima Yojana
PMGSY	Pradhan Mantri Gram Sadak Yojana
PMJDY	Pradhan Mantri Jan-Dhan Yojana
PMJJBY	Pradhan Mantri Jeevan Jyoti Bima Yojana
PMKKKY	Pradhan Mantri Khanij Kshetra Kalyan Yojana
PM-KUSUM	Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan
PMKVY	Pradhan Mantri Kaushal Vikas Yojana

PMMSY	Pradhan Mantri Matsya Samapada Yojana
PMSBY	Pradhan Mantri Surakhya Bima Yojana
PMSMA	Pradhan Mantri Surakshit Matritva Abhiyan
PPAS	Paddy Procurement Automation System
PSP	Pathani Samanta Planetarium
PSU	Public Sector Undertakings
PVTG	Primitive Vulnerable Tribal Group
PWCS	Primary Weavers Co-operative Societies
PWD	Public Works Department
PWDV	Protection of Women from Domestic Violence
RBI	Reserve Bank of India
RBSK	Rashtriya Bal Swasthya Karyakarma
RCCMS	Revenue Court Case Monitoring System
RCS	Registrar of Cooperative Societies
RESCO	Renewable Energy Service Company
RKVY	Rashtriya Krishi Vikas Yojana
RMC	Regulated Market Committee
RMNCH	Reproductive, Maternal, New-born, Child and Adolescent Health
RPLI	Rural Postal Life Insurance
RPO	Renewable Power Obligation
RPRC	Regional Plant Resource Centre
RWBCIS	Restructured Weather Based Crop Insurance Scheme
RWD	Rural Works Department
RWSS	Rural Water Supply & Sanitation
SAACAR	Single Window Application Atrocity Compensation Assistance and Relief
SAC	State Action Plan
SADHAC	State Agency for Development of Handloom Clusters
SAFAL	Simplified Application for Agricultural Loans
SAHAY	Sports Action towards Harnessing Aspiration of Youth
SANKALP	Skill Acquisition and Knowledge Awareness for Livelihood Promotion
SAO	Seasonal Agricultural Operations
SBMS	Scheme-wise Bank Account Management System
SCA	Special Central Assistance
SCERT	State Council of Educational Research and Training
SCP	Special Contingency Policy
SCRIPS	State Capital Region Improvement of Power System
SDC	State Data Centre
SDG	Sustainable Development Goals
SDH	Sub District Hospital
SDRF	State Disaster Response Fund
SDTE	Skill Development and Technical Education
SEBC	Socially and Economically Backward Classes
SERIFED	Odisha Cooperative Tassar & Silk Federation Ltd.
SETU	Socio-Economic Transformation and Upliftment
SEZ	Special Economic Zones
SFSS	State Food Security Scheme
SFURTI	Fund for Upgradation and Regeneration of Traditional Industries
SHDP	State Highways Development Project
SHG	Self-Help Group
SIDAC	State Institute for Development of Arts & Crafts
SIDR	State institute for Disability Rehabilitation
SIEP	State Institute for Empowerment of Persons with Disabilities

SIRD&PR	State Institute for Rural Development and Panchayati Raj (SIRD & PR)
SIS	Space based information support
SLBC	State Level Bankers' Committee
SLNA	State Level Nodal Agency
SLSWCA	State Level Single Window Clearance Authority
SMC	Soil Moisture Conservation works
SNCU	Sick New-born Care Units
SNP	Single Nucleotide Polymorphisms
SOPAN	Strategy for Odisha's Pathway to Accelerated Nutrition
SPCB	State Pollution Control Board
SPDP	Social Protection Delivery Platform
SRC	Special Relief Commissioner
SRR	Seed Replacement Rate
SRS	Sample Registration System
SSA	Sarva Shiksha Abhiyaan
SSC	Staff Selection Commission
SSD	ST and SC Development, Minorities and Backward Classes Welfare
SSTHH	Shramik Sahayata Toll Free Helpline
SSTL	State Seed Testing Laboratory
STC	Special Training Centre
STPI	Software Technology Parks of India
SUJOG	Sustainable Urban Services in a Jiffy by Odisha Government
SUY	Shilpi Unnati Yojana
SWM	Solid Waste Management
TBI	Technology Business Incubator
TCIS	Technical Controls and Inspection Services
TDCCOL	Tribal Development Cooperative Corporation of Odisha Limited
TFIIP	Targeted Financial Inclusion Intervention Programme
TFR	Total Fertility Rate
TIFMS	Telecom Infrastructure Facilitation and Management System
TRAI	Telecom Regulatory Authority of India.
TTI	Technical Training Institute
UBI	Universal Basic Income
UDAN	Ude Desh ka Aam Naagrik
UGB	Utkal Gramya Bank
ULBs	Urban Local Bodies
UNICEF	United Nations International Children's Emergency Fund
UPHC	Urban Primary Health Centre
UWEI	Urban Wage Employment Initiative
VSS	Vana Surakshya Samitis
WAMIS	Works and Accounts Management Information System
WATCO	Water Corporation of Odisha
WAZA	World Association of Zoos and Aquarium
WCD	Women & Child Development
WFP	World Food Programme
WPR	Worker Population Ratio
WSC	World Skill Centre
WSHG	Women Self Help Group

CHAPTER

1

STATE OF THE ECONOMY:
A MACRO VIEW



The World Bank predicts that the global economy is expected to experience moderation in economic growth. The global real GDP growth is expected to be 1.7 per cent in 2023 in real terms. The Russia-Ukraine conflict has led to an increase in commodity prices, particularly energy prices such as oil, gas, coal, electricity, and food prices. This also has its second-round effects, i.e., monetary tightening, worsening external balances, depleting fiscal space, reduced disposable income, capital outflow from emerging markets and developing economies and depreciating currencies against US dollar. It is expected that inflation would moderate in the future but the high inflationary environment which has been persisting for an extended period recently has impacted consumer expectations. This could put upward pressure on inflation in the future.

India, on the other hand, although not fully immune to the crisis emanating from the rest of the world, is expected to perform better. India is projected to grow at 7.1 per cent in real terms in 2022-23 (as per MoSPI, Gol) and 6.0 - 6.8 per cent in 2023-24 (Union Economic Survey 2022-23). This is one of the highest growth rates among the major economies globally.

Odisha is one of the fastest growing States in India. In 2022-23, it registered a growth rate of 7.8 per cent in comparison to 7.1 per cent at all India level. Odisha's post-COVID growth revival is quite exemplary. In 2021-22, the State's GSDP grew by 11.5 per cent while India grew by 290 basis points lower than Odisha. Odisha's growth resilience is reflected in its average medium-term growth rate of 7.9 per cent from 2013-14 to 2021-22, leaving aside the COVID year. Odisha's COVID recovery and resilience is demonstrated by its nominal growth in GSDP in 2021-22. In nominal terms (growth in current price), Odisha grew by a spectacular rate of 23.5 per cent against 19.5 per cent at all India level in 2021-22.

Per Capita income in the State is growing at a rapid rate. Per capita income (income per head) of Odisha has multiplied by thrice between 2011-12 and 2022-23 while at all India level, it is multiplied by 2.7 times. Odisha's per capita income grew at an annual compound rate of 10.9 per cent while that of India grew by 150 basis points lower than Odisha during this period. Odisha, in the shortest possible time, is going to converge and exceed India's per capita income bringing all round prosperity driven by growth, innovation, technology, governance, institutional innovation and effective decentralization.

In the past, effective tackling of natural disasters, high and targeted capital spending, positive shock in terms of higher mineral revenues, prudential fiscal management, relatively lower inflationary environment, rising job opportunities, substantial improvement in various social indicators such as in health and education, diversification of manufacturing sector, strong growth in fisheries sector, power and manufacturing sector reforms, and promotion of start-ups are some of forces behind rapid growth. In future, the massive outlay is in the pipeline for improving the crucial components of infrastructure namely Electricity, Transport (Road, Railway, and Water & Air), Water Supply & Sanitation, Ports, Airports, Warehousing Facilities, and IT to uplift the economy. This would strengthen the medium-term growth potential of the State and would make the State grow at an even higher rate and ensure prosperity for all.

1.1. Macroeconomic Scenario- Global and National

1.1.1. As per World Bank Global Economic Prospects (January 2023), the emerging market and developing economies would continue to grow at 3.4 per cent in 2023 and would gain further pace in 2024. South Asia remains as one of the fastest growing regions in the World and India would remain as one of the fastest growing economies in the World.

1.1.2. The World economy is experiencing headwinds on multiple fronts. Resurgence of COVID-19 cases in China (with a share of 18.6 per cent in World GDP in 2021) has reduced growth in 2022 to 2.7 per cent (Global Economic Prospects, January 2023). Geopolitical disturbances and ensuing armed conflict at many parts of the World disrupted global supply chains, pushed up commodity prices, impacted the availability of essential supplies and slowed international trade. Except net energy and agricultural exporters (such as Middle East and North Africa region), majority of economies are expected to be hit with the conflict.

1.1.3. Given the rising inflation, central banks across the world have raised policy rates in a synchronized manner. Rising import bills, limited fiscal space in developing economies combined with structural weaknesses have induced capital outflows to safer markets such as United States which has further put downward pressures on the exchange rate against the USD. Monetary tightening is expected to deliver results by moderating inflation in the short term. However, high inflation over an extended period is expected to change inflationary expectations in the medium-term.

1.1.4. Table 1-1 provides growth forecasts for the World economy, China, and India. Growth projections for the World economy for 2023 vary between 1.7 per cent to 3.3 per cent and for India between 5.7 per cent to 6.6 per cent which is comparatively substantially high. Some of the key drivers of low growth for the world economy are uncertainty over the conclusion of the Russia-Ukraine conflict, lagged impact of significant monetary tightening globally, shrinking fiscal space for investment, declining confidence in advanced economies which further impacts exports from EMDEs.

Table 1.1 Growth Estimates & Projections for Economies: World, China, and India (Y-o-Y, per cent)

Agency	World			China			India		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
IMF	6.0	3.2 ^f	2.7 ^f	8.1	3.2 ^f	4.4 ^f	8.7	6.8 ^f	6.1 ^f
World Bank	5.9	2.9 ^f	1.7 ^c	8.1	2.7 ^e	4.3 ^f	8.7	6.9 ^e	6.6 ^f
OECD	5.8	3.0	2.2	8.1	3.2	4.7	8.7	6.9	5.7
Nomura	6.0	4.3	3.3	7.8	4.3	4.7	8.2	8.5	6.0

Source: World Economic Outlook, IMF, October 2022; Global Economic Prospects, World Bank, June 2022 & January 2023; OECD Economic Outlook, Interim Report, September 2022; Nomura Global Economic Outlook 2022, December 2021.

Note: Figures for 2021 are real GDP growth rate estimates and figures for other years are forecasts/ projections as specified; e = estimate; f = forecast

1.1.5. Several estimates suggest India is expected to post stronger growth in the coming decade. India is expected to benefit from four global trends, i.e., demographic change, deglobalization, transition towards decarbonised world, and digitalization. Relative to other major economies, India would still have a lower median-working age. A large part of future energy consumption would be based on renewable sources. This would improve India's terms of trade and support inflation management.

1.2. Macroeconomic Development in Odisha

1.2.1. The economy of Odisha is performing well for quite some time despite recurrent natural disasters and the recent pandemic. This shows strong resilience of Odisha's economy. A strong and sustained post-COVID recovery with higher-than-expected growth rates are hallmarks of the State economy. Odisha's economy has made a remarkable rebound with GSDP growth of 11.5 per cent in 2021-22 in real terms.

Odisha is one of the fastest growing States in India. In 2022-23, it is expected to grow at 7.8 per cent in comparison with 7.0 per cent at all India level.

1.2.2. In 2022-23, Odisha's economy is expected to grow at 7.8 per cent which is higher than pre-COVID average growth of 7.1 per cent (2012-13 to 2019-20) in real terms. Comparatively, India is expected to grow at 7.0 growth in real terms in 2022-23. Odisha is expected to grow at a rate higher than All-India average growth. The industry and service sectors have been the major engines of economic growth in the State.

I. Growth in Gross Value Added

1.2.3. An outline of the sectoral shares and growth rates along with growth of GSVA and GSDP in the short run is given in Table 1.2.

1.2.4. Agriculture and allied sectors constitute nearly 22.5 per cent of GSVA (2022-23 AE). The sector employs more than 40 per cent of workforce, thus being the biggest employment generating sector in Odisha. **The sector is expected to grow at 5.9 per cent in 2022-23 as against 3.5 per cent at All-India level. High growth in agriculture and allied areas is important for balanced growth of the economy and ensures that benefits of growth are shared widely. Due to pro-active measures of the Government of Odisha, the Agriculture and Allied Sector grew at nearly double rate than of All-India at 6.3 per cent in real terms in 2020-21.**

Table 1.2 Sector-wise Growth Rate of Odisha (in per cent)

Sector	Pre-COVID (2012-13 to 2019-20)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (AE)
Growth Rate (at Constant 2011-12 Prices)				
Agriculture and Allied	4.8	6.3	2.4	5.9
Industry	7.0	-1.4	12.1	6.0
Services	6.9	-11.2	9.6	8.8
GSVA	6.3	-4.2	9.5	7.1
GSDP	7.1	-4.9	11.5	7.8
Share in GSVA (at Current Prices)				
Agriculture and Allied	20.9	25.7	22.9	22.5
Industry	39.0	37.3	41.0	41.3
Services	40.1	36.9	36.0	36.2

Source: DE&S, GoO

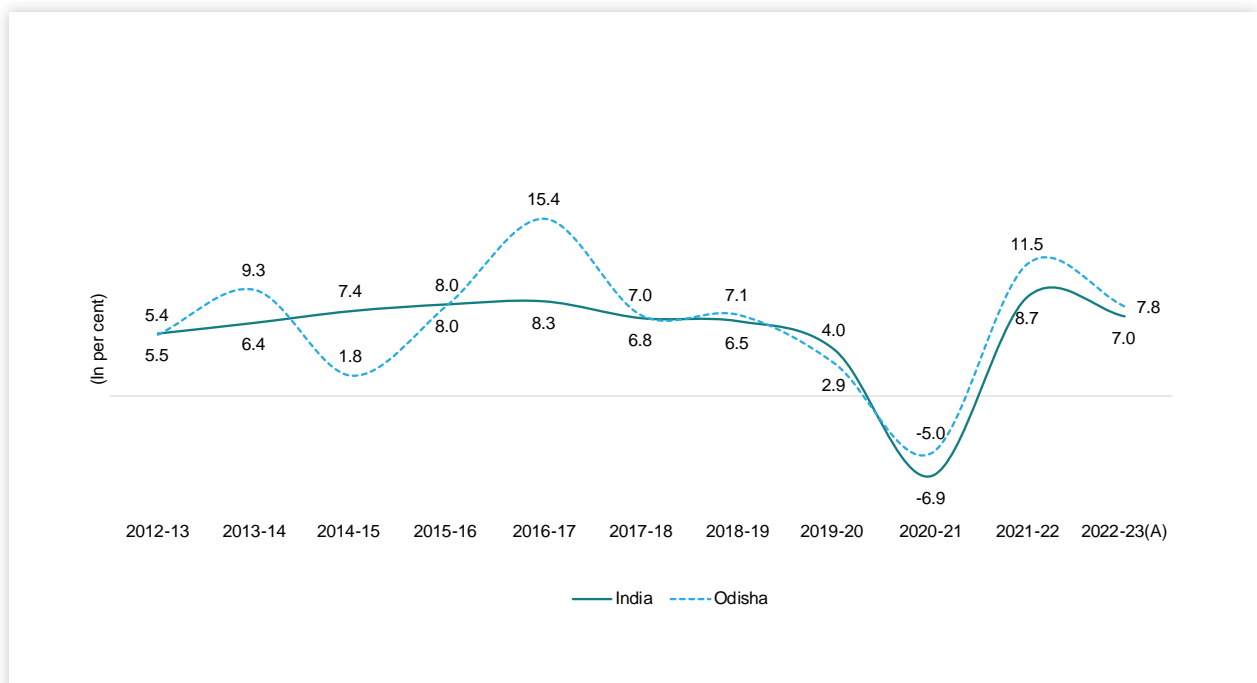
1.2.5. The industry sector has recorded the highest growth on average in the pre-covid times (7 per cent). In 2022-23, the industry sector is expected to grow at 6.1 per cent. The mining sector constitutes more than 10 per cent of GSVA. Therefore, any movement in mining activity impacts not just the mining sector but also the manufacturing sector and other sectors through backward and forward linkages.

1.2.6. The third major sector, Services sector is expected to grow at 8.8 per cent in 2022-23 higher than pre-covid average growth. The sector constitutes nearly 36 per cent of GSVA in 2022-23. Unlike the industry sector, the services sector is highly diverse. It includes trade, transport, education, health, financial services, public administration, communication, etc. Various sub-sectors of Services sector are growing rapidly in Odisha. For example, significant growth is seen in the air transport sector with opening of new airports, new routes and subsequently the passenger traffic. In 2022-23, air transport grew at nearly 58 per cent in real terms. It is expected that in the future, several other sub-sectors such as financial services, hotels and restaurants (due to improvement in tourism infrastructure, etc.) would experience robust growth. In 2022-23, these sectors are expected to grow at a rate higher than pre-COVID average growth. With a long coastline, Odisha has a significant potential in the tourism sector which can have second round effects on jobs and investments in other sectors as well such as transport, hotels, construction, etc.

Agriculture and Allied sector, Industry sector and Service Sector is expected to grow by 6 per cent, 6.05 per cent, 8.8 per cent respectively in 2022-23.

1.2.7. Comparatively, on an average during 2012-13 to 2022-23, Odisha has grown at a higher rate (6.5 per cent) than India (5.6 per cent). The trend is depicted in Figure 1.1.

Figure 1.1 G(S)DP Growth of Odisha and India at constant (2011-12) basic prices (in per cent)



Source: DE&S, GoO & MOSPI, GoI

1.2.8. It may be seen that in majority of the years, Odisha experienced a higher real GSDP growth than that at the national level.

II. Per Capita Income

1.2.9. Odisha has successively reduced its gap with India's per-capita income as shown in Table 1.3. In 2015-16, Odisha's per-capita income was 32 per cent lower than India's per-capita income. Within 7 years, the gap is reduced to 11.7 per cent in 2022-23. Odisha's per-capita income has grown at CAGR of 10.9 per cent while India's per-capita income grew at a CAGR of 9.4 per cent in nominal terms since 2011-12.

Per capita income (income per head) of Odisha has multiplied by more than thrice between 2011-12 and 2022-23 while at all India level, it is multiplied by 2.7 times.

Table 1.3 Per capita income of Odisha and India at current prices (INR)

Year	Per-capita income (current) INR		Gap (per cent)
	Odisha	India	
2015-16	64,835	94,797	31.6
2016-17	77,507	103,870	25.4
2017-18	87,055	115,224	24.4
2018-19	98,005	125,946	22.2
2019-20 (3rd RE)	104,741	132,115	20.7
2020-21 (2nd RE)	102,166	126,855	19.5
2021-22 (1st RE)	128,873	150,007	14.1
2022-23 (A)	150,676	170,620	11.7

Source: DE&S, GoO, MoSPI, Gol

III. Sectoral Dynamics

1.2.10. The analysis of sectoral composition throws light on which sectors are leading the growth journey for the state. This can also help in identifying sectors which may not have significant share presently but may be critical for the State's growth in the future given the emerging trends. As an example, India is progressing rapidly on its digitalization journey (India Stack). There is hardly any sector which is immune to the technological disruption. Modern technologies are transforming the entire supply-chain, i.e., the way goods are produced, services are delivered, payments are made, workers are hired and monitored, product quality is ensured, etc. This is expected to create significant demand for new-age services/products both domestically as well as in rest of the world.

1.2.11. At an aggregate level, Odisha, like other states, has experienced a structural transformation in the last few decades. In 1993-94, agriculture constituted 33 per cent of GSVA which went down to 18 per cent in 2011-12 again increasing to 26 per cent in 2020-21. On the other hand, both Industry sector and Services sector have gained share in 2020-21 relative to 1993-94.

1.2.12. A brief outline of sectoral shifts and structural change in Odisha is presented in Table 1.4.

Table 1.4 Structural change in Odisha (Employment and GSVA Composition)

Sector	Area	Employment Share (in per cent)				GSVA Share (At Current Prices, in per cent)			
		1993-94	2004-05	2011-12	2020-21	1993-94	2004-05	2011-12	2020-21
Agriculture	Rural	72	69	62	52	33	23	18	26
	Urban	10	14	14	12				
Industry	Rural	9	17	23	28	33	41	44	37
	Urban	26	27	23	29				
Services	Rural	18	14	15	19	34	36	38	37
	Urban	65	60	63	59				

Source: DE&S, GoO

1.2.13. Odisha has witnessed a change in output composition as well as intersectoral movement of workers to industry. There is an increase in the share of industry in both GSVA and employment, and a reduction in that of agriculture over the years. Agriculture is the biggest employer which absorbs 52 per cent of workers in the rural areas and 12 per cent in the urban areas against its 26 per cent share in GSVA in 2020-21.

A. Agriculture Sector

1.2.14. In 2021-22, net area sown in the State was at 35 per cent of total geographical area. Paddy is the dominant crop in the State, gross cropped area under non-paddy cereals and other crops has been increasing and area under paddy has declined in 2021-22. In 2022-23, Agriculture and Allied sector is estimated to contribute 22.5 per cent to GSVA and to grow at about 6 per cent. The crops sub-sector is prominent in terms of both share and growth while Fishing and Aquaculture is a major contributor to growth of this sub-sector. Growth of the Forestry and Logging sub-sector has picked up in 2022-23.



B. Industry sector

1.2.15. The industries sector has a great potential to attract investment, generate employment, and play an instrumental role in the economic development of the State. The State has a significant handicraft sector that includes the prestigious handlooms and sericulture (silk production) industry.



1.2.16. The industries sector has the highest share in the GSVA. Its share is estimated at 41.3 per cent with growth at 6.1 per cent in 2022-23. Manufacturing and Mining & quarrying are the important sub-sectors in the industry sector in terms of their GSVA share. Construction contributes approximately 6 per cent to GSVA. However, all the four sub-sectors within the sector are growing at a high pace, the highest among them being Mining & quarrying.

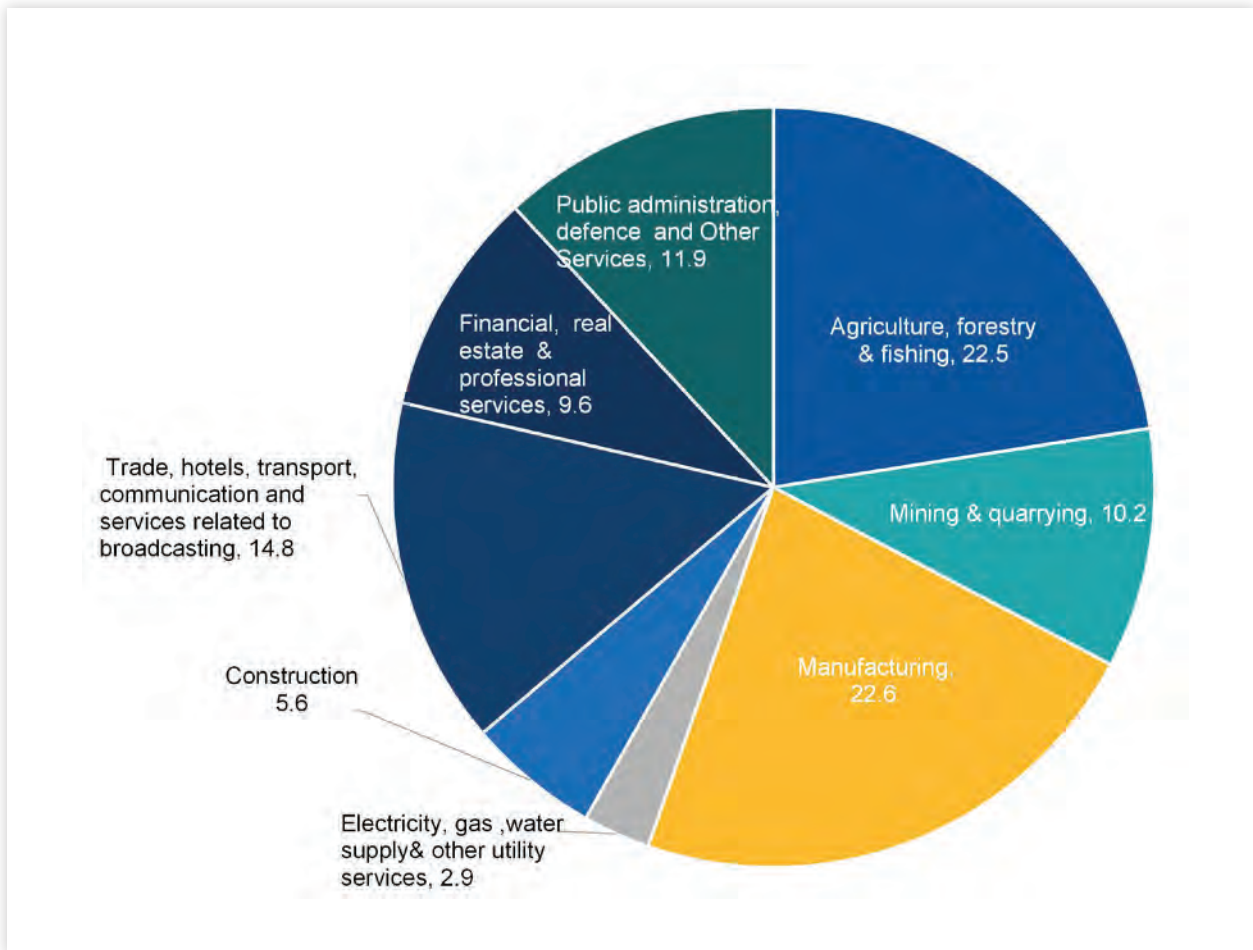
C. Services sector

1.2.17. The Services Sector is a major player in Odisha's economy in terms of addition. It has a 36.2 per cent share, next to industry sector in the GSVA of the State and grown at a rate of 8.8 per cent in 2022-23 as per advance estimates. The vital growth segments of the sector are Trade, Repair, Hotels & Restaurants including Tourism; Transport; Financial Services; and Real estate, Ownership of Dwelling & Professional Services. Though Tourism has played a relatively small role overall, of late, it has grown in significance.



1.2.18. Industrialisation and expansion of the service sector are, therefore, important for economic development. The composition of GSVA at current basic prices for 2022-23 has been illustratively summarised in Figure 1.2.

Figure 1.2 Major sub-sector-wise share of GSVA (in per cent) at current Prices, 2022-23



Source: DE&S, GoO

D. Source of growth

1.2.19. The average annual growth rate of GSDP during in the last 10 years (excluding COVID-19 year 2020-21) is 7.9 per cent. Analysis of composition of growth reveals that Industrial sector contributed to the maximum to growth followed by Services. Industry sector is the engine of Odisha's economic growth.

IV. Labour, Employment, Skill Development, and Labour Welfare

A. Labour Force - LFPR, WPR and UR

1.2.20. In 2020-21, 56.5 per cent of population aged 15 years and above were in the labour force in Odisha and this was higher than the pre-COVID year (2019-20) figure of 55.3 per cent. It was also higher than the all-India Labour Force Participation Rate (LFPR) of 54.9 per cent. This holds for both male and female LFPR.

1.2.21. Nearly 53.5 per cent of Odisha's labour force were working which is 0.9 basis points higher than India. Appropriate skilling efforts, 'Mission Shakti,' bolstering self-employment and the availability of opportunities at the grassroots level and wider work participation at family level are helpful in increasing the Worker Population Ratio (WPR).

The Worker Population Ratio (WPR) in Odisha which was 47.6 per cent in 2018-19 has gone up to 53.5 per cent registering higher WPR vis-à-vis India.

Table 1.5 Key Employment Indicators According to Usual Status (PS+SS), 15 years and above age (in per cent)

Particulars	Person
Labour Force Participation Rate, 2020-21	
Odisha	56.5
India	54.9
Worker Population Ratio, 2020-21	
Odisha	53.5
India	52.6

Source: Periodic Labour Force Survey (PLFS), 2020-21

B. Industrial distribution of Employment

1.2.22. The fact that agriculture and allied activities continue to be the most prominent sector for employment, among the three sectors of the economy, both at national and the state levels, can also be seen in the context of distribution of workers according to Industry Sections of NIC-2008 as given in Table 1.6.

Table 1.6 Percentage Distribution of Usually Working Persons (PS+SS) by Broad Industry of Work, 2020-21

Sl. No.	Industry Sections of NIC-2008	Odisha (Rural + Urban)			India (Rural + Urban)		
		Male	Female	Person	Male	Female	Person
A	Agriculture and Allied Activities	41.22	59.71	46.84	39.81	62.16	46.46
B	Industry (i-iv)	30.37	24.11	28.47	27.11	16.35	23.89
i	Mining and Quarrying	0.53	0.35	0.47	0.43	0.07	0.32
ii	Manufacturing	5.25	9.15	6.43	11.07	10.55	10.91
iii	Electricity, Gas, Water Supply and Other Utility Services	0.55	0.2	0.45	0.76	0.16	0.58
iv	Construction	24.04	14.41	21.12	14.85	5.57	12.08
C	Services (v-vii)	28.4	16.18	24.7	33.08	21.49	29.64
v	Trade, Accommodation and Food service	13.77	4.29	10.9	14.82	6.11	12.23
vi	Transport and Communication	5.53	0.26	3.93	7.29	0.95	5.41
vii	Other Services	9.1	11.63	9.87	10.97	14.43	12.00

Source: Periodic Labour Force Survey (PLFS), 2020-21

C. Employment in Organized Sector

1.2.23. The form of employment i.e., where a worker works or more precisely whether a person is engaged in the organised sector or unorganised sector is an important indicator of quality of employment in a state. It is well known that employment in organised sector is protected and is covered under different social security and labour welfare schemes. Employment position in organized sector in Odisha in 2020-21 is given in Table 1.7.

Table 1.7 **Employment Position in Organized Sector in Odisha, 2020-21 (In No.)**

Public Sector	Private Sector	Total Organized Sector
5,42,823	1,25,609	6,68,432

Source: Directorate of Employment & Odisha Skill Development Authority, GoO
Note: Figures are from June to May

1.2.24. In 2020-21, total employment in the organised sector was 6.68 lakh in which the public sector had a share of 81.21 per cent and private sector's share was 18.79 per cent.

D. Skill Development

1.2.25. Education, skills, knowledge, and experience are crucial for human capital and enhancing the employability of new entrants to workforce, adding to their competitive advantage, enabling them to adjust more effectively to the challenges and opportunities, strengthening the drive to generate new ideas and innovation, augmenting productivity growth, increasing economic growth, and driving social development. Similarly, up-skilling and re-skilling of existing workers by equipping them with the right kinds of skills through regular scaling up of skill training efforts are essential for maintaining the level

Odisha's skill initiative, Mission Shakti, conducive sectoral policies and general rise in vocational and professional education, helped the State to increase its work force participation year after year.

of employability of those already in employment and sustaining growth and development. In this context, Uzawa (1965), Lucas (1988), Romer (1989), Barro (1991), and Becker (1993) have emphasised the pivotal role of human capital and skills in the process of economic growth. The National Skill Development Corporation (NSDC) is engaged in providing policy directives and guidance, reviewing, and monitoring overall progress and implementation in line with Mission objectives.

E. Government Initiatives towards Skill Development in Odisha

1.2.26. Skill development is critical for providing decent employment opportunities to Odisha's working population and achieving faster, sustainable, and inclusive growth. State Government is providing basic infrastructure and institutional support for enhancing the skill levels and employability of working age population and workers by conducting skill training programmes and undertaking different skill development initiatives.

1.2.27. The Skill Development and Technical Education (SDTE) Department is entrusted with the responsibility of providing skill development training, strengthening the human resource potential, and empowering the youth of the State to become technically competent and compete in the global labour market. The Odisha Skill Development Authority (OSDA) provides overall direction and guidance and works for implementation of skill development programmes to bring transformative human development through skilling youth in the State. Establishing new institutions like ITIs, Polytechnics and Engineering and Management institutes in un-served areas of the State, strengthening of such existing institutions and making "Skilled-in-Odisha" a global household brand is a part of this initiative.

1.2.28. The various transformational initiatives being undertaken include:

- a) Career Counselling Campaigns in High Schools involving ITIs and Polytechnics.
- b) 'Sudakshya' scheme of monthly maintenance allowance to the ITI girl students.
- c) A new Students' Welfare Scheme for ITI trainees with risk coverage such as death of trainees and earning parent, and accident benefits to trainees while in training.
- d) The construction of 23 new Government ITIs is in progress of which 11 will start functioning in AY 2022-23 and 10 will be commissioned in AY 2023-24.
- e) Training in Internet of Things (IoT) in four disciplines viz. trades in Smart City, Smart Agriculture, Smart Health Care, Smart Phone in ITI, Bhubaneswar; Training in New Age Trades like Technician Mechatronics at ITI, Cuttack, Rourkela, Hiraikud; Solar Technician trade at ITI Cuttack, Ambaguda, Phulbani, Berhampur, Hinjilicut, Bhawanipatna, Barbil, Rourkela; Warehouse Technician & Implant Logistic Trade at ITI, Bhandaripokari is likely to start in ensuing Academic Year.
- f) A partnership has been forged with Odisha Lift Irrigation Corporation Ltd, Housing & Urban Development Department, Larsen & Toubro (L&T) Ltd., CMM, Sandvik Mining for providing hands-on training and exposure to ITI trainees.
- g) Of the 9 Mini Tool Rooms sanctioned for ITIs under State Plan /DMF/OMBADC, 04 have been operationalised at Cuttack, Berhampur, Hiraikud and Talcher, and 5 at Malkangiri, Barbil, Jharsuguda, Rourkela & Takatpur will be commissioned soon.
- h) Two Technology Extension Centers (TECs) under the MSME Ministry have already been commissioned one each at Berhampur and Keonjhar and setting up of two more TECs at Balasore and Bhawanipatna are in full swing and likely to be commissioned.
- i) During the plenary session of Make in Odisha Conclave on 3 December 2022, the SDTE Department signed 8 MoUs with leading institutions, agencies and companies such as World Skill Centre (WSC), the Singapore based Institute of Technical Education Services (ITEES), the IBM, EVOS Buildcon Pvt Limited, SMS Group, Hexagon Geosystems India, Tata Steel Foundation, and Yokohama Tyres to strengthen skill training and infrastructure and generate employment in the State.
- j) Mahindra Electric Mobility Ltd, Bengaluru has been roped in for setting up E-Vehicle labs at ITI, Barbil and Rourkela under CSR (Corporate Social Responsibility).
- k) Contract agreements have been signed under Odisha Mineral Bearing Areas Development Corporation (OMBADC) with M/s PV Power Technologies Pvt. Ltd. for establishment of 50 KW ONGRID Rooftop Solar Power Plants at 15 ITIs and Polytechnics.
- l) MoUs have been inked with Non-Destructive Testing (NDT) TCIS Pvt Ltd to develop NDT training facility with International Certification to train NDT technocrats in industries at ITI, Cuttack and for training infrastructure of UGIE, Rourkela.



F. Centers of Excellence (CoEs) in ITIs and Government Engineering Colleges

1.2.29. M/S Messer Cutting System India Pvt. Ltd. has been contracted for establishment of a CoE in Advanced Cutting & Welding at ITI, Jajpur and is likely to be commissioned soon. L&T Limited has been contracted for establishment of CoE in Erection of 400KV EHV Transmission tower & maintenance with testing of Transmission Line using Drones at ITI, Hinjilicut under CSR support of Odisha Mining Corporation Ltd. Contract agreement has been signed with M/S KEMPI India Pvt. Ltd. for establishment of Advance Welding CoE at TTI, Takatpur and M/S Festo India Pvt. Ltd. has been selected for establishment of Advanced Mechatronics CoE at Government Polytechnic, Mayurbhanj.

1.2.30. As an initiative under 5T programme, it has been decided to establish CoEs in Engineering Colleges to facilitate creation of technology hubs, solutions and provide access to industry- standard exposure to the students with OSDA support in the following areas: Artificial Intelligence & Machine Learning CoE at Odisha University of Technology & Research (OUTR), Bhubaneswar with Tech Mahindra has been set up with students getting 100 per cent placements; CoE with Institute of Chemical Technology at OUTR (started functioning); CoE with Indian Space Research Organisation at VSSUT, Burla; Aviation, Automobile and allied CoE with Dassault System at P MEC Berhampur; CoE in Mining and allied industries with Dassault System at Government College of Engineering, Keonjhar; and Cyber security and Cloud computing CoE at P MEC, Berhampur with Tech Mahindra.

G. Chief Minister's Employment Generation Programme

1.2.31. Under the inclusive skill development strategy named 'Chief Minister's Employment Generation Programme' in line with National Strategy, Government has set a target of skilling 15 lakh youth in 5 years (2019-20 to 2023-24) @ 3 lakh/year. Under this programme 3,27,815 youth have been trained in 2019-20, 76,142 during 2020-21, and 1,03,008 between April 22, 2021, and July 13, 2021.

H. Short Term Skilling Programme

Placement Linked Training Programme

1.2.32. OSDA is engaging eligible Training Agencies and Industries for conducting Placement Linked Training Programmes through Private/Government Project Implementing Agencies (PIAs) since 2011-12 to train and equip youth, especially school dropouts, with employable skills through mobilization, counselling, screening, training, placement and tracking of unemployed youth from the state. Under this programme 5,451 youths have been trained and 1,733 have been provided placement during 2021-22. The cumulative numbers trained and placed were 1,03,502 and 29,821 from 2011-12 to 2021-22 respectively.



Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

1.2.33. OSDA has empanelled 49 Training providers to conduct training programmes under PMKVY to impart training to unemployed youth, especially to school & college dropouts in job-roles in Apparel, Beauty & wellness, BFSI (Banking, Financial Service, and Insurance), Construction, Healthcare, Logistics, Plumbing, Retail and Telecom sectors. Under PMKVY, 2,356 youths have been trained in these trades; 130 have been trained under Customized Covid Care Programme and 3181 have been trained & certified under Recognition of Prior Learning [RPL] programme CSSM 3.0 during 2021-2022.

Digital Skilling

1.2.34. An all-inclusive programme under the banner of OSDA named 'Digital Skilling for All' (DIGITALL) has been launched for imparting Digital skilling to all the students of the State for generating a large number of professionals by 2024. OSDA renewed its partnership with CISCO to continue with its Net Acad program to impart Digital Skilling for the students of ITI, Polytechnic and Engineering and more than 15000 students have been trained till date from inception. It has also partnered with SAP, a global ERP OEM (Original Equipment Manufacturer) player headquartered in Germany, and Times Pro, the education arm of Times Group to impart SAP ERP digital learning to the students from Government Engineering, MCA, and MBA institutes in Odisha and around 2000 students have been trained in different modules.

World Skill Centre, Bhubaneswar

1.2.35. The WSC has been operationalized at Bhubaneswar as a premier advanced skill training institute assisted by the Asian Development Bank (ADB) in collaboration with ITEES, Singapore as the knowledge partner. The best talent from ITIs and Polytechnics are inducted and trained in the Centre to become globally employable in emerging areas in engineering and service sectors such as "Industry 4.0." In the 2023-24 academic session, WSC will start the new courses like Vertical Transport and Precision Engineering. World Skill Centre plays a pivotal role in organizing and coordinating the state level skill competition.

Promoting entrepreneurship through Nano-Unicorn

1.2.36. The Nano-Unicorn Program has the objective of inculcating spirit of entrepreneurship among youth of the State and interest free loan of INR one lakh for 1 year is given to young and aspiring entrepreneurs. Under this programme, 189 young entrepreneurs have been identified and trained in entrepreneurship development, among whom loan assistance has been given to 145 (128 male and 17 female) young entrepreneurs and INR 145,00,000 refundable risk capital has been given during 2021-22. As of 2021-22, 482 (400 male and 82 female) are the cumulative number of entrepreneurs supported in the entire programme.

Skill Museum and Skill Park

1.2.37. The State has a Skill Museum at ITI, Cuttack and a Skill Park at ITI, Berhampur to create awareness amongst school children, teachers, public and intelligentsia for orientation towards skilling ecosystem /Technical Vocational Education and Training

I. Rewards and Recognitions

1.2.38. Athlete Praveen K. Giri brought laurels to the State by winning the Silver Medal in Water Technology at the World Skills Competition 2022 hosted in Stuttgart, Germany. The professionals of ITI, Berhampur have sculpted a 30-feet high Odisha map, the highest one, from automobile scraps and iron bars. This has found place in Asia Book of Records. Smt. Nibedita Mohapatra, ATO (PF&V), Government ITI, Bhubaneswar, and Sri Bipin Goud, ATO (COPA-VI), Special ITI for PwD, Jatni have been conferred with Kaushalacharya Award by DGT, New Delhi on 5th September Teachers' Day 2021.

1.2.39. In matters of skill development, Odisha has risen to a powerhouse with market-responsive and quality relevant skills development. The institutional capacity and skills ecosystem have been strengthened characterised by promotion of partnerships with international and national skill and knowledge institutions. The State's ITIs now witnesses high enrolment including girls and the students take pride in identifying themselves as 'ITians.' Employability of the youth has increased especially those with engineering, management, and pharma backgrounds. In 2021, Odisha figured among the states with maximum employable skills.

In 2021, Odisha figured among the States with maximum employable skills.

J. Labour Welfare in Odisha

1.2.40. Government of Odisha is establishing a labour friendly environment in the State based on the principles of coordination, association, responsibility, accountability, and sense of belonging. It aims to create a congenial physical, social, economic, and psychic environment, build healthy and participatory employer-employee relations, and promote hardworking, sincere, and law-abiding workmanship for improving their well-being and raising efficiency and productivity. The government implements various general and economic welfare schemes for the workers and their families to provide services and amenities for the good health and well-being of the workforce and a conducive work atmosphere. Measures for skill formation and upgradation, workers' insurance, minimum wages, gender equality, increasing job opportunities and information dissemination on jobs, and socio-economic security of the unorganised sector workers and the self-employed are in place for preventing exploitation, furthering harmony, and enhancing welfare.

1.2.41. In Odisha, the Labour Commissioner, who is the administrative head of the Labour Directorate also known as the Industrial Relations Machinery for the State, has been entrusted with the task of maintaining harmonious Industrial Relations, enforcement of Labour Laws, Verification of Trade Unions membership in the State, regulation of Welfare Schemes, Social Security of Workers, etc. The Labour Directorate is responsible for enforcement of about 29 labour legislations and welfare schemes for workers for maintaining industrial peace and harmony, regulating service conditions of workers, preventing exploitation and adoption of unfair labour practices, providing protection to Child & Migrant Workers, and ensuring payment of statutory wages. The Industrial Relations Machinery and Enforcement Machinery have been streamlined to take preventive measures for ensuring industrial peace and payment of the prescribed minimum wages to workers engaged in 89 scheduled employments including agriculture.

Industrial Relations scenario

1.2.42. The industrial relations scenario during 2021-22 was largely peaceful. There were no strike and lockout involving workers. Eight industrial disputes were settled, and 28 failure reports were submitted to government by the Directorate during the year. As many as 1670 complaints were disposed of and an amount of INR 6,35,42,436/- was paid to the affected workers during 2021-22.

Enforcement of Minimum Wages

1.2.43. Periodic revision and effective enforcement of minimum wages for workers in 89 employments including agriculture scheduled under the Minimum Wages Act, 1948 remains a priority of Government of Odisha. The minimum rates of wages including Variable Dearness Allowance have been fixed at INR 315/-, INR 355/-, INR 405/- and INR 465/- per day for the Unskilled, Semi - Skilled, Skilled and Highly Skilled category of employees respectively for 2021-22 effective from 01.10.2021. Under this Act, 3630 inspections were conducted, 69 prosecutions were filed, and INR 11,88,382 were released and paid to workers towards short payment and non-payment of wages in 2021-22.

Welfare of Inter-state Migrant Workers from Odisha

1.2.44. Labour Directorate of Odisha has identified 14 migration prone districts in the State. Since 2020-21, government is implementing a State Action Plan (SAC) for migrant workers. The focus of SAC is to ensure safety and welfare of migrant workers through:

- i. Creating a database at the GP level for identification and tracking of migrants,
- ii. Establishing linkage between migrants and livelihood initiatives and Government welfare schemes for reducing distress migration,
- iii. Bringing about coordination between States for improving worksite facilities and facilitating rescue (if needed), and
- iv. Building an enabling environment for safe and informed migration through Information, Education & Communication (IEC) and enforcement of Inter State Migrant Workmen (Regulation of Employment and Conditions of Service- RE & CS) Act, 1979.

1.2.45. The second phase migrant workers survey is in progress in 200 Gram Panchayats of Bolangir, Bargarh, Kalahandi and Nuapada districts. 1218 Odia migrant workers have been rescued from different States in coordination with Odisha Migrant Labour Help Desk in Telangana and other States. The Shramik Sahayata Toll Free Helpline (SSTHH) for migrant workers has been operational 24 x 7 and in 2021-22 a total 2412 calls have been attended in SSTHH Call Centre and 27,687 calls have been made to different construction workers during the year. Repatriation of 41 emigrant workers and shifting of mortal remains for 7 cases from different countries have been facilitated in coordination with Ministry of External Affairs, Government of India. Labour Commissioner, Odisha and Team visited Gujarat and Telangana to facilitate improving worksite facilities for Odia Migrant Workers.

1.2.46. Pursuant to Inter-State Migrant Workmen (RE & CS) Act, 1979, 96 inspections were conducted, 12 prosecutions were filed, 21 Registration certificates were issued, 461 licence were issued for employment and 9 licence were issued for recruitment relating to labourers migrating from Odisha to other States in 2021-22.

State Action Plan for Elimination of Child Labour

1.2.47. A State Action Plan for Elimination of Child Labour is being implemented in Odisha in a convergence mode through 9-line departments.

- i. State level sensitization meeting with Employers was held in collaboration with UNICEF for not engaging children as labourers.
- ii. Sensitisation meetings at District Level were held for Employers to not engage children as labourers.
- iii. Virtual meeting with all stakeholders was held on “World Day Against Child Labour” on 12th June 2021.

1.2.48. In 2021-22, 1701 inspections were conducted, 115 child labourers were rescued, and 19 prosecutions were filed under the Child & Adolescent Labour (P&R) Act, 1986. In respect of Odisha, 907 children were enrolled in the two Special Training Centre (STC) districts- Jharsuguda and Sundargarh- and INR 1,99,97,955/- were released for the purpose during the year.

Building & Other Construction Workers Welfare Board

1.2.49. The Building & Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Building & Other Construction Workers’ Welfare Cess Act, 1996 have been enacted by Government of India to safeguard the interest of construction workers engaged in different building or other construction works. Government of Odisha is implementing these two Acts in the State. Orders passed by the State Government provide for depositing the collected cess in the welfare fund of the State Building & Other Construction Worker’s Welfare Board.

1.2.50. The Board is extending financial support/ benefit to the construction workers and their families towards accident, death, funeral, major ailments, education, marriage, maternity, housing under Nirman Shramik Pucca Ghar Yojana, pension under Nirman Shramik Pension Yojana, Scheme for Financial Support for Children of BoC workers for pursuing ITI Training & Diploma Education in Government Institutions (Nirman Kusum) and construction of Rental Housing Complex (RHC) for providing temporary housing facilities to migrant construction workers in urban areas, etc.

1.2.51. The Odisha Building and other Construction Workers’ Welfare Board conducted 443 inspections, filed one prosecution, registered 180 establishments, obtained registration certificates for 19,111 workers, collected INR 45,900/- as registration fees from the establishments, issued 3,69,067 identity cards, collected INR 454,23,14,581/- as cess, spent INR 544,00,75,177 and distributed 1,05,455 number of benefits in 2021-22. (See Table 1.8).

Table 1.8 Odisha Building and other Construction Workers’ Welfare Board-Achievements in 2021-22

Inspection conducted	Prosecution filed	No. of establishments registered	No. of workers for whom registration certificate obtained	Amount of Registration fees collected from the establishments. (Rs.)	No. of identity cards issued	Cess collected (Rs.) (approx)	Amount spent (Rs.) (approx)	No. of benefits distributed
443	1	180	19,111	45,900	3,69,067	454,23,14,581	544,00,75,177	1,05,455

Source: Office of the Labour Commissioner, Odisha

1.2.52. Purpose-wise provision of funds by the Board for 2021-22 are given in the following Table 1.10

Table 1.9

Purpose-wise Assistance by Odisha Building and Other Construction Workers' Welfare Board, 2021-22

Purpose	Amount in INR
Educational assistance	15,44,86,000/-
Marriage assistance	84,88,70,000/-
Maternity Benefit	3,15,12,000/-
Assistance for working Tools	5,68,800/-
Assistance for Bicycle	82,27,600/-
Assistance for Safety equipment	19,65,977/-
Death benefit	1,12,25,45,000/-
Funeral Assistance	2,82,06,800/-
RPL & Skill Development Training Wage Loss Compensation (RPL) Tool Kits	3,45,86,000/-
Nirman Kusum (Funds placed with DTE&T Dept.)	10,00,00,000/-
Special Financial Assistance under Covid-19	3,10,91,07,000/-

Source: Office of the Labour Commissioner, Odisha

Social Security of Unorganized Workers

1.2.53. About 92 per cent of the 1.75 crore working population of Odisha are unorganized workers (Labour Directorate estimates and Census 2011). The State Government is implementing The Unorganized Workers' Social Security Act, 2008 and the Odisha Unorganized Workers' Social Security Board (constituted in 2011) is working in the State for the benefit of workers in the unorganised sector. Beneficiary registration is done at district level with District Labour Officers, Assistant Labour Officers, and Rural Labour Inspectors as the Registering Officers. No fee is charged for beneficiary registration/ renewal of registration and the renewal period is extended from 1 year to 3 years. In the 1st phase, Government has decided to enrol the unorganized workers belonging to the categories of Street Vendors, Small Traders, Domestic Workers, Rickshaw Pullers, Auto Drivers, Cobblers, Agricultural Workers, Forest Workers, Newspaper Hawkers, and Safai Karmacharis under the Board. Up to 2021-22, 2,87,645 unorganised workers were registered under Odisha Unorganised Workers' Social Security (OUWSS) Board.

1.2.54. Eligible registered workers are provided health assistance through the Odisha State Treatment Fund (OSTF). Benefits are also provided to the registered beneficiaries and their family members under social security schemes like i). Death Benefit (in case of natural death and accidental death), ii). Disability Benefit due to accidents, and iii). Health Assistance for the registered beneficiaries under the Board. Benefit disbursement is done at the district level and the District Collectors have been authorized as the sanctioning Authorities for this purpose. Till now, death benefits amounting to INR 1.98 crore have been disbursed under the Board.

Odisha Labour Welfare Board

1.2.55. From 2020-21, the Odisha Labour Welfare Board is implementing a Scholarship Scheme for meritorious children of contributor employees under Odisha Labour Welfare Board. Under this scheme, onetime scholarship of INR 1 Lakh is provided to those who have successfully enrolled for graduation or post-graduation level studies through the qualifying examinations in any of the reputed Government institutions like IIT, NIT, IIM, IISc., IISER,

NISER, AIIMS and MBBS & BDS in Government Medical College across India. The basic objective of the scheme is to encourage them to pursue quality technical and professional courses.

Information, Education & Communication

1.2.56. Information, Education & Communication (IEC) has been an important initiative of the Odisha Labour Directorate. Funds are placed under the Labour Offices of 32 labour districts of Odisha for i). Display of hoardings at prominent places in industrial areas/ Municipal Corporation areas/ Municipality areas; ii). Wall painting for display of Shrama Kantha in all districts; iii). Organising seminars on sensitization meetings of stakeholders and civil society; and iv). publication and updating of RTI proactive disclosure.

Other Welfare Measures

1.2.57. The following welfare measures were also taken by the department.

- i. Under the Odisha Shops & Commercial Establishment Act, 1956, a total of 51135 establishments were covered, 929 inspections were conducted, and 270 prosecutions were filed during 2021-22.
- ii. Under the Contract Labour (Regulation & Abolition) Act, 1970, 188 principal employers were registered, 1318 licenses were issued to the contractors, 842 inspections were conducted, and 19 prosecutions were filed during 2021-22.
- iii. Under the Beedi and Cigar Workers (Condition of Employment) Act, 1966, 591 establishments were covered, and 16 inspections were conducted during 2021-22.
- iv. Under the Motor Transport Workers Act, 1961, 3473 establishments were covered, 146 inspections were conducted, and 27 prosecutions were filed during 2021-22.
- v. Under the payment of Wages Act, 1936, 97803 establishments were covered, 2945 inspections were conducted, and 64 prosecutions were filed during 2021-22.
- vi. Under the payment of Bonus Act, 1965, 3319 establishments were covered, and 841 inspections were conducted, and 5 prosecutions filed in 2021-22.
- vii. Under the Employees Compensation Act 1923, 502 cases were decided and INR 20,79,67,346/- were paid to the affected workers and their dependents during 2021-22.
- viii. Under the payment of Gratuity Act 1972, 115 cases were decided and INR 32,02,270/- were paid to workers and employees during 2021-22.
- ix. Since 1990, the Labour Directorate has been compiling Price Index for Industrial Workers of Berhampur and Sambalpur Centres and publishing them in the Directorate which are of benefit to workers of different industries.

Reforms in Labour Sector

1.2.58. The Labour Directorate under the Labour and Employees' State Insurance (L & ESI) Department, Government of Odisha has initiated several labour reforms in the State. These include the following.

- i. Amendment of Rules benefitting workers, Contract Labour, Inter-State Migrants, and employers.
- ii. Maintenance of registers and records, and submission of applications for grant of registration, licence, renewal, etc. and Annual Return electronically.

- iii. Time bound delivery of 23 services under 09 Labour Acts implemented by the Labour Directorate.
- iv. Elimination of requirement of prior inspection for grant of Registration Certificate under Odisha Shops & Commercial Establishment Act.
- v. Voluntary Compliance Scheme for non-hazardous establishments covering 18 labour laws; allowing employers to submit self-certified Combined Annual Returns and get exemption from regular inspection for 3 years from the date of enrolment.
- vi. Self-Certification Scheme for 'Start-ups' permitting complete exemption of inspection to start-ups in the 1st year of establishment, allowing online submission of self-declaration under 4 labour laws in the first year, and very regulated inspection from second year onwards up to three years.
- vii. Composite Inspection Scheme to check compliance of 19 labour laws in a single inspection/ visit.
- viii. Synchronized inspections under the Central Inspection Framework (CIF) under GO-SMILE portal, uploading of inspection reports within 48 hours of completion of inspection and prohibition of consecutive inspection by the same inspector in the same establishment except in exigency.
- ix. 52 services of Labour Directorate and Directorate of Factories & Boilers are delivered online through PARESHRAM portal of Labour & ESI Department.

V. Public Finance

1.2.59. Strong public financial management practices reflect a government's ability to raise, allocate, and use public funds effectively to achieve development outcomes. The initiatives of the Odisha government on blending data governance principles with PFMS principles are revolutionary. The PFMS framework may be presented in a simple chart as in Figure 1.3.

1.2.60. Government of Odisha is often credited for managing its finances and fiscal risks efficiently, and for restoring stability in the overall fiscal situation of the state without compromising its objectives of faster socio-economic development and inclusive growth. The overall fiscal situation of the state is stable. It has been able to keep the major fiscal indicators within the stipulations of the Central Finance Commission and the FRBM Act.

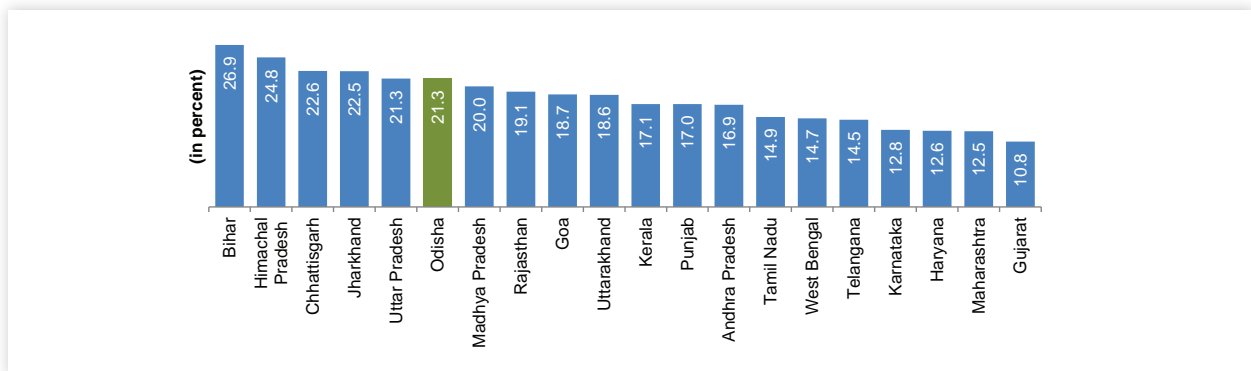
1.2.61. Odisha is among six highest spending states in the country. In 2020-21, the total public expenditure (revenue expenditure plus capital outlay) of the State was 21.3 per cent of GDP. The objectives of high public expenditure by the State have been provision of collective wants to maximize social welfare, lowering unemployment, increasing production through demand and capacity creation, improving the investment climate, and creating and maintaining conducive conditions for economic development. A bird's eye view may be had in Figure 1.4.

Odisha is one of the most fiscally prudent state in the country. Fiscal deficit in Odisha is one of the lowest in the Country and much lower than India at a country level. In 2021-22, Odisha has registered only 0.4 per cent fiscal deficit while it was 6.7 per cent at the country level.

Figure 1.3 **Quality of Public Finances: the Odisha Framework**



Figure 1.4 **Total Public Expenditure as per cent of GSDP in 2020-21**

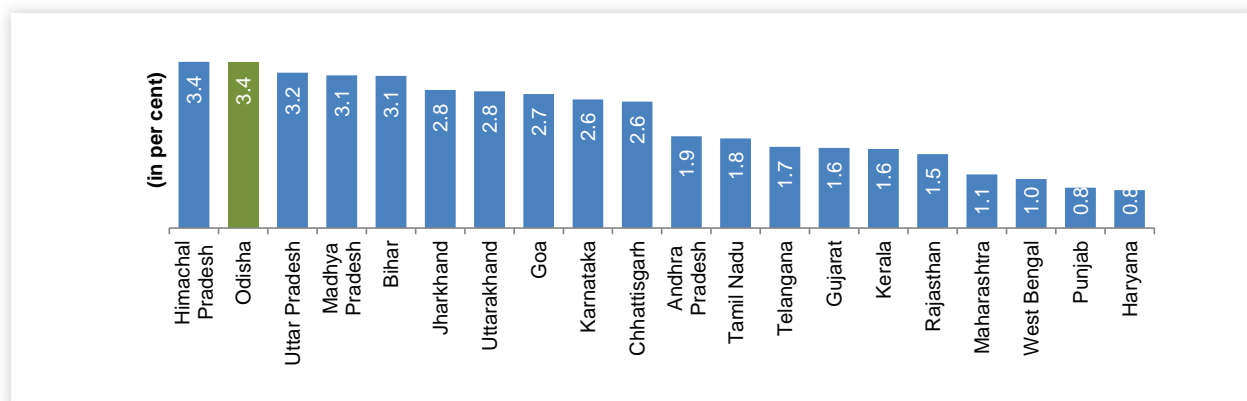


Source: Study of State Budgets, Reserve Bank of India

1.2.62. Odisha has invested heavily in building capacity for growth. The State is one among the two highest spenders on capacity creation as proxied by capital outlay as a percentage of GSDP. In 2020-21, the State spent 3.4 per cent of GSDP under capital outlay as shown in Figure 1.5. It is noteworthy to see that higher public expenditure (revenue expenditure plus capital outlay) has been achieved along with fiscal prudence. Odisha has won accolades for strictly following the rules of the game and being a fiscally disciplined state for a long time. In matters of fiscal management, the State has been ranked highest among 17 major states by the domestic credit rating agency, Care Edge in its first edition of State Ranking 2023. The report attributed the State's success on the fiscal front to its high scores on revenue deficit (RD) and fiscal deficit (FD), primary deficit (PD), and healthy debt management indicators.

1.2.63. It has the unique distinction of achieving all FRBM targets in all years from enactment of FRBM Act and has been a revenue-surplus state continuously for more than 15 years. The average revenue deficit to GSDP ratio during the period 2017-18 to 2022-23 is (-2.3 per cent (implying surplus) which is the lowest among 20 major states as shown in Table 1.11. This is suggestive of the fact that the State makes use of borrowings mostly to finance capital expenditure. In terms of average Gross Fiscal Deficit, the State ranks third among 20 states with a GFD/GSDP ratio of 2.13 per cent. The State also has one of the lowest PD/GSDP ratio at 1.00 per cent.

Figure 1.5 Capital Outlay as per cent of GSDP, 2020-21



Source: Reserve Bank of India, A Study of State Budgets; Annual budget documents, Odisha

Table 1.10 Average Revenue Deficit, Fiscal Deficit, and Primary Deficit of States

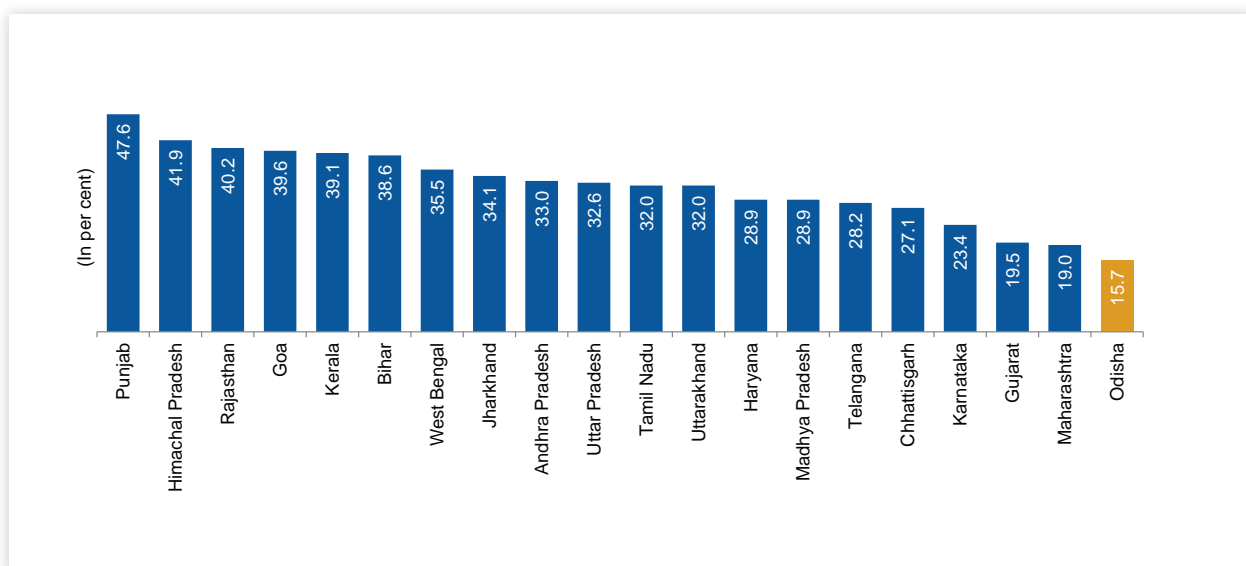
States	Average for 2017-18 to 2022-23 (BE)		
	RD/GSDP	GFD/GSDP	PD/GSDP
Odisha	-2.30	2.13	1.00
Uttar Pradesh	-1.62	2.38	0.28
Bihar	0.37	4.63	2.58
Jharkhand	-0.70	3.37	1.60
Goa	-0.08	4.15	2.08
Himachal Pradesh	0.12	3.52	0.83
Gujarat	0.12	1.77	0.38
Karnataka	0.27	2.68	1.50
Maharashtra	0.53	1.95	0.65
Uttarakhand	-0.03	2.82	0.83
Telangana	0.22	3.82	2.32
Chhattisgarh	0.58	3.67	2.23
Madhya Pradesh	0.22	3.68	2.07
Tamil Nadu	2.20	3.77	1.88
West Bengal	1.62	3.27	0.70
Punjab	2.65	3.73	0.50
Kerala	2.55	4.02	1.67
Andhra Pradesh	2.12	4.08	2.30
Haryana	1.78	3.27	1.22
Rajasthan	3.00	4.33	1.98

Source: Reserve Bank of India, A Study of State Budgets

1.2.64. Against the backdrop of the prolonged COVID crisis, the Sri Lankan catastrophe, the Russia-Ukraine war, and the worsened fiscal positions of many governments around the world as reflected in their mounting debt levels, high fiscal risks and vulnerability, the Government of Odisha has prudently managed the state's finances to have a very comfortable fiscal position.

1.2.65. Sound PFMS has helped the State to keep the interest cost low and the total outstanding liabilities as percentage of GSDP at the lowest amongst all states at 15.7 per cent in 2022-23 (BE). This is shown in Figure 1.6.

Figure 1.6 Total Outstanding liabilities as percentage of GSDP 2022-23 (BE), (in per cent)



Source: Reserve Bank of India, A Study of State Budgets

VI. Inflation

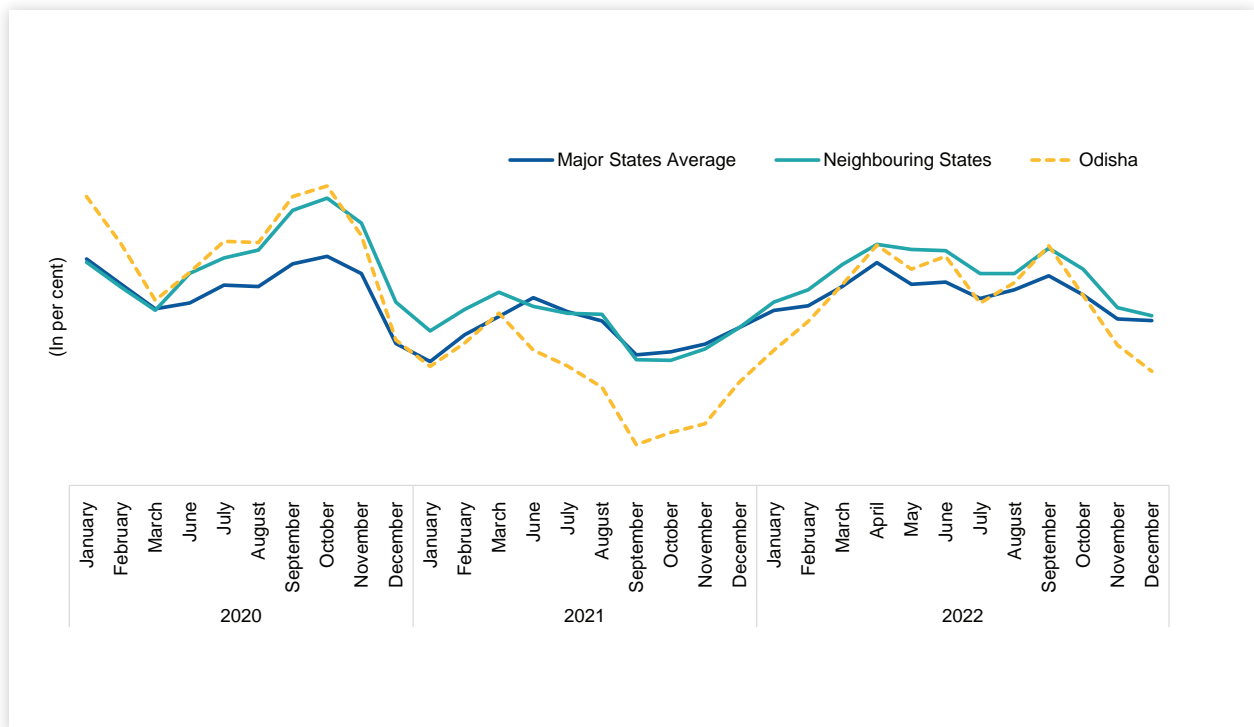
1.2.66. High inflation impacts the purchasing power of the population. It affects the quantity of goods/services that individuals/firms can purchase within their income. Continued inflation may also increase inflationary expectations of individuals. This would mean higher demand for essential items than under normal circumstances. This further constrains the availability of goods and services increasing inflation further and the vicious cycle continues. The Indian economy has been experiencing high inflation since 2020-21. In the year 2020-21, the COVID-19 induced lockdown led to a constrained supply chain and higher inflation consequently. In 2020-21 and 2021-22, at All-India level, the headline inflation (CPI-Combined) was 6.2 per cent and 5.5 per cent respectively as compared with 4.8 per cent in 2019-20. In Odisha too, the

Inflationary environment in Odisha has always remained benign in comparison to all India. During 2021-22, average consumer price inflation in India was 5.5 per cent while in Odisha, it was just 3.7 per cent. During 2022-23 (until December 2022), when the average inflation in India shot up to 6.8 per cent, Odisha has registered a 24 basis points lower inflation than India.

inflation in 2020-21 (June 2020 to March 2021) was 7.1 per cent which moderated to 3.7 per cent in 2021-22 (June 2021-March 2022).

1.2.67. In the year 2022-23 (April-Dec), the inflation in Odisha went up to 6.56 per cent but lower than the neighbouring states average of 7.24 per cent in 2022-23. Over a longer period too, inflation in Odisha on a year-on-year basis has been lower than that experienced in neighbouring states on an average as shown in Figure 1.7.

Figure 1.7 Inflation in Odisha, All Major States* and Neighbouring States** Average, Jan 2020 to Dec 2022



Note: *Major States: Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, and West Bengal; **Neighbouring States: Chhattisgarh, Andhra Pradesh, Jharkhand, West Bengal, Telangana

1.3. Conclusion

- 1.3.1. Odisha has achieved impressive growth in the last two decades. Various stylised facts about the State’s long-term growth process are worth noting. First, the State has grown faster than many states and the all-India growth. Second, economic growth has been steady without any prolonged reversal(s). Third, industry has been the engine of growth, while the services sector is picking up.
- 1.3.2. The State economy is poised to grow at 8 per cent to 8.5 per cent in real terms in 2023-24 by harnessing human, natural, and financial resources and strengthening the productive base of the economy. Having more than 35 per cent of the country’s natural resources and huge reserves of iron ore, bauxite, coal, etc. and other natural resources, with a skilled workforce, the State would continue to grow at a faster rate.

- 1.3.3. The industrial diversification would propel the growth of the industry sector in the State with the creation of immense job opportunities. Expansion of the service sector would make the State economy more resilient. Promotion of the Blue economy with a coastline of 480 kms would open huge opportunities for the State to establish Odisha as the hub of maritime trade and contribute to growth. Odisha is a sought-after tourist destination in India and by developing Eco-tourism, Green-tourism, Spiritual-tourism, and Medical-tourism, this sector is going to contribute to the state economy.
- 1.3.4 Odisha's agriculture sector is witnessing significant diversification. Furthering diversification of production structure with effective market linkage and correct information dissemination in agriculture would be a significant contributor to local economic development and sustained inclusive growth. The State is making immense investment in education and health as well as in skill development. Harnessing the power of digital technology and promotion of Small and Medium Industries has remained a focus area of the State. Such multifaceted intervention with the 5T governance model is ushering a new era for Odisha.

CHAPTER 2

AGRICULTURE AND
ALLIED SECTORS



Agriculture and allied activities constitute the main source of livelihood for a major section of population in Odisha. This sector accounted for a share of 22.5 per cent of GSVA in 2022-23 (AE). Within various sub-sectors within agriculture, the crop sub-sector occupied a high share of 14.2 per cent in GSVA followed by livestock (3 per cent), fishing and aquaculture (2.7 per cent) and forestry and logging (2.6 per cent) in 2022-23.

Agriculture and allied sectors in Odisha are expected to grow by 6 per cent in 2022-23 against 2.4 per cent growth rate in 2021-22. The agriculture sector in Odisha registered a much higher growth rate than that of India (3.5 per cent) in 2022-23. All the sub-sectors of agriculture sector witnessed a strong growth rate in 2022-23 over the previous year. In 2021-22, net sown area in the State was 54.1 lakh hectares accounting for 35 per cent of the total geographical area. It has increased by 1.5 per cent over the previous year. Total food grains production in Odisha has reached a record of 130.39 lakh MT in 2020-21. In 2021-22, Odisha produced 113.8 lakh MT of food grains.

Government of Odisha has implemented various initiatives like National Food Security Mission, Integrated Farming System, Integrated Action Plan, Mission for integrated development of Horticulture, Odisha Millet Mission, Technology Mission on Sugarcane and crop-oriented programme for pulses and oilseeds, to foster crop diversification in the State. The State experienced success in terms of crop diversification, irrigation, productivity, plant protection, farmers' credit, post-harvest management and marketing of paddy and non-paddy procurement. The production, productivity and per capita availability of animal husbandry and fishery products and exports of marine products have increased in 2021-22 over the previous year. Further, forestry sector also performed well with the rise in actual forest area during 2021-22.

Overall, the adoption of sub-sector specific development measures backed by adequate institutional set up has positively helped the State in sustaining and promoting agricultural growth despite its high susceptibility to natural calamities.

2.1. Introduction

2.1.1. As an agrarian State, majority of the rural workforce in Odisha (about 55 per cent) are engaged in agricultural activities. Agriculture sector continues to be the main source of livelihood for a large section of the population in the State. The agriculture and allied sector in Odisha accounts for 22.5 per cent of Gross State Value Added (GSVA) in 2022-23(AE) and 22.9 per cent in 2021-22 (RE). During the pandemic, agriculture sector showed resilience and was least impacted by lockdown measures. Development of agriculture and allied sector is critical to enhance farmers' income, eradicate poverty, and boost economic growth through forward and backward linkages and value-added activities.

2.1.2. The core sub-sectors of the agriculture sector include crop, livestock, fishery, and forestry. During 2021-22, the contribution of crop sector to GVA in Odisha was 14.3 per cent and the State experienced success in terms of crop diversification, irrigation, productivity, plant protection, farmers' credit, post-harvest management and marketing of paddy and non-paddy procurement. The production, productivity and per capita availability of animal husbandry and fishery products and exports of marine products improved in 2021-22. Further, the forestry sector also performed well with a rise in actual forest area during 2021-22.

2.2. Broad overview of Agriculture in Odisha

2.2.1. Odisha has 10 Agro-Climatic Zones, 8 Nutrient Rich Soil Types, 480kms long coastline (8 per cent of India's Coastline), and abundant water resources. Paddy is predominantly grown in Odisha. Besides paddy, Odisha also produces different non-paddy agriculture and horticulture crops like millet, maize, pulses, oilseeds, onion, sweet potato, fruits and vegetables, cashew, and coffee. Similarly, it is a large producer of fish, shrimp, and marine products as well as meat, egg, and milk. Turmeric, honey, and tamarind are also being produced in large quantities with significant marketable surplus.

2.2.2. Odisha ranks 1st in production of sweet potato contributing 25 per cent to the national basket and it is also one of the largest onion producing states in the country with a production of 3.5 lakh MT per annum. Odisha is the 4th largest fish producing state in the country. The State produces 65 lakh litres of milk every day with more than 70 per cent marketable surplus. Milk products like rasgulla produced in the State with a GI tag have niche demand across the country. It is the 6th largest producer of goat meat, 4th in cashew nuts (14 per cent of India's production). Odisha ranks 5th in the country in production of coconut. 660 MT of Arabica coffee is produced in Koraput. Similarly, Kandhamal turmeric and Simlipal honey are famous in the country.

2.2.3. The last two decades witnessed an increase in production and productivity of all crops including foodgrains. The details of production, productivity and factors of production are discussed in the subsequent sections.

2.3. Gross value added and growth of Agriculture & Allied Sector

2.3.1. The share of agriculture and allied sector GSVA at current prices stood at 22.5 per cent in 2022-23. The share of agriculture and allied sectors and various sub-sectors from 2011-12 to 2022-23 is given in Table 2.1. Between 2011-12 and 2022-23, the share of agriculture and allied sector in GSVA has increased from 17.9 per cent in 2011-12 to 22.5 per cent in 2022-23. Within agriculture, crops account for highest share in GSVA at 14.2 per cent in 2022-23. The share of livestock and fisheries in GSVA has slightly increased between 2011-12 and 2022-23, indicating success of the government's effort to promote these sub-sectors.

Table 2.1 Share of Agriculture and Allied Sectors and various Sub-Sectors in GSVA at current prices – Odisha

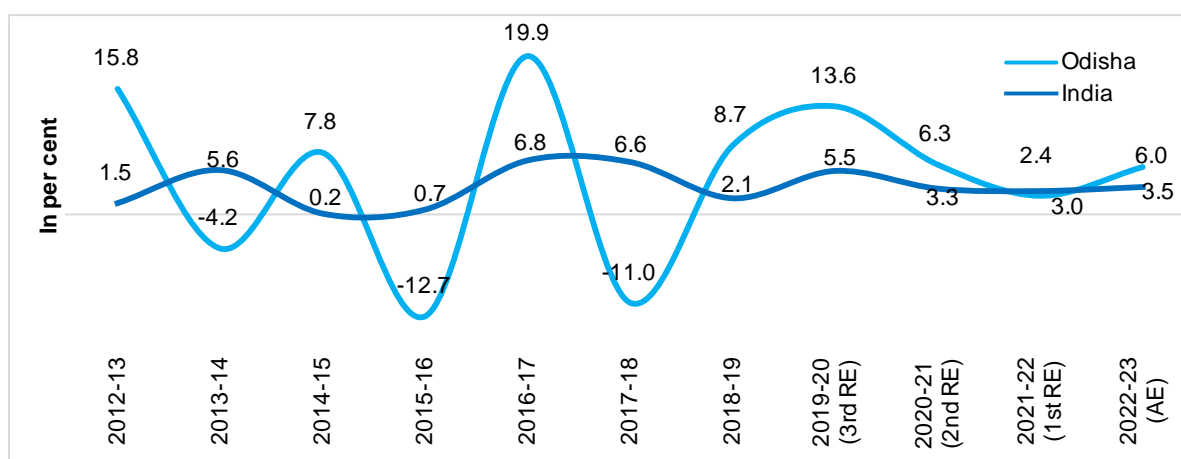
Economic Activity	Percentage Share in GSVA											
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (AE)
Agriculture, Forestry and Fishing	17.9	21.4	20.2	22.2	20.2	20.9	19.2	19.4	23.6	25.8	22.9	22.5
Crops	11.6	15.1	13.6	15.0	12.4	13.3	11.3	11.3	14.8	16.2	14.3	14.2
Livestock	2.4	2.6	2.6	2.7	2.9	2.6	3.0	3.2	3.4	3.7	3.4	3.0
Forestry and Logging	2.6	2.5	2.8	2.9	3.1	3.1	2.6	2.8	3.1	3.3	2.8	2.6
Fishing and Aquaculture	1.2	1.3	1.3	1.5	1.8	2.0	2.2	2.1	2.3	2.6	2.5	2.7

Source: DE&S, Odisha

2.3.2. Growth of agriculture and allied sectors GVA of Odisha and India at constant prices from 2012-13 to 2022-23 is given in Figure 2.1. The growth of agriculture and allied sectors GVA in Odisha has been more fluctuating than the growth rate at national level. The decline in agricultural growth rate in Odisha is majorly associated with incidence of natural calamities in the State. The performance of agriculture remains vulnerable to natural calamities in Odisha. The current financial year has been a good year for the agriculture sector in Odisha. In FY 2022-23, agriculture, and allied sectors GVA is estimated to grow at 6.0 per cent (AE) against 2.4 per cent (RE) in 2021-22. In 2022-23, the agriculture and allied sectors in Odisha are expected to grow at a much higher rate (6.0 per cent) than India (3.5 per cent).

Figure 2.1

Growth of Agriculture and allied sector GVA at constant prices of Odisha & India



Source: DE&S, Odisha

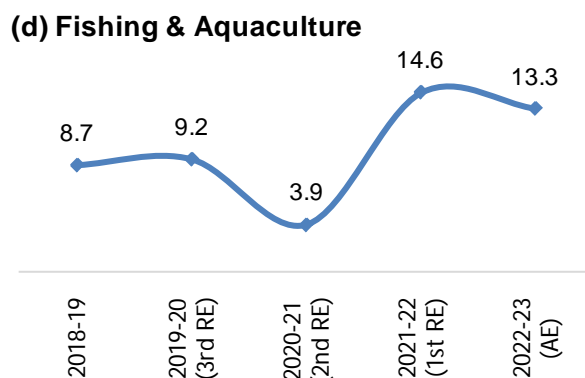
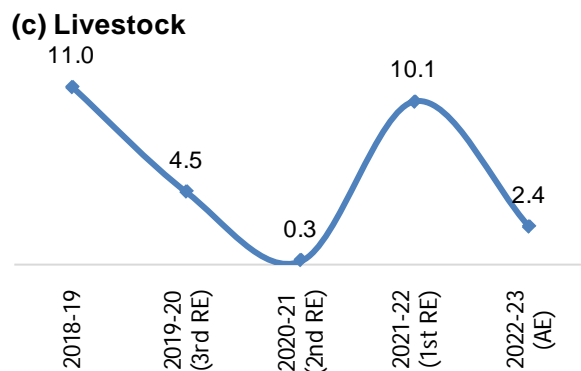
Growth of Sub-Sectors

2.3.3. Crop sub-sector accounts for 14.2 per cent of GSVA in 2022-23 against 14.3 per cent in 2021-22. Crop sub-sector grew at 5.4 per cent in 2022-23 (AE) against -1.6 per cent in 2021-22. The contraction in growth rate in 2021-22 was due to the combined effect of drought, unseasonal rain, and cyclone Jawad in the harvesting period of the Kharif season (Figure 2.2a).

2.3.4. Livestock sub-sector contributed to 3.0 per cent of GSVA in 2022-23 while the corresponding share was 3.4 per cent in 2021-22. During 2018-19, the growth of the livestock sector reached a peak of 11.04 per cent & lowest in 2014-15, i.e., -3.60 per cent. In 2022-23, the livestock sector grew at 2.4 per cent against 10.1 per cent in 2021-22 (Figure 2.2c).

Figure 2.2 Growth of various Sub-Sectors of Agriculture - Odisha





Source: DE&S, Odisha

Figure 2.2 (d) shows growth of fishery sub-sector. In 2022-23, the fishery sector grew at 13.3 per cent against 14.6 per cent in 2021-22. The forestry sub-sector registered a growth rate of 5.5 per cent in 2022-23 against 1.8 per cent in 2021-22.

2.4. Crops

I. Production of Major Crops

2.4.1. Production of major crops in Odisha from 2014-15 to 2021-22 is presented in Table 2.2. During 2021-22, food grains contributed around 45 per cent of the total crop production in the state, with a record production of 113.8 lakh MT. However, total food production in the state has declined by about 13 per cent in 2021-22 over the previous year, majorly due to a decline in rice production (by about 15.5 per cent).

2.4.2. As shown in Table 2.2, maize production has increased by about 4.5 per cent in 2021-22 over previous year and there is a significant growth in production of other cereals (about 12.54 per cent). This could be due to the promotion of millet (including ragi & non-ragi) cultivation in the State.

2.4.3. There is a marginal decrease in pulses production, oilseeds production has increased by about 6 per cent in 2021-22 which is a positive sign for the economy. There is an increase (0.36 per cent) in vegetable production, but the growth of production of spices and condiments remained the same as the previous year. Further, the production of sugarcane has increased by about 2.6 per cent in 2021-22 over the previous year. Among the cash crops, there is a significant growth in production of cotton (14 per cent) and other fibres (21 per cent).

Table 2.2 Production of Major Crops - Odisha (in '000 MT)

Crop	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Growth % in 2021-22 over 2020-21
Rice	9845	5875	9794	6551	7734	9755	10999	9291	-15.53
Maize	751	666	746	730	753	733	832	869	4.49
Other Cereals	171	153	144	126	131	155	164	185	12.54
Total (A) Cereals	10767	6694	10684	7407	8618	10643	11995	10345	-13.76
Mung (Green gram)	414	361	374	435	411	408	433	417	-3.61
Biri (Black gram)	259	234	249	250	238	210	197	189	-4.27
Tur	124	123	120	124	147	145	151	131	-13.54
Other Pulses	260	218	255	267	258	282	263	299	13.59
Total (B) Pulses	1057	936	998	1076	1054	1045	1044	1035	-0.84
Total Food grains (A+B)	11824	7630	11682	8483	9672	11688	13039	11380	-12.72
Groundnut	463	387	377	358	345	388	312	339	8.73
Other Oilseeds	216	177	184	177	178	181	167	168	0.87
Total (C) Oilseeds	679	564	561	535	523	569	479	508	5.99
Cotton@	316	298	382	408	455	578	551	626	13.68
Other Fibers@	172	129	101	118	110	94	98	119	21.27
Total (D) Fibers@	488	427	483	526	565	672	649	745	14.82
Sugarcane	2469	2107	2013	1986	1813	1366	1502	1541	2.58
Vegetables*	9403	9068	8974	8978	8892	9798	9795	9830	0.36
Spices & Condiments*	669	652	557	557	557	1129	1127	1127	-0.01
Total (E) Other Crops	12541	11827	11544	11521	11262	12293	12424	12498	0.59
Grand Total (A+B+C+D+E)	25532	20448	24270	21065	22022	25222	26591	25131	-5.49

Source: DE&S, Odisha

@: Production in '000 bales

* For 2019-20 onwards production of chilly is taken for green chilly. Similarly for these years turmeric represents dry turmeric, ginger represents raw ginger. Other spices include betel vine.

2.4.4. Keeping in view the consumption pattern and popularity of mushroom and spices in the State, the Directorate of Horticulture, Department of Agriculture and Farmers' Empowerment is going to initiate Mushroom Mission and Spices Mission to promote their cultivation in the state. These two missions are briefly discussed below.

MUSHROOM MISSION

This mission aims to make the State self-sufficient in production of button mushroom and a net exporter of paddy straw and oyster mushroom by involving women SHGs/ FPOs through area expansion and promotion of value-added products between 2022-23 and 2026-27. The mission will be implemented in convergence with ongoing schemes and requires an allocation of INR 328.88 crores from the State budget. 40,000 units of paddy straw and oyster mushroom, 150 units of button mushroom, and 150 preservation units will be established with a production capacity of 23,715 MT of paddy straw and oyster mushroom and 28,500 MT of button mushroom by involving 10000 SHG members.

SPICES MISSION

The mission will double the area under spices and promote primary processing of spices by establishing market linkages through buy-back arrangement involving women from SHGs/ FPOs in selected clusters. The mission will cover a period of five years from 2022-23 to 2026-27. The mission will be implemented in convergence with ongoing schemes and requires a budgetary allocation of INR 724.60 crores. 2.4 lakh ha will be brought under cultivation of spices by promoting 1000 seed villages, installing 500 primary processing units and involving about 5000 SHG members.

II. Production of Fruits

2.4.5. There was a marginal increase in total fruit production in the State in 2021-22 over 2020-21 and 2019-20. Table 2.3 shows the marginal increase in production of different fruits like mango, banana, jackfruit, litchi, guava, papaya and sapota during 2021-22 over previous years. The growth of fruit production for all categories of fruits is marginal while maximum rise was observed in production of lemons (7.6 per cent) followed by banana (4.1 per cent).

Table 2.3 Production of fruits - Odisha (in'000MT)

Year	Total Fruits	Mango	Banana	Jack Fruits	Lemons	Guava	Papaya	Lichi	Sapota	Other fruits
2019-20	2,482	847	483	310	268	120	100	24	13	316
2020-21	2,527	848	503	312	288	121	101	24	14	317
2021-22	2,527	848	503	312	288	121	101	24	14	317
Growth (%) in FY22 over FY20	1.8	0.1	4.1	0.7	7.6	1.0	0.6	1.9	0.5	0.1

Source: Directorate of Horticulture, Odisha

2.4.6. As jackfruits are popular in Odisha as a traditional fruit and are used in different cultural and traditional communication with friends and relatives, the Director of Horticulture, Department of Agriculture & Farmers' Empowerment is going to establish the Odisha Jackfruit Mission to promote the cultivation of jackfruit in the State. A brief description of the mission is given below.

ODISHA JACKFRUIT MISSION

During 2022-23 and 2023-24, the mission will cover 50 potential blocks across 9 identified districts namely Angul, Dhenkanal, Mayurbhanj, Keonjhar, Gajapati, Koraput, Rayagada, Kandhamal & Sundargarh. The mission will be implemented in convergence with other ongoing schemes. The key objectives of the Mission are: (i) to expand the area under jackfruit cultivation by 1500 Ha in 5 years, (ii) Production of Quality Planting Material including 5 lakh local elite varieties and grafts. The mission will also focus on the creation of Post-Harvest Management (PHM) infrastructures such as 200 pack houses, 100 primary processing units at block level in 5 years (2 units per block). Three techno-incubation centres will be established; one each in Koraput, Kandhamal & Keonjhar districts. Training and capacity building on improved practices and management will be imparted to about 10,000 stakeholders. As a part of this mission, Odisha Jackfruit Brand will be established.

III. Floriculture / Production of Ornamental Crops

2.4.7. Odisha has good potential in ornamental crops. marigold, rose, gladioli and tuberose are the main flowers grown in Odisha. Area sown and production of different flowers in the State from 2014-15 and 2021-22 are presented in Table 2.4.

2.4.8. Flower production has increased in 2021-22 over the previous two years for the entire major categories viz. marigold, rose, gladioli and tuberose. But for marigold, both area and production have increased consistently between 2014-15 to 2021-22. Further, the rise in production of new gerbera flowers in the past few years is encouraging. During 2021-22, the production of gerbera was about 310.43 lakh spikes from 23.69 ha of land.

Table 2.4 Area and production of Major Ornamental crops-Odisha

Year	Marigold		Rose		Gladioli		Tuberose	
	Area (in Ha.)	Production (in Qtls.)	Area (in Ha.)	Production (in lakh stems)	Area (in Ha.)	Production (in lakh spikes)	Area (in Ha.)	Production (in Qtls.)
2014-15	2735	245810	1870	3598	2374	2359	511	12820
2015-16	2609	245820	1857	3575	1578	1558	503	12810
2016-17	2608	235221	1859	3584	1580	1560	507	12968
2017-18	2616	235943	1870	3607	1596	1576	514	13143
2018-19	2577	233641	1825	3504	1544	1526	464	11727
2019-20	2996	298000	1469	2915	585	593	383	10490
2020-21	3055	304669	1518	3144	608	605	397	10966
2021-22	3076	305334	1523	3164	610	605	405	11157

Source: Directorate of Horticulture, Odisha

2.4.9. In order to meet the public demand of flowers and to enhance the income and standard of living of people engaged in floriculture, the Directorate of Horticulture has launched the Floriculture Mission for a period of five years.

FLORICULTURE MISSION

The mission will make the State self-sufficient in production of loose flowers in three years of the mission period through area expansion in 30 districts. In addition, this also aims to make the State a net exporter of cut flowers in five years by involving women SHGs/ FPOs in selected clusters of 7 districts over the mission period from 2022-23 to 2026-27. The mission will be implemented in convergence with ongoing schemes and requiring INR 38.3 crores from the State budget. Around 4000 ha will be brought under cultivation of loose, cut, and bulbous flowers in open condition and 50 ha will be covered under protected cultivation of high value flowers. This shall be carried out by establishing seven high tech floriculture nurseries involving about 20000 SHG members.



Cluster polyhouse at Huma, Berhampur

IV. Productivity

A. Productivity of Major Crops

2.4.10. A comparative picture on changes in productivity of some important crops in Odisha between 2011-12 and 2021-22 is presented at Annexure-2.4. Table 2.5 shows the change of productivity of some major crops from 2001-02 to 2021-22. There has been significant rise in productivity of major crops in the last two decades.

2.4.11. Between 2001-02 and 2021-22, productivity of food grains (consisting of cereals and pulses) increased by about 132 per cent with a CAGR of 4.1 per cent. For oilseeds, productivity has increased by about 42.1 per cent with highest increase in mustard (34.8 per cent) followed by groundnut. Among the fibres, the productivity of cotton has increased about 274.8 per cent during last two decades with a CAGR of 6.8 per cent. But for Til, the change in productivity is comparatively less than the others i.e., only 14.3 per cent and a CAGR is 0.67 per cent.

2.4.12. The productivity of vegetables has increased by 18.5 per cent during the last two decades whereas for major vegetables like potato, onion and sweet potato the productivity increase is 16.29 per cent, 31.29 per cent and 19.56 per cent respectively. Similarly, productivity of pulses has increased by about 36 per cent with the highest increase being recorded in arhar (red gram, by 60.6 per cent) during this period.

Table 2.5 Percentage change in productivity of some major crops in 2021-22 over 2001-02- Odisha

Major Crops	2001-02	2021-22	Growth rate (%)	CAGR (%)t
Rice	1,589	2,354	46.4	2.0
Maize	1,128	3,194	183.2	5.3
Ragi	738	1,107	50.0	2.0
All Cereals	1,526	2,321	52.1	2.1
Arhar	645	1,036	60.6	2.4
Mung	354	503	42.1	1.8
Biri	403	480	19.1	0.9
All Pulses	400	544	36.0	1.5
Total Food grains	1,232	1,787	45.1	1.9
Groundnut	1,426	1,805	26.6	1.2
Til	351	401	14.3	0.7
Mustard	322	434	34.8	1.5
All Oilseeds	635	902	42.1	1.8
Cotton	147	551	274.8	6.8
Sugarcane	63,728	73,198	14.9	0.7
Potato	10,302	11,980	16.3	0.8
Onion	8,889	11,670	31.3	1.4
Sweet Potato	8,130	9,720	19.6	0.9
All Vegetables	11,855	14,045	18.5	0.9

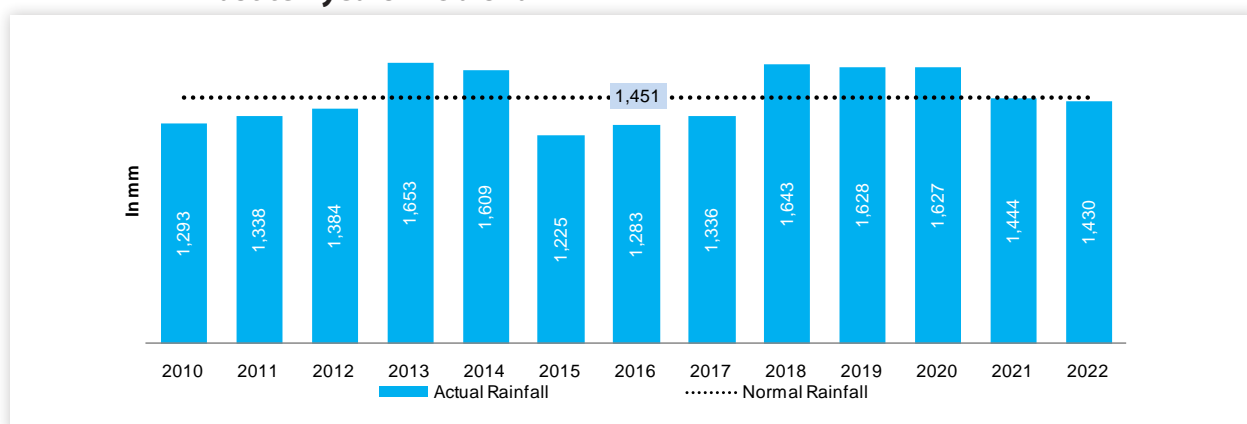
Source: Directorate of Agriculture and Food Production, Odisha & Directorate of Horticulture, Odisha

B. Factors influencing Agricultural Production

Rainfall

2.4.13. Rainfall is critical for agricultural production and productivity. The normal rainfall in Odisha is around 1451.2 mm with about 75-80 percent of the rainfall being recorded between mid-June and end-September (monsoon season) supporting cultivation of kharif crops. During 2022, the State received 1430 mm of rainfall, which was 1.5 per cent less than the normal rainfall. Figure 2.3 shows the trend of actual rainfall in Odisha during last decade and its deviation from the long-term average normal rainfall of 1451.2 mm.

Figure 2.3 Actual rainfall vis-à-vis long-term average during last ten years – Odisha



Source: SRC, Odisha

Farm Pond for Water Conservation

2.4.14. Although Odisha is bestowed with good annual rainfall, its erratic and uneven distribution results in frequent droughts & floods in the State. Water scarcity during critical stages of crop growth hampers production and productivity, affecting farmers' income. In order to overcome water scarcity issues and to provide irrigation during Kharif season, construction of farm ponds has been conceptualised. Every willing Farmer can have a farm pond under this initiative. This programme also aims to promote Integrated Farming Systems (IFS) to increase farmer's income and counter frequent extreme weather events.

2.4.15. The objectives of farm pond scheme are- to provide drought proofing, increase cropping intensity, promote integrated farming, increase productivity, recharge ground water, mitigate the adverse effect of water stress condition and create employment opportunities in the local economy. A total of five lakh farm ponds were targeted to be constructed in five years between 2019-20 and 2023-24 and this scheme has been included under 5T initiatives.

2.4.16. During 2019-20, a total of 9,390 farm ponds were excavated generating 36 lakh person days of employment with an expenditure of INR 107 crore under MGNREGA. During 2020-21, 55,836 farm ponds were grounded utilising INR 197.5 crore and generating 86.3 lakh person days of employment.

2.4.17. Similarly, during 2021-22, 29,823 new farm ponds were grounded, and 28,417 farm ponds identified in 2020-21 were completed utilising INR 359.5 crore and generating 134.5 lakh person days of employment. For the year 2022-23, the target was to construct 50,000 farm ponds/dug wells and out of which 10,406 ponds have been grounded till January 2023 under MGNREGA.

Climatic risk

2.4.18. Odisha is prone to natural calamities like cyclone, drought, and floods which adversely affect agricultural production and productivity. Table 2.6 shows the list of natural calamities that affected the State since 2010. However, timely interventions and implementation of different risk mitigation schemes like Restructured Weather Based Crop Insurance Scheme (RWBCIS), Pradhan Mantri Fasal Bima Yojana (PMFBY) and other interest subvention and input subsidy schemes could reduce disaster related stress faced by farmers and help them cope up with the disasters.

Table 2.6 Incidence of Natural Calamities affecting Odisha since 2010

Year	Natural Calamities
2010	Flood, Heavy Rain, Drought & Unseasonal Cyclonic Rain
2011	Drought & Flood
2012	Drought & Flood
2013	Very Severe Cyclonic Storm "Phailin"/Flood
2014	Very Severe Cyclonic Storm "Hudhud"/Flood
2015	Drought, Flood & Heavy Rain
2016	Drought, Flood & Heavy Rain
2017	Flood, Heavy Rain, Drought & Pest Attack, Unseasonal Rain
2018	Cyclonic Storm "Titli" and "Pethai" / Drought
2019	Extremely Severe Cyclonic Storm "Fani" and "Bulbul"
2020	Severe Cyclone "AMPHAN" and heavy flood
2021	Drought, Unseasonal Rain and Cyclones Yaas, Gulab, JAWAD
2022	Flood and Heavy rain

Source: SRC, Odisha

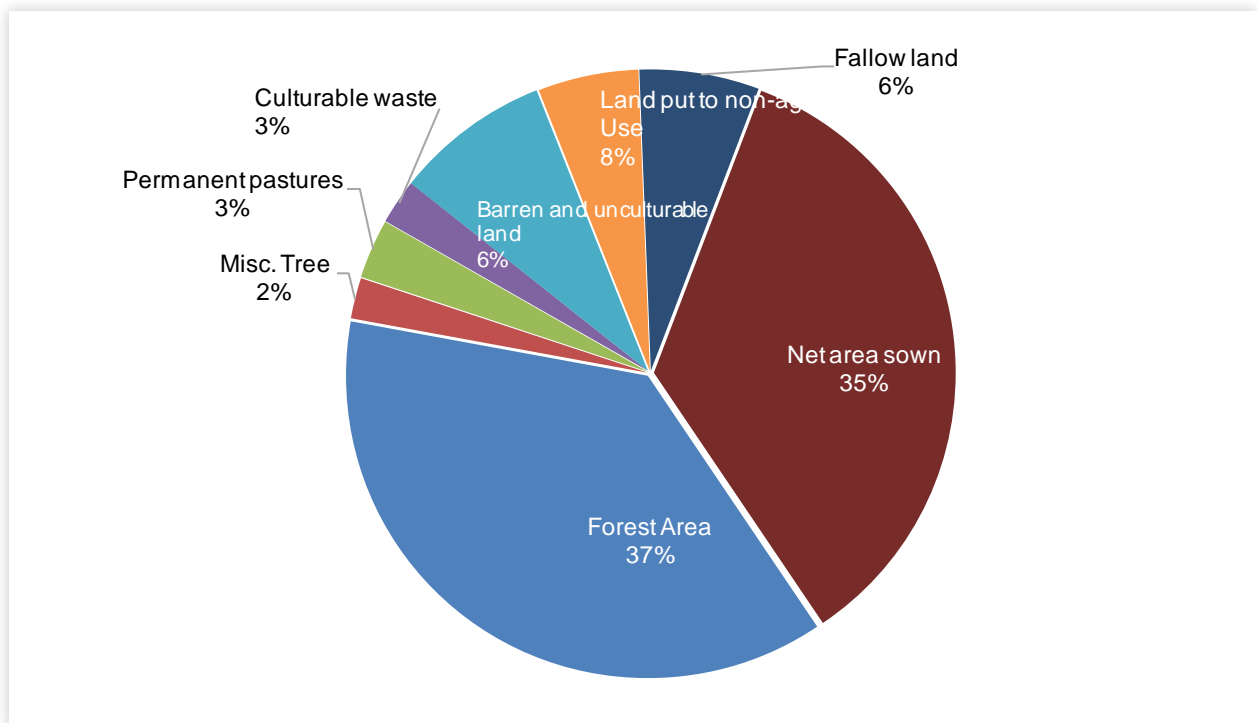
V. Land

A. Land use Pattern and Cropping Intensity

2.4.19. Land use is an important statistic for agricultural growth. Out of the total geographical area (155.7 lakh hectares) in the State, a major portion of land is under forest cover (37 per cent of total area). In 2021-22, the net sown area in the State was 54.1 lakh hectares accounting for 35 per cent of the total geographical area. It has increased by 1.5 per cent over the previous year.

2.4.20. Land use pattern in Odisha for 2021-22 is given in Figure 2.4. Fallow lands which include both current fallows and other fallows accounted for 6 per cent of total land in the State. The total gross cropped area which represents the total area sown once and/or more, has increased marginally (0.3 per cent) in 2021-22 over the previous year. During 2021-22, the total gross cropped area in the State was about 85.6 lakh hectares.

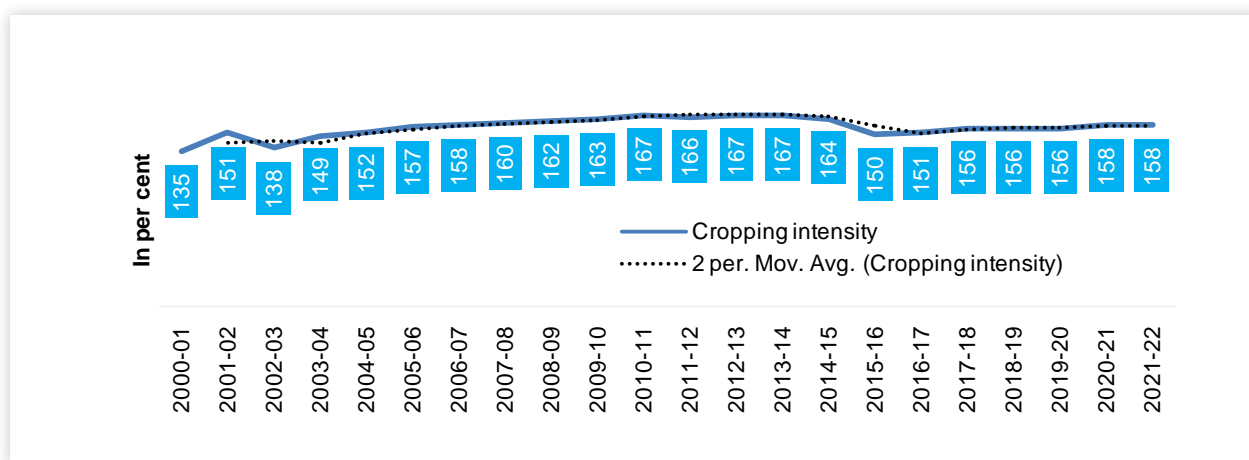
Figure 2.4 Distribution of land use pattern during 2021-22 – Odisha



Source: Directorate of Agriculture and Food Production, Odisha

2.4.21. Cropping intensity measures the number of times an area of land has been used for cultivation in a year. It is defined as the ratio of gross cropped area to net sown area. A higher cropping intensity enables optimum utilization of land. The cropping intensity in the State has increased from 150 in 2015-16 to 158 in 2021-22 as shown in Figure 2.5. This could be because of an improvement in irrigation facilities and concerted efforts of the government to promote multiple sowing, and crop diversification.

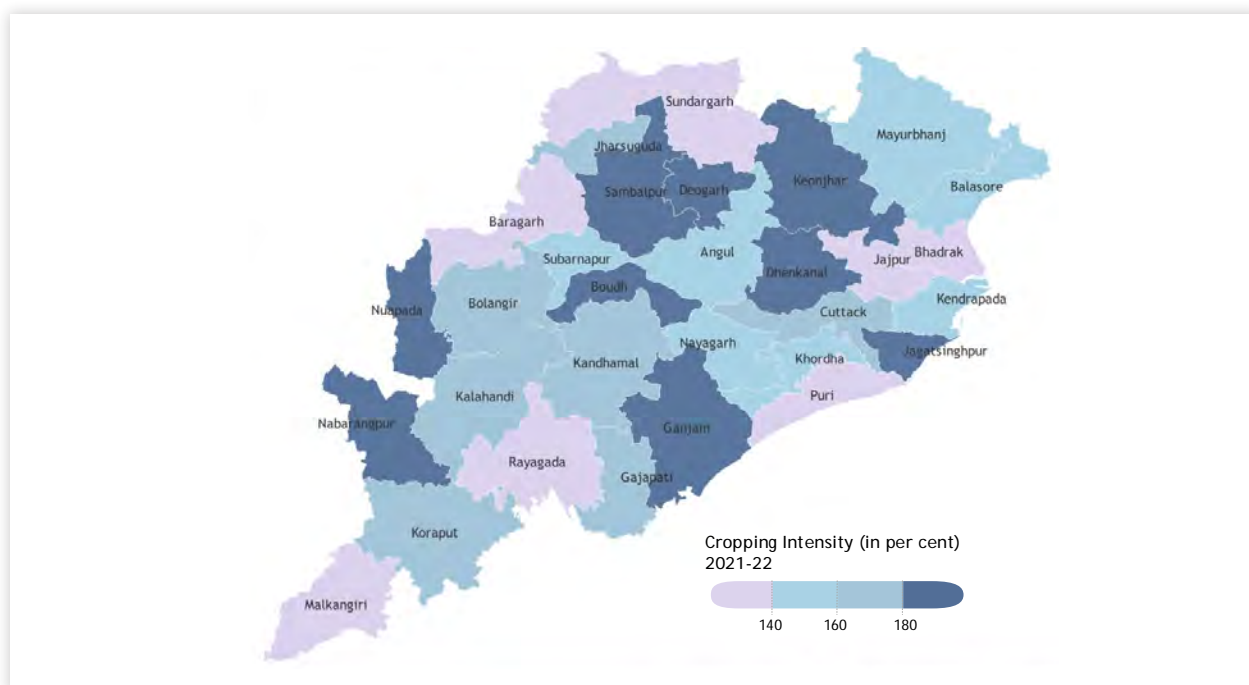
Figure 2.5 **Trend of Cropping Intensity - Odisha**



Source: Trend of Cropping Intensity in Odisha

2.4.22. Figure 2.6 provides district-wise cropping intensity for the year 2021-22. Districts like Jagatsinghpur, Nuapada, Nabarangpur, Boudh, and Kendujhar etc. have higher cropping intensity while districts like Malkangiri, Puri, Bargarh, Rayagada and Jajpur have lower intensity. Cropping intensity depends on several factors like climate, soil type, irrigation facilities, etc.

Figure 2.6 **District wise Cropping Intensity for the year 2021-22- Odisha**



Source: Directorate of Agriculture & Food Production, Odisha

B. Land Holding

2.4.23. According to the concept of Agriculture Census, one operational holding is defined as the “whole land used for agricultural production and is operated as a single unit by one person alone or with others under the same management and has the same means of production such as labour force, machinery, animals, and credit without regard to the title, legal form, size or location”.

2.4.24. As per the Agriculture Census 2015-16, about 48.7 lakh operational holdings in Odisha were operating 46.2 lakh hectare lands for agricultural production in Odisha. The average size of operational land holding in the State is 0.95ha, whereas the same is 1.1 ha for all India level. The number of operational holdings of Odisha was about 3.22 per cent of that of India.

2.4.25. Operational land holdings are classified as marginal, small, semi-medium, medium, and large land holdings depending upon the area operated by a holder. As can be seen from Table 2.7, marginal and small farmers accounted for about 93 per cent of total holdings and 75 per cent of the total operational area. Compared to the previous estimates, the number of operational holdings has been increasing over the years while the area under holdings has been declining. This indicates a decline in average holding size in the State. As families break into smaller units, the common piece of land gets fragmented, leading to a rise in the number of land holdings.

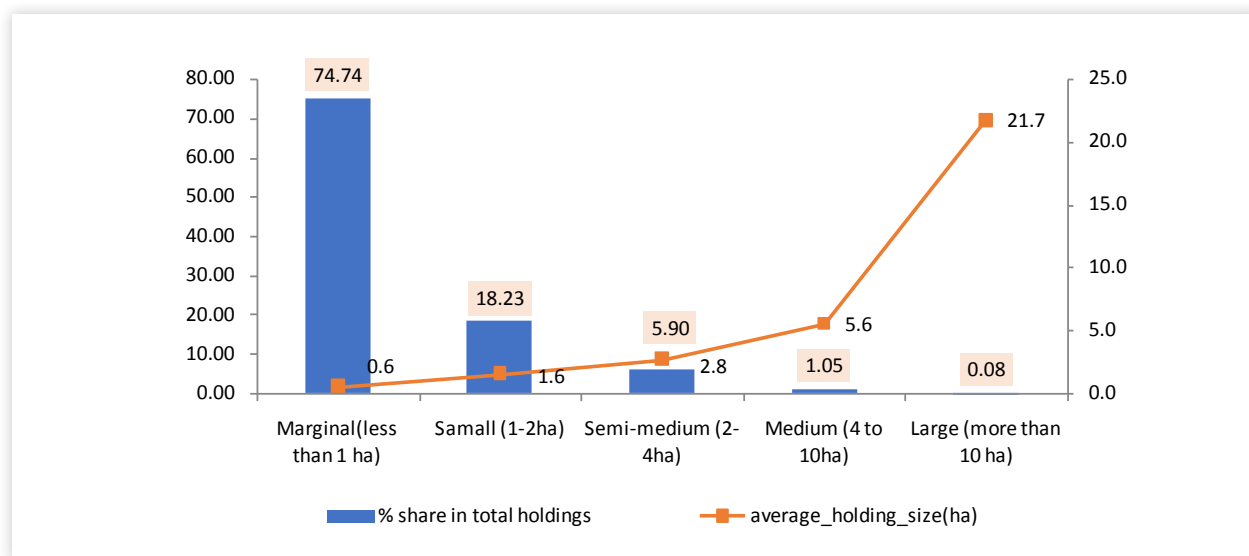
2.4.26. Steps have been taken to address the predominance of marginal and small farmers to improve their land productivity and thereby household income. Further, collective farming through farmer producer organisations has been encouraged to address the issue of scale. Further, disparity in average land holding size in Odisha is given in Figure 2.7.

Table 2.7 Distribution of Operational Holdings - Odisha

Size classes	No. of Holdings (in lakh nos.)			Area (in lakh hectare)			Percentage to total nos. of holding			Percentage to total area		
	2005-06	2010-11	2015-16	2005-06	2010-11	2015-16	2005-06	2010-11	2015-16	2005-06	2010-11	2015-16
Marginal (< 1.0 ha)	25.97	33.68	36.37	13.42	19.22	20.57	59.62	72.17	74.74	26.73	39.61	44.53
Small (1-2 ha)	11.56	9.18	8.87	15.88	14.98	14.04	26.54	19.68	18.24	31.63	30.87	30.40
Semi- medium (2-4 ha)	4.72	3.11	2.87	12.50	9.19	7.88	10.84	6.67	5.89	24.92	18.94	17.06
Medium (4-10 ha)	1.20	0.64	0.51	6.58	3.81	2.84	2.70	1.36	1.05	13.11	7.86	6.15
Large (>10.0 ha)	0.11	0.06	0.40	1.81	1.32	0.86	0.30	0.12	0.08	3.61	2.72	1.87
Total	43.56	46.67	48.66	50.19	48.52	46.19	100.0	100.0	100.0	100.0	100.0	100.0

Source: Agricultural Census, Directorate of Economics and Statistics, Odisha

Figure 2.7 **Disparity in average land holding size - Odisha**



Source: Agriculture Census 2015-16

2.4.27. In Odisha, out of 48.7 lakh total operational holdings, about 9.05 lakh operational holdings are of “leased in” tenancy status. In short, about 18.6 per cent of operational holdings are being operated by sharecroppers, out of which 93.2 per cent are small and marginal farmers. Keeping in view, the financial need of these sharecroppers and lessee cultivators, government of Odisha has launched Bhoomihina Agriculturist Loan and Resources Augmentation Model (BALARAM) to facilitate formal credit to these farmers through joint liability group mechanism thereby reducing their dependence on informal sources of credit.

Table 2.8 **Size class wise leased-in Operational Holdings– Odisha**

Sl No	Size groups	Total Operational Holdings	Wholly leased-in Holdings	Partly leased-in holdings	Total Leased in Holdings	% of leased in holdings
1	Marginal	36,36,658	2,51,982	3,91,823	6,43,805	17.7
2	Small	8,87,272	26,588	1,72,832	1,99,420	22.5
3	Semi- Medium	2,86,735	4,166	50,179	54,345	19.0
4	Medium	51,210	295	6,814	7,109	13.9
5	Large	3,975	40	465	505	12.7
6	All Size Groups	48,65,850	2,83,071	6,22,113	9,05,184	18.6

Source: Directorate of Economics and Statistics, Odisha

C. Cropping pattern

2.4.28. Cereals are the dominant crops in the State, accounting for about 52 per cent of the gross cropped area in 2021-22 (Figure 2.8). The gross cropped area under non-paddy cereals has increased in 2021-22 by 7.56 per cent over the previous year whereas the crop area under paddy has decreased by 1.5 per cent in the same period. As the State has become paddy surplus, the government is implementing initiatives such as Odisha Millet Mission to promote other non-paddy cereals.



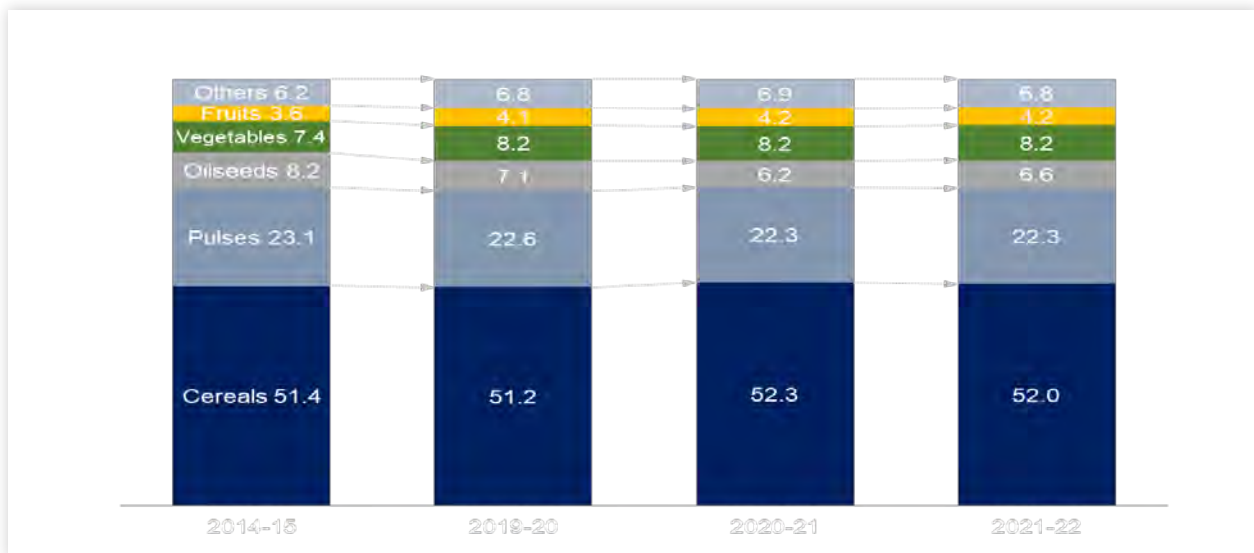
Multi-location trial of ragi varieties

2.4.29. The next major crop produced in the State is pulses, which accounted for 22.3 per cent of the total gross cropped area in 2021-22. The area under pulses has remained at 22.32 per cent in 2020-21 and 2021-22. The share of oilseeds in total crop area was about 6.6 per cent in 2021-22, slightly higher than the area previous year. The share of vegetables in total gross cropped area has increased marginally in 2021-22 over 2020-21 while the share of fruits has declined during the same period.

2.4.30. The increasing share of 'other crops' indicates the rise in area under high value crops like cotton, other fibres, spices, flower, etc. In 2021-22, the area under spices and flowers has increased to 3.09 per cent and 2.67 per cent respectively over the previous year.

2.4.31. The Government has been taking initiatives for diversification of crops, with emphasis on high value crops like cotton, pulses, oilseeds, vegetables, spices, and fruits through various developmental schemes like NFSM, IFS, IAP, MIDH, Odisha Millet Mission, Technology Mission on Sugarcane and crop-oriented programme for pulses and oilseeds etc. Further, crop diversification targeting rice fallow areas has been given special focus within Department of Agriculture and Farmers' Empowerment as part of 5T (Technology, Teamwork, Transparency, Timelines and Transformation) initiatives of the Government of Odisha.

Figure 2.8 Distribution of area under cereals, pulses, oilseeds, vegetables, and fruits – Odisha



Source: DAFP(O) & DoH, GoO

VI. Agricultural Inputs

A. Seeds

2.4.32. Usage of quality seeds is critical for improving production and productivity of Agriculture and Horticulture crops. Quality seed multiplication programme is being organized through the state agricultural farms, Odisha State Seeds Corporation (OSSC) and registered seed growers of OUAT and NRRI.

2.4.33. Under the seed village scheme, registered seed growers are supplied foundation seeds and the seeds produced in their fields are certified by the Odisha State Seed & Organic Products Certification Agency. Certified seeds are also produced by OSSC and OAIC (Odisha Agro Industries Corporation) which is marketed through a dealers' network. In recent years, the private players have started playing a significant role in seed production, processing, and marketing. The distribution of quality seeds in the State from 2010-11 to 2021-22 is given in Table 2.8. There are 227 functional seed processing plants in the State at present with a capacity of about 587 TPH. The agency wise functional status and capacity is given in Table 2.9.

Table 2.9 **Distribution of certified Quality seeds-Odisha**

Year	Distribution of certified Quality seeds (in Qtl.)		
	Paddy (HYV)	Non-Paddy	Total
2010-11	523298	149440	672738
2011-12	521375	158281	679656
2012-13	535129	151140	686269
2013-14	639627	142467	782094
2014-15	657267	84091	741358
2015-16	709924	85576	795500
2016-17	549919	83066	632985
2017-18	415571	87514	503085
2018-19	481327	113063	594390
2019-20	580951	113162	694113
2020-21	519035	60705	579741
2021-22	646729	58566	705295

Source: Directorate of Agriculture and Food Production, GoO

Table 2.10 **Agency wise seed processing plants- Odisha**

Agency	No of Seed Processing Plants (functional)	Capacity in TPH
Government	36	50.6
NSC	2	4
OSSC	67	232.1
OUAT	10	13.2
NRRI	1	2
PRIVATE	111	285.05
TOTAL	227	586.95

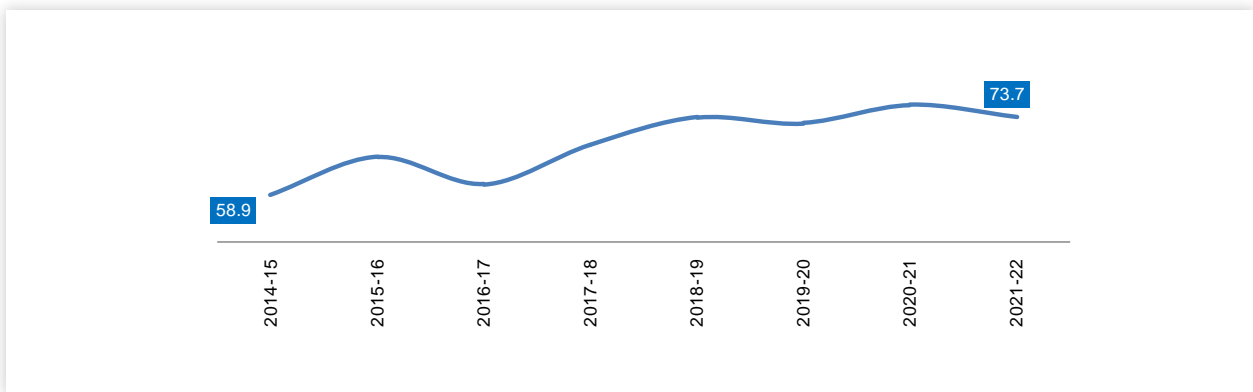
Source: Directorate of Agriculture and Food Production, GoO

2.4.34. PACS are the grass root level organisations which are associated with the farmers of the state and more than 60 per cent of the crop finance of the state is made through PACS. So, PACS are also entrusted with responsibility for supply of quality and certified seeds to the farmers in right time at a subsidized rate. DBT (Direct Benefit Transfer) scheme has been implemented in distribution of seeds from the financial year 2016-17. During 2021-22, 150048.6 qtl of seeds have been supplied by Odisha State Seeds Corporation (OSSC) to 1947 PACS/LAMPSCS for distribution to farmers in the state.

B. Fertilizer Consumption

2.4.35. Judicious usage of fertilizer is critical for increasing agriculture production and yield. The State has witnessed rising trend in the usage of fertilizer as seen in Figure 2.9. The usage of fertilizer in Odisha is 73.74kg/ha in 2021-22. The balanced usage of different fertilizers (NPK use ratio) is the key for better crop production and good soil health. Against an ideal NPK use ratio of 4:2:1, the State's NPK use ratio was 4.7:2.1:1 in 2018-19, 4.9:2.2:1 in 2019-20, 4.1:2.1:1 in 2020-21. But in 2021-22 the ratio is 5.3: 2.5: 1 which indicates the higher use of Nitrogen fertilizer by farmers in the State. This may be due to higher application of Urea fertilizer in crops.

Figure 2.9 Consumption of fertilizer (kg/ha) – Odisha

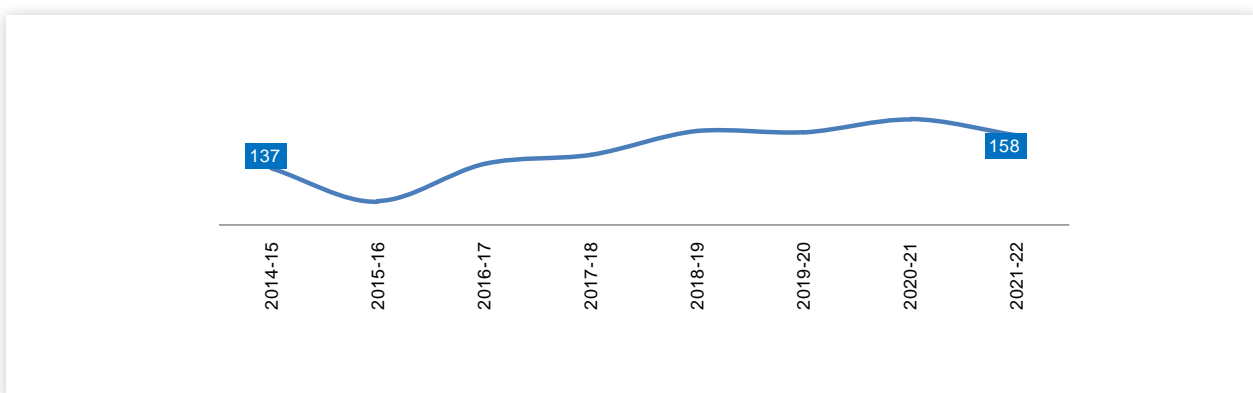


Source: Directorate of Agriculture and Food Production, GoO

C. Use of pesticides

2.4.36. Usage of pesticides is important to protect crops from pests, diseases, and weeds and to increase productivity. The usage of pesticides in the State was 137gm ai/ha in 2014-15 which has increased to 158 gm ai/ha in 2021-22. The trend of pesticide usage in the State is shown in Figure 2.10. In addition to increased use of pesticides, the adoption of eco-friendly techniques like integrated pest management (IPM), biological control measures, seed treatment campaign can help to contain the pest related problems.

Figure 2.10 Pesticide Consumption - Odisha (gm ai/ha)



Source: Directorate of Agriculture and Food Production, GoO

D. Farm Mechanization

2.4.37. The farm mechanization improves production and productivity and reduces dependency on labourer and cost of production. It also enables efficient utilization of agricultural inputs. The Government encourages the farmers to adopt improved farm machinery and equipment by providing financial assistance in the form of subsidies and facilitating agricultural credit. The State is implementing several schemes for promoting usage of agricultural implements, and equipment through provision of subsidy. The supply/sale of farm mechanized equipment like tractors, power tillers, combined harvesters and rotavators in agriculture is shown in Table 2.11.

Table 2.11 Farm Implements supplied under Farm Mechanization (in number)

Year	Tractor	Power Tiller	Combine Harvester (RH-axis)	Rotavator
2011-12	9231	11257	78	96
2012-13	11085	12503	103	469
2013-14	11891	13032	399	4553
2014-15	10325	14388	264	4631
2015-16	11688	9166	407	5003
2016-17	12800	6296	495	6885
2017-18	1964	9382	1207	7784
2018-19	1755	10712	949	9990
2019-20	1450	9061	934	3834
2020-21	1856	9599	1384	3965
2021-22	1250	10714	766	3470

Source: Directorate of Agriculture and Food Production, Odisha

E. Agriculture Credit

2.4.38. Agricultural credit is an important input for facilitating farm mechanisation. The major component of the state agriculture credit is crop loan. Crop loan is a short-term advance that is extended by banks and co-operative societies for the purpose of purchase of improved seeds, fertilizers etc. and adoption of new technologies. Access to crop loan at an affordable interest rate ensures easy working capital to the farmers. The unique scheme - BALARAM has been launched by the State Government for financing crop loan to the sharecroppers on short term basis.

2.4.39. The term loan has a longer tenure than the crop loan. It's provided for larger agriculture-related expenditures like the purchase of machinery, pump-sets, upgrading the farm facilities, installation of solar power motors, etc. Term loans are provided to individual farmers, groups of farmers, SHGs, etc. engaged in other sectors like animal husbandry, fishery, aquaculture, horticulture, plantation, silk farming, and floriculture etc. Storage facility and agri-infrastructure development activities are also covered under term loan. Mukhyamantri Krushi Udyog Yojana (MKUY) is a flagship scheme of State Government scheme through which term loans are being provided with normative subsidies for setting up of commercial agriculture/ horticulture/ animal husbandry/ fisheries units.

2.4.40. Table 2.12 provides disbursement of crop loan and term loan from 2010-11 to 2021-22. The disbursement of credit under both crop and term loans has been increasing indicating increased access to credit for farmers. For the year 2021-22, the target of agriculture credit was fixed at INR 46586.48 crore (Crop loan- INR 32156.12 crore and term loan INR 14430.36 crore) and achievement has been around 95 per cent in the same period (Table 2.12).

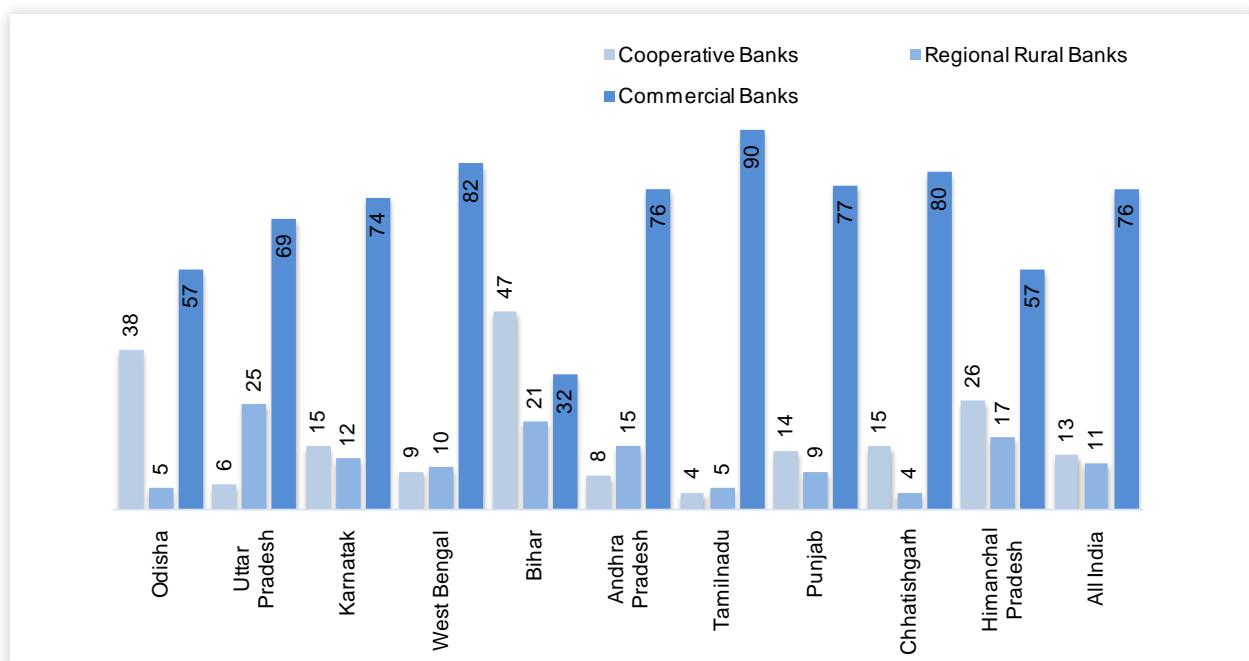
Table 2.12 Disbursement of Crop loan and Term loan to the Farmers from 2010-11 to 2021-22 (INR Crores) – Odisha

Year	Crop Loan	Term Loan
2010-11	5448.78	1303.03
2011-12	6851.92	1667.75
2012-13	8457.02	1997.12
2013-14	8916.46	3665.19
2014-15	11303.02	3725.2
2015-16	15868.66	5780.35
2016-17	15534.23	4450.79
2017-18	16529.8	6134.22
2018-19	18732.47	7621.04
2019-20	20432.69	8248.04
2020-21	24617.86	11138.45
2021-22	27462.35	16795.38

Source: SLBC, Odisha

2.4.41. The credit delivery system in the State operates through a network of 36 Commercial Banks (4007 branches), 2 regional Rural Banks (985 branches), Odisha State Cooperative Bank (14 branches), 17 District Central Cooperative Banks (340 branches) and 3 Small Finance Banks (118 branches). Figure 2.11 provides share of different financial institutions in total agricultural credit disbursement for select states and India. The cooperative banks in Odisha account largest share in total agriculture credit (38 per cent in 2021-22) while in other states commercial banks are leading in disbursement of agricultural credit. The performances of commercial banks in agricultural credit in Odisha is below national average and other major states as given in Figure 2.11.

Figure 2.11 Share of different financial institutions in total agriculture Credit disbursement for the year-2021-22- Major States



Source: NABARD

F. Irrigation

2.4.42. Irrigation is essential for sustainable farming and an effective solution to increase the income of farmers. Apart from major and medium irrigation projects, many short gestation irrigation schemes, such as mega lift irrigation, deep bore wells, and community lift points, have been implemented on a large scale to accelerate irrigation development. Further, underground pipelines (UGPL) have been adopted in the distribution systems of most irrigation projects for time bound completion.

2.4.43. In the last three years, giving a further thrust to water infra, four big projects namely Upper Indravati Lift Canal system, Kalahandi Lower Indra, Nuapada-Bolangir, Deo in Mayurbhanj and Mahanadi Chitropala Island Irrigation benefitting Kendrapada, Cuttack & Jagatsinghpur have been completed and are providing irrigation facilities to more than 71,000 hectares. The work on other big projects has also been expedited and target has been set to complete three big projects, namely Gangadhar Meher Lift Canal in Bargarh, Ghateswar in Ganjam and Manjore in Angul during 2023 and another four projects, namely Lower Suktel, Kanupur, Anandapur and Subarnarekha, during 2024.

2.4.44. Apart from big irrigation projects, mega lift irrigation projects for upland areas and deep bore wells have also contributed substantially to irrigation expansion. Since the inception of these schemes, more than one lakh bore wells, and more than 200 mega lift projects have been completed. These schemes have got overwhelming response from the farmers. Therefore, Government has approved INR 10760 crore for construction of 170 new mega lift projects and INR 4198 crore for construction of one lakh deep bore wells in the 2nd phase (including those using solar pumps).



Deo Irrigation Project in Mayurbhanj district. Irrigation benefit- 9900 ha

2.4.45. Apart from irrigation, emphasis is being given for conservation of water resources to tackle the adverse effect of climate change. More than 15000 Check Dams have been built across various nallahs in the State. During 2020, INR 11760 crore was approved for construction of in stream Storage Structures (ISS) in different rivers. In the meantime, 30 ISS projects have already been taken up in different rivers. 16 more ISS projects are proposed to be grounded during 2023.

2.4.46. Apart from surface water, ground water recharge in water stressed areas covering 52 Blocks and 27 Urban Local Bodies have been taken up through a new scheme namely CHHATA (Community Harnessing & Harvesting Rainwater Artificially from Terrace to Aquifer). Besides, another new scheme namely ARUA (Artificial Recharge to Underground Aquifer) has also been launched to improve ground water table through construction of recharge shafts.



Lower Suktel Irrigation Project in Balangir district. Irrigation benefit- 40000 ha

2.4.47. To increase water use efficiency in canal irrigation, canal lining works, system rehabilitation works have been taken up in a large scale. Around 35% of canals have been lined through different schemes. Further, training and capacity building of farmers/ Pani Panchayat members are being done on a large scale for promoting micro irrigation in all the mega lift projects, CLIPs and borewells installed by the department in order to produce more crop per drop of water.

2.4.48. During the year 2021-22, for kharif crops, the total Irrigation Potential Created (IPC) was 46.3 lakh hectares and for Rabi it was 20.6 lakh hectares. Table 2.13 provides total IPC from different sources during Kharif and Rabi crops for the period 2016-17 to 2021-22.

Table 2.13 Irrigation Potential Created (IPC) - Odisha (Area in lakh hectares)

Sources	2016-17		2017-18		2018-19		2019-20		2020-21		2021-22	
	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
Major and Medium	14.04	6.44	14.26	6.52	14.46	6.62	14.65	6.73	14.86	6.86	15.1	6.99
Minor (Flow)	6.63	0.86	7.04	0.90	7.18	0.91	7.30	0.92	7.36	0.93	7.36	0.93
Minor (Lift)	9.98	4.84	11.05	5.34	11.67	5.65	12.23	5.93	12.97	6.29	14.05	6.74
Mega Lift	0.70	0.00	0.54	0.00	0.95	0.00	1.25	0.00	1.55	0	2.08	0.0
Other Sources	7.52	6.54	7.59	5.93	7.64	5.92	7.64	5.93	7.64	5.93	7.68	5.95
Total	38.87	18.68	40.48	18.69	41.90	19.10	43.07	19.51	44.38	20	46.28	20.61

Source: Water Resource Department, Odisha



Lining of Baitarani Left Main canal (Anandapur Barrage)



Taladanda Main Canal

Government Initiatives under Irrigation

- Government's continued thrust on creating and completing water infrastructure, reflected in increased budgetary outlays for the sector, led to enhanced coverage under irrigation.
- Many major irrigation projects (like Lower Indra & Upper Indravati Lift Irrigation) and medium irrigation projects (like Deo & MCII) were completed. Work is expedited in other ongoing projects to complete in coming year.
- Irrigation to upland areas were covered through 208 mega lift projects under Parvati Giri Mega Lift Irrigation scheme. 170 more projects were approved under Parvati Giri Mega Lift scheme (2.0 version).
- Under the ambitious INR 11700 crore scheme for construction of In-stream Storage Structure, initial work began in 30 places.
- Deep Bore Wells across the state, through "Biju Krushak Vikash Yojana- Deep Bore Well Secha Karyakrama" continued to lift lives through diverse crops grown.
- The Department leveraged technology, starting its Water ERP called Go-Water.
- Community involvement in irrigation through Pani Panchayats continued as 14000 new Pani Panchayats were created and the PP Act amended to have PPs under mega lift irrigation schemes as well.

G. Annual Expenses for Crop Production

2.4.49. The recent survey (SAS-2019) conducted by NSO during 2019 collected information on various input materials used for crops harvested in the reference period of July 2018-June 2019. The survey collected data on inputs like seeds, fertiliser, manure, plant protection materials, fuel, electricity, labour, irrigation, etc. As per the survey result, the annual average expenses of a crop producing household was about Rs 19,044 during 2018-19. The compound annual growth rate of the annual expenses was 8 per cent over the period 2012-13 to 2018-19.

2.4.50. The increase in expenses for seeds was maximum at 17 per cent in the same period while expenses on labourer increased by about 6.5 per cent, for fertilisers by 4.5 per cent, and 3.3 per cent for plant protection, etc. Also, there is a significant share in other expenses like farm mechanisation. As this expense factor has maximum impact on the net receipts of crop production, input wise growth rate of expenses should be reduced to enhance income of agricultural households.

VII. Post-Harvest Management

2.4.51. Post-Harvest management is a system of handling, storing, and transporting agricultural commodities after harvest. During the post-harvest period, handlers and producers focus on preserving quality, quantity, and the safety of the commodities because it directly affects their prices.

2.4.52. During last few years, several activities have been undertaken for improving post-harvest management practices. These include development of marketing infrastructures like mandis, cold storages, cashew processing plants, small scale presentation units, pack houses, low-cost onion structures, e-NAM mandis, etc.

A. Paddy Procurement

2.4.53. There are 3,862 operational mandis for paddy procurement in Odisha as of 2022. About 71.1 lakh MT of paddy were procured in the State during the Kharif Marketing Season (KMS) of 2021-22. Table 2.14 presents district wise procurement during the KMS of 2021-22. In paddy procurement, Bargarh district occupies the first position followed by Kalahandi and Subarnapur districts. The proportion of procurement in total paddy production has been increasing over the years. In 2021-22, about 50 per cent of total produce was procured by the State.

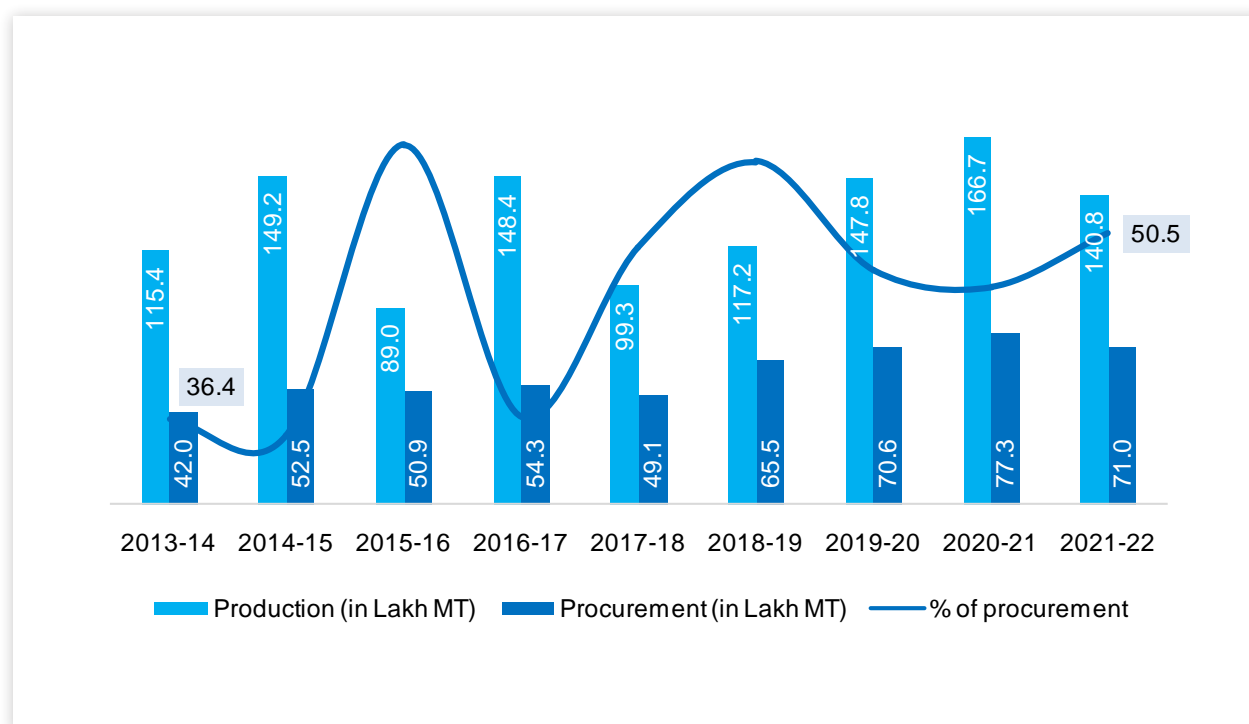
Table 2.14 District wise paddy procured (in MT) during KMS 2021-22 – Odisha

Sl No.	District	KMS 2021-22		
		No. of Registered Farmers Sold Paddy	Total Paddy Purchased (in 000' MT)	Total MSP Paid (in Cr.)
1	Angul	32,837	100.08	194.15
2	Balasore	1,02,318	281.56	546.22
3	Baragarh	1,91,092	1138.76	2,209.19
4	Bhadrak	66,631	263.31	510.82
5	Bolangir	61,894	310.62	602.60
6	Boudh	38,456	182.70	354.43
7	Cuttack	52,482	161.92	314.12
8	Deogarh	17,128	53.96	104.69
9	Dhenkanal	42,912	130.59	253.34
10	Gajapati	11,798	52.94	102.70
11	Ganjam	96,491	405.20	786.09
12	Jagatsinghpur	27,790	101.74	197.38
13	Jajpur	39,388	154.51	299.76
14	Jharsuguda	19,047	76.32	148.06
15	Kalahandi	93,029	582.04	1,129.15
16	Kandhamal	2,862	8.83	17.12
17	Kendrapada	26,388	94.92	184.15
18	Keonjhar	45,205	162.98	316.17
19	Khordha	41,856	134.91	261.72
20	Koraput	49,811	364.17	706.48
21	Malkangiri	27,119	121.63	235.95
22	Mayurbhanj	53,579	200.22	388.43

Sl No.	District	KMS 2021-22		
		No. of Registered Farmers Sold Paddy	Total Paddy Purchased (in 000' MT)	Total MSP Paid (in Cr.)
23	Nabarangpur	28,379	175.01	339.53
24	Nayagarh	41,894	144.02	279.40
25	Nuapada	39,956	212.74	412.72
26	Puri	48,900	164.78	319.68
27	Rayagada	14,474	99.01	192.09
28	Sambalpur	65,346	423.35	821.30
29	Subarnapur	91,435	576.06	1,117.55
30	Sundargarh	44,183	224.80	436.12
Sub-Total		15,14,680	7,104	13781.11

Source: FS & CW Department Of Odisha, GoO

Figure 2.12 Paddy production and proportion of procurement – Odisha



Source: Directorate of Agriculture and FE and FS&CW Department, GoO.

2.4.54. Paddy Procurement Automation System (P-PAS) has been extended to all the paddy procuring PACS in the State since KMS 2016-17. Direct Fund Transfer (DFT) has been introduced for the first time in all the PACS under 310 Blocks during KMS of 2016-17. This enables the direct transfer of funds from the State Agency (OSCSC Ltd) to the farmers' bank accounts under P-PAS. During KMS of 2021-22, INR 11,101.27 crore have been credited to the Bank accounts of 12,92,714 farmers against Kharif procurement and INR 2679.85 crore have been credited to 2,21,966 farmers against Rabi procurement. During KMS 2022-23, 12,51,156 number of farmers sold 57,01,719 MT quantity of paddy under P-PAS.

B. New Initiative in Paddy Procurement Operation

2.4.55. FS & CW Department has undertaken several initiatives to make paddy procurement operations transparent, efficient, and accountable. Aadhar based authenticated transaction in paddy procurement has been introduced in KMS 2019-20. For the first time, during 2021-22 (KMS), satellite imagery has been used for validation of paddy crop cultivation as a pilot project to register genuine farmers.

2.4.56. An interactive Voice Response system (IVRS) toll free number (1967) has been introduced, through which farmers can get various information related to land verification, paddy procurement and MSP payments by dialling from their registered mobile numbers. Further, one call centre is set up at the State headquarters to interact with farmers and register their grievances, if any. The Grievance Redressal System (GRS) is monitored on regular basis.

C. Procurement of non-paddy crops

Procurement of Pulses and Oilseeds

2.4.57. Price Support Scheme (PSS) has been introduced by Government of India to provide remunerative prices to farmers for non- paddy crops. The scheme aims to develop a balanced and integrated pricing mechanism for non-paddy crops to prevent losses for farmers. In addition, Government of India also launched “Pradhan Mantri –Annadata Aay Sanrakshan Abhiyan (PM-AASHA) in 2018 to procure pulses, oilseeds, and other crops at MSP to prevent distress sale.

2.4.58. In Odisha, PSS is implemented for procurement of pulses and oilseeds since 2013-14. In Odisha, MARKFED has been designated as the State Level Supporter (SLS) for procurement under the scheme. Further, an E-samridhi portal has been developed to register farmers for procurement of pulses and oilseeds under PSS. SLS arranges the purchase of oilseeds, pulses, groundnut pods, and Sunflower seeds on behalf of National Agricultural Cooperative Marketing Federation of India Limited (NAFED) for Odisha under PSS through Primary Agricultural Cooperative Societies (PACS)/ LAMPCS, Regulated Market Committees (RMC), Farmer Producer Organizations (FPO) etc.

2.4.59. For Rabi 2021-22 season, Gol has approved the purchase of a maximum quantity of 11,962 MT green gram, 1247 MT black gram, 934 MT groundnut pods and 934 MT sunflower seeds under PSS for Odisha. The procurement details of pulses and oilseeds is presented in Table 2.15. The procurement of sunflower and groundnut has declined in 2021-22 over 2020-21. But procurement of green gram has increased by 341 per cent during the same period. The overall procurement of pulses and oilseeds increased by 25 per cent in 2021-22 over 2020-21.

Table 2.15 Procurement of pulses and oilseeds under PSS by MARKFED, Odisha (Quantity in MT)

Items Procured	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Sunflower seeds	164.560	177.000	130.426	211.331	121.079	185.724	22.985
Groundnut pods		947.765	2638.250	130.760	2007.997	2203.107	248.430
Green gram (Mung)		1405.880	2675.114	6148.189	7011.381	862.350	3800.950
Black gram (Biri)			4216.765	1103.000			
Red gram (Arhar)					97.180		
Total	164.560	2530.645	9660.555	7593.280	9237.637	3251.181	4072.365

Source: RCS, Odisha, MARKFED, DA&FP, GoO

Ragi Procurement (Odisha Millet Mission)

2.4.60. The Government of Odisha has launched Odisha Millet Mission for promotion of millets and to revive millet cultivation in the State. Considering the nutritional benefits of millets, it has been decided to include millets in Public Distribution System (PDS), Integrated Child Development Scheme (ICDS) & Mid-day Meal (MDM) Schemes in the State. In this context, Government of Odisha has approved procurement of ragi (Kharif Crops) from registered farmers through Tribal Development Cooperative Corporation of Odisha Limited (TDCCOL) under Millet Procurement Automation System (M-PAS) by PACS/LAMPCS.

2.4.61. During Kharif 2021-22 season, TDCCOL procured ragi from the 15 identified districts namely Anugul, Bargarh, Bolangir, Ganjam, Keonjhar, Sundergarh, Nabarangpur, Mayurbhanj, Malkangiri, Rayagada, Gajapati, Nuapada, Kalahandi, Kandhamal and Koraput. During KMS 2021-22 (as on 31.03.2022), about 323018.1 qtls of ragi was procured by 276 PACS/LAMPCS.

2.4.62. Table 2.16 shows the procurement of non-paddy crops like cotton, ragi, pulses & oilseeds and jute by different procurement agencies from 2017-18 to 2021-22

Table 2.16 Procurement of Non-paddy crops from 2017-18 to 2020-21 (In Qtl./ Cotton in Bales)

SL. No.	Crop	2017-18	2018-19	2019-20	2020-21	2021-22	Procuring Agency
1.	Cotton	16.05 lakh	17.21 lakh	19.13 lakh	17.82 lakh	0* (Noprocurement)	Cotton Corporation of India & Private Traders
2.	Ragi		17985.78	94745.17	203843.72	323019.05	TDCCOL
3.	Pulses & Oilseeds	96605.55	75932.80	92376.37	32511.84	40723.65	NAFED though MARKFED
4.	Jute	787	667	624	976.9	0* (Noprocurement)	Jute Corporation of India

Source: DA&FP(O) and Cooperation Department, Odisha

*There was zero procurement in case of cotton and jute for the year 2021-22 as the market price was much higher than the MSP.

Sugarcane Procurement

2.4.63. Currently, two cooperative Sugar Industries namely Aska Coop. Sugar industries, Ltd. and Dhenkanal Sakti Sugar Meal are providing facilities like developing marketing infrastructures for sugar cane growers, providing fair remunerative price for sugar cane as well as providing employment opportunities in the local area. Besides, these sugar industries are providing high yielding varieties of seeds and fertilisers to the farmers and facilitate credit from cooperatives/banks. In the year 2021-22, Aska CSI produced 27038.9 qtl of sugar and crushed 36470.41 MT of sugar cane.

D. Agricultural Price

Minimum Support Price (MSP)

2.4.64. MSP protects agricultural producers against sharp fall in prices particularly during the harvesting period. They are announced by the Government of India at the beginning of the sowing season for certain crops based on the recommendations of the Commission for Agricultural Costs and Prices (CACP).

2.4.65. Government announces MSPs for 22 mandated crops and Fair and Remunerative Price (FRP) for sugarcane. The mandated crops include 14 Kharif crops, 6 Rabi crops and 2 commercial crops. MSPs for all mandated crops with a return of at least 50 percent over all India weighted average cost of production for the season 2022-23 are announced by the government and the same is presented in Table 2.17

Table 2.17 Minimum Support Price of various agriculture commodities from 2015-16 to 2022-23

SL. No.	Commodity	Variety	Rs./ Qtl. for FAQ(Fair Average Quality)							
			2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
KHARIF CROPS										
1.	Paddy	Common	1410	1470	1550	1750	1815	1868	1940	2040
		Grade 'A'	1450	1510	1590	1770	1835	1888	1960	2060
2.	Jowar	Hybrid	1570	1625	1700	2430	2550	2620	2738	2970
		Maldandi	1590	1650	1725	2450	2570	2640	2738	2990
3.	Bajra		1275	1330	1425	1950	2000	2150	2250	2350
4.	Maize		1325	1365	1425	1700	1760	1850	1870	1962
5.	Ragi		1650	1725	1900	2897	3150	3295	3377	3578
6.	Arhar(Tur)		4625	5050	5450	5675	5800	6000	6300	6600
7.	Moong		4850	5225	5575	6975	7050	7196	7275	7755
8.	Urad		4625	5000	5400	5600	5700	6000	6000	6300
9.	Cotton	Medium Staple	3800	3860	4020	5150	5255	5515	5726	6080
		Long Staple	4100	4160	4320	5450	5550	5726	6025	6380
10.	Groundnut In Shell		4030	4220	4450	4890	5090	5275	5550	5850
11.	Sunflower Seed		3800	3950	4100	5388	5650	5885	6015	6400
12.	Soyabean	BLACK		2775	3050					
13.		YELLOW	2600	2775	3050	3399	3710	3880	3950	4300
14.	Sesamum		4700	5000	5300	6249	6485	6855	7307	7830
15.	Nigerseed		3650	3825	4050	5877	5940	6695	6930	7287
RABI CROPS										
16.	Wheat		1525	1625	1735	1840	1925	1975	2015	
17.	Barley		1225	1325	1410	1440	1525	1600	1635	
18.	Gram		3500	4000	4400	4620	4875	1600	5230	
19.	Masur (Lentil)		3400	3950	4250	4475	4800	5100	5500	
20.	Rapeseed/Mustard		3350	3700	4000	4200	4425	4650	5050	

SL. No.	Commodity	Variety	Rs./ Qtl. for FAQ(Fair Average Quality)							
			2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
21.	Safflower		3300	3700	4100	4945	5215	5327	5441	
OTHER CROPS										
22.	Jute	TD5	2700	3200	3500	3700	3950		4500	4750
23.	Sugarcane		230	230	255	275	275			
24.	Copra (Milling)		5550	5950	6500	7511	9521	9960		
25.	Copra (Ball)		5830	6240	6785	7750	9920	10300		
26.	Jute				3500	3700	3950	4225		
27.	De-Husked-Coconut				1760	2030	2571	2700		
28.	Sugarcane				255	275	275	285		

Source: 5 decades of Odisha Agricultural Statistics, DA&FP(O), Odisha

Agricultural Marketing System

2.4.66. Access to improved market channels ensures better price for agricultural produce. The government has been focusing on providing a conducive policy environment for developing agri-marketing infrastructure. Odisha focuses more on promotion of private investment in creating marketing infrastructure, contract farming and direct marketing with an accent of free play of market forces than on a strict control regime of a Regulated Marketing Mechanism.

2.4.67. As of 2021-22, there were 66 Regulated Market Committees (RMCs) operating across 30 districts to strengthen agricultural marketing mechanism in the State. These RMCs operate under the supervision of Odisha State Agricultural Produce Marketing (OSAM) Board, which is under the administrative control of Cooperation Department, Government. of Odisha. Out of 66 RMCs, 54 are linked with e-NAM (The electronic National Agricultural Marketing) portal and operate as e-NAM mandies to create a unified national market for agricultural commodities across the countries through e-auction process.

2.4.68. During 2022-23, volume of online trade on e-NAM-platform was 36,72,670 qtl (for different agricultural commodities) and 7,47,23,377 number of coconuts. The total number of marketing committees and cooperatives operating in the State and the volume of trade through e-NAM is given in Table 2.18

Table 2.18 Status of RMC / e-NAM Mandis - Odisha

RMC / e-NAM Mandi	2018-19	2019-20	2020-21	2021-22	2022-23
RMC (Cooperative)	66	66	66	66	66
RMC (Private)	0	0	0	0	0
e-NAM Mandies (RMCs linked with e-NAM Platform)	10	10	41	41	54
* Volume of Trade on e-NAM trade (qtl / numbers)	1,18,833 qtl. & 26,20,432 numbers of coconut	189748.45 qtl. & 3,23,014 numbers of Coconut	10,03,463 qtl. & 4,58,90,158 numbers of Coconut and betel leaves	27,43,993 qtl. & 8,44,96,153 numbers of Coconut and betel leaves	36,72,670 Qtl and 7,47,23,377 numbers of Coconut and betel leaves

Source: Cooperation Department, GoO

VIII. Government initiatives in Crop Sector

Pradhan Mantri Fasal Bima Yojana (PMFBY)

2.4.69. Odisha is prone to natural calamities which disproportionately impact the agriculture sector. Crop insurance safeguards the farmers against loss of income due to crop damage. Odisha implemented Pradhan Mantri Fasal Bima Yojana as a flagship crop insurance programme in Kharif-2016.

2.4.70. The scheme covers risks ranging from sowing to post-harvest stages for eight crops in Kharif (Paddy, Maize, Groundnut, Arhar, Cotton, Ragi, Ginger, & Turmeric) and nine crops in the Rabi season (Paddy, Green Gram, Black Gram, Groundnut, Mustard, Potato, Onion, Sunflower & Sugarcane). Farmers pay only a premium of 2 per cent in Kharif, 1.5 per cent in Rabi and 5 per cent for commercial crops. The insurance companies are selected as implementing agencies through a bidding process. All loanee and non-loanee farmers growing notified crops in notified areas are eligible for coverage under PMFBY. A new initiative, Bhulekh, has been integrated with the PMFBY portal to facilitate smooth implementation. Achievements under PMFBY for the last three crop seasons are given in Table 2.19.

Table 2.19 **Achievements under Pradhan Mantri Fasal Bima Yojana (PMFBY) – Odisha**

Season	Claims settled (Rs. In Crore)	No. of Benefitted farmers (Application Count)
Kharif-2019	1099.16	9,72,765
Rabi 2019-20	98.93	43,117
Kharif-2020	559.82	16,14,177
Rabi 2020-21	12.67	28,818
Kharif 2021	1140.63	31,19,714

Source: Co-operation Department, Odisha

BALARAM (Bhoomihina Agriculturist Loan and Resources Augmentation Model) Scheme

2.4.71. To augment the institutional flow of credit to sharecroppers, Odisha has launched the BALARAM scheme in association with NABARD. The scheme provides joint crop loans (4-10 members) to sharecroppers by forming JLGs (Joint Liability Groups). It enables sharecroppers to avail of loans from formal credit institutions and reduces their dependence on informal credit sources. Till December 2022, loans amounting to INR 268.32 crores have been sanctioned to 38766 JLGs under the scheme. It is financed through the JLG scheme to 32645 JLGs for INR 221.19 crore and through BALARAM Scheme 6121 JLGs for INR 47.13 Crore.

KALIA scheme

2.4.72. Krushak Assistance for Livelihood and Income Augmentation (KALIA) was introduced in 2018 to accelerate agricultural prosperity and reduce poverty. The scheme provides financial support for cultivation to small and marginal farmers in both Kharif and Rabi seasons. In addition, it also provides livelihood support for landless agricultural households for undertaking non-farm activities. So far, more than 59 lakh small and marginal farmers, and landless agricultural households have been assisted under the scheme. This initiative has been widely appreciated in various forums. KALIA, is perhaps the 1st Universal Basic Income (UBI) scheme in India.

Odisha Millets Mission (OMM)

Odisha Millets Mission: Reviving Millets in Farms and Plates

Odisha is one of the most culturally diverse states in the country. The State is home to 62 tribal communities, constituting 22.85 per cent of the total population (Census 2011). Millets form a major staple food for these communities and are closely associated with their cultural and heritage agricultural systems.

Realising this importance, the Government of Odisha launched the flagship initiative titled, Odisha Millets Mission (OMM) in 2017-18. OMM is a uniquely designed government-facilitated multi-stakeholder intervention with a “fork to farm” approach. It focuses on developing a sustainable food system of millets and ensuring nutritional security for vulnerable rainfed areas of Odisha.

Objectives of OMM:

- Increasing household consumption of millet by 25% to the baseline.
- Revalorization of millet food cultures in urban and rural areas.
- Conservation and promotion of millet landraces through seed system of landraces
- Promotion of post-harvest and primary processing enterprises on millets.
- Improving productivity of millet-based crop systems.
- Promotion of millet value-addition enterprises in rural/urban areas of Odisha.
- Inclusion of millets in PDS, ICDS, MDM, Welfare Hostels, and others.
- Facilitating the millet markets and exports of millet-based products.

OMM started in 30 blocks spread across seven districts of Odisha in 2017. By 2022-23, it was extended to 143 blocks covering 19 districts. The Government of Odisha has approved scaling of OMM to 30 districts covering 177 blocks from FY 2023-24 onwards, till FY 2026-27, with a budgetary allocation of Rs 2808 Crores. The program is being implemented through Women Self Help Groups and FPOs with active facilitation from NGO partners.



Key Program Achievements

- OMM reached out to 1.58 Lakh rainfed farmers covering 74 thousand hectares during Kharif 2022-23.
- 1228 enterprises established with threshing/ cleaning/ pulverizing units and 188 millet value addition enterprises managed by WSHGs/FPOs. A sum of 230 community- managed seed centres, 250 custom hiring centres were established and managed by WSHGs and FPOs.
- 163 landraces conserved under in-situ conservation and 96 landraces of millet preserved with State Seed Testing Laboratory (SSTL) for ex-situ conservation.
- agencies working with TDCCOL for Ragi procurement for the first time in Odisha. 14 FPOs registered as export agencies with APEDA.
- Millet (Ragi) procurement of 6.39 Lakh Quintals from FY 2018-19 to FY 2021-22. 209.94 Cr has been transferred to farmers through DBT at the minimum support price (MSP). For FY 2022-23, six Lakh quintal of Ragi is targeted for procurement.
- Under PDS, ragi has been distributed to around 50.60 Lakh ration card holders.
- Ragi Ladoos have been included in the morning snacks of pre-school children in Anganwadi centres under ICDS in Keonjhar and Sundargarh Districts since 2020, covering 1.49 Lakh pre-school children.

Mid-Term Evaluation Results of OMM

- As per the mid-term evaluation of Nabakrushna Choudhury Centre for Development Studies (NCDS): -
- The yield of millet has increased from 6.4 quintals/ha in 2016-17 to 14.9 quintals/ha in 2019-20.
- Adoption of improved agronomic practices such as SMI and LT/LS farmers increased from 0.3% in 2016-17 to 62.9% in 2019-20 and 2.5% to 33.1%, respectively.
- The consumption of millets in winter, rainy, and summer seasons increased from 64.3% and 66.9% in 2016-17 to 98.5% and 72.6% in 2019-20, respectively.

Awards and Recognition

- Odisha was recognised as the best-performing millet promotion state award at the National Convention on Nutri-Cereals in 2021 and 2022 by the Ministry of Agriculture & Farmers' Welfare, Government of India, and Indian Institute of Millets Research.
- The Ministry of Agriculture & Farmers' Welfare, Government of India, and NITI Aayog identified OMM as one of the best models and asked different state governments to adopt the OMM approach to promote millets.
- World Food Program identified OMM as one of the best practices that can be replicated in other states and other countries in Africa as part of the South-South Collaboration.

Odisha declared November 10 as Millets Day (Mandia Dibasa) to promote millets cultivation and consumption for better health and the environment. OMM has also chalked out a detailed celebration of millets in the international year of millets with a focus on SDGs, Gender, Tribal Culture and Sports.



Ama Krushi

2.4.73. "Ama Krushi" is a free of cost phone -based advisory service introduced in 2018. It aims to strengthen the extension system and provide timely information to farmers on crops, livestock and fisheries. The information is provided in both Odia and Sambalpuri dialects to ensure maximum outreach. The farmers can obtain expert advice on agriculture and allied services queries through a Live Call Centre (LCC) service. Currently, the service covers more than 40 crops under its advisory and inbound system. Till the third week of January 2023, 48 lakh farmers have registered under the programme.

Rashtriya Krishi Vikas Yojana (RKVY)

2.4.74. RKVY was initiated in 2007 to ensure the holistic development of agriculture and allied sectors. It was a central scheme till 2014-15. Later, the funding pattern changed in the ratio of 60:40 between centre and states since 2015-16. So far, Odisha has implemented around 855 RKVY projects in various sectors, including crop development, horticulture, agricultural mechanization, natural resource management, marketing and post-harvest management, animal husbandry, dairy development, fisheries, and extension, among others. Currently, there are 208 ongoing projects in various districts.

Odisha Watershed Development Mission (OWDM)

2.4.75. ODWM was launched in 2000 to prioritize the development of rain-fed areas in the State. ODWM is a dedicated agency responsible for planning, coordinating, streamlining, and supervising the watershed implementation in a Mission Mode. OWDM has also been designated as the State Level Nodal Agency (SLNA) for the implementation of the flagship programme, Integrated Watershed Management Programme (IWMP).

Farm Pond Plus

2.4.76. Farm Pond Plus is introduced to increase farmers' income by enhancing farm pond productivity through intensification, diversification, and surplus generation from farm-based livelihood activities. Till December 2022, a total of 1,04,060 Farm Ponds were grounded. Out of this, 42,119 were completed under the Farm Pond Plus scheme.

2.4.77. The First Agriculture Policy came into force in 1996 and has been revised twice in 2008 and 2013. This policy has been further re-oriented to leverage market linkage and enhance farmers' income through realisation of better prices. It is now known as **SAMRUDHI Agriculture Policy**.

2.4.78. **Odisha Organic Farming Policy 2018** has been launched to promote organic farming in the State. The policy aims to cover 2 lakh hectares in 5 years.

2.4.79. **Odisha Farmer Producer Organisations (FPOs) Policy** was launched in 2018, to promote sustainable development and generate large-scale employment in rural and semi-urban areas. The Policy supports Farmer Producer Organisations (FPOs) in the production, aggregation, storage, processing, distribution and marketing of agriculture and allied sector resources. The guidelines launched by the Government of India for the promotion of 10000 FPOs are being incorporated into the existing state policy to improve outcomes.

2.4.80. **Mukhyamantri Krushi Udyog Yojana (MKUY)** was launched in 2018 to provide single-window facilities for promotion of commercial agri-enterprises. Subsidies are being provided for setting up of commercial, agriculture, horticulture, animal husbandry, and fishery units.

2.4.81. **Agriculture Production Cluster (APC)**, a special programme in Tribal Regions of Odisha, extended to 14 districts, 73 Blocks, 617 GPs and 3081 villages for the benefit of more than 177000 women farmers during 2021-22. This is a collaborative effort of Dept. of Ag & FE, Mission Shakti, PR & DW Department, Bharat Rural Livelihood Foundation (BRLF), Bill and Melinda Gates Foundation (BMGF) and Professional Assistance for Development Action (PRADAN). It initially covered 40 Blocks of 12 Tribal dominated districts. This is a unique convergence model converging not only the extra – budgetary fund of DMF to the State budget fund but also four Departments and organization like BRLF, BMGF, PRADAN and other partners. The project aims to create sustainable livelihoods for the small and marginal women farmers in the project area through various farm-based and livestock-rearing interventions and collectivizing them into Producer Groups and Producer Companies

2.4.82. Horticulture Programme for Non-Mission Districts was launched during 2005-06 to improve horticulture activities in districts not covered under the National Horticulture Mission (NHM). One Centre of Excellence was established at Deras, Bhubaneswar, in 2013-14 to showcase the latest production technologies and support Horticulture entrepreneurs.

2.4.83. **Coconut Development Board (CDB)** is a part of the centrally Sponsored Scheme MIDH associated with coconut plantations. Replanting and Rejuvenation of old coconut gardens and initiation of the Coconut Palm Insurance Scheme have been approved for implementation in the State during 2020-21.

2.4.84. **Implementation of Interest Subvention Scheme:** Government of India provides interest subvention to NABARD to grant short-term agricultural credit to farmers at 7 per cent interest rate with an upper limit of INR 3 lakhs on the principal amount. Further ST (SAO) loan has been financed to farmers at a 5 per cent interest rate by PACS. In addition, a 3 per cent subsidy on interest rate is provided in case of repayment within the due period. Odisha has been providing an interest subvention to the farm families for availing crop loans up to INR 50000 at a concessional interest rate of 4 per cent. Loans ranging between INR 50001 to INR 300000 are provided at an interest rate of 5 per cent. With an interest incentive of 3 per cent on prompt repayment, the effective rate of interest to farmers on crop loans is only 1 per cent and 2 per cent respectively. The State has further reduced the interest rate from 1 per cent to 0 per cent under the 'KALIA' scheme for loans up to INR 50000. These loans are made interest-free upon prompt repayment.

2.4.85. Under the Central Sector Scheme, ` **Financing Facility under Agri-Infrastructure Fund** ' INR 1,00,000 crores were provided for funding Agriculture Infrastructure projects at farm-gate and the aggregation points (PACS, FPOs, Agri-Entrepreneurs etc.) From this fund, Odisha has been allocated an amount of INR 2500 crore to improve agricultural infrastructure. All loans under the financing facility will have an interest subvention of 3 per cent per annum up to the maximum limit of INR 2 crores for a period of 7 years. The funds will be credited to financial institutions such as scheduled commercial banks, co-operation banks, RRBs, Small finance banks, NBFCs and NCDC upon their MoU with NABARD/ Department of Agriculture, Cooperation & Farmers Welfare, Govt. of India. These financial institutions further provide loans to PACs, Marketing Co-operative Societies, Agri-Entrepreneurs, Start-ups, etc. as, per scheme guidelines. Odisha has started implementing this scheme, and the Director of Agriculture and Food Production has been declared the State Nodal Officer. The eligible state schemes are being identified to converge with this financing facility to benefit from both schemes. The eligible projects have been identified and registered under this new scheme. By mid of December 2021, 678 beneficiaries have registered in the AIF portal. INR 58.70 crore has been sanctioned to 111 beneficiaries against the target of INR 2500 crore.

Odisha University of Agriculture and Technology, Bhubaneswar (initiatives and achievements)

2.4.86. Odisha University of Agriculture and Technology, Bhubaneswar, contributes to agricultural development through triple mandates of academics, research, and extension education activities. The University offers undergraduate and postgraduate courses in agriculture and allied areas through 10 constituent colleges, a centre for Post Graduate Studies and 10 Agro-polytechnic centres. Research activities are undertaken through 8 Regional Research & Technology Transfer Stations, 4 Regional Research & Technology Transfer Substations, 7 Commodity Research Stations, 52 All India Coordinated Research Projects and several ad hoc projects. Technology transfer activities take place through a network of 31 Krishi Vigyan Kendras situated in 28 districts of the State and various extension projects operating at Bhubaneswar.

2.4.87. **OUAT Kalinga:** A special brand, OUAT Kalinga, was created for the timely supply of quality technological products at a fair price to the farmers and other stakeholders.

2.4.88. **5T Task Teams:** The Department of Agriculture and Farmers' Empowerment, Government of Odisha, constituted 20 Task Teams under the 5T programme. The key focus areas of these task teams include- Doubling Farmers' Income, Crop Diversification, Farmer Database preparation, Credit extension to share-croppers, Yield Estimation using technology, non-paddy crops procurement, Digitisation of MPRs, Farm Pond development, strengthening extension system and AMA Krushi service, creation of centre of excellence, value addition and market linkage through women SHG.

2.4.89. Besides the above-mentioned initiatives, Odisha has also implemented various agriculture marketing reforms to foster market linkages of the agricultural produce. This has contributed positively towards increasing farmers' income.

2.5. Livestock

I. Overview of livestock sector

2.5.1. Livestock is an important source of additional income (secondary source of income) for many small and marginal farmers. It plays a significant role in improving livelihood, enhancing farmers' income, and fostering rural development. Livestock rearing is an integral part of farming communities as it supplements the income of agricultural households. It has a huge potential for self-employment in rural areas with a low investment. In Odisha, landless labourers, and marginal farmers own the majority of the livestock.

2.5.2. Livestock sector is the second largest sub-sector after the crop sub-sector, contributing nearly 13-15 per cent of the total Gross Value Added (GVA) of agriculture and allied activities. In 2022-23, the livestock sector contributed 3.1 per cent to total GSVA while the agriculture and allied sector share was 22.5 per cent. cent to total GSVA while the share of agriculture and allied sector was 22.5 per cent.

A. Livestock Population

2.5.3. As per the Livestock Census 2019, Odisha has 3.4 per cent of India's total livestock population and 3.2 per cent of the total poultry. The total livestock population in the State stood at 182 lakhs, while the poultry population was 274 lakhs as per the 2019 census. Cattle form the largest share of livestock population with a share of over 55 per cent (Odisha has a share of 5.12 per cent in the total cattle population in India).

2.5.4. Odisha ranks 10th in cattle & poultry population and 9th in terms of goat and sheep population in the country. The percentage share of exotic/crossbreed cattle in the total cattle population has been improving, and there was an increase of crossbreed female cattle population by 36 per cent in the 2019 Census compared to the 2012 Census. Share of crossbreed cattle has reached to 16 per cent of the total cattle population. This indicates the rising share of higher productive animals which is reflected in the rising milk production in the State.

B. Health of livestock

2.5.5. The activities under this sub-sector have been oriented towards improving health of the livestock, increasing production of milk, meat and eggs, and provision of bullock power for agricultural operations. In this regard, several schemes have been formulated in the State in pursuance with the national policies to improve livestock production, fight protein hunger, improve the nutritional standards of the population, and provide technical support for the maintenance and improvement of livestock breeds. There are 541 veterinary hospitals/dispensaries, 314 Mobile Veterinary Units and 3239 Livestock Aid Centres in the State.

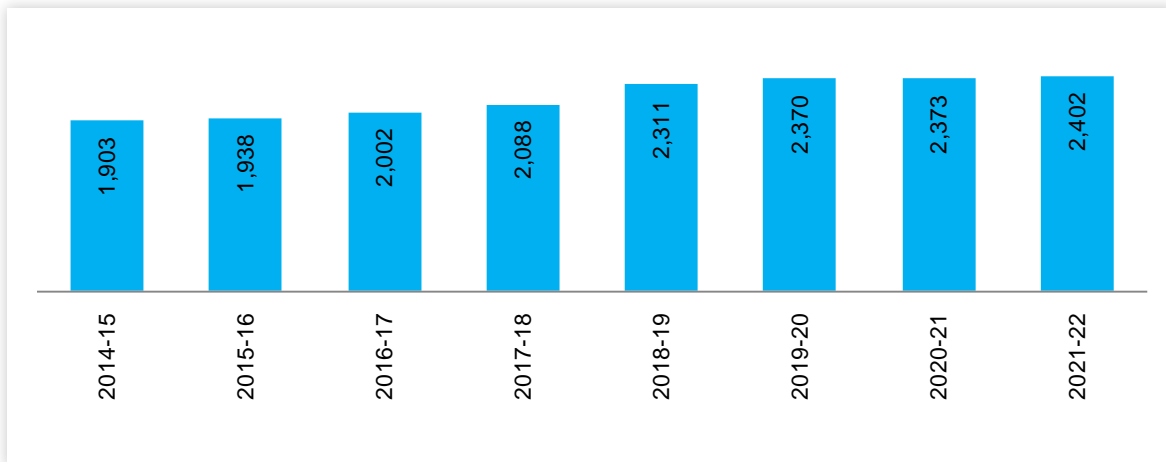
II. Milk, Meat, and Egg production

C. Milk Production

2.5.6. The total milk production in the State from 2014-15 to 2021-22 is given in Figure 2.13. Milk production in the State has grown from 1903 thousand MT in 2014-15 to 2402 thousand MT in 2021-22, at a CAGR of 3.4 per cent.

2.5.7. Cow milk constitutes around 88 per cent of total milk production while the share of buffalo milk is about 12 per cent. The per capita availability of milk in the State has increased from 114 gm/day in 2012-13 to 135 gm/per day in 2021-22. This is lower than the per capita availability at the national level (406gm/day in 2019-20). There is a scope for increasing milk production, and productivity through the adoption of good agricultural practices to meet the nutritional requirements of the people in the State.

Figure 2.13 Milk Production in Odisha from 2014-15 to 2021-22 (in 000, MT)



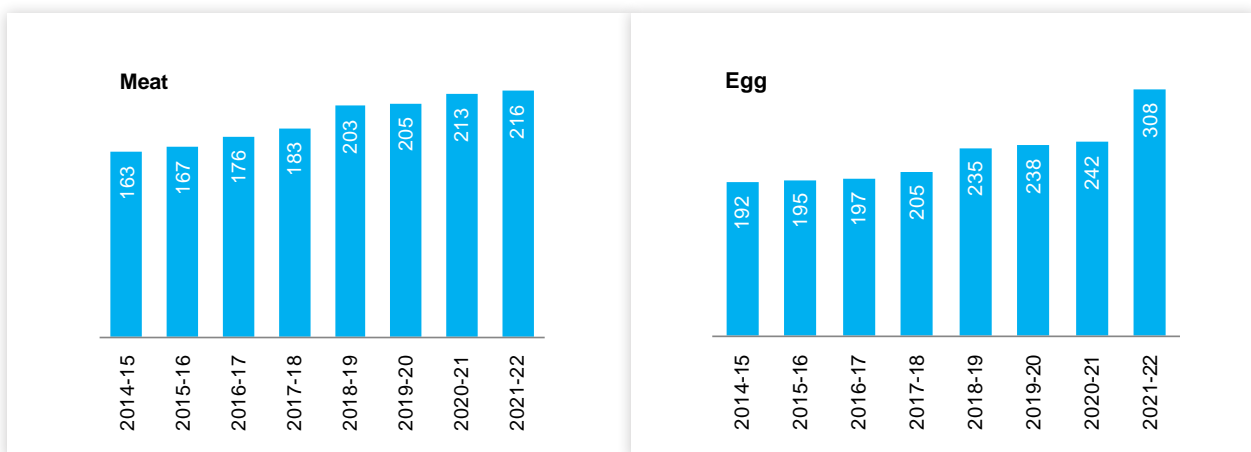
Source: F&ARD Department, Odisha

D. Meat and Poultry

2.5.8. Meat constitutes a major share of GVA of the livestock sub-sector. There has been a consistent increase in meat production in the State from 2014-15 to 2021-22, as seen from Figure 2.14(a). Therefore, the per capita availability of meat has increased from 3.66 kg/annum in 2014-15 to 4.42 kg/annum in 2021-22.

2.5.9. Egg production in Odisha has increased significantly from 192 crore in 2014-15 to 308 crore in 2021-22. The per capita availability of eggs has reached 63 per year in 2021-22 against the national average of 91 eggs per year. Figure 2.14 (b) shows the trend in eggs production in the State from 2014-15 to 2021-22.

Figure 2.14 Meat and Egg Production from 2014-15 to 2021-22 – Odisha



(a) Meat Production of the State (in 000, MT)

(b) Egg Production of the State (in crores)

Source: F&ARD Department, Odisha

E. Support for Egg Production

2.5.10. To promote egg production, the State Government has introduced various schemes to encourage farmers and entrepreneurs to take up small-scale, semi-commercial and commercial poultry layer units. Support is being provided to farmers to undertake broiler farming, layer farming under the cage system, and in the deep litter system through WSHG, and backyard poultry farming.

F. OPOLFED

2.5.11. Odisha State Poultry Products Co-operative Marketing Federation Limited (OPOLFED), a Government of Odisha undertaking, operates in two-tier system, i.e., PPCS at the grass-root level and the federation at the apex, with 46 of PPCS/WPCS. The annual turnover increased to INR 6,14,36,637 in 2021-22 from INR 6,06,00,281 in 2020-21.

III. Government initiatives for livestock

Integrated Livestock Development Program through BAIF

2.5.12. The cattle breeding programme is implemented through a network of 285 Cattle Development Centres (CDCs) spread across various districts of the State. Each CDC is responsible for the genetic improvement of 1000 cattle through Artificial Insemination.

2.5.13. The programme adopted a holistic approach integrating health, nutrition and management through promotional activities, awareness creation and geo-tagged calving reports to improve breeding services in the State. During the last three years, six lakh artificial inseminations were carried out through door-step quality bovine breeding services. This created a positive impact and generated tangible benefits at multiple levels, including- the birthing of more than 2.5 lakh high genetic progenies, an increase in annual milk production by more than 20 crore litres, farmer-level asset creation worth more than 85 crores, skilled self-employment to 300 local youth and upliftment of economically weaker sections among others. The programme aligns with the SDGs 1 (No Poverty), 2 (Zero Hunger), 8 (Decent Work and Economic Growth) and 12 (Responsible Consumption and Production).

Mobile Veterinary Unit (MVU)

2.5.14. Mobile Veterinary Units operate for 20 days in a month conducting animal health camps at village level. These units cover at least two villages per day and are operational in all the 314 blocks of the State. In addition, the Veterinary Ambulance Service provides health care services to stray and destitute animals across 11 urban locations.

Genetic Improvement of Bovine

2.5.15. Odisha Breeding policy, 2015, is being implemented to promote Artificial Insemination (AI). AI centres provide breeding services to bovines for the genetic improvement of cattle and buffaloes. The Nation-wide Insemination Programme (NAIP) has been implemented in all the districts since 15th September 2019 without any disruptions, even during the pandemic period. During NAIP-III (from 1st August 2021 to 31st July 2022), 14.54 lakh animals were covered against a target of 15 lakhs under the organized breeding program. During the year 2021-22, 16.48 lakh artificial inseminations were conducted.

Preventive Vaccination of Livestock

2.5.16. Under the National Animal Disease Control programme (NADCP), Foot and Mouth Disease (FMD) vaccination has been initiated in a mission mode to control FMD by 2025. During 2021-22, 95.62 lakh cattle and buffaloes were vaccinated with FMD & Brucella vaccine under NADCP. All the vaccinated animals have been ear-tagged, and data has been uploaded on the national portal (INAPH). data has been uploaded on the national portal (INAPH).

Mukhyamantri Krushi Udyog Yojana (MKUY)

2.5.17. MKUY was launched in 2018 to ensure efficient delivery of services to agri-entrepreneurs by ensuring ease of doing agribusiness. APICOL is designated as the State Nodal Agency for the implementation of MKUY in collaboration with line departments. Under MKUY, a beneficiary can apply for a minimum of 10,000 birds capacity for layer farming, 4000 birds capacity for broiler farming and 100 goats' capacity for a goat farm. Under this scheme, a subsidy up to 40 per cent is provided to a general category farmer and up to 50 per cent subsidies for women and SC/ST farmers is given subject to a maximum total of INR 50 lakhs for any project. So far, 146-layer units have been commissioned, and 38 new projects are in pipeline for the current financial year.

Fodder Development activities

2.5.18. Under the state plan scheme in FY 2021-22, 1649 acres of land were brought under perennial fodder crop cultivation. 3127 farmers possessing a livestock population of 6015 were benefitted through this programme. During 2021-22, 6280 crop residue enrichment units and 6280 azolla units were set up exclusively for women livestock farmers. Further, under the National Livestock Mission (NLM), 42 units of silage were grounded. During Kharif & Rabi, 29,565 mini fodder kits were distributed, covering an area of 7,275 acres. Under MGNREGA, 632.5 acres of land is covered with perennial fodder in convergence with the PR Department.

2.5.19. In addition to the above initiatives, the government has implemented many innovative measures for the development of livestock sector. These include the digitalization of schemes, services, and statistical reports (Go Sugam Portal); improving credit linkages; weekly advisories to farmers, regular surveillance, and monitoring of disease outbreaks, sex-sorted semen in a breeding programme for enhancing milk production and Artificial Insemination of goats among many other animal welfare activities. All these initiatives positively contributed to the development of the livestock sector in the State.

Key Initiatives under Animal Resources Development (ARD) Sector

- Use of Sex sorted semen (SSS) for Artificial Insemination (AI) in Cattle across the state. This would enhance milk production in the state through the production of around 90 per cent of female calves
- Introduction of Artificial Insemination (AI) in goats to promote goat development through scientific breeding for flock multiplication, and breed improvement
- Launch of State Animal Help Line: 24X7 helpline facility; Toll-free 1962, for emergency healthcare services to stray & destitute animals.
- Introduction of Tele Veterinary Service for livestock health care and animal husbandry advisory by dedicated veterinary experts through teleservices. livestock farmers get advisory services from 10 A.M. to 5.30 P.M. on all days of the week using Toll Free Numbers 1962 & 155333.
- Promoting livestock development through empowered Women Self Help Groups (WSHGs) engaged in livestock farming.
- Large scale promotion of poultry hubs, boosting entrepreneurship development, and strategic promotion of commercial, semi-commercial and small-scale poultry units.

2.6. Fishing and Aquaculture

I. Overview of Fishing Sector

2.6.1. Odisha, being an agro-maritime State on the east coast with a thrust in agriculture, fishing has been under the close and constant attention of policymakers and planners. Fish catching is a flourishing industry in Odisha. The long coastline (480KM) and the coastal plains are the gift of six major rivers: the Subarnrekha, the Budhabalanga, the Baitarani, the Brahmani, the Mahanadi, the Rusikulya and a number of small rivers. The world's largest brackish water lake Chilika is famous for fishing. All the rivers meet the Bay of Bengal on the east. Nearly 80 per cent of the people of the State are habituated to eating fish. Quite a large number of people belong to the fishing community.

2.6.2. The State is endowed with small/big ponds, small/medium and major reservoirs, and a large coastal belt suitable for brackish water aquaculture and deep-sea fishing. The important fishing centres include Talasari, Kirtania, Balaramagadi, Kasaphala, Chudamani, Chandabali, Barunei Mouth, Astaranga, Paradeep, Puri, Chilika, Gopalpur, and others. It has 7.04 lakh ha of freshwater resources, and 4.18 lakh ha of brackish water resources. By judiciously harnessing these resources, the fish production from capture, culture and culture-based capture fisheries could be substantially augmented to cater to the domestic and export market. This would create employment and income-generating opportunities for the rural poor, women, and youth and contributes towards food and nutrition security. The government targets to double inland fish production and triple the current export level. The sector contributes 12 per cent of the total Gross Value Added (GVA) of agriculture and allied activities. In 2022-23, fishing and aquaculture contributed 2.7 per cent to total GSVA, while the growth of the sector in GSVA is highest at 13.3 per cent.

II. Fish Production

A. Fish, Crab and Shrimp Production

2.6.3. Development of hatchery and quality fry, including fish spawning, is critical for enhancing fish yield. The production of fish spawn and fry stood at 51030 lakh and 15100 lakhs, respectively, in 2021-22 (Table 2.20), with over 74 per cent contribution of spawn and 82 per cent of fry from the private sector due to establishment of new circular hatcheries under various government schemes (state plan and PMMSY) and periodical introduction of genetically improved quality brood stock. There is significant growth in seed production which is 5.9 per cent for spawn and 26.43 per cent in fry due to the early breeding program.

Table 2.20 Spawn and Fry production in different Fish Farms from 2017-18 to 2021-22 – Odisha

Year	Government	OPDC	Private	Total
Spawn Production (in lakh)				
2017-18	3651	8376	26201	38228
2018-19	4062	7818	26996	38876
2019-20	3796	6468	24457	34721
2020-21	5220	8032	34908	48160
2021-22	5222	8027	37781	51030
Fry Production (in lakh)				
2017-18	684	1767	5626	8077
2018-19	825	1852	6285	8962
2019-20	578	1518	7376	9472
2020-21	594	2502	8847	11943
2021-22	760	1968	12372	15100

Source: Directorate of Fisheries, Odisha

2.6.4. There has been a significant rise in total fish production in Odisha in the last decade. Fish production more than doubled between 2013-14 and 2021-22 and registered a CAGR of 11.5 per cent during the same period. The total fish production and growth rate in Odisha are given in Table 2.21. The overall fish production has increased from 873 thousand MT in 2020-21 to 990 thousand MT in 2021-22, registering a 13.4 per cent growth rate. Odisha has been among the top fish-consuming states, with per capita annual consumption of 17.15 kg in 2021-22. The per-capita annual consumption of fish in the state has increased from 11.1 kg in 2014-15 to 17.2 kg in 2021-22.

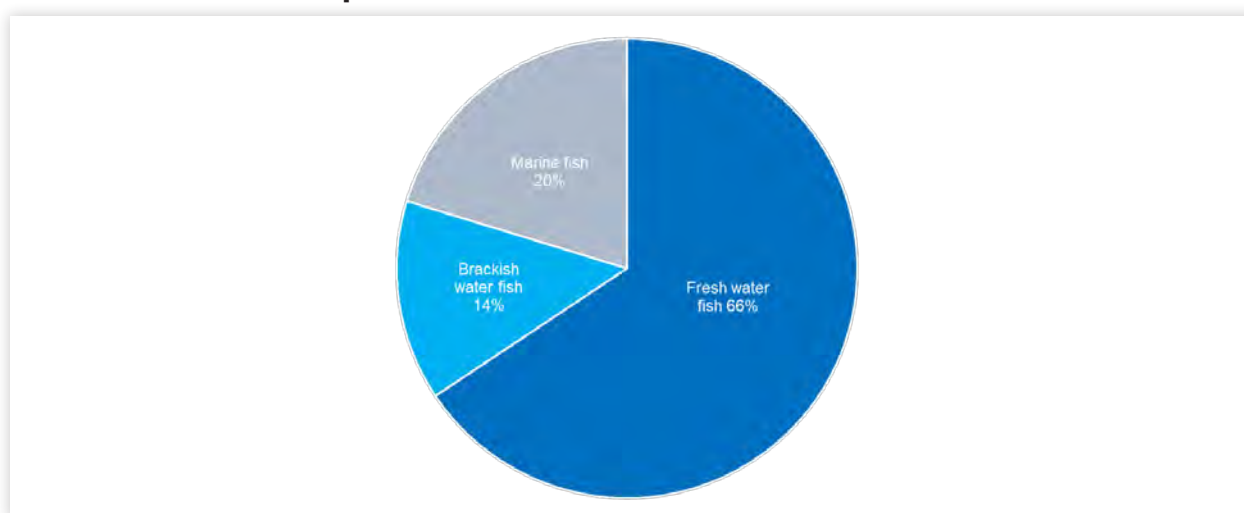
Table 2.21 Fish production in Odisha (000' MT) from 2013-14 to 2021-22

Year	Inland fish production		Marine fish	Total	Growth rate of fish production (per cent)	Per capita consumption of fish (Kg.) per year
	Fresh water	Brackish water				
2013-14	263.86	30.01	120.02	413.89	0.91	9.66
2014-15	300.96	35.37	133.21	469.54	13.45	11.06
2015-16	336.22	40.31	144.75	521.28	11.02	12.24
2016-17	393.73	61.27	153.10	608.10	16.66	13.49
2017-18	454.19	79.94	150.84	684.97	12.64	14.42
2018-19	506.61	94.03	158.32	758.96	10.80	15.38
2019-20	543.05	116.10	157.31	816.46	7.58	16.24
2020-21	574.98	125.52	172.47	872.97	6.92	16.34
2021-22	649.62	139.62	200.60	989.84	13.39	17.15

Source: Directorate of Fisheries, Odisha

2.6.5. In 2021-22, freshwater fish accounted for 66 per cent of total fish production, while brackish water fish and marine fish constituted 14 per cent and 20 per cent, respectively(Figure 2.15).

Figure 2.15 Share of different Fish Categories produced in Odisha during 2021-22 (per cent)



Source: Directorate of Fisheries, Odisha

2.6.6. The major sources of freshwater fish include tanks/ponds, followed by reservoirs, rivers/canals, and lakes/swamps/beels. Freshwater fish production has significantly increased in the last eight financial years (between 2013-14 and 2021-22), growing at a CAGR of 11.92 percent, with the highest production in 2021-22 at 650 thousand MT. Table 2.22 shows the source-wise fresh water fish production and their share in total fish production in Odisha from 2013-14 to 2021-22.

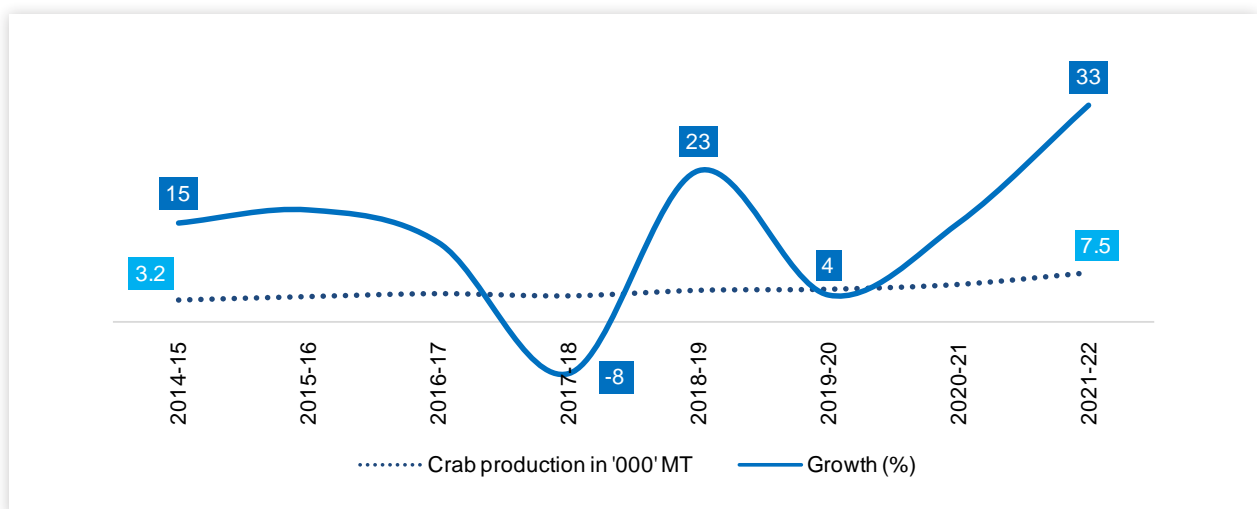
Table 2.22 Freshwater fish production and its share from different sources ('000 MT) from 2013-14 to 2021-22- Odisha

Year	Tanks /Ponds	Reservoirs	Lakes /Swamps/ Bheels	Rivers / Canals	Total
2013-14	230.43 (88)	18.57 (7)	2.41 (1)	10.51 (4)	261.90
2014-15	261.85 (87)	21.83 (7)	2.94 (1)	14.35 (5)	301.00
2015-16	289.67 (86)	22.76 (7)	4.25 (1)	19.54 (6)	336.20
2016-17	331.19 (84)	30.07 (8)	4.88 (1)	27.59 (7)	393.70
2017-18	393.61 (87)	33.99 (7)	4.93 (1)	21.66 (5)	454.20
2018-19	442.85 (87)	37.39 (7)	5.28 (1)	21.09 (4)	506.60
2019-20	472.84 (87)	41.73 (8)	6.14 (1)	22.34 (4)	543.10
2020-21	501.11 (87)	45.15 (8)	5.35 (1)	23.39 (4)	575.00
2021-22	549.64 (85)	66.48 (10)	6.74 (1)	26.76 (4)	649.62

Source: Directorate of Fisheries, Odisha. Figures in the parenthesis represents percentage share in total fish production

2.6.7. While the growth rate of crab production in Odisha showed a varied trend in the last seven years, the overall crab production rose from 3.2 thousand MT in 2014-15 to 7.5 thousand MT in 2021-22, registering a CAGR of 12.9 per cent during this period. In 2021-22 the overall crab production grew by 32.5 per cent to 7.5 thousand MT, from 5.69 thousand MT in 2020-21. Figure 2.16 shows crab production in Odisha from 2014-15 to 2021-22.

Figure 2.16 Crab production ('000 MT) and growth (per cent) in Odisha from 2014-15 to 2021-22



Source: Directorate of Fisheries, Odisha

2.6.8. Shrimp production increased at a CAGR of 26.1 per cent from 19.1 thousand MT in 2013-14 to 122.1 thousand MT in 2021-22. Table 2.23 shows the source-wise shrimp in Odisha from 2013-14 to 2021-22. The share of shrimp production from brackish water culture was very low prior to 2013-14. However, post 2013-14, the share of shrimp production from brackish water culture has increased significantly compared to other sources, making brackish water the highest contributor to shrimp production.

Table 2.23 Shrimp production by sources - Odisha ('000 MT)

Year	Chilika Lake	Brackish water shrimp	Estuaries	Total Production
2013-14	4.93	12.61	1.58	19.12
2014-15	4.57	19.25	1.59	25.41
2015-16	5.46	23.34	1.11	29.91
2016-17	13.30	29.41	2.21	44.92
2017-18	4.71	58.11	2.35	65.17
2018-19	4.95	71.62	2.73	79.30
2019-20	4.14	90.16	6.04	100.34
2020-21	5.05	97.13	6.13	108.31
2021-22	6.76	110.63	4.71	122.11

Source: Directorate of Fisheries, Odisha

B. Export and Import of Fishery Products

2.6.9. The fishery sub-sector shows positive trends in exports and imports of marine/fish products, as shown in Table 2.24. The total export of fish from all sources, i.e., marine, freshwater and brackish water, increased at a CAGR of 12.1 per cent between 2013-14 and 2021-22. Marine and brackish water fish constituted the major share of total exports during this period. Due to the COVID-19 pandemic, however, the growth rate of total export declined from 7.7 per cent in 2019-20 to 0.9 per cent in 2020-21. But during 2021-22 exports increased by 18.6 percent over 2020-21. The import of freshwater fish has also increased from 43.0 thousand MT in 2020-21 to 50.5 thousand MT in 2021-22.

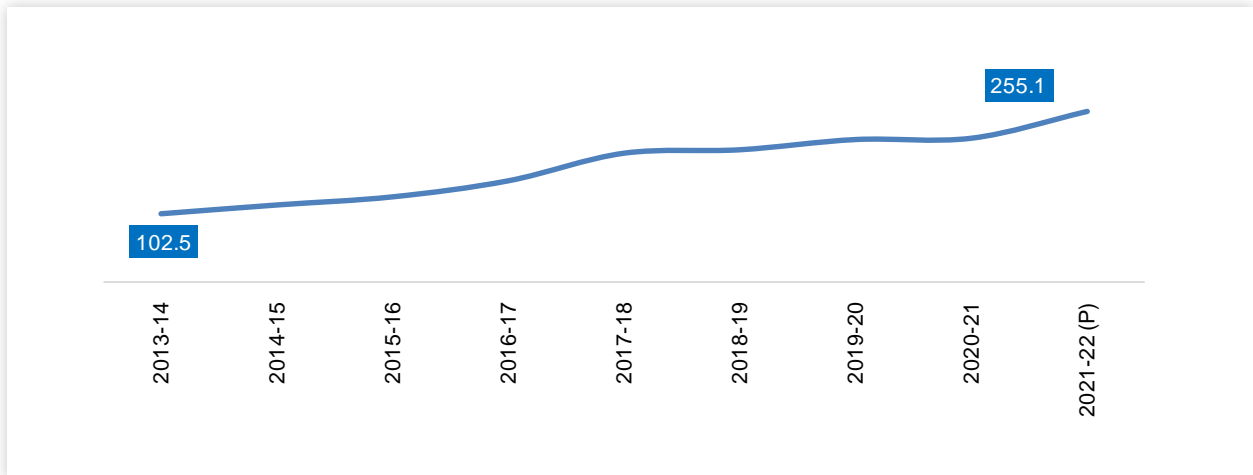
Table 2.24 Export and Import of Fish ('000 MT) – Odisha

Year	Fish export to other States and Countries					Import of freshwater fish	Growth in imports (per cent)
	Chilika Lake	Brackish water shrimp	Estuaries	Total Production	Growth in exports (per cent)		
2013-14	56.65	25.94	19.92	102.50		26.50	
2014-15	65.69	24.56	25.37	115.62	12.8	38.12	43.8
2015-16	74.57	24.3	28.86	127.73	10.5	46.28	21.4
2016-17	78.91	25.35	47.41	151.67	18.7	35.16	-24.0
2017-18	87.47	43.6	61.75	192.82	27.1	40.74	15.9
2018-19	88.82	44.97	64.14	197.92	2.6	49.61	21.8
2019-20	84.95	50.38	77.85	213.18	7.7	46.27	-6.7
2020-21	89.04	45.34	80.77	215.14	0.9	43.01	-7.0
2021-22 (P)	107.33	53.78	93.93	255.05	18.55	50.52	17.46

Source: Directorate of Fisheries, Odisha

2.6.10. Export of marine products to foreign countries increased at a CAGR of 12.1 per cent between 2013-14 and 2021-22 (Figure 2.17). During 2021-22, the overall marine exports to foreign countries increased by 42.4 percent over the previous year, indicating post-pandemic improvement.

Figure 2.17 Export of Marine Products to foreign countries ('000 MT) – Odisha



Source: Marine Promotion & Export Development Agency (MPEDA), Kochi

III. Government Initiatives for Fishery

2.6.11. Odisha has implemented a wide range of schemes and programmes for the promotion of inland and brackish water aquaculture. The Government spends around INR 100 crores per year on subsidy to encourage farmers towards aquaculture. These measures have attracted many farmers and entrepreneurs towards both inland and brackish water aquaculture. Long-term lease of panchayat tanks is provided to women SHGs, and currently, around 8300 women SHGs undertake pisciculture under the “Mission Shakti” programme. The fisheries sector in Odisha has also received national-level recognition. Balasore district received the “Best Marine District” award on ‘World Fisheries Day-2021’ in a ceremony organized by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India. Government initiatives under fishery sector are given in Table 2.25.



Farm pond in Dhenkanal district under PMKSY

Table 2.25 **Government Initiatives under Fishery sector**

Scheme	Activities
Odisha Fishery Policy, 2015	Odisha Fishery Policy offers great opportunities for the development of fresh water, brackish water, and marine fisheries in the state. Under the Inland sector, with the technical support of “WorldFish”, activities like Carp-Mola poly culture, GIFT tilapia demonstration, and cage culture in reservoirs were undertaken. In addition, the usage of GIS and spatial planning tools was also initiated.
Matsya Pokhari Yojana, 2017-18	This flagship scheme encourages farmers and entrepreneurs to undertake freshwater fish production by creating new water bodies with a unit cost of INR 8.50 lakh/ha. A subsidy of 40 per cent is provided to the General category and 50 per cent to SC/ ST/ Women categories of beneficiaries.
Input to Women Self Help Groups for pisciculture in Gram Panchayat tanks	It aims to empower women by providing livelihood support through WSHGs. This is a convergence project involving Mission Shakti, Panchayati Raj and Drinking Water Department, Fisheries and Animal Resource Development Department. Under this programme, Gram Panchayat tanks are given on a long-term lease (3-5 years) to the identified WSHGs for pisciculture. Technical support and training are imparted to the members of WSHGs. Inputs for fish farming with the project cost of INR 1.50 lakh per ha and a subsidy of 60 per cent or INR 90,000 per ha are provided to WSHGs under RKVY and State Plan schemes.
Promotion of BIO-FLOC technology for intensive shrimp and fish farming	This scheme aims to promote income generation through small-scale bio-floc fish farming system. 40 per cent financial assistance for the general category and 60 per cent for SC/ST/Women beneficiaries is provided under the scheme.

Scheme	Activities
Cage culture in Reservoirs	Odisha has launched a policy for leasing water areas to undertake Cage Culture Fisheries. Recently, F&ARD Department has approved guidelines for cage culture in reservoirs by private entrepreneurs in partnership with PFCS and SHGs. Under the PMMSY scheme, there is a provision of assistance for taking up cage culture. Over 49 entrepreneurs have been leased out of water area in Hirakud Reservoir to take up cage culture. The royalty received from leasing is shared with the local Primary Fishery Cooperative Societies for undertaking activities such as fish stocking, purchasing boats & gear and others.
Skill upgradation training	The Fisheries Training Institute at Balugaon is equipped to impart 15 days of skill up-gradation training. BWTC Paradeep provides 15 days training to brackish water farmers.
Livelihood Support to Marine Fishermen During Fishing Ban Period	This scheme provides livelihood support of INR 7500 to marine fishermen affected by the fishing ban for seven months every year on account of sea turtle conservation.
Assistance for Fish Transport Infrastructure	The scheme aims to ensure better prices, reduce wastages, and enhance the income of fishermen by providing cold-chain solutions. This component under Blue Revolution (Now PMMSY) involves providing autorickshaws with ice boxes, motorcycles with ice boxes, refrigerated trucks, and insulated vehicles to the fishermen on subsidy. The admissible subsidy is 40 per cent for the General category and 60 per cent for SC/ST/Women beneficiaries.
Pradhan Mantri Matsya Sampada Yojana- Group Accident Insurance Scheme (GAIS)	The scheme coverage is under two policy heads, Group Janata Personal Accident Policy (GJPA) which covers death and permanent total disability (PTD) and Special Contingency Policy (SCP) covering permanent partial disability (PPD). A compensation of INR 5,00,000 is provided in case of death/PTD and up to INR 2,50,000 for PPD, and INR 25,000 for hospitalization. An insurance Premium of INR 72.44 per fisherman is shared by the Government of India (INR 43.64) and by the State Government (INR 28.98) on a 60:40 basis.

Scheme	Activities
OMBADC Funded Schemes	Under OMBADC, fisheries activities are implemented for the economic upliftment of poor tribal communities in seven mineral-bearing districts, including all blocks in Keonjhar, Mayurbhanj, Sundargarh, Jharsuguda, Deogarh, two blocks in Jajpur and one block in Dhenkanal district.
Popularization of Fisheries Machineries/ Equipment	A 40 percent subsidy is being provided for the procurement of fishery machinery. It implements to control disease outbreaks, stabilize biotic factors, and achieve a quick turnaround time between crops. This will sustainably increase the production and productivity of fish and shrimp as well as maximize profit.
Input assistance to farmers for taking up fish farming in farm ponds	This State sector scheme aims to assist with for three sizes of farm ponds -20 mt. X 20 mt., 15 mt. X 15 mt., and 10 mt. X 10 mt. An input subsidy of 40 percent for the general category and 60 percent for SC/ST/women category for feed/seed on the project cost of INR 1.50 lakh per ha water area is being given.
Development of Brackish Water Aquaculture through Excavation of New Tanks	The scheme aims to enhance brackish water shrimp and fish production in the state by excavating of new brackish water tanks. The unit cost per ha. is INR 10 lakhs, and a maximum up to 2 ha. can be excavated by the beneficiary. The admissible subsidy is at 40 per cent for the general category and 60 per cent for the SC/ST/women category of beneficiaries.
Bio-floc fisheries	Odisha has spent more than 40 crores as a subsidy for promoting Bio-floc fisheries over the last two years. The Government accords equal importance to improving livelihoods of people and conserving marine biodiversity. Accordingly, infrastructure development of the fishing harbours and FLCs has been undertaken.

Scheme	Activities
Mukhya Mantri Krushi Udyog Yojana (MKUY)	The Mukhya Mantri Krushi Udyog Yojana (MKUY) is a flagship scheme of the Government which provides a subsidy of up to INR 50 lakhs to farmers and entrepreneurs for taking up fishery -related activities including,commercial fish / prawn / crab farming, hatchery, processing units, aqua shops, harvest and post-harvest technologies like vessels, gears, value addition, cage culture aquaculture, feed mills etc.
Support to Private Fish Hatcheries for adoption of Early Breeding and Year-round Seed Production Technology and for hatchery accreditation and seed certification	This State sector scheme aims to aidprivateinterested hatcheries for early breeding of IMC seed in 4 nos. of sub-components with 40 per cent for the general category and 60 per cent for SC/ST/ women category towards the cost of the component as below: i. Early breeding with existing brood stock towards the supply of brood feed. ii. New Brood stock Infusion with two sub-components towards the purchase of brood fish and brood feed for the same. iii. Raising National Fresh Water Fish Brood Bank (NFFBB), Kausalyaganga sourced genetically improved strains of IMC fingerlings for 2+ years with two sub-components towards cost of NFFBB brood seed and two years maintenance cost of brood seed. iv. Construction of new bore well in the hatchery (maximum one bore well per hatchery)
Assistance to network of seed growers for round-the-year seed availability	This State sector scheme aims to provide assistance to an interested network of seed growers for lifting the early bred IMC seed from any govt./OPDC/Registered private hatcheries under early breeding program / Govt. assisted program during March to June (early breeding period) for making year-round seed availability in all districts with the provision of subsidy at 40 per cent for general category and 60 per cent for SC/ST/ women category towards input cost @ INR1.0 lakh/acre water.

Source: Directorate of Fisheries, Odisha

2.7. Forestry

I. Overview of Forestry sector

2.7.1. Forests have an important role in the economy of the State. Forestry activities not only contribute to food security and livelihood of rural and tribal population but also to the people residing in adjacent urban areas. Forestry and logging sub-sector grew at 5.5 per cent in 2021-22 against 1.8 per cent in 2020-21. It contributed a share of 2.8 per cent in GSVa in 2021-22. The role of this sub-sector is mainly linked to the management, conservation and protection of forest and wildlife resources and securing the environmental and ecological balance with the creation of habitable and pollution-free living spaces.

II. Production**A. Forest and Tree Cover**

2.7.2. The State has a recorded forest area of 61204.17 Sq. Km. in 2021-22, which is about 37 per cent of its total geographical area. This includes 26873.7 Sq. Km. of Reserve Forest, 9175.2 Sq. Km. of Proposed Reserve Forest, 1085.2 Sq. Km. of Protected Forest, 287.51 Sq. Km. of Village Forest, 4179.59 Sq. Km. of Demarcated Protected Forest, 4272.91 Sq. Km. of Un-Demarcated Protected Forest, 15117.30 Sq. Km. of Revenue Forests, 22.06 Sq. Km. of Un-Classified Forests and 190.77 Sq. Km. of private Forests. The detailed component-wise forest area is presented in Table 2.26.

Table 2.26 Component-wise recorded forest area in Odisha, 2021-22

Department	Component	Area (in sq. km.)	Share (per cent)
Forest, Environment & Climate Change Department	Reserve Forest	26873.66	43.91
	Proposed Reserve Forest	9175.15	14.99
	Protected Forest	1085.22	1.77
	Village Forest	287.51	0.47
	Un-Classified Forest	22.06	0.04
Revenue & Disaster Management Department	Demarcated Protected Forest	4179.59	6.83
	Un-Demarcated Protected Forest	4272.91	6.98
	Revenue Forest	15117.3	24.7
	Private Forest	190.77	0.31
Total		61204.17	100

Source: Forest & Environment Department, Odisha

B. Forest Area Diversion

2.7.3. As on 31st March 2022, about 59359.9 hectares of forest land have been diverted for developmental projects in various sectors. In 2021-22, 1193.9 ha of forest area was diverted for 18 projects. As shown in Table 2.27 below, the largest share of total forest land was diverted for mining-related development activities (50 per cent) followed by irrigation-related activities (17.9 per cent).

Table 2.27 Sector wise diversion of Forest Area as on 31st March 2022 - Odisha

Sector	No. of Proposals	Forest Area diverted (ha.)	Share of forest area diverted (per cent)
Irrigation	85	10653.05	17.95
Industry	34	4438.52	7.48
Mining	193	29935.13	50.43
Energy	8	159.45	0.27
Road and Bridges	54	1449.37	2.44
Railway	25	2768.29	4.66
Defence	4	3865.25	6.51
Human Habitation	5	366.46	0.62
Transmission	76	4403.06	7.42
Others	57	1321.32	2.23
Total	541	59359.9	100

Source: Forest & Environment Department, Odisha

2.7.4. Ministry of Environment, Forests & Climate Change, Government of India accorded permission for exploratory mineral drilling in forest land under section 2 of Forest (Conservation) Act, 1980. During 2021-22 permission was given for explanatory drilling of different minerals by 13 project proponents involving 74.3 ha of forest land. As per Section 3(2) of the Forest Rights Act, 2006, the Divisional Forest Officers are competent to grant permission for the diversion of forest land up to 1.0 ha with felling of trees not exceeding 75 per hectare for small public utility projects of Government Departments under thirteen categories as envisaged under Section 3 (2) of Forest Rights Act, 2006. During 2021-22, about 289.271ha of forest land was diverted under the above Act for 748 different developmental projects (Table 2.28).

Table 2.28 Diversion of Forest Land under Section 3(2) of Forests Rights Act, 2006 (As in March 2022)

Sector	No. of Proposals	Forest Area diverted (ha.)
Transmission Line	629	324.33
Water Harvesting Structure	43	11.79
Tank & other minor water bodies	35	14.01
Drinking water supply & water pipeline	436	87.89
Irrigation	71	25.86
Road	722	489.94
School	444	219.74
Community Centre	104	35.58
Vocational training centre and Skill Development	36	24.57
Hospital	15	5.17
Telecommunication	15	2.88
Others	48	19.47
TOTAL	2,598	1,261.23

Source: Forest & Environment Department, Odisha

C. Afforestation Programme

2.7.5. A series of State and Centrally Sponsored afforestation programmes are being implemented in the State to control forest degradation. As on 31st March 2022, 1,10,368.30 ha has been afforested. Out of the total afforested area, 11,225.30 ha was under Artificial Regeneration (AR) plantation, and 99,143 ha was under Assisted Natural Regeneration (ANR) with planting in gaps. During 2021-22, 4616.60 Row Kilo Metre (RKM) under avenue plantation was made, and a total of 6.13 crore seedlings were planted and distributed under different afforestation schemes.

Green Mahanadi Mission (GMM)

2.7.6. To conserve the perennial flow of the Mahanadi River, the 'Green Mahanadi Mission' was launched in 2018-19 for a period of 5 years. The scheme enhances water availability and improves livelihood. During 2021-22, the mission receives a budgetary allocation of INR 2258.0lakh. Out of the budgeted amount, a total of INR 2208.90 lakh has already been utilized up to 31st March 2022. This year, 75 lakhs seedlings (18 months old) were raised for planting and distribution for the 2023 planting season.

Medicinal Plants Knowledge Centre at Patrapada

2.7.7. Medicinal Plants Knowledge Centre was established at Patrapada, Bhubaneswar to enhance knowledge about medicinal plant species. So far, 314 species of medicinal plants have been planted in 314 plots (a separate plot for each plant species). Each plot is bound by contour bunds to create zero run-off area. A demonstration area is developed where all 314 plant species are displayed at a landscaped site. During 2021-22, a sum of INR 170.00 lakh was utilized.

D. Compensatory Afforestation Fund Management & Planning Authority (CAMPA)

2.7.8. CAMPA was constituted to promote the Conservation, Protection, Regeneration and Management of existing Natural Forests, Wildlife and their habitats and raising Site-Specific Compensatory Afforestation and Penal Compensatory Afforestation. The state legislative assembly approved the CAMPA Annual Plan of Operation 2021-22 of INR 903.03 Cr. The following activities were undertaken in APO 2021-22.

- Regeneration of Degraded Bamboo Forests over 75,000 ha.
- Creation of ANR over 35,515 Ha and under AJY 20,000 ha.
- Creation of AR Plantation in 1490 ha.
- Bamboo Plantation in 1370 ha.
- Casuarina Plantation in 46.10 ha.
- Mangrove Plantation in 130.0 ha.
- Bald Hill Plantation in 1326 ha.
- Fodder and Fruit Bearing Plantation in 105 ha.
- Site specific Compensatory Afforestation, Penal Compensatory Afforestation etc. and include 185.442 ha. of Block Plantation, 3405.58 ha. of ANR, 344.61 ha. Bald Hill, 13.09 Ha ANR without a gap.
- 10.12 RKM Avenue plantation along with urban plantation of 120 saplings.
- Soil Moisture Conservation works (SMC) in forest area of 6668 Ha.
- Conservation of RET species 130 ha. and Miyawaki plantation 13 ha.
- Maintenance of 1.95 crores and raising of 2.5 crores 18 months old seedlings. Apart from above new plantations, maintenance of old plantation works was also taken up.

Government initiatives under forestry is given in Table 2.29.

Table 2.29 Government initiatives for forestry

Name of the Scheme	Achievement
Ama Jangala Yojana (AJY)	<p>AJY has been introduced to promote participatory and sustainable forest management and alternative livelihoods for the forest fringe communities in the state. As on March 2022, Assisted Natural Regeneration (ANR)- without gap plantation has been carried out in 2,09,568 ha of forest area, and ANR-with gap plantation has been carried out in 20,000 ha of forest area under the project. Apart from these, block plantations have also been raised over 1005 ha of forest land.</p> <p>Total 4,601 numbers of VSS have been covered under the scheme by March 2022. As a measured policy under the project, participatory village micro plants have been prepared in all 4601 villages. In addition, 14,263 women self-help groups (SHGs) are also linked with various income-generating activities (IGAs) under inter-sectoral convergence with line Departments.</p>
Forest Protection and Management	<p>To enable forest protection, numerous Forest Protection Units and Vana Suraksha Samitis (VSS) and Eco-development Committees (EDCs) are set up. There are about 5034 forest protection units in the State for forest and wildlife protection.</p>
Forest Fire Prevention	<p>Deployment of 213 firefighting squads in 37 forest divisions, 2270 rural unemployed youth with a provision of 227 vehicles for protection duty through the active participation of CAMPA under the Forest, Environment & Climate Change Department has been initiated.</p>
Development of mobile apps under 5T	<p>Under Odisha's 5T initiatives, an application named "Mo Jungle: My Odisha Forest App has been developed to ensure transparency in afforestation activity. All plantation assets created during 2020 are brought under the public domain through the web application (www.odishaforest.in).</p>

Source: Forest & Environment Department, Odisha

E. Odisha Forestry Sector Development Project (OFSDP), Phase-II

2.7.9. Odisha Forestry Sector Development Project, Phase-II, is being funded by Japan International Cooperation Agency (JICA) and is implemented by the Odisha Forestry Sector Development Society. The project implementation period is ten years, from 2017–18 to 2026-27. The project has the mandate to organize 1200 VSSs. Up to March 2022, 1211VSSs have been formed. The following activities have been undertaken in OFSDP-II during 2021-22.

- Survey, demarcation and posting of pillars across areas assigned to VSS.
- Plantation of 194.23 lakh seedlings in 56031 ha of land.
- Drainage Line Treatment in 1180 VSSs located in 1479 ha of land Under JFM (Joint Forest Management) mode and 743 ha under non-JFM mode
- Establishment of Six Hi-tech Nurseries, which can produce about 2.2 lakh poly-pot seedlings and 1.1 lakhs Hyco-pot of 300 CC, and 1.1 lakhs of Hyco-pot of 150 CC seedlings every year.

Bio-diversity Management

Implementation of Satoyama Initiatives

2.7.10. Satoyama Initiative is landscape-based bio-diversity conservation and management focussing on sustainable livelihood initiatives. 10 Eco Development Committees (EDC) in Badrama Wildlife Sanctuaries of Bamra Wildlife Division under OFSDP- II have been set up to implement this initiative. It is being piloted in 10 villages covering 500 households, out of which 80 percent are tribal population. Their main income sources include agriculture and wage labour. The average land holding at the community level is around 2 acres and the 10per cent are landless households.

Key interventions taken up at the EDC level include:

- Micro Plan Formulation for each EDC
- Avenue Plantation across the villages
- Revival of traditional Paddy variety (Bhajana) in 1 ha land of 14 farmers in the pilot programme
- Training on Bio-fertiliser and Bio insecticide preparation and usage
- Establishment of nutri garden through the convergence of 32 households
- Supply of Smokeless Chullha to all households
- Development of Anganwadi Centre to make it operational
- Solar Fencing for elephant depredation to reduce man-animal conflict
- Fire line construction and community-driven protection of forest from fire
- Construction of Pucca Road of 1 Km through Rural Development Department, Government of Odisha
- Revival of traditional equipment like Belana (Thrashing Equipment) and Dinki
- Declaration of plastic-free, Eco-friendly and open-defecation-free villages

F. Wildlife Organization

2.7.11. The State Wildlife Organization, created in 1974, is committed to the protection, conservation and management of wildlife and their habitat within and outside the protected areas of the State. Key initiatives of the Wildlife organization are as follows:

a) Conservation of Wildlife

2.7.12. There are nineteen wildlife sanctuaries, one National Park, one proposed National Park, three elephant reserves, two tiger reserves, one proposed tiger reserve and 14 identified elephant corridors for promoting in-situ conservation of wildlife. In addition, the state has established eleven zoos for ex-situ conservation. 15 eco-sensitive zones were declared as per the direction of the Government of India around these protected areas. 539 eco-development Committees (EDC) have been formed, covering 43455.32 ha of the protected area.

b) Protection of Wildlife

2.7.13. Several measures have been adopted to reduce man-animal conflicts in Odisha. Some of the initiatives include engaging 586 anti-depredation/anti-poaching elephant squads and 115 trackers to prevent depredation by wild animals; trench fencing up to 40kms; solar fencing in 14.8 kms in the depredation-prone localities; awareness creation with the help of VSS/EDC members, NGOs, and school students; engaging 2785 Gaja Saathis in 557 villages; compensation of INR 2099.66 lakh to animal attack victims in 2021-22; and setting up a 24 x 7 toll free number (18003456771) to address man-animal conflicts.

c) Habitat Development

2.7.14. Habitat development is key in reversing the damage caused by human developmental activities and conserving wildlife. Some of the initiatives undertaken to promote habitat development include the creation of 86 new water bodies, 5 Water Harvesting Structures (WHS) and renovation of 47 water bodies, the plantation of 9000 fruit-bearing plants, fodder plantation in 10 ha of land around water bodies, wildlife corridor rejuvenation in 25 ha and mangrove plantation in 150 ha in the coastal districts of Puri and Kendrapada.

Relocation of Villages

Relocation of villages from critical protected areas is an important step for conserving flagship species like tigers which require vast inviolate habitats. It not only makes the protected area inviolate but also enables the villagers to access various development schemes of the State.

During December 2021, all 42 families of village Lambipali have been relocated from Debrigarh Sanctuary to outside sanctuary. In this process, funds have been provided for relocation of Asanbahal village of Satkosia (WL) Sanctuary, Baliamba village of Khalasuni (WL) Sanctuary and Jamunagarh village of Similipal Tiger Reserve.

Eco-tourism

2.7.15. Forest, Environment and Climate Change Department is the Nodal Agency for the development of ecotourism in Odisha. During 2021-2022, 47 eco-tourism destinations across 18 districts have been developed with 366 rooms accommodating 769 eco-tourists during night stays. In the same year, 46,576 tourists visited these destinations and a revenue of INR 556.81 lakhs were generated. Seven new eco-tourism sites are under construction. Eco-tourism emerged as an alternate source of livelihood for forest-dependent communities. More than 600 forest-dependent community members are engaged in eco-tourism activities.

G. Kendu Leaves Organization

2.7.16. Odisha is the third largest producer of kendu leaf. It is a source of livelihood for many tribal communities. The Government has been promoting kendu leaves production through various incentives. In 2021-22, the

Government provided a total incentive of around Rs. 88.61 crores to pluckers, binders and seasonal staff. During this period, various kendu leaf operations like bush butting, repairing and maintenance of Phadi, procurement of kendu leaves, drying, storage and binding etc. were carried out in 22 districts benefitting 8 lakh people. Revenue from Kendu leaves operations was around INR 589.29 crores.

H. Other forest related organisations

Odisha Bamboo Development Agency (OBDA)

2.7.17. Odisha Bamboo Development Agency (OBDA) is aimed at the integrated development of bamboo production. It promotes commercial cultivation of bamboo and value addition by setting up Bamboo based industries to ensure adequate returns to farmers. Further, it encourages sustainable livelihood, employment, and women empowerment among poor tribal and rural communities. During 2021-22, the OBDA has undertaken the following activities:

- Establishment of 16 Bamboo Nurseries (3 hi-tech, 6big, 6small and 1big in the private sector).
- Development of bamboo plantations in 496.19 ha of farmers' land through 649 farmers.
- Three FPOs (Farmer Producer Organizations) have been identified in Mayurbhanj, Khurdha & Angul District, and formalities are under progress.

Odisha Forest Development Corporation Limited (OFDC)

2.7.18. Odisha Forest Development Corporation Limited (OFDC) aims to scientifically explore the State's vast forest resources, to ensure fair wage to forest labourers, to promote forest-based industries and raise non-tax revenues for the State exchequer. The key activities of OFDC include the trade of timber/firewood, processed and phal kendu leaves, cashew nut and rubber; collection and trade of Sal seed directly or through Raw Material Procurer (RMP); regulation of firewood long bamboo and other small timbers distribution to local people, monitoring bamboo operations directly or through RMP, processing and trading of honey and a few non-timber forest items. In 2021-22, OFDC earned a revenue of INR66207.30 lakhs from timber, kendu, and bamboo trade.

I. Environment and Climate Change

2.7.19. Odisha was the first State in the country to formulate a State Action Plan on Climate Change in 2010. The Second Action Plan was for the period 2018-23. Further, it was modified to Climate Change Action Plan 2021-30. This plan is a coordinated response of twelve sectoral missions, and the implementation activities are reviewed by the Monitoring and Advisory Committee of Climate Change Action Plan headed by the Chief Secretary. To closely monitor and review the activities, a climate change cell has been set up. This cell mobilizes resources for the implementation of different areas of the action plan in a time-bound manner.

Chilika Development Authority

2.7.20. Chilika lake hosts over 228 different species of birds during the peak migratory season. The census estimate was 1242826 in 2021. Chilika Development Authority carries out restoration measures to protect the ecosystem in this region. In 2021-22, de-siltation of the Lead channel was completed from 7680 m. to 8120 m., through dredging. This prevents the sediments from draining and siltation to Chilika.

Centre for Environmental Studies (CES)

2.7.21. Centre for Environmental Studies (CES) is an organization under the Department of Forest, Environment & Climate Change, Government of Odisha. CES undertakes activities to promote environmental education, awareness, training & research to build the environment information database and disseminate the environmental knowledge through newsletters, books, booklets, posters, leaflets, video clips, mobile apps etc. CES is the State Nodal Agency for implementing Eco Club and Energy Club Programme in Odisha. CES is also the State programme centre for environmental information, awareness, capacity building and livelihood programmes EIACP).

Odisha Biodiversity Board

2.7.22. Odisha Biodiversity Board (OBB) is a statutory body operating under the administrative control of the Forest, Environment & Climate Change Department, Government of Odisha. The mandate of the Board is to implement legal provisions of the Biological Diversity Act 2002 and Rules 2004, which envisage conservation of biodiversity, sustainable use of its components, and fair and equitable sharing of benefits from biological resources and associated traditional knowledge.

Odisha Biodiversity Board has successfully completed the following research projects

- a) Inventory of Biodiversity of Mandasaru Gorge & Kotgarh Wildlife Sanctuary (Kandhamal), Debrigarh Wildlife Sanctuary (Sambalpur), Hadagarh Wildlife Sanctuary (Keonjhar), Sunabeda Wildlife Sanctuary (Nuapada), Kapilash Wildlife Sanctuary (Dhenkanal), Badrama-Khalasuni Wildlife Sanctuary (Sambalpur) & Bonai Forest Division (Sundargarh).
- b) Developing a database on socio-economic, ecological, and biological aspects of the proposed Mahendragiri Biosphere Reserve (MBR), Gajapati, Odisha.
- c) Studies on biodiversity of Lakhari Valley Wildlife Sanctuary, Gajapati, Odisha.
- d) Multi-taxa biodiversity inventory of Karlapat Wildlife Sanctuary, Kalahandi.
- e) Biodiversity study in the project impact area of Sukinda chromite mines, Jajpur and Barbil iron mines, Keonjhar.
- f) Status survey of freshwater turtles in Odisha.
- g) Study of sporadic nesting behaviour of Olive Ridley turtles in Rushikulya.

Regional Plant Resource Centre

2.7.23. Regional Plant Resource Centre (RPRC), popularly known as Ekamrakanan, is a Research and Development organization operating under the Forest, Environment and Climate Change Department of Odisha. It implements several innovative research and development activities for bio-prospecting indigenous macro and micro flora for wider usage through fundamental and applied research. In addition, RPRC also carries out a few development activities. The process for setting up of Nursery Sale-cum- Exhibition Centre has been initiated, and a Hanging Garden in the Botanical Park was established. RPRC also produced a total of 60,000 banana plants, out of which 25,000 plants were sold to the farmers in Jagatsinghpur, Kendrapara, Tangi (Cuttack), ICAR-CIWA other parts of the state.

Research activities undertaken during 2021-22 in RPRC were:

- a. Microbiological Applications
 - i. Development of bio inoculant for growth and development of *Dalbergia latifolia* and
 - ii. *Desmodium oogeinense* by using native microflora.
 - iii. Morphotaxonomic characterization and documentation of fungi of Odisha.
- b. Tissue Culture & its application on various important plants (banana, orchids, medicinal and forest products.)
 - i. Mass production of medicinal plants through tissue culture.
 - ii. Establishment of mass propagation and breeding facility for orchids.
 - iii. Mass Propagation of Local *Musa* (Banana) varieties.
 - iv. Commercialization of red banana using Tissue Culture Techniques.

c. Medicinal plants and their application

Therapeutic validation of *Pterocarpus marsupium* and *Piper trioicum* as a cholinesterase inhibitor for the treatment of Alzheimer's disease.

d. Wild Edible Fruits: propagation and nutraceutical analysis

- i. Standardization of various macro propagation methods of wild edible fruits.
- ii. Determination of Vitamin-C (Ascorbic Acid) for selecting potent species to promote domestication.

e. Propagation and reintroduction of RET & Mangrove plants

Conservation of salt-sensitive back mangroves *Heritiera fomes* and *H. littoralis* through re-introduction in the protected areas using the vegetative propagation technique.

State Pollution Control Board (SPCB), Odisha

2.7.24. Key activities carried out by State Pollution Control Board (SPCB) are as follows:

- Installation of an online monitoring system for all industries and mines.
- Installation of surveillance IP Camera for online stack and ambient air quality check in highly polluting large scale industries and mines to provide regular alerts. So far, surveillance IP Cameras have been installed in 80 industries
- Authorization has been given to 171 hazardous waste generating units for the collection, storage, treatment, and disposal of hazardous wastes. Thirty-four actual users in Odisha and 19 actual users outside Odisha have been authorized during 2021-22 for the utilization of hazardous wastes.
- Conducted 104 public hearings for major industrial, mining and development project requiring environmental clearance.
- Granted authorization to 303 Bedded Health Care Facilities (HCF) under the provisions of the Bio-Medical Waste Management Rules, 2016, for proper management, segregation, handling, treatment, and disposal of biomedical wastes.
- Refusal of authorization to 01 unit due to improper management of biomedical wastes
- Five plastic product manufacturing units registered with the Board
- Authorization of 01 E-waste collection-cum-dismantling unit
- Monitoring ground-water quality at 91 stations across 30 districts using 32 water quality parameters.
- Analysis of 3470 water samples under MV Sagar and NWMP

2.8. Conclusion

2.8.1. Development of agriculture and allied sector is critical for the development of state. A majority of the rural workforce in Odisha (about 55 per cent) are engaged in agricultural activities. In terms of contribution to state output, agriculture and allied sector in Odisha accounted for 22.5 per cent of Gross State Value Added (GSVA) in 2022-23(AE) and 22.9 per cent in 2021-22 (RE). The share of agriculture and allied sectors in GSVA has increased from 17.9 per cent in 2011-12 to 22.5 per cent in 2022-23. This could be because of less than expected growth rate of services sector in the state.

2.8.2. In FY 2022-23, agriculture and allied sector GVA is estimated to grow at 6.0 per cent (AE) against 2.4 per cent (RE) in 2021-22. In 2022-23, the agriculture and allied sector in Odisha grew at a much higher rate (6.0 per cent) than India (3.5 per cent). All the sub-sectors of agriculture and the allied sector registered strong growth rates except the livestock sector which grew at just 2.4 per cent. Fishery sector grew at 13.3 per cent and forestry sub-sector registered a growth rate of 5.5 per cent in 2022-23 over the previous year. Crop sub-sector, the main sub-sector within agriculture, grew at 5.4 per cent in the same period.

2.8.3. There has been significant increase in the production and productivity of some crops in the state. Still, the productivity level of major crops in Odisha is less than average at the national level. Promoting crop diversification with suitable incentives, raising cropping intensity and production, the productivity of major crops and enhancing per capita availability of animal husbandry and fishery products should continue to be the focus.

2.8.4. Concerted efforts are needed to enhance the net income of farmers. For multiplying the income of agricultural households, several measures have been undertaken which were discussed above under the initiatives sections. These measures can be classified into four categories namely- Improvement of production and productivity; Establishing market linkages; Provision of credit and insurance; Capacity building, and Infrastructure development. Though these initiatives have led to significant improvement, there is still scope for improvement. Some of the measures that can further boost the growth of the sector are discussed below.

2.8.5. For crop subsector, the strategies should be developed to increase the production and productivity of some important crops in line with average national-level productivity. Measures such as cropping of rice fallow area, adoption, and popularisation of new high-yielding varieties, supply of good quality planting material, development of export-centric clusters with end-to-end value chain infrastructure, acid soil management, increasing seed replacement rate (SRR) in paddy and non-paddy crops, integrated pest and disease control mechanism coupled with e-pest surveillance etc., can be adopted. Additional focus can be leveraged on reducing post-harvest losses by improving agro-processing sectors and enabling infrastructure development of the marketing hubs.

2.8.6. For livestock sector to improve per-animal milk production, efforts should be made to improve the genetic potential of cattle and buffaloes. Dairying through cooperatives needs to be encouraged in a mission mode by creating infrastructure for cattle feed manufacturing, milk procurement, processing, and marketing. Further, the adoption of good fodder crops is necessary to meet the nutritional requirements of the state. Backyard poultry may also been encouraged in mission mode to cater to local markets.

2.8.7. For fishery sector, the water area for pisciculture needs to be expanded horizontally. Further, production and productivity from ponds should be improved, production costs need to be reduced through the adoption of good agricultural practices in aquaculture and enabling diversification towards the new high value fish and shrimp species. Increasing fish trade by enabling access to a direct market and improving the value chain through cooperatives and FPOs (including FPCs) need to be considered. Self-sufficiency in fish seed production should be encouraged by adopting advanced technologies.

2.8.8. For forestry sector, steps need to be taken to increase the forest cover by undertaking afforestation measures. Further, the density of forests can be increased by assisted natural regeneration (ANR). Mangrove cover need to be

conserved and the efforts need to be undertaken to safeguard coastal biodiversity. Soil and water conservation measures in watersheds should be undertaken to control runoff, conserve water and harvest (excess) water.

2.8.9. To overcome the post-harvest losses (currently constitutes about 25-35 per cent of the agricultural produce), improved post-harvest technology and practices, value addition and the timely marketing of produce are critical. The major cause of high loss is the lack of forward linkages. The agro-processing sector needs to be given greater emphasis in line with state agriculture policy. Infrastructure development of marketing hubs with sorter, grader, cold storages, cold chains, information kiosks etc., needs to be taken up on a priority basis. An effective post-harvest management and improving supply chain alone may significantly increase return on investment (ROI) in agriculture.

CHAPTER 3

INDUSTRY



Odisha's economic performance is driven by a strong industrial base. Industry is the anchor sector which propels the performance of primary and tertiary sector. There is a strong backward and forward linkage between Industry and other sectors. Since 2012-13, average annual growth of the industrial sector is 6.6 per cent as against overall GSDP growth of 5.7 per cent. Other major sectors, i.e., services sector and agriculture sector have grown at 5.7 per cent and 4.8 per cent respectively. The average industrial growth is registered in the State is higher than India's average growth of 4.8 per cent during the same period. Odisha's successively higher industrial growth in comparison to India is made possible through setting up a progressive ecosystem governing the Industry Sector. The State government has undertaken multiple initiatives to make Odisha a destination of choice for investors.

As per advance estimates of 2022-23, Industrial sector of Odisha performed much better than India by growing at six per cent compared to All-India growth of around four per cent. Odisha's industrialisation is gaining new pace in every passing year as different types of industries are joining the juggernaut.

The State's 480 kms of long coastline opens up a lot more opportunities for development of maritime industries and it is also supported by three important seaports: Paradip, Gopalpur, and Dhamara. These ports offer a useful platform for overseas trading, which is crucial for the marketing of industrial goods. In addition, industrial diversification remains the cornerstone of the new industrial policy of the State Government. Odisha is drawing investments in a number of industries, including food processing, chemicals, textiles, IT, etc. These industries produce higher value addition along with more employment per unit of capital investment.

It is corroborated by a report by the Asian Development Bank (ADB) that Odisha has one of the lowest costs of doing business in India in terms of Industrial electricity tariffs, industrial land cost, water tariffs, and competitive skilled labour wage rate. The 'GO-SWIFT', a first-of-its-kind single window system that supports industries throughout their investment lifecycle, has been recognized as a best practice by the Government of India.

Odisha has increased its standing in terms of logistics infrastructure and services and is a power-surplus State. These are anticipated to benefit the State in the long run by luring in more investments. The promotion of MSMEs has gained traction through different policies and facilitation measures, including initiatives under the Start-up Policy and the construction of O-Hub, to ensure that the advantages of economic growth continue to trickle down to the local level. To meet MSME demand, the financial sector could develop customized and innovative collateral-free lending products such as cash-flow based lending than asset-based lending. In this lending market, 'Fintech' has emerged as a viable alternative to conventional financial institutions. In order to enhance digital footprint of underserved population and MSMEs, Government of Odisha is running several G2P transfers schemes.

3.1 Introduction

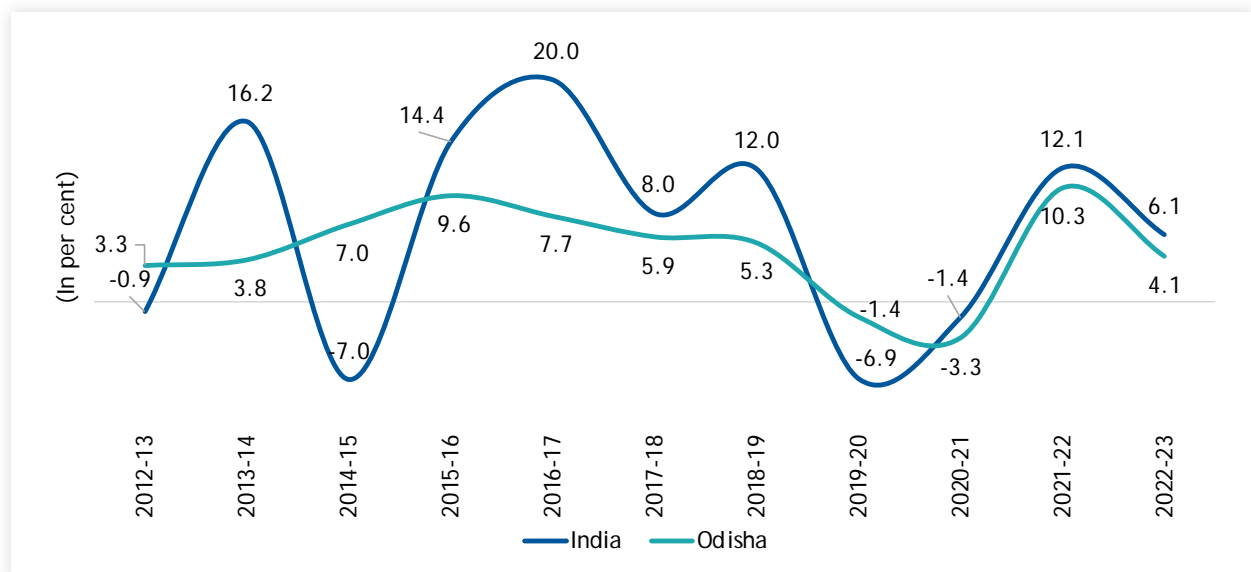
3.1.1 Odisha has become a destination for investors and entrepreneurs from across the globe to create value for all the stakeholders (business, community, working class) by leveraging several advantages that Odisha offers. The State has industry-friendly policies, enabling infrastructure, and ensures swift and agile administration to enriching experience for the industry players. The State has been able to make tremendous progress over the past two decades in terms of industrial growth and has been at the forefront of the country, attracting mega investments across various industrial sub-sectors. The industrial sector has helped the state in deriving benefits through the application of advanced technology, division of labour and scientific management, besides helping to broaden the base of the economy through its various forward and backward linkages. It has also helped in the modernization of agriculture, leading to the lowering of the cost of production and value addition to the products, development of science and technology, proper utilization of natural resources etc. resulting in an improved standard of living for the people of the State.

3.1.2 Odisha has been witnessing consistent industrial growth despite recurrent natural shocks which occur in the State almost every alternate years. Figure 3.1 presents the long-term movement of industrial growth of Odisha in comparison to India from the year 2001-02 to 2022-23. Out of this 22 years, the industrial growth of the State remains significantly higher in 14 different years and in another 2 years, growth rate of industry sector of the State is almost equal to the national level.

3.1.3 As a result of the enabling policy-led investment promotion initiatives of the State, the industrial sector of Odisha bounced back in 2021-22 (with growth of 12.1 per cent) and is expected to grow at 6.05 per cent in 2022-23 as against India level growth of 4.1 per cent. Hence, post Covid-19 recovery is more pronounced in Odisha as compared to India as a whole.

Figure 3.1

Annual Growth of Industry Sector at Constant Prices–Odisha and India, 2012-13 to 2022-23



Source: Directorate of Economics & Statistics (DE&S), GoO, MoSPI, GoI

I. Sectoral performance: A Kaleidoscopic View

Industrial growth has been driven by strong manufacturing sector

3.1.4 Table 3.1 shows the percentage share of various sub-sectors of Industry Sector in 2022-23 and their growth rates from 2001-02 to 2022-23 in the State. As of 2022-23, manufacturing sub-sector has emerged as the largest sub-sector in Industry followed by mining and quarrying, construction, and electricity, gas, water supply & other utility services. Growth in these sub-sectors as well as in Industry sector have been shown for four different periods i.e., 2001-02 to 2010-11, 2011-12 to 2018-19, 2019-20 to 2020-21 and 2021-22 to 2022-23 to analyse the growth trend in Pre-Covid, during Covid & Post-Covid periods. The industry sector experienced a growth rate of 7.7 per cent during the period from 2001-02 to 2022-23. It also registered a growth of 9.6 per cent in 2001-02 to 2010-11 as against 8.1 per cent during the period 2011-12 to 2018-19. Almost the same pattern is observed in case of the other sub sectors of industry i.e., the growth rate in the period from 2011-12 to 2018-19 is relatively low in comparison to the growth rates experienced by the sub sectors during the period 2001-02 to 2010-11. The reasons for this low growth may be due to macro level decisions at the country level. It may be stated here that the industry and its three sub sectors i.e., mining and quarrying, manufacturing and construction had experienced contraction averaging at (-) 4.2 per cent, (-) 8.1 per cent, (-)2.8 per cent and (-) 5.3 per cent during Covid-hit years 2019-20 & 2020-21. However, the growth of mining and quarrying sub sector has been more affected in comparison to other two sub sectors.

3.1.5 The mining sub-sector of Odisha was also seriously affected due to Covid pandemic restrictions since extraction totally came to a halt which may be the main factor pulling down the growth rate of mining and quarrying sub-sector. Apart from the impact of Covid pandemic, the slow growth in electricity, gas, drinking water and other utility services may be due to growth in captive power plants. Captive power plants are those industrial units that produce power for their consumption. It has led to a reduction in industrial demand for power from distribution utilities. Except Electricity, Gas, Water Supply & other utility services, all sub-sectors of industry contracted during the Covid pandemic period but with different proportions.

Table 3.1 Share in GVA and Growth Rates Industry and its Sub-Sectors –Odisha, 2001-02 to 2022-23 (in per cent)

Sectors/Sub-Sectors	Percentage Share	Growth Rate				
	2022-23 (Current Prices)	2001-02 to 2010-11	2011-12 to 2018-19 (pre-Covid)	2019-20 & 2020-21 (During Covid)	2021-22 & 2022-23 (post-Covid)	2001-02 to 2022-23
Industry	41.29	9.57	8.06	-4.17	9.05	7.73
Mining & Quarrying	10.21	10.80	6.20	-8.08	14.58	7.75
Manufacturing	22.60	13.85	11.56	-2.78	7.25	10.90
Electricity, Gas, Water Supply & Other Utility Services	2.86	9.71	4.37	4.67	7.36	7.09
Construction	5.95	4.46	4.70	-5.32	8.10	3.99

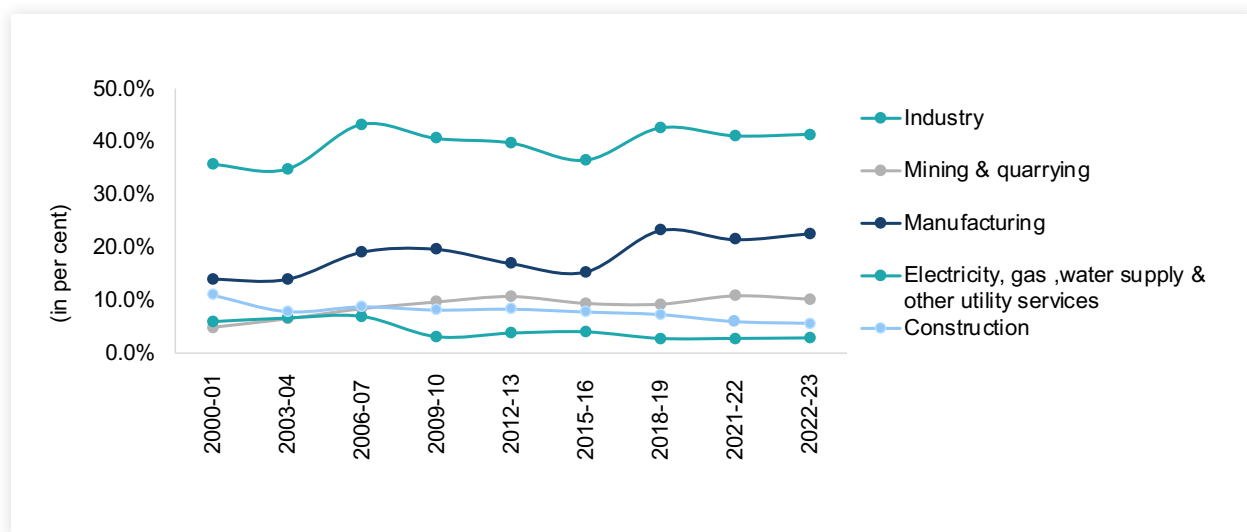
Source: DE&S, GoO

II. Structural shift of sub sectors of Industry

3.1.6 Figure 3.2 presents the movement of percentage share of various subsectors of industry vis-a-vis industry sector from 2000-01 to 2022-23. It may be mentioned here that out of the four sub-sectors of industry sector, the contribution of manufacturing sector is the highest followed by mining and quarrying, construction and electricity & gas, water supply and other utility services, etc. The share of the industry sector to state GSVA in 2000-01 was 35.7 per cent which reached a level of 43.1 per cent in 2006-07 and remained at a level of 42.5 per cent in 2018-19. By and large, the contribution of industries sector varies in the range 35-40 per cent to 40 per cent on an average. The manufacturing sub-sector exhibits an increasing trend from a level of 14 per cent in 2000-01 it reached a level of 23.2 per cent in 2018-19 and marginally declined to 21.5 per cent in 2021-22 with slight fluctuations in between. . The share of the mining and quarrying sub-sector which was 8.37 per cent in 2006-07 reached 10.8 per cent in 2021-22. From 2006-07 onwards the contribution of this sub-sector lies in the range of 8-11 per cent. Barring the year 2000-01 (11 per cent), the contribution of the construction sector has remained at 6 to 9 per cent. Electricity, gas and water supply and other utility services sectors which had a contribution of 6 to 7 per cent during the period 2000-01 to 2006-07 has come down to a bare minimum level of 2.9 per cent in 2022-23, exhibiting a declining trend. It leads to the conclusion that within the industry sector, the manufacturing sector is expanding, and electricity water supply and other utility services is contracting whereas the other two sectors namely mining and quarrying sub-sector and construction sub-sector are approximately remaining static with slight inter-year fluctuations.

Figure 3.2

Share of Industry and its Sub-Sectors in GSVA at Current Prices – Odisha, 2000-01 to 2022-23



Source: DE&S, GoO

3.1.7 Table 3.2 below presents the percentage distribution of sub-sectors of industry sector from 2000-01 to 2022-23. The manufacturing sub-sector had a share of 39 per cent in the industry sector in 2000-01 which has risen to 54.7 per cent in 2022-23 (AE). The share of electricity, gas, water supply and other utility services which contributed 16.6 per cent of total industrial output in 2000-01 is reduced to 6.9 per cent in 2022-23. Barring the year 2000-2001, the contribution of mining and quarrying sub sector within industry is about 19-27 per cent. Similarly, the share of construction sub-sector in industry lies in the range of 14-23 per cent during the period barring the year 2000-01.

Table 3.2 Shares of Sub-sectors within Industry Sector – Odisha, 2000-01 to 2022-23 (in per cent)

Year	Manufacturing	Mining & Quar- rying	Electricity, gas, water supply & other utility services	Construction	Industry
2000-01	39.02	13.48	16.62	30.88	100
2003-04	39.91	18.51	19.00	22.58	100
2006-07	44.20	19.40	16.09	20.31	100
2009-10	48.45	23.80	7.64	20.11	100
2012-13	42.59	26.96	9.48	20.97	100
2015-16	41.91	25.77	10.97	21.35	100
2018-19	54.56	21.76	6.50	17.16	100
2021-22	54.36	27.41	6.99	15.06	100
2022- 23(AE)	54.73	24.73	6.93	13.61	100

Source: DE&S, GoO

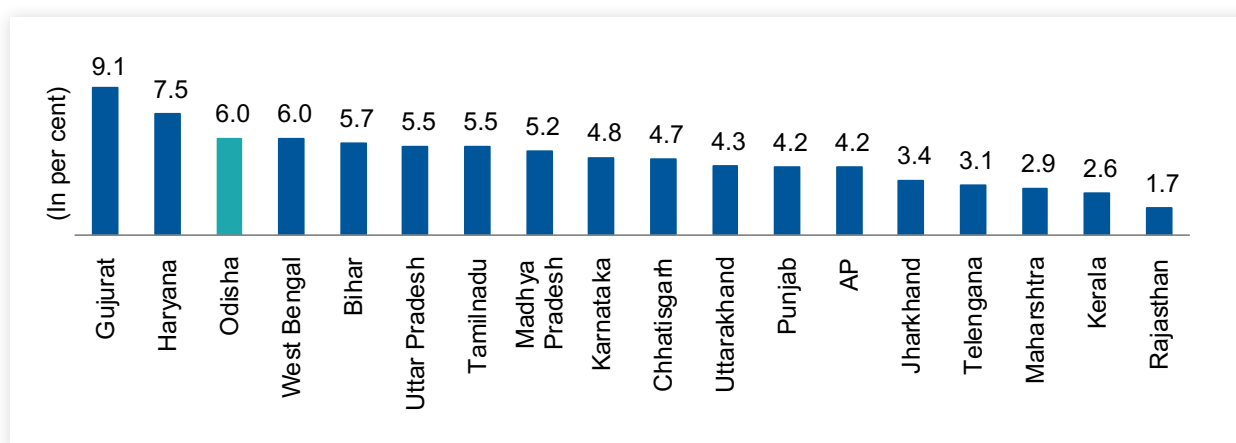
III. Inter-state comparisons of Industrial Growth

3.1.8 Figure 3.3: presents the average annual growth rate of the industry sector of the major states of the country from 2012-13 to 2020-21. It is illuminating to note that Odisha ranks 3rd among the 18 major states of the country registering a growth rate of 6 per cent during the period. Gujarat (9.1 per cent) and Haryana (7.5 per cent) have higher industrial growth in comparison to Odisha. However, other major states like Tamil Nadu, West Bengal, Karnataka, Maharashtra, Andhra Pradesh and Telangana are lagging in industrial growth relative to Odisha.

Odisha ranks #3 among the major States of India in average annual growth rate of industry sector from 2012-13 to 2020-21

Figure 3.3

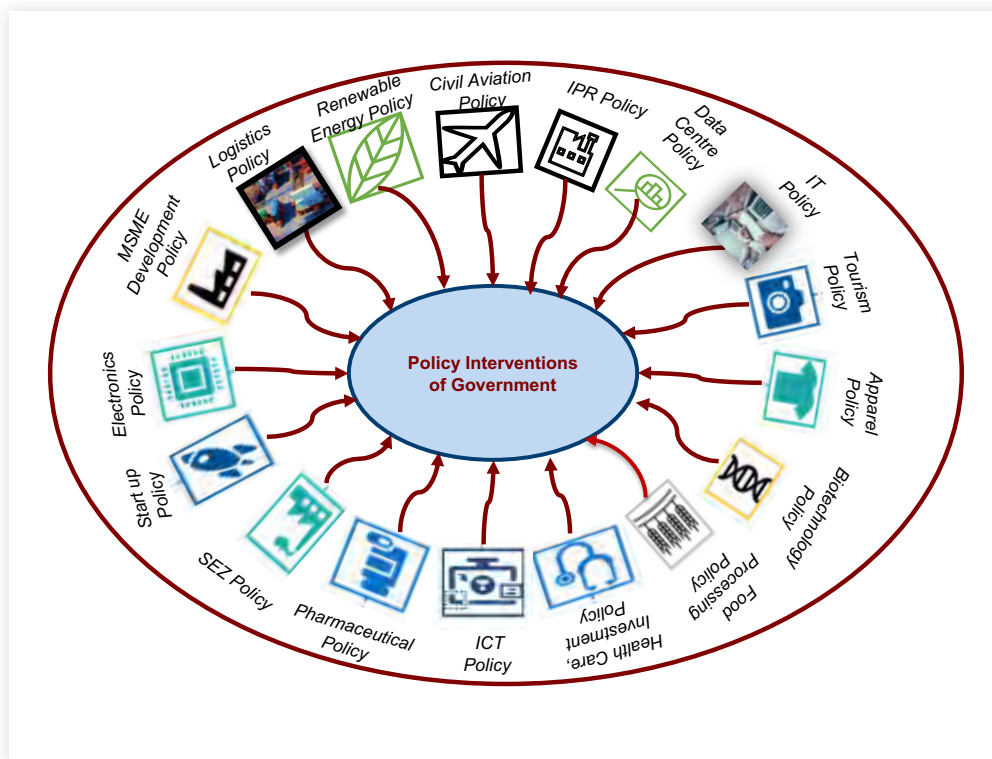
Average Growth Rate in Industrial GSVa at Constant Prices for Major States between 2012-13 to 2020-21



Source: Ministry of Statistics and Programme Implementation, GoI

3.2 Key Initiatives to promote Industrialisation in Odisha

3.2.1 Odisha, the 'Land of New Opportunities', with a clear focus on transforming all sectors, has ambitiously set its eye on becoming a trillion-dollar economy and emerge as the gateway to the East and South-East Asia. Over the years, the State government has taken several new initiatives to place Odisha in the league of major industrialised states in the country.



Robust industrial & sector specific policy framework supported by best-in-class incentives aims to put Odisha in the league of major industrialised states in the country.

The State has crafted the most progressive policies in the country such as – IPR Policy, Data Centre Policy, IT policy, Tourism Policy, Apparel Policy, Biotechnology Policy, Food processing Policy, Healthcare Investment Policy, ICT Policy, Pharmaceutical Policy, SEZ Policy, Start-up Policy, MSME development Policy, Logistics Policy, Renewable Policy, Civil Aviation Policy etc.

I. New Policy Initiatives

A. Odisha Industrial Policy Resolution, 2022

3.2.2 The Industrial Policy Resolution, 2015 put in place a robust policy framework for industrial promotion and facilitation in the state. It provided a major fillip to industrial development in the state, placing Odisha in the league of major industrialised states in the country. It also enabled development of a robust industrial ecosystem focused on broad basing of industry and rapid development of industrial infrastructure. The policy also created employment avenues, enabling overall socio-economic development of the State.

3.1.1 The Industrial Policy Resolution (IPR), 2022, launched on 1st December 2022, aims to reinforce and further accelerate the pace created in IPR-2015. The new policy has been formulated following an elaborate iterative process wherein the concerned stakeholders; including the National and State-level Industry Associations, Sector Specific Associations, Chamber of Commerce and Industry, Industry Representatives, Experts and Government Departments; have been consulted and their suggestions have been duly considered. The IPR 2022 aims to create a conducive and consistent business environment to drive sustainable industrial growth in Odisha.

3.2.4 It has provisions to enable timely approval of industrial projects, online single window clearances, dedicated

investor facilitation and best-in-class incentives for identified priority and thrust sectors, robust industrial infrastructure development, sustainable industrial practices, skill development and promotion of Micro, Small & Medium enterprises.

B. Odisha Apparel & Technical Textiles Policy, 2022

3.2.5 The Odisha Apparel & Technical Textiles Policy, 2022 focuses on harnessing the State's potential to develop a strong Textile Sector including Apparel & Technical Textiles and boost employment and economic growth in the state. Some of the investor attraction initiatives include incentives like Capital Investment Subsidy, Employment Cost Subsidy, and Market Development Initiative. This policy is a natural outcome of the pro-people and pro-industry outlook of the State Government.

3.2.6 The National Institute of Fashion Technology, Bhubaneswar is offering fashion education, research, and training facility in the field of fashion technology. Further the Apparel Training Design Centre in Bhubaneswar, together with its five satellite locations in various regions of the State is offering skill-development training programs to the unemployed youth for better employment prospects.

C. Odisha Logistics Policy, 2022

3.2.7 The Odisha Logistics Policy, 2022 aims to map, develop and augment logistics facilities across the state, improve efficiency of supply chain, decarbonise logistics sector and facilitate private sector investment, ultimately generating employment opportunities. This policy will lead to the creation of an integrated logistics system to enhance competitiveness, operational efficiency and sustainability, besides strengthening Odisha's position as a preferred destination for trade and commerce in the country.

D. Odisha Export Promotion Policy, 2022

3.2.8 The Export Promotion Policy, 2022 proposes to take Odisha to the league of top-five exporting states in the country and achieve an export target of INR 3.5 lakh crore by 2026-27 through diversification of its export basket by facilitating value addition. The policy focuses on improving the overall ease of exporting from the state through measures like single window for information dissemination, online grievance redressal mechanism, branding of Made in Odisha products in national and international platforms by incentivising participation of exporters in trade fairs and exhibitions.

E. Odisha Registered Vehicle Scrapping Facility Policy, 2022

3.2.9 The Odisha Registered Vehicle Scrapping Facility Policy, 2022 will reduce vehicular air pollution and boost manufacturing in the automobile sector. As per provisions, all vehicles that have completed 15 years will be scrapped and the vehicle owners will receive an incentive to buy new vehicles

F. Odisha Civil Aviation Policy, 2022

3.2.10 The Odisha Civil Aviation Policy, 2022 aims to further improve air connectivity and create a more suitable environment for business. It will unlock the untapped potential in this sector and create jobs.

G. Odisha Tourism Policy, 2022

3.2.11 The Odisha Tourism Policy, 2022 focuses to promote sustainable and responsible tourism and accelerated development of the tourism and hospitality sector by making it attractive for investors.

H. Odisha Data Centre Policy, 2022

3.2.12 The Odisha Data Centre Policy-2022 aims to transform Odisha into a significant “Data Centre Hub” by 2025. In order to take advantage of the growth opportunities in the IT/ITeS/ESDM sector and ultimately establish itself as the nation’s “Data Centre Hub,” the state government contemplates measures to create a favourable environment for accelerated investment in Data Centre projects through strategic initiatives, concessions, and facilitations.

I. Odisha IT Policy, 2022

3.2.13 The goal of the Odisha IT Policy, 2022 is to make Odisha a top investment destination for information technology in the country and to place it prominently on the world map as a preferred destination for IT outsourcing, propelling inclusive growth and employment opportunities. The policy aims to usher in balanced socio-economic growth of Odisha with the suitable deployment of technology for seamless electronic service delivery, ensure the acquisition of a higher degree of employability skills for its people, provide a strong foundation to Start-ups and Investors and promote innovation & entrepreneurship in the state. Currently, several IT majors like Infosys, TCS, Wipro, Tech Mahindra & Mindtree Capgemini, Quest Global & Semtech Corporation, Black Knight Inc., and more than 100 other IT companies & tech Start-ups have made it a vibrant destination.

J. Timely amendment of Mineral Laws

3.2.14 The Mineral Laws (Amendment) Act, 2020 was enacted to amend the Coal Mines (Special Provisions) Act, 2015 [CMSP Act] and the Mines and Minerals (Development and Regulation) Act, 1957 [MMDR Act]. The notable features of the amendments are: -

- I. Allocation of coal blocks for composite prospecting license-cum-mining lease which will help in increasing the inventory of coal. The repetitive provision requiring approval of the Central Government in cases where the allocation or reservation of coal/lignite block has been made by the Central Government has been done away with.
- II. Provided flexibility to the Central Government in deciding the end use of Schedule II and III coal mines under the CMSP Act. Companies which do not possess any prior coal mining experience in India can now participate in the auction of coal blocks.
- III. A new methodology for auction of coal and lignite mines/blocks for sale of coal/lignite on revenue sharing basis under the CMSP Act and the MMDR Act was approved by CCEA in May 2020. Salient features of the methodology are-
 - Bidders would be required to bid for a percentage share of revenue which would be payable to the State Government.
 - Applicable to fully explored as well as partially explored coal blocks under the CMSP Act and MMDR Act. The upfront amount is based on the value of estimated geological reserves.
 - Successful bidders shall be provided incentives for early production and gasification or liquefaction of coal. The exploitation of Coal Bed Methane (CBM) is also allowed.
 - There shall be no restriction on the sale and/or utilization of coal from the coal mine.
 - Provides for relinquishment of coal block by the successful bidder of the partially explored coal mine.
 - Provides for relinquishment of coal block by the successful bidder of the partially explored coal mine.

II. Initiatives for Broad Basing the Industrial Sector

A. Diversification/ Broad basing of industries

3.2.15 The Government of Odisha has taken concerted efforts to attract investments across a diverse set of sectors, including textiles and apparel, food processing including seafood, electronics and IT, chemicals and petrochemicals, plastics, tourism, etc. because of which the State has become the “destination of choice” for firms in the metal and mining sector. The ultimate goal is to transform Odisha into a manufacturing powerhouse along India’s eastern coast.

B. Support to Ancillary and Downstream Industries

3.2.16 The upstream ecosystem for downstream and ancillary industries is well developed in Odisha with abundant availability of mineral resources and mother plants in proximity to the mineral rich regions. The State is working to increase value addition in Kalinganagar for steel downstream and Angul and Jharsuguda for downstream of Aluminium. Moreover, Paradip and Dhamara are also developed as chemical and petrochemical hubs. Downstream industrial parks are also being developed at other locations like Jharsuguda, Sambalpur, Rayagada, Gopalpur and Mayurbhanj.

C. Development of enabling infrastructure

3.2.17 To support the industries in their growth, the State has made major investments in the development and modernization of industrial parks, regions, and clusters. Dedicated sectoral manufacturing zones like Aluminium Park, Mega Food Park, Sea Food Park, Electronics Manufacturing Cluster, PCPIR, Plastics Park, Textile Park, etc. have been built with the necessary infrastructure and supply of water and electrical connections at the factory doorstep.

3.2.18 The state also has an extensive network of roads and railways that provide for the efficient movement of goods throughout the State and to the hinterlands of the country. The Biju Expressway, that connects North-Western Odisha to Southern Odisha could be leveraged for Expressway Economic Corridor.

3.2.19 Further, Odisha has the advantage of being strategically located with a 480 kms long coastline. Currently, the State has 3 operational large ports at Paradip, Dhamra, and Gopalpur

D. Effective investor facilitation through GO-SWIFT 2.0

3.2.20 The State has developed online single window portal, GO SWIFT i.e., Government of Odisha – Single Window for Investor Facilitation and Tracking, to transform the B2G interface through the entire investment cycle of project. The portal is a ‘One-Stop Solution’ for information on clearances required, land banks available, application, payment, tracking & approval of G2B services, risk based synchronised inspection by regulatory agencies, incentive administration, post land allotment services, grievance redressal, and dovetailing of CSR activities with the developmental goals of the State. GO SWIFT is also integrated with the National Single Window System (NSWS). The newly revamped GO-SWIFT 2.0 provides enhanced functionality and makes the entire process even more hassle-free, responsive, and transparent.

E. Establishment of Industry and DIPA Care Mechanism

3.2.21 The State of Odisha, to provide swift clearances and resolution of grievances faced by the industries, has introduced the “Industry Care” mechanism which ensures that all grievances/issues raised by industries about setting-up and /or operating in the State are resolved in a prompt manner. A team of senior Government officials under the chairmanship of Principal Advisor to Honourable Chief Minister of Odisha are entrusted with the task of

regularly visiting districts and meet with industry representatives to understand urgent issues which need to be resolved and provide after care service through fast-forward processing.

3.2.22 Moreover, to streamline investment facilitation at the district level, the State Government has decided to set up facilitation cells at the district level, called as 'District Investment Promotion Agency (DIPA)', which shall function under the guidance of the respective district collectors. As of now, DIPA has been set up and operational in 15 industrial districts i.e., Angul, Balasore, Balangir, Bhadrak, Cuttack, Ganjam, Jajpur, Keonjhar, Khurda, Jagatsinghpur, Jharsuguda, Koraput, Rayagada, Sambalpur & Sundargarh. The remaining 15 districts will be covered by DIPA by May 2023. One of the key roles of DIPA is to ensure the timely resolution of issues raised by industries and provide aftercare services.

District Investment Promotion Agency (DIPA) will promote investment facilitation in every district of the state.

F. Ease of Doing Business (EoDB)

3.2.23 The State has undertaken several measures to develop an industry-friendly industrial ecosystem. GO SWIFT – the single window online facilitation portal of the State, has significantly improved the Ease of Doing Business in Odisha. Owing to its focused approach towards reforming the business centric services, Odisha has been classified as an 'Achiever' State in the Ease of Doing Business ranking 2020 by Government of India.

III. Best-In-Class Incentives and Packages

A. Better-than-the-best incentive packages to entrepreneurs

3.2.24 For investments in priority and thrust sectors, the Government of Odisha is offering competitive capital investment subsidies, employment-based subsidies, SGST subsidies, electricity price reimbursements, etc. The Government of Odisha has also introduced a special incentive package for massive investments in new-age and strategic industries like EV, Green Energy Equipment, Defence and Aerospace, etc to encourage investments in the sectors. These are designed to be comparable to incentives offered by State Governments around the country. Further, the policy also incentivizes investments in western Odisha, around the Biju Economic Corridors and industries setting up capital intensive units, providing large scale employment. In addition to the standard IPR incentives, the concerned departments are also offering additional incentives under sectoral policies, making the incentive more inducive for quick realisation of the dreams of the entrepreneurs.

B. Boosting Innovation through Start-up Odisha

3.2.25 Start-up Odisha is a flagship initiative of the Government of Odisha under the MSME Department. The Government has created a conducive environment for start-ups, empowered them to grow through innovation and design, created a world class scientific ecosystem and enabled the youth of the state to pursue their dreams. The Odisha Start-up Policy-2016 aimed at creating a top-tier "Start-up Hub" in Odisha to create an enabling environment and supportive eco-system that facilitates at least 1,000 start-ups and places the State among the top three start-up hubs in the country. The State Government has also notified the opening of the Odisha Start-up Hub (O-Hub) in Bhubaneswar, which would offer state-based start-ups a top-notch and world-class incubation and co-working facility. As per the latest figures, 1,468 start-ups have already been established in Odisha.

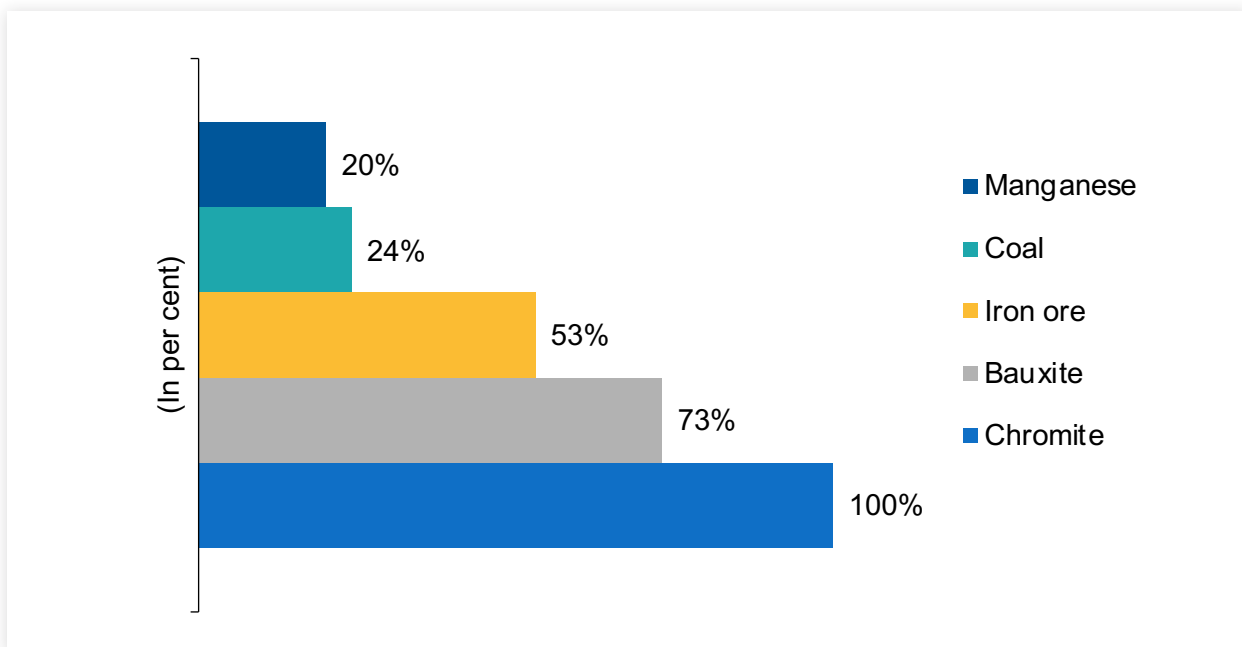
3.3 Mining and Quarrying Activities in the State

3.3.1 Minerals are essential raw materials for infrastructure, capital goods, and also the basic ingredients for core industries. Odisha is a mineral-rich state occupying a special position in the mineral map of India and is endowed with large varieties of metallic and non-metallic minerals, which include chromite, bauxite, graphite, iron ore to the state GSVA. This mining sub-sector contributes multi-dimensionally to the economy of the State. Therefore, the extraction and management of minerals must be integrated into the overall strategy of the state’s economic development. Further, value addition in mineral activities is also essential to ensure better economic dividends to the State economy and provide additional employment to the labour force of the State.

3.3.2 The mining and quarrying sub-sector is a major driver in the state economy after manufacturing with a share of 12 per cent to GSVA in 2011-12 which reached a level of 10.8 per cent in 2021-22 exhibiting a slight declining trend over the period. The sub-sector is expected to contribute 10.2 per cent to the state GSVA as per the advance estimates released by the State Government for the year 2022-23 at current prices. As per the Periodic Labour Force Survey Report, 2020-21, 0.5 per cent of the workforce of Odisha is engaged in this sub-sector. This subsector generates about 0.5 lakh direct employment in mineral-based industries.

3.3.3 Odisha also contributes a remarkable share of mineral production (excluding fuel oil and atomic minerals) to national output. In the supply of major minerals for meeting national needs, Odisha was a leading state during 2021-22. Figure 3.4 shows the share of production of a few major minerals of Odisha at the National level.

Figure 3.4 Share in Major Mineral Production in India –Odisha, 2021-22



Source: IBM, Nagpur, Govt. of India

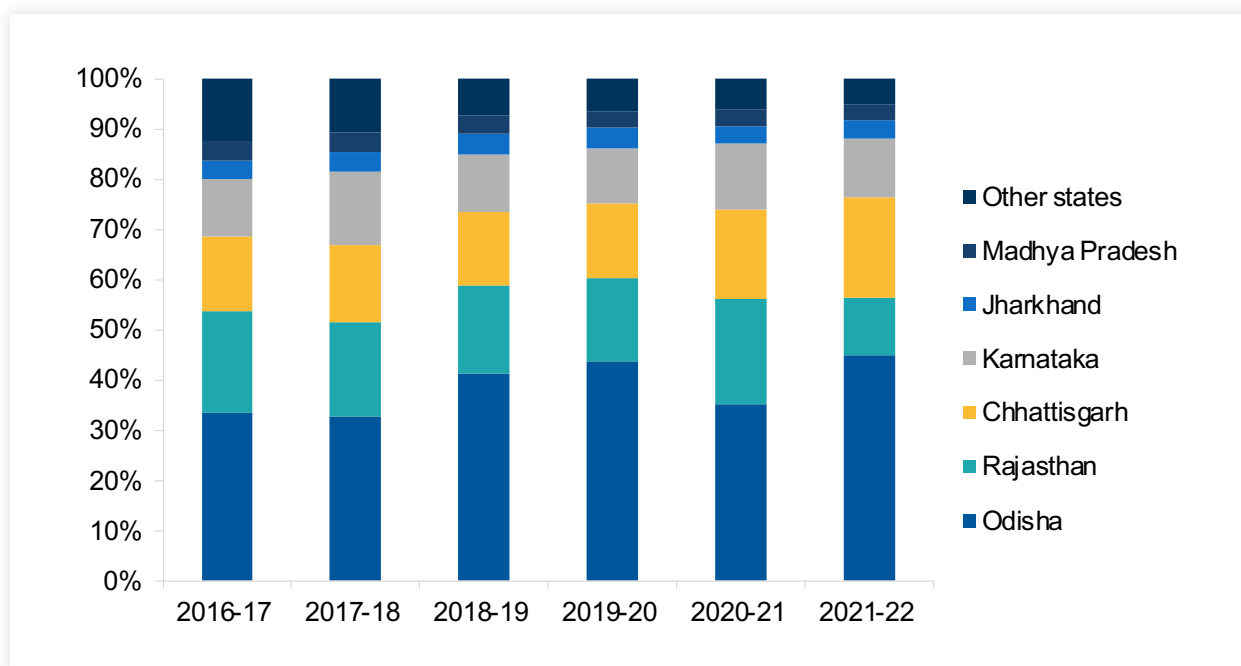
3.3.4 In production of minerals, Odisha ranked -1 with respect to Chromite, Bauxite, Iron Ore & Coal in 2021-22 while it ranked third in Manganese production. This precipitates the importance of Odisha’s contribution in major mineral production at the national level.

I. Mineral Production across the States

3.3.5 In terms of the value of mineral production among the major producing states like Madhya Pradesh, Jharkhand, Karnataka, Chhattisgarh, and Rajasthan, it is noteworthy to mention that Odisha occupies a dominant position during the period from 2016-17 to 2021-22. (Figure 3.5)

Figure 3.5

Share of Selected States in the Value of Mineral Production in India, 2016-17 to 2021-22



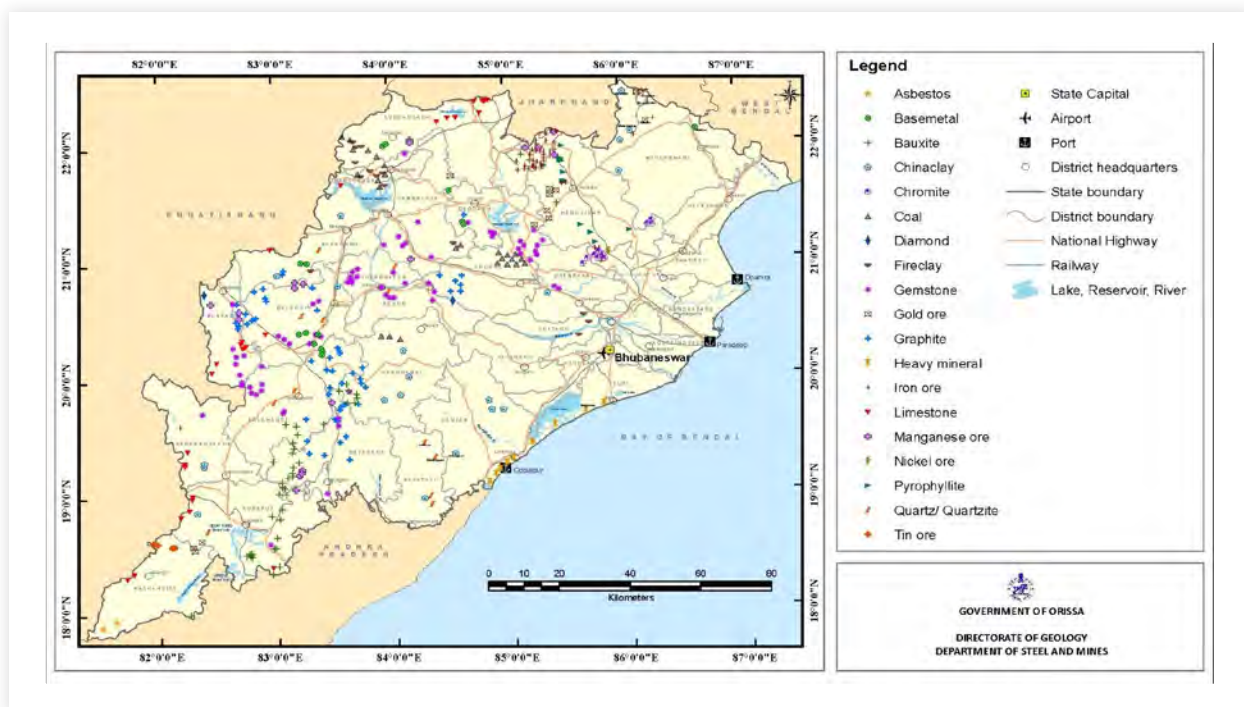
Note: Data excludes fuel oil and atomic minerals

Source: Based on data from Monthly Statistics of Mineral production, IBM Nagpur

II. Resources in Odisha

3.3.6 Odisha occupies a prominent place in the country as a mineral-rich State. Abundant reserves of high-grade iron ore, Bauxite, Chromite, and Manganese ore along with other minerals like Coal, Limestone Dolomite, Platinum Group Metals (PGM), Nickel, Vanadium, Graphite Gemstone, Diamond, Dimension stone and Decorative stones are extensively available in the state. It is worth mentioning that reserves of gold and silver are also found in the Adash block of Deogarh district as per the survey made by GSI, Government of India. It is illuminating to note that as per the recent survey by Oil India, reserves of natural gas and petroleum were found in Kushapur and Chitra Gram Panchayats of Gop block of Puri district and it is learnt that the exploration plan will be executed during 2022-23. The State accounts for India's 100 per cent chromite production, 73 per cent bauxite, 24 per cent coal, 53 per cent iron ore, and 20 per cent of manganese as per the latest report of the Indian Bureau of Mines (Figure 3.4). The mineral resources of the state are mainly concentrated in the southern and western districts of the State. Iron ore is concentrated in districts like Keonjhar, Sundargarh, Mayurbhanj and Jajpur whereas coal which is another chief mineral of the state is concentrated in districts like Jharsuguda, Anugul, Dhenkanal, Gajapati and Sundargarh districts. The chromite mines belong to Keonjhar, Jajpur, Dhenkanal and Balasore districts and bauxite mines are concentrated in Kalahandi, Koraput and Bolangir and districts.

Figure 3.6 Mineral Map –Odisha, 2011

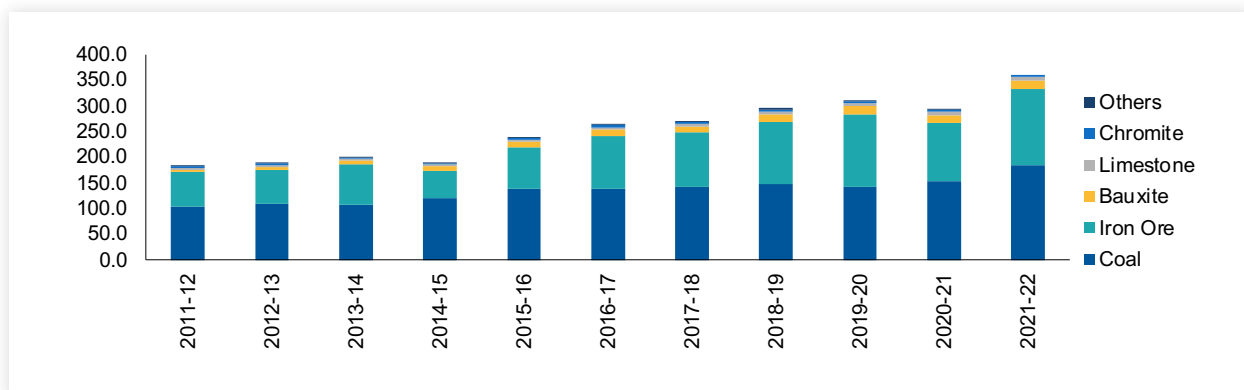


Source: Directorate of Geology, Department of Steel and Mines

III. Mineral Production

3.3.7 Figure 3.7 provides a picture relating to mineral production in Odisha from 2011-12 to 2021-22. It is important to note that out of the total mineral production in Odisha, coal and iron ore taken together constitute about 90 per cent of the total mineral production. The mineral production in the State almost followed an increasing trend from the year 2011-12 to 2021-22 except 2014-15 and the covid year (2020-21) when the mineral production slightly declined. In the year, 2021-22 the mineral production in the State increased by 22 per cent over the last year.

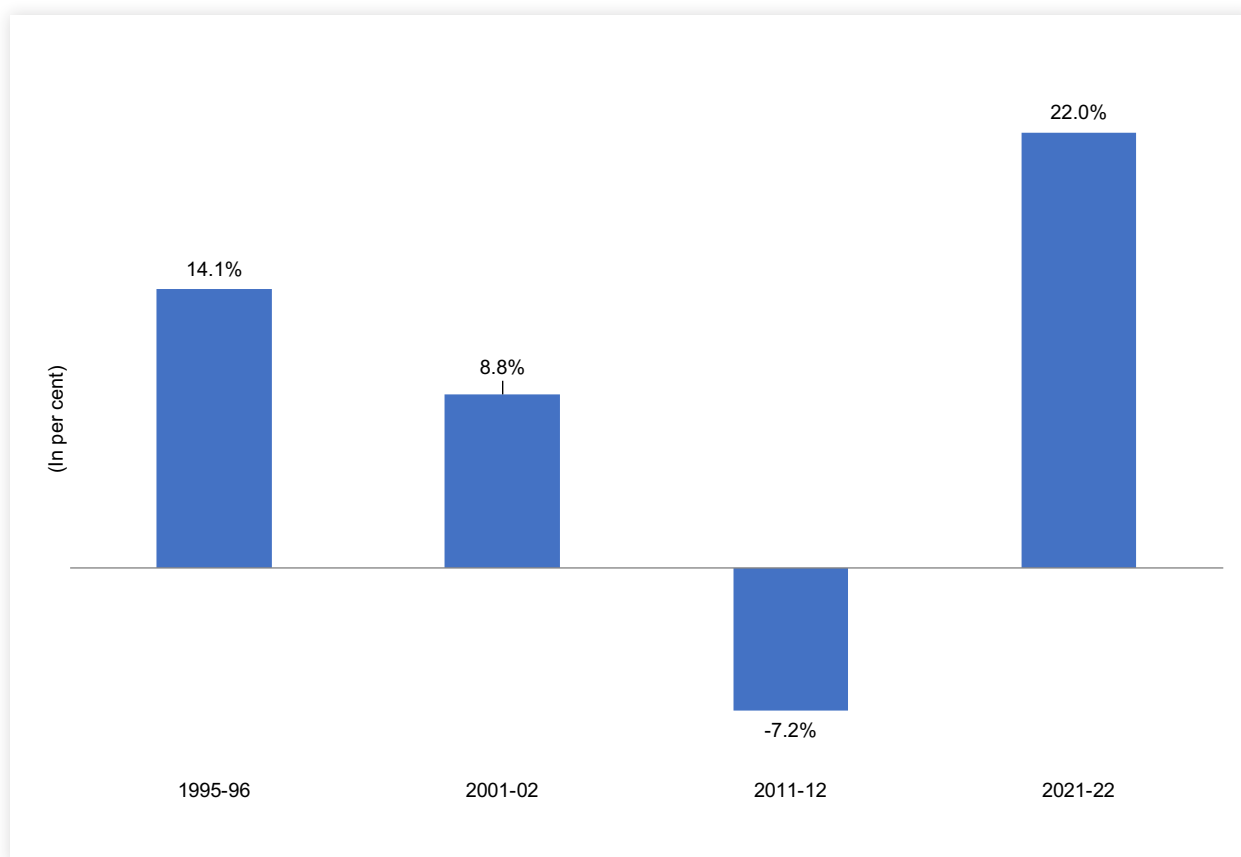
Figure 3.7 Mineral Production– Odisha, 2011-12 to 2021-22 (in Million Tonnes)



Source: Department of Steel & Mines, Odisha

3.3.8 The mineral production witnessed a growth rate of 14 per cent in 1995-96 and thereafter exhibited down swings and reached a level of 9 per cent in 2001-02. The growth rate moved in a distinct declining trend thereafter and recorded a (-) 7 per cent decline in 2011-12. Thereafter, the growth rate increased steadily to reach its peak at 22 per cent in 2021-22. However, average growth rate in mineral production is about 10 per cent from 1994-95 to 2010-11 and it remained at a level of 6.1 per cent from the year 2011-12 to 2021-22. (Figure 3.8)

Figure 3.8 Growth of Mineral Production- Odisha, 1995-96 to 2021-22



Source: Department of Steel & Mines, Odisha

IV. Major Minerals

3.3.9 Out of the total mineral production in Odisha during 2021-22, coal itself constitutes more than 50 per cent of the total mineral production and about 52 per cent of this coal production is shared by the Angul district itself followed by Sundargarh (24 per cent), Jharsuguda (21 per cent) and Sambalpur (3 per cent). The entire manganese ore production is mostly shared by the Jajpur district (83 per cent). Iron ore extracted during 2021-22 constitutes about 41 per cent of the total mineral production and it is extracted from districts like Keonjhar (61.93 per cent) followed by Sundargarh (33.81 per cent), Jajpur (2.88 per cent) and Mayurbhanj (1.38 per cent). Bauxite ore constitutes roughly 4.5 per cent of the state's mineral production, of which 60 per cent is shared by the Koraput district and another 40 per cent by the Rayagada district. Though Odisha has a variety of mineral reserves, it is the chief producer of minerals like iron ore, chromite, coal, bauxite, limestone, graphite, and manganese ore, etc. (Table 3.3)

Table 3.3

**Production and Value of Major Minerals- Odisha, 2017-18 to 2021-22
(Production in lakh tonnes, Value in INR crore)**

Minerals/ Ores	2017-18		2018-19		2019-20		2020-21		2021-22	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
Iron ore	1049.8	19947.0	1209.7	25863.6	1424.6	25133.8	1126.0	25038.0	1473.64	64339.10
Chromite	36.5	3647.9	40.7	3934.3	39.2	1179.8	27.9	1102.0	37.73	4765.40
Coal	1433.3	12899.0	1453.9	15992.9	1428.0	NA	1539.4	NA	1849.71	14295.61
Bauxite	113.7	1085.5	154.2	1002.1	154.8	185.6	156.8	338.0	164.49	1936.03
Limestone	51.1	209.6	50.6	173.5	56.5	0.5	71.7	0.4	70.60	286.64
Graphite	0.2	1.0	0.6	17.5	0.7	1.8	0.2	3.6	1.53	265.08
Manganese ore	5.4	647.8	4.8	865.4	5.4	192.1	5.0	94.1	5.14	332.06

Source: Directorate of Mines, Odisha

V. Minor Minerals

3.3.10 Minor minerals include building stones, gravel, ordinary clay, ordinary sand other than sands used for prescribed purposes, and any other mineral notified in the official Gazette by the Government of India. The State Government has now promulgated the Odisha Minor Mineral Concession Rules 2016 which came into force on 15.12.2016. Accordingly in Odisha, the following minerals have been notified as minor minerals, namely: 1. Quartzite 2. Pyrophyllite 3. China clay 4. Dolomite 5. Soapstone 6. Fire clay 7. Silica sand 8. Sandstone.

3.3.11 The total value of mineral production in 2021-22 is estimated to be INR 87,086.00 crore, of which the contribution of mineral sand and dolomite is noteworthy at INR 742.6 crore and INR 107.9 crore, respectively.

VI. Production of Iron and Steel

3.3.12 Odisha has one-third of the country's total iron ore reserves, making it one of the most popular investment destinations for domestic and international iron and steel investors. It is also the largest producer of steel and stainless steel in the country. For promoting investment in the Iron and Steel sector, the State Government has signed MoUs with 45 steel plants with an approved production capacity of 134 MTPA. Out of these 35 steel plants and 1 pellet plant are in partial/ full production. At present, the installed capacity of these MoU signed steel plants is 25.3 MTPA registering an increase of about 20 per cent over the year 2016-17. Besides, 49 steel plants with an approved capacity of 51 MTPA are coming up through the non-MoU route of which 16 plants with an installed capacity of 7.9 MTPA are already in production. Taken together, there are 51 steel plants in Odisha now (MoU 35 and NON-MoU 16) with a total installed capacity of around 33.2 MTPA in operation which constitutes almost one-fourth of the country's total installed capacity. In addition, a large number of sponge iron units and pellet plants

have also been established by utilizing the vast iron resources in the State for the value addition of products, which is contributing to the domestic steel production in the country to a great extent. The detailed picture is furnished in Table 3.4.

Table 3.4

Status of Iron-ore based Industrial units Capacity and Production – Odisha, 2019-20 to 2021-22 (in Million Tonnes)

Company type	MOU/Approved	Installed capacity (MTPA)	Annual production 2019-20	Annual production 2020-21	Annual production 2021-22
Steel					
MoU	134	25.27	15.03	16.10	18.73
Non-MoU	51	7.86	4.62	4.40	4.99
Tata Steel	185	33.13	19.65	20.50	23.72
Sponge Iron	-	16.68	7.67	7.87	9.74
Pellet	46.75	36.65	22.34	22.87	25.77
Total	231.75	86.46	69.31	71.74	99.03

Source: Department of Steel & Mines, Government of Odisha

3.3.13 The Government of Odisha has implemented the policy of long-term linkage (LTL) for the supply of Iron ore, Chrome ore, Bauxite ore and other minerals to the units located in Odisha through Odisha Mining Corporation Limited to make the minerals available to the end user units. The Government has also implemented the pre-emption policy, mandating the holders of standalone Iron ore leases to sell at least 50 per cent of their production to the State-based units. The aforesaid projects have been facilitated as part of the mineral development policy of the State Government to pursue value addition, mass employment generation, and welfare-oriented revenue collection. Special initiatives are put in place by the Government of Odisha in the area of metal manufacturing to develop downstream and ancillary enterprises and accordingly industrial promotion resolution has been suitably modified to attract more such units to the state. Kalinga Nagar is stated to be a manufacturing hub in the State. The National Steel policy 2017 envisages an increase in per capita steel consumption from the present level of 72 kg to 158 kg by 2030. In line with the central policy, the state is aiming to contribute 100 million tons to the national target. Capacity enhancement is under process by scaling up different front-liner steel plants.

VII. Production of Aluminium

3.3.14 Owing to its lightweight, infinitely recyclable properties, high durability, and eco-friendly advantages including lower carbon footprint and power requirement in recycling, Aluminium is gaining wider acceptability, and demand for Aluminium in India as well as in the world is increasing manifold. Further, when the global transport industry is focussing on Aluminium for manufacturing lightweight vehicles with lesser fuel consumption and lower carbon emissions, demand for the material will certainly pick up momentum in the future. The construction

sector has also started betting big on the metal. In view of this, the state of Odisha endowed with big treasures of Bauxite can harness the opportunity to bring radical economic changes to the state. The southwest part of Odisha is rich in Bauxite accounting for 65 per cent of the country's total bauxite deposits and 95 per cent of it is located in four Western and Southern districts, namely Koraput, Kalahandi, Rayagada, and Bolangir which are part of the Eastern Ghats. Growth of the Aluminium industry in the state will provide ample scope for new allied and ancillary sectors, creating employment and adding dividends to the state's GDP. Enabling infrastructure, power, and the railway network, along with the friendly industrial policy of the state government, has made Odisha a preferred destination for many key Aluminium players. A good number of private players are in Odisha and the State has already become the Aluminium capital of the country. Unit-wise Aluminium production in Odisha is given in Table 3.5.

Table 3.5 Aluminium Production–Odisha, 2019 to 2022 (in lakh MT)

Name of the Company	2019	2020	2021	2022
NALCO	4.40	4.18	4.18	4.60
BALCO	5.72	5.63	5.68	5.80
HINDALCO	12.94	13.14	12.28	12.94
VEDANTA Pvt Ltd	13.88	13.43	13.72	16.78
Total	36.94	36.38	35.86	40.12

Source: Monthly Summary Report, Ministry of Mines, March 2022

3.3.15 The total Aluminium production in the state was at a level of 36.9 lakh MT in 2019. It is illuminating to note that the dreadful Covid-19 pandemic could not make a big dent in Aluminium Production, and it remained almost at the level of 36 lakh MTs during both the Covid-19 hit years 2020 and 2021. Soon after the ease of pandemic restrictions, Aluminium production picked up momentum and reached a record level of 40.1 lakh MTs in 2022 registering a growth of about 12 per cent over 2021. All four Aluminium plants of Odisha have exhibited equal levels of resistance to the impact of COVID-19, but after recovery, the highest level of growth of 22.3 per cent was demonstrated by Vedanta Aluminium Limited followed by 10 per cent by NALCO, 5.4 per cent by Hindalco and 2.1 per cent by BALCO in 2022 over the previous year 2021.

VIII. Aluminium Parks

3.3.16 To provide jobs to the unemployed and expanding the scope for downstream and ancillary industries and making the state a preferred destination for Aluminium players, Aluminium Parks have been planned with the initiation of the State Government. An Aluminium Park, the first of its kind in the subcontinent, is already established at Angul over an area of 223.00 acres with an investment of INR 180 crore for the infrastructure of the project in joint collaboration of IDCO and NALCO, Angul with the objective of creation of 15,000 job opportunities. NALCO will provide 50,000 MTs of hot Aluminium to its park at Angul. The process for the second one is already in motion at Jharsuguda over an area of 257.2 acres of land in collaboration with IDCO and VEDANTA Pvt Ltd, which plans to invest INR 2,500 crore with the objective of creating 1 lakh job opportunities. VEDANTA is committed to

provide 3 lakh metric tons of hot Aluminium to the downstream industries of the park. The park will have an industrial state-of-the-art entity, fully equipped with logistics, infrastructure facility, exclusive training centres, park administration, display and trade services facility, etc. By developing world-class infrastructure, the State plans to provide an ideal business ecosystem for the ancillary sectors to flourish.

Aluminium Parks, the first of its kind in the subcontinent, is established at Angul over an area of 223 acres with an investment of INR 180 crores

IX. E-governance in the mining sector

3.3.17 The Department of Steel and Mines has implemented the IT-enabled mineral administration through a software application named Integrated Mines and Mineral Management System (i3MS) to bring in more transparency and ensure effective mineral administration in activities like mineral transactions along with proper monitoring and supervision. i3MS is an effective facilitation measure with improved governance for the mining sector. This technology intervention caters to ease of doing business in the mining sector under 5T and helps monitor various activities from extraction to consumption of minerals at the end-use industries. This system also facilitates online vehicle tracking, issues of e-permits, e-pass, e-filing, e-payment, and regular surveillance. Steps are also being taken to adopt drone technology and webcasting methodology for further improving the system of i3MS.

The major achievements of i3MS are -

- More than 94,888 user registrations have been made.
- INR 1,10,774.7 crore of mining revenue has been collected.
- Around INR. 388 crore of user fees and INR. 27.1 crore of application fees have been collected.
- More than 10,44,077 e-permits and 8,46,54,309 e-passes were issued.
- A total of 1,116 electronic weighbridges have been integrated with i3MS for online mineral payments.
- The system has been successful in bringing about dynamic changes in transparency, user delivery system and increasing mineral revenue.

X. Employment Scenario in the mining sector

3.3.18 As per the Periodic Labour Force Survey Report 2020-21, 0.5 per cent of the total workforce of Odisha is employed in the mining sector. The mining sector does not contribute to workforce employment in proportion to its high contribution of 8 per cent to state GSDVA (2020-21). This is because this sector is capital-intensive in nature and such a scenario is largely prevalent in other States as well.

3.3.19 However, as per the Mining Directorate sources, the total number of workers employed in the mining sector were 1,61,911, 1,72,413 and 1,71,965 during 2019-20, 2020-21, and 2021-22 respectively. Though this employment is distributed over a variety of minerals, iron ore mining itself shares the largest percentage of the workforce recording 65.8 per cent followed by coal mining (21.8 per cent). All other mines taken together share 12.4 per cent of the workforce of the mining sector.

XI. Mineral Revenues and Receipts

3.3.20 The mining sector generates substantial revenue for both the central government and the state government. At the state government level mineral revenue is normally collected from statutory revenues like royalties, rents, profits, and interest income received from public enterprises functioning in the sector. The production and dispatch of minerals along with mineral revenue generated from it in the state from 2016-17 to 2021-22 is presented in Table 3.6.

Table 3.6 Production and dispatch of minerals and Revenue collection–Odisha, 2016-17 to 2021-22 (In million tonnes and in INR Cr respectively)

Year	Production (in million tonnes)	Dispatched	Revenue collection (INR Crore)
2016-17	264.84	285.25	4925.66
2017-18	270.84	287.67	6130.97
2018-19	295.45	310.08	10479.18
2019-20	312.60	313.16	11019.86
2020-21	294.80	326.67	13918.20
2021-22	362.40	358.88	49859.12

Source: Directorate of Mines, Odisha

3.3.21 The revenue collection from the mining sector has dramatically changed over the period from the year 2017-18 to 2021-22. In 2017-18 when the despatch was 287.8 million tonnes, the generation of revenue was INR 6131 crore. In 2019-20, the revenue collection registered an increase of 80 per cent when mineral dispatch had been increased by 8.9 per cent over 2017-18. In 2021-22, revenue collection reached a record level of INR 49,859.1 crores registering an increase of 258.2 per cent over 2020-21 when despatch of minerals increased by 12 per cent. The achievements of the state in the collection of revenue from minerals have undergone sea changes over the last five years which may be due to revisions in royalties, rise in prices of minerals, stringent enforcement measures and successful implementation of i3MS system. Considering the expected impact on the state finances, mineral revenues are the potential non-tax revenue sources to boost development spending in the state. However, infrastructural capability to handle further cargo movements, as well as other associated facilities may come in the way of harnessing the benefits from this sector. Environment intergenerational equity and the non-replenishable nature of the sector are also other important considerations.

XII. Impact of Mining on Forest Cover

3.3.22 Table 3.7 presents the details of operating mining leases of different minerals in the state for the period from 2017-18 to 2021-22. It is noteworthy to mention that despite the COVID-19 impact, the mining leases in the state are showing a distinctly increasing trend. While there is a need for utilising the state's rich mineral resources for expanding growth and developmental in the state, its adverse impact on forest cover needs to be carefully investigated.

Table 3.7 Details of mining leases (operational) –Odisha, 2017-18 to 2021-22

Mineral Name	2017-18	2018-19	2019-20	2020-21	2021-22
Bauxite	2	4	5	8	5
Chromite	8	11	10	24	12
Coal	-	-	29	0	29
Chromite and pyroxenite	1	1	1	0	-
Dolomite	2	3	2	0	4
Iron and manganese	18	21	11	14	16
Iron Ore	31	39	29	62	47
Limestone	2	3	2	0	3
Limestone and dolomite	7	7	5	8	4
Manganese ore	11	13	6	18	5
Sand (Stowing) + Mineral sand	3	4	2	3	2
Iron and bauxite	2	2	2	2	-
China clay + Gemstone	1	1	4	0	1
Pyrophyllite and quartzite	1	1	9	0	8
Graphite	1	1	6	0	5
Total	90	111	121	139	141

Source: Department of Steel & Mines, Odisha

XIII. Mining Activity and Local Development

3.3.23 According to the National Steel Policy of 2017, India intends to boost its capacity for crude steel by 300 MT by 2030. Odisha is likely to play a significant role in providing the essential raw ingredient, iron ore. This precipitates the fact that there will be a significant increase in mineral production in the upcoming years. However, it is crucial that increasing resource extraction also benefits the local communities at large in way of their development and healthy living.

3.3.24 In all the 30 districts of the state, District Mineral Foundation (DMF) Trusts were constituted with the District Collector as the Chairperson and other designated members, such as MPs and MLAs from mining areas, etc. The provisions as envisaged in the Guidelines of Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) were incorporated in the ODMF Rules. The goal of DMF is to promote the interests of those impacted by mining-related activity as well as the affected areas. The mining lease holders of major and minor minerals will contribute to DMF at the rate of 30 per cent of royalty payments for all mining leases executed prior to January 12, 2015 (the date of the MM(DR) Amendment Act, 2015). The contribution payable is 10 per cent of the royalty in cases when mining leases are awarded on auction after January 12th, 2015.

3.3.25 By end of 2021-22, 25,362 projects were allocated for INR 17,239.05 crores out of the total fund accrual of INR

17,907.32 crores under DMF. Projects in the areas of Drinking Water, Health, Education, Sanitation, Environment Preservation, Road Connectivity, Housing, Welfare of Women, Children, Aged and Disabled People, Physical Infrastructure etc. were taken up by the DMFs of the Districts through the Line Departments. The major mineral-bearing Districts namely Anugul, Jajpur, Jharsuguda, Keonjhar, Koraput, Mayurbhanj, Rayagada and Sundargarh contribute 99 per cent of the total DMF accrual of the State.

3.3.26 According to Rule 10 of the ODMF Rules, funds from DMF Trusts must be used to carry out permitted high-priority activities like drinking water and sanitation, health care, education, the welfare of women and children, skill development and environment. Other priority activities like roads, irrigation and energy, watershed development, and afforestation etc. are also taken up. The Steel and Mines Department is responsible for drafting the DMF Rules whereas the Planning & Convergence Department monitors the use of DMF funding, project identification, and recommendations to DMF Trust Boards for approval. A State Level Monitoring Committee, with the Chief Secretary as its Chairman, the Development Commissioner as Vice Chairman, and Secretaries of various Line Departments as Members, is in place to provide the Trust with directions or advisories in accordance with DMF rules. To ensure that resources under DMF are used as effectively as possible, district level machinery needs to be strengthened and local governments must be equipped with the necessary skills, including planning, budgeting, procurement, financial and investment management. It also needs strengthening of monitoring mechanisms and problem redressal system at the Government level.

XIV. Mining and Regulatory System

3.3.27 Mining sector has been subjected to many regulatory changes over time. The Mines and Mineral Development and Regulation Act Amendment 2021 was passed by the Union Government in March 2021. Under the scope of this Act, captive miners (miners who use extracted material for personal use only) are now permitted to sell up to 50 per cent of their production after meeting the requirements of end-use plant and paying additional royalties to the State Government. This is clearly exhibited in the collection of mineral revenue which has surpassed all previous records since captive miners now have more motivation to utilize the assigned mines more effectively. In addition, a fixed additional royalty has been set up for central public sector enterprises to be paid to the State Government if the lease period needs to be extended.

XV. Geological Surveys and Resource Exploration

3.3.28 The Directorate of Geology and Odisha Mineral Exploration Corporation Limited regularly conduct geological surveys and explorations. When Odisha Mineral Exploration Corporation Limited is limited to major minerals alone, the Directorate of Geology often conducts activities for both major and minor minerals. For the purpose of scaling up the state's resources, the Directorate of Geology conducted 19 mineral investigation programs for minerals including coal, iron & manganese, limestone, graphite, base metal, pyrophyllite, dolomite, quartz, and quartzite dimension and decorative stone and artisan grade decorative stone during the year 2021–2022. Out of the 19 investigations, four were at the G2 level, eleven were at the G3 level, and four were at the G4 level. Similarly, geological mapping in 1:25,000 scale was completed for an area of 225 square kilometres, and detailed geological mapping in scale 1:5,000/1:4,000/1:2,000 was also completed for an area of 13.37 square kilometres during 2021-22. As many as 21 investigation reports were finalized, the technical evaluation of 68 major mineral blocks and 6 decorative stone blocks of expiring leases was also completed, 617 mining plans of minor minerals (other than decorative stone) were approved, geological report of 7 blocks was finalized and 10 mineral blocks were identified for upgradation. The petrochemical laboratory of the Directorate also completed petrographical study of 90 rock samples and jem laboratory also identified 451 gemstones. XRF analysis in respect of 896 samples and XRD analysis in respect of 18 samples were also completed during the year.

XVII. Odisha Mining Corporation (OMC)

3.3.30 Odisha Mining Corporation Limited, a state gold category company, established in 1956 is working with the prime objective of harnessing mineral wealth through exploration and extraction. A wholly owned corporation by the Government of Odisha has come a long way since its inception and today it is one of the largest mining companies in India. The major minerals mined by OMC are chrome, iron and bauxite ore which cater to the requirement of mineral-based industries such as steel, aluminium, sponge iron, pig iron, ferro-manganese, and Ferro-Chrome etc. OMC is well known for its all-around CSR activities and sustainability. It has been honoured at the state and Central levels on several occasion for its outstanding performance and leadership.

Odisha Mining Corporation has bagged 27 Medals/ Prizes during 2020-21. It was awarded with People HR Award, Kalinga CSR Award and Golden Peacock Award in 2021-22.

A. Mineral Production by OMC

3.3.31 At present OMC has 34 mining leases (chromite-10, iron- 13, iron and manganese- 5, Manganese-3, Limestone -1, Gemstone-1 and bauxite-1) spreading over 19044 hectares of leasehold area. OMC is producing about 17 per cent of Odisha's total iron ore production, 28 per cent of Odisha's chrome ore production and 18 per cent of Odisha's bauxite production in 2021-22. At present Daitari, Gandhamardhan-A and B, Kurmitar (Khandadhar), Guali and Jilling-Langalota are the major iron ore mines of OMC. The Bangur Chrome Ore mine is the first and only underground mine of OMC. Kodingamali is the major bauxite mine of OMC. The Khondallite mines have been added to OMC for making decorative stones for supply to various heritage sites of the state.

3.3.32 OMC mainly concentrates on iron ore, chromite ore and bauxite ore as is evident from Table 3.8. The production of iron ore in 2015-16 was 60.2 lakh MT which reached a level of 275.7 lakh MT in 2021-22 registering an increase of 358 per cent. But production of chromite ore fluctuated between 8 lakh MT to 12 lakh MT during the same period. Bauxite ore production during the year 2018-19 was 27 lakh MT and the same is 30 lakh MT 2020-21 onwards. The production of iron ore exhibited a remarkable increase of 111.53 per cent in 2021-22 over the previous year 2020-21. (Table 3.8)

Table 3.8 Production of Minerals by OMC–Odisha, 2015-16 to 2021-22 (In lakh MT)

Year/ Production	Production of Minerals				
	Iron ore	Chrome Ore	Manganese Ore	Bauxite	Chrome Concentrate
2015-16	60.2	9.06	0	0	0.30
2016-17	63.66	11.71	0	0	0.35
2017-18	79.2	8.93	0	0	0
2018-19	104.79	11.89	0	27	0
2019-20	123.86	8.35	0	0	0.3
2020-21	130.33	10.93	0	30	0
2021-22	275.69	11.64	0	30	0

Source: Odisha Mining Corporation, Bhubaneswar

3.3.33 The domestic trade of OMC from 2017-18 to 2021-22 is depicted in Table 3.9. It is illuminating to note that the trade is exhibiting an increasing trend over a period of 5 years. Domestic sales of OMC which were at a level of 84.6 lakh MTs in 2017-18 reached a record level of 277.4 lakh MTs in 2021-22 recording an increase of almost 228 per cent over the period along with an annual linear average growth rate of 57 per cent. Similarly, the total trade amount which was INR 2,850.7 crore in 2017-18 reached a record level of INR 17,056.1 crore in 2021-22 which records an increase of 498 per cent against the base year 2017-18 along with an annual linear average growth rate of almost 125 per cent.

Table 3.9 Domestic Sale of Minerals by OMC–Odisha, 2017-18 to 2021-22
(quantity in lakh MT, value in INR crore)

Minerals/ Year	2017-18		2018-19		2019-20		2021-21		2021-22	
	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
Iron ore	74.19	1700.94	103.37	2559.54	133.79	2875.95	123.24	4456.67	231.64	14855.9
Chrome ore	9.97	1108.25	11.22	1350.72	8.56	855.61	8.26	653.77	9.47	1613.06
Chrome con- centrate	0.42	41.53	0.03	2.81	0	0	0	0	0.008	1.28
Bauxite	0	0	16.9	138.97	25.8	243.09	30.48	495.43	36.3	585.82
Total	84.58	2850.72	131.52	4052.04	168.15	3974.65	161.98	5605.87	277.41	17056.06
Dividends to Govt (in cr.)	-		500		250		1000		1000	

Source: Odisha Mining Corporation, Bhubaneswar

3.3.34 It is noteworthy that OMC also shares its dividends with the government which annually varies from Rs 250 crore to Rs 1000 crore. The CSR credential of OMC is also admirable and in the year 2021-22, it spent Rs 793.5 crore in activities like providing health care facilities, improving quality education and promotion of talent, development of sports, environmental protection and energy conservation, clean water and sanitation, skill development and training, livelihood promotion and infrastructure development, disaster management and eradication of hunger and other community activities. OMC played a crucial role in supporting the government in the fight against the menace of Covid-19 which could save thousands of priceless human lives. For its activities and performances, OMC has become an outstanding corporation in the state. It has bagged 27 Medals/ Prizes during 2020-21. It has also been awarded with People HR Award, Kalinga CSR Award and Golden Peacock Award in 2021-22.

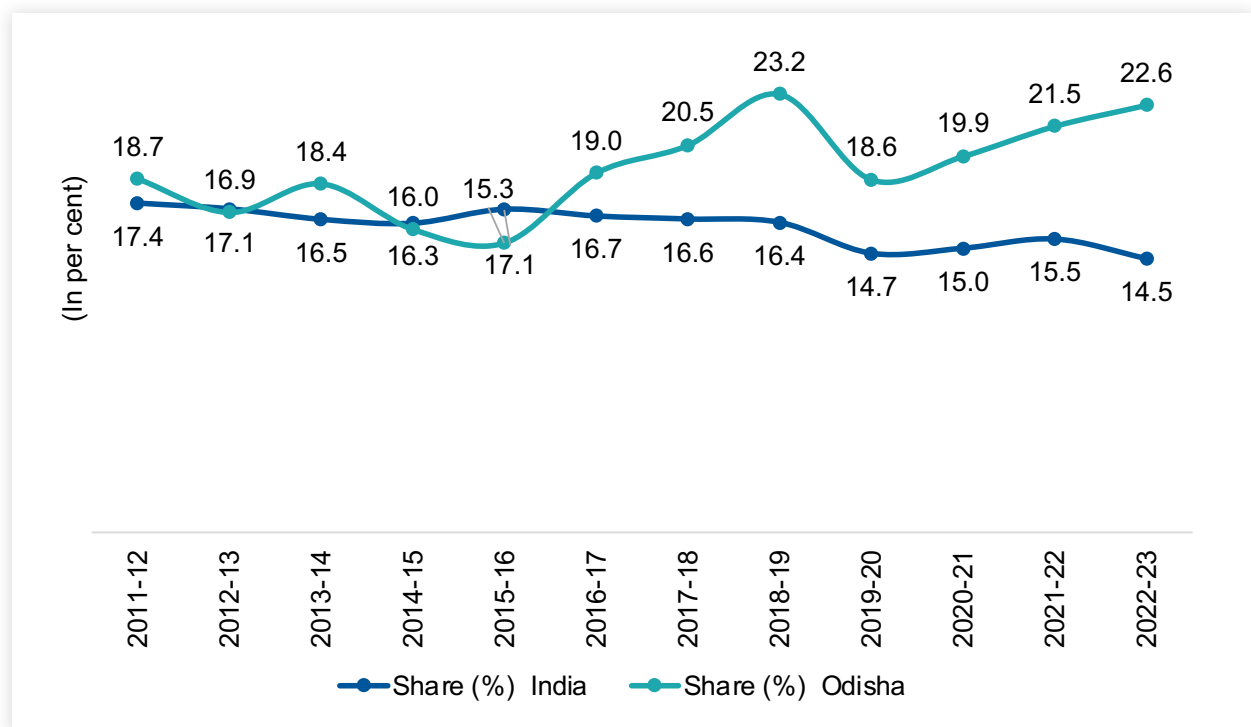
3.3.35 In view of its performance and commitment, State Government may think of strengthening OMC by entrusting more mines and more responsibility to OMC which will be a direct benefit to the state Government.

3.4 Manufacturing Industry in Odisha

3.4.1 The manufacturing industry in Odisha is an important subsector in consideration of its contribution to state income and share in the overall employment of the state. On an average, it contributes 20 per cent of the GSDP of Odisha. Its share to GSDP was estimated at 18.7 per cent in 2011-12 in current prices and after showing some downswings in 2012-13, 2014-15 and 2015-16, it reached a level of 20.5 per cent in 2017-18. It reached a record level of 23.2 per cent in 2018-19 and despite pandemic effects, the sub-sector's contribution remained at 18.6 per cent, 19.9 per cent and 21.5 per cent in 2019-20, 2020-21 and 2021-22 respectively which is indicative of its stability, dependence of workforce on it and its importance in the state economy. However, the share of the manufacturing sub-sector to the state GSDP is estimated at 22.6 per cent in 2022-23 as per the advance estimate released by the Directorate of Economics and Statistics, Odisha. Similarly at the Government of India level, the share of this sub-sector varies between 15 per cent to 17 per cent during 2011-12 to 2021-22 and it is estimated at 14.5 per cent in 2022-23, leading to the conclusion that the Indian economy is prominently dependent on the manufacturing sub-sector. Figure 3.9 illustrates the picture of Odisha vs. India.

Figure 3.9

Shares of manufacturing to GVA at Current Prices— Odisha and India, 2011-12 to 2022-23

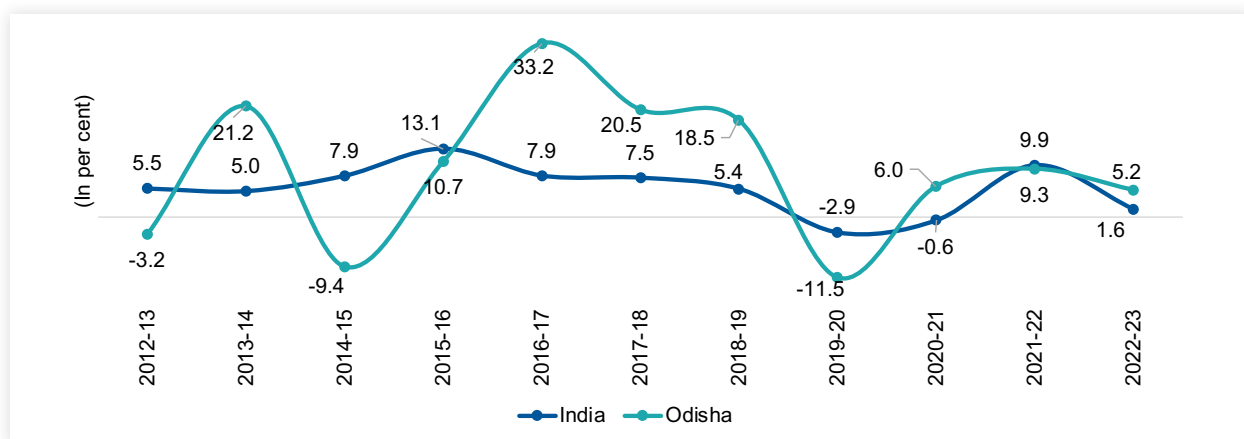


Source-Directorate of Economics and Statistics, Odisha

3.4.2 The annual average growth rate of the manufacturing sub-sector over the period 2012-13 to 2021-22 is recorded at 9.3 per cent in Odisha as against an average growth rate of 5.87 per cent at all India level during the same period. However, the variability both in case of share to gross value added and yearly growth rates in case of manufacturing sub-sector is more pronounced in Odisha compared to India. In the face of a friendly industrialisation ecosystem, enabling infrastructure and hassle-free environment, the variability may be due to impact of unforeseen catastrophes like floods, droughts and cyclones which hit Odisha very frequently. A large number of manufacturing units in the state have a low base and low scale of production and are less resilient to unforeseen factors. Figure 3.10 presented below illustrates the picture of Odisha versus India.

Figure 3.10

Growth rates of manufacturing at constant prices (2011-12) – Odisha and India, 2012-13 to 2022-23



Source-Directorate of Economics and Statistics, Odisha

I. Annual Survey of Industries

3.4.3 The major source of industrial statistics is the Annual Survey of Industries (ASI), which provides estimates for several aggregates like fixed and working capital, input, output, value-added and employment limited to the registered manufacturing sector. It applies to all factories registered under sections 2 m(i) and 2 m(ii) of the Factories Act of 1948 and bidi and cigar units registered under the Bidi and Cigar Workers (Conditions of Employment) Act of 1966. Table 3.10 presents the classification of manufacturing industries in Odisha according to compound annual growth rate registered by them during the period 2015-16 to 2019-20.

Table 3.10

Classification of Industries According to their CAGR–2019-20

Classification of Manufacturing Industries According to CAGR		
Category	Range of CAGR (per cent)	Name of Industries
Positive	0-5	Manufacture of other non-metallic mineral products, Printing and reproduction of recorded media, Manufacture of beverages
	5-10	Manufacture of fabricated metal products, except machinery and equipment, Manufacture of paper and paper products
	10-20	Manufacture of food products Manufacture of chemicals and chemical products, Manufacture of pharmaceuticals, medicinal chemical and botanical products, Manufacture of chemicals and chemical products, Manufacture of motor vehicles, trailers and semi-trailers, Manufacture of Basic Metals

	20-30	Manufacture of electrical equipment, Manufacturing of crop and animal product, hunting etc.
	30-50	Manufacture of machinery and equipment n.e.c., Manufacture of wearing apparel
	50 & above	Manufacture of coke and refined petroleum products, Manufacture of other transport equipment
Negative	0 to (-10)	Manufacture of rubber and plastics products, Manufacture of furniture, Manufacture of textiles, Manufacture of tobacco products Others
	(-10) to (-25)	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
	(-25) to (-50)	No Industries
	(-50) & above	Repair and installation of machinery and equipment

Source: Annual Survey of Industries 2019-20, Ministry of Statistics and Programme Implementation, India

3.4.4 During the period, the highest growth rates are experienced by industries like manufacture of coke and refined petroleum products (83.8 per cent) and manufacture of other transport equipment (65.1 per cent). Industries like manufacture of crop and animal products, manufacture of electrical equipment, manufacture of wearing apparel and manufacture of machinery and equipment experienced growth rates in the range varying from 20 per cent to 50 per cent. Low growth rates of less than 5 per cent is seen in case of manufacture of beverages, printing and reproduction of recorded media, and manufacture of other non-metallic mineral products. Table 3.11 gives the compound annual growth rates of different industry groups of Odisha during the period 2015-16 to 2019-20.

Table 3.11 CAGR of Individual Industries in Manufacturing Sub Sector–Odisha, 2015-16 to 2019-20 (per cent)

Manufacturing Sector	CAGR
Manufacturing of crop and animal product, hunting etc.	20.10
Manufacture of food products	14.29
Manufacture of beverages	1.93
Manufacture of tobacco products	-9.89
Manufacture of textiles	-9.73
Manufacture of wearing apparel	33.53
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	-23.92
Manufacture of paper and paper products	6.81
Printing and reproduction of recorded media	2.91
Manufacture of coke and refined petroleum products	83.77
Manufacture of chemicals and chemical products	11.38
Manufacture of pharmaceuticals, medicinal chemical and botanical products	10.91
Manufacture of rubber and plastics products	-3.49
Manufacture of other non-metallic mineral products	3.24
Manufacture of Basic Metals	16.03
Manufacture of fabricated metal products, except machinery and equipment	8.32
Manufacture of electrical equipment	26.83
Manufacture of machinery and equipment n.e.c.	38.70
Manufacture of motor vehicles, trailers and semi-trailers	16.28
Manufacture of other transport equipment	65.10
Manufacture of furniture	-3.50
Repair and installation of machinery and equipment	-78.96
Other	-6.85
All	19.19

Source: Annual Survey of Industries 2019-20, Ministry of Statistics and Programme Implementation, India

3.4.5 Table 3.12 presents important constituent industries in the manufacturing sector and their share to the gross value added both at state and all India level from 2017-18 to 2019-20 as per the survey findings of Annual Survey of Industries, Government of India.

Table 3.12

Share of Certain Constituent Industries in GVA of Manufacturing group –Odisha and India, 2017-18 to 2019-20 (In per cent)

Name of Industry	2017-18		2018-19		2019-20	
	Odisha	India	Odisha	India	Odisha	India
Basic Metals	61.95	9.92	60.87	11.00	62.03	10.14
Chemicals and chemical products	9.96	9.83	10.44	10.40	16.12	11.17
Food Products	3.61	7.58	2.87	7.35	3.51	7.85
Other Industries	24.48	72.67	25.82	71.26	18.33	70.84
Total manufacturing	100	100	100	100	100	100

Source: DE&S, Odisha

3.4.6 It is seen from the above table that during the period 2017-18 to 2019-20, basic metals are the major industry in Odisha's manufacturing sector. It shares about 62 per cent of the gross value added by manufacturing sub sector whereas at the national level, this industry shares about 10 to 11 per cent of the total GVA of manufacturing sub-sector. Similarly, chemicals and chemical products contributes about 10 to 16 per cent in the state GVA, while it remains at the level of 10 to 11 per cent at all India level. Food products is the third largest industry of manufacturing in Odisha which contributes 3-4 per cent of the gross value added by the manufacturing group, while it contributes at a level of 8 per cent at the national level. There is no denying the fact that Odisha is a mineral rich state and metal industries do have a major contribution in manufacturing sector. But to expand the employment opportunities and exploit other areas of manufacturing, the government needs to focus on non-metal manufacturing areas.

3.4.7 Table 3.13 presents the total number of functioning industries in the manufacturing sub-sector, the total value added by this group of industries, employment position and the output-input ratio during 2015-16 to 2019-20 in Odisha in comparison to all India level. The table also presents the annual growth rate over the previous year to study the relative growth trend.

Table 3.13

Total No. of Registered Factories, GVA, No. of employees and Output Input Ratio of Manufacturing Industries–Odisha and India, 2015-16 to 2019-20

Year	No of regd. Factories			Gross value added			Total No of employees			Input output Ratio	
	Odi-sha	India	Share of State in all India	Odisha	India	Share of State in all India	Odisha	India	Share of State in all India	Odi-sha	India
2015-16	2948	233116	1.26	2385539	127327968	1.87	257842	14299710	1.8	1.21	1.23
2016-17	3051	234865	1.3	3083574	136805049	2.25	272508	14911189	1.83	1.26	1.23

Year	No of regd. Factories			Gross value added			Total No of employees			Input output Ratio	
	Odi-sha	India	Share of State in all India	Odisha	India	Share of State in all India	Odisha	India	Share of State in all India	Odi-sha	India
Growth	3.49	0.75	2.72	29.26	7.44	20.31	5.69	4.28	1.35	4.13	0
2017-18	3066	237684	1.29	4101582	146697043	2.8	279496	15614619	1.79	1.22	1.22
Growth	0.49	1.2	-0.7	33.01	7.23	24.04	2.56	4.72	-2.06	-3.17	-0.81
2018-19	3063	242395	1.26	5305972	153801928	3.45	281520	16280211	1.73	1.21	1.2
Growth	-0.1	1.98	-2.04	29.36	4.84	23.39	0.72	4.26	-3.39	-0.82	-1.64
2019-20	3079	246504	1.25	4189428	148574512	2.82	281911	16624291	1.7	1.18	1.2
Growth	0.52	1.7	-1.15	-21.04	-3.4	-18.27	0.14	2.11	-1.93	-2.48	0

Source: DE&S, Odisha

3.4.8 The total number of registered factories in Odisha reached 3,079 and it exhibited an annual average growth of 1.1 per cent against 1.4 per cent at India level during the period 2015-16 to 2019-20. The growth trend in registered factories remained positive both in the state and country excepting a marginal decline of - 0.1 per cent in 2018-19 in the state. The share of the state in number of registered factories remained at about 1.3 per cent. The annual average growth in GSVA is estimated at 17.6 per cent in Odisha compared to 4 per cent at the India level which is indicative of better performance of manufacturing industries in the state during the period. The annual average growth in employment of this sub-sector is recorded as 2.3 per cent in Odisha in comparison to 3.8 per cent in the country. Coincidentally the output and input ratio are 1.2 both in the state and country as well. The analysed picture taken together precipitates the fact that the increase in value addition from the manufacturing sub-sector is discernible in Odisha during 2015-16 to 2019-20 which may be due to industry friendly policies of the state government, single window facilitation and marketing support.

3.5 Industrial Promotion in Odisha

3.5.1 Odisha has made tremendous progress over the past two decades in terms of industrial growth and is emerging as the manufacturing hub of the east through its industry-friendly environment and policy framework. With an enabling environment for industrial investments, the government is incessantly working towards developing Odisha as a global hub for industries in certain focus sectors. Endowed with rich maritime resources and one of the largest major seaports of the country at Paradip, Odisha is fast emerging as the eastern gateway to the ASEAN region. Huge natural endowments put Odisha in an advantageous position to build several industries based on mineral resources.

Odisha Industrial Development Plan: Vision 2025 aims to attract investment to the tune of INR. 2.5 lakh crore and generate direct and indirect employment opportunities for 30 lakh people.

3.5.2 The Odisha Industrial Development Plan: Vision 2025, with a number of opportunities for investment, aims to develop an industrial strategy for five key sectors like Agriculture & Food Processing, Chemicals & Petrochemicals, Textiles, Downstream & Ancillary and Electronics System Design & Manufacturing (ESDM) to ensure the development march of the state is on the economic growth trajectory.

I. Make in Odisha Conclave- 2022

3.5.3 The Make in Odisha Conclave-2022, the flagship investor summit of the State Government, aims to attract investors from across the globe to Odisha – the ‘Land of New Opportunities’, by assuring them ‘better than the best’ facilities & helping entrepreneurs realise their dreams by showcasing its prowess as a progressive state focusing on industry-led development as well as its potential to be a manufacturing hub connecting India to Southeast Asia and beyond. The third edition of the

‘Make in Odisha’ conclave was a huge success with INR 10,48,830 crore worth of investment intent received across 22 sectors with a potential to generate direct and indirect employment to the tune of 10,37,701.

marquee event was organized in Bhubaneswar from November 30 to December 04, 2022, with a runaway success. As a build-up to the MIO Conclave-2022, the Hon’ble Chief Minister of Odisha led the government delegations on roadshows to various metros across the country and abroad like Coimbatore, Jamshedpur, Ahmedabad, Lucknow, New Delhi, Mumbai, Bengaluru and Hyderabad as well as to Dubai. The MIO Conclave is a unique opportunity to understand Odisha’s policy and regulatory environment, and its existing as well as emerging vast business opportunities across the sectors. It promises to take engagement to the next level with a wide range of activities and events. Key feature of MIO Conclave are given in Table 3.14.

Table 3.14 **Key Features of MIO Conclave 22**

Networking	Exhibitions	Benefits to Participants
<ul style="list-style-type: none"> * B2B meetings among industries and entrepreneurs. * One-to-one meetings with senior Government Functionaries on Business proposals. 	<ul style="list-style-type: none"> * Live product and technology demonstration by Indian and International companies. * Success Stories of Investors in Odisha. 	<ul style="list-style-type: none"> * Know the business ecosystem in the State. * Learn about ready-to-invest projects. * Networking with Government officials and industries.

Source: mio.investodisha.gov.in

II. Institutional Support

3.5.4 The Industrial Promotion and Investment Corporation of Odisha Ltd. (IPICOL), a State PSU under the Industries Department, is the nodal agency for investment promotion and facilitation in the State. One of the major objectives of IPICOL, the SLNA under Odisha Industries Facilitation Act, 2004, is to extend Single Window Facilitation Services to the investors and to take up promotional activities for the State to make Odisha a vibrant State and a favourite destination for Investors.

3.5.5 The “Invest Odisha” brand is being promoted by organization of and participation in National & International events, seminars and workshops by the State. Various promotional campaigns in print, social & digital platforms are also being carried out constantly and consistently to increase the visibility of the

IPICOL Odisha has been categorized as a “Top Performer” among 20 state IPAs with an overall score of 98%

State across the globe. During 2021-22, Invest Odisha has participated in 37 such national/international events where delegates from the state met with several industry captains of various sectors and invited them to visit the state to explore investment opportunities. Technological interventions like GO SWIFT, GO PLUS, GO SMILE, GO CARE and Invest Odisha CRM Module have also been adopted to ensure a hassle-free investment environment. In the Investment Promotion Agency’s (IPA) rating report 2020-21, released by Invest India in collaboration with the World Bank Group, IPICOL Odisha has been categorized as a “Top Performer” among 20 state IPAs with an overall score of 98 per cent.

3.5.6 Odisha has become the 7th state in the country to implement the reforms stipulated by the Department of Expenditure, Ministry of Finance, Government of India, because of which the state could mobilize additional financial resources of INR 1,429 crores through Open Market Borrowings. Further, as per the Business Reforms Action Plan (BRAP) 2020 assessment report released by the Department for Promotion of Industry and International Trade (DPIIT); Odisha has been categorized as an “Achiever” state by implementing over 90 per cent reforms and achieving more than 80 per cent positive user feedbacks during the survey.

3.5.7 In order to facilitate ease of doing business and expedite the grounding of projects in Odisha, the State Level Facilitation Cell (SLFC) at IPICOL meets every week and has conducted 215 meetings to date since its inception in 2015. Since April 2021 the SLFC has approved/recommended 47 projects worth of INR 2,16,603.70 crore with an employment potential of about 58,818 workers and various issues relating to 13 industrial projects have been resolved.

3.5.8 The cumulative number of projects approved by the State Level Single Window Clearance Authority (SLSWCA) & High-Level Clearance Authority (HLCA) has increased significantly. During 2021-22, the SLWCA & HLCA have cleared 79 & 8 project proposals respectively with a proposed total investment of INR 3,67,027.53 crore and with an employment potential of 1,07,251 workers. The year-wise achievements are presented in Table 3.15.

Table 3.15 Approval of Projects in SLSWCA & HLCA–Odisha, 2017-18 to 2021-22

Year	Number of Approved Projects	Investment Amount (in Rs. Crore)	Employment Potential(persons)
2017-18	46	2,04,110.00	98,308
2018-19	47	67,417.41	41,643
2019-20	49	2,37,146.92	62,031
2020-21	60	1,19,017.68	56,303
2021-22	87	3,67,027.53	1,07,251

Source: IPICOL, Odisha

3.5.9 Institutionalisation of CSR Activities: Through Government of Odisha – CSR Administration and Responsive Engagement (GOCARE), a one-stop portal for all CSR activities, the IPICOL is administering the CSR projects in the State. The State CSR Council recommends high impact projects for corporates to take up as CSR initiative. During FY 2014-2022, a total number of 8,872 projects with a cumulative amount of INR 3,512.70 crore have been reported in the GOCARE portal and out of which, during 2021-22 an amount of INR 141.73 crore against 300 projects has been reported.

3.5.10 To achieve the goal of environmentally suitable industrialization, M/S PricewaterhouseCoopers (PwC) has been engaged as the Investment Promotion Advisors for the Focus Sectors. PwC also acts as the knowledge partner in formulating policies and making strategies for attracting investment to Odisha. For strengthening the “Brand Odisha”, IPICOL has taken need-based support of M/S Lintas India Pvt. Ltd. for preparing various promotional materials/videos for use in print, television, online, outdoor and social media platforms, which gave the State identity in terms of being a preferred investment destination and gateway to the ASEAN region.

3.5.11 Industrial Development Corporation of Odisha Ltd. (IDCO): Facilitating industrial investment in the state by way of providing ready-to-use infrastructure is the core business of IDCO. The major achievements of IDCO are as follows:

3.5.12 By the end of FY 2021-22, a total number of 120 Industrial Estates (IE)/ areas/parks, Theme Park etc. with a land area of Ac. 10,996.3 and 1,545 built-up sheds have been established and managed by IDCO in different strategic locations of the state and Ac 6,596 land and 1,475 built-up sheds have been allotted to 6,265 industrial units in different IEs. During 2021-22 (as on January 2022), 107 MSME units have been allotted around Ac. 160.9 of land in different IEs of the State. Six Industrial Estates at Ambapua (Ganjam), Balarampur (Dhenkanal), Semela & Bamani (Nabarangpur), Champajhar & Kapileswar (Khurda) and 30 new Multi-Product MSME Parks have been taken up for establishment during 2021-22.

- Establishment of 2 Special Economic Zones (SEZs) at Chandaka & Gaudakahsipur for the ITI/ITeS sector over an area of Ac. 145.9 and Ac. 262 respectively are underway.
- Development of an IT Incubation Centre in Infocity IT/ITeS SEZ with two towers is under process.
- Formation of an SPV namely M/S Odisha Electronics Park Ltd. for implementation of the Electronics Hardware Manufacturing Cluster over an area of Ac 203.4 with a project cost of INR 200.8 crore under the EMC Scheme of Ministry of Electronics & Information Technology is on the offing.
- The State is developing a Petroleum, Chemical and Petrochemical Investment Region (PCPIR) hub at Paradip under the PCPIR Scheme of Government of India over an area of Ac 70,214 spread over Jagatsinghpur & Kendrapara districts which is expected to attract investment to the tune of INR 2.7 lakh crore. Another 15 MT oil refinery with an investment of INR 30,000 crores (Approx.) is also coming up. A plastic park is also coming up over Ac. 120 land in PCPIR with an investment of INR. 106.8 crore for the promotion of industries in the Plastic and Polymer sector. Twenty units have already been allotted Ac. 32 of land for the establishment of their industries.
- The GoI has already approved the proposal of the State for developing the existing Steel Complex at Kalinganagar as a National Investment Manufacturing Zone (NIMZ) & Plan and DPR is under progress.
- Construction of a Seafood Park at Deras over an area of Ac. 152.8 with an investment of INR 130 crore is coming up. IDCO has allotted Ac. 46.1 to 15 units out of which one unit is operational and four units are under construction.
- IDCO has contemplated to establish a Textile Park over Ac. 234 of land near Dhamnagar in Bhadrak district and work is under progress.
- Development of East Coast Economic Corridor: A gross financial assistance of INR 3,000 crore (from 2021-22 to 2023-24) through the budgetary provision of the State has been made for development of industrial infrastructure of two nodes mainly Gopalpur-Bhubaneswar-Kalinganagar(GBK) and Paradeep-Kendrapada-Dhamara-Subarnarekha (PKDS) of the East Coast Economic Corridor.

III. Promotion of Ancillary & downstream industries

3.5.13 The upstream ecosystem for downstream and ancillary industries is well developed in Odisha with abundant availability of mineral resources and mother plants in proximity to the mineral-rich regions. Moreover, Odisha is the largest producer of Aluminium in the country with 54 per cent of the total Aluminium smelting capacity. Odisha is also the largest Stainless Steel producing State in the country having 20 per cent of the total steel-making capacity of the country. With the growth of the economy, the requirement for value-added products will multiply thus offering a good potential for downstream development both in the Aluminium and Steel

sector. The State is now working towards value addition in major industrial regions such as Angul and Jharsuguda for aluminium downstream and Kalinga Nagar for steel downstream. Further, Paradip and Dhamara are being developed as hubs for the chemicals and petrochemicals industries.

3.5.14 In consideration of availability of mineral resources, enabling infrastructure and the major industries set up or in process of commissioning, downstream and ancillary investment opportunities are available across metal sector and segments as outlined in Table 3.16.

Table 3.16 Opportunities for Downstream & Ancillary Industries–Odisha

Segment	Aluminium	Steel	Stainless Steel
Industrial Segments	Cables, Foils, Panels, Castings, Forgings, Laminates, Rods, Reflectors, etc.	Equipment Manufacturing, Foundries, Flat / Cold rolled products, Fabrication, Machining and precision equipment, etc.	Fuel Containment vessels, Waste Handling Systems, Auto components, Fasteners, etc.
Consumer Durables	Tubes, Bottles, Aerosol Cans and Panels, Refrigeration, Electronics, etc.	Appliances and White goods, etc.	Kitchenware Lifestyle industries Appliances

Source: investodisha.gov.in

3.6 Skill Development

3.6.1 Over the past few years Odisha has emerged as the skill capital of India with the presence of globally recognized Institutes of Higher Learning & Research including CIPET, IIT, IIM, NIT, AIIMS, KIIT, XIMB, ICT, Biju Patnaik National Steel Institute and so on. Odisha is the first state to have a dedicated Skill Development Authority, which develops customized training programs for workers based on industry requirements. As the State economy diversifies to other sectors, the demand for new kinds of skills is likely to increase manifold which will be critical to cater to the expanding industrial base. The government of Odisha is currently taking several measures on that front. The vision of the Odisha Skill Development Authority (OSDA) is given below:

- I. In a 3-year period, OSDA wants Corporate India to make a beeline to Odisha, not just to hire but to “lock-in” talent ahead of its manpower requirement. Young OSDA graduates should command a premium in the wage market.
- II. In a 5-year period, OSDA plans to skill around 15 lakh youth and ensure that Odisha’s young men and women across sectors become global preference. Nations of the world shall come to Odisha to hire, and Odisha would become a global destination for skilled employers.
- III. The Odisha model must be worth emulating in other parts of the world.

Promotion of sunrise sectors

3.6.2 The Union government has taken steps to promote sunrise industries realising the future need and growth of these industries. The government of Odisha has also set the vision and roadmap for the state to lead in areas of the new economy such as block-chain, ML, AI, etc. and setting up a “Centre for New Economy” in the state. Manufacturing of Electric Vehicles, Green Energy Equipment, Electronics, and Hardware manufacturing type of New Age Industries are being promoted by the state government. These industries are expected to support the

development of ancillary and downstream industries in the State and create a positive effect on employment, tax revenue and overall growth of the state. The new age sectors have been categorized under Thrust Sector Category and investments in such manufacturing units will be provided special incentives under IPR 2022.

3.6.3 Odisha's Electric Vehicle Policy 2021 coupled with Industrial Policy Resolutions, is aimed at promoting the manufacturing and usage of EVs across vehicle segments in the state by facilitating an appropriate ecosystem. The state is committed to promote the production of electric vehicles including batteries. The state has also taken steps to support the creation of jobs in driving, marketing, financing, servicing, manufacturing, and charging electric vehicles.

Odisha Electric Vehicles Policy 2021 aims to achieve an adoption of 20 per cent battery electric vehicles in all vehicle registration by 2025

3.6.4 To create a supportive ecosystem for the industry, a number of incentives are offered for EV production and purchase. In addition, it is important to note that the manufacturing of EVs and their component parts have been classified by IPR 2022 under the Thrust Sector Category.

3.7 Micro, Small and Medium Enterprises (MSMEs)

3.7.1 Micro, Small, and Medium-Sized Enterprises (MSMEs) are the key drivers of exports and are a crucial link in the supply chain of Odisha. MSMEs are generally labour intensive in nature and therefore are key to generate more employment. However, going by the number of MSMEs in Odisha registered under Udyam compared to other States of India, there is ample scope for further broad basing of MSME units in the State. The State Government has also created adequate space for MSME development in IPR-2022 and also in the MSME Development Policy 2022, Odisha Food Processing Policy 2022 and several other sector-specific policy frameworks.

MSME sector has remained a thrust area for the State with a cumulatively 5.3 lakh MSME units providing 1.9 million employment in the State.

3.7.2 During the year 2021-22, around 44,288 MSME units went into production with an investment of INR1,966.6 crore, leading to employment generation for 1.2 lakh persons. By the end of March 2022, a cumulative total number of 5,35,913 MSMEs had been established in Odisha with an investment of INR 25,655.9 crore along with creation of job opportunities for 19,34,893 persons.

Table 3.17 Category Wise Cumulative Number of MSME Units Set Up– Odisha (up to 2021-22)

Category	Cumulative number of units set up		Investment (Rs. in crore)		Employment (persons)	
	Number	(%)	Amount	(%)	Number	(%)
Repairing and services	3,39,159	(63.3)	16,884.05	(65.8)	9,92,355	(51.3)
Food and allied	48,109	(9.0)	2,561.24	(10.0)	2,21,095	(11.4)
Misc. manufacturing	51,160	(9.5)	1,825.79	(7.1)	1,67,240	(8.6)
Engineering and metal based	19,987	(3.7)	1,436.29	(5.6)	1,25,855	(6.5)

Textiles	23,611	(4.4)	559.32	(2.2)	96,274	(5.0)
Forest and wood based	25,507	(4.8)	387.24	(1.5)	90,649	(4.7)
Glass and ceramics	12,170	(2.3)	843.84	(3.3)	1,54,340	(8.0)
Chemical and allied	4,998	(0.9)	383.48	(1.5)	31,846	(1.6)
Paper and paper products	5,146	(1.0)	247.60	(1.0)	24,814	(1.3)
Electrical and electronics	2,873	(0.5)	167.86	(0.7)	13,121	(0.7)
Rubber and plastics	2,370	(0.4)	339.51	(1.3)	13,742	(0.7)
Livestock and leather	823	(0.2)	19.68	(0.1)	3,562	(0.2)
Total	5,35,913	(100)	25,655.90	(100)	19,34,893	(100)

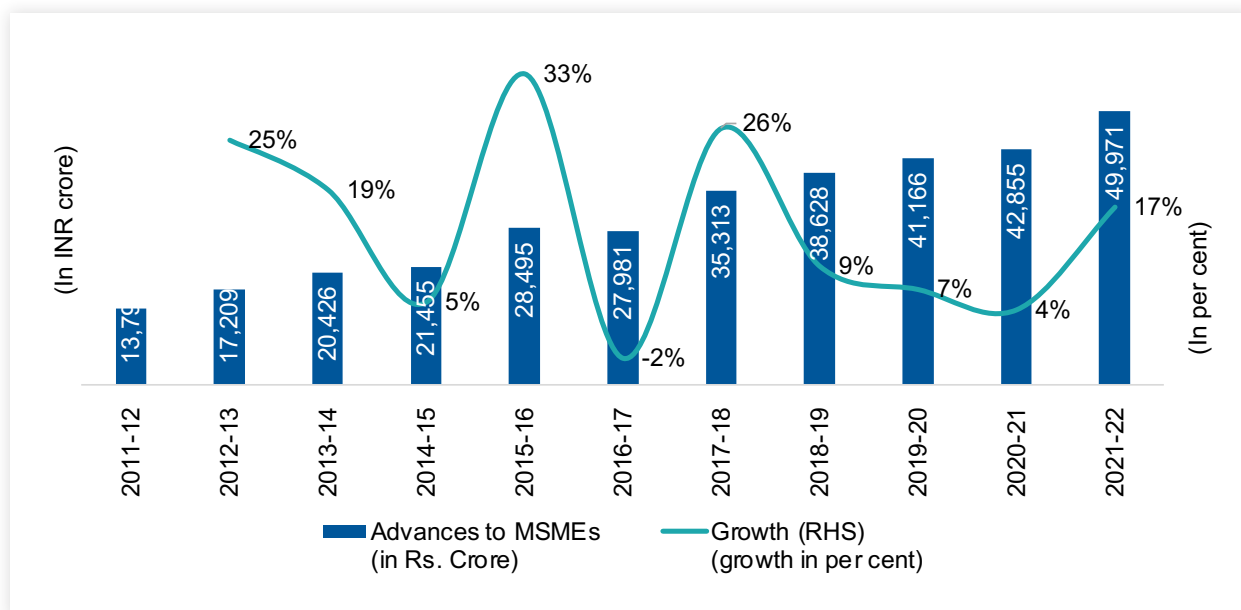
Note: Figures within parentheses are percentages to column totals

Source: Directorate of Industries, Govt. of Odisha

3.7.3 Distribution of MSME units by their type of business, as narrated in Table 3.17, indicates the fact that repairing services alone account for the a majority share in MSMEs with almost 63 per cent share of all MSMEs set up in the State. MSMEs in repairing services alone and which also generates 51 per cent of the total employment opportunities created through MSME units. Possible reasons for the high concentration of MSMEs in the repairing services could be the challenges related to literacy, skills, opportunities, marketing, credit facilities etc. The relative ease of entry may also be a factor.

3.7.4 Advances to MSMEs by banks in Odisha are show in in Figure 3.11 .The advances to MSMEs have grown from INR 13,795 crore in 2011-12 to INR. 49,971 crore in 2021-22. The advances have grown at a CAGR of 17 per cent over the previous year period. As per the 168th State Level Bankers' Committee (SLBC) Odisha meeting held on 27 September 2022, the annual target for 2022-23 for lending to MSMEs has been set at INR 59,499.5 crore and the achievement as on 30th June 2022 is INR 14,815.4 crore which was 25 per cent of the targeted amount.

Figure 3.11

Advances by Banks to MSMEs (in INR Cr) and Growth (in per cent) –Odisha , 2011-12 to 2021-22

Source: Year-wise key indicators, SLBC Odisha

I. Expanding lending opportunities for MSME

3.7.5 With the revision in the definition of MSMEs by the Government of India, more MSMEs are expected to avail benefits from MSME lending schemes. After the revision of the definition, now both investment and annual turnover are taken as the criteria for classification. The investment amount has also been increased leading to the creation of scope for more firms to come under the ambit of the MSME definition. Differentiation between manufacturing and services in terms of eligibility criteria are merged.

Classification	Micro	Small	Medium
Manufacturing and Services Enterprises	Investment do not exceed Rs. 1 crore and Turnover does not exceed Rs. 5 crore	Investment does not exceed Rs. 10 crore and Turnover does not exceed Rs. 50 crore	Investment does not exceed Rs. 50 crore and Turnover does not exceed Rs. 250 crore

II. PMEGP

3.7.6 The Prime Minister's Employment Generation Programme (PMEGP) is a flagship Programme of the Union government to create employment opportunities and it has been in implementation in Odisha since 2008–09. The achievements under this scheme in the state for the last 3 years are listed in the Table 3.18.

Table 3.18 Progress of PMEGP – Odisha, 2019-20 to 2021-22 (INR Lakh)

Year	Implementing Agency	Target		Achievement	
		Units	Margin Money (Subsidy) (Rs. lakh)	Units	Margin Money (Subsidy) (Rs. lakh)
2019-20	DIC, OK&VIB & KVIC	3487	10787.09	2709	7799.72
2020-21	DIC, OK&VIB & KVIC	2578	7959.94	3168	8743.64
2021-22	DIC, OK&VIB & KVIC	3351	10303.95	4301	11335.95
Total		9416	29050.98	10178	27879.31

Source: Activity Report 2021-22, MSME Department, Odisha / Directorate of Industries, Odisha

3.8 Handicrafts, Handlooms, Sericulture, and Textiles

I. Handicrafts Sector

Figure 3.12 Handicrafts map – Odisha



Source: Directorate of Handicrafts and Cottage Industries, <https://dhorissa.nic.in/>, Odisha

3.8.1 Odisha is renowned for its beautiful handicrafts across the world. With the highest number of artisans honoured with national accolades, such as “Padma” awards, the State is credited with the best craftsmanship in the country. The handicraft sector; being less capital intensive, requires application of simple technology and has ample scope for marketing with value addition. It has been recognised as a potential sector for providing self-employment both in rural and urban areas. As on date more than 1.3 lakh craftsmen across the State are practising as many as 50 different crafts of varied nature and skill.

3.8.2 The Odisha Handicrafts Policy, 2019 aspires to boost the growth of the handicrafts sector by leveraging the selling proposition of skilled artisans and help to enhance Odisha’s share of exports of handicraft goods. The policy looks to empower handicraft artisans and make them lead partners of development through easy availability of raw materials, capacity building, extension of financial assistance for availing bank credit, survey and data base management of artisans, coverage under various social security and welfare schemes, in collaboration with agencies like NIFT, NID to infuse innovation in product design, quality, and productivity, etc.

3.8.3 The Odisha Artisan Grade Stone Policy, 2021 has been formulated by the Government to facilitate availability of quality raw materials to stone carving artisans of the state.

3.8.4 During 2021-22, a total number of 5,876 handicrafts units were set up in the State with an investment of INR 45.7 crore generating employment for 9,529 persons. By the end of 2021-22, the cumulative (from 2012-13) number of handicraft units set up in Odisha was 32,456. The handicraft production and sales of the state during 2021-22 were INR 132.6 crore and INR 145.4 crore, respectively. The year-wise number of handicraft industries established; investment made & employment generated in Odisha for the period from 2015-16 to 2020-21 is narrated in Table 3.19.

During 2021-22, a total number of 5,876 handicrafts units were set up in the State with an investment of INR 45.7 crore generating employment for 9,529 persons.

Table 3.19 Handicraft Industry – Odisha

Year	Number of units established during the year	Investment (in Rs. crore)	Employment generated (Number of persons)
2015-16	2278	8.44	3867
2016-17	2759	23.93	5571
2017-18	3320	24.05	5793
2018-19	5616	26.19	9004
2019-20	5702	26.37	9060
2020-21	2951	22.56	4897
2021-22	5876	45.65	9529

Source: Directorate of Handicrafts, Odisha

A. Achievements of Handicrafts Sector

Table 3.20 Capacity Building (Training) –Odisha, 2021-22

Scheme	Objective	Crafts	Achievement (No. of artisans benefitted)
State Level Training in Various crafts	Promotion of the handicraft industry & creating a new generation of craft persons with adequate skill transfer and exposure (managed by SIDAC)	Stone Carving, Wood Carving, Pattachitra, Palm Leaf Engraving, Terracotta, Applique	132
District Level Training in Various Crafts	Promotion of the handicraft industry & creating a new generation of craft persons with adequate skill transfer and exposure	Seashell, Cane & Bamboo, Sabai Grass, Golden Grass, Stone Carving, Pattachitra	156
Guru Sishya Parampara Training	Transfer of traditional skill of national/State level awardees to new generation artisans to up-keep the traditional craft heritage	Bamboo Craft, Stone Carving, Wood Carving, Natural fibre, Silver filigree, Dhokra casting, Straw craft, Pattachitra, Golden Grass, Brass & Bell metal, Palm Leaf Engraving, Applique, Natural Fibre, Terracotta	525
MCM Training	Impart training to handicraft artisans for self-employment with minimum capital investment by engaging reputed master craft persons	Bamboo Craft, Pattachitra, Cane craft, Stone Carving, Wood Carving, Dhokra casting, Straw craft, Sabai Craft, Golden Grass, Palm Leaf Engraving, Terracotta, Brass & Bell Metal, Applique, Jute Craft, Lacquer Craft, Patch Work, Paddy Craft, Embroidery, Tribal Jewellery, Paper mache, Dangaria Shawl, Clay Toy	2370
Craft Village Scheme	Sustained livelihood support through skill up-gradation training to artisans in SHGs along with distribution of tools and equipment.	Terracotta, Bamboo Craft, Paddy Craft, Jute Craft, Golden Grass, Metal Craft, Applique, Embroidery, Patch Work, Wood Carving, Sabai Craft, Pattachitra, Stone Carving, Coir Toys, Palm Leaf Engraving	152 SHGs covering 2280 Artisans

B. Marketing

3.8.5 Marketing assistance is provided to Co-operatives/SHGs/individual artisans through exhibitions organised inside and outside the state. Assistance is also provided for participation in GIFT Fair/Organisation of Buyer-Seller Meet/Fairs/Exhibitions being organised by other agencies. A total of 841 artisans were provided marketing support through participation in exhibitions (Toshali National Crafts Mela, Annual Terracotta Exhibition, Multi-craft Exhibition & other State & District level exhibitions) during 2021-22 promoting sales of INR 1172.01 lakh. The handicrafts artisans & handloom weavers of the State have been provided with marketing support by the Odisha State Co-operative Handicraft Corporation Ltd. (UTKALIKA) through their Sales Outlets.

3.8.6 Other marketing strategies adopted during 2021-22 were the launching of UTKALIKA's e-commerce website (www.utkalikaodisha.in), signing of MoUs with e-commerce companies like Flipkart, GoCoop & Thoomri.com for online marketing of handicrafts of Odisha, the Digital Catalogue of Handicraft items containing Silver Filigree, Dhokra Solid Artefacts & Framing, Jute Crafts File Folders & Multipurpose Bag, and Artificial Flower Bouquet.

3.8.7 The procurement and sale of handicrafts & handloom items by UTKALIKA has risen substantially to INR 1108 lakh and INR 2032.1 lakh respectively during 2021-22 as compared to INR 616.7 lakh and INR 1037.2 lakh respectively during 2020-21.

C. Welfare and Credit Measures for the Artisans (2021-22)

Table 3.21 Number of artisans benefitted in schemes - Odisha, 2021-22

Scheme	Objective	Achievement (No. of artisans benefitted)
Shilpi Unnati Yojana (SUY)	Margin money assistance to handicraft artisans to avail bank finance for setting up own production units.	Rs. 114.23 lakh to 935 Artisans
Construction of work shed-cum housing for Handicraft Artisans	Providing work shed-cum housing and hygienic working environment for Handicraft Artisans	Rs. 238.00 lakh to 176 Artisan families

Source: Directorate of Handicrafts, Odisha

Marketing Artisans have benefitted under schemes "Shilpi Unnati Yojana" wherein monetary assistance is provided to handicraft artisans to avail bank finance for setting up own production units and under "Construction of Work Shed cum Housing for Handicraft Artisans". Details are in Table 3.21.

D. Recognition & Awards

3.8.6 The State Institute for Development of Arts & Crafts (SIDAC) has been declared as "Centre of Excellence" by the Ministry of Skill Development & Entrepreneurship, Govt. of India. Some of the achievements are:

3.8.8 The State Institute for Development of Arts & Crafts (SIDAC) has been declared as "Centre of Excellence" by the Ministry of Skill Development & Entrepreneurship, Govt. of India. Some of the achievements are:

- In 2021, 9 handicraft artisans have been conferred with different National Level Awards (Shilpguru, National Award & National Merit Certificate), which is the highest in a single year. The increase is due to awareness generation by the handicraft machineries of the State Government.
- Kala Bhoomi-Odisha Crafts Museum was awarded the order of merit. The museum qualified for the semi-finals of SKOTCH award- 2021 on 6th January 2022 from SKOTCH Group.
- During the year, 3 artisans have been conferred with State Award and 8 artisans with Kala Kruti Awards.

Nine handicraft artisans of Odisha have been conferred with different National Level Awards, which is the highest for any State in 2021.

E. Best Practices Adopted

3.8.9 Some of the best practices adopted for the development of the sector are narrated below.

- After taking over the management of Urban Haats by Handlooms, Textiles & Handicrafts Department from IDCO in October 2020, the Ekamra Haat has been renovated with the creation of additional facilities, which are now open to provide marketing assistance to handicraft artisans & weavers of the state. The performance regarding sales on handicraft items in Ekamra Haat since its re-opening till 31.08.2022 is INR 194.4 lakh through participation of 787 artisans. The corresponding achievement of Neelachal Haat, Puri (which was renovated and reopened on 12.06.2022) till 31.08.2022 is INR 15 lakh through participation of 93 artisans.
- The 16th Toshali National Crafts Mela was organised at Janata Maidan, Bhubaneswar from 28.03.2022 to 10.04.2022, where around 465 artisans and weavers from all over the country participated and displayed their handicrafts & handlooms. The total sales turnover in the fair was INR 16.1 crore. The theme of the event was 'Kendrapara Golden Grass Products of SANKALP National Project of Kendrapara.
- Applications have already been filed for Geographical Indication (GI) Registration of Silver Filigree (Chandi Tarakasi) of Cuttack. Steps are now taken for GI Registration of Flexible Brass Fish of Belaguntha, Ganjam & Terracotta Roof Tile of Barapall of Bargarh. Earlier GI Registration of crafts like Pipili Applique, Odisha Pattachitra, and Konark Stone Carving have already been obtained.
- During 2021-22, the survey of the Handicraft Artisans was completed in all the 30 districts of the state with the support of the DE&S (O) through a GPS-enabled Mobile App. Field Enumeration of Survey work completed and data in respect of 1,51,505 handicraft artisans of the State has been captured. The survey data will be published after validation. Out of 50 approved crafts, Video documentation for 33 crafts has been completed and displayed in the Kala Bhoomi-Odisha Craft Museum.
- The Directorate of Handicrafts has developed a website & web application which is hosted in the state data centre with the URL <http://crafts.odisha.gov.in> and <https://craftsapp.odisha.gov.in> respectively to provide benefits under different schemes like Institutional Training, MCM Training Programme, GSP Training Programme, Craft Village Programme, Silpi Unnati Yojana, Construction of Work-shed-cum-Housing, and Participation in Exhibitions.
- An MoU has been signed with the Odisha Bamboo Development Agency (OBDA) for the development of bamboo craft clusters in 6 locations of 5 Districts of the State and accordingly an amount of INR 7.2 crore has been sanctioned by OBDA wherein the projects are currently under implementation.
- Funds to the tune of INR 35 crore have been sanctioned by Odisha Mineral Bearing Area Development Corporation (OMBADC) for the development of various handicraft clusters in 5 Districts of the State & the projects are currently under implementation.
- The DC (Handicrafts), MoT, GoI has sanctioned INR 27.3 crore for implementation of Comprehensive Handicrafts Cluster Development Scheme (CHCDS) for development of Dhokra Casting, Tribal Jewellery & Terracotta of Odisha and the projects are under implementation.

F. Achievements of UTKALIKA

3.8.10 During 2021-22, the Odisha State Co-operative Handicraft Corporation Ltd. (Utkalika) has organized 11 exhibitions in which 54 numbers of Artisans have participated. The total procurement and sale of handicrafts of Utkalika during this period was INR. 236.5 lakh and INR 644.4 lakh respectively. Other initiatives of UTKALIKA during 2021-22 are as follows: -

- Renovation & interior decoration of Rourkela, Sambalpur & Jeypore branch have been started
- Launching of Utkalika's E-Commerce portal
- Digital catalogue of Handicraft items containing Silver Filigree, Dhokra Solid Artefacts & Framing, Jute Crafts File Folder & Multipurpose Bag & Artificial Flower Bouquet has been prepared & shared with Government Departments & Corporate Bodies for promotion of Handicrafts.

G. Achievements of SIDAC

3.8.11 The State Institute for Development of Arts & Crafts (SIDAC) has been mandated for the all-round development of Handicrafts sector in the state. The important achievements of SIDAC for the period 2021-22 are:

- Design Development Programme has been conducted at 5 different craft clusters in Balasore, Mayurbhanj, Nabarangpur & Puri in 5 different crafts like Jute Craft, Dhokra Casting, Terracotta, Modern Applique & Coir Toys involving 150 artisans and 100 new prototypes were developed. Besides, 18 numbers of trainees are undergoing training in one year Craft Design Course at SIDAC.
- SIDAC has organised 16th Toshali National Crafts Mela – 2022 during March-April 2022 at Bhubaneswar, where around 20 lakh visitors visited the fair.
- Management of Urban Haats is another major activity of SIDAC. The basic objective is to make the Haat a place where the crafts heritage of Odisha would be showcased, and craftsmen would be provided a platform to directly interact with the buyers.
- Implementation of SANKALP Golden Grass Project is another challenging activity of SIDAC. The Sankalp National Project under the Ministry of Skill Development and Entrepreneurship, Govt. of India has been taken up for the development of Golden Grass craft of Kendrapara District. The interventions include basic skilling, design & quality skilling, entrepreneurship skilling and hard interventions like CFC and Raw Material Banks. A total of 3,128 numbers of golden grass artisans across 35 villages of Kendrapara district, mostly women will benefit from the Project. As part of the project, 2 nos. of CFCs in Golden Grass are under construction at Jajanga & Baro with funding of INR 60 lakh from the State Govt.

H. Achievements of Odisha Crafts Museum

3.8.12 The important achievements of Odisha Crafts Museum – Kala Bhoomi during 2021-22 are narrated below:

- A total number of 11,022 visitors visited Kala Bhoomi.
- In order to make Kala Bhoomi a vibrant cultural space, a number of workshops, demonstration programmes, trail story telling & craft conversation programmes have been organised.
- Odisha Crafts Museum has been awarded the order of merit prize from the SKOCH group.

II. Handloom Sector

3.8.13 Apart from agriculture, the handloom industry is one of the leading sectors that generate significant employment, notably for the rural non-agricultural households and side by side preserving the rich cultural heritage of the state. Odisha's handloom products have won national and international recognition for their highly aesthetic design, craftsmanship and durability. The sector has moved ahead in its mission and has successfully implemented the schemes within its mandate. The map of Odisha's handlooms is shown in Figure 3.13.

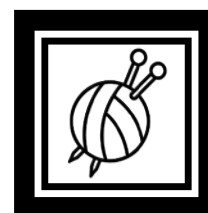
Figure 3.13 Handloom Map – Odisha



Source: Handlooms, Textiles & Handicrafts Department, Odisha

3.8.14 As per the 4th All-India Handloom Census, 2019-20, the handloom sector is growing faster in Odisha than the rest of India in terms of both looms and workers. The latest official figures indicate that there are 66653 households (weavers and ancillary) working in Odisha's handloom sector with 56,761 looms and 1,24,646 weavers and ancillary workers taken together by end of 2021-22. Similarly, there were 582 working Primary Weavers Co-operative Societies (PWCS) with 72,009 members. The employment created in this industry alone increased from 53,610 persons in 2020-21 to 80,345 in 2021-22.

3.8.15 Assistance in the form of several initiatives such as Technological Intervention, Capacity Building of Weavers through Skill Up-gradation Training, Exposure visits, Construction of Work Shed-Cum- Housing, establishment of Common Facility Centres/ Office-cum- Go-down/ Sales Centre/ Drum Shed, support for marketing, financial support in form of a rebate on sale of handloom cloth, Market Development Assistance, Marketing Initiatives, Design inputs and Publicity have been provided to make the sector more vibrant.



E-commerce activities of State level Organizations like Boyanika, Sambalpuri Bastralaya and Serifed have been strengthened to establish sustainable market linkage with the buyers both inside the country and abroad. Retail brands like FABINDIA, Odisha Artisans & weavers Ltd., a Community Owned Company (COC), online platforms like Amazon, GoCoop and Flipcart are engaged in marketing activities in the state with the objective to boost the sale of Odisha hand-woven items to increase the productivity and income of the weavers. In view of the aforesaid measures, the Productivity per Loom per Annum (P/L/A) has increased from 413.2 Sqr. Mt in 2020-21 to 560.5 Sqr. Mt in 2021-22.

3.8.16 **Web-based Public Services Delivery System:** Web-based online services in the link (www.textiles.odisha.gov.in/onlineservice) are being made go-live to extend benefits under different beneficiary-oriented schemes

i) Baristha Bunakar Sahayata Yojana (BBSY), ii) Work shed-Cum- Housing, iii) Supply of loom and Accessories, iv) Concretisation of Loom Pit v) Skill Up-gradation Training under Capacity Building, vi) Mukhyamantri Bayan Jyoti Yojana, and vii) Bunakar Assistance for Livelihood and Income Augmentation to weavers of Odisha.

A. State Agency for Development of Handloom Clusters (SADHAC)

3.8.17 The “State Agency for Development of Handloom Clusters (SADHAC)” an autonomous organisation under the H.T&H Department works for the promotion and development of handloom in the state. The main activities of SADHAC include training of weavers, creating new designs, product innovation, and marketing of products in order to ensure the welfare of weavers. The agency also provides assistance for the following:

- Organisation of eye camps for handloom weavers (aged 50 years and above) & provision of free spectacles.
- Provision of financial assistance on a monthly basis to senior weavers as a security support and in recognition to their weaving profession through programmes like Baristha Bunakar Sahayata Yojana (BBSY).
- Financial assistance is also provided for the construction of improved work-shed/ housing -cum-work shed with a hygienic environment to safeguard the work process & belongings of Weavers from natural hazards like rain and fire etc.
- Looms with accessories are supplied to weaver families to improve quality and increase the productivity with the objective of ensuring them better income.

Some important programmes taken under handloom sector during 2021-22

- Mukhyamantri Bayan Jyoti Yojana- To overcome problems due to low voltage / low light or failure of electricity, weavers/ allied workers are facilitated with backup light (Inverter) facility along with fan under the scheme “Mukhyamantri Bayan Jyoti Yojana” for smooth and continuous working without taking the physical strain.
- Bunakar Assistance for Livelihood and Income Augmentation (BALIA) - Providing working capital loan with interest subvention to the needy weavers for their livelihood as well as to improve their socio-economic status by increasing their income.

B. Marketing

3.8.18 As can be seen in Table 3.22 under the co-operative fold, the total sale of handloom products was INR 259.5 crore out of which the offline/ outlet sale was INR 212.4 crore and yarn/ Tassar cocoon sale was INR 39.3 crore.

Table 3.21 Organizational Sales-Odisha (INR in Lakh)

Orgn. / PWCS	Outlet sale	Exh. Sale	e-com. Sale	Yarn/ Tassar cocoon sale	Total
S. Bastralaya	4614.48	177.94	30.30	733.80	5556.52
Boyanika	10496.79	161.75	167.57	2104.99	12931.1

SERIFED	191.66	13.20	8.85	1088.86	1302.57
UTKALIKA	1280.12	62.85	19.54	0	1362.51
PWCS	4658.79	139.87	0.00	0	4798.66
TOTAL	21241.84	555.61	226.26	3927.65	25951.36

Source: Handlooms, Textiles & Handicrafts Department

3.8.19 As on 31.08.2022, after the renovation and reopening of the Ekamra Haat at Bhubaneswar & Neelachal Haat at Puri, the achievements regarding sales of handloom products are INR 745.1 lakh (by participation of 550 handloom weavers) & INR 99.2 lakh (by participation of 127 handloom weavers) respectively. The weekly Bunakar Bazaar at Behera, Bargarh is one of the biggest open air handloom markets of Asiawhich witnesses the participation of around 1300 weavers and traders from different parts of Odisha and from States like Chhattisgarh, Jharkhand and West Bengal etc. Transaction of different types of Hhandloom clothes, raw Materials, looms & weaving accessories takes place here. For providing an ideal platform for better marketing of handloom fabrics with provision for basic amenities, the project “Establishment of Bunakar Bazar, at Behera, Bargarh” has been approved for implementation under the State Plan scheme- “PoHI”. This will provide an impetus to the weavers and traders to increase their productivity and income.

III. Sericulture Sector

3.8.20 Sericulture, the art of cultivation of silk through the rearing of silkworm, is a traditional agro-based industry and a major source of livelihood for the rural poor, mostly the tribal population in Odisha. With its rich heritage of Tasar culture and vast forest resources, Odisha is one of the best-suited states to lead the country in sericulture and Tasar silk production. A large part of the Tasar farming in Odisha is done by tribal communities in natural forest or in schematic block plantations raised under MGNREGS which benefits a large section of the tribal Tasar growers in the state. Sericulture, being a highly labour-intensive activity that goes round the year and provides remunerative income to the farmers, mostly women. In Odisha, about 15,000 traditional families involving one lakh people actively practise sericulture for their livelihood with an equal number of employments for the reelers, spinners and weavers.

3.8.21 At present, with Government support, the Tribals and non-tribals under the BPL category are practising sericulture & producing silk cocoons. Incentives on the upgradation of seed infrastructure for the production of Tasar Basic Seed, Technology demonstration, Exposure visits and Training are being provided to the farmers for their skill-upgradation and higher earnings from farming. Eri is cultivated in pockets of Kendrapara, Jagatsinghpur, Cuttack, Nayagarh, Khordha, Kandhamal, Koraput, Sundargarh, Keonjhar, Rayagada, Kalahandi, Sambalpur, Dhenkanal & Angul districts as a subsidiary activity. Castor plantation raised by farmers are utilised for Eri rearing. It is because of the various promotional measures being taken by the Government, the raw silk production in Tasar and Eri has shown an upward trend over the years. An estimated 6,621 kg of Eri cocoons were produced during 2021-22. Mulberry Sericulture, which is highly climate sensitive and non-traditional to the state, is being cultivated in limited pockets in districts like Gajapati, Koraput, Rayagada & Phulbani. During 2021-22 an estimated 6,530 kg of Mulberry cocoons were produced with involvement of 537 farmers.

3.8.22 Different schemes and sub-schemes like MGNREGS, RKVY, Promotion of Sericulture Industry (State Plan),

Upgradation of Seed infrastructure for production of Tassar Dfls (Disease free layings), Reimbursement Cost on procurement of reelable Tassar cocoon and Central Sector Scheme (Silk Samagra) of Government of India are being implemented through the Primary Rearer's Cooperative Societies to support the farmers of Sericulture sector. The farmers are also being supported for systematic plantations, supply of disease free layings, Chawki worms, Rearing house, Rearing equipments, Cocoon storage house and assured marketing for their produce through network of Primary Cooperatives functioning in different districts under "Odisha Cooperative Tassar & Silk Federation (SERIFED)".

3.8.23 The sericulture farmers have been organised into primary cooperative societies to avail the benefits of Central & State Government schemes. There are 62 Primary Tassar Rearer's Co-operative Societies which are affiliated to 'SERIFED' at the State level. The major achievements of the Sericulture sector for the period during 2019-20 to 2021-22 is outlined in Table 3.23.

Table 3.22 Achievement of Sericulture – Odisha, 2019-20 to 2021-22

Activities	2019-20	2020-21	2021-22
Tassar Sector			
Tassar Food Plantation (Ha)	1812	1231	660
Production of Dfls (lakh nos.)	23.13	20.31	20.12
Procurement of Dfls (lakh nos.)	5.00	5.19	5.78
Consumption of Dfls(lakh nos.)	28.13	25.50	25.90
Production of reeling cocoons (lakh nos.)	1303.34	1002.12	1003.296
Production of Raw Silk (est. in MT)	130.33	100.50	101.58
Production of Silk Waste (est. in MT)	-	21	21
Farmers covered (nos.)	16,531	13,745	14,884
Eri Sector			
Castor plantation (Acres)	1173	1225	800
Consumption of Dfls (lakh)	0.82	0.40	1.00
Production of cut cocoons (Est. in MT)	6.37	1.61	6.621
Production of Raw Silk (Est. in MT)	5.1	1.28	5.29

No. of farmers covered (Nos.)	2780	2131	1830
Mulberry Sector			
Mulberry area (Acre)	68	20	0
Procurement of Dfls (lakh nos.)	0.65	0.45	0.293
Consumption of Dfls (lakh nos.)	0.65	0.45	0.293
Production of reeling cocoons (lakh nos.)	14.79	4.81	6.53
Production of Raw Silk (Est. in MT)	2.12	0.687	0.73
Production of Silk Waste (Est. in MT)	0.28	0.05	0.073
No. of farmers covered (Nos.)	833	570	537

Source: Directorate of Textiles, Odisha

3.8.24 Tasar Silk Parks – A soil to silk ecosystem: The concept of “Tasar silk Park” for women empowerment & livelihood is becoming popular and gaining momentum as it focuses on transforming Tasar farming to a “Zero Waste livelihood Activity” in the State. Silk parks are meant to transform silk handloom weaving industry into an organised profession and achieve sustainable growth. Apart from augmenting production, the silk parks will roll out value added products with branding and marketing along with women empowerment & livelihood to tribals in way of involving the women SHGs in the process. Three Tasar silk parks - Bhagamunda Tasar Silk Park in Keonjhar, Bisoi Tasar Silk Park at Mayurbhanj & Khuntgaon Tasar Silk Park in Lahunipara in Sundergarh have been rolled out in the state. The Bhagamunda Tasar silk park in Keonjhar was established to create the infrastructure for a value chain model by capitalizing on the raw materials i.e., Tasar cocoons produced by the tribal farmers and unemployed women workforce of Harichandanpur block and adjoining rearers to generate livelihood for the women through post cocoon value chain activities. At present more than 100 women are earning their daily livelihood in tasar value addition process in Bhogamunda silk park. Similarly, the Bisoi asar Silk Park at Mayurbhanj and the Khuntgaon Tasar Silk Park in Lahunipara in Sundergarh district have been taken up with an aim to stabilize the value chain of the Sericulture Industry. Gopalpur in Jajpur district, famous for its GI tag Tasar silk, has been proposed to be developed as a craft cluster under the Scheme of Fund for Upgradation and Regeneration of Traditional Industries (SFURTI), an initiative by the Ministry of Micro, Small and Medium Enterprises (MSMEs).

3.8.25 Odisha Cooperative Tasar & Silk Federation Ltd. (SERIFED), established in 1962, remains Odisha’s premier facilitator for the trading of all forms of raw materials of the silk industry including its processing & marketing. It is also engaged in cultivating an understanding of international buyer’s requirements through product diversification ensuring quality standards with due priority to timely delivery. ‘Amlan’ - the exclusive sale outlet of SERIFED, deals with elegantly hand-woven natural silk products in Tasar, Mulberry and Eri segment.

3.8.26 Khandua Patta Saree - the pride of Odisha: Khandua, a traditional and popular ‘Ikat’ silk saree produced in Odisha is worn by women during weddings. A special type Khandua is worn by Lord Jagannath that contain the texts of ‘Gita Govinda’ on them. The origin of this special sari dates back to the 12th Century. Khandua Saree

is famous for its 'Ikat' or otherwise popularly known as 'bandha'- a piece of art, based on the cultural heritage of Odisha. The laudable appreciation of Khandua Sari is not confined to the people who wear them but from the expert designers and fabric specialists from across the globe.

Other Achievements

3.8.27 Some other highlights in the sericulture sector are as follows: -

- During 2021-22 an estimated 62,706 kahans (1003.3 lakh nos.) of Tasar cocoons have been produced.
- Apart from natural forest, systematic plantation of Asan /Arjun trees are taken up under MGNREGS and RKVY schemes which are being distributed to farmers after 3 years of maintenance for rearing of Tasar silkworm for earning their livelihood.
- During 2021-22, employment to the tune of 7,23,120 man-days have been created through implementation of MGNREGS programme in the state.
- The branding of Demphi silk, one of the rarest silks of Odisha, made from the peduncle (stem) of the tassar cocoon has been trademarked, giving it a distinct identity. The eco-friendly yarn has ability to blend with other yarns which provides unique textures to the fabric.
- Tripartite MoU for the revival of the biggest Taser Farm of the State at Sukinda in Jajpur district with District Administration and Tata Steel Foundation.
- Tripartite MoU with Forest & Environment Department & Central Silk Board, Govt. of India for Taser farming with Vana Surakshya Samitis.

IV. Textiles Sector

3.8.28 Odisha has a long & rich history of Textiles and has gained world-wide acclaim and reputation for their design and quality. Various designs have existed here, such as Sambalpuri, Bomkei and Berhampuri, etc. Odisha is also famous for its Ikat type of weaving. With this rich history and locally available competence in this area, Odisha is uniquely positioned to attract investments in the textiles and apparel sectors. Apparel and textiles including technical textiles is also one of the focus sectors of the State. Being one of India's leading Handloom producing States, Odisha now aims to harness the State's potential to develop a strong Textile Sector including Apparel & Technical Textiles. The "Odisha Apparel & Technical Textiles Policy, 2022" focuses on boosting employment and enhancement of economic growth in the state by encouraging investors through incentives like Capital Investment Subsidy, Employment Cost Subsidy, and Market Development Initiatives. This policy is a natural outcome of the pro-poor and pro-industry outlook of the Government. The focus of this Policy is to encourage:

- Garment, Apparel, Made Ups
- Technical Textiles - Agrotech, Clothtech, Hometech, Meditech, Sportech, Packtech, Buildtech, Geotech, Indutech, Mobiltech, Protech, Oekotech, etc.
- Support Activities like Ginning, Spinning Weaving, Dyeing and Processing of Textiles & Wearables and accessories linked to Apparel and Technical Textiles

3.8.29 Odisha's Textile Sector has been transformed into an engine of inclusive growth and employment generation with an infusion of professionalism into traditional skilled expertise through techno-commercial networks. As a result of the pioneering steps of the State for promotion of employment generation through establishment of garment manufacturing units by enactment of the "Odisha Apparel Policy", M/s. Sahi Exports Pvt. Ltd. and M/s. Aditya Birla Fashion & Retail Ltd., M/s. Wild Lotus Ltd. And Jockey India Pvt.Ltd. have established

their units in the state. One Incubation Centre to boost the StartUps in Apparel Sector is going to be functional very soon. The ATDC at Bhubaneswar and five more satellite centres are also functioning at different parts of the State and conducting courses with nearly 100 per cent placement. To provide fashion education and platform for research, training, in fashion technology and to create employment opportunities for youths /artisans, a centre of the National Institute of Fashion Technology (NIFT) has been set up at Bhubaneswar.

3.8.30 Two Textiles and Apparel Parks, one near Dhamara port over an area of 1,000 acres with an investment potential of INR 6,500 crore and another in the proximity of Bhubaneswar at Malipada over an area of 800 acres with investment potential of INR 6,000 crore are being developed for promotion of textiles industry in the State. Concerned parks target to provide employment opportunities for 20,000 and 18,000 persons respectively. In addition, a Technical Textile Park is being developed in Bhadrak over an area of 100 acres. This dedicated park is being anchored by a 300 KTPA IOCL Polyester and Fibre plant.

Technical Textile Park is being developed in Bhadrak over an area of 100 acres

3.9 Export Promotion & Marketing

3.9.1 The Directorate of Export Promotion and Marketing, under the MSME Department, Odisha is mandated to promote export of goods and to provide marketing assistance to MSMEs of the State. In order to make the export promotion activities more effective and vibrant, it has taken a number of steps like: -

- Dissemination of market intelligence & overseas tender /trade enquiries among the existing and potential exporters /entrepreneurs of Odisha,
- Engagement with Export Promotion Council, Commodity Boards and other Govt. organisations for removal of difficulties in exports,
- Renders guidance in export processing, pricing and on availability of incentives granted by the Union Government.
- Organisation of seminars/ workshops/training programmes etc. in collaboration with the Indian Institute of Foreign Trade (IIFT), Indian Trade Promotion Organisation (ITPO), Indian Institute of Packaging (IIP) and Export Councils etc to educate the exporters & create export consciousness in general.

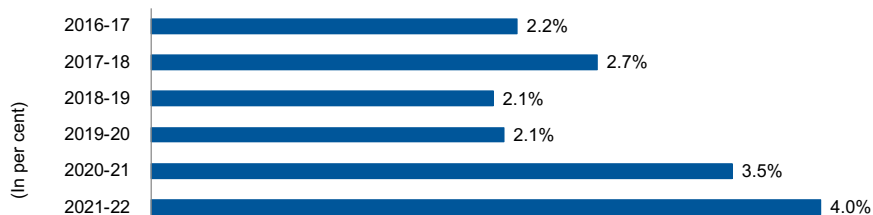
3.9.2 With active initiation and export promotion activities of the state, the merchandise export turnover of Odisha has increased to an all-time high figure of INR 1,27,197.7 crore during 2021-22 as against INR 75,718.3 crore in 2020-21, registering a growth of 68 per cent. The metallurgical, minerals, engineering/ chemical allied,

Odisha's export is witnessing a steady rise. Odisha's share in all India export which was 2.7 per cent in 2017-18 has gone up to 4 per cent in 2021-22.

marine and software products are the major contributors to the state's export turnover. The share of exports of the state in All-India exports has grown significantly from 2.2 per cent in 2016-17 to 4 per cent in 2021-22 (April-December) as shown in Figure 3.14.

Figure 3.14

Share of Odisha in All-India Exports, 2016-17 to 2021-22 (in per cent)



Source: State-wise Export Data, Monitoring Dashboard, Ministry of Commerce and Industry, Govt. of India.

3.9.3 As can be seen from Figure 3.14, the share of exports from Odisha to all India exports was all-time high at 4 per cent during 2021-22. During 2020-21, the share of Odisha to total export of India was 3.5 per cent.

3.9.4 Table 3.24 provides the State's major export scenario from 2019-20 to 2021-22. It is observed that mineral and metallurgical items (which include iron ore, chrome ore, manganese ore, etc. amongst minerals and charge chrome, ferrochrome, aluminium and alumina, ferromanganese etc. amongst metallurgical products) constitute the majority part of exports from Odisha. With the passage of time, exports of pharmaceuticals, technical textiles, and marine products are also becoming crucial. The state's export portfolio is rapidly becoming more diverse because of increased roadway connectivity and access to three ports, namely Paradip, Dhamra, and Gopalpur

Table 3.23 Major Export Products – Odisha, 2019-20 to 2021-22 (Value INR. crore)

Products	2019-20	2020-21	2021-22	Share in Value of Exports for 2021-22 (per cent)
Metallurgical	24,811.40	38,122.95	86,726.64	68.02
Engineering, Chemical and Allied	4,434.18	7,854.68	15,496.37	12.15
Minerals	14,627.10	26,189.58	19,374.27	15.20
Agriculture and Forest	187.18	177.85	469.21	0.37
Marine	3,028.88	3,114.16	4,462.08	3.50
Handloom	0.90	0.09	2.02	0.00
Handicraft	3.08	7.74	9.41	0.01
Textile	131.64	205.5	930.35	0.73
Pharmaceutical	6.34	8.8	16.32	0.01
Others	11.62	36.97	10.99	0.01
Total (Merchandise)	47,242.32	75,718.32	1,27,497.66	-
Electronics and software	4,500.00	4,701.01	-	-
G Total	51,742.32	80,419.33	1,27,497.66	100

Source: Directorate of Export Promotion and Marketing, Govt. of Odisha

3.9.5 The number of countries importing goods and services from Odisha is also increasing year after year. In 2021-22, Odisha was an import destination for 143 countries. As can be seen from Table 3.25, there is a significant rise in export destinations for traditionally exported products like metallurgical, engineering and chemical, and mineral products. Moreover agriculture, handicraft, textile, electronics & software, pharmaceuticals are also some of the important export products where there is a significant rise in the destination countries.

Table 3.24 **Rise in Export Destinations – Odisha, 2015-16 to 2021-22**

Category	Number of Countries to which exported during		
	2015-16	2020-21	2021-22
Metallurgical	40	92	97
Engineering & Chemical	79	111	119
Minerals	5	41	42
Agriculture and Forest	4	24	26
Marine	39	33	37
Handloom	13	8	9
Handicraft	7	19	25
Textile	2	17	28
Pharmaceutical	3	27	42
Electronics and software/Others	6	40	52

Source: Odisha State Economic Survey (various rounds), Govt. of Odisha

EXPORT PREPAREDNESS INDEX – 2021

The second edition of the Export Preparedness Index (EPI) - 2021, released by NITIAayog has placed Odisha at Sno. 13 (with an overall score of 42.04 out of 100), in the overall ranking of the states. Gujarat has topped the list, followed by Maharashtra & Karnataka. Odisha has scored 26.05 in the overall export ecosystem, 30.64 in export performance, 36.94 in business ecosystem and 79.66 in policy. The State is among the four coastal states which scored a perfect 100 in export promotion policy. Odisha has been rated as the most cost-competitive state in terms of cost of setting up and running a business.

The Export Preparedness Index (EPI), a valuable tool for the government and policy makers in encouraging competitive federalism and fair contest among States and UTs and thereby enhancing India's standing in the Global export market, assesses States' export potential, policies and performance. The index also enables the policy makers to identify the drivers and obstacles and examine the same to strategize a viable export map for the state. EPI- 2021 has ranked the States and UTs on 4 main pillars - Policy; Business Ecosystem; Export Ecosystem; Export Performance - and 11 sub-pillars - Export Promotion Policy; Institutional Framework; Business Environment; Infrastructure; Transport

Connectivity; Access to Finance; Export Infrastructure; Trade Support; R&D Infrastructure; Export Diversification; and Growth Orientation.

The three major challenges to India's export promotion, as identified in the EPI 2021, are – intra and inter regional differences in export infrastructure; weak trade support and growth orientation across states; and lack of R&D infrastructure to promote complex and unique export.

3.10 Construction sector

3.10.1 Construction industry, the second-largest employer in Odisha after agriculture, contributed 5.95 per cent of the state's GVA in 2021-22. Odisha's construction industry had a fall in its share of the state's GVA from 9.35 per cent in 2011-12 to 7.29 per cent in 2018-19 and is predicted to reach 5.62 per cent in 2022-23 (AE). Over the years from 2012-13, the contribution of the sector is exhibiting a slow declining trend. Construction not only bears significance for its growth potential, but also embodies huge employment potential for the state. Generally, the construction industry is an entry point for surplus labour from agriculture as it has very limited skill requirements. As such, it provides the avenue for large-scale absorption of labour shifting out of agriculture in Odisha. Table 3.25 shows a high share of employment in construction in Odisha (21.12 per cent) which is greater than the national average (12.08 per cent) in 2020-21.

Table 3.25 Distribution of Workers (PS+SS) by Industry Sector and Sub Sector - Odisha and India, 2020-21 (in per cent)

Industry Sections of NIC-2008	Odisha (Rural + Urban)			India (Rural + Urban)		
	Male	Female	Person	Male	Female	Person
Industry	26.37	24.11	28.47	27.11	16.35	23.89
Mining and Quarrying	0.53	0.35	0.47	0.43	0.07	0.32
Manufacturing	5.25	9.15	6.43	11.07	10.55	10.91
Electricity, Gas, Water Supply and Other Utility Services	0.55	0.2	0.45	0.76	0.16	0.58
Construction	20.04	14.41	21.12	14.85	5.57	12.08

Source: PLFS 2020-21, MoSPI

3.10.2 The State Government has taken a variety of steps to ensure the social and economic security of its construction workers. Odisha Building and Other Construction Workers (RE&CS) Rules, 2002 and Odisha Building and Other Construction (BOC) Workers Welfare Board, constituted in 2004, continue to provide social and economic benefits to BOC workers. The Board offers benefits to BOC employees in the form of educational assistance, assistance for the purchase of work tools, bicycles, and safety equipment, maternity benefit, death and funeral assistance, accident, medical expense reimbursement for the treatment of serious illnesses, assistance for Recognition of Prior Learning (RPL), and assistance for skill development.

3.10.3 New schemes such as Nirman Shramik Pucca Ghar Yojana (Rural) and Nirman Shramik Pension Yojana are being implemented by the Board since 2016. Nirman Shramik Pucca Ghar Yojana (Rural) aims at extending housing assistance to the beneficiaries completing one year of registration. Nirman Shramik Pension Yojana is implemented to extend old age, widow, and disability pension to the eligible beneficiaries.

3.10.4 The Board has launched a new program called “Construction of Rental Housing Complex (RHC) and “Ashraya in Urban Areas” to provide migrant construction workers with temporary housing with minimal facilities at a reasonable rent during 2017. INR 40 crore have already been made available for execution of the scheme. Ten urban areas—five Municipal Corporations and five Municipalities—have been chosen in the first phase for implementing RHC.

3.11 Odisha Start-up Ecosystem

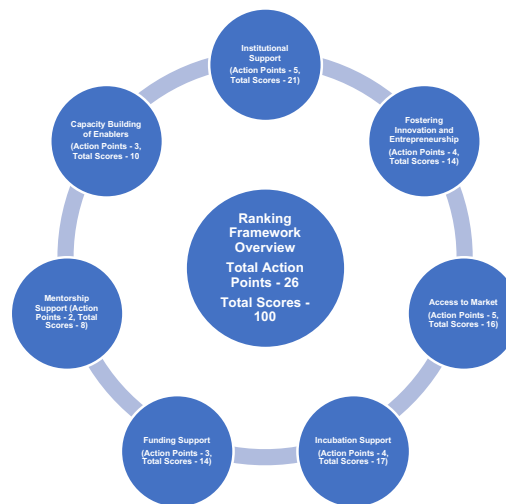
3.11.1 The ‘Start-up Odisha’, a flagship initiative of the MSME Department, Government of Odisha, is intended to act as a catalyst in the economic growth of Odisha creating models for scalability and replicability across the State resulting in creation of large-scale employment opportunities. The vision of the State Start-up Policy, launched in 2016, is to make Odisha among the top 3 ‘Start-up Hubs’ in India through strategic partnerships, a conducive ecosystem, investment and policy interventions. The objectives of Odisha State Start-up Policy are as follows:

- Develop a world class “Start-up Hub” in Odisha.
- Encourage incubators including sector specific ones aligning with the State’s strengths and requirements.
- Create enabling environment and supportive eco-system that facilitates at least 1,000 Start-ups in next five years in the State.
- Take steps to provide skill-based training to encourage youth to take up Start-ups.
- Encourage all major companies to include skill and infrastructure development for Start-ups as an integral component of their CSR activities.

I. Inclusive Approach

3.11.2 Odisha has a robust start-up ecosystem which has been rated as 'Top Performer' in the State/UT ranking 2021 by the Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India. The impact of the initiatives undertaken by the Government of Odisha to boost its start-up ecosystem has resulted in the creation of 1,468 numbers of start-ups, 140 numbers of seed-funded start-ups, 21 numbers of Venture funded start-ups and over 250 numbers of women-led start-ups. Behind Odisha's rise to 'Top Performers' in the latest ranking of States' on support to Start-up ecosystem in 2021 from the category of 'Leaders' in 2019, lies a great focus on women entrepreneurs, continuous support and monitoring and a widespread network of incubators catering to grassroots innovators. Odisha's start-up strategy aims for inclusivity by giving additional benefits to female, transgender, SC, and ST-led start-ups in addition to encouraging creativity and entrepreneurship passion.

Inclusive Approach to Odisha Start-up Policy has resulted in the State's rising to the category of "Top Performers"



STATES' START-UP RANKING - 2021

The Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry, Government of India has been conducting the States' Start-up Ranking Exercise since 2018. The 3rd edition of the States' Start-up Ranking 2021 (based on the robust and outcome-oriented Start-up Ranking Framework-2020) released by DPIIT, which has assessed supports and facilitation provided by various states to promote start-up ecosystem in the States, has placed Odisha in the Category of 'Top Performers'.

The key objectives of the States' Start-up Ranking include identifying good practices, augmenting mutual learning, building capacity of key stakeholders across the Indian start-up landscape and propelling States to advance ecosystems within their jurisdictions. The Start-up Ranking Framework 2020 is an evolved evolution tool aimed to strengthen the support of States and UTs to holistically build their Start-up ecosystem.

II. Institutional Support

3.11.3 Odisha has a comprehensive start-up portal with all the necessary features catering to all the start-ups and stakeholders of the Start-up Ecosystem. The Government of Odisha recognizes the fact that the seeds of entrepreneurship and the instinctive ability to innovate must be nurtured through an enabling ecosystem. A special focus has been drawn towards women-led start-ups with specially tailored

Odisha is working closely with 21 Incubation Hubs, including IIT Bhubaneswar, NIT Rourkela, Software Technology Park of India, KITT-TBI, Utkal University, and many others.

incentives and schemes to ensure equitable implementation. One-third of the subsidised incubation space at State supported incubators is reserved for women-led start-ups. An additional benefit of INR 22,000 monthly allowance is provided to the start-ups led by women. All these policies and benefits have provided a push in setting up of more than 250 women-led start-ups. The government also provides assistance to the incubators in exchange. For the promotion of Start-ups from ideation to monetization, Odisha is working closely with 21 Incubation Hubs, including IIT Bhubaneswar, NIT Rourkela, Software Technology Park of India, KITT-TBI, Utkal University, and many others.

III. O-Hub: A way forward for Start-up Incubation

3.11.4 O-Hub is Odisha's maiden, centralised Incubator, wholly owned and operated by the Government of Odisha. Located in the SEZ of Patia in Bhubaneswar and spread over a 1.5 lakh square feet area, it is equipped with the State-of art and Plug-n-play infrastructure to facilitate Start-up Incubation. It would provide a platform for innovators and entrepreneurs to develop products or services, establish formal businesses and interact with stakeholders of the ecosystem. It has the vision to see all - the innovators, the mentors, the corporate partners, the ecosystem enablers and the facilitators to work under one roof. It would facilitate 200 start-ups every year in diverse sectors like healthcare, renewable energy, ICT, artificial intelligence, machine learning, augmented reality/virtual reality, internet of things, handlooms and handicrafts, agri-tech and many more. It will provide a platform for attracting venture capitalists, angel networks, HNIs, State and Central Government Departments or Agencies.

IV. Odisha Start-Up Growth Fund

3.11.5 The Odisha Skill Development Authority (OSDA) is organising Nano-Unicorn Entrepreneurship Programmes since 2017-18 to motivate skilled youths, who could be prospective entrepreneurs, to start their small industries and create employment opportunities by providing mentoring, training and capital funding. This scheme is only applicable for the skilled youth of Odisha who have no access to collaterals and capital but have the fire in their belly to become an entrepreneur. The stories of inspiring youths across all districts, who overcame adversities and hardships to transform their own lives and others by skilling themselves and taking up vocations of different kinds and becoming shining examples of Skilled-in-Odisha are piling up day by day. Some of these businesses include tailoring, electrical repairing, fast food, plumbing, plastic manufacturing, welding etc. and are run by youths who passed 10th standard and have graduated from an Industrial Training Institute (ITI), while many others are run by school dropouts.

3.12 CONCLUSION

Odisha, the Land of New Opportunities, is fast emerging as a major investment destination in the country. The progressive state, with a clear focus on transformation in all sectors, will emerge as the gateway to the East and South-East Asia. The runaway success of the grand investment summit – the 'Make in Odisha Conclave-2022', coupled with the promises of the government to offer something better than the best in the focus sectors for the entrepreneurs for realisation of their dreams through the new Industrial Policy Resolution- 2022 coupled with other latest sectoral policies, would, undoubtedly, go miles in placing Odisha in the league of major industrialised states in the country within a few years to come.

Odisha, a major force in the field of mining and mineral based industries, has attracted major investments in steel and aluminium projects and has aimed at becoming the global hub in these sectors by the turn of this decade. The state is well-positioned for a strong push into many other industrialization areas with the goal of a significant degree of diversification for its adequate power availability coupled with generation by captive power plants, as well as a very favourable business environment and public administration. To ensure this, the government has put policies in place to support entrepreneurship and skill development in addition to the drive towards industrialization. All of these have already begun to bear fruit, and this process is likely to accelerate soon. In view of aforesaid advantages, the state is poised for significant growth in other industrial sub-sectors and achieve greater diversification.

CHAPTER 4

INFRASTRUCTURE



“Without a holistic care infrastructure to support us, our economy and society simply cannot thrive” - Jamaal Bowman

Infrastructure is a major sector that propels the overall growth and development of an economy. To facilitate production and investment in an economy, the need for world class infrastructure in terms of both quality and quantity cannot be overemphasised. Further, infrastructure ensures citizens’ access to basic services such as clean water, electricity, transport and communication, a market for finished products, etc. consequently creating jobs and boosting the business environment. Investment in infrastructure has a high multiplier effect and is essential for long term sustainable growth of the State. The State’s focus is on improving the crucial components of infrastructure namely electricity, transport (road, railway, and water & air), water supply & sanitation, ports, airports, warehousing facilities etc. for holistic development of infrastructure in the State.

In Odisha, Micro, Small and Medium enterprises (MSME) contribute significantly to economic value creation, employment generation, exports, and overall growth & development. The MSME sector contributes about 40 per cent of the exports and 45 per cent of the total manufacturing output in the State and are enabled by infrastructure development. Odisha ranks high as an Achiever (score – above 90 per cent) in the Logistic Ease Across Different States (LEADS) Index 2022, which is an indicator to assess the logistic ecosystem of States. According to the World Bank Logistic Performance Index (LPI) of 2018, India ranked 44 out of all the countries in the World.

Odisha is a power surplus State having an installed capacity of 8107 MW in 2021-22, registering a tremendous growth of 45 per cent in the last six years (from 2015-16 to 2021-22). The State has managed to achieve the mission of “Electricity to All” through constant and dedicated efforts of State Government and achieved 100 per cent electrification of villages by March 2020. The Government is taking steps for energy diversification by emphasising on other sources like biomass and solar power to ease the pressure on ecology and counter climate change. Electricity along with Gas, Water Supply & Utility services contribute 2.8 per cent to GSVA as per 2021-22 (RE) and is estimated to contribute 2.9 per cent in 2022-23 (AE).

As a service industry, transport does not exist for its own sake, rather it serves to achieve all round development of an economy. It enables trade, powers business, connects workers to their jobs and brings prosperity to the Region. Among the four modes of transportation (road, railway, water & air) in Odisha, the contribution of road transport is estimated to be around 56 per cent of transport GSVA followed by railways with 25 per cent as per 2022-23 (AE). After the relaxation on movement restrictions of COVID-19, the growth rate of road transport has bounced back to 7 per cent and 6.5 per cent in 2021-22 (RE) and 2022-23 (AE) respectively from a declined growth of 29.3 per cent in 2020-21 (RE). To improve air connectivity, new initiatives were undertaken to set up Sri Jagannath International Airport in Puri and the new air strip at Malkangiri along with development of a Biju Pattnaik Aero Space in Odisha. For effective Governance, digital platforms have been developed by the Government to meet public expectations and promote citizen participation through adoption of appropriate IT applications.

4.1. Infrastructure development is the bedrock for the progress of an economy

4.1.1. In consideration of the economic growth targets for 2030, the Odisha government has planned to take up several key infrastructure projects to improve the quality of life of people and bring about radical economic growth in the State. The projects will be implemented by 18 important Departments between 2022-23 and 2026-27.

4.1.2. Logistics support is a significant part of supply chain management and refers to a robust network of roadways, airways and waterways engaged in the storage, management, transportation, and delivery of products from the point of origin to destination.

“Logistics Policy 2022” aims to create an integrated logistics system to strengthen Odisha’s position as a preferred destination for trade & commerce.

Box 4.1

Logistic Ease Across Different States (LEADS)

Logistic Ease Across Different States (LEADS)

LEADS, as an initiative of the Government of India, has been instrumental in identifying challenges faced by stakeholders and the key areas of improvement. It will also provide a way forward to States and UTs for enhancing their logistic efficiency through a sound infrastructural base.

In the Logistics Ease Across Different States (LEADS) 2022 report, Odisha has been graded as an ‘Achiever’ State within the coastal cluster, showing exemplary logistics ecosystems with exceptional infrastructure and a transparent regulatory process. The LEADS 2022 survey, along with PM Gati Shakti’s transformative approach, aims to break the silos and improve the logistics efficiency of the country which will also reflect positively on international indices, such as Logistics Performance Index (LPI) conducted biennially by World Bank. Since 2018, the Logistics Division, DPIIT, Ministry of Commerce and Industry, GoI, has undertaken an annual LEADS survey in all States/UTs to assess the logistics ecosystem in the country at the State/UT level. The statistical assessment of LEADS 2022 was based upon 19 indicators (15 perception-based indicators & 4 objective indicators). The perception indicators are overarched by 3 pillars viz, Infrastructure (covers 4 indicators), Services (covers 7 indicators) and Operating & Regulatory Environment (covers 4 indicators). Adopting the evaluation framework of the Business Reforms Action Plan-1 in LEADS 2022, there is a shift from the usual uniform ranking process and all the States/UTs in their respective clusters are now grouped into three grades based on the percentage score range.

- (i) **Achievers:** These are States which have shown an exemplary logistics ecosystem with exceptional infrastructure and transparent regulatory process
[Score: Above 90 per cent of the highest scoring State (at 100 per cent)]
- (ii) **Fast Movers:** These are States who are moving towards becoming Achievers through progressive policy and legislative initiatives along with new infrastructure projects
[Score: 80 per cent to 90 per cent of the highest scoring State (at 100 per cent)]
- (iii) **Aspirers:** These are States which have initiated their journey towards logistics ease and excellence by adopting national best practices to further improve their contribution towards India’s emerging position as a global manufacturing and logistics hub.
[Score: Below 80 per cent of the highest scoring State (at 100 per cent)]

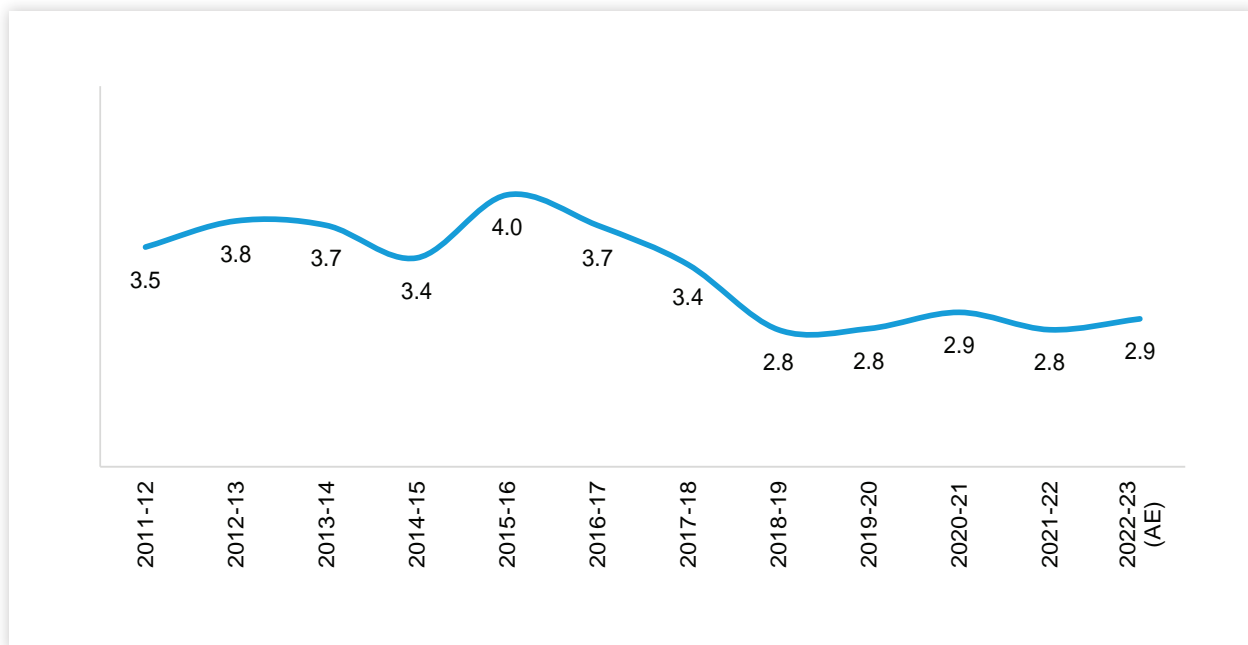
4.1.3. Energy, Transport (Road, Rail, Air & Water) and Science & Technology are the major components of infrastructure, development of which drives the whole economy to the path of glory. The subsequent sections will cover each of these areas in detail.

4.2. Energy sector: the core component of State Infrastructure

4.2.1. The availability of reliable, quality & affordable power is vital for rapid growth in agriculture, industry & overall economic development of a State. The energy sector is rightly regarded as the backbone of an economy, as it is a crucial development input in production, consumption and nation building. The energy sector not only significantly supports diversified economic activities but also has direct bearing on the quality of the State's air, water, land, forest resources, and climate protection. The power sub-sector along with gas and water supply contributed about 2.8 per cent of Odisha's GSVa during 2021-22 (RE) and is estimated to contribute 2.9 per cent in 2022-23 (AE). However, as far as growth is concerned, this sub-sector has, however, widely fluctuated from year to year due to several factors including the availability of inputs such as coal, gas or oil, environmental constraints, and natural shocks. The share and growth over the years of this sub sector at current and constant prices from 2011-12 to 2022-23(AE) is depicted in Figure 4.1 and Figure 4.2.

Figure 4.1

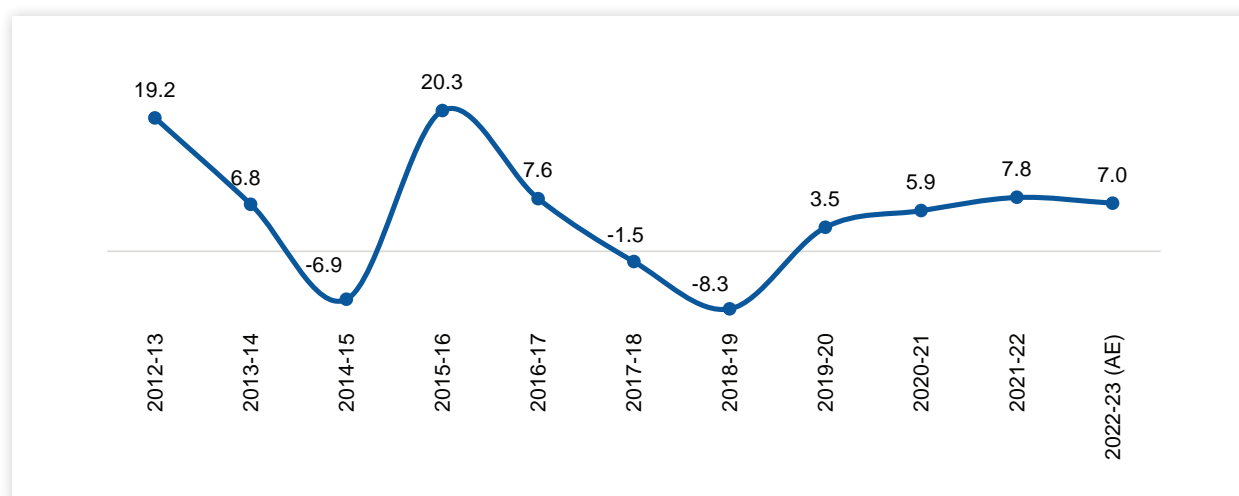
Percentage Share of Electricity, Gas, Water supply & Other Utility Services to GSVa - Odisha



Source: DE&S, GoO

4.2.2. Electricity being an inseparable part of modern life has many applications in both domestic and industrial appliances/machineries. However, it plays a greater role in industrialisation and transforming the economy of the State. The State has also introduced many pro-industrial policies and pro-consumer tariffs in this sector.

Figure 4.2

Growth of Electricity, Gas, Water Supply & Other Utility Services (in per cent) - Odisha

Source: DE&S, GoO

I. Power: Supply of Power surpasses demand (As per GRIDCO procurement)

4.2.3. To cater to the rising power demand of DISCOMs, GRIDCO has tied up with different generators including Central Generating Stations (CGS), State Generating Stations (SGS), Independent Power Producers (IPPs) & Renewable Energy (RE) developers. The power supply by DISCOMs caters largely to domestic and industrial demands - consumption by other consumers is relatively small. Consumption by the agricultural sector in Odisha is also quite small compared to the all-India average.

A. Installed capacity

4.2.4. The State's share in installed capacity of all power projects (including share of power from central & other sources) was 8107.1 MW in 2021-22 in comparison to 8018.3 MW in 2020-21, registering an increase of 1.1 per cent. But in the last six years (2015-16 to 2021-22) it increased by 45 per cent. Table 4.1 presents time series data of both contracted capacity of power and availability from different sources.

Table 4.1

Demand and Availability of Power by GRIDCO (in MW) - Odisha

Year	Demand (Estimated)	Availability of Power from different sources					Installed Capacity	Sold to other States
		State Sector	Central Sector	Other Sources	Purchase from Captive Plants of the State	Total		
2015-16	2934	1466	1275	85	75	2900	5593.1	44
2016-17	3020	1851	998	28	85	2962	5509.1	156
2017-18	3062	1674	1205	74	45	2998	5810.8	45
2018-19	2912	1771	1079	259	54	3163	6011.5	33
2019-20	2810	2184	765	206	60	3215	7671.7	267
2020-21	2802	2671	882	15	61	3629	8018.3	669
2021-22	3088	2376	1279	107	66	3827	8107.1	614

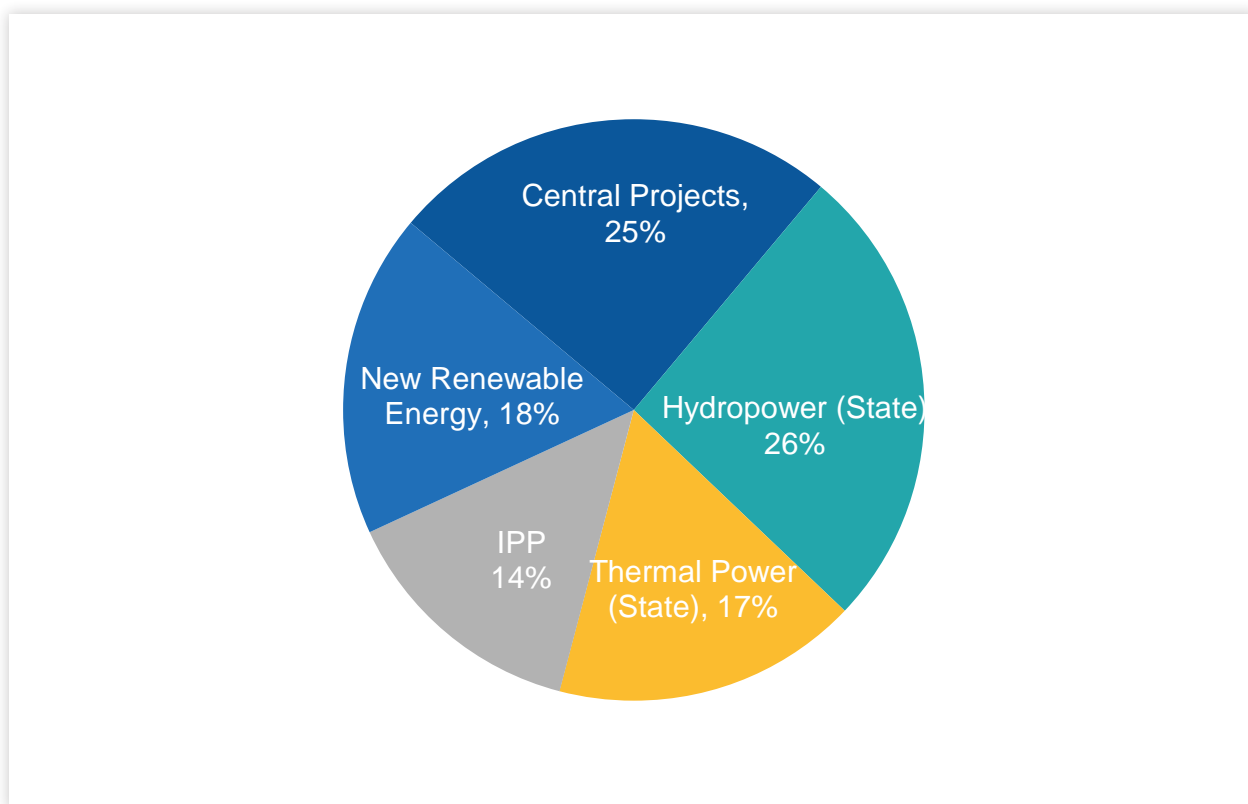
Source: GRIDCO, Odisha

4.2.5. The estimated demand for power has increased to 3088 MW in 2021-22 from 2934 MW in 2015-16, an increase of 5.3 per cent. The State remained power surplus during the years 2018-19 to 2021-22, as the load growth did not take place on expected lines.

4.2.6. By the end of 2021-22, the State had made arrangements for procuring power from 11 hydro power (7 in State and 4 in Central sector), 14 thermal power projects (2 in SGs, 4 IPPs and 8 CGSs), one biomass project, 8 small hydroelectric projects, 22 Solar Photo-Voltaic (SPV) projects and 5 wind energy plants.

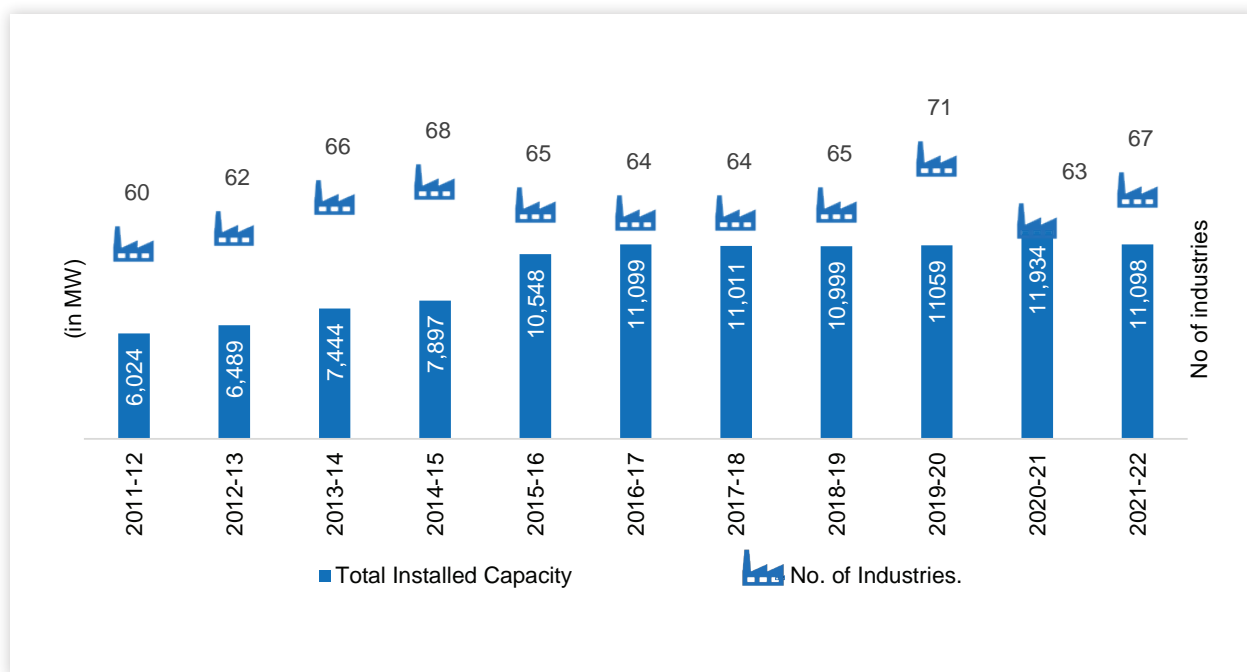
4.2.7. The contracted capacity of Odisha includes hydro, thermal, IPP, renewable energy sources and share in CGSs. The percentage share of all the above-mentioned sources to total contracted capacity during the year 2021-22 is given in Figure 4.3 .

Figure 4.3 Percentage Share of Different Power Sources in Total Contracted Capacity – Odisha, 2021-22



Source: GRIDCO, Odisha

Figure 4.4

Installed Capacity of Captive Power Plants (CPP) Producing More Than 1 MW (in MW) - Odisha

NB: Closed Industries not included.

Source: Office of EIC-cum Principal Chief Electrical Inspector, Odisha.

4.2.8. The total contracted capacity of power during 2021-22 was 8107.1 MW out of which the share of State hydro plants was the highest at 26 per cent followed by 25 per cent share of Central projects (Figure 4.3). Many industries inside the State have set up captive power plants (CPPs) to meet their own industrial demand. The details of the CPPs (more than 1MW) are given in Figure 4.4.

B. Power Generation (Availability)

4.2.9. Odisha is one of the pioneering States which undertook reforms in the electricity sector and opted for unbundling of power generation, transmission, and privatisation of distribution. During 2021-22, 3827 MW of power was available for consumption from all sources that stood at 47 per cent of total contracted capacity. The State sector, Central sector and other sources contributed 62.1, 33.4 and 2.8 per cent respectively of total power availability for Odisha during 2021-22 (Table 4.1). The surplus power injected to GRIDCO from captive power plants was 65.5 MW in 2021-22, an increase from 61.1 MW in 2020-21. State generators, namely Odisha Hydro Power Corporation (OHPC) and Odisha Power Generation Corporation (OPGC) ensured energy security of the State.

Odisha Renewable Energy Policy (OREP), 2022 envisages maximising the development of RE potential in the state and making Odisha a hub for the production of Green Hydrogen & Green Ammonia

4.2.10. The Odisha Government is keen on an energy transition that emphasises alternative sources like wind, small hydro and solar power. The recently released Odisha Renewable Energy Policy (OREP), 2022 envisages maximising the development of RE potential in the state and make Odisha a hub for the production of Green Hydrogen & Green Ammonia. During 2021-22, contracted capacity of renewable power by GRIDCO from various RE projects was 1433.7 MW.

C. Peak Period Demand & Availability

4.2.11. Table 4.2 displays the monthly peak period demand of power and the availability from different sources to meet the demand.

Table 4.2 Peak Period Power demand and availability (in MW) - Odisha

Month & Year	Peak Demand in MW	Availability (in MW)							
		Hydro	Thermal	IPP	CGP (Open Access)	ISGS	Inter State STOA for GRIDCO	Small Hydro & RE	Total
Apr-21	5383	1137	1235	557	610	1820	13	24	5396
May-21	5638	852	1232	653	582	2302	141	17	5779
Jun-21	5019	981	1096	760	538	1595	734	49	5753
Jul-21	5645	1021	989	751	546	2286	275	53	5921
Aug-21	5542	1258	1229	703	680	1592	215	79	5756
Sep-21	5583	1052	1209	316	671	2255	596	81	6180
Oct-21	5592	1563	1206	662	465	1610	91	86	5683
Nov-21	5362	996	813	634	273	2601	171	44	5532
Dec-21	5406	480	1136	746	430	2599	-241	17	5167
Jan-22	5101	829	736	346	280	2788	-602	123	4500
Feb-22	5424	923	1428	333	488	2234	299	18	5723
Mar-22	5362	1368	748	330	739	2116	0	61	5362

Source: GRIDCO, Odisha

4.2.12. From the above table, the peak period demand was the highest in July 2021 i.e., 5,645 MW, whereas it occurred last year in the month of October. During 2021-22, the availability of power exceeded the demand during the peak period. However, a power deficit was faced in the months of Dec' 21 & Jan' 22, when the peak demand surpassed the supply.

D. Power Consumption and Distribution

4.2.13. While the power purchase by Odisha DISCOMs (excluding CPPs) increased by 11.7 per cent in 2021-22 i.e., 27,396 MU as against 24,536 MU in 2020-21, the total power consumption across categories of consumers increased by 15.2 per cent i.e. 21,434 MU in 2021-22 as against 18,608 MU in 2020-21. The combined consumption of industry and domestic sectors is more than 70 per cent of total power consumption of the State. The domestic consumption is increasing continuously from 2010-11 due to massive investments in the Rural Electrification sector. Industrial consumption grew by 30 per cent in 2021-22 over the previous year. The State has a total of 94.9 lakh electricity consumers in 2021-22, as against 91 lakh during the previous year. About 91 per cent of the total number of power consumers belong to the domestic sector (both rural and urban). Rural consumers (in all sectors) constitute 77 per cent of the total consumers Broad consumer category wise energy consumption details are provided in Table 4.3.

Odisha is a power surplus State in the country with significant installed capacity supporting rise in energy demand in the State.

Table 4.3 Sector-wise Power Consumption Scenario (in million unit or MU) - Odisha

Odisha DISCOMs	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Domestic	6,296	6,757	7,108	7,543	8,113	8,130
Commercial	2,035	2,145	2,363	2,405	2,029	2,574
Industrial	5,793	6,425	7,252	6,713	5,529	7,035
Public Lighting	92	100	117	128	136	145
Irrigation & Agriculture	338	422	580	614	670	849
Railways	1,118	1,177	1,206	1,452	1,368	1,781
Public water works	260	254	298	316	312	383
Bulk Supply & others	411	449	446	557	451	537
Total consumption	16,343	17,729	19,370	19,728	18,608	21,434
Growth		8.48%	9.26%	1.85%	-5.68%	15.19%

Source: GRIDCO, Odisha

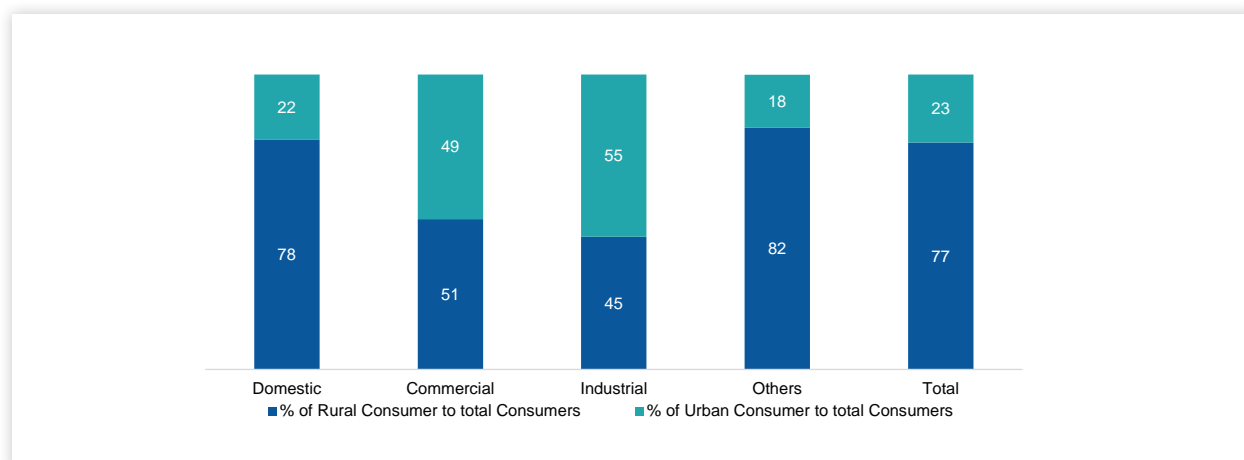
4.2.14. GRIDCO carried on the business of bulk power purchase & supply to four DISCOMs on a single buyer model. Tata Power Company Ltd. (TPCL) has been divested with 51 per cent equity share capital in all four power distribution companies (TP Central Odisha Distribution Ltd, TP Western Odisha Distribution Ltd, TP Southern Odisha Distribution Ltd. and TP Northern Odisha Distribution Ltd.) in the State. GRIDCO as the Designated Entity of the State Government holds 49 per cent stake in these distribution companies.

E. Rural Electrification

4.2.15. Odisha has witnessed a massive transformation in the availability of power over the last few decades. Constant and dedicated efforts of the State Government through different schemes to achieve the mission of “Electricity to All” have yielded good results. 47,679 villages of Odisha have been electrified by the end of March 2020. The State had a total of 94.9 lakh power consumers in 2021-22 with 72.62 lakh rural consumers and 22.29 lakh urban consumers. The detailed scenario is given in Figure 4.5. As per National Family Health Survey-5 (NFHS-5) (2019-2021), 96.6 per cent of rural households and 99.1 per cent of urban households have access to electricity in Odisha.

Figure 4.5

Sector-wise Distribution of Power Consumers (in percentage) - Odisha, 2021-22



Source: DISCOMS, Odisha

F. Transmission

4.2.16. The state has a robust power transmission system. OPTCL has added 11 GSSs during the year. Government has been providing equity support to OPTCL for taking up major transmission projects such as the 400 kV system for Paradip, construction of new GSS to meet the power demand of upcoming industries and to mitigate low voltage problems in rural areas. Funds have been provided to OPTCL to develop state of the art disaster resilient transmission and distribution systems for SCB Medical College and Hospital, Cuttack exclusively. A few snapshots of the commissioned GSSs are as below.



4.2.17. 132/33 KV Grid Sub-station at Birmaharajpur in Subarnapur district has been built at a cost of Rs 40.48 crore. This sub-station will mitigate low voltage issues and provide quality & reliable power in Birmaharajpur, Ulunda, Subalaya area and also to mega lift irrigation points.



4.2.18. 132/33 KV Grid Sub-station at Nawrangpur has been constructed at a cost of INR 34.69 crore. This sub-station will mitigate low voltage issues and provide quality & reliable power to Nawrangpur and its command area, Papdahandi, Sanamasaingaon and Maidalpur area.



4.2.19. 220/33 KV Grid Sub-station at Telkoi in Keonjhar district has been constructed at a cost of INR 55.71 crore. This sub-station will mitigate low voltage issues and provide quality & reliable power to Telkoi, Jagamohanpur in Keonjhr district and Pallahara in Angul district.

G. Energy Conservation

4.2.20. Conservation of energy is the first step towards energy transition. Energy efficiency and energy conservation are low-cost options to bridge the gap between demand and supply of energy. The following initiatives were carried out to create awareness on energy efficiency and energy conservation -

- 1000 "ENERGY CLUBS" established in High Schools to create awareness among school children
- Perform, Achieve & Trade (PAT)
 - I) 75 energy intensive industries notified as Designated Consumers (DC)
 - II) Utility-based DSM programmes carried out for all DISCOMs.
- Odisha Energy Conservation Building Code (OECBC-2022 and OECBC Rules-2022) have been notified to promote the construction of energy efficient buildings.



II. Renewable Energy: Access to Affordable, Reliable & Sustainable Energy

4.2.21. Our current reliance on fossil fuels is unsustainable & harmful to the planet making the adoption of alternative energy essential. Energy efficiency along with increased use of renewable energy contributes to climate change mitigation and disaster risk reduction. The Sustainable Development Goal (SDG) - 7 “Affordable & Clean Energy”, emphasises the use of alternative renewable energy sources like biomass, wind & solar power. The Renewable Energy Policy 2016 of Odisha aimed at augmenting the generation of renewable energy with relative emphasis on solar energy. Recently the “Odisha Renewable Energy Policy 2022” has come into force in November 2022 which targets to add more than 10,000 MW of renewable energy capacity in the State by 2030.

4.2.22. As of 2021-22, contracted capacity of renewable power by GRIDCO from various sources was 1460.7 MW, out of which 109.2 MW is from 8 small Hydro-electric Projects, 1010 MW from Solar PV Projects, including 25 MW from roof-top solar, 20 MW from one Biomass Power Project and 321.5 MW from wind sources. The contracted capacity of renewable energy will increase further after the completion of the ongoing pipeline projects. Odisha is on track to contribute to the Renewable Power Obligation (RPO) trajectory notified by Govt. of India where 43.3 per cent of energy needs have to be met from renewable sources by 2030.

4.2.23. Odisha Renewable Energy Development Agency (OREDA)

OREDA is the nodal agency for the implementation of various renewable energy programmes. Major initiatives of OREDA during 2021-22 are as follows-

4.2.24. Konark Solarisation

The project aims to turn the temple town of Konark into a solar town as well as a Net-Zero town. To make Konark a solar town several initiatives such as Solar Street Lighting, Solar Powered Drinking Water Kiosks, roof-top solar

power plants, solarising the night-time illumination of the Sun Temple, establishment of solar charging stations, introduction of electric vehicles, etc. have been taken up.

Roof Top Solar Power Plant

4.2.25. OREDA is promoting the installation of on-grid Rooftop Solar panel systems in residential, commercial as well as Government buildings both in CAPEX & RESCO models. Rooftop Solar plants of an aggregate capacity 6763 KW have been installed so far in different institutions.

4.2.26. In the 1st phase of RESCO implementation, OREDA has been working with 32 District Headquarter Hospitals (DHH), 7 Medical Colleges and Educational Institutions for identification of sites and feasibility assessments for a capacity of about 10 MW.

In the 'Make in Odisha' Conclave 2022, the Power, Renewable energy and Green energy sector fetched INR 2.38 lakh crore worth of investment out of the total investment intent of INR 10.5 lakh crore.

4.2.27. Solarisation of agricultural pump sets

Agricultural pump sets are being solarised under PM-KUSUM & Soura Jananidhi (State Scheme). The State Government & Central Government provide an equal amount of subsidy for solarisation of agricultural pumps under PM-KUSUM.

On-Going and New Schemes by Government:

4.2.28. Various Schemes and programmes have been implemented to strengthen the transmission & distribution infrastructure. Some of the important schemes are as follows:

- **Odisha Distribution System Strengthening Project (ODSSP)** - A flagship scheme under which construction of 463 33/11 KV substations have been completed and INR 1796.73 crore have been approved for construction of an additional 99 33/11 KV substations along with 64 independent lines under phase IV of ODSSP to low voltage in rural areas.
- **Socio-Economic Transformation and Upliftment (SETU)** - INR 17 crore have been sanctioned for new 33/11 KV substations at Badapada to provide quality power supply to Swabhiman Anchal.
- **Elephant Corridor Scheme** – Aims to prevent elephant death due to electrocution. INR 690.20 crore have been released to DISCOMs till December 2022 for implementation of this scheme.
- **State Capital Region Improvement of Power System (SCRIPS)** – The objective is to provide uninterrupted and reliable power supply to the cities of Bhubaneswar and Cuttack. Total funds released till FY 2022-23 were INR 1329.52 crore. The transmission and distribution infrastructure created in twin cities has been made disaster resilient.
- **Biju Gram Jyoti Yojana** - About 97 per cent of rural households have access to electricity. INR 415 crore has been released to the four DISCOMs during 2021-22 & 2022-23 to strengthen the distribution infrastructure and provide electricity to the remaining un-electrified households.

4.3. Transport: Lifeline of Infrastructure

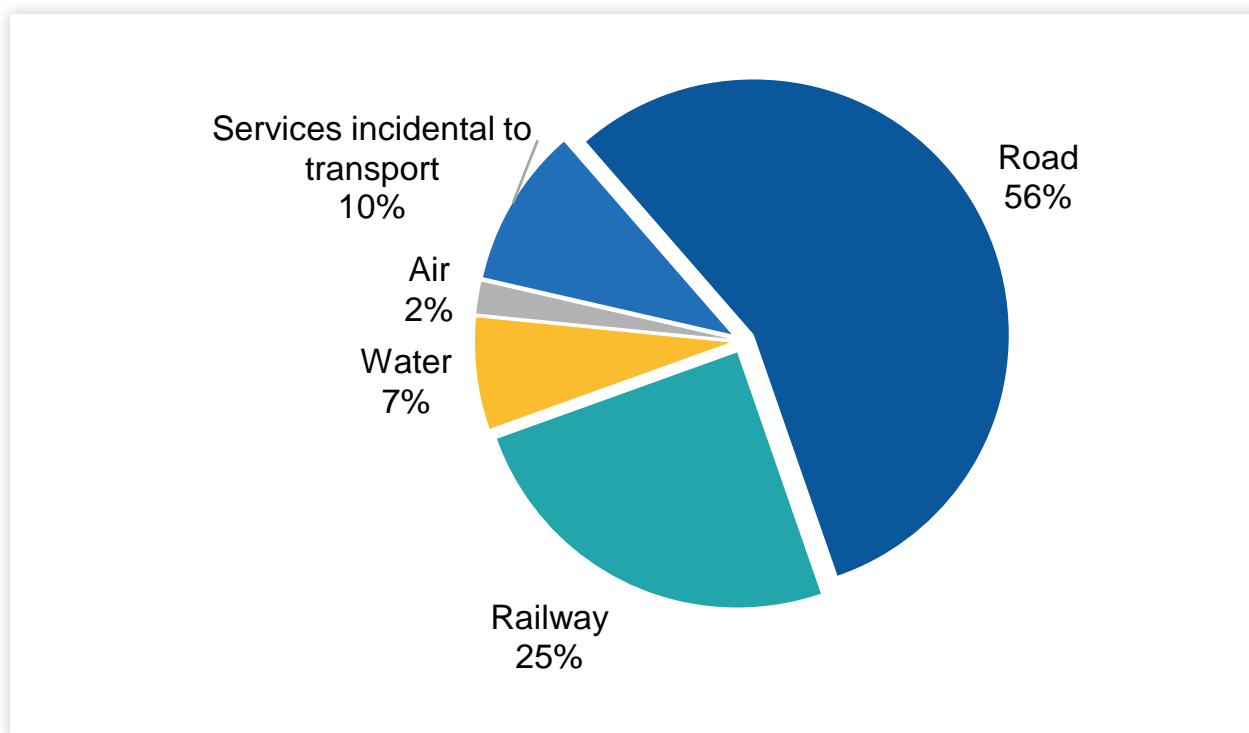
4.3.1. Transport networks cater to the mobility needs of both passenger & freight movement, thus becoming a key component of infrastructure. Rapidly changing demographic trends, urbanisation, industrialisation, and human settlements, etc. have led to an upsurge of demand for mobility – both passenger and freight traffic – in the State. With the expansion of social and economic activities, the requirement of diversified mobility across

the major modes of transport like road, railways, airways, and waterways remains very high in Odisha. A sound transport system in the State largely depends on its network strength, quality, speed, economic and energy efficiency, frequency of services, cost effectiveness, eco-friendliness and safety with minimal accidents, etc. The State Government addresses these issues with high priority by promoting the development of backward areas and connecting remote habitations to growth and service centres.

4.3.2. The percentage share of Transport, Storage, Communication, and Services related to broadcasting sector in the total GSVA of the State is estimated at 5.5 per cent (at current prices) for 2022-23 (AE), slightly lower than 5.54 in 2021-22 (RE). Among the constituents of transport services, the contribution of road transport is the highest to transport GSVA of Odisha, i.e., 56 per cent followed by railways, which contributes 25 per cent as per 2022-23 (AE). The break-up of transport GSVA is given in Figure 4.6.

Figure 4.6

Share of Road, Railway, Water and Air in Transport GSVA in Odisha (in per cent), 2022-23 (AE)



Source: DE&S, GoO

H. Roads

4.3.3. Roads are crucial for providing connectivity to human settlements, as well as commercial, industrial, and cultural establishments. In the absence of an adequate rail network in Odisha, roads play a predominant role in accommodating passenger and freight movements. The growth of the road transport sector has bounced back to 7.1 per cent in 2021-22 (RE) from a decline of 29.3 per cent in 2020-21 (RE), after the ease of movement restrictions imposed during COVID -19. In 2022-2023 (AE), the road transportation sector resumed its growth trajectory (6.5 per cent). The road network of the State consists of both highways, district and other roads, as detailed in Table 4.4.

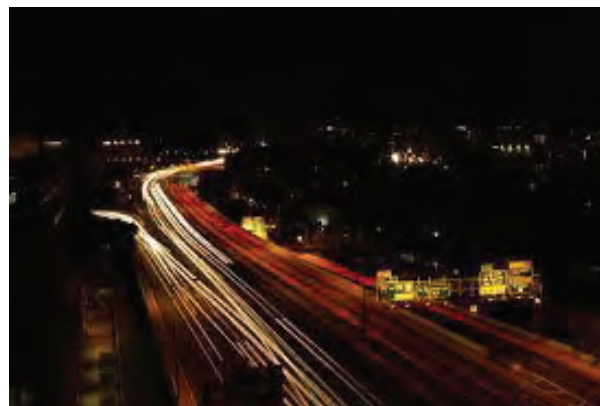
Table 4.4 Road Length by Types (in km) – Odisha, 2021-22

Type of Roads	Length (Kms)
National Highways	5753
Express Highways	17.9
State Highways	4172.8
Urban Roads	18590.7
Rural Roads	103731
Major District Roads	2740.8
Other District Roads	18854.5
GP/PS Roads	158800.4
Forest Roads	7574.9
Irrigation Roads	18126.3
GRIDCO Roads	88
Total	338450.4

Source: C.E, NH, C.E R&B, P.R. Department, GoO

I. National Highways

4.3.4. National Highways (NH) constitute only about 2 per cent of the road network in Odisha. They are the linking factor for all major and feeder roads of the State. 32 National Highways traverse through Odisha with a total length of 5753 kms of which 2833 kms and 2920 kms are under the control of NH wing of Government of Odisha and National Highway Authority of India (NHAI) respectively as of 2022. By the end of 2021-22, 12 projects of 309.4 kms with an expenditure of INR 481 crore were completed. Out of 26 ongoing projects, 699.6 kms have been completed and the remaining 210.2 kms are under progress. For 2022-23, 26 projects covering 212.9 kms are approved with a cost estimate of INR 3161.5 crore. State PWD (R&B) under the administrative control of the Works Department looks after the repair and maintenance of State Highways, major district roads and other district roads in Odisha.



4.3.5. During the year 2013-14, Government introduced a new scheme “State Highways Development Project (SHDP)” for the development of State Highways in the Double Lane Standard. Under this scheme, all the State Highways are being widened and improved to Double Lane Standard. The State cabinet had approved the development of 2158.26 kms of State Highways to 2-lane Standard with an outlay of INR 3000 crore with a variation of 10 per cent. By the end of 2021-22, 1961.45 kms of road length was taken up for 2-laning with an estimated cost of INR 3376.98 crore. Out of this, 2-laning of 1932.66 kms of road length was completed with an expenditure of INR 3184.55 crore. The Government of Odisha has envisioned the development of a four-lane road of 627 kms, namely “Biju Expressway (North-South Expressway)” connecting Jagdalpur to Rourkela through western Odisha and KBK districts of the State. Out of the total length of this Expressway, 181 kms of NH is being improved by NHAI/ MORT&H while 163 kms of SH-10 (i.e., Sambalpur-Rourkela Road) has been completed through PPP mode. The remaining 294 kms of the Expressway have been taken up under this scheme and the total project cost has been

pegged at INR 3630 crore, which includes the Land Acquisition Cost as well. For better monitoring of the project, supervision consultants have been engaged. The roads will be maintained by the Works Department after the expiry of the defeat liability period. The State Cabinet approved the construction of Biju Expressway in 2015-16 for a total length of 638 kms. The completion of the Project Corridor is targeted by 2023.

Bridge Projects

4.3.6. Rural Development Department owns a number of roads with un-bridged nallahs/rivers on them, thereby depriving the villagers of all-weather connectivity, compelling them to take detour. In some cases, even there is no alternative alignment, thereby causing difficulties to avail their basic services.

4.3.7. Connecting all villages with all-weather roads is both time and resource consuming. Provision of small bridges with reasonable approach road may provide instant connectivity to large number of people in inaccessible areas.

4.3.8. The State has been availing loans from the NABARD for construction of bridges since 1995-96. Government of India is also providing funds for construction of bridges on PMGSY roads permissible under the guidelines of the scheme on cost sharing basis.

4.3.9. But the existing schemes are unable to cater to the requirements of the State. Hence, the Government of Odisha has embarked upon a new initiative in formulating and launching the ambitious "Biju Setu Yojana" (BSY) to bridge all the missing links on roads of RD Department. In addition to above, the programme also covers strategic and important Panchayat Samiti roads belonging to PR Department. The BSY, as such, has been formulated to provide an effective all-weather road network across the length and breadth of the State, so as to effectively meet the transportation needs of every sector cost effectively.

4.3.10. Since inception of this scheme during 2011-12 up to 2021-22, 1768 bridge projects with a project cost of INR 8930.51 crore have been taken up, out of which 1238 bridges have been completed till end of January 2023, 441 bridges are ongoing, and 89 bridges are under process.

4.3.11. During the year 2022-23, 430 nos. new Bridge projects have been sanctioned by RD. Department, for which preconstruction activities are going on.



Achievements under BSY since launching of the scheme is presented below:

Table 4.5 **Achievements under BSY**

Financial Year	No. of bridges completed	Budget provision (INR crore)	Funds utilised (INR crore)
2011-12	7	80.00	54.60
2012-13	16	140.00	135.88
2013-14	97	175.00	172.19
2014-15	116	187.00	186.63
2015-16	119	230.00	229.99
2016-17	108	600.00	562.96
2017-18	121	500.00	457.51
2018-19	78	650.00	494.67
2019-20	89	560.00	550.74
2020-21	185	860.00	752.70
2021-22	203	1212.20	935.41
2022-23 (up to Jan' 2023)	99	1788.02	634.79
Total	1238	6982.22	5168.07

Source: R.D. Department, GoO

Instream storage structures near Bridge:

4.3.12. R.D. Department has taken up Bridge-cum-weir projects across the state primarily on small to medium bridges with an aim to store adequate quantity of water during Monsoon inside the water streams in order to Supply water for minor irrigation, domestic use and livestock feeding, Ground water recharging & reviving wells/ponds, creating green environment and to control soil erosion, reduction of atmospheric temperature & Creating livelihood of the local people by pisciculture etc.

4.3.13. 32 Bridge-cum-Weir projects have been taken up during the year 2021-22 with project cost of Rs 42.65Cr. 16 projects have been completed up to January 2023. There is a budget provision of INR 38.00 crore for Bridge-cum-weir projects out of which an amount of INR 21.25 crore has been utilized till the end of January 2023. It has been proposed to construct 100 projects during the year 2022-23 with a project cost of INR 150 crore (approximately) & 100 during the financial year 2023-24 with project cost of INR 170 crore (approximately).

4.3.14. The total registration of motor vehicles declined by 4.5 per cent in 2022 (March 2022) compared to 2021. During 2022, 10,640 road accidents were recorded, claiming 4,916 lives. However, road safety measures by the State Government have led to a declining trend of road accidents in Odisha.

4.3.15. Motor vehicle revenue collected during 2021-22 in the State grew by 9 per cent over 2020-21, yet it constituted only 94 per cent of the target revenue. The revenue had contracted by 18.9 per cent in 2020-21 due to restrictions imposed on account of COVID-19. The predominance of personalised vehicles like 2 wheelers, cars, etc. causes problems such as traffic congestion, parking, auto pollution & various vehicle offences. The penalty charges during 2021-22 for vehicle offences increased tremendously by 51 per cent compared to previous year.

4.3.16. Climate Change has become a global concern over the last few years and the road transport sector is a major contributor to the rapid rise in global temperature. Therefore, to reduce the use of fossil fuel and associated emissions, the Government of India has adopted a National Electric Mobility

The EV policy of Odisha seeks to achieve 20 per cent EV adoption across all vehicles registered by 2025

plan and has committed to cut emissions intensity below 35 per cent levels by 2030 and requested the states to frame their EV policies. Accordingly, the Government of Odisha announced its EV policy in August 2021, which aims at accelerating the adoption of EVs along with a focus on manufacturing EV components including batteries. This policy seeks to achieve 20 per cent EV adoption across all vehicles registered in Odisha by 2025.

J. Highlights of Odisha's EV Policy

- Purchase incentives of 15 per cent
- 100 per cent exemption of road taxes and registration for 4 years
- Interest subvention of 5 per cent on loans for purchase of electric buses
- 100 per cent of SGST paid on the sale of electric buses registered in the State will be reimbursed during the policy period.



4.3.17. The rising number of old vehicles on the road is a major contributor to air pollution. The Government of Odisha recently approved "Registered Vehicle Scrapping Facility Policy 2022" to phase out 15+ year old vehicles from the road. This is in line with the Vehicle Scrapping Policy released by the Government of India in January 2021. The old Vehicle Scrapping Policy is also expected to set a milestone for the development journey by providing an impetus to the automobile industry.

Odisha cabinet approved the "Registered Vehicle Scrapping Facility Policy 2022" in September 2022 aimed at creating an eco-system for phasing out unfit & polluting vehicles

K. Odisha Road Transport Corporation (OSRTC)

4.3.18. OSRTC's goal is to provide safe and dependable transport facilities to the public. During 2021-22, the corporation had 367 buses on the road in 267 routes with an average fleet strength of 596 and carried 56.7 lakh passengers with regular staff strength of 199. On road buses increased by 45 per cent during 2021-22 over the previous year. During FY 2021-22 OSRTC procured 180 new buses including 10 ultra-luxurious Volvo buses and decided to operate 9 new Inter-State routes with 7 neighbouring States. The OSRTC fleet has been chosen for transportation of players for different National and Inter-National events.

4.3.19. Construction of an Inter-State Bus Terminal (ISBT) at Baramunda is under progress and steps have already been taken to construct 55 new block level bus stands in 22 districts. Three bus stands, namely Motu (Malkanagiri), Jeypore (Koraput) and Aska (Ganjam) are in the finishing stage and Athagarth is already finished. 35 new inter-State and intra-State routes have been added to OSRTC route operations. The financial position of OSRTC has improved since the previous year mitigating a loss of INR 1,055 lakh and achieving a profit of INR 152 lakh with the easing of COVID -19 restrictions.

II. Railways

4.3.20. Railway routes pass through twenty-five (25) districts of the State, excluding 5 districts of Boudh, Deogarh, Kandhamal, Malkanagiri and Nawarangapur. There exists disparity in the extent of railway coverage across districts. By the end of 2021-22, the State had 2,859 kms of railway lines out of which 2789 kms (97.5 per cent) have been electrified. Revenue earned from freight traffic handled by railways reached an all-time high of INR 23,012.3 crore

and witnessed a sharp improvement in passenger bookings. The number of passengers (34.4 million) increased after the easing of COVID 19 restrictions but did not recover to the level achieved in earlier years. Overall, railway coverage is lacking in the State and its contribution to State GSVA is 0.9 per cent as per 2022-23 (AE), whereas it contributes 25 per cent to the transport sector GSVA of Odisha. The double-digit contraction in railways of 13.3 per cent in 2020-21 (RE) due to COVID-19 movement restrictions has revived and is estimated to grow by 10.5 per cent as per 2022-23 (AE). The railway route length in the State per thousand sq. km, is about 18 kms, while the national railway density is around 20 kms. It is likely that expanding the rail network in the State may increase the sector's contribution to state GSVA both directly and indirectly by attracting investment in the industrial and mineral sectors.

4.3.21. The State has acquired land for 14 new railway projects and is involved in 3 projects on a cost sharing basis: -

- 1) Khurda Road- Bolangir NBG Rail link
- 2) Jeypore- Nawarangpur NBG Rail link
- 3) Jeypore- Malkanagiri NBG Rail link.

Odisha Rail Infrastructure Development Limited (ORIDL) is a joint venture company appointed by Railway Ministry, Govt. of India, for coordinating the railway expansion network in Odisha.

III. Water Transport

4.3.22. Odisha, a principal maritime State has a coastline of 480 kms and is endowed with conducive, unique, and strategic port locations. The water transport sector has registered a double-digit growth from 2016-17 to 2018-19 but it has slowed down recently due to pandemic restrictions. As per 2022-23 (AE) the sector is estimated to grow at 9.6 per cent. The revenue is collected mainly from inland water transport, international shipping companies and ports.

IV. Ports

4.3.23. Expansion in port capacity has been accorded as the highest priority by the Government through implementation of well-conceived infrastructure development projects. The trade competitiveness of an economy largely depends on the presence of well-equipped ports. Odisha Government has notified the "Odisha Port Policy -2022" in November 2022 and formed the "Odisha Maritime Board" (OBM) to provide an impetus to trade through Odisha's ports.

A. Paradip Port

4.3.24. Paradip Port is the preferred maritime gateway in the East Coast of India. It is the largest dry bulk handling port in India and is strategically located in the State of Odisha. The hinterland of the port is known for its mineral and mining strength. It is endowed with raw material, water resources, rail & road connectivity and ancillary infrastructure which will facilitate port-led industrialisation in the region.

4.3.25. With an estate sprawling across 6,285 acres, Paradip Port has a 12 kms navigational channel which is 300 meters wide and has a turning basin of 520 meters in diameter with an 18.1-meter-deep approach channel that serves the port. It operates round the clock, 24x7 on all 365 days of the year.

Odisha Government has notified the Odisha Port Policy -2022 and formed the Odisha Maritime Board (OBM) to provide an impetus to trade through the state's ports.

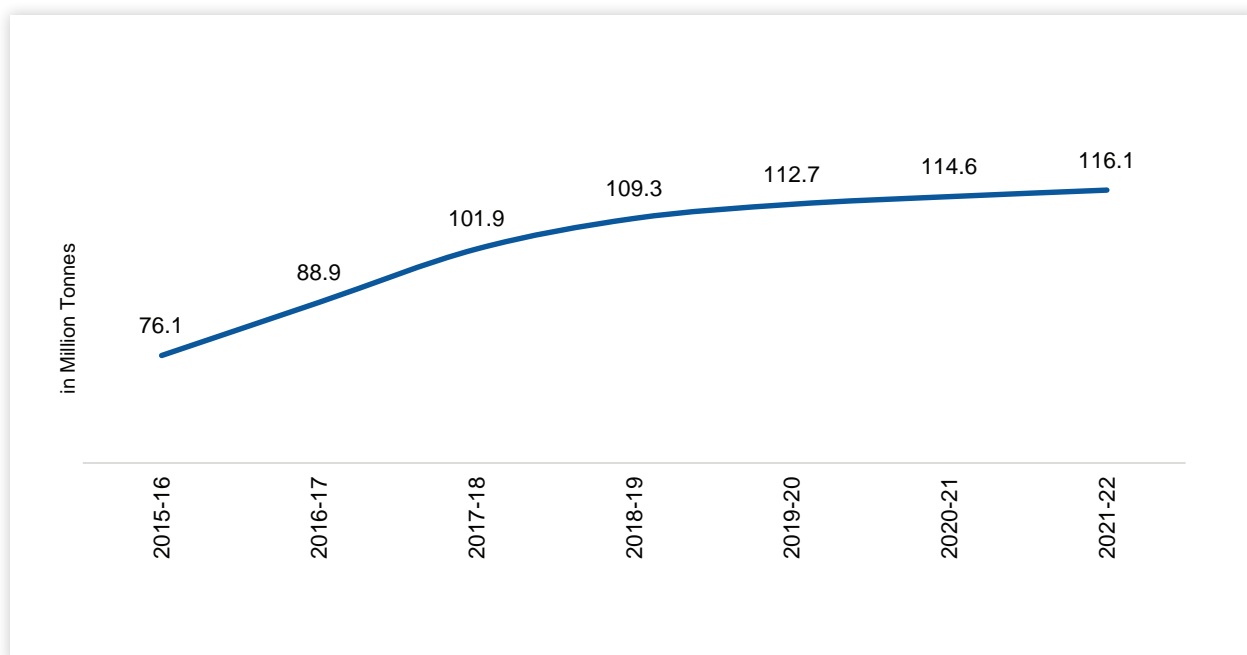
4.3.26. Paradip Port, declared as the 8th major port of India in April 1966 by Government of India, is the only major port in Odisha and the first major port on the East Coast commissioned in independent India. The port is equipped with 18 berths, three single point moorings and one Ro-Ro jetty and handles over 116 MT of cargo (of 719.4 MT at all India level) in 2021-22 which was 1.4 per cent higher than the previous year (Figure 4.7). Details of the type of cargo handling at Paradip Port is given in Table 4.6.

Table 4.6 Types of Cargo Handled at Paradip Port (in million tonnes) - Odisha

Year	Import	Export	Coastal	Total	Growth (per cent)
2015-16	46.4	0.8	28.9	76.1	-
2016-17	53.9	10.2	25.5	88.9	17
2017-18	60.6	9.8	31.5	101.9	14.5
2018-19	62	9	38.3	109.3	7.3
2019-20	59.3	18	35.4	112.7	3.1
2020-21	57.6	57	30.8	114.6	1.7
2021-22	59.3	56.8	42.2	116.1	1.4

Source: Paradip Port Trust

Figure 4.7 Increase in Cargo Handled at Paradip Port (in million tonnes) - Odisha



Source: Paradip Port Trust

4.3.27. The major ongoing capacity addition projects in the port are Southern oil jetty, multipurpose clean cargo berth, deep drought coal berth and deep drought iron ore berth on Build Operate Transfer Basis (BOT) to enhance the cargo handling capacity of Paradip Port.

Major Achievements of Paradip Port during 2021-22

- In FY 2021-22, over 116 million Metric Tonnes of cargo was handled by the Paradip Port as compared to 114.6 million Metric Tonnes handled during FY 2020-21, with a growth of 1.4 per cent.
- The port handled the highest ever monthly total of 12.3 million Metric Tonnes in March' 22.
- The output per ship berth-day achieved is 27,295 MT.
- The average TRT of the Vessels stands at 55.6 hours (Overall) & 46.4 hours (On Port A/c.).
- The average Pre-Berthing detention stands at 2.4 hours as against 6.2 hours in 2020-21.
- Mechanised Coal Handling Plant unloaded maximum no. of BOBRN Rakes, i.e., 7,156 in 2021-22 surpassing the previous record of 5,698 in 2018-19.
- Mechanised Coal Handling Plant Ship-loaded 27.8 million Tonnes in 2021-22 as against 25.2 in 2018-19.
- A record number of 64 rakes (27 outward + 37 inward) handled in a day on March 14, 2021
- The port handled the highest ever average rakes per day i.e., 51.82 in February 2021 where the average of incoming & outgoing rakes is 29.9 & 21.9 respectively.
- In pursuit of augmenting coastal shipping, MV STAR LYRA, a cape vessel berthed at the inner harbour of Paradip Port, with 16m Draught, at New Iron Ore Berth, will load 1,46,565 MT of Iron Ore Fines, the highest ever Iron ore cargo loaded in the port.
- MV LILA LISBON becomes single biggest Import Cape Vessel so far, carrying a shipment of M/s. Oceanic Trade Minerals Pvt. Ltd., with record cargo quantity of 1,34,375 MT Gypsum to berth at CQ-1 Berth of Paradip Port.
- The Port handled highest ever monthly total of 12.3 million Metric Tonnes in March 2022.

Box 4.2

Today's Paradip Port

Salient features of Paradip Port

- Largest major port in terms of rated capacity.
- Largest Dry Bulk Handling major port
- Cheapest Indian Bulk Port with lowest Vessel related charges
- Most efficient port in India with the highest OSBD, i.e., Output per Ship Berth

4.3.28. The average turn round time of ships is an important indicator of a well-equipped and efficient port, Paradip Port has improved over the years by reducing the average turn round time. Among ports of the country, Paradip occupied 11th position (4.5 days) as far as turnaround time is concerned in 2015-16 and has shown the biggest improvement in reducing the average turnaround time and promoted to 8th rank (2.3 days) in 2021-22. Details are provided in Table 4.7.

Table 4.7 Average Ship's Turnaround Time at Major Indian Ports (in days) – Various Indian Cities

PORT	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Diff in 7 years
Paradip	4.5	5	3.3	2.5	3	2.4	2.3	2.2
Visakhapatnam	3.8	3.8	3	2.5	2.5	2.8	3.2	0.7
Kamarajar	6.5	2.7	2.2	2	1.9	1.8	2	4.6
Mumbai	4.6	3.3	3.7	2.5	2.6	2.5	3.1	1.5
Deendayal	4.7	4.4	2.5	3	2.9	2.8	2.5	2.2
V.O.	3.7	4.4	2.7	2	2	1.9	2	1.7
Kolkata	4	4.7	4.1	3.8	4.2	3.2	2.9	1.1
New MPT (New Mangalore Port Trust)	2.6	2.4	2	1.9	1.91	1.91	1.9	0.7
Chennai	2.5	2.5	2.2	2	2	2.14	2.2	0.3
Haldia	3.3	3.5	3.8	3	3.62	3.09	2.5	0.8
Mormugao	3.7	4.5	2.6	2.6	2.69	3.15	3.2	0.5
JNPT	2.4	2	2.2	2.1	2	1.19	1.2	1.3
Cochin	2.2	2	1.5	1.5	1.51	1.49	1.4	0.7
All India	3.6	3.4	2.7	2.5	2.59	2.33	2.3	1.4

Source: Ministry of Ports, Shipping and Waterways, GOI.



B. Other Ports

4.3.29. With 480 kms of coastline, Odisha has 14 potential sites for minor ports development. These minor ports are located at Gopalpur, Bahuda Muhan and Palur in Ganjam district; Baliarchandi & Astaranga in Puri district; Jatadhar Muhan in Jagatsinghpur district; Inchri, Chandipur, Bahabalpur, Kirtania and Bichitrapur (Talasari) in Balasore district; Dhamra & Chudamani in Bhadrak district and Riverine port in Kendrapara district. Dhamra and Gopalpur port are commercially operational. Cargo handled by Dhamra and Gopalpur port was 33.4 MMT and 8 MMT respectively by the end of 2021-22. Government of Odisha is making efforts to develop three other non-major ports i.e port at Subarnarekha mouth (Kirtania), riverine port on Mahanadi River on Mahakalapada block of Kendrapara district and Astaranga port of Puri district are in the pipeline in PPP mode.

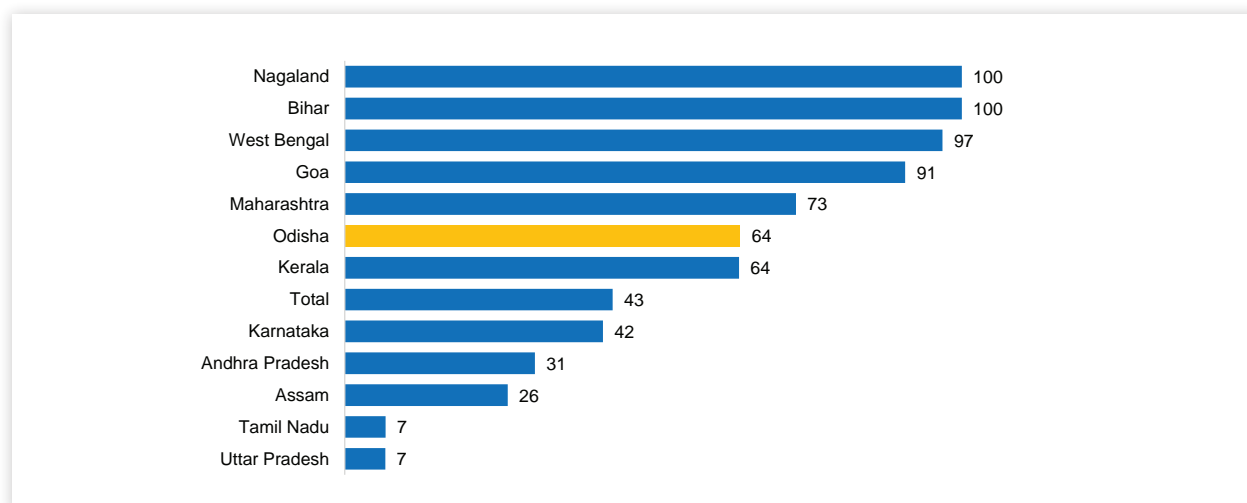
V. Inland Water Transport (IWT)

4.3.30. IWT is an important alternative, economic, fuel-efficient, and environmentally friendly mode of transport. Odisha has an extensive network of rivers, lakes, canals and breakwaters. An optimal combination of road, rail and inland water transport will provide an effective & efficient transport infrastructure in the state. Inland water transport services are provided by the State Government. The passenger launch services are used in remote areas where other modes of transport are generally unavailable. The Directorate of Port and Inland Water Transport under the administrative control of the Commerce and Transport Department, Government of Odisha, is the nodal agency which controls activities relating to passenger launch services, survey and registration of inland crafts. Passenger motor launch services are operational in six different water routes in two sectors, i.e., Chandbali and Balugaon. For development of Inland Water Transport, the Government of India has enacted the National Waterways Act 2016 in which 111 waterways have been declared as National Waterways (NW), out of which 6 waterways i.e, NW-5, NW-14, NW-22, NW-23, NW-64 and NW-96 are in Odisha. During 2021-22, 1.2 lakh passengers were moved by IWT, a 30 per cent increase from the previous year. The fare collection also bounced back after the removal of COVID-19 restrictions, witnessing a growth of 58 per cent over the 2020-21 collections of INR 27.5 lakh.

4.3.31. The navigable length of waterways is an indicator of inland water potential of a State. Details of State wise navigable waterways in India during 2020-21 is given in Figure 4.8.

Figure 4.8

Navigable Length of Rivers/Canals/Lakes in State (km) (per cent of Total Length) – India, 2020-21



Source: Statistics of Inland Water Transport 2020-21

VI. Civil Aviation

4.3.32. The air transport sector was severely affected by COVID-19 restrictions with a negative growth of 46.3 per cent in 2020-21(RE). However, air transport revived in 2021-22(RE) registering a tremendous growth of 75.2 per cent and it is estimated to grow 58 per cent as per 2022-23(AE). The contribution of this sector to total GSVA of Odisha is less than one per cent. The Airports Authority of India has developed the existing terminal building at Biju Pattnaik Airport, Bhubaneswar for operating international flights for which the State Government has provided different essential services, such as Animal Quarantine Services, Plant Quarantine services, Medical Services, and Immigration Services along with additional land for expansion of Airports. Odisha's first international flight was started in July 2015.

4.3.33. At present, this airport provides connectivity to 17 cities in India. After the pandemic, Biju Patnaik Airport, grew substantially in 2021-22, recording 42 per cent growth in passenger traffic, 42 per cent growth in cargo movement and a revenue growth of 21.2 per cent in comparison to 2020-21 and is likely to grow further with the various development plans undertaken by Airports Authority of India. The airport is expected to be recognised for its latest facilities and capacity shortly.

Brief on Development Projects in Planning at Biju Pattnaik Airport, Bhubaneswar

- New Domestic Terminal Building (T3)
- Under Make in India provisions, ATC Automation System by M/s BEL
- Conversion of CAT-I to CAT-III ILS and Runway Resurfacing
- Parallel Taxi Track (Phase-II)

Biju Patnaik International Airport has recorded 42 per cent growth in passenger traffic and cargo movement and a revenue growth of 21.2 per cent in 2021-22 over the previous year.

Brief on Development Projects in Progress at Biju Pattnaik Airport, Bhubaneswar

- New Control Tower, Technical Block, Fire Station and E & M Workshop
- Parallel Taxi Track, extension of apron with link taxi and Parallel Taxi Track (Ph-I)
- Hanger with apron and taxi
- Link Building between T1 & T 2 and renovation of International Terminal Building T-2
- Advance Surface Movement Guidance Control System (ASMGCS)
- Isolation bay with link taxi track

Achievements During 2021-22

- 1) Provision of 2 Passenger Boarding Bridges completed.
- 2) 4 MW ground based solar power plant installation completed and waiting for commissioning.
- 3) New CAT-I ILS installed for smooth landing of flights and commissioning awaited.
- 4) In Line Baggage Scanning System installed for smooth movement of luggage.

4.3.34. Jharsuguda Airport under AAI has been developed into a full-fledged commercial airport with the efforts of the State Government and started its flight operations in March 2019. While private carrier Spice Jet operates flights from Jharsuguda to cities like New Delhi, Hyderabad and Kolkata, Regional operator Alliance Air, a subsidiary of Air India operates flights to Raipur and Bhubaneswar under RCS-UDAN.

4.3.35. New Commercial Flights have been connected from BBSR to Jaipur (Rajasthan) & Goa in November 2021 & December 2021 respectively.

4.3.36. RCS-UDAN : As per Government of India approved NCAP-2016 Policy (National Civil



Aviation Policy-2016) to stimulate Regional Aviation growth under the Regional Connectivity Scheme, Govt. of Odisha and Govt. of India in joint collaboration have taken pro-active steps to improve the Rourkela Airstrip in Sundargarh District, Utkela Airstrip in Kalahandi District and Jeypore Airstrip in Koraput District, Rangeilunda Airstrip in Ganjam district and Rasagovindapur in Mayurbhanj district into full-fledged airports under RCS-UDAN scheme. Out of these, infrastructure work of Rourkela Airstrip and Jeypore Airstrip have been completed and DGCA licence has been obtained for commercial flights. During 2021-22, Odisha generated Rs 94.2 lakh revenue from the civil aviation sector connected with 17 cities within India and carried 22.2 lakh passengers, 42 per cent higher than the previous year. Total cargo movement in 2021-22 also increased by 42 per cent over the previous year of which international cargo comprised only 0.3 per cent.

4.3.37. **New Initiatives:** Government of Odisha has taken initiatives to set up Sri Jagannath International Airport, Puri, and a new airstrip at Malkangiri. In PPP mode, an airport at Dhamra is also in the pipeline.

4.3.38. **Flying Training Institute:** A flying training Institute namely, "Govt. Aviation Training Institute" (GATI) has been functioning under the Directorate of Aviation under PPP mode from November 2008 which started from January 2009 for imparting flying training to the Pupil Pilots of Odisha and elsewhere to make a career as commercial pilots. Various initiatives have been taken by the Government to expedite its growth, including regional connectivity with smaller aircrafts, opening a new opportunity. A Satellite Training Hub (Aviation Hub) has been developed at Birasal airstrip in the State. To expand the flying training facility, the daytime flying training at Birasal airstrip in Dhenkanal district was started from November 26, 2019. Construction of Hanger, ATC, Fuel point, Ambulance and Fire room installation of CCTV on runway at Birasal airstrip are in progress. The Government of Odisha is also taking initiatives to make a Biju Pattnaik Aerospace in Odisha.

To improve air connectivity, new airports are coming up at Utkela, Jeypore, Rangeilunda, Rasgovindpur and at Malkangiri and other places.

4.4. Science and Technology

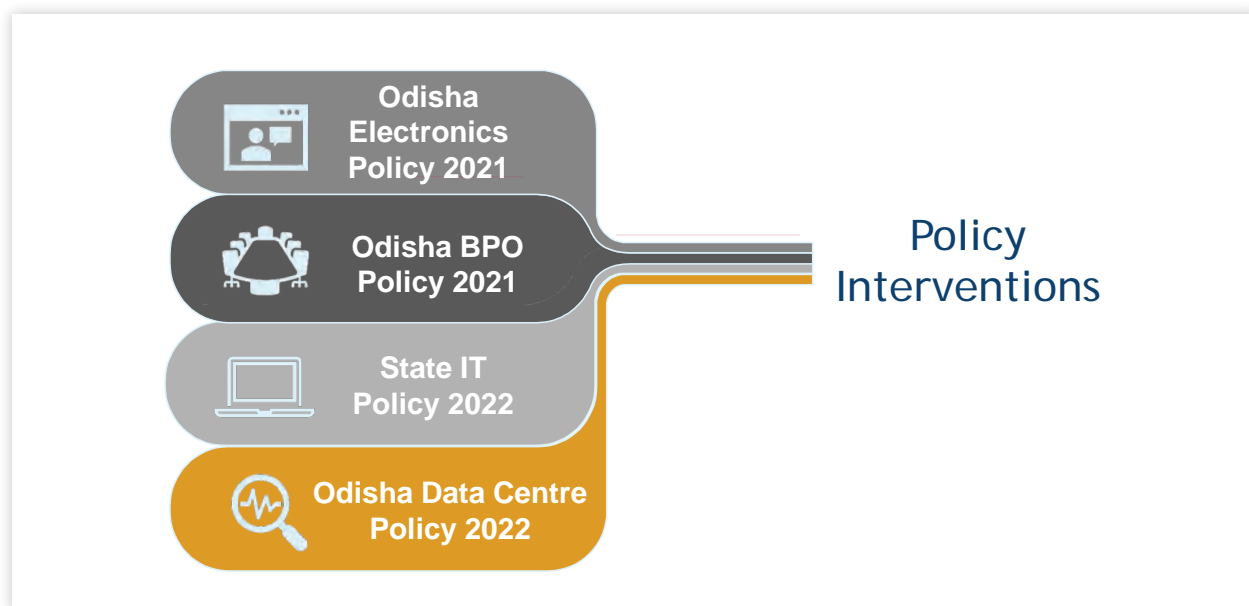
4.4.1. The Government of Odisha has incorporated IT in its own administration as well as encouraging the growth of the IT sector in general. Electronics & Information Technology Department of the State has the mandate for development, co-ordination and supervision of IT activities including computers, communication, software and electronics in the State. OCAC, OSEDC, IIT, STPI and IDCO are the institutions that help in promotion of IT and e-governance projects in different agencies of the Government.

4.4.2. In today's world, ICT forms the foundation for effective governance. The outbreak of the COVID-19 pandemic has hastened the transition to a borderless workspace and digitisation of services and automation of processes. There is a rise in the expectation levels of citizens to avail public services at their doorstep. Even many businesses re-engineered their processes to provide goods and services using digital platforms giving a boost to the gig economy. Keeping up with these trends and to meet public expectations, the State Government shifted the provision of several public services to a digital platform through the adoption of appropriate IT applications for Government to Business (G2B) and Government to Citizen (G2C) services. Odisha is leveraging IT to deliver seamless services between Government and Government (G2G), Government and Citizens (G2C), and Government and Business (G2B). Odisha provides stable governance and a conducive environment for investors with a Single Window Portal called Government of Odisha – Single Window for Investor Facilitation and Tracking (GO SWIFT). It has been introduced covering the complete lifecycle of industrial projects for time-bound and hassle-free investment in the State. Digitised e-governance processes have improved and strengthened transparency.

To transform Odisha into a leading destination of IT investment & securing a prominent place in the Global IT map, Government of Odisha approves "IT Policy 2022" in July 2022.

Figure 4.9

Recent Policy interventions - Odisha



4.4.3. The vision of the State IT Policy 2022 is to transform Odisha into a leading destination for Information Technology in the country and position it prominently on the global map as a preferred IT outsourcing destination. The policy hopes to encourage the IT sector to create a new quantum of productive employment opportunities thereby contributing significantly to growth and development of the state. The Government of Odisha also intends to use IT to usher in efficiency and transparency in governance and give a fillip to the spread of digital literacy in the state by realizing the goal of “Internet for all”. This policy aspires to establish Odisha as a preferred IT hub with innovation and new age/emerging technologies.

4.4.4. **Odisha Electronics Policy 2021** has been conceptualised to position the State as an attractive destination for the electronics industry and promote electronics manufacturing in the State. This policy will continue till 31st March 2026 or until further policy revisions. The policy coupled with a skilled workforce aims at creating a favourable ecosystem for growth and development of the electronics industry in Odisha and also focus on MSME enterprises which are the growth drivers of an economy.

I. Odisha Data Centre Policy - 2022

4.4.5. The Odisha Government is committed to modernise government ICT and lead by example in using cloud computing services to reduce costs, increase security and productivity as well as develop and provide excellent citizen services. The State of Odisha aims to emerge as one of the top five “Data Centre Hubs” in India by 2025 through strategic partnerships, favourable ecosystem, investment and policy interventions. Odisha’s Data Centre Policy aims to create enabling and supporting ecosystems that facilitate the setting up of at least 5 medium to large scale data centres in the next five years. It also aims to make available world class infrastructure with an emphasis on promotion of Green IT & ITeS in the state.

II. Odisha BPO Policy - 2021

4.4.6. Government of Odisha identifies the BPO/ITeS industry as a driving force for inclusive growth and creating employment opportunities across the State. This policy aims to attract BPO industries by enabling the best investment environment so that they can operate their enterprises productively accruing benefit to the State in terms of employment and revenue.

4.5. Delivery of Public Services (G2C/G2G/G2B)

Aadhaar Enrolment

4.5.1. AADHAAR enrolment share of the state is about 97.4 per cent of the population, compared to 99 per cent for the country, as of June 21, 2021 (Unique Identification Authority of India, Government of India).

Odisha Right to Public Service Act

4.5.2. ORTPS Act 2012 aims to cover various benefits under a single umbrella at the State level. It aims to address the growing demand of citizens for improved public services and reduce corruption by imposing penalties on Public Authorities for not delivering services within prescribed timelines.

Odisha One Portal: The One-Stop Access to Public Services

4.5.3. The State Electronics & IT Department has developed this common front-end interface to make it convenient for citizens to access G2C services. It is an integrated service delivery framework for G2C services through self-mode or assisted mode by Mo Seba Kendra (MSK). Key G2C services like birth certificates, death certificates, payment of water and electricity bills and booking tickets of OSRTC buses have already been integrated with the portal. More than 121 services are already integrated with Odisha One. It has planned to integrate an additional 400 G2C services with Odisha One to provide a hassle-free user experience to the citizens.

Mo Seba Kendra

4.5.4. The State Government has rolled out Mo Seba Kendras at GP and Ward level across the State to provide cost effective and quality services to citizens at their doorstep, promote rural entrepreneurship, and encourage community participation. The State Government has set up a massive network of more than 5000 Mo Seba Kendras. Plans are afoot to set up more than 7000 such centres across the state, with at least one in each GP and one per 25,000 people in urban areas.

Mo Sarkar

4.5.5. The State government has launched the 'Mo Sarkar' (My Government) initiative to further the goal of delivering a responsive and people-centric service. Mo Sarkar has already covered around 250 services from 27 Government Departments.

e-District

4.5.6. The e-District initiative has been identified by the Ministry of Communication & Information Technology (MeitY) and the Government of India. The project's goal is to provide seamless end-to-end online delivery of citizen-centric services. This would leverage the three IT infrastructure pillars: the State-wide Area Network (SWAN) for connectivity, State Data Centre (SDC) for secure and safe data storage, and Mo Seba Kendra as the primary front-end for service delivery to citizens at their doorstep.

Jana Sunani - A unified grievance management platform of the State

4.5.7. 'Jana Sunani' is a Centralised Public Grievances Redressal and Monitoring System of Odisha. It is an omni-channel mode of grievance sourcing and redressal that enables citizens to file grievances, lodge reminders or clarifications, and access near real-time view of the status of their complaints.

Student Academic Management System

4.5.8. This online system unifies the admission process, bringing all colleges under the Higher Education Department. It saves a significant amount of effort, time, and money on offline applications.

State Scholarship portal

4.5.9. This unified portal offers all scholarships offered by multiple departments. By generating a unique ID for each student, the system checks for duplication. It ensures that only the meritorious and deserving are awarded the scholarships.

e-Pravesh

4.5.10. This is a web and mobile-based application to ease and authenticate the entry of visitors to Lok Seva Bhawan, Rajeev Bhawan and Kharavela Bhawan.

4.6. Social Protection Delivery Platform (SPDP)

4.6.1. Odisha's Social Protection Delivery Platform (SPDP) or social registry would enable the government to monitor the well-being of beneficiaries of several State and Central welfare schemes while weeding out ineligible claimants or ghost beneficiaries. While creating the social registry, the Government is taking due care of data privacy as well.

PAReSHRAM

4.6.2. The PAReSHRAM portal, launched on October 2, 2020, is the web portal of the Labour and ESI Department of Government of Odisha where 52 services of labour, factories and boilers have been made online. It offers quick digital access to all the services delivered by both the Directorates.

Agni Shama Seva Services

4.6.3. Odisha Agni Shama Seva online portal is created for the issuance of fire safety certificates to different categories of buildings through online mode.

Go-Sugam

4.6.4. Sugam is India's 1st of its kind single window platform for farmers and agripreneurs. Aligning with the Government of Odisha's 5T vision of governance, the Sugam portal aims to transform the lives of farmers by leveraging technology and fostering teamwork among government officials to enable timely and transparent delivery of benefits to farmers. All farmer-centric schemes and services of the Fisheries & Animal Resource Development (F&ARD) Department, Department of Agriculture & Farmer Empowerment (DAFE) and the Government of Odisha are digitised on this portal. It will also provide support to farmers for availing associated services of other departments such as electricity connection, water supply, and pollution clearance.

SAACAR

4.6.5. Odisha Government is committed to the welfare of the SC-ST Community. The new 'Single Window Application Atrocity Compensation Assistance and Relief' (SAACAR) portal, launched on 12 October, aims to aid investigation and quick compensation payment to the victims of atrocity belonging to the SC-ST community.

SAFAL

4.6.6. Simplified Application for Agricultural Loans (SAFAL) is a Common Credit Portal and a one-stop solution for farmers and agripreneurs to avail formal sector credit from public sector banks, private sector banks, regional rural banks, Odisha State Cooperative Bank and small finance banks.

House Allotment System

4.6.7. The primary objective of the 'House Allotment System' is to provide an end-to-end process flow based automated system for all stakeholders. It would be providing a complete process flow-based web-application for

the allotment of houses to the beneficiaries under the Economically Weaker Section (EWS) category. It will further provide user specific dashboard and MIS reports which will serve as a complete solution to track and monitor the process lifecycle.

e-Diary

4.6.8. The Digital Diary is more functional and efficient than the traditional paper diaries. The objective of this project Digital Diary is to design a convenient framework including diary, notes, personal information, calendar, event scheduler, list of department information, leave account, pay particulars etc. to the user on one platform.

Ama Krushi

4.6.9. Ama Krushi is a free agricultural service provided by Odisha's Department for Agriculture and Farmer's Empowerment. There are currently 3,161,944 enrolled farmers who receive weekly calls on their mobile phones with customised agricultural advice throughout the season.

State Animal Helpline

4.6.10. F&ARD Department intends to establish the State Animal Helpline Call Centre to provide emergency help to the injured/ distressed livestock that remain unattended and uncared for a long period of time, following unnatural death, accidents, etc. Citizens can call the Toll-Free number of the helpline to get services for ailing stray animals.

Go-Skill Job Portal

4.6.11. OSDA provides a single platform for both employers and job seekers, assisting them to fulfil their needs of posting requirements and searching for a job respectively. Further, GoSkill Portal will automate the process of the Central Placement Cell (CPC) and ensure the presence of all stakeholders at one place.

Sanjog Helpline

4.6.12. Sanjog Helpline (Sanjog helpline.odisha.gov.in) is the Odisha State Call Centre for the citizens which can be accessed through a Toll-Free Number 155335 for any complaint related to Odisha Government operated schemes.

4.6.13. The objective is to streamline the grievance redressal process for the citizens of Rural Odisha through a single window and a central grievance redressal system with faster disposal rates.

AI based Live Video KYC System

4.6.14. The AI based Live Video KYC System verifies the pensioner's identity using Aadhaar e-KYC and liveness detection. It ensures timely disbursement of pension and other retirement benefits and provides seamless doorstep delivery of services through an alternative online method for identity.

Online Hostel Management System

4.6.15. Odisha Government is constructing Working Women's Hostels in different locations of the State. The online (web-enabled) integrated rules-based system for centralised online hostel management, provides facility to book hostel accommodation through an online and hassle-free mode.

COVID related IT Initiatives

4.6.16. Odisha leveraged the COVID Portal to monitor the movement of COVID cases and contact tracing. Identification of containment zones was done through GIS. Further, dedicated call centres were established to address public queries, and the State COVID dashboard displayed real-time information on COVID-19 data.

Litigation Management System (LMS)

4.6.17. LMS is implemented to ensure better management of Court cases of the Hon'ble High Court of Odisha. The interim orders, final judgments and contempt cases from the Hon'ble High Court are now being received digitally to LMS to improve the efficiency of the system in timely compliance to the orders of the Hon'ble High Court.

Odisha State Workflow Automation System (OSWAS)

4.6.18. The Odisha State Workflow Automation System (OSWAS) envisaged digital processing of files and correspondence for efficient and effective management of governance.

Mail Messaging Services

4.6.19. This "Mail Messaging System" is a custom built comprehensive and collaborative mail messaging solution for the Government of Odisha. OCAC has been keenly encouraging their adoption in the e-Governance movement of the State.

e-Despatch

4.6.20. The introduction of electronic transfer of letters used by all departments of the state has led to transparency in official communication among different government offices.

Bio Medical Waste Management

4.6.21. Biomedical waste management has recently emerged as an issue of major concern not only for hospitals and nursing home authorities but also for the environment. In this view, a comprehensive online Bio Medical Waste Management System has been developed to bring all stakeholders in one place to ensure better coordination and effective management of Bio Medical Waste.

Odisha Judicial Workflow Automation System (OJWAS)

4.6.22. Implementation of OJWAS, the customised version of Odisha State Workflow Automation System for judiciary, has been taken up in Odisha High Court (OHC) for automation of the administrative work in OHC. The system will be used by around 500-600 users of the administrative sections of Hon'ble Court in the 1st phase and will be extended to Sub-Ordinate Courts of Odisha subsequently.

Paperless High Court

4.6.23. Technological advancement has become essential for the functioning of the judiciary. Hence, paperless courts are introduced to ensure a transparent and speedy justice delivery system. The Odisha High Court has implemented paperless courts in all 30 districts.

National eVidhan Application (NeVA)

4.6.24. NeVA is a work-flow system deployed on the NIC Cloud, MeghRaj. It helps the Chair of the House to conduct proceedings of the House smoothly, Hon'ble Members to carry out their duties in the House efficiently and to conduct Legislative Business of the House in a paperless manner.

Biju Swasthya Kalyan Yojana (BSKY)

4.6.25. "Every life is precious..." has always been the guiding principle of the Hon'ble Chief Minister Naveen Patnaik. The vision of Hon'ble Chief minister has been to provide assurance of quality health care to all the citizens of the State, especially the vulnerable sections. With this objective, the Biju Swasthya Kalyan Yojana has been launched to provide universal health coverage.

I4MS Integrated Minor Mineral Mining Management System (i4MS)

4.6.26. The R&DM Department envisages implementing an Online Monitoring System for Minor Minerals. OCAC, as nodal agency under E & IT Department, has developed an Integrated Minor Mineral Mining Management System (i4MS) for bringing transparency in accordance with the 5T principles of Government.

4.7. ICT Infrastructure

Odisha State-wide Area Network (OSWAN)

4.7.1. Odisha developed its State-wide infrastructure with the Odisha State-wide Area Network (OSWAN) scheme. This scheme serves as a backbone for data, video, and voice communications across the State under the National e-Government Plan (NeGP). The Government has earmarked INR 350 crore to upgrade OSWAN up to the Block level.

Odisha State Data Centre (OSDC)

4.7.2. As another core infrastructure project, the State Data Centre (SDC) has been created for hosting a myriad of Government applications. The State has budgeted approximately INR 200 crore for a new state-of-the-art SDC with Disaster Recovery Sites and Cloud Services.

Cyber Security Operation Centre (CSOC)

4.7.3. To secure the ICT infrastructure and e-governance applications, the Government of Odisha has set up a next Generation Cyber Security Operation Centre (CSOC). CSOC is fully owned and operated by the Government. The key features include Bug Bounty - a setup through which ethical hackers/researchers will be given access to applications in a staging environment to detect security bugs and provide solutions to fix such bugs. This will enhance the safety of the applications and ensure real time threat hunting, threat awareness and analytics. This centre operates round the clock and each day of the year. SDC, SWAN, Secretariat Network and applications hosted in these infrastructures are now being monitored. Furthermore, the CSOC services will be extended to other infrastructure in the future.

Bharat-Net

4.7.4. The Government of India approved the setting up of a National Optical Fibre Network (NOFN) on October 25, 2011, which was subsequently known as Bharat-Net. The aim is to provide connectivity to 2,50,000 Gram Panchayats of the country, which would ensure broadband connectivity with adequate bandwidth. This is to be achieved by extending optical fibre to the Gram Panchayats. Odisha has a total of 6805 GPs, out of which 3860 GPs -spread over 181 Blocks and 18 districts - are to be covered by BBNL, using underground optical fibres and GPON technology as part of Bharat-net Phase I. The Government of Odisha shall carry out the Bharat-Net Phase II to cover 2945 GPs spread over 133 Blocks in 12 districts. OPTCL is the State Implementing Agency for the same. It is proposed to use aerial optical fibre and GPON technology. The State NOC (Network Operations Centre) for Phase II has been operationalised in OCAC, and the Department of E & IT is the nodal department for this project.

IPv6 Implementation

4.7.5. IPv6 is the next generation protocol for Internet networking. It expands on the current Internet Protocol standard known as IPv4. Compared to IPv4, IPv6 offers better addressing, security and other features to support large networks.

4.7.6. The existing IPv4 protocol has a 32-bit address space that provides approximately 4 billion hosts, while IPv6 uses a 128-bit address, allowing 2¹²⁸, or approximately 3.4×10³⁸ addresses, or more than 7.9×10²⁸ times as many as IPv4. IPv6 supports billions of hosts, provides better security (authentication & privacy), processes data

packets faster than IPv4, and reduces the size of routing tables. The E&IT Department, Government of Odisha has identified 3 critical IPv4 IT Infrastructure of the State to implement in IPv6.

These are as follows: -

- Odisha State Data Center (OSDC)
- Odisha Statewide Area Network (OSWAN)
- Odisha Secretariat Network (SEC-LAN).

Telecom Infrastructure Facilitation and Management System (TIFMS)

4.7.7. The Electronics & Information Technology Department has initiated a project, Telecom Infrastructure Facilitation and Management System (TIFMS) for end-to-end management of telecom related activities like setting up of mobile towers and telegraph lines, OFC and timely approval of requests by concerned stakeholders.

4.8. Institutions

The Odisha Space Application Centre (ORSAC)

4.8.1. The ORSAC is the apex body of the State for space technology applications and promotes the use and application of space technology in developmental planning in the State.

EDUSAT Network

4.8.2. During 2021-22, ORSAC produced 184 programmes for 12th class students and 131 programmes for primary class students of the State which were telecasted through Doordarshan Kendra, Bhubaneswar.

Paddy-GIS

4.8.3. GIS mapping and analysis of cadastral information at plot level with High Resolution Satellite Images and Microwave data, along with ground truth, has been carried out in seven districts i.e., Baragarh, Bolangir, Kalahandi, Koraput, Nuapada, Sambalpur & Subarnapur. With appropriate models, the outputs were generated in a time bound manner. This has benefited the Minimum Support Price in reaching genuine farmers and bringing more transparency during farmers' registration.

Odisha Spatial Data Infrastructure (OSDI)

4.8.4. This programme aims at sharing and dissemination of GIS datasets available with various Government Agencies in Odisha through OGC compatible Web Services. The service is being availed by all user Departments of the Government of Odisha, Universities, Researchers, other Governments, private agencies and the general public.

Space based information support for Decentralised Planning (SIS-DP) Update

4.8.5. The geo-spatial layers on 1:10000 scale of natural resources/ infrastructures prepared in 2010-12 are now being updated using LISS-IV and Cartosat image (2016-18) for the entire State of Odisha. It will be completed by March 2023 and provide useful information to different stakeholders for use in planning at the grass roots.

Bhubaneswar Land Use Intelligence' Systems (BLUIS)

4.8.6. The BLUIS portal and app has been prepared as per requirement of the GA Department, BDA and BMC. Geo-referenced cadastral data, Ortho-image of Bhubaneswar city, AI based satellite data processing of high-resolution images are being used to detect changes every month.

Pathani Samanta Planetarium (PSP)

4.8.7. The PSP is a premier institute of the State for popularisation of science in general and astronomy, astrophysics, and space science. PSP was inaugurated to the public on January 8, 1990. Pathani Samanta Interpretation Centre at Khandapada has been established as a tribute to the legendary Astro Scholar of Odisha- Pathani Samanta. About 1.6 lakh visitors have been watching the shows every year since 2013. It organises the Night Sky Watch (NSW) program, Astronomy Olympiad, demonstration of astronomical models, workshops, etc.

Odisha Bigyan Academy (OBA)

4.8.8. The OBA works for promotion and popularisation of science amongst the people of Odisha. It brings out popular monthly science magazines, 'Bigyan Diganta' in Odia and "Science Horizon" in English regularly for free distribution to Government recognised high schools, Navodaya Vidyalaya, Central school of Odisha, Government +2 Colleges and +3 Degree colleges, public representatives, writers, life members, Patron members and Executive Members of OBA.

Institute of Mathematics & Application (IMA)

4.8.9. The IMA provides several courses on Mathematics, Statistics and Computer Science, updating the latest trends in Mathematics and its applications. It also promotes research on mathematics, its applications, and nurtures talents in Mathematics.

Bio-Technology Cell

4.8.10. The Bio-Technology Cell in Science & Technology Department is the Nodal Agency for the promotion of Education & Research in Biotechnology. S&T Department has approved INR 2 crore to establish Biotechnology Incubation Centre in the second campus of Institute of Life Sciences (ILS), Bhubaneswar. A biotech Park located in Andharua, Bhubaneswar is being set up by M/S Sapigen Biologix Pvt. Ltd as an Anchor Tenant. A vaccine manufacturing facility is being set up inside the park.

The State Council on Science & Technology

4.8.11. The State Council on Science & Technology functions for the development of Science & Technology and oversees the implementation of programs undertaken in the field of Science and Technology in the State.

Establishment of Science Innovation Hubs in schools

4.8.12. These hubs serve as springboards for new ideas and innovation, thus preparing the society and economy to face future challenges and meet the rising aspirations of the growing population.

Patent Information Centre (PIC)

4.8.13. The PIC is facilitating the promotion of IP culture in the State through different legal, scientific, and technical instruments of Intellectual Property Rights (IPR). The main objective of the centre is to create awareness about IPR. In 2021-22, PIC facilitated 10 inventors to submit data towards the filing of a patent. Three trademarks and 1 copyright have been registered through PIC.

Establishment of Planetarium and Science Centre

4.8.14. The department has set up three planetariums in the State (Bhubaneswar, Rayagada, and Burla) and is setting up another five. Similarly, one science centre in Bolangir has been set up and another seven are in progress.

4.9. Conclusion

4.9.1. Quality infrastructure is the real backbone of a healthy economy. This is the biggest focus area of the State Government. It has planned to take up several key infrastructure projects like road, railway, port, and airports to reduce the logistic costs. In the transport sector of Odisha, road transport plays a significant role both in passenger and goods transportation, and it contributes about 56 per cent to transport GSVA (2022-23 AE). Road transport is largely in the private sector, so a well-regulated private transport system with sufficient public intervention leads to sustainable growth. In the urban cities of the state, cheap travel of the citizens is facilitated as a result of the presence of sufficient public run vehicles on the roads. The railway network in Odisha connects 25 districts. As railway is a central responsibility, the State Government has taken steps to enhance railway connectivity to the unconnected areas with cost sharing projects. More rail connectivity to mining areas may enrich the State exchequer.

4.9.2. Odisha is a power surplus State having 8107 MW installed capacity in 2021-22, which is 45 per cent higher than 2015-16 (5593 MW). The installed capacity of Captive Power Plants (CPP) of 67 industries is 11098 MW which empowered the State's power scenario post meeting its consumption needs. The main source of energy in Odisha is conventional which leads to industrial and economic growth but also contributes to environmental degradation. Cleaner energy sources can actively mitigate carbon emissions and preserve the environment. Diversification of the energy profile with clean energy sources like renewable, nuclear etc. is the need of the hour. The Sustainable Development Goals (SDG) Goal-7 "Affordable & Clean Energy" also emphasises on maintaining and protecting ecosystems to achieve sustainable development. To ensure this, Odisha has implemented measures to encourage renewable energy programmes through OREDA as the nodal agency. This has started bearing fruit through declaration of the "Odisha Renewable Energy Policy 2022" to decarbonise the energy sector by the State Government.

4.9.3. In the 2022 "Make in Odisha Conclave", power, renewable energy and the green energy sector fetched investment proposals worth INR 2.4 lakh crore. Enhancing public awareness on non-conventional energy production and conservation of available conventional energy is the real beginning of the journey towards GREEN ENERGY. Sensitisation programmes may be conducted through the village level workers, primary teachers, Anganwadi workers who are conversant with ground realities to make rural people aware. Sufficient government interventions with incentives may motivate people to install roof-top solar panels to meet their domestic power consumption. Inclusion of Electric Vehicles (EV) in the transport world is a cleaner alternative for sustainable environmental development. The Odisha Government declared the EV Policy in August 2021 to achieve the mission of 35 per cent emission reduction by 2030 and also promote production of EV vehicles along with battery industries. Such measures supported by sensitisation programmes will educate the citizens to protect our globe by protecting themselves.

4.9.4. Technology plays an important role for effective delivery of services. Odisha has been leveraging IT to deliver seamless services between Government and Government (G2G), Government and Citizens (G2C), and Government and Business (G2B).

CHAPTER 5

RURAL AND URBAN
DEVELOPMENT



Urbanization is not about simply increasing the number of urban residents or expanding the area of cities. More importantly, it's about a complete change from rural to urban style in terms of industry structure, employment, living environment and social security. **-Li Keqiang**

There is no one-size-fits-all solution to the challenges facing our cities or to the housing crisis, but the two issues need to be considered together. From an urban design and planning point of view, the well-connected open city is a powerful paradigm and an engine for integration and inclusivity. **-Richard Rogers**

All emerging economies are characterized by a dual set-up with a flourishing urban sector and a lagging rural sector. Given the trend of modernization at global levels, it has generally been a practice of such economies to focus more on the development of urban areas as compared to rural areas. However, it is the simultaneous development of both rural and urban areas that will lead to inclusive economic development in the true sense of livelihood opportunities and standards of living of the people. This is because, in a dual economic set-up, the subsistence sector acts as a resource provider in terms of supply of labor and other raw materials, which are synthesized by the urban sector for provision of finished products and factor payments. The role of rural development in the holistic development of an economy has been rightly recognised at international levels and has been highlighted in the framework of sustainable development goals. Given the structural differences between rural and urban areas, there occur differences in outcomes which lead to the rural-urban divide. However, it is the convergence of growth across the two sectors that is the current policy focus in the State of Odisha to achieve inclusive rural and urban development. The Government of Odisha has put in commendable efforts for creation of inclusive cities facilitating a better quality of life, along the lines of the sustainable development goals (SDGs). This chapter discusses the efforts and initiatives of the State Government in overcoming the anomalies of rural-urban development in Odisha along with a comparative analysis of rural and urban areas across sectors like health, education, housing, basic needs, infrastructure, and employment in the framework of development transformation.

5.1. Introduction

5.1.1. In India, nearly one third of the population lives in urban areas and two third in rural areas as of 2021 (MoHFW, GoI). Odisha remains primarily a rural dominated State with close to eighty per cent of its population living in rural areas. An upliftment of rural population with the steady progress in urban lives holds the key for Odisha's overall development. A regional balance in terms of rural and urban development is of utmost importance for policy makers. In a strict sense of development, although urbanisation accelerates the pace of development, rural areas act as supplementary building blocks by providing food, workforce, and other resources for a smooth urban development. Urbanisation helps rural areas through resource transfer and factor payments and, rural areas provide a market for the goods and services produced in the non-agricultural sector. The extent to which rural and urban economies contribute to the overall economic progress and their respective relative returns from national development has been a key question of probe for academics and policy makers alike.

5.1.2. The share of urban income in national income has increased from 37.6 per cent of net domestic product in 1970-71 to around 65 per cent of GDP by 2011 (MoHUA, 2019). A city offers agglomeration of economies. The concentration of firms and people in proximity brings in a lot of economic benefits. Demand for specialized labour force leads to division of labour and brings in efficiency. A city offers homogeneity as well as diversity. It expands the choice set, be it in products or services. Competition amongst the factor inputs due to a high concentration in a limited physical area brings in efficiency and enhances consumer welfare as well as producers' revenue.

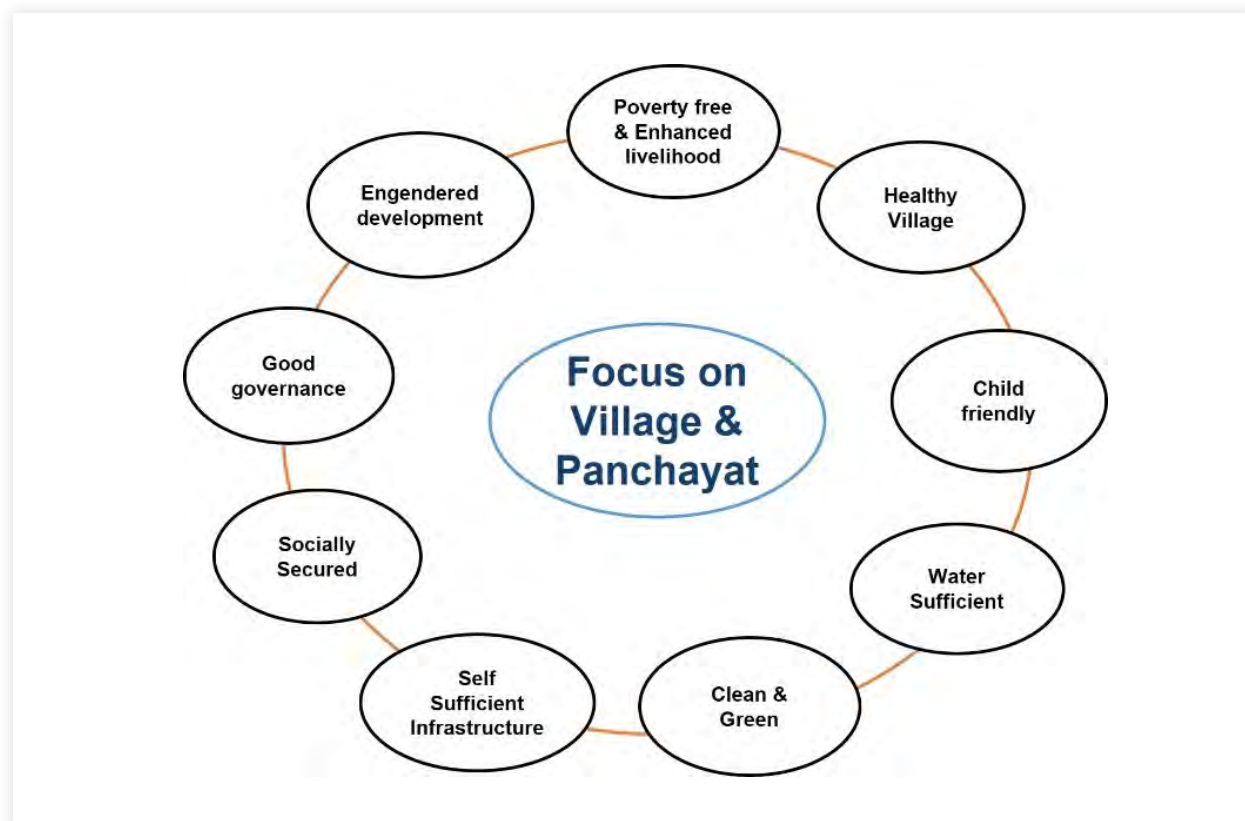
5.1.3. Urbanization is not just about increasing the number of urban residents or expanding the area of cities. Urbanization can take place in different ways – through expansion of villages to small towns, small towns to larger townships and cities. Migration of people from villages to urban places in search of a better life and livelihood also increases the urban density of population. More importantly, it is about a complete transformation from an agrarian based economy to a modern economy.

5.1.4. Urbanization is not just about development of urban areas, rather, it is about how development of rural areas is approached so that a transformation in the overall economy may take place. At a global level, the complementarity between rural development and overall development experience of an economy has been highlighted time and again.

5.1.5. Government of Odisha has worked across many areas to create inclusive cities to provide a better quality of life in the line of SDGs. The framework of SDGs has also highlighted rural development as a key to sustainable development. In fact, sustainable rural development is a key to sustainable urban development and a catalyst for the overall process of structural change in the economy. The Expert Group constituted by the Ministry of Panchayati Raj has recommended a thematic approach and identified 9 SDG related themes for focused interventions at the panchayat level to accelerate the process of rural development (Figure 5.1). The goal is to make all regions equitable, inclusive, and resilient.

5.1.6. In a dual economy set up, it is no wonder that the subsistence economy (rural economy in the present context) will lag the emerging economy (urban economy) on many aspects of development. The differences in the economic outcomes of both the set ups create a rural – urban divide and lead to an unbalanced regional growth. However, from a policy point of view, it is not the rural - urban divide per se which is important, rather it is the process through which a rural economy gets transformed. In the usual course, the lagging economy should eventually catch up through a mechanism in which rural areas experience higher growth rate and the standard of living converges in both rural and urban areas.

Figure 5.1

Nine SDG related themes for sustainable rural-urban development

Source: DE&S, GoO

5.2. Demographic Profile of Rural and Urban Odisha

5.2.1. During the period 1951-2011, the population in rural Odisha has increased by 2.5 times from 140.5 lakh to 349.7 lakh. The rural population in Odisha is expected to be 384.7 lakh by 2031. On the other hand, the population in urban Odisha has increased about 12 times from 5.9 lakh in 1951 to 69.8 lakh in 2011 and is expected to become 98.5 lakh by 2031. During the same period (1951-2011), the population of rural India has grown by 2.8 times and urban population of India has grown by 6 times (Table 5.1).

Table 5.1

Population trend- Odisha and India

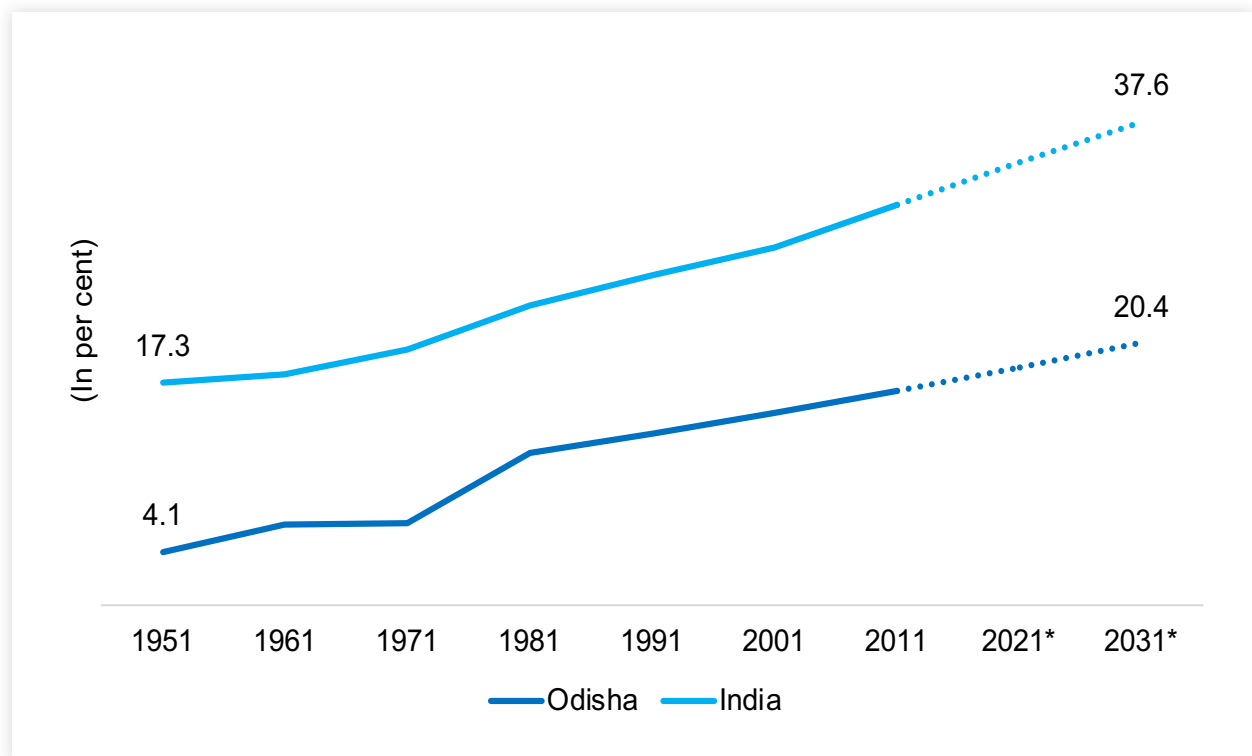
Year	Odisha				India			
	Population (in lakh No)			Urban (per cent)	Population (in lakh No)			Urban (per cent)
	Rural	Urban	Total		Rural	Urban	Total	
1951	140.5	5.9	146.5	4.1	2986.4	624.4	3610.8	17.3
1961	164.4	11.1	175.5	6.3	3603	789.4	4392.4	17.9

1971	201.0	18.5	219.5	6.4	4390.5	1091.1	5481.6	19.9
1981	232.6	31.1	263.7	11.8	5238.7	1594.6	6833.3	23.3
1991	274.6	42.4	316.6	13.4	6288.6	2175.7	8464.2	25.7
2001	312.9	54.2	367.1	14.9	7426.2	2861.2	10287.4	27.8
2011	349.7	69.8	419.5	16.7	8334.6	3767.3	12101.9	31.2
2021*	373.1	84.9	457.9	18.5	8950.4	4721.4	13671.73	34.5
2031*	384.7	98.5	483.1	20.4	9239.1	5577.5	14816.57	37.6

Source: Census of India from 1951 to 2011, *Projected Population, MoHFW, GoI

5.2.2. The pace of urbanization in Odisha in the post-independence period has been much faster than India. In the rural areas also, there will be substantial addition of population by 2031. It would remain a priority for the government to provide the growing population with infrastructure and basic amenities for a better standard of living and livelihood.

Figure 5.2 Share of Urban Population- Odisha and India

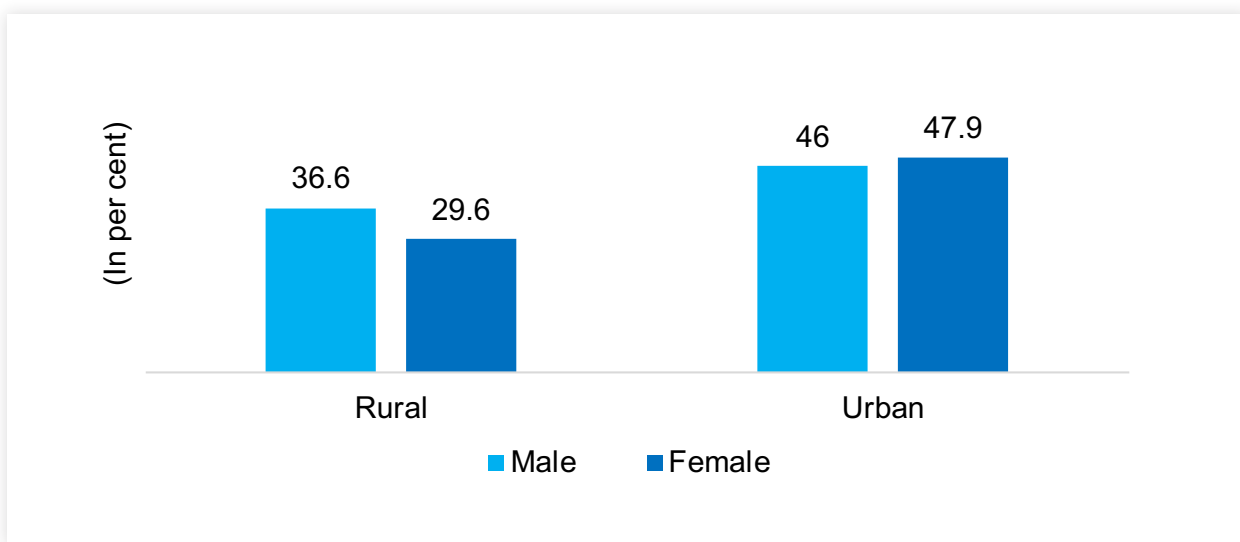


Source: Census of India from 1951 to 2011, *Projected Population, MoHFW, GoI

5.3. Selected Educational Outcomes in Rural and Urban Odisha

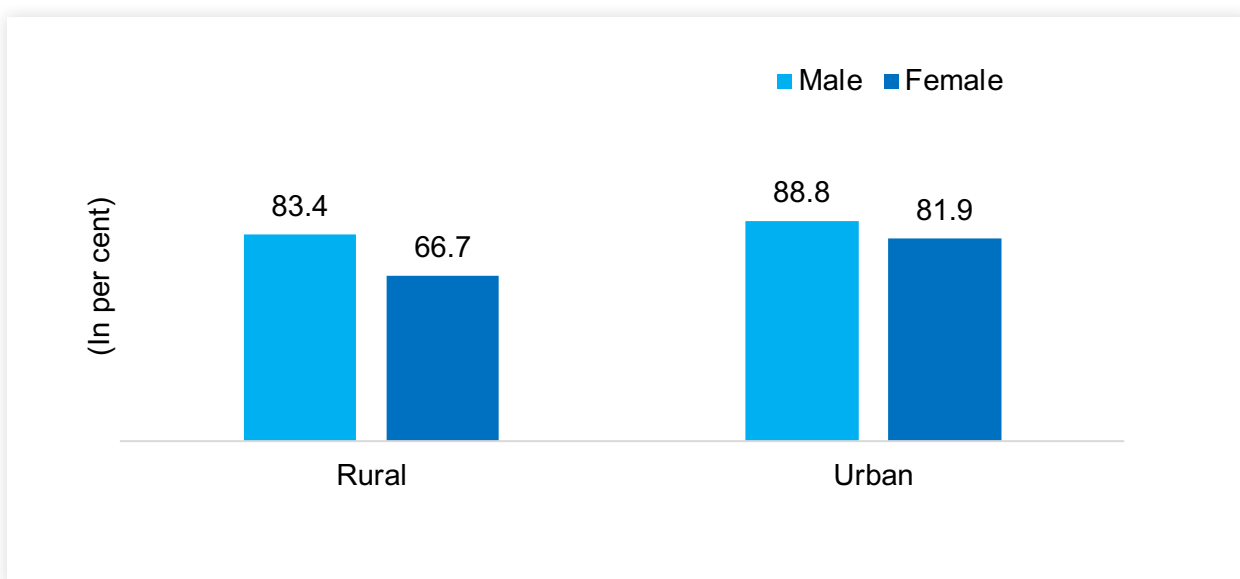
5.3.1. Education is considered as one of the main pillars of development. The two indicators, namely, literacy rate of 15-49 years age group and the persons with 10 or more years of schooling is presented below (Figure 5.3) to assess the comparative development in rural and urban areas.

Figure 5.3 **10 or more years of schooling- Odisha, NFHS 2019-21**



Source: NFHS 2019-21

Figure 5.4 **Literacy rate (15-49 years)- Odisha, NFHS 2019-21**



Source: NFHS 2019-21

5.3.2. The literacy rate is 83.4 per cent for males in rural areas and 88.8 per cent in urban areas in Odisha. The corresponding figures for females were 66.7 per cent and 81.9 per cent respectively in rural and urban areas. The literacy rate was higher for both males and females in urban areas.

5.4. Health & Nutrition Status in Rural and Urban Odisha

5.4.1. There has been significant progress on some of the key indicators of health and nutrition both in rural and urban areas. The progress also throws some light on the systemic efficiency of public service delivery in the State.

5.4.2. The number of pregnant mothers who consumed folic acid for 100 days has significantly increased in both rural areas (from 35.7 per cent to 60.2 per cent) and urban areas (from 40.8 per cent to 64.4 per cent) during 2015-16 to 2019-21 according to NFHS (Figure 5.5). This indicates an increased awareness among pregnant mothers about consumption of folic acid during their pregnancy.

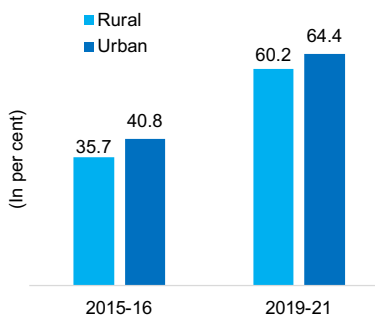
5.4.3. The Infant Mortality Rate (IMR), as per SRS, has considerably declined in both rural (63 to 37) and urban (43 to 28) areas during 2010 to 2020 (Figure 5.6). This is a result of the State's efficient health policy and programme implementation.

5.4.4. The number of mothers with at least 4 antenatal care visits witnessed a significant improvement from 60.5 per cent to 77.4 per cent in rural areas and from 69.7 per cent to 82 per cent in urban areas during 2015-16 to 2019-21 according to NFHS data (Figure 5.7). Though there is a rural - urban divide, the gap has reduced from 9.2 percentage in 2015-16 to 4.6 percentage in 2019-21.

Pregnant mothers' consumption of folic acid has increased, and Infant Mortality Rate has declined due to state's efficient health policy and programme implementation.

Figure 5.5

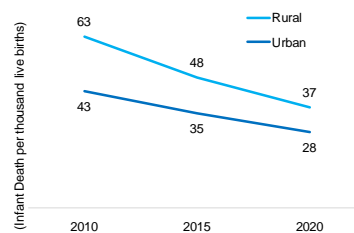
Pregnant mothers who consumed folic acid for 100 days



Source: NFHS-4 and NFHS-5

Figure 5.6

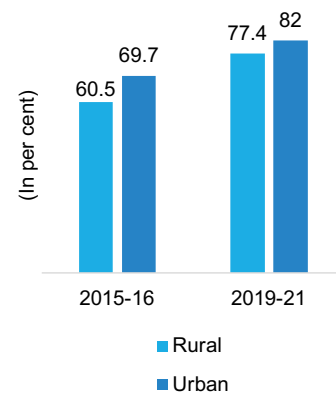
Infant Mortality Rate (IMR) per '000 live birth



Source: SRS, GoI

Figure 5.7

Mothers with at least 4 antenatal care visits



Source: NFHS-4 and NFHS-5

5.4.5. The proportion of women with BMI lower than normal has declined both in rural and urban areas during 2015-16 and 2019-21. However, the proportion of such women is higher in, rural areas than the urban areas (Figure 5.8). Similarly, the proportion of men with BMI lower than normal has declined both in rural and urban areas during the same period (Figure 5.10).

Figure 5.8

Women whose Body Mass Index (BMI) is below Normal (BMI < 18.5 kg/m²)- Odisha

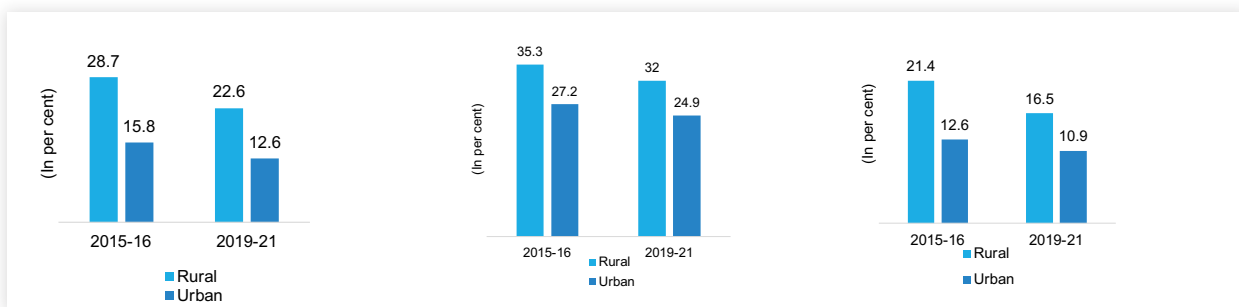


Figure 5.9

Children under 5 years who are stunted (height for age)- Odisha

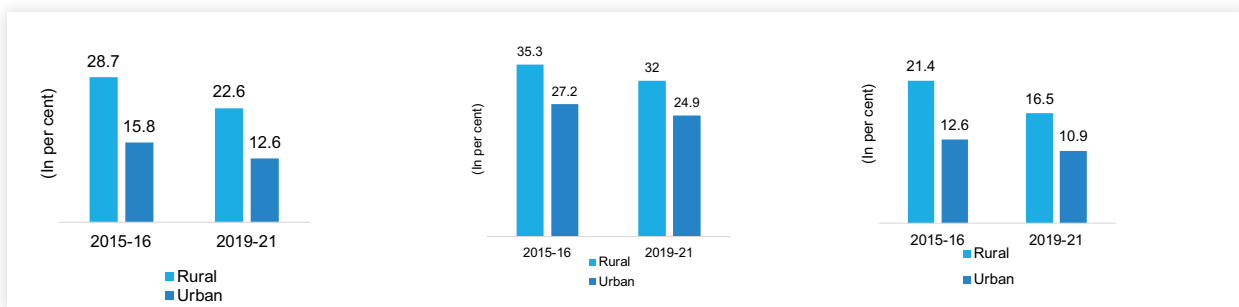
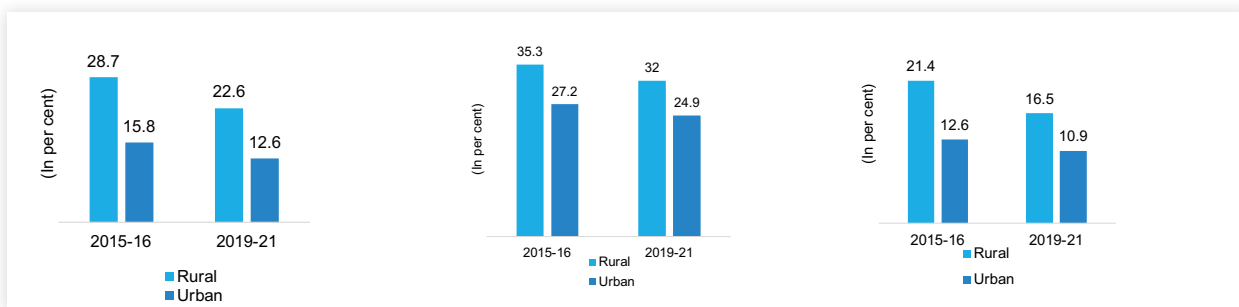


Figure 5.10

Men whose Body Mass Index (BMI) is below Normal (BMI < 18.5 kg/m²)- Odisha



Source: NFHS-4 and NFHS-5

5.4.6. Children under 5 years of age who are stunted (height for age) has declined in both rural and urban areas of Odisha from 35.3 per cent to 32.0 per cent in rural areas and from 27.2 per cent to 24.9 per cent in urban areas, as per NFHS (Figure 5.9). The proportion of stunting among children under 5 years of age is higher in rural areas than urban areas.

Figure 5.11

Women who are overweight or obese (BMI ≥ 25.0 kg/m²)- Odisha

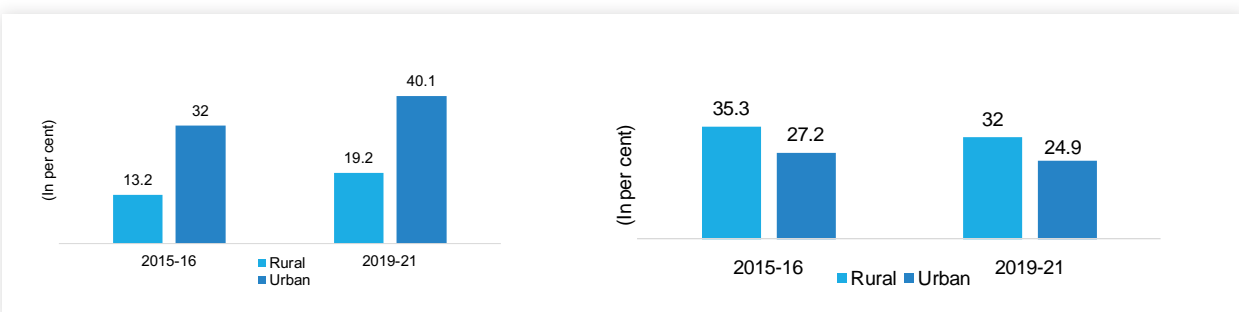
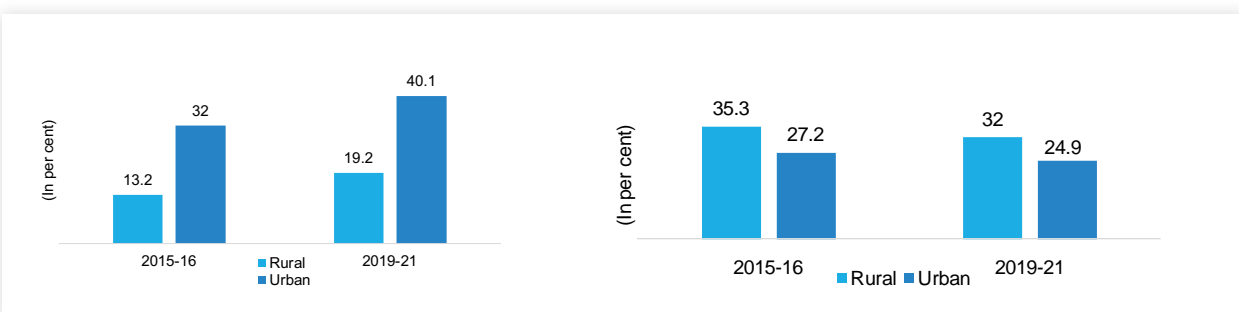


Figure 5.12

Men who are overweight or obese (BMI ≤ 25.0 kg/m²)- Odisha



Source: NFHS-4 and NFHS-5

5.4.7. The proportion of overweight or obese women has increased from 32 per cent to 40.1 per cent in urban areas and in case of rural areas, it has increased from 13.2 per cent to 19.2 per cent (Figure 5.11). The proportion of men, in contrast, who are overweight or obese has declined in both rural and urban areas (Figure 5.12).

Figure 5.13

Catching up across districts on Women having 4 or more ANC Visits- Odisha

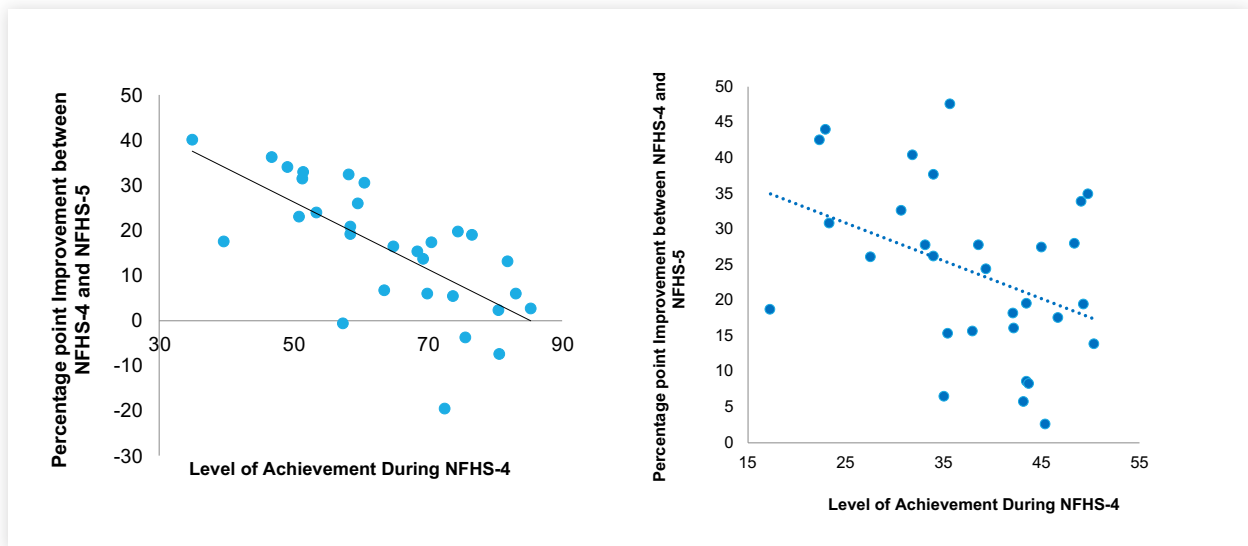
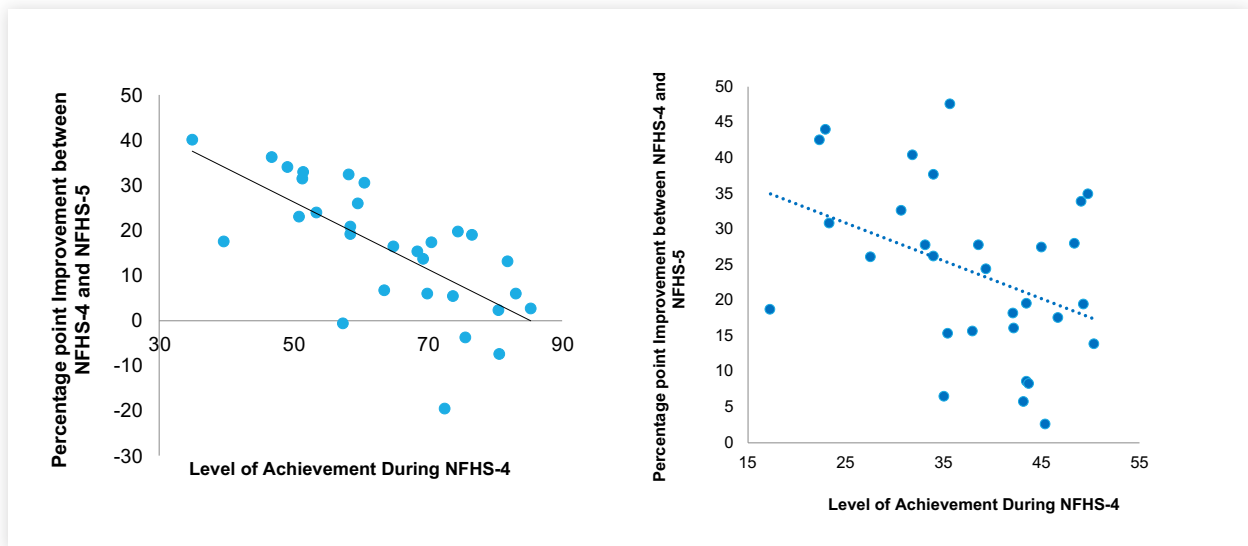


Figure 5.14

Catching up across districts on per cent of women who have taken Folic Acid Supplements for at least 100 days during pregnancy- Odisha



Source: NFHS-4 and NFHS-5

5.4.8. Although the situation is better in urban areas on many counts, the rural areas are catching up with the urban areas indicating a convergence. This can be assessed by plotting catching up curves. A catching up plot is a scatter plot between the differences in the value of an indicator over time for both rural and urban areas and the value of the indicator in the first time point. A downward sloping line of best fit indicates convergence, and the slope of the line indicates the speed of such convergence between backward and advanced areas. Across the districts, it is heartening to see that on most health and nutrition related indicators, the backward districts are catching up with the advanced districts between NFHS-4 and NFHS-5. To show this, we have used the catching up plots for the district level data on two selected indicators such as the per cent of women having four or more ANC visits and the per cent of women taking folic acid for at least 100 days. The negative slope of the catching up curves presented in Figure 5.13 and Figure 5.14 clearly indicate that not only there is a progress in these indicators but also, there is a convergence across districts with more backward districts catching up quickly.

5.5. Infrastructure in Rural and Urban Development

5.5.1. Infrastructure plays a vital role in growth of the economy by mainly enhancing competitiveness and productivity. While improvement in infrastructure facilities such as energy, telecommunications, and transport networks directly impact growth, they also act as catalysts in the production and distribution of goods and services in the economy. Moreover, a solid infrastructure base can also make production cost effective, increase competitiveness and facilitates the physical mobility of people and products. This section covers some of the key infrastructure facilities that play an important role in shaping the development trajectory in the rural and urban areas of the State.

I. Telecommunication

5.5.2. Telecommunication infrastructure also plays a crucial role in modernising our lifestyle and positively influences the growth of economy by enabling reduction in the cost of business communication. The importance of the sector was noticed more during the COVID lockdown period when it played a major role in public service delivery. Odisha has made significant progress in the telecommunication infrastructure between NFHS-4 and NFHS-5 periods. Figure 5.15 shows that the per cent of rural households having access to a mobile connection network has increased from 80.7 per cent in NFHS-4 (2015-16) to 88.30 per cent in NFHS-5 (2019-21) period.

Figure 5.15

Households with Access to Mobile Telephone Connection- Odisha

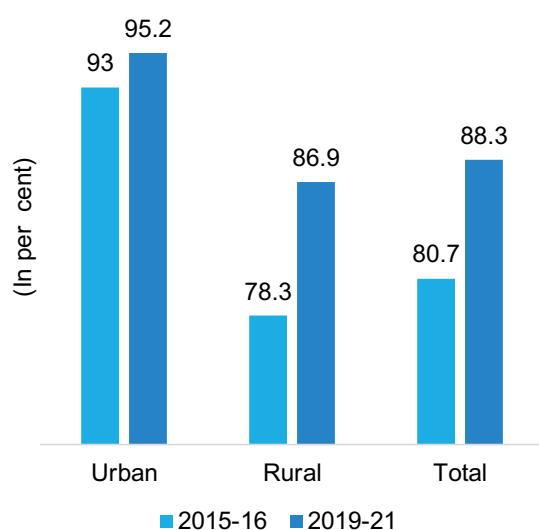
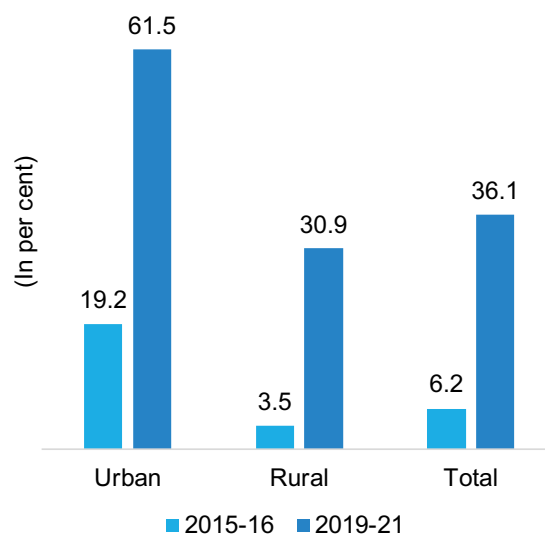


Figure 5.16

Households with Internet Connectivity- Odisha



Source: NFHS-4 and NFHS-5

5.5.3. In urban areas, with already higher coverage, the access to telephone connection increased from 93 per cent in 2015-16 to 95.2 per cent in 2019-21 period. The progress is more prominent in rural areas with access to telephone connection increasing from 78.3 per cent to 86.9 per cent during the same period. There has been progress in terms of Internet users also. The households with

The households with Internet connection have increased from a mere 6 per cent to 36 per cent during the same period.

Internet connection have increased from a mere 6.2 per cent to 36.1 per cent during the same period. While in urban areas, it has increased from 19.2 per cent to 61.5 per cent, and in rural areas, the coverage increased from a mere 3.5 per cent to 30.9 per cent during the same period (Figure 5.16).

II. Housing in Rural and Urban Odisha

5.5.4. While discussing infrastructure, access to housing cannot be ignored as it plays a prominent role in economic development. The problem of homelessness has been addressed through public funded programmes at both state and the national level. NFHS-5 estimated that around 83 per cent households in the State own a house of their own. Government of Odisha has undertaken efforts through effective implementation of various programmes for housing.

5.5.5. Several programmes and schemes were launched by both the Union and the State government for providing housing facilities to the homeless in recent years. The Pradhan Mantri Awas Yojana-Gramin (PMAYG) was restructured in April 2016 from the existing Indira Awas Yojana of 1996 to meet the objectives of 'Housing for All' by the year 2022. The program aims to provide a 25-square meter disaster-resilient and low cost pucca house with basic amenities to beneficiaries. Biju Pucca Ghar Yojana (BPGY) is the State's own flagship programme launched during the financial year, 2014-15, replacing the old scheme "MO-KUDIA YOJANA" to achieve the objective of converting all the kutchha houses to pucca houses. To cover a greater number of construction workers under the rural housing schemes, the State Government has revised the guidelines for Nirman Shramik Pucca Ghar Yojana (NSPGY).

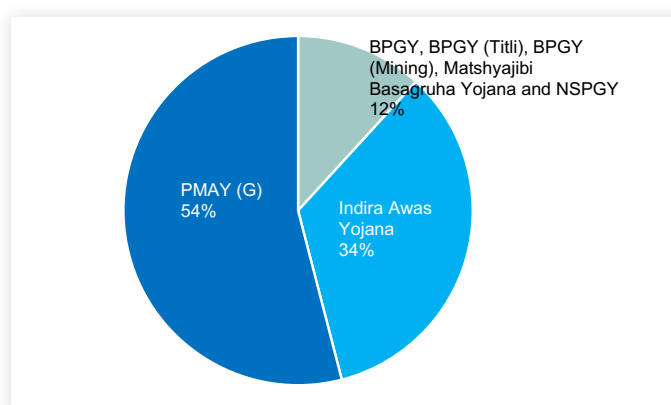
Table 5.2 Year wise Progress in Rural Housing units Completed- Odisha

Financial Year	Number of Rural Houses Completed	Cumulative Number of Rural Houses Completed in Odisha
2014-15	3,52,421	3,52,421
2015-16	6,16,818	9,69,239
2016-17	1,63,983	11,33,222
2017-18	5,32,254	16,65,476
2018-19	5,10,486	21,75,962
2019-20	3,94,212	25,70,174
2020-21	4,38,747	30,08,921
2021-22	1,07,743	31,16,664
Total	31,16,664	100 (per cent)

Source: Monthly Master Report March 2022, Panchayati Raj & Drinking Water Department, GoO

Figure 5.17

Share of Different Schemes under which Rural Houses were Built - Odisha, Between 2014 and 2022.



Source: Drawn based on Monthly Master Report March 2022, Panchayati Raj & Drinking Water Department, GoO

5.5.6. Till March 2022, a total of 31.17 lakh rural housing units have been constructed in the state under different programmes and schemes of the governments since 2014-15. Table 5.2 provides a glimpse of the progress made in rural housing in the State. Figure 5.17 shows the composition of these houses under different programmes since 2014-15 till 2021-22. The current rate of houses completed per day is 296 (Figure 5.17).

A total of 31.17 lakh rural housing units have been constructed in the state under different programmes and schemes of the governments since 2014-15

5.5.7. Figure 5.17 shows that between 2014-15 and 2021-22, around 16.8 lakh houses have been built under the PMAY (G) programme while around 10.65 lakh houses were built under Indira Awas Yojana (Renamed as PMAY in 2016). Around 3.67 lakh additional houses were constructed under Biju Pakka Ghar Yojana (BPGY) and other State Schemes. A review of the district wise target and achievements under PMAY (G) and state sponsored programmes for rural housing in the year 2021-22 shows that the total completion rate in the state was 34.5 per cent in the year with around 1.8 lakh rural houses completed against the annual target of 3.12 lakhs for the year.

5.5.8. Recognizing the need for an effective and efficient institutional mechanism for achieving the objectives of 'Housing for All' in urban areas, AWAAS (Odisha Urban Housing Mission) was launched by the Hon'ble Chief Minister of Odisha on 11th October 2015. The Government of Odisha has accorded top-priority to 'AWAAS - Odisha Urban Housing Mission' at the state level. The Government, further envisaged creation of District Urban Housing Societies (DUHS) to provide additional managerial and technical capacity to the Odisha Urban Housing Mission, at the district level. Thirty-one DUHS have been setup in the State, one each in 30 districts and one at Bhubaneswar Municipal Corporation. DUHS is responsible for ensuring the implementation of 'HFA Policy for Housing for All in Urban Areas of Odisha, 2015 and other directions of OUHM and H&UD Department, Government of Odisha. As per HFAPoA, report of H&UD, Department, GoO, there is a shortage of housing for 3,53,182 households out of which only 1,15,175 households hold land titles. Pradhan Mantri Awas Yojana (PMAY)-Urban is a major programme implemented in urban areas to meet the housing shortage.

III. Road Connectivity

5.5.9. Road connectivity is also an important issue, when it comes to infrastructure. Government of Odisha has initiated "Biju Setu Yojana" (BSY) in 2011-12 to bridge and provide all weather connectivity on all the roads owned by the Rural Development Department. During 2011-12 up to 2020-21 (up to January'2021), the construction of 1332 bridge projects on 536 RD roads and 796 important PS roads with a project cost of INR 6130.51 crore have been taken up, out of which 1139 bridges have been completed till end of March 2022. Table 5.3 provides information on the year wise number of bridges constructed under BSY since inception.

Table 5.3 Year wise Number of bridges constructed under BSY

Year	Bridges constructed under BSY	Funds utilised in Rs. Cr
2011-12	7	54.6
2012-13	16	135.9
2013-14	97	172.2
2014-15	116	186.6

2015-16	119	230.0
2016-17	108	563.0
2017-18	121	457.5
2018-19	78	494.7
2019-20	89	550.7
2020-21	185	752.7
2021-22 (Upto January)	90	559.8
Total	1026	4157.7

Source: R.D. Department, GoO

5.5.10. As per the Online Management, Monitoring and Accounting System (OMMAS) of Pradhan Mantri Gram Sadak Yojna, the completion rate under PMGSY was 95 per cent in the State since the inception of the scheme. So far, of the sanctioned length of around 61,122 km under PMGSY, the State has completed 58,277 kms of road under the programme.

5.5.11. There are various types of roads classified based on the material used to build them. For example, it could be water bound macadam (WBM) roads, Wet Mix Macadam (WMM) roads, Bituminous (BT) roads and cement concrete (CC) roads. WBM roads are laid as layers having 10 cm thickness. BT roads are prevalent roads around the world, as they are low in cost and suitable for driving conditions. CC roads require less maintenance and are suitable for high traffic areas. Table 5.4 below displays the length of different types of roads in Odisha, both surfaced and unsurfaced.

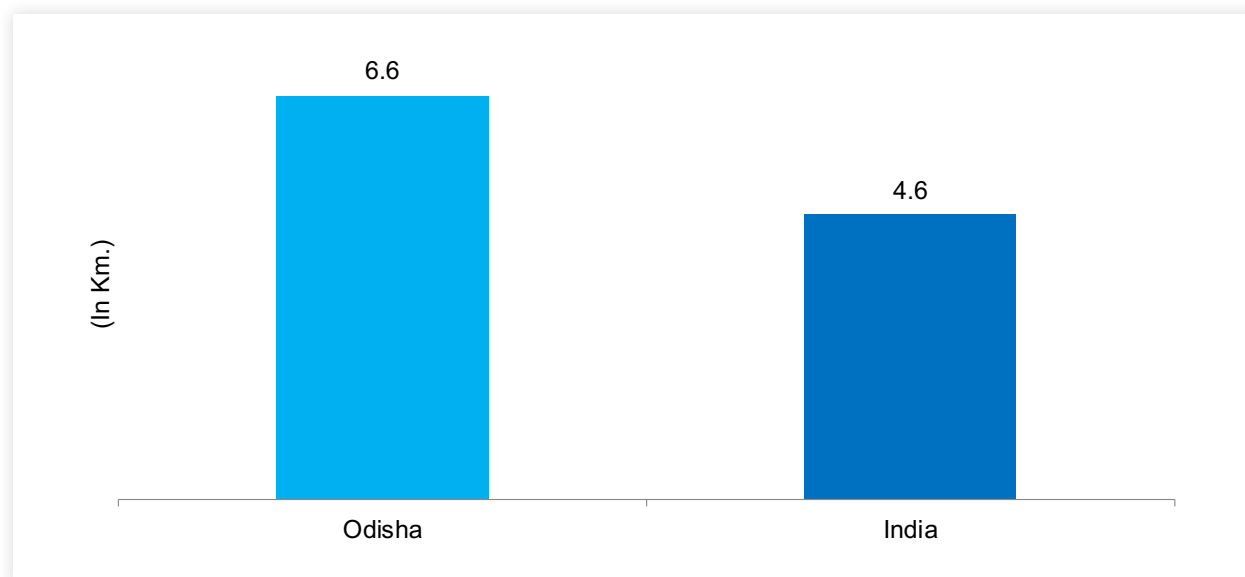
Table 5.4 Length of Municipalities Roads both surfaced/unsurfaced (in Kms) up to March,2022

Period	Total length	Surfaced			Total unsurfaced
		WBM/WMM	BT/CC	Total	
As on March 2021	18163	2656	12093	14749	3413
As on March 2022	17896	2689	12287	14976	2920

Source: H&UD, Department., GoO

5.5.12. In total, Odisha has 3.05 lakh kilometres of road network compared to around 64 lakh kilometres in the country. Going by the projected population for the state and the country in 2019 at 4.65 crore and 138.31 crore respectively, this amounts to 6.6 Kilometres per thousand population in the state compared to 4.63 kilometres per thousand population in the country (Figure 5.18). Table 5.5 shows the composition of different types of roads in Odisha and India as of March 2020.

Figure 5.18

Length of the road network per thousand population- Odisha and India, 2020 (in Km)

Source: Basis Road Statistics of India (various years) and Annual Report 2020-21, Ministry of Road Transport and Highways, GoI

Table 5.5

Composition of different types of road networks - Odisha and India, 2020

Type of Roads	Road Length in Kms	
	Odisha	India
National Highway	5,762	1,51,000
State Highway	4,143	1,86,528
Other PWD/ District Roads	21,647	6,32,154
Rural Roads (PMGSY, Panchayati Raj, PWD/RWD)	2,26,922	45,35,511
Urban Roads	21,425	5,44,683
Project Roads	25,733	3,54,921
All	3,05,632	64,04,797

Source: Basis Road Statistics of India (various years) and Annual Report 2020-21, Ministry of Road Transport and Highways, GoI

5.5.13. To provide affordable good quality public transport in the capital region covering Bhubaneswar, Cuttack, and Puri the government decided to create CRUT and been operating MO Bus services since November 6, 2018. Adoption of smart technology, service level benchmarking, and customer satisfaction has been at the core of CRUT's operations which has helped transform the urban public transport scenario in major cities of Odisha.



5.5.14. For the past four years, Capital Region Urban Transport (CRUT) has provided Mo Bus service in Odisha's Capital Region, including Bhubaneswar, Cuttack, Khurda, Pipili, Puri and Konark.

5.5.15. At present, a fleet of 200 buses catering to around one lakh passengers in 21 routes in the twin cities of Cuttack and Bhubaneswar are being operated by CRUT. In 2023, CRUT expanded its operations in Rourkela with a fleet of 30 buses. Mo Bus has drastically eased the daily commuting needs of the citizens, and for many, Mo Bus has become the most preferred mode of transportation.



5.5.16. The government is also developing two modern bus terminals at Bhubaneswar & Cuttack. Both the bus terminals – Baramunda Bus Terminal of Bhubaneswar and Netaji Bus Terminal at Cuttack are in advanced stages of construction. While the Netaji Bus Terminal is expected to be commissioned by March 2023, the Baramunda Bus Terminal will be commissioned by June, 2023.

IV. Banking Infrastructure

5.5.17. Banking infrastructure also plays a crucial role in providing impetus for development in both rural and urban areas. As per the report of SLBC 167th released in March 2022, Odisha has 12 public sector banks, 19 private banks, two rural banks, five Jana small finance banks and one state cooperative bank. In total, there were 5,607 bank branches in Odisha as of March 2022. About 53 per cent of total bank branches are in rural areas of the state, and availability of ATMs is skewed towards urban and semi urban areas. Besides, 3000 micro-ATMs were installed in the State under NABARD financial assistance. In total, 5691 ATMs were installed in urban and semi urban areas as compared to 1770 in rural areas. Distribution of Bank branches is rather skewed as 53 per cent of bank branches serve about 82 per cent of total population living in rural areas while 47 per cent of bank branches serve only 18 per cent urban population. Table 5.6 provides a glimpse of the banking infrastructure in rural and urban areas of Odisha.

Table 5.6

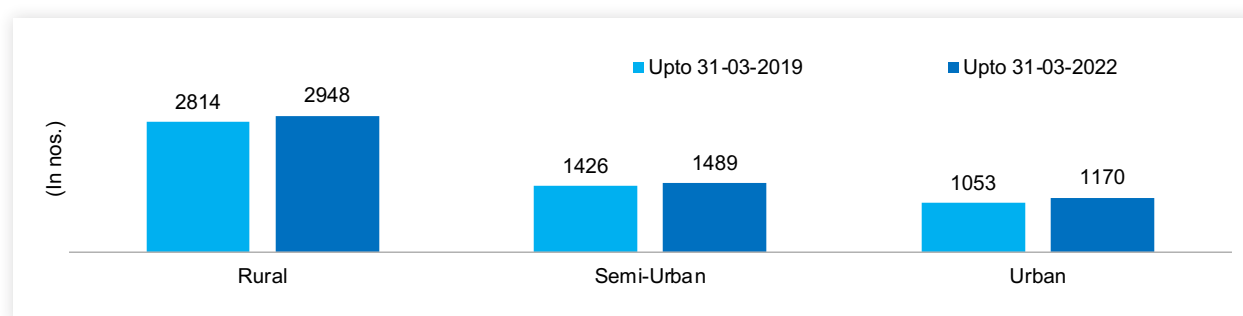
Banking Infrastructure in Odisha

Description	Rural	Semi-Urban	Urban	Total
Branch Network	2948	1489	1170	5607
ATM Network	1770	3112	2579	7461
Business Correspondents Network	12632	3786	709	17127

Source: SLBC

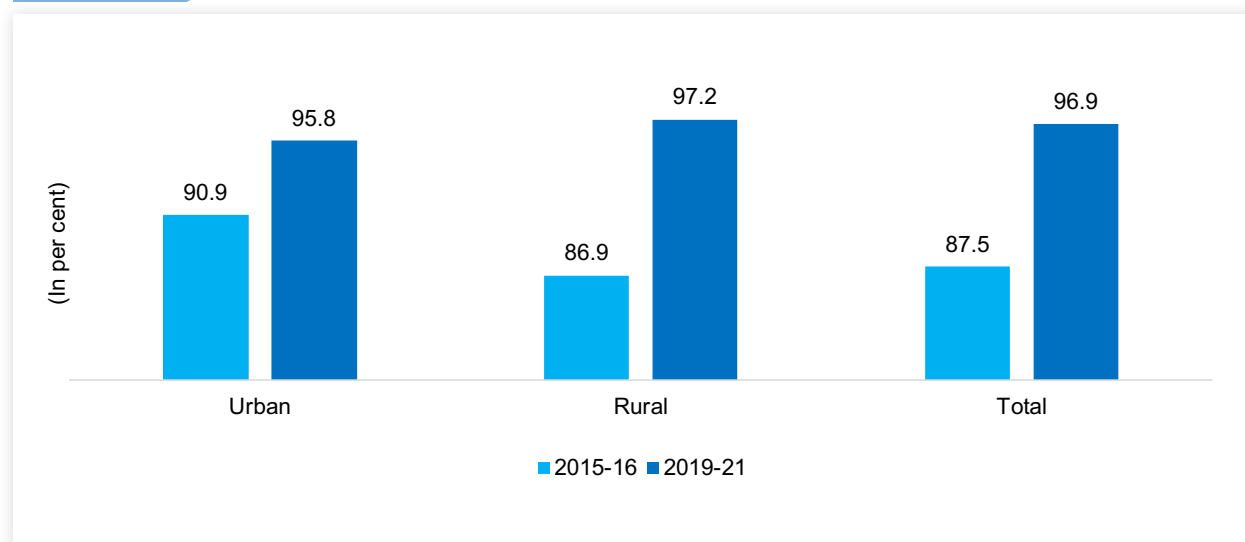
Figure 5.19

Households having an Account in Bank/ Post Office- Odisha



Source: NFHS 4 & 5

Figure 5.20

Growth in the Bank Branches- Odisha

Source: SLBC

5.5.18. Figure 5.20 shows the growth in the number of bank branches in Odisha. Between 2019 and 2022, the number of bank branches in rural areas grew by 4.8 per cent and in urban areas by 11.1 per cent, indicating a more prominent growth in urban areas. However, the number of bank branches in rural areas is much higher as compared to urban areas.

5.5.19. The increase in the number of bank branches, spread of ATM facilities and widespread deployment of Business Correspondents led to an increase in the per cent of households having an account in a bank or a post office. A comparison of 2015-16 and 2019-21 shows that households with bank/post office accounts increased by five per cent points in urban areas and by more than 10 per cent points in rural areas (Figure 5.19).

A. Employment/Unemployment Scenario in Rural and Urban Odisha

5.5.20. Labour employment is considered as an indicator of welfare as well as productive capacity of the economy.

5.5.21. Table 5.7 shows the composition of the workers in the usual status in rural and urban areas. The share of self employed in the rural area increased from 59.9 per cent in 2018-19 to 62.9 per cent in 2020-21 in rural areas. The corresponding increase in urban areas was from 38.8 per cent to 45.5 per cent. This is a good scenario for the economy.

5.5.22. Figure 5.21 shows the growth in the share of self-employed workers in rural and urban Odisha. There has been a significant increase in the proportion of self-employed among the female workers in both rural and urban areas. In rural areas, the share of female workers in the self-employed category has increased from 59.6 to 66.5 per cent while in urban areas, the share has increased from 30.6 per cent to 39.8 per cent. It is observed that the rate of increase in the share of female workers in the self-employed category is more vivid in urban areas than that of same in the rural areas. This has many possible interpretations. The COVID crisis had changed the modus operandi of the job market with more availability of work from home opportunities available, leading to increased opportunities for women to participate in the economic activities.

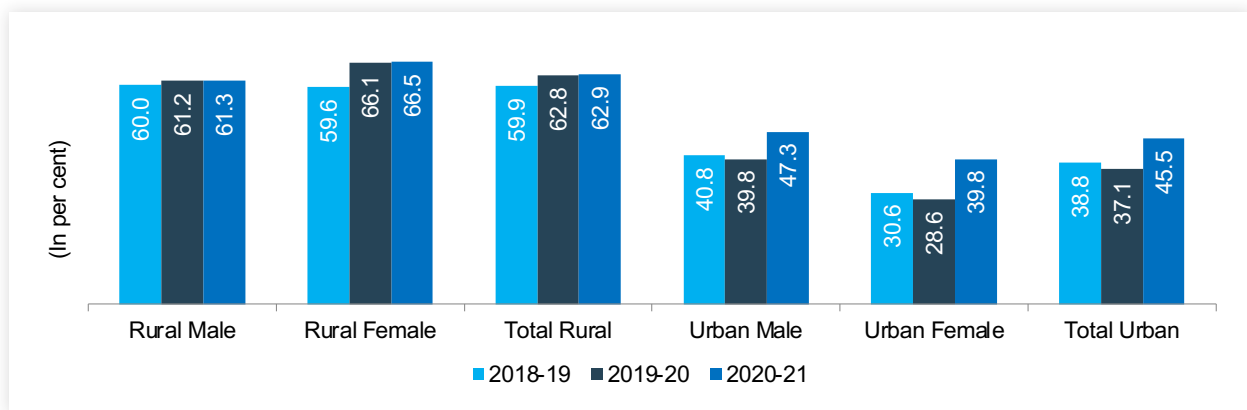
Table 5.7 Percentage distribution of workers in usual status (PS+SS) by broad status in employment

Categories	Self Employed			Regular Wage			Casual Labour		
	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
Rural Male	60	61.2	61.3	11.2	12.0	11.0	28.8	26.9	27.6
Rural Female	59.6	66.1	66.5	9.5	7.0	8.1	30.9	26.9	25.4
Total Rural	59.9	62.8	62.9	10.8	10.3	10.1	29.3	26.9	26.9
Urban Male	40.8	39.8	47.3	47.4	42.5	34.9	11.8	17.8	17.7
Urban Female	30.6	28.6	39.8	50.8	47.1	37.2	18.6	24.3	23.0
Total Urban	38.8	37.1	45.5	48.1	43.5	35.5	13.2	19.3	19.0

Source: PLFS 2018-19, 2019-20 and 2020-21

Figure 5.21

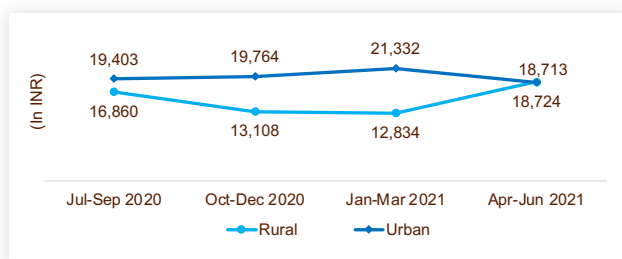
Share of self-employed workers in usual status in rural and urban areas



Source: PLFS Annual Reports 2018-19, 2019-20 and 2020-21

Figure 5.22

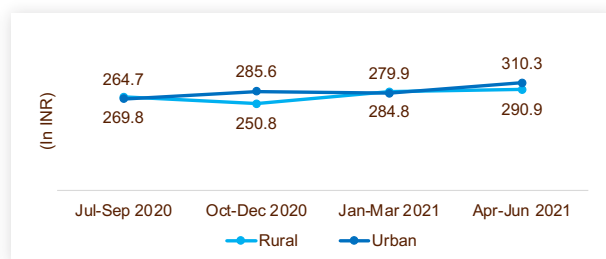
Average monthly wage of regular/salaried workers in the aftermath of COVID 19 - Odisha



Source: PLFS 2020-21 Annual Report

Figure 5.23

Average wage earnings (INR 0.00) per day from casual labour work other than public works in CWS - Odisha



5.5.23. In terms of earnings, Odisha is one of the states with the least rural urban divide. As observed from Figure 5.22 and Figure 5.23, the rural urban gap in earnings, by both regular wage earners and casual workers, increased temporarily during the peak of COVID crisis. However, when the economic activities resumed, the earnings in rural and urban areas converged again.

5.6. Urban Development Initiatives by Government of Odisha

5.6.1. Table 5.8 provides some of the flagship programmes of the government for urban development in the State.

Table 5.8 Initiatives and the flagship programmes by the government for urban development in the State

Initiatives	Description
JAGA Mission	JAGA Mission: Transforming slums into Liveable Habitats Aims to provide land rights to identified and eligible slum dwellers with the objective of providing security of tenure and transforming the slums into liveable habitats.
OUHM	The mission seeks to fulfil the housing requirements of the urban poor, including slum dwellers through In Situ Slum Redevelopment scheme, credit-linked subsidy scheme in partnership with Public and Private Sectors.
Drink from Tap Mission	Aims of the Mission is to critically examine the risk management of continuous water supply from catchment to consumer and enable consumers to directly drink water from the tap and to achieve 24X7 water supply (including 100 per cent metering), quality surveillance and assurance of tap water quality and community participation in water supply management. Importantly, the Drink from Tap mission will reduce the generation of plastic waste by 400 tonne per annum through reduction in the use of plastic drinking water bottles.
Basudha-Portable piped water for all under Mega pipe water scheme	The primary objective of the Basudha scheme is to provide adequate safe water to rural people for drinking and domestic purpose on sustainable basis. Mega pipe water scheme, 2023 launched to provide portable piped water supply to all and ensure that given water is safe for drinking & domestic purpose. Odisha Government launched mega pipe water for 147 water scare villages of Puri and Ganjam districts
Amrut:2.0	Aims to provide universal piped water supply with household water tap connection, universal coverage for sewerage & septage management & promotion of circular economy of water, rejuvenation of water bodies to augment water and to enhance amenity value & development of green spaces
Sanitation	In 2011, State has notified an urban sanitation strategy with the goal of transforming urban areas into community-driven, totally sanitized, safe, healthy and liveable cities and towns
Garima	Aims for safety & dignity of core sanitation workers by introducing risk& hardship in state
Mukta	An Urban Wage Employment programme was introduced amid Covid pandemic for providing a socio- economic safety net by generating mass employment opportunities for the migrant/informal workers
Public Transport: MO Bus service (CRUT)	To ensure a complete transformation of the urban public transport scenario in the city and its hinterland through use of smart technology, service benchmarking and customer satisfaction, the CRUT rolled out its MO BUS service. The focus is not only to focus on customer service, employee development and technology but also to provide the best public transportation possible to improve the quality of life.

Above schemes coverage with several government of India schemes

5.7. Urban Night Sky & City Landscape

5.7.1 It is imperative for the Government to provide adequate and uniform Energy Efficient Public Street Lighting systems in urban and peri-urban areas. Bhubaneswar became the first city in the state to introduce Retrofitting of energy efficient LED street lighting on a pilot basis in 2014 in PPP mode (saving about 80 per cent of BMCs power bill).

5.7.2. Encouraged by the success of the pilot, the Retrofitting Project was extended to four other Municipal Corporations in 2016 along with illumination of uncovered Greenfield stretches in BMC. Subsequently in 2018, the Retrofitting project was extended to cover all 109 Municipalities and Notified Area Councils and all uncovered Greenfield stretches in 113 ULBs excluding BMC.

5.7.3. 4,27,261 LED streetlights covering 5957.63 kilometres have been installed across cities in Odisha. These were covered under the below projects to make Public Street Lighting in Odisha energy efficient through Smart LED luminaires:

- i. Smart LED Street light programme: The objective of the project is to increase public safety and convenience, save energy and reduce carbon footprints as well as reduce power bills of Urban Local Bodies.
- ii. Greenfield LED public street lighting projects: This project consists of means designing, implementing, operating, and maintaining the public street lighting system along with other infrastructure including Central Control & Monitoring System (CCMS) to the new stretches approved by the different ULBs. The projects are allotted to five different project SPVs and is at an ongoing stage.
- iii. NEESL (LED light retrofitting & Greenfield project): This has been appointed for retrofitting LED street lighting project in five Municipal Corporations and for Greenfield LED public street lighting project in Bhubaneswar Municipal Corporation. The 100 per cent coverage for the project was achieved installing 1,09,010 LED luminaires in all 05 corporations.
- iv. M/S EESL project (LED light Retrofitting project): The Government has specifically initiated a drive to retrofit streetlights through a JV of PSUs under Ministry of Power, Govt. of India in 109 ULBs except the five Municipal Corporations. Around 2,57,716 LED Luminaires have been installed exceeding the estimated target of 2,73,331.

5.7.4. Odisha Urban Infrastructure Development Fund (OUIDF) has been pioneering the execution of LED street lighting project implemented in 5 Municipal Corporations through M/s NEESL with a total project cost of INR 83.17 crore and OUIDF assistance of INR 71.95 crore. Further, OUIDF has also taken up the illumination of 113 Urban Local Bodies (ULBs) of Odisha, excluding BMC, through Greenfield LED Public Street Lighting projects with a total project outlay of INR 264.52 crore including OUIDF assistance of INR 79.36 crore.

A. Urban Employment

Mukhyamantri Karma Tatpara Abhijan (MUKTA)

5.7.5. MUKTA aims to secure the livelihoods of the urban poor, especially the vulnerable groups like migrants, women, transgender, and persons with disabilities who have faced severe economic vulnerabilities owing to the ongoing pandemic by providing gainful employment opportunities and building community resilience in urban areas. While its primary aim is to enable sustainable livelihoods, it aims to a) strengthen the community-based institutions by building local leadership and capacities of community organisations to further synergies for long term development, b) enhance ecological resilience by creating inclusive and participative community assets and c) apply innovative technologies to enhance the overall sustainability of public welfare schemes and

measures. The model builds on and converges with ongoing welfare schemes to respond to a crisis swiftly and yet in an organised manner.

5.7.6. MUKTA adopts a community-driven, participatory, and bottom-up approach to project planning and implementation, ensuring transparency and accountability through the project life cycle. MUKTA is a community-driven scheme tailor-made for empowering Community-Based Organisations (CBOs) such as Women Self Help Groups (W-SHGs) and Slum Dwellers Associations (SDAs).



5.7.7. Till date, 28,000 Projects worth INR 506 crore implemented across 1,856 Wards in 114 ULBs generating more than 32 lakh workdays. It directly benefitted about 400,000 urban poor and migrant wage seekers, of which about 40 per cent are women, by paying around INR 104 crore in wages under the scheme. In addition, 22,258 Self-Help Groups (SHGs)/Slum Dwellers Associations (SDAs) with about 200,000 members are engaged as the implementing partners and paid supervision charges worth about INR 12 crore.

Table 5.9 No of projects and value of projects for MUKTA (2022-23)

Particulars	Value
No of project approved	16,988
No of work order issued	14,846
Total value of projects approved (Rs. Cr.)	449.2
Total No of SHGs/SDAs engaged	11,976
No of workers engaged	5,00,000
No of man-days generated	26,00,000
Total wages paid in (RS. Cr.)	72
No of ward level committee formed till date	1,935
No of wards benefited from OUWEI Projects	1,660

Source: H&UD, Department, GoO

5.7.8. MUKTA is complimented by Dindayal Antodaya Yojana-National Urban Livelihood Mission (DAY-NULM) whose primary objective is to reduce poverty and vulnerability of the urban poor households by enabling access to gainful self-employment and skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis, through building strong grassroots level institutions of the poor.

Jaga Mission: Slum Dwellers Empowerment Programme



5.7.9. In Odisha, a total of 17 lakh people live in slum areas accounting for 3.72 per cent of total population and 24 per cent of total urban population in the state. Out of the total slum population in Odisha, 32.7 per cent live in semi-permanent or temporary houses facing eviction on a regular basis.

5.7.10. Recognizing the crucial role played by slum dwellers in building and sustaining cities, the Government of Odisha has decided to empower these impoverished residents by granting them in-situ land rights through the

landmark legislation - 'The Odisha Land Rights to Slum Dwellers Act, 2017. Subsequently, on 7 May 2018, the government launched the JAGA Mission with the noble and ambitious aim of transforming slums to liveable habitats through a combination of land rights and a comprehensive slum improvement process. Given its sheer geographical scale covering all 2919 slums in all 114 cities and towns of Odisha and a beneficiary coverage of 1.7 million slum dwellers, JAGA Mission has become the world's largest slum land titling and improvement program.

Table 5.10

Housing status in urban area- Odisha, 2021-22 (Up to March 2022)

Particulars	Population
Total urban population	70,03,656
Total urban Households	15,47,833
Housing shortage	
a. Housing availability households	1,19,4651
b. Housing shortage (as per HFAPoA)	3,53,182
Slum population	
c. Housing shortage in slums	2,38,007
d. Housing shortage in non-slums	1,15,175

Source: H&UD, Department, GoO

5.7.11. The mission eased out the access to stable housing and basic civic infrastructure for the urban poor. In addition, it works to formalise the rights of slum dwellers and mobilise communities to make their own decisions and improve living standards. Today, 175,000 slum families in 1,725 slums have Land Rights/Land Entitlement certificates, providing security of tenure and mitigating the fear of eviction. Further, out of all 3,96,208 slum households, 100 per cent households have electricity connection, while 94 per cent households have household water connection and 78 per cent have individual household toilets.

5.7.12. Similarly, 727 slums are upgraded as liveable habitats across 30 cities with basic amenities to address the primary inequalities prevailing in urban areas and integrate informal settlements into the mainstream city fabric. All 2919 Slum Dwellers Associations were formed and trained to function as partners of ULBs in the development and governance process. Support was extended to ensure all 2919 SDAs are provided with bank accounts, while MoUs have been signed with 2,778 to empower them as the 4th Tier of Governance.



5.7.13. For the second time, 'Jaga Mission' – the largest land titling and slum upgrading scheme in the world – won the Bronze Award organized by World Habitat in partnership with UN-Habitat. The award is the world's leading award in housing and recognizes innovative, outstanding, and revolutionary housing ideas, projects, and programmes from across the world. Earlier in 2019, Jaga Mission received the World Habitat Award for its success in providing land tenure security.



5.7.14. As on March 2022, a total of 1,94,397 houses have been sanctioned under different verticals of PMAY (U). Under BLC vertical of PMAY, INR 2007 crore have been spent and 1,24,277 houses have already been constructed and incentive amounting to INR 24.51 crore has been disbursed to the beneficiaries for completion of houses within a period of 180/120 days. Under AHP vertical of PMAY, an amount of INR 27.14 crore and INR 84.80 lakh under ISSR vertical were disbursed to the implementing agencies for construction of houses.

Table 5.11

Key Statistics of Beneficiary Led House Construction scheme

Key indicators	No. of beneficiaries
Number of Valid houses sanctioned under BLC	1,62,492
Number of valid houses sanctioned under AHP	20,920
Number of valid houses sanctioned under ISSR	6,360
Number of houses grounded under BLC	1,18,463
Nos of houses grounded under AHP	3,840
Nos of houses grounded under ISSR	1,160
Total Nos of houses grounded under all verticals	1,23,463
No of houses completed under BLC	8,421

Source: H&UD Department, GoO

B. Urban Sanitation

5.7.15. The state government has initiated a multipronged approach to achieve safe sanitation & sustainable sanitation for all. It aims to accelerate the universal sanitation consciousness to make Odisha open defecation free and improve levels of cleanliness through solid and liquid waste managements. In Odisha, all the 115 ULBs were declared as “Open Defecation Free” (ODF) - 34 ULBs have certified as ODF, 18 ULBs have been certified as ODF ++ and 62 ULBs as ODF+. Construction of 1,42,336 individual Household Latrines (IHHL), 7,217 Community Toilet (CT) seats and 4782 Public Toilet (PT) seats have been undertaken under the “Swachha Odisha Sustha Odisha” scheme.

5.7.16. Processing of municipal solid waste is done by adopting decentralized methods of Micro composting centres (MCCs) to adhere to Solid waste management rules. The MCCs along with 1833 pit composting and barrel composting facilities have enabled processing of the wet waste into organic manure, branded as “Mo Khata”, which set to gradually replace chemical fertilizers. All ULBs have also established Material Recovery Facilities (MRFs) for processing of recyclable dry waste. Currently, there are 242 MCCs and 219 MRFs established in all ULBs for solid waste management.

5.7.17. The sanitation value chain has been made women-centric by engaging women members of the local WSHG/ALF/CLF named as Swachh Sathi and Swachh Karmis to drive a change in Solid waste Management (SWM) in Odisha. As of now, 4,657 women from 2579 SHG groups have been engaged across SWM value chain for O&M of SWM Assets & Service Delivery of SWM in all 114 ULBs. These engagements have helped in creating livelihood and increasing gender parity through community based operating model which also ensures sustainability.



5.7.18. The decentralized system for SWM called attention to the need for a performance management system to manage staff performances to streamline the performance. Thus, for effective monitoring and evaluation, a performance management tool has been developed known as ‘Ama Sahara’ - it is an attempt towards fostering a digital footprint to provide support to the H&UD Department to manage outputs of staff action & using those, surface key policy and process bottlenecks.

5.7.19. Ama Sahara is a data-driven performance management system that is used to record data for each process of the decentralized system and to monitor the performances of ULBs by the state. It is a mix of technology & processes (software suite & personnel/system review mechanisms) designed to ensure all people & assets in the SWM value chain operate optimally and work towards intended outcomes. The state is using it to drive a competition to periodically recognize & reward best performing ULBs & functionaries within.



5.7.20. Environment friendly Battery-operated vehicles (BoV) have been deployed for the collection of segregated waste from the doorsteps. So far 708 BoVs are in operation in 93 ULBs in addition to the other types of vehicles used for collection and transportation of the segregated waste from households to processing facilities.

Garima

5.7.21. Garima Scheme was launched by the Government of Odisha to provide benefits to around 20,000 sanitation workers and their families covering 1 lakh population. This scheme aims to ensure safety and dignity of core sanitation workers. A dedicated corpus fund initially with INR 50 crore was created to institutionalize and regulate social security and financial benefits to workers and their families. Through the GARIMA scheme, Odisha is the only state that identifies 5 categories of core sanitation workers as skilled and highly skilled workers. Till date 5,018 Core Sanitation Workers have been identified and validated across 6 pilot cities. Under the scale up survey for the scheme in 108 cities, 4,708 no of CSWs identified so far.



Sewerage and Septage

5.7.22. A 26 per cent rise in urbanisation in the last decade in Odisha, India, has led to an increased wastewater generation across all 114 cities. However, until 2014 there was absence of any sewer network with treatment facility across urban Odisha, wastewater used to be indiscriminately discharged, contaminating water bodies causing severe public health hazards for 70 lakh people living in urban Odisha.



5.7.23. Realising the challenges in executing sewerage networks, Odisha adopted the unprecedented strategy for a state-wide decentralised septage treatment system. So far, 110 FSTPs have been commissioned treating the wastewater from 108 towns thus treating the faecal waste in urban and peri-urban areas. With another 9 FSTPs under construction when commissioned by June 2023 will make the state achieve saturation status in FSTP capacity creation in the state.

5.7.24. The sewerage system in Cuttack city which is taken up under JICA loan assistance is on the verge of completion with 90 per cent construction works completed. The network is expected to be commissioned by June 2023.

5.7.25. The underground sewerage system for Rourkela city has been completed and commissioned in 2022. Similarly, sewerage system for Sambalpur is under implementation and expected to complete by end of 2023.

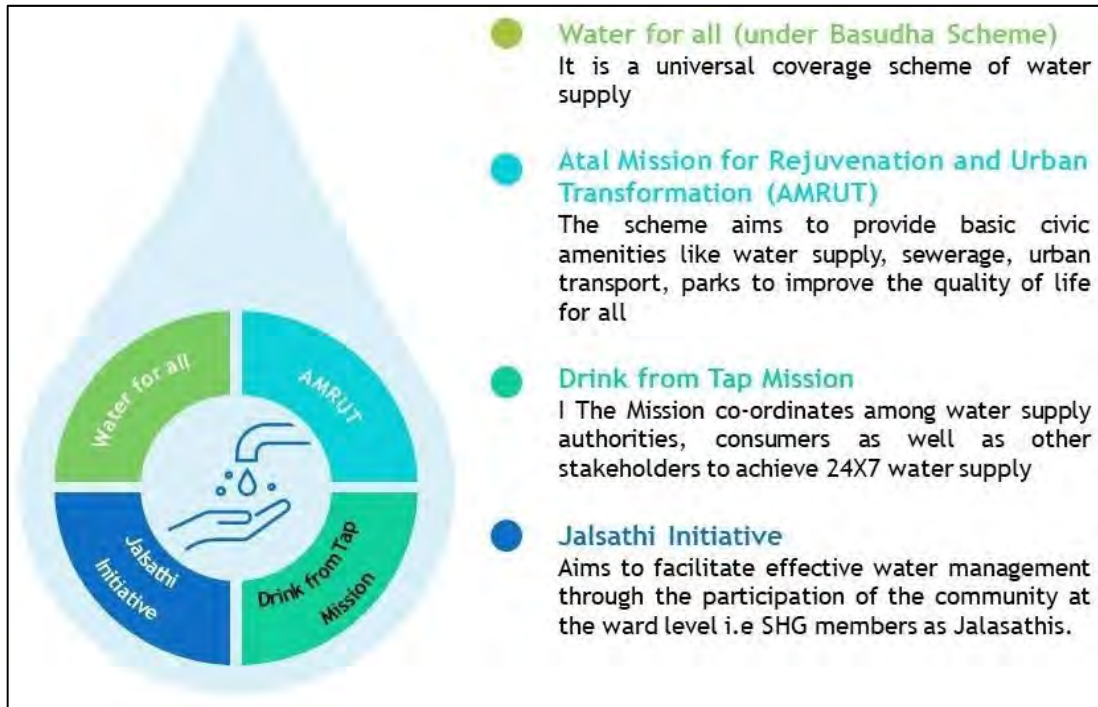


5.7.26. Furthermore, cities inducted 3000 women & transgender groups from the community to manage these SWM & FSTPs thereby creating livelihoods, enhancing gender parity, and empowering the marginalised. The SHG members are responsible for the daily operations which includes – managing the entry of all cesspool vehicles for discharging faecal sludge at the plant, regular treatment, minor repairs, upkeep of the plant and the premises. They were trained extensively on the operations & maintenance and are now proud managers of the facility.

C. Urban Water Supply

Figure 5.24

Major Schemes for Water Supply



5.7.27. To ensure a more equitable efficient and sustainable urban water supply system, the Government of Odisha has given more thrust on improving the level of urban drinking water service. The state has given a mandate for universal coverage with adequate and quality drinking water supply to enable easier and equitable access to all categories of people in the society.

5.7.28. Water Corporation of Odisha (WATCO), a Not-for-Profit company was established with a mandate to provide water and wastewater related services on a sustainable basis in Bhubaneswar, Khordha and Jatni municipal areas in the first phase. Given its success in driving urban water supply service & maintenance, WATCO is entrusted with the responsibility to provide water supply services in 29 cities covering more than 60 per cent of the urban population of the state.

BASUDHA

5.7.29. State took up the ambitious challenge of revamping the water infrastructure, including vital policy reforms under a comprehensive development programme to connect 1.0 million households in the state with piped water connections. During 2022-23, 100 urban water supply projects were completed & commissioned ended in December 2022. Today, 96 per cent of urban households in the state have



piped water supply, and 85 out of 114 cities have achieved 100 per cent house connections truly following the principle of “Leaving No one Behind”.

5.7.30. State has deployed a unique community-led service delivery model, including women from marginalized low-income families. These women support billing & collections and act as relationship managers to help households apply for new connections, resolve grievances, regularize an illegal connection, amongst others, helping improve service delivery & citizen delight.

Drink from Tap Mission



5.7.31. The main objective of the Mission is to critically examine the risk management of continuous water supply from catchment to consumer and enable consumers to directly drink water from the tap. The Mission is one-of-its-kind and has added a new chapter to the not just the history of the state, but also the country.

5.7.32. It aims to achieve 24x7 water supply (including 100 per cent metering), quality surveillance and assurance of tap water quality and community participation in water supply management.

5.7.33. Puri became the first heritage town in the Country to get this facility. About 2.5 lakh residents of Puri municipal area are now getting potable clean drinking water 24x7 under the new project. Followed by Puri, Gopalpur has achieved full city coverage of 24x7 DFT facility from Dec 2022. With upscaling of the DFT program in 22 other cities, altogether 7.5 Lakh population is presently provided with 24x7 directly drinkable water at their house taps.

Jal Saathi Initiative

5.7.34. The Jal Saathi Initiative was launched on December 2018 by Hon'ble Chief Minister Shri Naveen Patnaik to facilitate effective water management through participation of the community at the ward level in the form of Self-Help Group (SHG) members as Jal Saathis.

5.7.35. More than 750 Jal Saathis are now deployed throughout the state partnering with the water supply distribution and customer management activities. Jal sathis support billing & collections and act as relationship managers to help households apply for new connections, resolve grievances, regularize an illegal connection, amongst others, thus improving service delivery & citizen delight.



AMRUT Scheme

5.7.36. Under the national flagship programme of Atal Mission for Rejuvenation and urban Transformation (AMRUT) following achievements have been made -

- i. Out of 130 proposed projects with total cost of INR 1415.68 crore, 121 projects have been completed amounting INR 1363.84 Core till date.
- ii. 285.14 km of water supply distribution pipelines have been replaced /laid in 9 Nos of AMRUT cities during the financial year.
- iii. Out of 1,90,874 households, water supply pipelines connection has been provided to 1,73,773 households in 9 AMRUT cities in State.
- iv. Out of 48 Nos proposed projects for parks, 40 Nos of projects have been completed.
- v. All sewerage/ Septage related projects have been completed under AMRUT Scheme.

5.8. Urban Governance

Direct Feedback Management System Working in Tandem with Mo Sarkar – Mo Sahara Sarkar

5.8.1. In a bid to reinforce people-centric governance at the grassroots level, Odisha Government has planned to popularize Mo Sarkar initiative and its benefits across the State. This initiative attempts to bring in professionalism and behavioural change in public offices through a direct random feedback system from citizens has become a model for other States.

5.8.2. A dedicated Feedback Cell launched on 1st August 2021, in line with Mo-Sarkar with presence in all 360 institutions which includes 114 Urban Local Bodies (ULBs), 237 Public Health/ WATCO Section Offices, and 9 Development Authorities along with six call centre executives in operations. Currently following feedback for following services are included -

- i. Housing (Awaas): Delay in payment
- ii. Trade License: Issues relating to submission of documents
- iii. Holding Tax: Assessment related issues
- iv. Building Plan Approval (5 Corporations+ 9 DAs)
- v. Water Supply Connection: Pipeline issues
- vi. MUKTA: Payment related issues

5.8.3. As a complimentary to Mo Sarkar mechanism, H&UD Department have introduced its dedicated Feedback Management Mechanism working in tandem to the mechanism - Mo Sahar Sarkar, which aims are not only

ensuring the satisfaction of citizens on all urban services but also ensures quality of Urban Services. Till date, more than 1 lakh calls have been corresponded with key stakeholders related to urban governance system. The Mo Sahar Sarkar system has a dedicated team of 05 dedicated Senior Call Executives in operation attending 250 calls (approx.)/every day. The system has been integrated with SUJOG platform and till date 1,748 adverse feedback cases addressed.

5.9. Awards and Recognitions Received by the Government of Odisha for the Initiatives in Urban Development:

- i. Bronze Award 2023, organized by World Habitat in partnership with UN-Habitat for Jaga Mission, a 5T initiative of the state. The awards recognise and highlight innovative, outstanding, and revolutionary housing ideas, projects and programmes from across the world.
- ii. Award to the Capital Region Urban Transport (CRUT) for being the 'Most Innovative Bus Transit System in India' in the 2nd Urban Infra Business Summit & Awards 2022 in the category of 'Transit & Mobility'.
- iii. Three awards at ISC-FICCI sanitation Awards 2022
 - Bhubaneswar Municipal Corporation (BMC) - The "Best Faecal Sludge and Septage Management (FSSM) Model – Urban,"
 - Bhadrak municipality with the "Women Change maker in Sanitation"
 - Jajpur district for "Best Skilling Initiative in Sanitation."
- iv. 13 National awards in "Swachha Survekshan, 2022 & Indian Swacchata league, 2022 .11 ULBs bagged the awards under Swachh Survekshan 2022 and Cuttack and Pipili ULBs received National Awards in Indian Swacchata League 2022.
- v. Award to WATCO as Global water Leader 2022 for excellence in 24x7 water supply to urban citizen and its Drink from Tap Mission.
- vi. The Global Water Leader Award 2021 for Drink from Tap Mission
- vii. Award with the prestigious Pradhan Mantri Awas Yojana-Urban (PMAY-U) Award 2021, for 'Best Policy Initiatives by State' under the special category.
- viii. Award for 114 urban local bodies (ULBs) and Medal of Honour for two initiatives — Urban Wage Employment Initiative (MUKTA scheme) and Faecal Sludge & Septage Management (FSSM)
- ix. Asia Pacific Housing Forum Innovation Awards 2021 (Issued by Asia Pacific Housing Forum, Dec 2021): Innovation in Public Policy in recognition of Jaga Mission's Slum Upgradation programme.
- x. Medal of Honour, 5th Guangzhou International Award for Urban Innovation (Issued by 5th Guangzhou International Award for Urban Innovation): The Urban Wage Employment Initiative (UWEI) implemented in all 114 Urban Local Bodies (ULBs) of Odisha for reducing vulnerabilities and enhancing resilience of the urban population in the State.
- xi. Best Faecal Sludge and Septage Management Model (by India Sanitation Coalition (ISC)-FICCI): Awarded to Dhenkanal Municipality for demonstrating successful urban rural convergence in FSSM.
- xii. Award of Excellence at the 2nd National Water and Sanitation Innovation Summit to WATCO (by Elets Techno media and Ministry of Jal Shakti, Government of India · Mar 2021): Awarded to WATCO For 24 X 7 Smart Water Transportation and Distribution in Puri through the Drink from Tap Mission.

- xiii. Award of Excellence (by Computer Society of India (CSI) · Feb 2021): For Smart Water Management in Puri through the Drink from Tap Mission, Odisha's programme on providing universal access to piped water supply
- xiv. PHEO won the National level V Ramachandra awards 2020 under the category "Best Civic Agency" for piped water supply scheme for all urban households on 12th January 2021.
- xv. Received Elets water Innovation Award of Excellence 2021 for 24x7 water supply to Puri town under Drink from Tap mission.
- xvi. WRI Prize for Cities – MUKTA the Housing & Urban Development Department of the Government of Odisha has been announced as one of the winners of the World Resource Institute's Prize for Cities 2021-22 edition, a global commendation for its initiative – MUKTA - Urban Wage Employment Initiative a large-scale jobs program to employ the urban poor and informal and migrant labourers in public works projects. It is a global award appreciating and highlighting innovative approaches adopted by cities in response to uncertainty, disruption and crisis showing how to live and thrive in turbulent times.

5.10. Rural Development Initiatives by Government of Odisha

Table 5.12 A Snapshot of Rural Development Initiatives by the Government of Odisha

Initiatives	Description
MGNREGS	Aims at enhancing the livelihood security of the rural poor through the generation of wage employment opportunities in works leading to the creation of durable assets.
Drinking water & sanitation	Aims in Provision of safe, accessible, and adequate drinking water for all the people living in the rural areas. Access to sanitation is extremely important as it ensures good health and overall wellbeing of people resulting in holistic growth and development. Saturation plan 100 & Target to provide safe & potable drinking water through FHTC to every household by 2024.
Basudha	Aims is to provide safe and adequate water through piped water Supply Systems to every rural household. The drinking, cooking and other domestic needs will be met through an enhanced supply of 70 LPCD (litre per capita per day). The scheme also focuses on enhancing water quality and empowering community for ownership of water assets to ensure operation and maintenance sustainability.
JJM	Jal Jeevan Mission (JJM) aims to provide a functional household Tap Connection (FHTC) to every household and achieving drinking water security. The key focus on water conservation, source sustainability and rainwater storage
Swachh Bharat Mission (Gramin)	Aim to provide safety, security and convenience, especially for women and children, by eliminating open defecation across the country and achieve Open Defecation Free (ODF) villages.

Basic services programmes (PMAY(G), BPGY & NSPGY)	Odisha has been a pioneer in the country in rural housing. Government of Odisha commits to provide pucca house to all Rural houseless and those staying in Kutchha houses through Biju Pucca Ghar Yojana (BPGY) and Nirman Shramik Pucca Ghar Yojana (NSPGY). The Pradhan Mantri Awas Yojana-Gramin (PMAYG) was formed to meet the objectives of the "Housing for All" scheme by the year 202
OLM: Aegis of Department of Mission Shakti, Odisha,	Odisha Livelihoods Mission (OLM) is a registered society under the aegis of Department of Mission Shakti, Government of Odisha for enhancing the socio-economic condition of the rural poor through promotion of sustainable livelihoods
Rural connectivity	Aims and promotes access to economic and social services, thereby generating increased agricultural as well as non-agricultural productivity and non-agricultural employment. It further helps in extending basic facilities in health care, education, drinking water and livelihood support to the people.
NRuM	National Rurban Mission with the vision of developing Clusters of villages that preserve the essence of rural life and does not compromise on the provisions that are essentially urban in nature thus creating a Rurban cluster.

Rural Employment through MGNREGS

5.10.1. Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has been playing a pivotal role in generating rural employment and enhancing rural livelihood in the State since 2006-07. It has generated large-scale employment at the village/ gram panchayat level in rural areas since its operation. It covered the entire State generating 1113.89 lakh person days of employment in 2019-20, which has risen to 2080.81 lakh person days in 2020-21. A sudden spike in the number of person days of employment in 2020-21 (187 per cent increase over 2019-20) may be associated with the effort of the government to provide wage employment to returning migrants and others in the times of the COVID 19. The figures have been normalising in recent years (Table 5.13). In 2021-22, a total of 1977.9 lakh person days of employment were generated, benefiting 55.5 lakh beneficiaries.

5.10.2. It is to be noted that the most vulnerable groups seek employment under MGNREGS. It has been designed to allow women equity in both access to work and in the payment of wages. The participation of women has also increased over the years. Table 5.14 shows the detailed category-wise person days generated in rural Odisha from 2018-19 to 2021-22. The participation of SC/STs in terms of person-days generated was more than 50 per cent during these years. Thus, the scheme is well-targeted to reach the most disadvantaged groups. Moreover, the share of both women and SC/ST groups has been increasing in recent years.

Table 5.13 Performance of MGNREGS- Odisha

Parameters	2018-19	2019-20	2020-21	2021-22
Person days (in lakh)	829.9	1113.9	2080.8	1978.8
Beneficiaries assisted (in no.)	3366339	3731602	6214748	5554728
Wage assistance provided (Rs. in crore)	1485.2	1948.2	4672.54	4127.0

Source: Panchayati Raj & Drinking Water Department, GoO

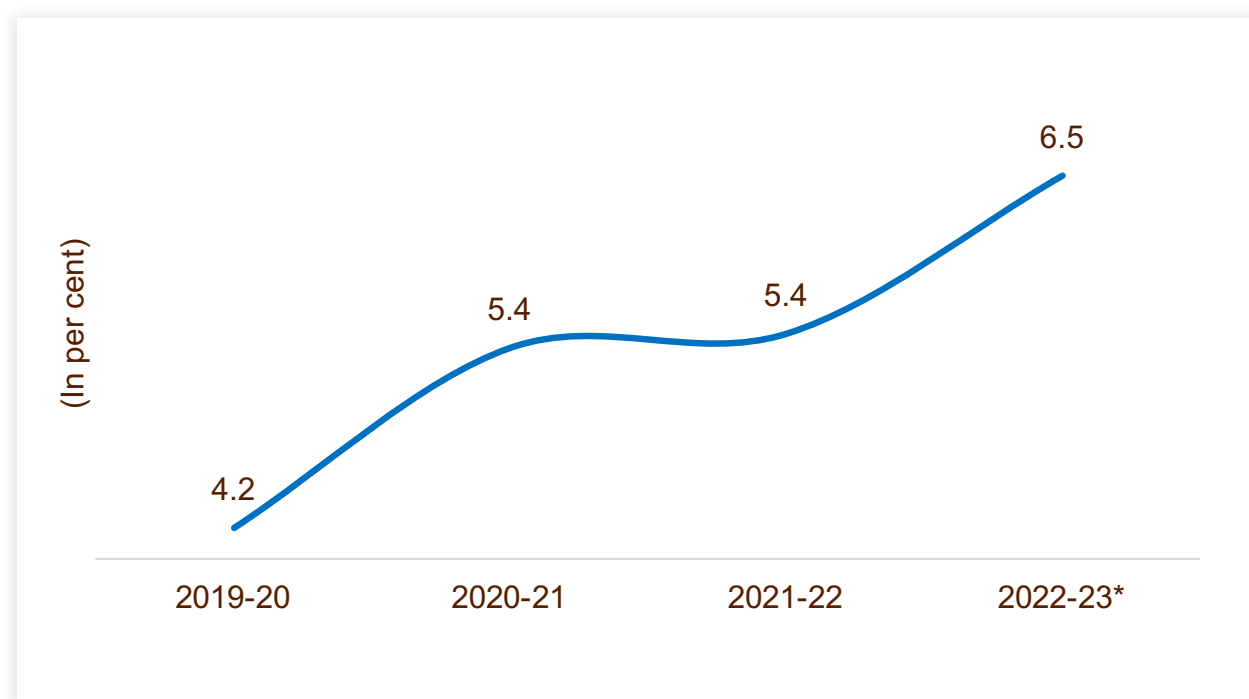
Table 5.14 Person days generated and share of Women, SC/ST under MGNREGS- Odisha

Year	No of Person-days generated (in lakh)					
	SC	ST	Total	Women	Women (per cent)	SC/ST (per cent)
2015-16	141.8	372.8	892.7	339.4	38.0	57.7
2016-17	124.3	292.3	773.4	307.9	39.8	54.0
2017-18	152.9	338.7	922.1	386.0	41.9	53.3
2018-19	133.6	294.6	829.9	348.5	42.0	51.6
2019-20	171.7	397.9	1113.9	482.3	43.4	51.1
2020-21	292.7	743.8	2080.8	931.0	44.7	49.8
2021-22	271.6	697.6	1977.9	912.7	46.1	49.0

Source: Panchayati Raj & Drinking Water Department, GoO

Figure 5.25

Trend of the Share of Odisha in Total Employment Generated through MGNREGS- India



Source: MGNREGS Portal. *Till January 2023

MGNREGS: Major initiatives during 2022-23

- The State aims to achieve 23 Cr. person days during FY: 2022-23.
- Issue of new Job Cards to the households willing for unskilled works.
- SC & ST person days to be 50 per cent.
- Person days of Women beneficiaries should be 33.3 per cent.
- Effective Convergence with Line Departments
- Focus on Water Conservation works, Plantation, Farm Ponds, AWC, Dug Wells, Land Development etc.
- Special Package of minimum wage and additional 200 days of work in 20 Migration Prone Blocks of 04 Districts: Bargarh, Bolangir, Kalahandi and Nuapada.
- Timely Payment of Wages: Generation of Fund Transfer Orders (FTOs) should be more than 99 per cent in T+8 days.

Performance in 20 Migration prone blocks (Bargarh, Bolangir, Kalhandi & Nuapada) 2021-22:

To address distress migration, the Government has taken special initiatives for providing minimum wage @Rs 308/- over and above MGNREGA wage @Rs 215/- and additional 200 days of work in 20 migration prone blocks of 4 Districts.

Innovative initiatives by PR&DW Department:

- a. Tagging beneficiaries with specific functionary: Each beneficiary is tagged with a particular block functionary, who assist the beneficiary in house completion. This practice has been highly praised by the Parliamentary Standing Committee.
- b. Simplification of Process: Beneficiary can now view Work Order for house construction through her/his registered mobile number & Beneficiary gets notification through SMS in her/his mobile whenever instalment / incentive amount is credited to their bank accounts.
- c. Online Case Record: Beneficiaries can access information through 'Mo Case Record' on web portal. (www.rhodisha.gov.in)
- d. Ama Ghar: Android Mobile App: Beneficiary/ tagged officers/ block functionaries use the App to report progress of house construction. Beneficiary can initiate instalment process by uploading photo of house at each stage with timestamp and Geo-tag.
- e. Robust Feedback Mechanism: State's "Mo Sarkar" initiative for directly connecting with people. All 314 blocks and 30 districts have exclusive "Mo Sarkar" cell to promote citizen connect. State/ District Call Centre obtain grievances from beneficiaries and forward to officer concerned for their redressal.

5.10.3. Given the post COVID economic challenges, the Government of Odisha has been very serious as far as the effective implementation of the programme is concerned. It has been observed that since 2019-20, the share of Odisha in the total employment generated through MGNREGS has been on the increase. Figure 5.25 shows that the share of the state in total person days generated in the country has gone up from 4.2 per cent in 2019-20 to 5.44 per cent in the year 2021-22 and further increased to 6.45 per cent by January 2023.

Water Supply and Sanitation

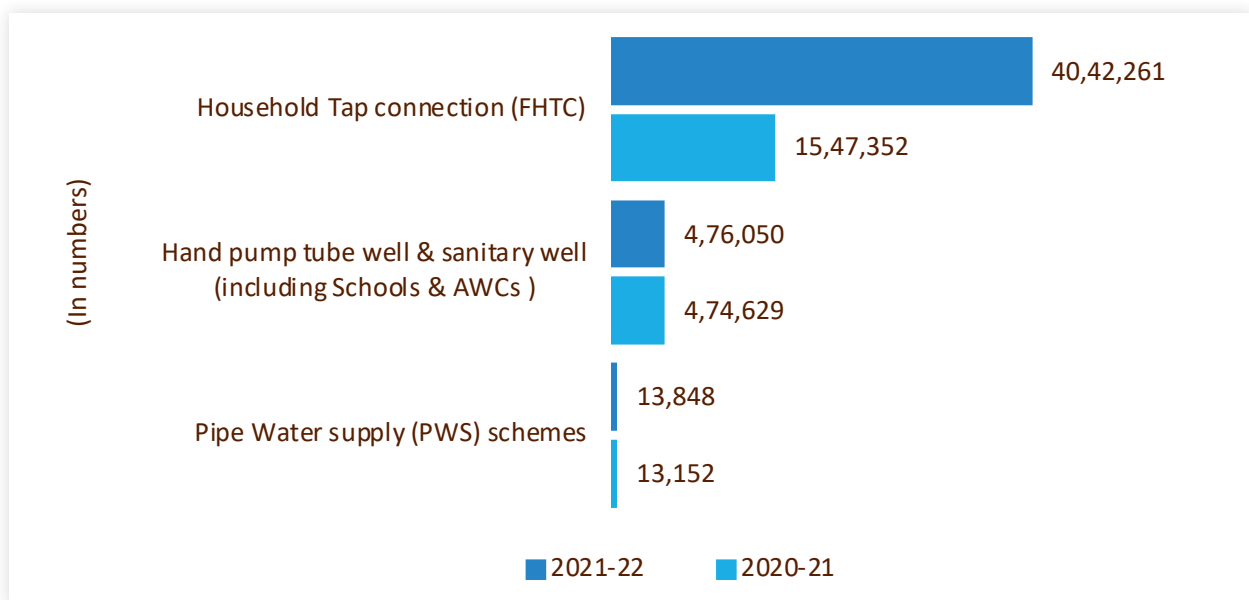
5.10.4. Provision of safe and adequate drinking water for all the people living in rural areas is a basic developmental requirement. The PR&DW Department has taken up the task under RWS&S to provide a safe source of drinking water in all rural habitations. The Government of India, through the National Rural Drinking Water programme (NRDWP), provides technical and financial assistance to the state. The NRDWP is a centrally sponsored scheme aimed to provide adequate and safe drinking water at the doorstep of the rural population of the country. In water-scarce and poor-water quality areas, there is a shift from spot sources (tube wells and sanitary wells) to PWS schemes taking water from surface sources.

5.10.5. In rural areas, piped water supply schemes are being taken up and commissioned in phased manner under different programmes such as Rajiv Gandhi drinking water supply programme, NRDWP (renamed as Jal Jivan Mission), BASUDHA, etc.

5.10.6. As on 31.3.2022, 13,848 new PWS schemes have been commissioned in the State and out of 88,57,396 rural households, 40,42,261 households have been provided with piped water connections functional household tap connection (FHTC) facilities. Besides, 12,683 solar units have been installed in the inaccessible villages, and 6489 new solar units are to be installed in 2022-23. Government has also taken up 209 mega PWS projects on surface water sources. As on March 2022, 10 projects have been completed, 132 projects are under execution, and the remaining are in the tender phase. Figure 5.26 presents a summary of progress in rural water supply during 2020-21 and 2021-22.

Figure 5.26

Progress in Water and Sanitation facility in Rural Odisha in 2021-22



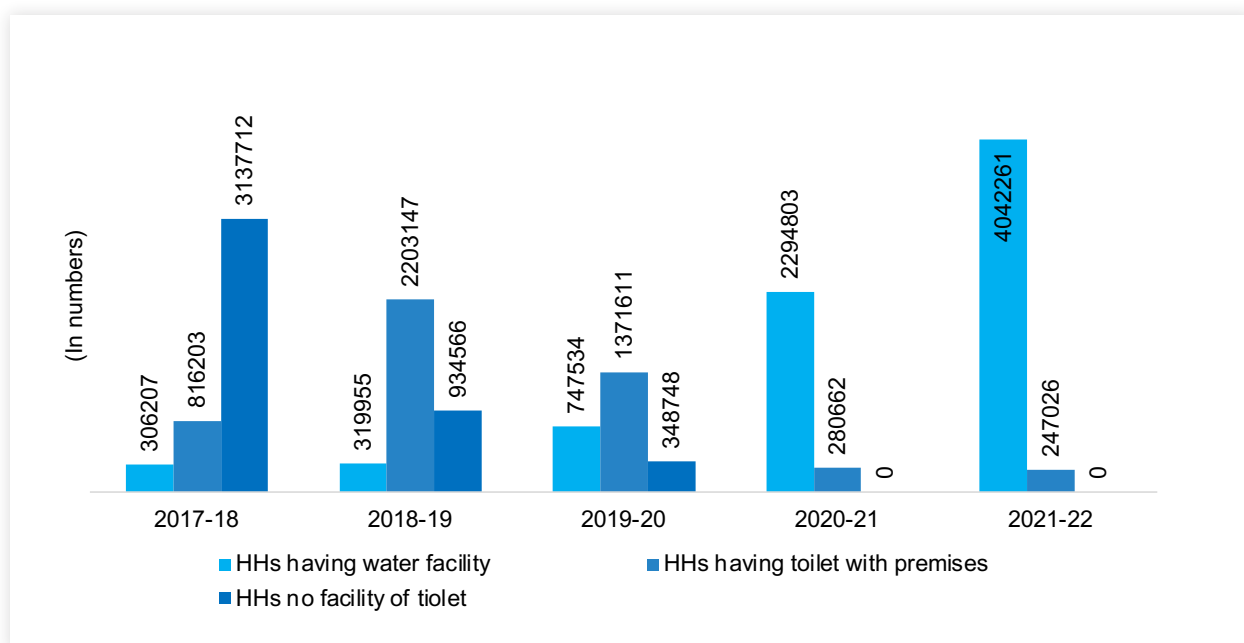
Source: Office of the Engineer in Chief, RWSS, GoO

Sanitation and Solid and Liquid Waste Management

5.10.7. Access to sanitation is extremely important as it ensures good health and overall well-being of people resulting in holistic growth and development of a State. As per the report released by NITI Aayog, the state performed better in SDG (Sustainable Development Goal 6), i.e., Clean Water and Sanitation. Odisha achieved 100 per cent ODF status in 2019 with all 30 districts declared Open Defecation Free (ODF), and thus households with no toilet facility dropped to zero in 2020-21. Figure 5.27 shows the progress of rural sanitation in Odisha from 2017-18 to 2021-22.

Figure 5.27

HHs having water facility and toilet within premises (In Nos)



Source: RWSS, GoO

Deendayal Antyodaya Yojana- National Rural Livelihoods Mission (DAY- NRLM):

5.10.8. Deendayal Antyodaya Yojana- National Rural Livelihoods Mission (DAY-NRLM) is a new strategy of poverty alleviation woven around community-based institutions having the primary objective to reduce poverty by promoting diversified, gainful and skilled wage employment opportunities, resulting in an appreciable increase in their incomes, on a sustainable basis through building strong grassroots institutions of the poor.

5.10.9. NRLM focuses on universal inclusion of the poor, prioritizing the poorest of the poor, identified through participatory processes and converted into institutions of the poor that are supported to leverage formal credit and access services and benefits for the poor, sustainable livelihoods, and improved quality of life.



5.10.10. Odisha Livelihoods Mission (OLM) is a registered society under the aegis of the Department of Mission Shakti, Government of Odisha, for enhancing the socio-economic condition of the rural poor through the promotion of sustainable.

5.10.11. OLM is working with 52.44 lakh households by covering 4.65 lakh SHGs across the State

Innovative e-Governance applications for Rural Areas

- a. eGramSwaraj: To strengthen e-Governance in Panchayati Raj Institutions (PRIs) to bring in better transparency in the decentralized planning, progress reporting and work-based accounting.
- b. National Panchayat Portal (NPP): NPP (National Panchayat Portal) is in place to cater to the need for uploading information to the individual website of Gram Panchayats / Block Panchayats / Zilla Panchayats.
- c. NREGA Soft: This Software have been developed by NIC in accordance with MGNREGS and implemented for monitoring the physical and financial progress of the programme along with generation of job cards, project details etc.
- d. Awas Soft: This software has been developed by NIC for Rural Housing Schemes and implemented for monitoring the physical and financial progress of the same.
- e. PP Grant: This is a web-based application that enables the Gram Panchayats to provide details of the good work that has been achieved in their Panchayat and upload necessary documents of testimonials in support of their achievements.
- f. LGD (Local Government Directory): Primary objective of Local Government directory is to facilitate State Departments to update the directory with newly formed panchayats /local bodies, re-organization in panchayats, conversion from Rural to Urban area, etc. and provide the same info in public domain.
- g. Tube well Management Information System: This Software is being developed by creating a Database of Tube well in Odisha for transparency to monitor functioning of tube well & its water quality.
- h. Video Conferencing facility at the Block level: VC system has been installed in all 314 Blocks of the State to interact and monitor all the developmental Schemes/programmes implemented by the Department on regular basis.
- i. Dashboard Monitoring System (DBMS): The Dashboard Monitoring System is a quick and effective way to review performance at a glance.

by forming 45,962 Cluster Level Forums (CLFs) and 5,560 Gram Panchayat Level Federations (GPLFs). 16.8 lakh households (HHs) have been covered under focused livelihoods interventions against the target of 21 lakh households during the year ,2021-22.

5.10.12. 15,464 (110 per cent) Rural Youths have been trained against the target of 14,032 in the year 2021-22. During the financial year 2022-23, out of an available fund of INR 494.33 crores 84 per cent (INR 413.47) has been utilised by October 2022.

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY):

5.10.13. Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) aims to skill rural youth between the age of 15 and 35 years who are poor and provide them with jobs having regular monthly wages at or above the minimum wage. It is one of the cluster of initiatives of the Ministry of Rural Development, Government of India, that seeks to promote rural livelihoods. It is a part of the National Rural Livelihood Mission (NRLM) -the Mission for poverty reduction under Deen Dayal Antodaya Yojana (DAY). The programme is tasked with the dual objectives of adding diversity to the incomes of rural poor families and cater to the career aspirations of rural youth. State Odisha Rural Development and Marketing Society (ORMAS), a registered society under the aegis of Panchayati Raj and Drinking Water Department, Government of Odisha, is the nodal agency for implementing the scheme.

5.11. Conclusion

5.11.1. While urbanization is generally presumed to be the indicator of economic development, the rural economy also plays an important role in accentuating the pace of urbanization and development through provision of food, labour, and other resources. Thus, though from the policy point of view, development of urban areas appears to be a more urgent and necessary precondition for economic development, a holistic development of both urban and rural areas will result in better livelihood options and standard of living. In this regard, the Government of Odisha has taken several steps in the last few years that have also been reflected in the performance of its various sectors.

5.11.2. In terms of population growth, literacy rate and levels of education attained by workers, an urban-rural gap is still prominent. However, as already discussed, it is not the urban-rural gap as such which holds relevance, but the process of convergence of rural development with urban development that holds the clue to the overall magnitude of development ultimately realized.

5.11.3. The State's health and nutrition policy seems to have been designed efficiently and has yielded very significant results in terms of improvement in indicators like decline in infant mortality rate, increase in antenatal care visits by mothers, increase in folic acid consumption by pregnant women, reduction in number of children with stunted height for age, decline in proportion of women with lower BMI than normal, etc. individually in urban and rural areas. The pace of development in rural areas in terms of these has also been at par with urban areas. Several backward districts too observed to be close to the standards achieved by the districts, from NFHS-4 to NFHS-5.

5.11.4. In terms of transportation and road connectivity, Biju Setu Yojana (BSY) was launched to bridge and provide weather connectivity on all the roads owned by the Rural Development Department. The MO BUS service in cities has been a prominent step towards development.

5.11.5. A significant increase in number of households with mobile phones and access to internet connection has been realized in rural areas as compared to urban areas (which already had high coverage) during 2015-16 to 2019-21.

5.11.6. In terms of banking infrastructure, 53 per cent of bank branches are in rural areas while 47 per cent in urban areas. Taking into consideration the proportion of population living in rural and urban areas, per cent of bank branches are skewed in favour of urban areas. 53 per cent of bank branches serve 82 per cent of total population who live in rural areas, while 47 per cent of bank branches in urban areas serve only 18 per cent of total population. ATM facilities, which are a faster and easier way of financial transactions in current times, however, are majorly skewed in favour of urban areas.

5.11.7. While the urban areas in Odisha are still ahead of rural areas in terms of most developmental outcomes as observed, the rural areas in the State have also made remarkable progress in recent years. No wonder, the government has attracted the attention of development leaders across the globe and has received several prizes and accolades on different issues.

CHAPTER

6

SERVICES SECTOR

PATHWAY TO
SUSTAINABLE GROWTH



“Quality in a service or product is not what you put into it. It is what the customer gets out of it.”

Peter F Drucke

India’s Services sector covers a wide range of activities, such as trade and repair, hotels and restaurants, communication, banking and insurance services, transport, storage, real estate, ownership of dwelling, business services, legal services, public administration, and other services.

The services sector is comparatively more organised, providing employment to the educated and skilled youth as well as unskilled youth, thereby contributing significantly to the GSDP & GSVA. The services sector accounts for about 40 per cent of the state’s GDP. The services sector in the state is the second highest contributor to Odisha’s GSVA after industry. The share of services sector in GSVA stood at 36.2% in 2022-23 (AE).

The services sector expanded by 8.8 per cent in 2022-23 (AE) in Odisha against 9.6 per cent in 2021-22. In 2022-23, as per the advance estimates, services sector in Odisha is expected to grow at 8.8 per cent. All the key sub-sectors within services sector depicted a buoyant growth rate in 2021-22(RE) and 2022-23(AE) in Odisha. The sub-sector “Trade, Repair, Hotel & Restaurants” GVA grew at 13.7 per cent in 2021-22 and 16.2 per cent in 2022-23. The “transport, communication and services relating to broadcasting” registered a growth rate of 6.8 per cent and “real estate and professional services” grew at 7.0 per cent as per 2022-23(AE).

The Services sector plays a vital role for the growth of the State and providing employment opportunities for the youth. The growth and functioning of the banking network was impressive for Odisha during the year 2021-22. Total deposits in all banks in Odisha grew by 12.9 per cent and total advances sanctioned and utilised grew by a higher rate of 26.9 per cent. The priority sector lending rate at 59 per cent in the state has been well above the RBI’s benchmark of 40 per cent. The credit-deposit ratio is above 72, relative to the benchmark of 60 during 2021-22.

The state has huge potential for development of tourism given its rich cultural heritage. Tourism enhances livelihoods and generates financial resources for the state. The State has undertaken several steps for the promotion of tourism at the national & international arena, including Odisha’s Tourism Policy, 2016 which would positively impact many other services sub-sectors. The state’s telecom infrastructure is relatively less developed with lower tele-density and internet penetration than at the national average.

6.1. Introduction

6.1.1. The Services Sector contributes immensely to India's GDP, employment, exports, and foreign exchange earnings. Over time, a robust manufacturing and productive agriculture sector in India led to services sector becoming a mainstay of GDP and employment.

6.2. Share and Growth of Services Sector

6.2.1. Services sector in the State is the second highest contributor to GSVA after industry. The share of services sector in GSVA stood at 36.2 per cent in 2022-23 (AE) in Odisha at current prices.

6.2.2. As given in Table 6.1, the share of Services Sector for Odisha were 39.8 percent in 2019-20 and 37 percent in 2020-21. Despite a nearly 40 per cent share in state's GSVA till up to 2019-20 (pre-pandemic period), the share has remained around 36 percent from 2020-21 to 2022-23(AE) mainly due to COVID-19 impact.

Table 6.1 Share and Growth Rate of Services Sector from 2016-17 to 2022-23(AE)-Odisha

Year	Odisha	India
2016-17	39.75	3.99
2017-18	40.52	8.75
2018-19	38.11	2.73
2019-20 (RE3)	39.81	7.47
2020-21 (RE2)	36.95	(-)11.24
2021-22 (RE1)	36.08	9.61
2022-23 (AE)*	36.19	8.79

Source: DE&S, GoO

6.2.3. Table 6.2 depicts share of various sub-sectors within services sector GSVA in Odisha. The sub-sector "trade, repair, hotels & restaurants" accounted for the highest share in services sector GSVA (26% of services sector GSVA) and contributed 9.3 per cent to total GSVA in the state followed by "other services" which accounted for 7.4 per cent in total GSVA in 2022-23(AE).

6.2.4. Some of the sub-sectors witnessed a robust recovery after the COVID-19 pandemic and crossed the pre-pandemic level of 2019-20 in terms of output and contribution to GSVA. The share of "Trade, Repair, Hotels & Restaurants" which was 8.4 per cent in 2021-22 increased to 9.3 per cent in 2022-23(AE). (Table 6.2).

Table 6.2 Share of Services Sub-sectors in Odisha's GSVA from 2017-18 to 2022-23

Sub-sector	2017-18	2018-19	2019-20	2020-21	2021-22 (RE)	2022-23 (AE)
Trade, Repair, Hotels & Restaurants	10.22	10.05	10.26	7.89	8.35	9.32
Transport, Storage, Communication & Services relating to Broadcasting	7.01	5.92	6.10	5.95	5.54	5.46
Finance services	3.42	3.36	3.63	3.85	3.41	3.21
Real estate, Ownership of Dwelling & Professional Services	7.21	6.66	6.43	6.42	6.40	6.35
Public Administration & Defence	4.48	4.34	4.83	4.86	4.70	4.49
Other Services	8.17	7.77	8.56	7.98	7.68	7.36
Total Services Sector	40.50	38.11	39.81	36.95	36.08	36.19

Source: DE&S, GoO

6.2.5. In 2022-23, as per the advance estimate, services sector in Odisha is expected to grow at 8.8 per cent. All the key sub-sectors within services sector depicted buoyant growth rates in 2021-22(RE) and 2022-23(AE) in Odisha. The GSVA of sub-sector "Trade, Repair, Hotel & Restaurants" GVA grew at 13.7 per cent in 2021-22 and 16.2 per cent in 2022-23. "Transport, Storage, Communication and Services relating to broadcasting" registered a growth rate of 6.8 per cent and "Real estate, Ownership of dwelling and Professional Services" grew at 7.0 per cent in 2022-23(AE) (Table 6.3). Table 6.3 depicts growth of various sub-sectors within services sector from 2017-18 to 2022-23.

Services sector in Odisha is expected to grow at 8.8 per cent in 2022-23 (AE), with all sub-sectors depicting a buoyant growth rate

Table 6.3 GSVA Growth of Services Sub-sectors from 2017-18 to 2022-23 (AE)-Odisha

Sub-Sectors	2017-18	2018-19	2019-20	2020-21	2021-22 (RE)	2022-23 (AE)
Trade, Repair, Hotels & Restaurants	9.79	8.11	6.67	-23.95	13.72	16.21
Transport, Storage, Communication & Services relating to Broadcasting	6.79	-8.08	4.04	-16.34	5.99	6.81
Finance Services	8.16	5.21	8.56	5.47	7.91	8.40
Real estate, Ownership of Dwelling & Professional Services	6.09	1.58	0.73	-3.52	6.88	6.96
Public Administration & Defence	5.77	6.53	15.97	-0.70	6.53	1.59
Other Services	15.09	2.97	12.82	-10.87	13.54	7.98
Total Services Sector	8.75	2.73	7.47	-11.24	9.61	8.79

Source: DE&S, GoO

6.3. Employment in Services Sector

6.3.1. In Odisha's context, the services sector has become extremely important not only in terms of contribution to GSDP, but also as a key vehicle for employment generation. Employment in services sector in Odisha was estimated to be 24.4 per cent in 2020-21 as per PLFS estimation against 28.6 per cent for India.

6.4. Tourism

6.4.1. Odisha is known for its places of natural beauty and historical significance and the State offers fascinating tourist attractions, including historical monuments, beach resorts, eco-tourism, adventure tourism, flora and fauna, national parks, sanctuaries and now sports events. The tourism industry contributes significantly to the overall state's GVA and employment. Tourism is highly labour intensive and has the potential to generate high employment through a mix of activities of hotels, transport, shopping, food, entertainment, etc. It is the hospitality sector which binds together a lot of other employment generating sectors through backward and forward linkages. It's not only creates direct employment but also creates spill-over effects for indirect employment and strengthens the local economy through inflow of money including foreign exchange earnings into the state.

6.4.2. Tourism has exponential possibilities to boost Odisha's services sector in the next one decade. To attract significant revenue, improved customer experience is the key factor that will ensure its high future growth. In this context, Government initiatives such as e-VISAs, better infrastructure facilities, safety and security, and stronger connectivity, etc. are the main enablers.

6.4.3. The Hotel & Restaurants sector contributed 0.6 per cent to the state's GSVA in 2021-22 with a growth of 62.7 per cent over the last year's share. As per Advance Estimates, its share will be 0.8per cent in Odisha's GSVA in 2022-23(AE), registering a growth of 37.1 per cent.

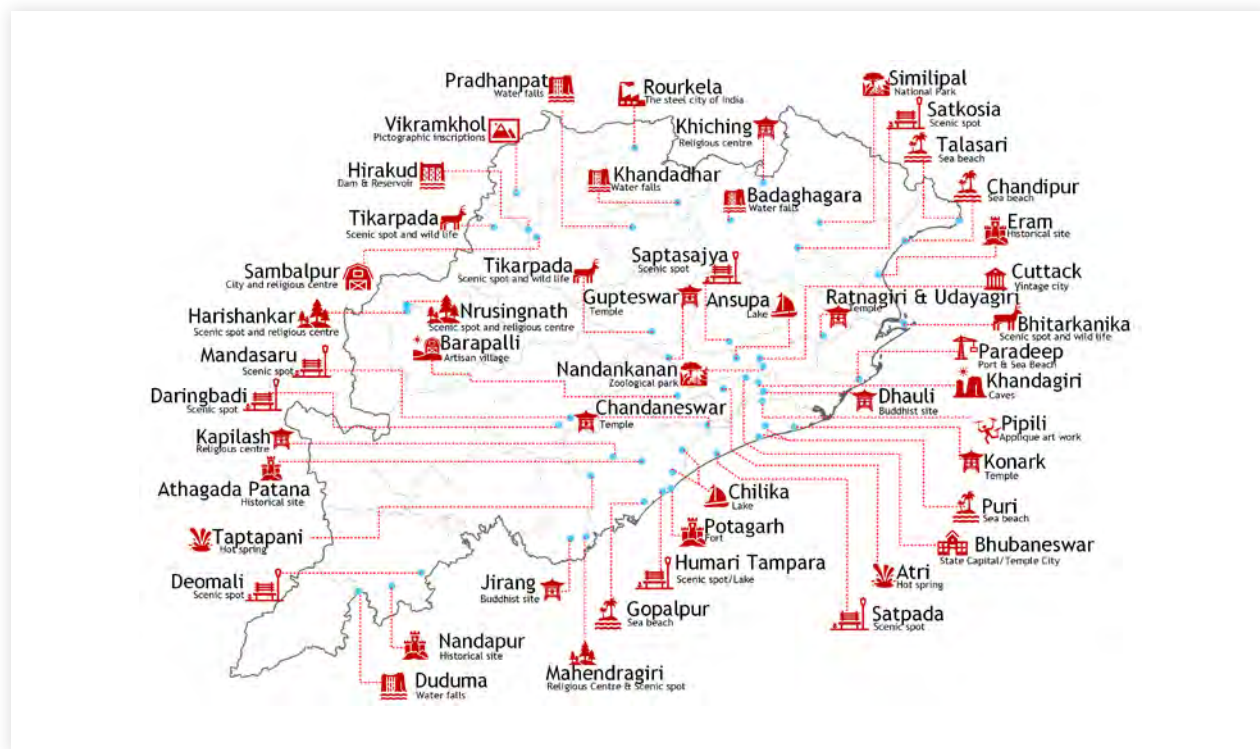
I. Tourist Spots

6.4.4. The grand scenic beauty of nature, historic monuments, exotic sea beaches, lush forests, majestic mountains, captivating wildlife, mystic waterfalls, beautiful handicrafts, vast water bodies, famous classical and folk dances, enchanting music and most importantly, hospitable people are the wonders that make the state a supreme tourist destination of the world.

6.4.5. Odisha has 358 identified tourist destinations located around 30 districts of the State. Cuttack with 28 destinations, Balasore with 22, Ganjam with 22, Puri with 21, Mayurbhanj with 19, and Khorda with 19 destinations are the leading districts in terms of number of tourist destinations. The 'Golden Triangle' of Bhubaneswar-Puri-Konark is the biggest tourist attraction. Puri, the shrine of Lord Jagannath, one of the oldest pilgrimage centres, famous for the Car Festival, attracts lakhs of pilgrims round the year. The world-famous Sun Temple, a UNESCO heritage site at Konark (12th century), and the temple city of Bhubaneswar (9th century) are other major tourist attractions. The 'Tri-Ratna Triangle' comprising Lalitgiri, Udayagiri and Ratnagiri are yet another attraction for Buddhists from eastern countries.

6.4.6. The Ashokan rock-inscriptions of 3rd Century BC at Dhauli, where the historic war of Kalinga was fought, is a testimony to the existence of strong Buddhist traditions in Odisha. 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 attractions of Odisha. Apart from these currently identified tourist attractions, there are several others in the state, particularly in the western and southern parts of the state that are to be developed for popular tourism with adequate tourist infrastructure. Odisha has an abundance of hospitable tourist attractions as illustrated in Figure 6.1.

Figure 6.1 Major Tourist Destinations- Odisha



Source: Department of Tourism, GoO

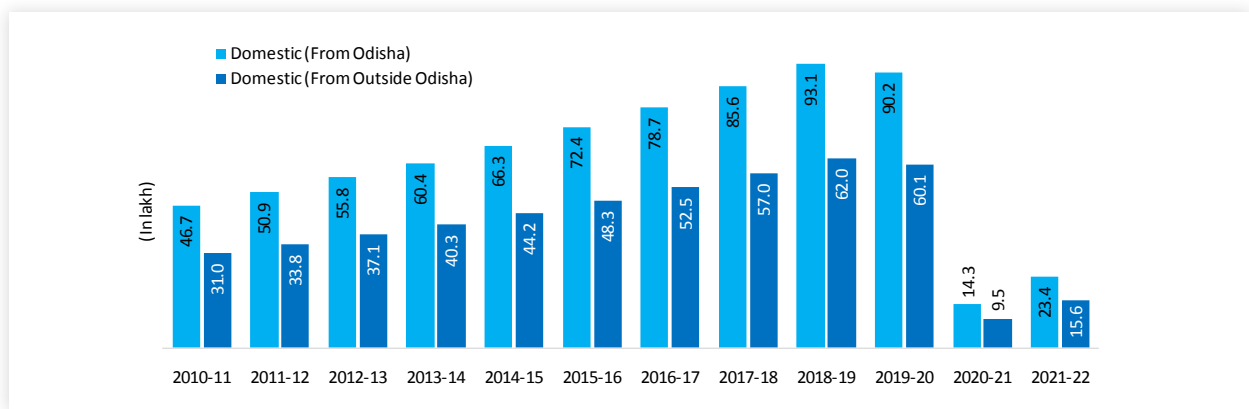
II. Number of Tourist Arrivals in Odisha

6.4.7. Department of Tourism (DoT) has adopted a multi-pronged strategy to promote tourism. The development of tourism is generally measured in terms of tourists' arrival in the State. Figure 6.2 depicts the composition of tourists arrived in Odisha from 2010-11 to 2021-22.

6.4.8. It may be observed from Figure 6.3 that foreign tourists represented less than one percent of total tourist arrivals in Odisha from 2015-16 to 2021-22. However, in absolute terms, the number of tourists from within the State, from outside the State and from abroad increased till 2019-20 and thereafter tourist arrivals were impacted mainly due to the COVID-19 pandemic.

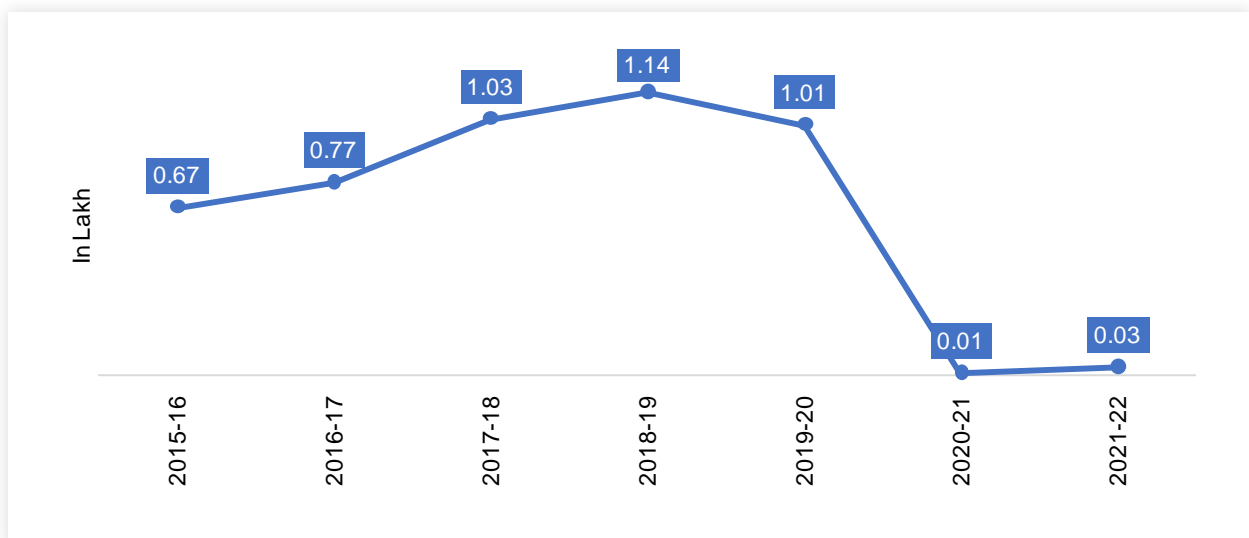
Tourists from within vis-à-vis outside the state as well as foreign tourists increased by several times between 2010-11 to 2019-20

Figure 6.2 Domestic Tourists' Composition from 2010-11 to 2021-22- Odisha



Source: Annual Report, 2021-22 Department of Tourism, GoO

Figure 6.3 Foreign Tourists from 2015-16 to 2021-22- Odisha



Source: Department of Tourism, GoO

6.4.9. It is observed from Figure 6.2 and Figure 6.3 that tourists from within the state as well as from outside the state and foreign tourists increased about 2 times between 2010-11 to 2019-20. This steady increase in tourists' arrival may be partly attributed to regular and extensive marketing by the State Government. The arrival of tourists has been impacted in 2020-21 and 2021-22 due to COVID-19 pandemic induced restrictions on travel during 2020-21 and 2021-22.

III. Tourists' Spending

6.4.10. It is a bit challenging to estimate the earnings of the State from tourism because of the nature of the industry and the different sectors that are directly and indirectly involved in it. However, an attempt was made to assess it by following a sample survey method. A Tourist Profile Survey was conducted by the Department of Tourism, Odisha during the year 2013-14. At that time, the average duration of stay was found to be 11 days in case of Foreign Tourists and 3.7 days in case of Domestic Tourists. Similarly, the average per capita expenditure was found to be INR 4,167 for Foreign Tourists and INR 2,763 for Domestic Tourists.

6.4.11. In the year 2018-19, another Tourist Profile Survey was conducted by the Department of Tourism to find out the changes, if any, occurred in the Tourists' Profiles. The survey revealed that average duration of stay was 9.8 days in case of Foreign Tourists and 3.8 days in case of Domestic Tourists. Similarly, the average per capita expenditure was found to be INR 4,275 in case of Foreign Tourists and INR 2,655 in case of Domestic Tourists.

6.4.12. The inflow of money through tourists' expenditure for the years 2015-16 to 2021-22 is shown in Table 6.4. The inflow of money via tourists' spending in Odisha increased steadily from INR 12,646 crores in 2015-16 to INR. 15,388 crore in 2019-20. Due to COVID-19 induced restrictions on travel, the tourists' expenditure was impacted in 2020-21 and in 2021-22. Table 6.4 shows tourists' spending between 2015-16 and 2021-22.

Table 6.4

Inflow of Money via Tourist Spending- Odisha (in INR Crore)

Year	Domestic Tourist	Foreign Tourist	Total
2015-16	12,337	309	12,646
2016-17	13,405	355	13,760
2017-18	14,580	472	15,052
2018-19	15,856	521	16,330
2019-20	14,970	419	15,388
2020-21	2,375	3	2,367
2021-22	3,882	13	3,895

Source: Tourist Profile Survey 2018, Department of Tourism, GoO.

IV. Health Tourism

6.4.13. The Health & Wellness tourism segment has grown rapidly in the last decade, where travellers travel to a particular destination specifically for healing purposes. On similar lines, Bhubaneswar, the State capital of Odisha is equipped with numerous multi-facility/super speciality hospitals, which attract patients from across the state and also from neighbouring states such as Jharkhand, Chhattisgarh, West Bengal, Andhra Pradesh, etc. To promote Health Tourism, the Department of Tourism shall be promoting Integrated Developments (comprising of Hotels and Hospitals) in the urban areas of the State. For the purpose of Health tourism, the hospital shall be attached to a hotel which must be of 3-star and above category.

6.4.14. Such accommodation units shall have on mandatory basis, dormitory facility for at least 30 patient attendants, either within the same structure or as a separate structure with all facilities like washrooms, restaurants, etc. The DoT will only incentivise the hotel component of the project. The Hospital development must follow the extant rules or guidelines of National Medical Commission and Department of Health & Family Welfare, Government of Odisha. Where Hospital is attached to a Hotel, the incentive shall be considered under New Odisha Tourism Policy 2022 only after due recommendation by Department of Health & Family Welfare, Government of Odisha.

6.4.15. To streamline the efforts of developing wellness tourism in the State, the DoT shall incentivise the interested investors willing to develop wellness resorts. The focus is on:

- Wellness properties with at least 15 accommodation or overnight stay units
- The wellness property is accredited through National Accreditation Board for Hospitals & Healthcare Providers (NABH) for standardization of therapies offered and must follow the necessary acts or rules or guidelines of the competent authority.
- The workforce employed must be skilled, trained, and certified.

6.4.16. The resorts promoting healing, AYUSH, yoga, meditation, panch-karma etc. along with prescribed accommodation units (15), NABH accreditation, skilled manpower with requisite certification, shall also be eligible for the incentives.

6.4.17. The present health care facilities in Odisha are very conducive for the promotion of Health tourism in the state. A study was undertaken by NSS to explore key issues and challenges in the development of medical tourism in Odisha. The study suggested some corrective measures to facilitate Health tourism for projecting Odisha as a medical tourism destination.

V. Tourism Infrastructure Development

6.4.18. The State has identified tourism sector as a high potential sector and taken many steps to boost it through various tourism infrastructure development projects like Integrated Tourism Master plans, Infrastructure Gap assessment, special projects, and introduction of niche tourism products.

A. Hotel Industry in the State

6.4.19. The hotel industry is strongly linked to services sector. Over the last 12 years, the number of hotels has increased sharply and touched a total of 2,136 by the end of 2021. 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 2010 to 2021 can be seen in Table 6.5.

Odisha experienced more than 3-fold increase in the number of hotels servicing high spending groups (HSG) between 2010 and 2021.

Table 6.5 Statistics of Hotels- Odisha (2010 to 2021)

Year	Number of Hotels				No. of Rooms	No. of Beds
	HSG	MSG	LSG	Total		
2010	114	263	942	1,319	26,531	51,233
2011	150	245	933	1,325	27,291	52,867
2012	251	288	918	1,457	30,770	60,077
2013	306	356	923	1,585	33,349	65,967
2014	334	399	956	1,689	35,373	70,600
2015	383	455	921	1,758	26,382	73,086
2016	433	474	916	1,823	37,674	75,152
2017	281	435	1,142	1,858	38,765	77,354
2018	295	462	1,149	1,906	39,917	79,918
2019	317	487	1,157	1,961	41,207	82,377
2020	355	579	1,123	2,057	43,456	87,531
2021	362	613	1,161	2,136	44,826	90,305

Source: Department of Tourism, GoO.

6.4.20. During 2021, there were 2,136 hotels with 44,826 rooms and 90,305 beds, of which 362 catered to high spending groups (HSG), 613 to middle spending groups (MSG) and 1,161 to lower spending groups (LSG). It is observed from Table 6.6 that the number of HSG and MSG hotels in Odisha has been increasing steadily during the last twelve years while the number of LSG hotels has been also increasing steadily with slight fluctuations.

B. Projects for Infrastructure Development

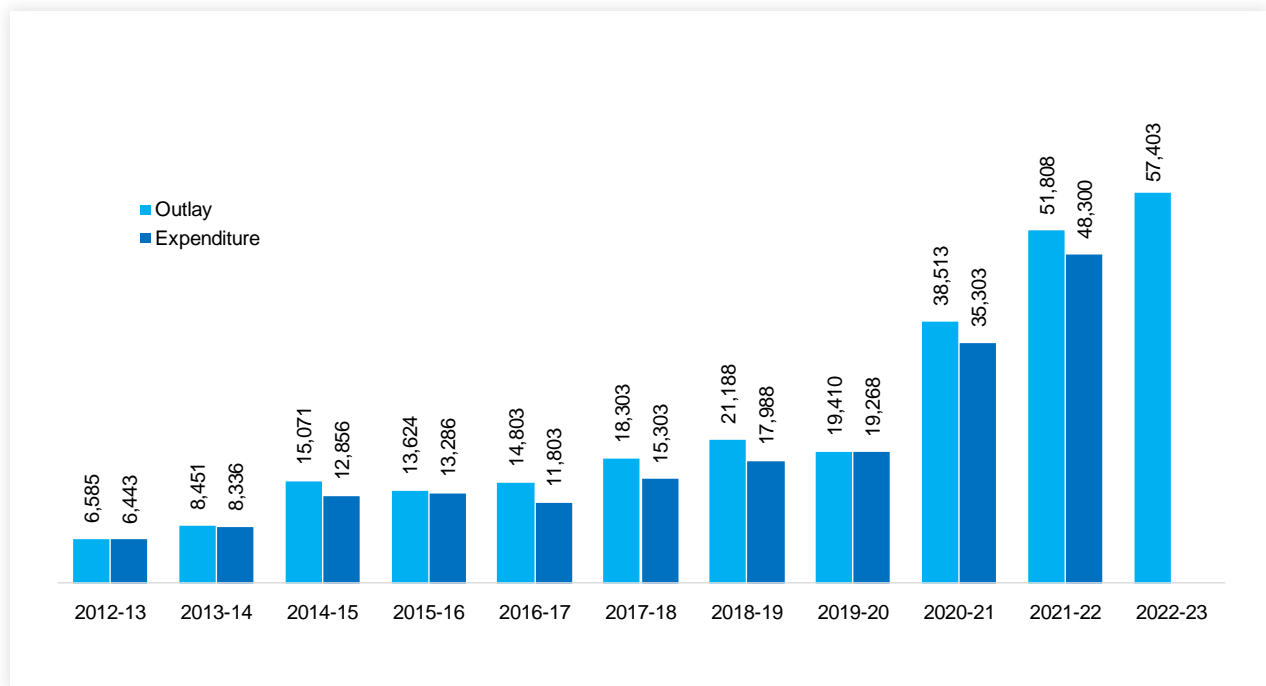
To create adequate tourism infrastructure and facilities within the State, Odisha Tourism Department has undertaken/ is in the process of taking up execution of tourism projects at various locations with State/ Central funds.

BOX-1

- Development of 16 Integrated tourism masterplans has been taken at various potential destinations like – Bhitarkanika, Nrusinghnath-Harishankar, Samlei, Chandrabhaga, Talsari-Udaypur, Satkosia, Hiraakud, Chilika, Daringbadi, Deomali, Mahendragiri, Dhauli, Khandagiri-Udaygiri, Bakulabana, Dhableswar, Raghurajpur, Tampara, Ramchandi, etc
- Identification of Infrastructure gaps at 358 identified Tourist centres and development of tourism activities at 49 destinations (beachfront, waterfalls, forest destinations, temple peripheral development) in a phased manner.
- Development of Special projects like promenades, boat clubs, Eco-Cottages, food courts, river front developments, etc. at Ramchandi, Tampara, Silver City Boat Club-Cuttack, Taladanda Canal front development, Mahanadi, etc.
- Development of Niche Tourism products like glamping, Sports Tourism with Hockey World Cup, Garuda Houseboat, Development of shore infrastructure for cruise tourism, Refurbishment of 4 Catamarans at Bhitarkanika, Development of beach shacks
- Conceptualisation of niche tourism products like Caravan Tourism, Yacht Tourism, camping, riverfront development,
- Eco-Retreats at 7 prominent destinations in Odisha
- Establishment of Special Odia Cuisine Restaurant (NIMANTRAN) at Puri, Bhubaneswar and Sambalpur
- Development of Blue Flag Beach (Golden beach), Puri with world class facilities and amenities.
- Development of Coastal Circuit (Gopalpur, Tampara, Satapada and Barkul) under Swadesh Darshan 1.0
- Development of Projects in Puri under Central Scheme - PRASAD

C. Outlay & Expenditure for Infrastructure Development

6.4.21. The State Government has spent substantially on infrastructure development in the tourism sector to attract tourists to the State.

Figure 6.4 Outlay and Expenditure of Tourism Sector from 2012-13 to 2022-23-Odisha

Source: Annual Report, 2021-22, Department of Tourism, GoO.

Note- Figure for total expenditure for 2022-23 is yet to be released.

6.4.22. There is an increasing trend in state's capital outlay and expenditure in the tourism sector. Provision was made for an outlay of INR 57,403 lakhs for 2022-23 for implementation of projects in different thrust areas for infrastructure development to attract tourists. This outlay is 10 per cent higher than the previous year (Figure 6.4).

6.4.23. Sports tourism is attracting investment, state's interest, media attention and thousands of participants and spectators from abroad. Odisha is aggressively using this opportunity and has already taken many important measures to make the state the 'Sports' Capital of India'.

6.4.24. Odisha Tourism has become a global partner of International Hockey Federation (FIH) for a period of five years. This collaboration with FIH heralds a virtuous relationship with the potential to further boost Odisha's brand equity globally, en-route to the Hockey World Cup 2023 that was held in Bhubaneswar's Kalinga Stadium and Rourkela's Birsa Munda International Hockey Stadium from 13th to 29th of January 2023.

VI. Sports Tourism

6.4.25. Odisha has developed sports infrastructure, hosted international and national events in the past and ran successful talent identification programs. Additionally, meritorious sportspersons were recognised for their excellence with jobs in Government Departments and Government PSUs. Many were felicitated with cash award.

6.4.26. Odisha's sports budget went up to over INR1300 Crore from nearly INR 400 Crore in 2021-22. A significant amount is being dedicated to developing and upgrading sports infrastructure and running coaching programs.

6.4.27. Currently, over INR2000 Crore projects are underway. Some of the mega sports projects nearing completion and are part of the Kalinga Stadium expansion plan and include India's first indoor athletic stadium, indoor aquatic centre, tennis court, Hockey High Performance Centre, Staff accommodation and Sports Science Centre.

Figure 6.5 The Hockey Men's World Cup 2023



Source: Sports & Youth Services Department

6.4.28. Similarly, INR 700 Crore is being invested in developing 90 indoor Multi-Purpose Halls in the urban areas that will play a significant role in the development of sports. Government of Odisha is the first State in India to sponsor the National Hockey teams and also stepped up to sponsor both men's and women's teams for a period of five years. India's success in Tokyo Olympics in Hockey 2021 holds a special significance for Odisha, which has been at the forefront of supporting the sport. For making the event successful, the State earned praise from different quarters. Recently, the State announced its sponsorship for both the teams for another 10 years.

Odisha became the first state to sponsor the national Hockey team (both women and men) for a period of five years

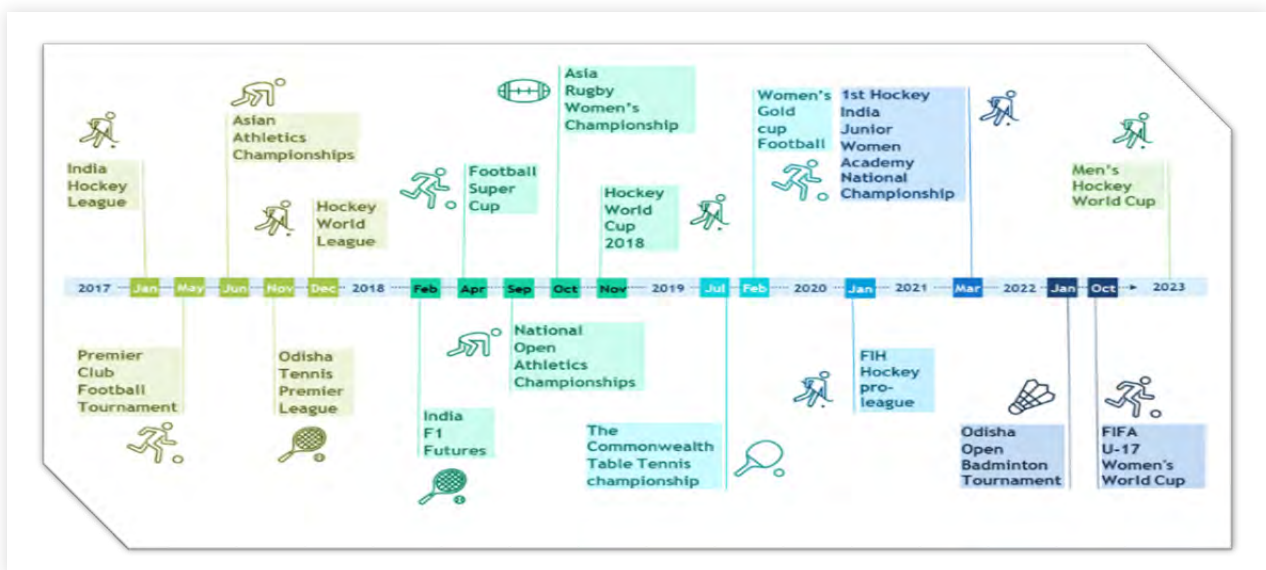
6.4.29. The government is planning to develop infrastructure in different parts of the state. The State Government has announced the construction of Multi-Purpose Indoor Stadiums in various districts. These stadiums will also serve as hospitals in the event of a medical emergency and as shelters in the event of a natural disaster.

6.4.30. Hosting successful events has become synonymous with Odisha, and in this period 2022-23, Odisha hosted the Hockey Pro-League 2021/22 (Men and Women), Odisha Women’s League (Football), Indian Grand Prix Series (Athletics), Indian Women’s League 2022 (Football), FIBA U18 SABA Qualifiers (Basketball), 2022 South Asian Football Federation U20 Championship, the Junior National Aquatic Championship. Noteworthy are FIFA U17 Women’s World Cup 2022 and the FIH Odisha Hockey Men’s World Cup 2023 at the two venues of Bhubaneswar and Rourkela.

6.4.31. Over INR70 crore have been invested in developing 4 FIFA standard, natural grass, football training centres and one artificial turf football ground for the FIFA U17 Women’s World Cup.

6.4.32. Similarly, Rourkela being a second venue of the Hockey World Cup 2023, the Birsa Munda Hockey Stadium was developed within 15 months. Spread over 15 acres this stadium with over 20,000 seating capacity has made it into the Guinness Book of records for being the largest fully seated hockey stadium in the world. Additionally, for the comfort and convenience of the teams and officials, a unique hospitality concept, the World Cup Village was developed in a short span of nine months.

Figure 6.6 Timeline for Sports Events in Odisha



Source: Sports & Youth Services Department

6.4.33. Another noteworthy achievement of 2022-23 is Odisha Juggernauts! Odisha was the only state to have a team ‘Odisha Juggernauts’ in the inaugural edition of the Ultimate Kho Kho League and the team made history by becoming Champions in 2022.

6.4.34. To tap into the hidden potential of the children of Odisha, a Talent Identification program was conducted across disciplines for selection into the Sports Department run sports hostels. Besides, pay and play programs and weekend sports programs have been launched to give exposure to young students to sports and gauge their skill and interests.

6.4.35. Odisha’s sportspersons have brought many laurels for their state and in recognition of their excellence, 53 sportspersons were awarded jobs in Government departments and PSUs. This includes 14 para sportspersons and 39 sportspersons. Cash incentives amounting to INR 2,30.55 Lakhs were also awarded to 267 sportspersons. Besides, INR. 48. 29 Lakhs was disbursed towards pension.

Figure 6.7

Birsa Munda International Hockey Stadium, Rourkela

Source: Sports & Youth Services Department, GoO

VII. Eco Tourism

6.4.36. Launched in December 2019, Odisha Tourism's Eco Retreat, is one such initiative that will make the tourists skip the traditional travel for a swanky glamping experience instead. Glamorous Camping or 'Glamping' involves residing in a luxurious tent set up in the middle of a picturesque destination surrounded by imposing mountains, blue beaches, or lush forests. As envisioned by the Odisha Government, Eco Retreat has made strides with opening of new livelihood opportunities in the respective local communities. Conservation of forests and nature is turning into a sustainable treasure for the community. Government has taken all possible steps to ensure that each Swiss tented cottage is properly functioning and all facilities including the air conditioning, toilets, etc. are available. Moreover, amenities and facilities including multi-cuisine restaurant and dining area, bar, beach shacks, water sports and other adventure sports activities, etc., are available to provide a resort like experience to tourists in a sustainable way.

6.4.37. Apart from the "Eco-Retreat Odisha," a flagship glamping product of Odisha Tourism, Odisha has undertaken commendable strides in development of Eco-tourism in the state. The Department of Forests with the support of Department of Tourism has developed state-of-art Eco-tours (nature camps) at 48 sites of nature and wildlife repute. This step has created new avenues for tourists visiting the state, apart from the existing famous tourism circuit, Golden Triangle – Bhubaneswar – Puri – Konark.

6.4.38. These Eco-Tour properties are being run by involving local communities and hence providing them with alternate livelihoods. Apart from Operations, local people also get employment as Nature Guides, Cooks, Taxi Operators, Drivers, etc.

6.4.39. Apart from the existing 48 Eco-Tour sites, 13 new approvals for development of Eco-Tour sites have been accorded, which would increase the total number of Eco-Tour sites to 61. The recently proposed eco-tour destinations include: -Deomali hilltop in Koraput, Jakam of Kalahandi, Nawana of Similipal north in Mayurbhanj, Silviculture Garden of Phulbani, Muhana at Astaranga in Puri, Kotia in Koraput, Khadakhai dam in Rairangpur, Mahendragiri from Ganjam side in Berhampur, Kanjipani Ghat and Hadagarh dam in Keonjhar forest divisions. These spots are getting popular with increasing footfalls and revenue generation. Online booking facility has also been rolled out.

6.4.40. Further, new nature camps for day tourists would be developed at Rani Duduma of Koraput, Dhaltangarh of Cuttack, and Bhandarpahar near Jhadeswari Temple of Nayagarh forest divisions. These places have the potential to attract tourists.

6.4.41. The local communities will be roped in to provide hospitality to the tourists. They will be encouraged to maintain the spots so that they earn their livelihood and preserve the natural environs of the spots.

Figure 6.8 Eco-retreat destinations and nature camps in Odisha



Source: Department of Tourism, GoO

A. Nandankanan Zoological Park

6.4.42. Located near Bhubaneswar, Nandankanan Zoological Park is one of the biggest and most famous zoos in India. This zoo is a member of the World Association of Zoos and Aquarium (WAZA). On a visit to the city of Bhubaneswar, an excursion to the Nandankanan Zoological Park and Botanical Garden is a must, especially for those tourists, who are travelling with their family and friends. Located in Bhubaneswar, this zoo, unlike others in the country, has been built inside a natural forest, which is moist deciduous in nature and remains semi-ever green. The animals kept in this zoo get the feel of their natural surroundings and roam freely without any apprehensions. Over the years, the zoo has been successful in breeding several white tigers that have been shifted to many zoos in India and abroad. The total number of visitors in the zoo were 8,93,714 in 2020-21, which went up to 15,18,864 in 2021-22 with an annual growth of 41 per cent. There is a growth of 36.4 per cent revenue in the year 2021-22.

Promotion of eco-retreat destinations and nature camps with involvement of local communities will encourage tourists.

VIII. New government initiatives for the Tourism sector

Baristha Nagarika Tirtha Jatra Yojana

6.4.43. This scheme was launched in 2016-17. Under this scheme, senior citizens of BPL category are facilitated with free pilgrimage tours by Indian Railways. During the last two years, the scheme was put on hold on account of COVID-19 pandemic. The Tourism Department is planning to resume these tours by organising about five pilgrimage tours for senior citizens in the current year under this scheme. The destinations and timeframe for the proposed pilgrimage tours is planned in co-ordination with Indian Railway Catering and Tourism Corporation (IRCTC). Till date 13,686 senior citizens have been facilitated under this scheme.

Upgradation & Renovation of Tourism Projects

6.4.44. Different tourism projects across the State that require renovation / refurbishment / augmentation/ upgradation / furnishing, etc. shall be funded under this scheme. Panthanivas, Rourkela has been upgraded in view of the Hockey World Cup 2023. Similarly, more projects will be taken up as per assessment and requirement in a phased manner.

Odisha Homestay Establishment Scheme-2020

6.4.45. A new scheme to motivate homeowners in the state to host tourists with the objective of offering them with unique cultural experiences in hospitality, cuisine and local culture is being developed by the Department with the help of Indian Institute of Tourism and Travel Management (IITTM), Institute of Hotel Management (IHM) etc. and language trainings – Hindi, Odia, English, Foreign Languages, and Safe and honourable training, etc. is being offered.

Silver City Boat Club

6.4.46. Based on the ambitious vision of Hon'ble Chief Minister, a rapid development in tourism and hospitality infrastructure in identified areas is being incorporated in water bodies. The Silver City Boat Club is a water sports facility in the Mahanadi river that will establish Odisha as a sought-after tourism hub. This revamped boat club is moulded by Department of Tourism with support from Odisha Tourism Development Corporation (OTDC) with further investment to develop a world class marina in Mahanadi river. The club currently has water sports, toilets, cafeteria, floating jetty, waterfront promenade, floating restaurant, and bar. The present phase of infrastructure development will be further augmented with recreational and ancillary activities. The activities that will be operationalised in the boat club include separate and larger parking area, open air theatre, children play area with equipment, open convention space for community functions and marriage parties, food kiosks, glass deck with bar shack besides other attractive features.

Hirakud Boat Club

6.4.47. Hirakud Reservoir has a vast waterfront that is available throughout the year and an island created inside it provides enormous tourism prospects. Recently, water sports activities have been launched on the right dyke of Hirakud Dam near Jhankarani temple in Burla. Water sports like Jet Ski, speed boats, water scooter, bumper boat, banana boat, kayak, paddle boat and a day cruise are now available for tourists at the reservoir apart from the newly launched 40-seater floating restaurant. As part of proposed master plan for Hirakud, it has been decided to set up a boat club near the dam for tourists with development of recreational facilities and water-based activities at Hirakud dam with gated vehicle parking area, vending zone, common facilities like toilets, restaurants, shacks in island, floating jetty to island and children play area, etc.

Taladanda Canal-front Development

6.4.48. Taladanda Canal-front development is a little different from the other boat clubs since only non-motorised water sports are available within the narrow width of the canal. A boat club is planned in the precinct of this canal with pathways, sitting spaces, cafeteria, lawn, open gymnasium, ticket counters for boating and a slipway for going into the canal for water sports.

Tampara Eco-cottages

6.4.49. After development of Tampara lake front development, Tampara has seen great potential for growth of the destination. The lake front presents an unlimited potential for real estate developments and investments in hospitality. In this context, Department of Tourism proposed the development of eco-cottages on the left side waterfront. The complex will provide premium accommodation and water sports experience. The facilities proposed for the development are tourist reception centre, landscaping, promenade, deluxe, premium cottages and villas, restaurant, landscaping, sports pool, changing rooms, etc. with facilities like conference hall.

Ramchandi Promenade

6.4.50. Ramchandi beach offers magnificent scenic beauty and has great potential for water sports/ adventure activities, etc. Due to its naturally formed slopes; the beach at Ramchandi does not have high waves. This makes it ideal for boating as the sea remains calm most of the time. Work has been started to turn the destination into a premium one with facilities like parking, vending zone, toilets, children play areas, rainwater shelters, food court, caravan park, sitting spaces, viewpoints, landscaping, pathways, illumination, temple precinct development, etc.

Cruise Tourism

- The process has been initiated to refurbish/augment, operate and maintain Catamarans of Dept. of Tourism for tourism purpose at Bhitarkanika in partnership with M/s Heritage River journeys.
- Development of cruise tourism in partnership with private cruise operators at various water bodies like Hirakud dam, Chilika lake, Bhitarkanika and various channels on River Mahanadi, is in process.
- Tourism masterplans of Chilika and Hirakud where development of shore infrastructure for cruise operations has been initiated.
- Additionally, two 40-seater day cruises have been procured under Central Scheme Swadesh Darshan to be deployed at Chilika lake as a part of cruise tourism development.

Camping

6.4.51. In line with the Eco-retreat, demand for economical camping and tented accommodation spaces is also growing in other potential sites for temporary accommodation. With a dearth of accommodation and tourism facilities at sites, the need for temporary tented accommodation and camping is addressed with a proposal for developing camping and tented accommodation projects in a budget segment.

Caravan

6.4.52. The present growing demand in Odisha is for eco-adventure, wildlife, and pilgrimage tourism, etc. which involves visiting and staying in remote areas, forests, and riversides. There is shortage of decent and affordable accommodation at remote tourist destinations where a permanent construction may neither be permissible nor feasible. In such a scenario, caravan tourism will effectively meet the growing demand.

Development and operations model for Caravan Tourism shall be as per Ministry of Tourism, Government of India (MoT) policy.

Yacht Tourism

6.4.53. Yacht industry is generally used for transportation of relatively short distances as compared to cruise ships. Considered as a luxury tourism component, the yacht clubs are generally developed at a lake/ riverside/ sea side spots. In view of the scenic beauty of Odisha’s coastline and strong ports positioning, there is strong potential for yacht tourism in Odisha. The yacht tourism can go hand in hand with cruise tourism.

Beach Shacks

6.4.54. Beach Shacks with a vibrant ambience and delectable food accompanied by a wide range of beverages with a beach view are being established at 5 beaches in Odisha – Sonapur, Talsari, Chandipur, Gopalpur and Paradeep, for promotion of beach tourism.

The Costal Regulation Zone (CRZ) clearance application has been submitted to Odisha Coastal Zone Management Authority (OCZMA) for the development of beach shacks.

6.5. Financial Services

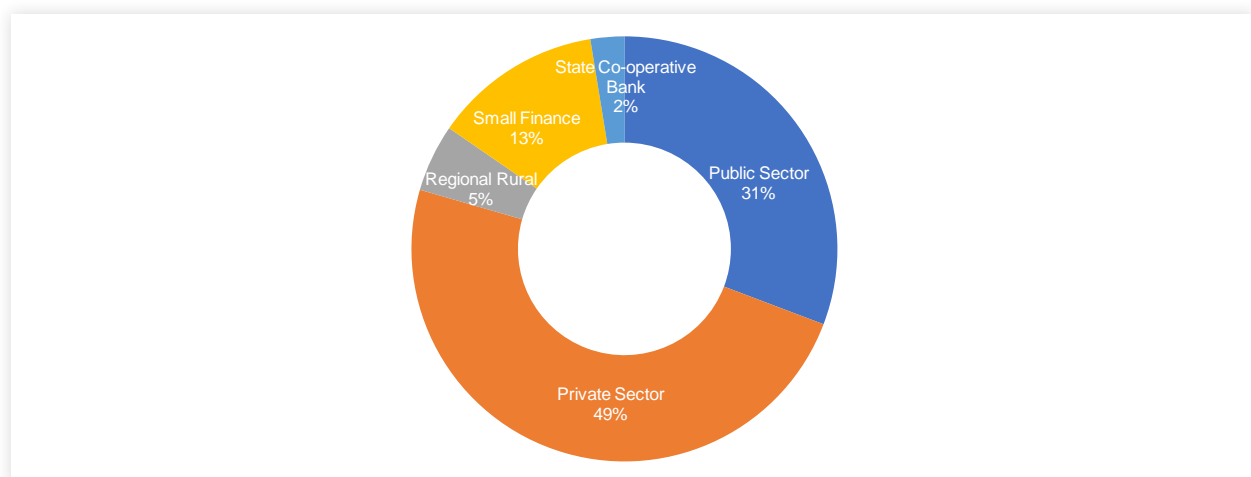
6.5.1. Financial services, viz. banking (savings, deposit, and credit), insurance, etc. play the role of a catalyst in the growth of the economy through provision of avenues for investment and risk management. As the economy grows, with increasing per capita income and wealth, the demand for financial services increases as well.

6.5.2. In Odisha, financial services accounted for a share of around 3.4 per cent in state’s GSVA in 2021-22. The sector was unaffected by the pandemic, registering a GSVA growth of 7.9 per cent in 2021-22. As per advance estimates, the share of financial services in 2022-23 is expected to be 3.2 per cent with a growth of 8.4per cent.

I. Banking Network in the State

6.5.3. The extent of availability of financial services depends on the infrastructure of financial institutions present in the state. Banks are the most pivotal component of institutional finance mechanism. Banking networks not only promote financial inclusion but also enable diversification of economic activities and productive investment. It shoulders the responsibility of mobilising public savings.

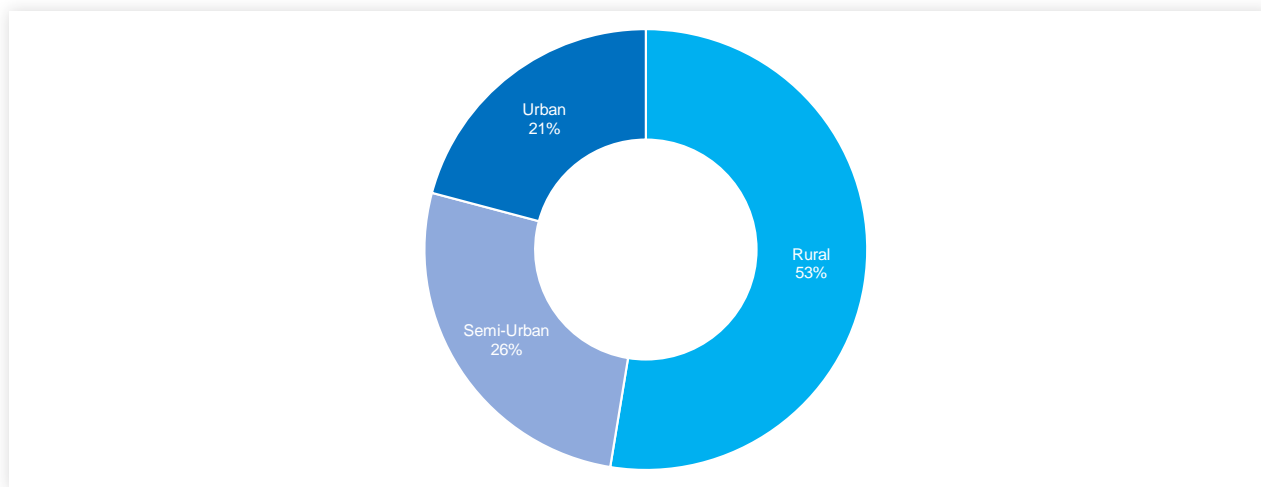
Figure 6.9 Distribution of Banks by Category - Odisha (as on 31.03.2022)



Source: SLBC (167th Issue), March 2022

6.5.4. Odisha has 12 public sector banks, 19 private sector banks, 2 rural banks, 5 'Jana' small finance banks and one state cooperative bank spanning 5,607 branches as of March 2022(Figure 6.9). Public sector bank branches constitute 54 per cent of total branches. The average population served by a bank branch is 8,102. About 53 per cent of total bank branches are located in rural areas of the state (Figure 6.10).Bank branch distribution is rather skewed as 53 per cent of bank branches serve about 82 per cent of total population living in rural areas while 48 per cent of bank branches serve only 18 per cent urban population. During 2021-22, 59 new branches of different banks were opened in the state.

Figure 6.10 Distribution of Bank Branches by Rural & Urban areas (as on 31.03.2022)

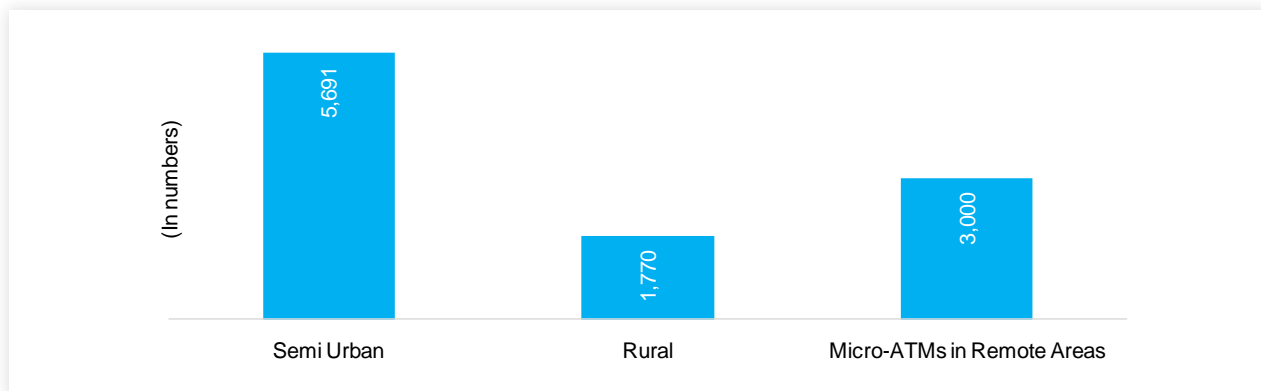


Source: SLBC, March 2022

II. Distribution of ATMs

6.5.5. Even though 53 per cent of bank branches are in rural areas, the availability of ATMs is skewed towards urban/ semi-urban areas. In all, 5,691 ATMs are present in urban and semi-urban centres in the state as compared to 1,770 ATMs in rural areas. The present status of branch and ATM distribution in the state indicates that banks are yet to give due importance to installation of ATM in rural branches. Besides, under the financial assistance from NABARD, 3,000 micro-ATMs were installed in PACS and LAMPCS to provide basic banking services to the account holders of DCCBs in remote localities where banking services are not available (Figure 6.11).

Figure 6.11 Distribution of ATMs by Urban and Rural Locations(as of March 2022)



Source: SLBC, 167th Issue, March 2022

III. Bank Deposits, Advances, and Credit-Deposit Ratio

6.5.6. Growth in bank deposits and advances is an indication of flow of credit and consumer demand in the economy. Total deposits of all banks in Odisha grew by 12.9 per cent in 2021-22 over 2020-21. Advances sanctioned and utilised grew by a higher rate of 26.9 per cent, indicating higher demand for credit in the economy. More than 94 per cent of total bank deposits were with commercial banks (Table 6.6).

6.5.7. Agriculture, MSME, weaker sections, minority community, advance to women and housing are the leading sub-sectors in terms of growth of bank advances in 2021-22. Growth rate of priority sub-sectors such as agriculture was 21.3 percent, MSME was 16.6 percent, weaker sections was 36.3 percent, minority community was 52.4 percent, advance to women was 67.4 percent and housing was 23.6 percent, and the growth rate of total advances was 44.5 percent. Out of total advances by banks in the state, 83.7 percent was sanctioned and utilised within the state. Priority sector advances were 59 percent of the total advances, which is above the minimum benchmark rate of 40 per cent set by the RBI. This indicates the compliance of banks with priority sector lending norms as well as demand from the agriculture, MSME, education, and housing loans for credit. Advances to education (-3.7 per cent) showed contraction over the last year while advances to women (52.4 per cent), minority communities (67.4 per cent) and weaker sections (36.3 per cent) registered significant growth over the last year. The details are in Table 6.6.

Table 6.6 Deposits and Advances in 2020-21 and 2021-22 - Odisha(INR in crore)

Indicators	2020-21	2021-22	Growth (in per cent)
Total deposit	3,80,799.48	4,30,073.31	12.94
Total advance utilised in the state	2,14,949.19	3,10,598.74	44.50
Total advance sanctioned and utilised in the state	2,04,932.27	2,60,053.30	26.90
Priority sector advance	1,23,460.77	1,53,365.62	24.22
Agriculture advance	63,134.21	76,594.69	21.32
MSME advance	42,854.67	49,970.86	16.61
Education loan	1,847.38	1,778.80	-3.71
Housing loan	16,251.28	2,0029.16	23.25
Advance to minority community	3,386.55	5,669.86	67.42
Advance to weaker section	40,958.53	55,813.59	36.27
Advance to Women	28,397.30	43,270.99	52.38

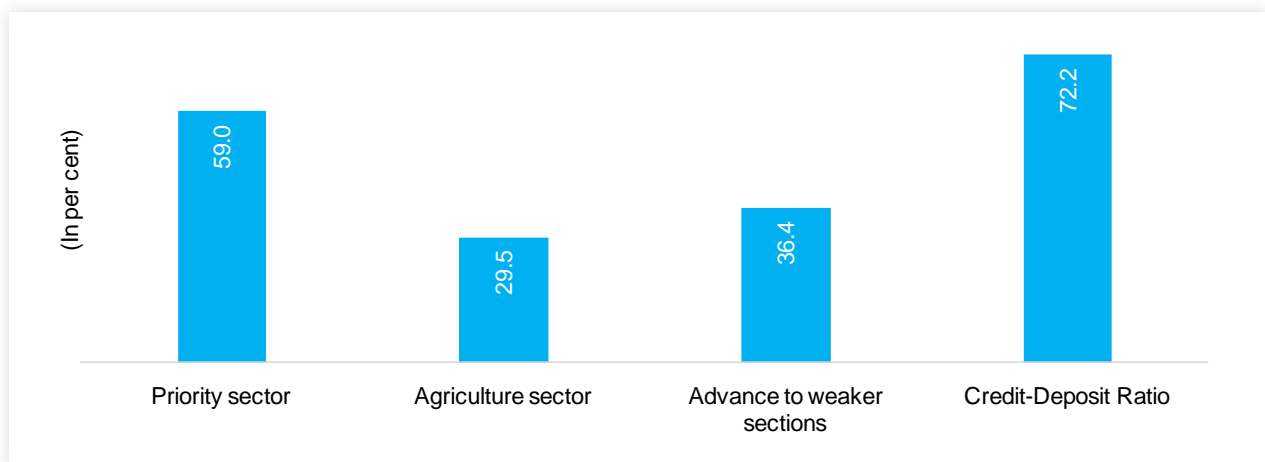
Source: SLBC (167th Issue), March 2022

6.5.8. For inclusive development of the economy, it is essential that credit flow and investment be disbursed uniformly and not to be kept concentrated in areas of high returns only. To ensure the same, the Reserve Bank of India requires banks in the country to advance at least 40 per cent of their loans under priority sector lending which comprises of advances to agriculture, MSME, export credit, education, housing, social infrastructure, renewable energy, and weaker sections of the society. Priority sector lending in the state was well above their respective benchmark rates (Figure 6.12).

6.5.9. Credit-Deposit (CD) ratio is the proportion of loans created by banks from the deposits received by them. High ratios indicate that banks are generating more credit from deposits and vice versa. The national norm of benchmark CD ratio in India is maintained at 60 per cent. In Odisha, the CD ratio (including advances sanctioned in other states and utilised in Odisha) for 2021-22 was 72.2 per cent, reflecting the need for financial sector deepening.

6.5.10. Public sector banks play a pivotal role in the banking sector in Odisha, accounting for larger proportion (53.9 per cent) of bank branches as well as majority share (69.3 per cent) of total deposits and majority share (58.2 per cent) of total advances. Between commercial banks and cooperative banks, share of the latter in total deposit is very small (5.6 per cent). This indicates the increasingly important role of commercial banks in credit flow in the state.

Figure 6.12 Credit-deposit ratio of banks in priority sectors in Odisha (March 2022)



Notes: 1) Figures for priority sector & agriculture sector are as percentage of total advances, 2) Figures for advances to weaker sections is as percentage of priority sector advances.

Source: SLBC (167th Issue) March., 2022

IV. Co-operatives

6.5.11. The co-operative sector of Odisha is composed of credit and non-credit institutions. The co-operative credit, the largest constituent of co-operative sector, consists of a well-structured three-tier institutional network, namely, (i) short-term cooperative credit, (ii) agriculture term loan and (iii) non-agricultural credit cooperatives that play a pivotal role in the dispensation of farm and non-farm credit in the state.

A. Short-term agricultural credit

6.5.12. Short-Term Agricultural Co-operative Credit (STCC) sector plays a pivotal role in Odisha by providing financial credit support for agricultural operations including purchase of agricultural inputs like certified high yielding varieties of seeds, fertilisers, pesticides, and agricultural implements. The STCC Units also deal in storage and marketing of agricultural produce and help members in getting remunerative prices for their produce. The

State has 2,710 Primary Agriculture Cooperative Societies (PACS) including 215 Large sized Adivasi Multi-Purpose Cooperative Societies (LAMPCS) and 5 Farmers' Services Cooperative Societies (FSCS) at grass roots level, 17 District Central Cooperative Banks in the middle-tier with 335 agricultural financing branches and the Odisha State Cooperative Bank (OSCB) at the State level with its 14 branches. The network of PACS, LAMPCS and FSCS covers almost all the GPs of the State for providing easy access of credit to small and marginal farmers along with marginalised sections of the society.

6.5.13. The State government of Odisha has begun offering crop loan finance upto INR. 1 lakh free of interest for prompt repayment w.e.f. 01.04.2022 in place of INR 50,000 under interest subvention scheme (Registrar, Co-operative Societies).

6.5.14. Market share of Cooperatives in short-term agricultural credit sector is about 58 per cent, with Commercial Banks and Regional Rural Banks (RRBs), accounting for the smaller share of 42 per cent in 2021-22. Short term crop loan in 2021-22 was INR. 16,048.9 crore financed to 34.6 lakh farmer members with a growth rate of 5.7 per cent over 2020-21. The per capita crop loan increased from about INR 17,000 in 2010-11 to about INR 46,000 in 2021-22 (Registrar, Co-operative Societies).

B. Agricultural Term Loan

6.5.15. The Co-operative Credit Sector provides term loans, also called investment credit, for agricultural and allied purposes including capital investment, asset creation in agriculture and land improvement, farm mechanisation, plantations, horticulture, and other non-farm activities. During 2021-22, a sum of INR 144.3 crore was provided as agricultural term loan to 10,127 members. Under non-farm sector, a sum of INR 120.4 crore was provided to 7,167 members as investment credit (Registrar, Co-operative Societies).

C. Kisan Credit Cards (KCC)

6.5.16. The Kisan Credit Card Scheme was introduced in the State through District Co-operative Central Bank (DCCB) and Primary Agricultural Credit Societies (PACS) in 1998-99. The scheme aims at providing timely, adequate, and hassle-free credit to farmers, based on their land holding, cropping pattern scale of finance. Under the Scheme, once the crop-wise credit limit for farmers is sanctioned, the scheme remains valid for five years. The farmers are supplied with Passbook and Cheque Books to avail credit through Branches of DCCBs. The KCCs are being converted into smart Rupay Cards to provide the farmers with withdrawal facilities at ATMs and PoS outlets. In all, 60 KCCs have been issued by the DCCBs/PACs as on 31st March 2022.

D. Non-Performing Asset (NPA)

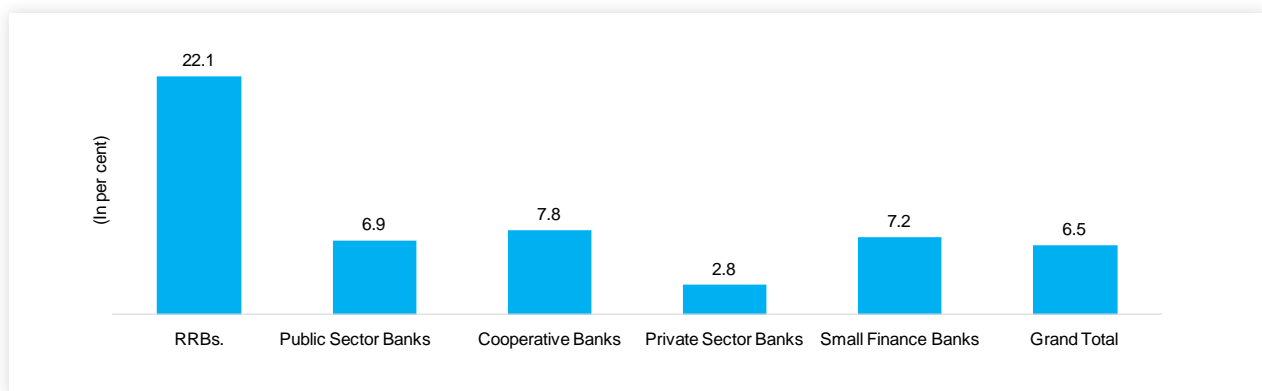
6.5.17. An asset, including a leased asset, becomes non-performing when it ceases to generate income for the banks. Share of non-performing assets in total assets in Odisha, as of March 2022, is given in Table 6.7 Public sector banks in Odisha have higher NPA levels than private sector banks, similar to the trend seen at all-India level.

6.5.18. During, 2021-22, the overall gross NPA was 6.5 per cent, remaining high despite the improvement over previous years. RRBs had the highest NPA share of 22.1. By sector, short term crop loans and education loans constituted the highest NPAs (Table 6.7). NPAs ranged between 3.8 per cent to 14.2 per cent during 2021-22 for all major sectors which is a matter of concern as NPAs adversely affect the productive recycling of funds.

Table 6.7 Sector Wise Non-performing Assets -Odisha (as on 31 March 2022)

Sectors	NPA as of March,2022 (Per cent)
Short term crop loan	14.18
Agricultural term loan	11.12
Agriculture & allied	5.43
Total agriculture	10.37
MSME sector	8.94
Education loan	11.38
Housing loan	3.84
Total priority sector	8.94
Total advance	6.47

Source: SLBC (167th issue) March, 2022

Figure 6.13 Share of non-performing assets in total assets of banks, by type in Odisha

Source: SLBC (167th issue), March 2022

6.6. Financial Inclusion

6.6.1. The essence of financial inclusion is to ensure delivery of financial services, which includes bank accounts for savings and transactions, low-cost credit for productive, personal, and other purposes, financial advisory services, insurance facilities (life and non-life), etc. Financial inclusion plays an important role in the overall development at the grass root level in a state. Financial inclusion broadens the resource base of the financial system by developing a culture of savings among a large segment of rural population and plays its own important role in the process of economic development. Further, by bringing low-income groups within the ambit of the formal banking sector, financial inclusion protects their financial wealth and other resources in exigent/demanding circumstances, in addition to providing different financial services.

6.6.2. This section presents details of progress of some government actions targeted towards increasing access to financial services and ensuring financial inclusion in the state.

I. Strategies for Increasing Financial Inclusion

Pradhan Mantri Jan-Dhan Yojana (PMJDY)

6.6.3. The push towards financial inclusion in the form of Jan Dhan Yojana has led to significant progress. As on March 2022, more than 1.9 crore bank accounts were opened under this Jan Dhan Yojana in Odisha with total deposit of INR 7,242.1 crore. These were primarily concentrated in rural areas. 145.3 lakh accounts were opened in rural areas as compared to around 40.3 lakh accounts in urban areas.

Operation of Business Correspondents (BCs)

6.6.4. To promote financial inclusion through penetration of banking services in rural areas and to provide sustainable banking services in unbanked areas, a phase-wise approach has been adopted to provide doorstep banking services in unbanked areas. In terms of revised guidelines on Branch Authorisation policy, 78 unbanked rural centres having population of more than 5,000 and without a bank branch of a Scheduled Commercial Bank (SCB) were to be covered by banking outlets. As on 31st March 2022, there were 17,127 BC (Business Correspondence) outlets operating in the state with 41 outlets per one lakh population considering the population of Odisha at 419.5 lakhs as per 2011 census.

Opening of Bricks and Mortar Bank Branches in 65 identified GPs

6.6.5. Govt. of Odisha has decided to provide space in Bharat Nirman Rajiv Gandhi Seva Kendra (BNRGSK) Buildings/ GP Offices to open Brick and Mortar (B&M) bank branches /HTA/BC in GP headquarters for public sector banks/ RRBs/ private sector banks free of cost for the next five years and continue the existing banking operations in BNRGSK Buildings/ GP offices in the GPs having no banks/ Post offices. As on 31.3.2022, B&M branches have been opened in 22 GPs out of 65 un-banked GPs, remaining 43 GPs have been covered by BCs and IPPBs. Further, the Finance Department in consultation with RBI, NABARD and SLBC has selected 200 GPs, based on population to open B&M Branches on point basis by March 31, 2023.

Coverage of un-banked GPs by IPPBs of post office Department

6.6.6. To promote financial inclusion, the Department of Post, Government of India, has opened Indian Post & Promotion Bank (IPPB) in each district headquarter. Under IPPB, 7,966 facility access points of IPPBs are available as on March 2022, covering 339 un-banked GPs in 33 branch locations in the state. Further, as of March 2022, a total of 23,052 Postal Life Insurances Policies and 97,872 policies under Rural Postal Life Insurance (RPLI) have been opened in the state with total insured amount of about INR. 2,695 Crore (Chief PMG, Odisha).

Digital Connectivity under Bharat Net

6.6.7. Digital connectivity is necessary to ensure financial inclusion. As on 31st March 2022, 3,990 GPs/BHQs out of 3,991 GPs/BHQs were connected through Optical Fibre Cable under Bharat Net Phase-I, covering 18 districts. Regarding Phase-II, out of 2,939 GPs/BHQs, 2,842 GPs/BHQs have been connected.

Jan Dhan Darshak GIS Application

6.6.8. The Ministry of Finance, Govt. of India, has mapped 45,036 villages on the Jan Dhan Darshak GIS Web Portal. Out of these, six villages do not have a bank branch/ IPPB/BC. The concerned banks have been requested to open banking outlets in these six villages. However, IPPB has confirmed that they have CBs enabled access points in two villages, namely, Sulketi and Patbil.

Targeted Financial Inclusion Intervention Programme (TFIIP) within overall Aspirational Districts Programme(ADP) of NITI Aayog

6.6.9. In Odisha, TFIIP is being implemented in all the 10 aspirational districts, namely, Dhenkanal, Gajapati, Kalahandi, Baragarh, Kandhamal, Rayagada, Koraput, Malkangiri, Nawarangpur&Nuapada. 1,948 Financial Inclusion camps have been organised in 10 aspirational districts upto March 2022, where 2,66,347 accounts under Pradhan Mantri Jan Dhan Yojana (PMJDY) were opened, 2,55,014 enrolments under Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) were done, 2,92,599 enrolments under Pradhan Mantri Suraksha Bima Yojana (PMSBY) were done, and 42,220 subscriptions in Atal Pension Yojana (APY) have been created. Odisha received the National Award for outstanding performance in Financial Inclusion under Deendayal Antodaya Yojana-National Rural Livelihood Mission (DAY- NRULM) in 2018. Further, Gajapati District received cash award from NITI Aayog for best performance in Financial Inclusion among Aspirational Districts of India.

Financial Inclusion Funds (FIF) of NABARD

6.6.10. NABARD has provided fund to banks under Financial Inclusion Funds (FIF) for financial inclusion and banking technology schemes for banking services in rural areas. Banks have been instructed to prepare a financial inclusion plan. As on 31 March 2022, NABARD has extended a financial grant of INR 13.8 crore for creating awareness on financial inclusion. Further, NABARD has earmarked a sum of INR. 32.4crore for FIR under 20 different schemes for 2021-22. As of March 2022, INR. 9.6 crore has been disbursed out of the sanctioned amount of INR 25.7crore to different Banks for FIF. On the supply side, NABARD has been providing financial support to SCBs, RRBs and DCCBs for connectivity infrastructure like V-SAT, mobile booster, and solar power supply to ensure uninterrupted financial services and banking technology infrastructure like micro-ATM, POS/m-POS, on-boarding BHIM UPI, activation of RuPay Cards at micro-ATMs, etc. to improve digital transactions in rural areas. On the demand side, financial support has been provided to banks for rolling out Mobile Demonstration Vans for conducting Financial and Digital literacy and awareness camps in rural areas.

Financial Literacy Camps

6.6.11. During 2021-22, a total of 3,124 financial literary camps were organised through 2,850 rural Branches for providing training and knowledge about financial inclusion.

Financial Literacy Centres (FLC)

6.6.12. FLCs are the building blocks or the basic units that initiate financial literacy activities at the ground level & the banks provide the minimum basic infrastructure & strengthen the existing FLC ecosystem. The Financial literacy councillor/ Director heading the Financial Literacy Centre is the key stakeholder in driving financial literacy initiatives at the ground level. The recruitment process for 4 FLC co-ordinators out of 12 vacant posts has already been completed.

Aadhaar Number Seeding

6.6.13. Total population as per Census(2021), eligible for Aadhaar enrolment is 4,40,33,004 and as on 31.3.2022, 100 per cent enrolment has been achieved.

Inclusion of Financial Literacy Materials in 10+2 Classes

6.6.14. Finance Department has requested RBI's regional office in Bhubaneswar to provide material on digital payment & cyber- crime for inclusion in the curriculum of 10+2 students. The inclusion of such material in the syllabus

of 10+2 standard will develop awareness among young minds against cyber threats during digital transactions.

Expanding and Deepening of Digital Payment Eco-system

6.6.15. Cuttack and Bolangir districts have already been declared as digitalised districts. Further, two districts namely, Sambalpur and Ganjam have been identified for undertaking digital coverage. As on March 2022, total digital coverage of individual SB Accounts in Sambalpur is 76.8 per cent and the digital coverage of Current Accounts is 63.3 per cent. The corresponding figure for Ganjam is 70.3 per cent and 71.6 per cent respectively.

Centres for Financial Literacy (CFL) project

6.6.16. Department of Financial Inclusion and Banking Technology, NABARD has allotted 52 CFLs proposed to be set-up in the state of Odisha through 4 Banks. All the 52 CFLs have already been operationalised since December 1, 2021. Till March 2022, about 8,066 FLAPs (Financial Literacy Awareness Programme) have been conducted with the participation of 1,80,844 members.

Performance under Social Security

6.6.17. As financial inclusion measures, achievements under the social security schemes are given below Table 6.8.

Table 6.8 Government policies on Insurance Sector

Initiative	Objective	Progress in brief
Pradhan Mantri Surakhya Bima Yojana (PMSBY)	Covers accidental insurance of Rs. 2 lakh for death/full disability for 18 to 70 years with a yearly premium of Rs. 12	During 2021-22, 23.55 lakh accounts were enrolled in this scheme
Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)	A life insurance scheme for the age group of 18 to 50 years, with yearly premium of Rs. 330 for coverage of Rs. 2 lakh	During 2021-22, 10.25 lakh accounts were enrolled in the scheme.
Atal Pension Yojana (APY)	A pension benefit to the people of unorganised sector between the age group of 18 to 40 years after attaining the age of 60	During 2021-22, 3.64 lakh accounts were enrolled in the scheme.

Source: SLBC (167th issue), March 2022

II. National Strategy for Financial Inclusion

6.6.18. A National Strategy was launched in January 2020 to deepen the financial inclusion efforts throughout the country. Some major initiatives taken under this in Odisha are given below.

- Universal access to financial services: Every village should have access to a formal financial services provider within an area of 5 kms to provide hassle-free digitization process
- Village-wise banking data: There should be data on the availability of banking services in each village
- Providing a basic bouquet of financial services: Every adult who is willing and eligible should be provided with a basic bouquet of financial services.
- Access to Livelihood and Skill Development Programme: A new entrant to the financial system if eligible and willing to undergo any livelihood/skill development programme should be given access to relevant programmes
- Financial Literacy and Education: Target specific financial literacy and education should be provided to people to avail facility under financial inclusion.

III. Indicators of Financial Inclusion

6.6.19. Table 6.9 shows the status of various financial inclusion indicators in Odisha. As compared with the performance in 2021, the accessibility of formal financial services has improved marginally on indicators like number of bank branches per lakh population, proportion of credit financed by banks to SHGs, etc. The extent of credit given by SCBs per person has marginally increased from INR 43,053 in 2021 to INR 50,341 in 2022.

Odisha became the first state to adopt Self Help Groups (SHG) based model for financial inclusion to extend banking services to the unbanked areas

Table 6.9 **Key Indicators of Financial inclusion- Odisha**

Indicators	ODISHA	
	2021	2022
Number of ATMs per lakh population	20.74	21
Number of bank branches per lakh population	11.67	12.34
Proportion of credit financed by banks to SHGs (in per cent)	2	2.6
Number of Post offices per lakh population	17.52	NA
Total Credit by SCBs per person (in Rs.)	43,053	50,341
Total deposits in RRBs per person (in Rs.)	4,407	4,853
Advance to weaker sections per person (in Rs.)	8,605	12,386

Source: SLBC (167th issue), March 2022

IV. Finance to Self Help Groups

6.6.20. Odisha became the first State in the country to adopt Self Help Groups (SHG) based model for financial inclusion to extend banking services to the unbanked areas. The SHGs formed under the Odisha Livelihood Mission (OLM) will provide banking services. OLM has entered into an agreement with SBI, Odisha Gramya Bank (OGB), Utkal Gramya Bank (UGB) and other banks for financial inclusion. The agreements assume significance as around 70 per cent of the Gram Panchayats (GP) in the State do not have brick and mortar bank branches. As per the agreements, OLM will function as corporate agent and around 3 lakh SHGs operating under it will be the banking correspondent. In the first phase, SHGs will be engaged as Business Correspondents in around 1,000 remote GPs in scheduled areas having no banking facilities. Gradually in subsequent phases, it will be extended to 4,060 un-banked GPs and entire State will be covered under the financial inclusion plan.

Women SHGs in Odisha through Mission Shakti

6.6.21. As a financial Inclusion programme, the Mission Shakti has provided access to financial literacy, bank credit-linking and interest subvention for economic development of 70 lakh women in 6 lakh Mission Shakti SHGs. The details are provided below.

Mission Shakti Loan- State Interest Subvention

6.6.22. Government is providing interest subventions to Women-SHGs (WSHGs) in the State (under OLM / NULM / NRLM/Mission Shakti). Known as the "Mission Shakti Loan" it provides interest free loans i.e., at zero per cent per annum on prompt and regular repayment for WSHGs for loan amount up to Rs. 3 lakh, effective from 1st April 2019 to reduce the interest burden and encourage SHGs to invest more capital in livelihood activities. The Govt. aims at graduating SHGs to entrepreneurs. The quantum of loan to SHGs is crucial for undertaking livelihood

and entrepreneurial activities in a sustainable manner. Under 5T mandate of Mission Shakti, the Govt. has targeted to increase the loan size to 4 lakh per SHG by the financial year 2022-23. Interest subvention claims amounting to Rs.162 crore have been settled under Mission Sakti loan-state Interest subvention scheme during 2021-22, benefiting 2.87 lakh eligible SHGs.

During 2021-22, more than 3 lakhs SHGs have been credit linked with a loan amount of INR 6,836.48 crore and average loan size of INR 2.20 lakhs per SHG.

Women SHGs-Bank Linkage Programme

6.6.23. The SHGs-bank linkage programme undertaken by Mission Shakti is of paramount significance for the economic empowerment of 70 lakh women with 6 lakh Mission Shakti SHGs. With institutional finance, the MS-SHGs have been able to own and operate women-led enterprises which significantly contribute to local economics. During 2021-22, about 3,10,819 SHGs have been credit linked with a loan amount of Rs. 6,836.48 crore with average loan size of Rs. 2.20 lakh per SHGs. The physical and financial target for 2022-23 has been fixed at 3.50 lakh SHGs and Rs. 8,725 crore to undertake different livelihood and entrepreneurial activities.

Engaging WSHG/Federation Members as BCA under BC model

6.6.24. To ensure last mile delivery of different banking services to the people in unbanked & underbanked GPs across the state, the Govt. has made a historic decision to engage eligible SHGs and Federation members as BCAs. This will not only provide a sustainable livelihood option to WSHG members but will also extend banking services to public at large in GPs deprived of Brick and Mortar bank branches. It further increases the out-reach of banking services, such as, savings, deposits, withdrawal, remittances, insurance and so on, integrating group-based transactions with the ICT-based micro-ATMs operated by BCAs. This continues to improve the quality & effectiveness of financial services in rural areas and will prove to be a sustainable livelihood to women. During 2021-22, about 2,203 BCAs

were engaged by banks with financial transactions of Rs. 979.94 crore. During the current financial year (2022-23), it is targeted to cover all unbanked GPs by engaging WSHGs/Federation members to act as BCAs.

Pradhan Mantri Fasal Bima Yojana (PMFBY)

6.6.25. The scheme was launched nationwide in 2016-17 in place of the earlier schemes viz. Modified National Agricultural Insurance Scheme (MNAIS), Weather-based Crop Insurance Scheme and the National Agriculture Insurance Scheme (NAIS). This crop insurance scheme aims at providing insurance to farmers in case of crop loss in notified crops during stages of premature sowing, standing crop, mid-season adversity, localised calamities, post-harvest losses and pest affects, etc, which are non-preventive natural risks.

6.6.26. The notified crops are (1) Paddy, (2) Groundnut, (3) Cotton, (4) Ginger, (5) Turmeric, (6) Maize, (7) Red Gram, and (8) Ragi in Kharif season, and (1) Paddy, (2) Groundnut, (3) Mustard, (4) Potato, (5) Black gram, (6) Green gram, (7) Onion, (8) Sugarcane, and (9) Sunflower in Rabi season.

6.6.27. The GPs/ULBs are units of insurance for Paddy and blocks for other notified minor crops. All loanee and non-loanee farmers including share cropping tenant farmers, growing notified crops in notified areas, are eligible for coverage under the scheme. The maximum premium payable by farmers is 2 per cent for kharif, 1.5 per cent for rabi season and 5 per cent for commercial/ annual horticultural crops. During rabi season of 2020-21, about 28,813 farmers benefited with claims worth INR 12.7 crore settled and during Kharif 2021, about 25,35,493 farmers benefitted with claims worth INR 915 crore settled. Under the scheme, Remote Sensing Technology and Smart Phones are being used for selection of plots for crop cutting experiments and recording the results of the exercise. Further, it has been proposed to use drones to expedite crop loss estimation. As a new initiative, BHULEKH is integrated with PMFBY portal for smooth implementation of the scheme (Registrar, Co-operative Societies).

V. Mobile Banking

6.6.28. Mobile banking is a service provided by a bank or other financial institutions that allow its customers to conduct financial transactions remotely using a mobile device such as smart phone or tablet. This activity can be as simple as a bank sending fraud or message activities to a client's cell phone or as complex as a client paying bills or sending money abroad. It is a part of digital banking. It is operated with or without internet even through a basic phone.

6.6.29. There are three types of mobile banking (App-based banking, MS-based banking & USSD banking) as explained below-

- App-based Mobile Banking: Mobile banking over mobile application for smart phone.
- SMS-based Mobile Banking: Mobile banking over SMS (Known as SMS Banking)
- USSD based banking: Mobile Banking over unstructured supplementary service data.

6.6.30. Mobile banking allows customers to access banking services from anywhere. Business owners are now able to save time by making use of mobile apps to process their payments or even receive funds from clients directly to their phone numbers.

The total users of mobile banking increased from 40.4 lakhs in 2019-20 to 68.8 lakhs in 2021-22.

VI. Telecommunications

6.6.31. It is a well-known fact that the Telecom sector has a multiplier impact on the economy, contributing to economic growth and the GDP. Digital connectivity provides new opportunities while also providing access to

online citizen centric services which ensure better e-governance. With rapid globalisation and increasing reach of internet, development of telecom infrastructure is a sine qua non in the growth of economic infrastructure. Telecommunication is a Central subject, and the State Governments play a supporting role for increasing mobile connectivity in the state.

6.6.32. The “communications and services relating to broadcasting” sub-sector’s contribution to services GSVA stood at 1.7 per cent in 2021-22(RE) and 1.7 per cent in 2022-23(AE). The contribution of the sub-sector to overall output grew at the rate of 17.9 per cent in 2014-15 and then declined to 4.7 per cent in 2021-22 and 3.4 per cent in 2022-23(AE).

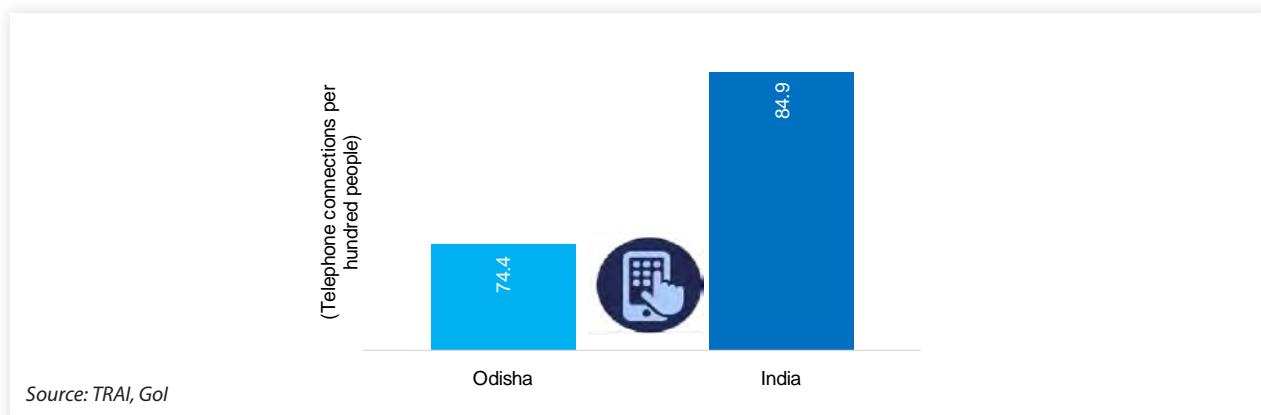
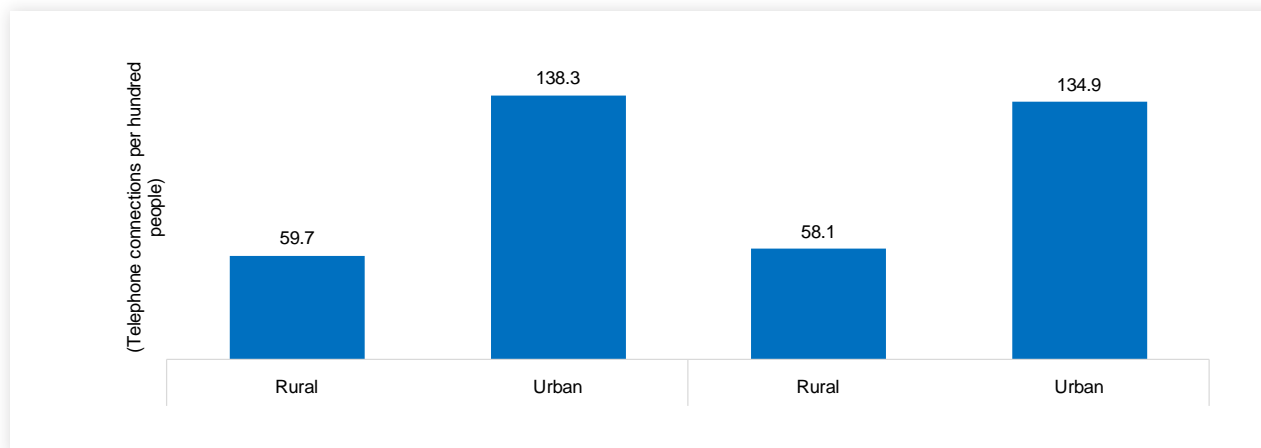
Table 6.10

Telecommunication Services Status - Odisha and India (As on 31st March 2022)

Indicators	Odisha			India		
	Total	Rural	Urban	Total	Rural	Urban
Wireless Tele-density (per cent)	73.64	59.56	134.82	83.07	57.85	130.17
Wireline Tele-density (per cent)	0.74	0.10	3.51	1.81	0.22	4.77
Overall Tele-density (per cent)	74.38	59.67	138.32	84.89	58.07	134.94
Total subscribers (in millions)	32.86	21.43	11.43	1166.93	519.82	647.11
Wireless subscribers (in millions)	32.53	21.39	11.14	1142.09	517.86	624.23
Wireline subscribers (in millions)	0.33	0.04	0.29	24.84	1.96	22.88
Total Internet subscribers (millions)	20.90	13.69	7.20	824.89	331.81	493.08
Broadband subscribers (millions)	20.15	13.14	7.01	788.30	314.30	473.99
Narrowband subscribers (millions)	0.74	0.55	0.19	36.59	17.51	19.09
Internet subscribers per 100 population	47.31	38.14	87.18	60.00	37.06	102.82

Source: TRAI, Gol, as of March 2022

6.6.33. The communications sector is still at a developing stage in Odisha as inferred by the tele-density and internet subscription base. The Table 6.10 and Figure 6.14 reveal that the overall tele-density of Odisha is 74.4, while the national average is 84.8. In Odisha, wireless tele-density is 59.7 in rural areas and 138.3 in urban areas. The share of wireless subscribers is about 99 per cent whereas the same of wireline is only 1 per cent in the state, which is well comparable to national average of 97.9 per cent and 2.1 per cent, respectively.

Figure 6.14 Overall Tele-density- Odisha and India (As on 31.03.2022)**Figure 6.15 Urban and Rural Area Tele-density -Odisha and India (As on 31.03.2022)**

6.6.34. Similarly, Internet subscribers per 100 population of the State is 47.3 in comparison to the national average of 60. The Internet subscription per 100 population in Rural areas stands at 38.1 whereas it is 87.2 in case of Urban areas (Table 6.10, Figure 6.16, Figure 6.17).

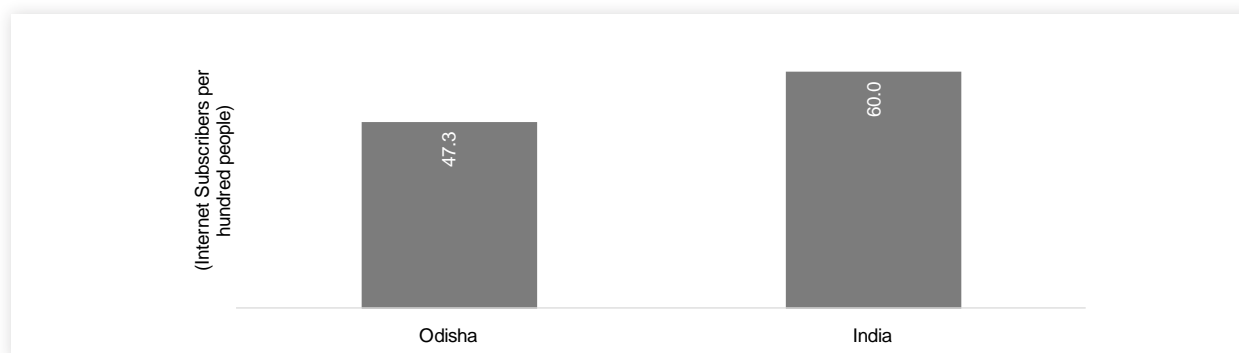
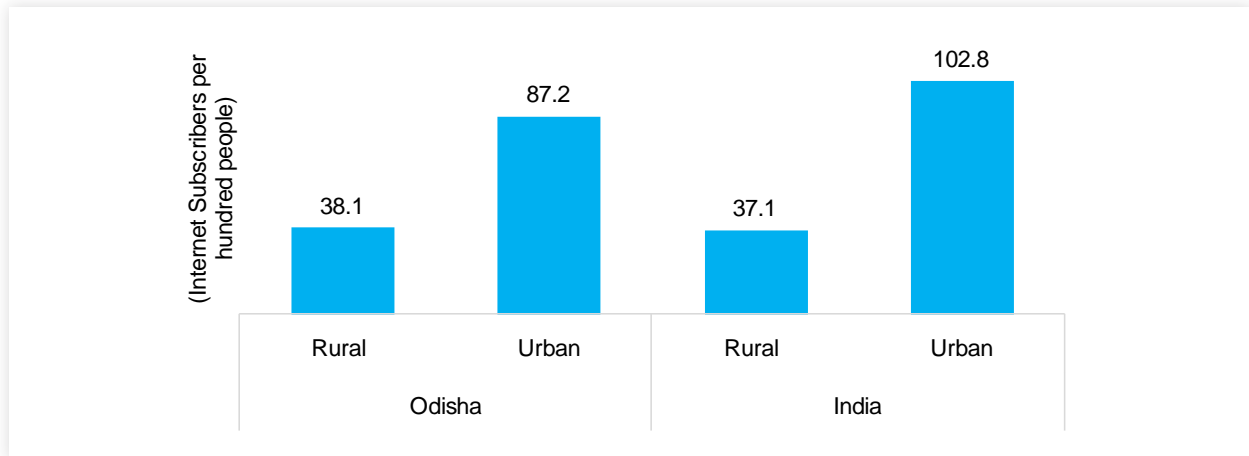
Figure 6.16 Internet Subscribers Per 100 Population - Odisha and India (As on 31.03.2022)

Figure 6.17

Internet Subscribers Per 100 Population in Urban and Rural - Odisha and India (As on 31.03.2022)



Source: TRAI, Gol

6.6.35. Thus, there is significant urban-rural difference in the state internet subscription. It is also seen that while overall tele-density and internet subscription per 100 population in Odisha is lower than National level, it is comparable when urban regions are seen for both. This implies that in urban regions, the status of telecom infrastructure is adequate and at par with national average. Internet connections have increased in both rural & urban regions of Odisha as well as India, while the tele-density has declined marginally in both rural & urban regions of Odisha & India over the last year. On this backdrop, increasing internet services needs to be focused on in rural regions in the State.

6.6.36. The matter of low mobile penetration in Odisha has been raised consistently in various forums such as Eastern Zonal Council and also with Department of Telecommunications, Govt. of India. Similarly, to increase the internet penetration in Odisha, a coordinated effort is required by the various stakeholders involved in the Bharat Net project.

6.6.37. A survey was conducted by the Department of Telecommunication, Government of India involving Block Level Officers during 2016-17 for assessing the number of villages having no connectivity. It was found that out of 51,311 villages of the State, about 11,000 villages do not have mobile connectivity. Out of this, 10,000 villages come under LWE affected area. Special funding is required to set up a greater number of mobile towers in these uncovered areas for improving the Tele-density in the State.

6.6.38. Government of Odisha has notified the Odisha Mobile Towers, Optical Fibre Cable, and Related Telecom Infrastructure Policy, 2017 to assist the Telecom Service Providers/Infrastructure Providers in obtaining RoW permission in a given timeframe. Telecom Service Providers/Infrastructure Providers are yet to come forward to install telecom infrastructure in villages of Gajapati, Kalahandi, Kandhamal, Malkangiri, Koraput and Rayagada districts of the State.

6.6.39. A survey was conducted by the Department of Telecommunication, Government of India involving Block Level Officers during 2016-17 for assessing the number of villages having no connectivity. It was found that out of total 51,311 villages of the State, about 11,000 villages do not have mobile connectivity. Out of this, 10,000 villages come under LWE affected area. Special funding is required to set up more number of mobile towers in these uncovered areas for improving the Tele-density in the State.

6.6.40. Government of Odisha has notified the Odisha Mobile Towers, Optical Fibre Cable and Related Telecom Infrastructure Policy, 2017 to assist the Telecom Service Providers/Infrastructure Providers in obtaining RoW permission in a given time frame. Telecom Service Providers/Infrastructure Providers are yet to come forward to install telecom infrastructure in villages of Gajapati, Kalahandi, Kandhamal, Malkangiri, Koraput and Rayagada districts of the State.

6.7. Conclusion

6.7.1. India's Services Sector has been growing fast and contributes the largest share to the country's economy over the past few years. It helps in the development of primary and secondary sector as well. The services sector in India began to expand in 1990s when India started a series of economic reforms.

6.7.2. For India, services are already the largest sector in terms of the contribution to GDP/GVA, accounting for more than half of it (52-55 per cent) till 2022-23(AE). In Odisha, the share of services in GSVAs accounted for about 40 per cent up-to 2019-20. Then, the services sector saw a steady decline in share of GVA, owing to the adverse impacts of pandemic. It declined to about 36-37 per cent from 2020-21 till 2022-23(AE) due to the pandemic. The sector rendered an annual average growth of 7-8 per cent in the last decade.

6.7.3. Tourism has exponential possibilities to boost Odisha's Services Sector in the next decade. The State Govt. is focusing on promotion of recently developed different forms of Tourism such as Health Tourism, Sports Tourism, and Eco-Tourism.

6.7.4. The State has identified tourism sector as a high potential sector for the growth of the economy and has taken many steps to boost the sector through various tourism infrastructure development projects including new initiatives. In this context, Government initiatives such as e-VISAs, better infrastructure facilities, safety, connectivity, etc. are enablers in the right direction. The state has several tourist attractions which need to be developed by providing necessary facilities, ensuring good transport services, and publicity.

6.7.5. 'Financial services' play the role of a catalyst in the growth of the economy through provision of avenues for investment and risk management. The sub-sector was unaffected by the pandemic and registered a GSVAs growth of 7.9 per cent in 2021-22 and is expected to grow at 8.4 per cent in 2022-23(AE).

6.7.6. For inclusive development of the economy, it is essential that credit flows and investments be disbursed uniformly and not be concentrated in areas of high returns only.

6.7.7. Financial inclusion plays an important role in the overall development at the grass root level in the state. Financial inclusion broadens the resource base of the financial system by developing a culture of savings among a large segment of rural population and plays its own role in the process of economic development by bringing low-income groups within the ambit of the formal banking sector.

6.7.8. The State Government has implemented an 8-point strategy along with central Government strategies to broaden the scope of financial inclusion. Under Jan Dhan Yojana, more than a crore bank accounts have been opened in Odisha as of March 2022.

Odisha became the first state in the country to adopt Self Help Groups (SHG) based model for financial inclusion to extend banking services in the unbanked areas. In the first phase, SHGs will be engaged as Business Correspondents in around 1,000 remote GPs in scheduled areas having no banking facilities. Gradually in subsequent phases, it will be extended to 4,060 un-banked GPs and the entire state will be covered under the financial inclusion plan.

6.7.9. Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a smartphone or tablet. Mobile banking users in the state have increased from 40.4 lakhs in 2019-20 to 68.8 lakhs in 2021-22.

6.7.10. It is a well-known fact that the Telecom sector has a multiplier impact on the economy, contributing to economic growth and the GDP. With rapid globalisation and increasing reach of internet, development of telecom infrastructure is a sine qua non in the growth of economic infrastructure.

6.7.11. Odisha's telecom and internet connectivity is still growing and that would be a good enabler for further growth in service sector.

CHAPTER 7

SOCIAL PROTECTION
AND EMPOWERMENT



Ensuring quality of life is imperative to enable human development and progress. Quality of life is a multi-dimensional concept encompassing several key components such as access to health care, basic amenities, quality education, and inclusive human development. Over the years, Odisha has accorded due priority towards enhancing quality of life with consistent social sector spending of over 40 per cent in its overall revenue expenditure. The State has put forth an elaborate policy framework in place to enable universal access to healthcare and quality education, and upliftment of disadvantaged and vulnerable communities. To ensure universal access to affordable and quality healthcare services, a wide range of schemes for strengthening public health infrastructure, improving delivery of healthcare services, enhancing food and nutrition security, and addressing local health issues and needs of vulnerable communities have been implemented. This has led to significant progress on key health indicators such as life expectancy at birth, IMR, MMR, NNMR, and the rate of institutional deliveries over the years. A plethora of schemes were implemented to enable universal access to quality education, early childhood development and universal pre-primary education. As a result, Gross and Net Enrolment Ratios in the State at the primary and upper primary levels have been on a rise accompanied by a declining rate of dropouts. The access to quality education among the disadvantaged SC/ST communities has also significantly improved. Further, upliftment and empowerment of the vulnerable and disadvantaged communities including Women, Children, SC/STs, Disabled, Elderly and Transgenders among others has been taken up through various targeted interventions.

Odisha has undertaken a holistic approach by focusing on each and every stage of human development right from pre-infancy to old age to improve the quality of life of its citizens, leaving no one behind.

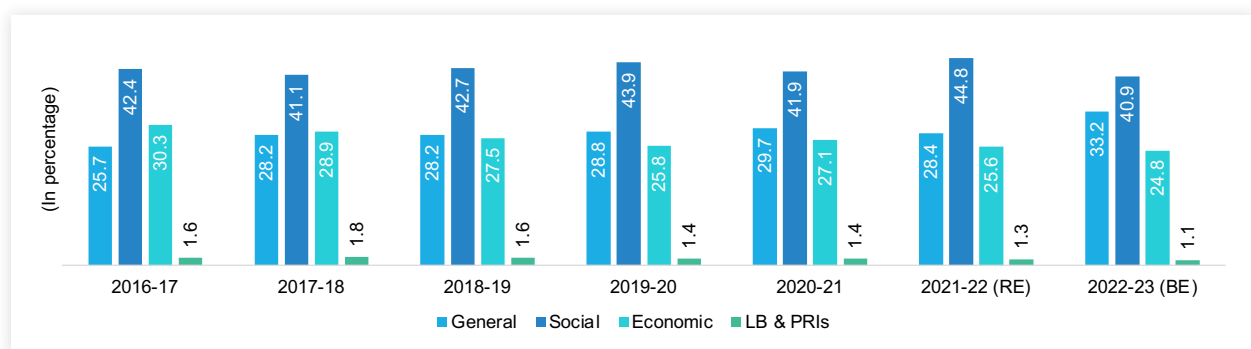
7.1. Introduction

7.1.1. Improving quality of life and wellbeing of people has been a major focus area of policy makers across developing countries. Quality of life is a multi-dimensional concept. Longevity of human lives, access to basic amenities, improved health and educational conditions, women empowerment, safety and security and holistic human development are some of the basic characteristics of a quality life. It can be improved by developing social infrastructure, enabling social protection, and promoting socio-economic empowerment. Understanding how well the State is performing in these areas and the various interventions being implemented by the State to foster them, is the key to evaluate future opportunities and track changes pertaining to quality of life.

7.1.2. The Government of Odisha has given highest priority to improve different aspects of quality of life, including health care, education, water supply and sanitation, poverty reduction, housing, and social safety nets by allocating adequate budgetary resources for social sector spending like expenditure on education, health, housing, urban and rural development and welfare of SC/STs, among others. Social Sector spending of the State has been maintained consistently at over 41 per cent of its overall revenue expenditure (Figure 7.1). As per 2022-23 Budget Estimates (BE), the Government of Odisha has earmarked 40.9 per cent of its total revenue expenditure for Social Sector spending.

Figure 7.1

Percentage Share of Government Revenue Expenditure from 2016-17 to 2022-23 (BE) - Odisha



Source: State Budget, GoO

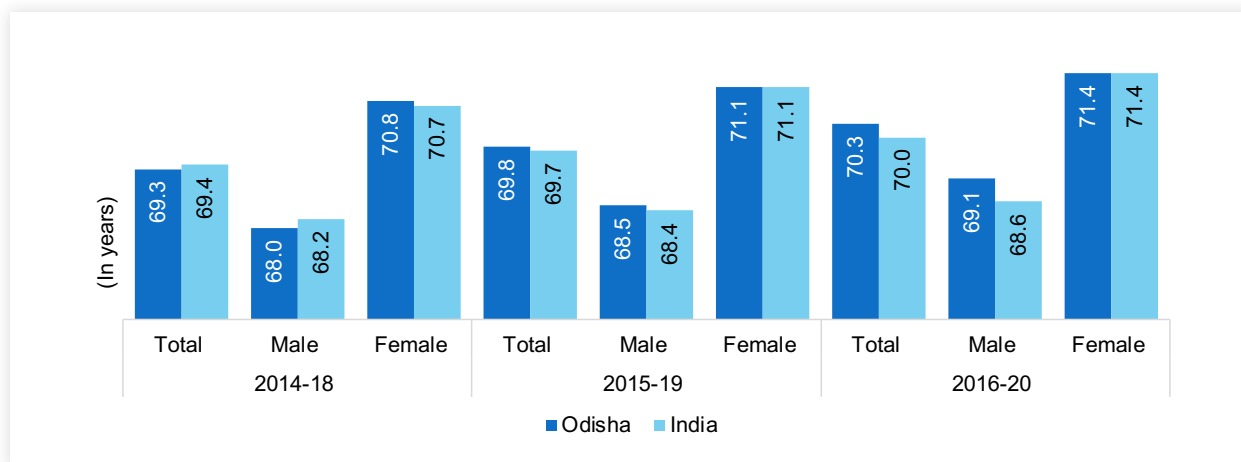
I. In Steps Towards Universal Health Coverage

A. Providing quality and affordable healthcare services

7.1.3. Good health promotes economic growth, improves productivity, and enhances individual incomes. The Government of Odisha has strived to ensure universal access to affordable and quality healthcare services. Several measures have been implemented for strengthening public health infrastructure, improving delivery of health care services and for addressing the local health issues and needs of vulnerable communities (SC/STs). This has led to a drastic improvement of public health facilities in Odisha and has increased people's faith, trust, and dependency on these institutions. Efforts of the State in this regard have been appreciated and acknowledged at various national and international forums.

7.1.4. Life expectancy at birth in Odisha has been on an increasing trend over the years and is currently higher than the national average (Figure 7.2). The overall life expectancy has increased from 69.3 in 2014-18 to 70.3 in 2016-20. During 2016-20, the male and female life expectancy stood at 69.1 and 71.4 years, respectively. Higher female life expectancy over male life expectancy follows the national trend. Life expectancy of Odisha is better than many other states such as Madhya Pradesh, Uttar Pradesh, Jharkhand, Chhattisgarh, and Assam.

Figure 7.2 Life Expectancy at Birth - Odisha



Source: SRS, Census of India

7.1.5. Quality healthcare infrastructure is an essential indicator of the State's progress in the social sector, in general and, the health sector, specifically. The State Government has undertaken concerted efforts to develop quality health infrastructure to offer comprehensive healthcare services to its citizens. In this regard, new medical colleges have been established by the Government.

7.1.6. Public healthcare facilities in Odisha include 32 District Hospitals, 33 Sub-Divisional Hospitals, 384 CHCs, 1379 PHCs, 6688 Sub-centres, 619 Ayurvedic Dispensaries, and 561 Homeopathic Dispensaries. In addition, there are three Ayurvedic Colleges and four Homeopathic Colleges operating in the public sector.

7.1.7. Efforts are being made to establish new PHCs / UPHCs and upgrade PHC to CHC and CHC to SDH as per the mandate of Indian Public Health Standards (IPHS) 2022. For upgradation of Peripheral Health Institutions during 2022-23, funds to the tune of INR 8000 lakh have been provisioned for expenditure on equipment for installation in different district headquarters. In addition, special measures have been undertaken to mobilise super specialists to Western Odisha by extending incentives to the faculty on VIIMSAR, Burla in the lines of incentives applicable for KBK districts.

B. Increasing intake capacities of students for medical and paramedical education

7.1.8. Besides, physical health infrastructure, an adequate number of medical professionals is essential to meet the growing health care needs of people. The admission capacity of students at medical schools, pharmacy colleges, and nursing institutions has increased over the years in the State. The intake capacity of Nursing Colleges, Nursing Schools and Auxiliary Nurse and Midwife (ANM) Training Schools/Centres in Odisha is shown in Table 7.1

Table 7.1

Intake Capacity of Nursing Colleges, Nursing Schools and ANM Training Schools - Odisha

Year	Nursing College (Basic B.Sc, P.B.B.Sc, M.Sc & P.B.Diploma)				Nursing School(GNM)				ANM Training Centres			
	Government		Private		Government		Private		Government		Private	
	Nos.	In-take	Nos.	In-take	Nos.	In-take	Nos.	Intake	Nos.	In-take	Nos.	In-take
2020-21	12	645	127	6664	8	550	101	4610	21	840	144	5170
2021-22 (upto March 2022)	17	1185	128	6744	0	0	105	4770	21	840	145	5230

Sources: Directorate of Nursing, Odisha

II. Major Achievements of Health Sector in Odisha

A. Improving performance in Infant Mortality Rate (IMR), Neonatal Mortality Rate (NNMR) and Under-5 Mortality Rate (U5MR)

7.1.9. The incidence of NNMR, IMR, and U5MR, have been on a declining trend indicating an improvement in the child health scenario in Odisha. The IMR for Odisha reduced from 40 to 36 during 2015-16 and 2019-21. Similarly, U5MR per 1000 live births dropped from 48 to 41.1, and NNMR has reduced from 28 to 27 during the same period. The all-India averages of the IMR, U5MR and NNMR are close to that of the State (Figure 7.3, Figure 7.4 and Figure 7.5).

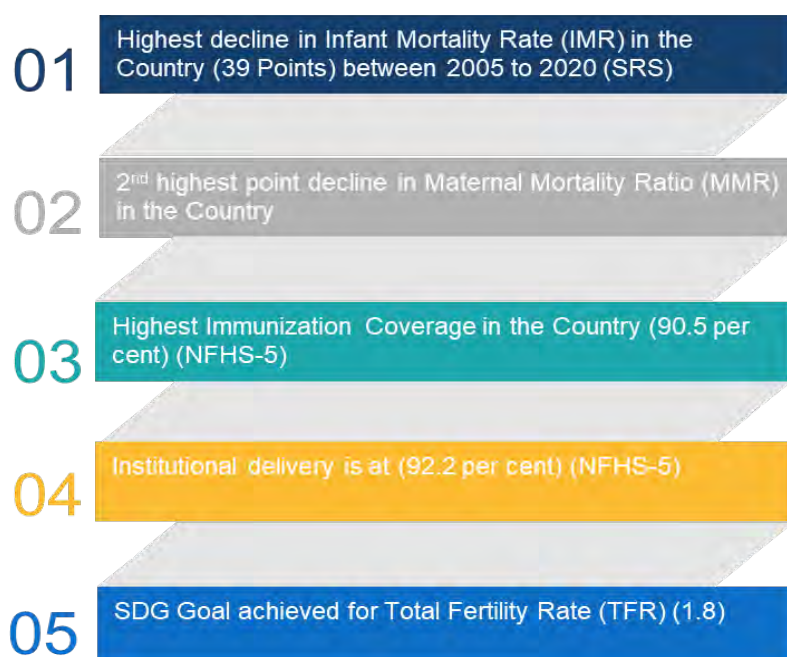
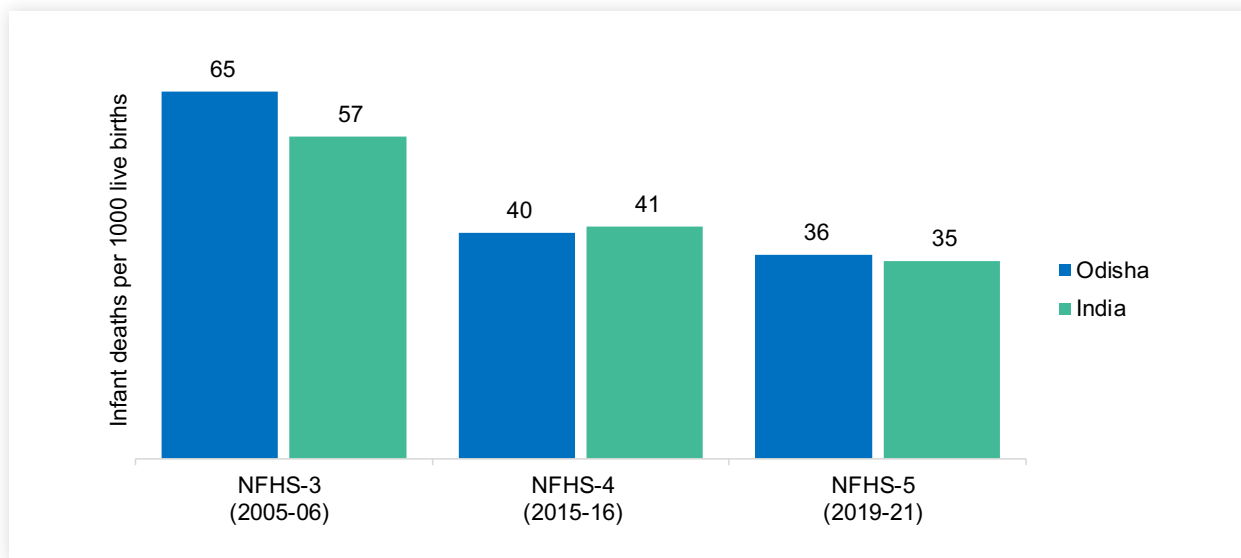


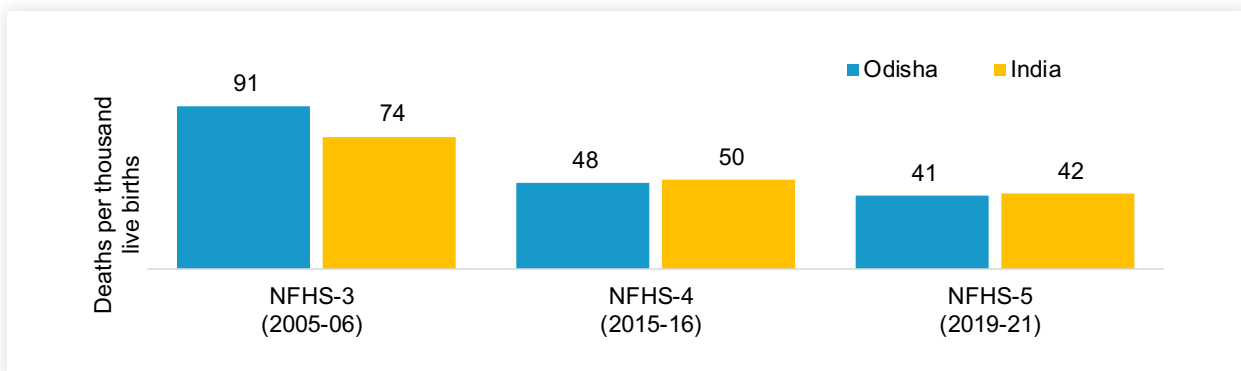
Figure 7.3 Infant Mortality Rate (per 1000 live births) - Odisha vis-à-vis India



Source: National Family Health Survey

Note: Infant Mortality Rate is defined as the probability of dying between birth and the first birthday

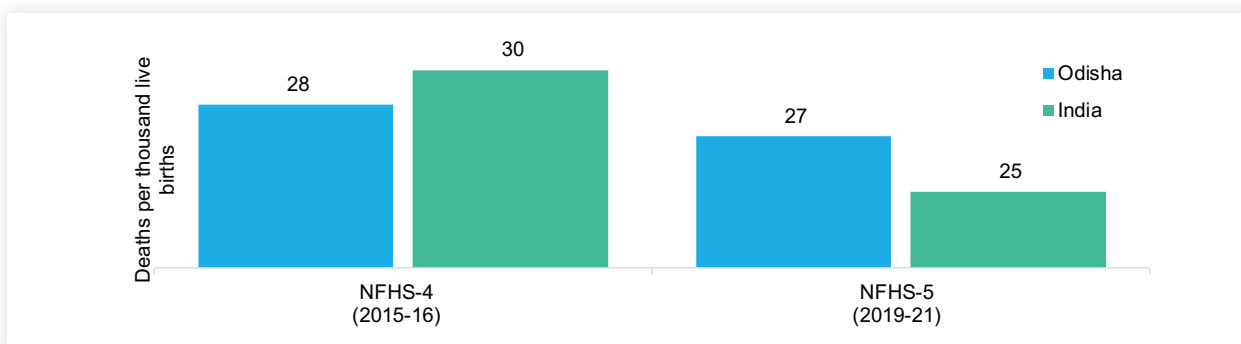
Figure 7.4 Under 5 Mortality Rate (per 1000 live births) - Odisha vis-à-vis India



Source: National Family Health Survey

Note: Under five Mortality Rate is defined as the probability of dying between birth and the fifth birthday

Figure 7.5 Neonatal Mortality Rate (per 1000 live births) - Odisha vis-à-vis India



Source: National Family Health Survey

Note: Neonatal Mortality Rate is defined as the probability of dying within the first month of life

7.1.10. The decline in infant and child mortality rates has largely been an outcome of the State's active interventions through various health programmes such as IMR Mission (2001) and Nabajyoti Scheme (2004). In addition, the implementation of corrective strategies such as creation of New-born Care Corners, New-born Stabilisation Units, Sick New-born Care Units, Nutrition Rehabilitation Centres, etc. also played a key role in enabling these outcomes.

B. Better accessibility and utilisation of maternal health care facilities

7.1.11. The Government's Maternal Health Care facilities have boosted the access and usage of pre-natal, neo-natal, and post-natal care facilities throughout the state. According to the NFHS-5 (2019–21), the percentage of mothers in Odisha who had a prenatal check-up during their first trimester increased from 64 per cent in 2015–16 to 76.9 per cent in 2019–21. The postnatal care and neonatal care check-ups have also increased during this period (Table 7.2)

7.1.12. The improved reproductive and maternal health care status in the state can be observed from trends in ante-natal and post-natal care over the years. Similar trends can be seen in mothers whose last birth was protected against neonatal tetanus, registered pregnancies for which the mother received a Mother and Child Protection (MCP) card, mothers who consumed iron folic acid for 100 days or more while they were pregnant, and mothers who received postnatal care from a doctor, nurse, LHV, ANM, midwife, or other health personnel within two days of delivery (Table 7.2).

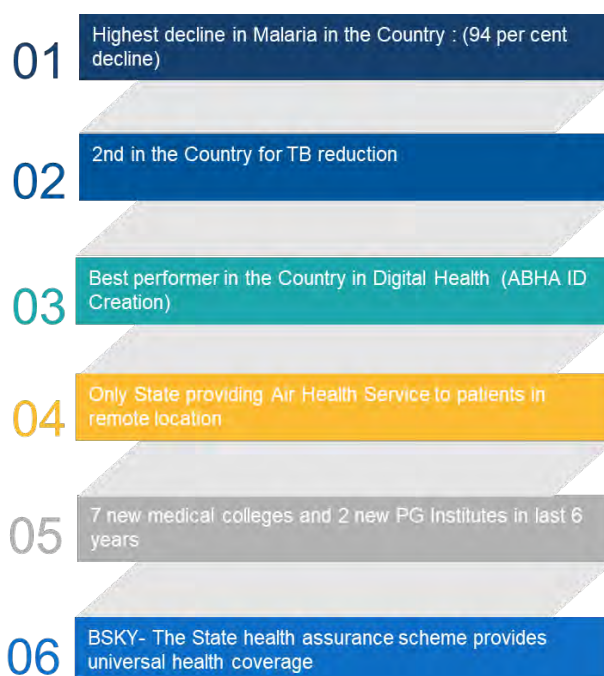


Table 7.2 Key Maternal and Child Health Care Indicators (in per cent) - Odisha

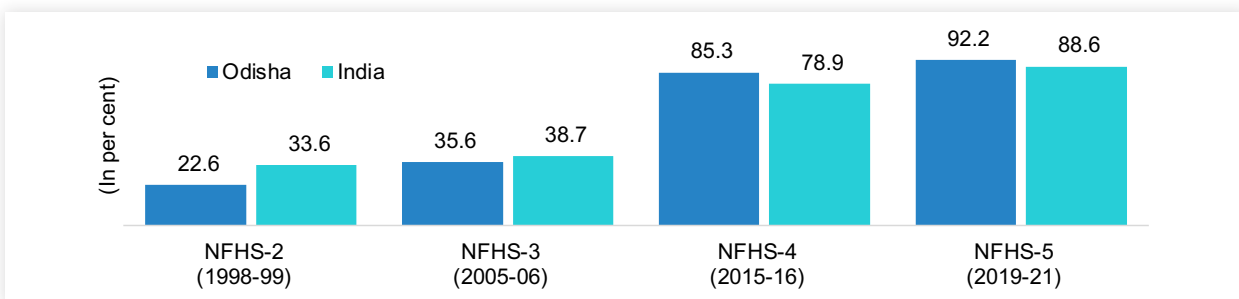
Indicators	NFHS-4 (2015-16)	NFHS-5 (2019-21)
Mothers who had ante-natal check-ups in the first trimester	64	76.9
Mothers who had at least four full antenatal care visits	61.9	78.1
Registered Pregnancies for MCP card	97.2	99.4
Mothers whose last birth was protected against neonatal tetanus (per cent)	94.3	95.2
Mothers who consumed iron folic acid for 100 days or more when they were pregnant (per cent)	36.5	60.8
Mothers who received postnatal care from a doctor/nurse/LHV/ANM/ midwife / other health personnel within 2 days of delivery (in per cent)	73.2	88.4
Children who received postnatal care from a doctor/nurse/LHV/ANM/ midwife/ other health personnel within 2 days of delivery (in per cent)	NA	88.1

Source: National Family Health Survey

C. Improved Delivery care resulted in high Institutional Delivery Rates

7.1.13. Institutional delivery is crucial for the prevention, detection, and management of delivery complications as well as to reduce MMR and IMR. The institutional delivery rate in the State has significantly increased from 35.6 per cent in 2005-2006 (NFHS-3) to 92.2 per cent (NFHS-5) and is now well above the national average both in rural and urban areas (Figure 7.6). The NFHS-5 data shows that Odisha has a higher institutional delivery rate than states like Assam, Arunachal Pradesh, Meghalaya, Manipur, Mizoram, Nagaland, Tripura, West Bengal, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Himanchal Pradesh, Jharkhand, Bihar, and Chhattisgarh. The implementation of Government policy initiatives like JSY, JSSK, the Free Drug Scheme, 108/102 ambulance services, and the construction of Maa Gruha, have contributed to improving the state’s institutional delivery rates.

Figure 7.6 Institutional Deliveries (as per cent of total deliveries) - Odisha and India

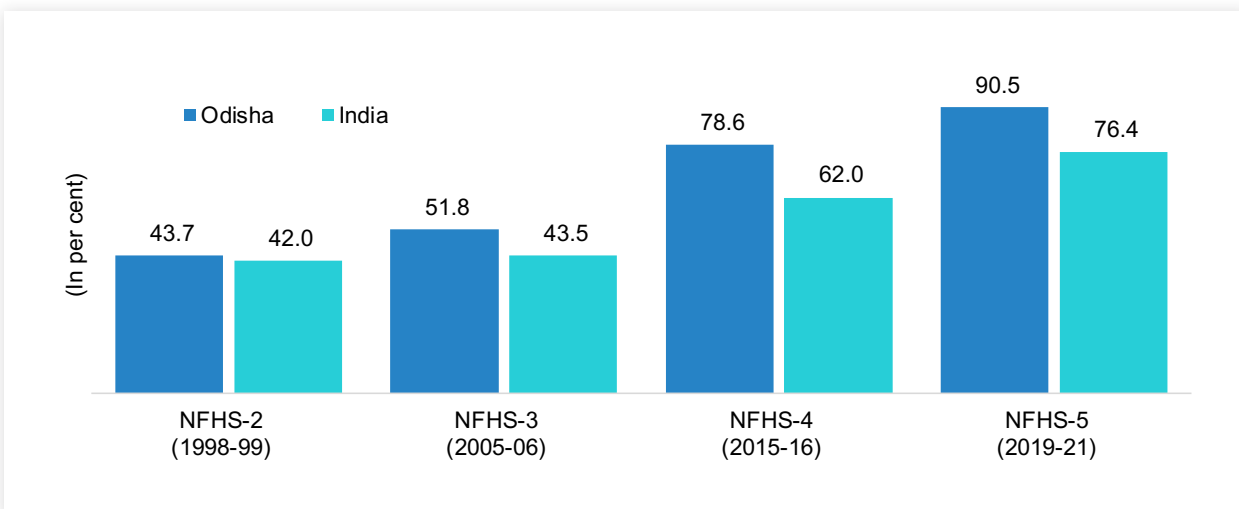


Source: National Family Health Survey

D. A progressive step towards full Immunisation

7.1.14. The Government is undertaking several programmes to fully immunise children in the State. As a result, 90.5 per cent of children aged 12-23 months are fully immunised in 2019–21 which is a remarkable improvement from 43.7 per cent during 1998-99 (NFHS 2) (Figure 7.7).

Figure 7.7 Percentage of Children Aged 12-23 months Fully Immunised – Odisha and India



Source: Various rounds of National Family Health Survey

E. Initiatives to combat Anaemia among children and adults

7.1.15. 64.2 per cent of the children aged 6-59 months are anaemic in Odisha in 2019-21, lower than that of India. The incidence of anaemia among children and adults in Odisha and India is shown in Table 7.3.

Table 7.3 Anaemia among Children and Adults – Odisha and India

Anaemia among Children and Adults	NFHS-5 (2019-21)	
	Odisha	India
Children aged 6-59 months who are anaemic (<11.0 g/dl) (per cent)	64.2	67.1
Men aged 15-19 years who are anaemic (<13.0 g/dl) (per cent)	30	31.1

Source: National Family Health Survey.

Anaemia Mukta Lakhya Abhiyan

7.1.16. To accelerate the reduction of anaemia, Odisha has launched the Anaemia Mukta Lakhya Abhiyan (AMLAN). The objective of this initiative is to achieve a 10 per cent reduction in anaemia every year considering NFHS-5 as the base. The strategy was designed and built on the technical and operational evidence derived from National Iron Plus Initiative (NIPI), Weekly Iron and Folic Acid (WIFS) programmes and Anaemia Mukta Bharat (AMB). The following activities are proposed as part of the scheme: (i) Collating recommendations under different guidelines into an implementable framework to meet the local requirements; (ii) Quarterly testing of students in schools and regular testing of other beneficiaries at Urban Health Sanitation and Nutrition Days (UHSND)/ Village Health Sanitation and Nutrition Days (VHSND) and Health and Wellness Centres (HWCs). The beneficiaries in remote areas shall be tested in T3 (Test, Treat, Talk) camps; (iii) Multivitamin & Multimineral Tablets will be supplemented along with IFA (Iron folic acid) and Calcium, (iv) To ensure better compliance to treatment, the identified in-school students shall be provided with doses of IFA under the supervision of school teachers instead of home consumption; (v) Integration of reporting mechanisms with the online reporting of the State (DHIS) to enable better programme implementation.

F. Improvement in nutritional status among children

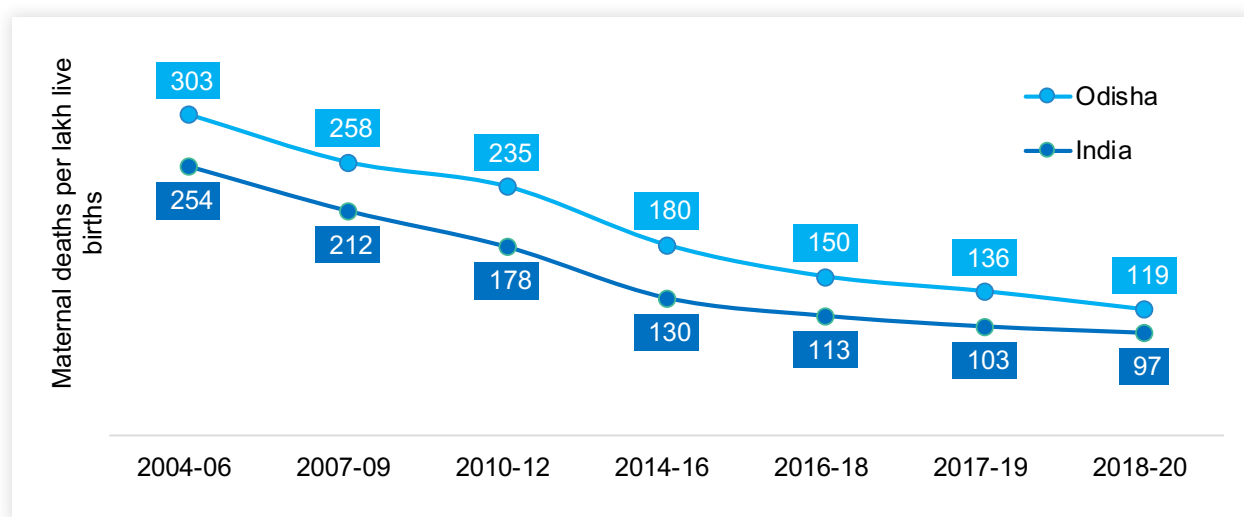
7.1.17. Adequate nutrition reduces incidence of stunting (height for age), wasting (weight for height), and underweight (weight for age) among children and supports their physical and mental growth. In this regard, Odisha has introduced several measures such as implementation of supplementary nutrition programmes, expansion of Anganwadi Services, pre-school education programme, and development of infrastructure which led to improvement in child nutrition outcomes. Further, the Aspirational Districts Programme is rendering due focus on child nutrition in the underdeveloped districts. The percentage of stunted, wasted, severely wasted and underweight children under the age of five in Odisha has decreased from 34.1 per cent, 20.4 per cent, 6.4 per cent and 34.4 per cent respectively in 2015-16 (NFHS-4) to 31.0 per cent, 18.1 per cent, 6.1 per cent and 29.7 per cent, respectively in 2019-21 (NFHS-5). The percentage stunting, wasting, severe wasting and underweight among

children under the age of five at the national level stood at 35.5 per cent, 19.3 per cent, 7.7 per cent and 32.1 per cent respectively.

G. Improvement of Maternal Health in the State

7.1.18. Odisha has achieved significant progress on maternal and reproductive health indicators owing to implementation of key interventions like Janani Suraksha Yojana, 108/102 Ambulance Services, and construction of Maa Gruha among others. Maternal Mortality Ratio (MMR) in the State has been on a declining trend (Figure 7.8). It was 303 during 2004-06 (SRS 2004-06), later dropped to 150 during 2016-18 (SRS -2016-18) and further fell to 119 during 2018-20. The rate of reduction of MMR in Odisha over the years has been higher than that of India (Figure 7.8).

Figure 7.8 Comparative trend of MMR during 2004-2020 - India and Odisha



Source: SRS, Office of the Registrar General, India

7.1.19. Total Fertility Rate (TFR) is used to measure the childbearing capacity of a women during her fertility period. TFR in Odisha dropped over time and is less than the national average (Table 7.4).

Table 7.4 Comparative Figures of TFR - Odisha and India

Year	TFR	
	Odisha	India
2015	2.0	2.3
2016	2.1	2.2
2017	1.9	2.2
2018	1.9	2.2
2019	1.8	2.1
2020	1.8	2.0

Source: SRS Bulletin/National Family Health Survey

Note: Total Fertility Rate is defined as the average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the three years before the survey, based on detailed birth histories provided by women.

H. Improvement in Odisha's Overall Nutrition Status

7.1.20. Odisha has undertaken various initiatives to improve the nutritional status of children and mothers. These include promotion of Infant and Young Child Feeding (IYCF) practices through community and facility-based interventions and capacity building of ANMs/ASHA/AWW (Anganwadi Workers) for counselling mothers on breast feeding and complementary feeding practices. Facility/community level measures were taken up to facilitate various training and IEC activities under MAA (Mother's Absolute Affection) initiative. Similarly, National Iron Plus Initiative has been undertaken to eradicate anaemia. In addition, the Government has established 67 Nutrition Rehabilitation Centres (NRC) to provide institutional care for children with acute malnutrition. Besides, Vitamin-A Supplementation Programme and National Deworming Day (NDD) are also being conducted. The effective implementation of these initiatives has enabled the State to garner success in various nutritional indicators.

I. Increasing usage of alternative health care services

7.1.21. Due to the increase in lifestyle related diseases, a shift towards alternative healthcare services has been observed. These are indigenous, affordable, and accessible remedies used to treat illnesses and enhance quality of life, collectively known as AYUSH. Currently, four homoeopathic and three Ayurvedic Medical Colleges are in operation to provide effective alternative health care services in the State. Further, there are 561 Homoeopathic, 620 Ayurvedic and 9 Unani dispensaries operational in the State (Table 7.5).

Table 7.5 Government Ayurvedic, Homeopathic and Unani Medical Institutions - Odisha

Year	Type of institutions	Hospitals	Dispensaries	Doctors in Position	No. of Beds	Patients treated (in lakh)
2020-21	Homeopathic	4	561	396	135	2248171.18
	Ayurvedic	5	620	468	468	2130019.47
	Unani	0	9			20728.15
2021-22 (Up to March 2022)	Homeopathic	4	561	409	135	844025
	Ayurvedic	5	620	450	468	704374.69
	Unani	0	9	3	0	5110.14

Source: Directorate of AYUSH, GoO

J. Improvement in Nursing Services

7.1.22. Eight Government Nursing Schools at Cuttack, Berhampur, Burla, Dhenkanal, Kandhamal, Kalahandi, Sundargarh and Nabarangpur have been upgraded to B.Sc. Nursing Colleges with total annual intake capacity of 840. Admission in these Nursing Colleges began from the academic session of 2021-22. Besides, 15 new PG Diplomas of one year duration have been introduced in Nursing Colleges at Berhampur, Cuttack and Burla, and admission for the same has started from the 2021-22 academic session.

7.1.23. Employees State Insurance (ESI) Scheme is a social security measure available to industrial workers in the State since 1960. Currently, medical care is provided to insured persons and their dependants through four ESI Hospitals and 41 ESI Dispensaries. Apart from healthcare services, immunisation and family welfare programmes are also conducted in these facilities (Table 7.6).

Table 7.6 Family Welfare and Immunisation Programmes Conducted under ESI Scheme - Odisha

Name of the Programmes	Achievement during the Year (no. of programmes)				
	2017-18	2018-19	2019-20	2020-21	2021-22
Family Welfare Programmes					
Vasectomy	7	6	5	8	5
Tubectomy	41	38	35	39	27
IUD	51	62	67	72	23
MTP	83	94	88	34	23
Oral Pills	3281	3310	3402	3803	2135
Nirodh	9427	9706	9628	8112	5317
Immunisation Programmes					
BCG	1780	1823	1846	1907	543
Polio	8755	9302	9643	10342	8243
DPT	9481	9402	8549	9833	7680
T.Toxoid	4811	5918	6124	8241	3455
Measles	658	742	482	713	325

Source: Directorate of ESI Scheme, GoO

III. Major Interventions in the Health Sector undertaken by Government of Odisha

7.1.24. The outlay for infrastructure of Medical Colleges and Hospitals has gone up by 2.5 times, from INR 972 crore in 2019-20 to INR 2,546 crore in 2022-23 as given in Table 7.7.

Table 7.7 Outlay for Infrastructure of Medical Collages and Hospitals in Odisha

Year	Provision (in INR crore)
2019-20	972
2020-21	1070
2021-22	1898.38
2022-23	2546.84

Source: Odisha Budget 2022-23

7.1.25. The Government of Odisha has undertaken several reform measures to strengthen delivery of healthcare services and achieve universal health coverage. Few reforms are as follows:

- Increase in public health financing under the State Budget
- Strengthening human resources management in public health system through cadre restructuring and incentives for doctors and paramedics
- Establishment of State-of-art public health infrastructure
- Expansion of service delivery packages to public health facilities
- Harnessing private healthcare providers' potential for purchasing specialist and super specialist services
- Expansion of high-end pathology test, CT, MRI for improved service delivery
- Promotion of quality assurance standards through National Quality Assurance Standard (NQAS) & LaQshya certification for labour room and Operation Theatres
- Promotion of hygienic hospitals by institutionalising Kayakalp Award to public health facilities
- Improved Emergency Medical Ambulance and referral transportation services (Janani Express)
- Adoption of 5t initiatives and Mo Sarkar to improve accountability and delivery of quality health care services in public health facilities

Major Infrastructural Development of SCB Medical College, Cuttack



The State Government has fast-tracked the redevelopment of SCB Medical College and Hospital and has directed the Works Department to speed up construction and complete the project by December 2023. The premier medical college will be redeveloped as an AIIMS-plus institution with 5,000 beds in two phases with an estimated investment of around INR 5000 crore.

A. Major Maternal Health Interventions

Janani Suraksha Yojana (JSY)

7.1.26. Janani Suraksha Yojana (JSY) has been launched to promote institutional deliveries especially among poor pregnant women in order to reduce MMR and IMR. Due to effective implementation of JSY, the institutional deliveries in the State increased from 28.8 per cent in 2005-06 to 92.2 in 2019-21. During 2021-22, around 4.66 lakh people benefited from JSY.

Janani Shishu Suraksha Karyakram (JSSK)

7.1.27. This programme was launched in November 2011 to provide free treatment for all pregnant women, sick new-borns and infants (up to 1 year) at public health facilities. In the last ten years (since 2012-13) about 47,60,267 pregnant woman and 10,12,997 sick children availed the benefits of this programme. As many as 5,69,418 pregnant women and sick infants have also availed free referral transport services through 102/108 Ambulance during 2021-22.

Delivery points: State has set up a target of 1,190 delivery points. Out of which 533 are functional and measures are being taken to operationalise the others.

First Referral Unit (FRU): Currently, 80 hospitals out of 95 are operating as FRUs for providing Comprehensive Emergency Obstetric Care including C-Section.

In the last ten years about 47.6 lakh pregnant woman and around 10 lakh sick children have benefitted from Janani Shishu Suraksha Karyakram. As many as 5.7 lakh pregnant women and sick infants have availed free referral transport services through 102/108 Ambulance during 2021-22.

Safe Abortion Care Services: 252 facilities are providing Comprehensive Abortion Care in the State.

Village Health and Nutrition Day: Village Health and Nutrition Day (VHND) is being organised every Tuesday/ Friday at village Anganwadi Centres. In 2021-22, 5,74,494 sessions were held out of 5,96,226 planned sessions.

Maternity Waiting Homes (Maa Gruha)

7.1.28. Maa Gruhas are established near delivery points to accommodate the expected delivery patients from remote areas 7-10 days before the expected delivery date to enable safe institutional delivery. Till September 2022, 91 Maa Gruhas were operationalised.



Maa Gruha – A pioneering step for improving Institutional Delivery

Initiatives for Anaemia Control (IFA and Calcium Supplementation)

7.1.29. Iron sucrose and blood transfusion services are made available at Institutional level for pregnant women with severe anaemia. One-time de-worming of all pregnant woman is carried out in second trimester. About 9 lakh pregnant women are covered annually under this initiative.

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

7.1.30. This programme has been launched in 2016 to enable screening of antenatal cases at least once during 2nd or 3rd trimester preferably by O&G (Obstetrics and Gynaecology) specialists. This activity is implemented

on the 9th of every month in CHC and above facilities. The primary objective of the programme is to screen for high-risk pregnancies and initiate appropriate treatment. During 2021-22, 1,40,115 ante-natal cases have been screened and 10,527 high risk pregnancies were detected.

Mother & Child Health Wing

7.1.31. These are constructed in health facilities with high delivery load for providing comprehensive RMNCH+A (Reproductive, Maternal, New-born, Child and Adolescent Health) services under one roof. They enable 48 hours' stay for mothers after delivery to improve post-natal and neonatal care. Construction of 74 Maternal and Child Health Complexes ranging from 30-125 bedded facilities is under progress (Completed and functional - 47, In progress-19).

B. Major Child Health Interventions

New-Born Care Corner (NBCC)

7.1.32. For preventing mortality and brain damage immediately after birth, 771 New-born Care Corners are functional at all delivery points including Labour Rooms and Operation Theatres to provide essential New-born Care and resuscitation immediately after birth.

Sick New-born Care Units (SNCU) and New-born Stabilisation Units (NBSU)

7.1.33. For treatment of sick and low birth weight new-borns, 44 Sick New-born Care Units (SNCU) (against target of 45) and 45 New-born Stabilisation Units (SNCU) have been made operational. During 2021-22, about 62,683 children were admitted to SNCU and 47,995 new-borns were discharged after treatment.

Kangaroo Mother Care (KMC)

7.1.34. KMC units have been established adjoining 44 SNCUs. Kangaroo Mother Care refers to the activity of maintaining warmth through skin-to-skin contact in order to promote early initiation of breastfeeding among all new-borns with a special focus on preterm, low birth weight and sick new-borns.

Training and Capacity Building

7.1.35. To ensure the provision of effective health care services, trainings are being provided to concerned personnel at various levels. These include trainings under India New-born Action Plan (INAP) and Indian Association of Parliamentarians on Population and Development (IAPPD); Facility based Integrated Management on Neonatal and Childhood Illness (IMNCI) training and Facility Based New-born Care (FBNC), Orientation of AYUSH medical officers on Community Based clinical data repository, etc.

Home based new-born care (HBNC)

7.1.36. Training is provided to all ASHAs for early identification and referral of new-borns with warning signs and to provide counselling. During 2021-22, about 46,966 low birth weight babies were reported during HBNC visits and 13,587 New-born were diagnosed with warning signs. Out of these, 12,120 new-borns were referred to hospital for treatment.

Intensified Diarrhoea Control Fortnight (IDCF)

7.1.37. As an intensified diarrhoea control fortnight IDCF is being organised every year since 2015 during the monsoon season. During IDCF, prophylactic dose of ORS is distributed to children under five years of age to prevent deaths caused by childhood diarrhoea. The ASHA workers visit the under 5 children in their areas and demonstrate the preparation of ORS to the mothers. In addition, they also counsel the mothers about various warnings signs to look for in case of diarrhoea to seek medical help. Besides, ORS corners are established at all

facility levels to address diarrhoeal cases and counsel parents/caregivers on ORS preparation and treatment. During Integrated Campaign 2021, around 52,020 under-five children were diagnosed with diarrhoea and all of them were treated with ORS and Zinc.

C. Nutrition

7.1.38. Village Health and Nutrition Day (VHND) is organised once in a month in every Anganwadi Centre collectively by ANM, AWW and ASHA. The VHND provides quality ante-natal and post-natal care services for expecting and lactating mothers, monitors child growth and development and services like general health check-ups (Weight-for-age, BMI, Anaemia detection etc.) are provided. Further, essential drugs and micronutrients like IFA, albendazole and calcium are provided along with counselling and identified high-risk cases are referred to appropriate institutions.

Rashtriya Bal Swasthya Karyakram (RBSK)

7.1.39. The RBSK is a National Flagship Programme under National Health Mission (NHM) rolled out in Odisha since March-2014. It aims to cover 1.07 crore children from birth to 18 years of age. The Programme targets the diagnosis and treatment of 40 types of health conditions using a 4D' approach- Defect at Birth, Deficiencies, Childhood Disease and Developmental Delay and Disabilities. During 2021-22, a total of 38,92,221 number of identified children have been treated under RBSK at primary, secondary and tertiary facilities.

Early Intervention Services through District Early Intervention Centres (DEIC)

7.1.40. District Early Intervention Centres (DEIC) are being operated at 32 District Headquarter Hospitals (DHH) for children seeking special care (secondary and tertiary care). A team of professionals from different specialities (MBBS, Paediatrics, Dental, Physiotherapy, Audiology, Optometry, Psychology, etc) are engaged for providing special care.

D. Highlights of Major health Systems strengthening Interventions

Ayushman Bharat-Health and Wellness Centres

7.1.41. All PHC/ UPHC and Sub Centres are being converted to Health and Wellness Centres for providing comprehensive Primary Health Care with 12 expanded packages of services, telemedicine, and wellness activities. Till September 2022, around 5053 Sub Centres, PHCs and UPHCs were converted to HWCs. At Sub Centre level HWC, one additional Community Health Officer (CHO) (General Nursing Midwifery/BSc Staff Nurses or trained Ayurveda practitioners) is being posted. Tele-consultations with Specialists of Maternal and Child Health and DHHs under E-Sanjeevani are being implemented in all HWCs.

Free Health Care and Health Insurance through BSKY

7.1.42. The Biju Swasthya Kalyan Yojana (BSKY) provides free health services for all (irrespective of income, status, or residence) in all government health care facilities. All treatments are cashless, and no document is required to be produced. Free healthcare is provided in more than 604 empanelled private hospitals through annual health coverage of INR 5 lakhs (INR 5 lakh additional for women members) per family per annum. From 1st September 2021 onwards beneficiaries are availing entitlements under BSKY on production of New BSKY card or NFSA/SFSS card if New BSKY Card not provided for some reasons. The BSKY benefit extends to 3.3 crore people including 96.5 lakh NFSA/ SFSS card holder families in Odisha.

BSKY HIGHLIGHTS

96.5 lakh families covering over 3.3 crore people of Odisha are provided with annual cashless health coverage of INR 5 lakh for family and additional INR 5 lakh for female member after exhaust of initial limit.

- Total 2056 packages are covered under this scheme.
- Total 604 hospitals are empaneled under BSKY
- 498 within the State and 106 Outside of the State.
- Hospitals in 16 states outside Odisha are empaneled under BSKY.
- Around 90,000 claims amounting to INR 200 crore cashless treatment is being provided under BSKY per month.
- 97 per cent positive patient feedback under BSKY scheme.



Free Drug Services (Niramaya)

7.1.43. Under this scheme, around 750 types of essential drugs are being provided free of cost to all categories of patients in public health facilities. The costly medicines which are to be used for a longer duration to treat ailments like cancer, diabetics, hypertension, psychiatric, blood disorders, etc. are also supplied under the scheme. These medicines go through a rigorous quality check at different stages of procurement and before final distribution to patients by NABL accredited Laboratories. Since 2018, more than 19.97 crore patients have benefitted.



*"Niramaya"
Free Drugs
distribution
Counter
available in all
govt. health
facilities*

Free Diagnostic Services ("Nidaan")

7.1.44. Nidaan provides a range of free diagnostic services at all public health facilities as per the level of care which includes high-end pathology tests, CT scan, MRI, X-Ray and general pathology tests. Over 5.97 lakh patients have received free CT scans and 1.47 lakh patients have received free MRI Scan services since 2019. Over 2.20 crore tests are done per year under Nidaan.



Free High-end diagnostics tests under Nidaan



Free High-end diagnostics tests under Nidaan

Free Dialysis Service (Sahay)

7.1.45. Sahay has been introduced to provide free dialysis services at all Medical College Hospitals, 30 DHHs, CHC Narshingpur, CHC Barbil and SDH Bhanjanagara to reduce the out-of-pocket expenditure towards Dialysis services. Around 50 thousand patients benefit every year under the scheme.



Free Dialysis Centre: A ray of hope to live for poor kidney patients

Nirmal

7.1.46. The scheme aims to strengthen ancillary services for cleanliness, hygiene, and sanitation in public health facilities. Due to additional funding from the State Budget, around 337 public health facilities in 2019-20 and 586 in 2020-21 were covered under the scheme.

Free Ambulance Services

7.1.47. Citizens can seek emergency ambulance services to avail treatment at public health facilities by dialing '108' Toll Free Number. As many as 630 Ambulances are operational under the fleet of '108' service including 6 Boat Ambulances. Likewise, under '102' ambulance services 501 ambulance are operational for referral transport services to all pregnant women during ante-natal, delivery and post-natal period up to 42 days and sick infants upto 1 year by just dialing '104' Toll Free Number. Six Boat Ambulances are operational in Kendrapara, Koraput, Malkangiri and Kalahandi districts. More than 47 lakh beneficiaries availed the services under 108 services & more than 39 lakhs beneficiaries availed the services under 102 services. Odisha is the only State in India providing Air Health Services to patients in remote locations. Moreover, 36 Bike ambulances are also available in 7 districts for carrying emergency patients/PW from difficult to access villages. So far more than 15,000 patients have benefited



Emergency Ambulance services



Bike Ambulance service In hard to reach areas in Malkangiri



Services through Mukhyamantri Vayu Swasthya Seba by engaging Specialists and Super specialist doctors from Medical Colleges performing operation in Malkangiri



Boat Ambulance device in cut off area in Chitrakonda, Korkunda Block of Malkangiri at Balimela Water Reservoir

from these services.

Free Blood Services

7.1.48. Over 7.9 lakh units of blood were given free of cost to patients under Free Blood Services. Besides, a monthly transport assistance of INR 500/- was given to all registered blood disorder patients attending blood transfusion or treatment. More than 4.4 lakh patients received free blood during 2021 (Jan to Dec'21) and 2.8 lakh till September 2022.

Free Sanitary Napkins Distribution Schemes (Khushi)

7.1.49. To address the issue of menstrual hygiene among women and adolescent girls, the State Government has introduced 'Khushi' sanitary napkins. These are provided free of cost to women post-delivery and post-MTP (Medical Termination of Pregnancy) at all public health facilities. In addition, Government has introduced social marketing of 'Khushi' sanitary napkins in the rural community through ASHAs at a subsidised rate of INR 6 per packet of 6 napkins. The Government of Odisha also made provisions for supply of free sanitary napkins to all school going girls, from classes 6-12, in all Government and Government-aided schools.



Free Sanitary Napkin Distribution: Need for rural adolescents

Sishu Abong Matru Mrutyuhara Purna Nirakarana Abhijana (SAMMPurNA):

7.1.50. The State has launched SAMMPurNA for accelerating reduction of MMR & IMR in 15 districts with "Hard to Reach" areas and tribal communities. Besides, some activities were taken up at the State level also. Some of the key features of the scheme include (i.) identification of High-risk pregnancies and issuance of red card; (ii.) birth preparedness and couple counselling; (iii.) additional home visits to identified high risk pregnant woman; (iv.) reimbursement of transportation cost of INR 1000 to pregnant women from remote villages; (v.) provision of INR 500 for drop-back transport services for pregnant women after institutional delivery and treatment of sick infants at Public Health Facilities; (vi.) Surakhya Kabacha (Mother & Baby Kit) to all pregnant women and newborn for preventing sepsis; (vii.) IEC/ BCC (Information, Education and Communication, and Behavioural Change Communication activities) campaigns; (viii.) wage compensation to mothers for SAM (Severe Acute Malnutrition) children admitted to NRCs. Some notable achievements made under the scheme include strengthening of 3388 VHND sites, joint visits to 80 per cent high risk mothers, identification of 17 per cent of high-risk pregnant women and 70 per cent decline in home deliveries. Further, IMR reduced to 36 per 1000 live births (SRS 2020) from 46 per 1000 live births (SRS 2015).

7.1.51. Free Cancer Care and Chemotherapy Services were established and provided at all DHHs through District Cancer Care Programme. While 7769 patients enrolled at Day Care Chemotherapy Centres during 2021-22, 6826 patients enrolled during April to Sept 2022.

Mobile Health Units (Swasthya Sanjog)

7.1.52. To ensure primary health care services to the people residing in tribal and remote areas, 177 Mobile Health Units are being operated in all Blocks under Tribal and KBK districts of the State covering 5500 villages.

Universal Eye Healthcare Programme (Sunetra)

7.1.53. Sunetra was launched to strengthen eye care programme in the State and supplement efforts of NPCB&VI (National Programme for Control of Blindness & Visual Impairment). Over 2,03,005 cataract operations were conducted during 2019-2021. In 2022 till December

Over 2 lakh cataract operations were conducted under Sunetra during 2019-2021. Till December 2022, more than 1.83 lakh cataract operation were done and free spectacles were provided to more than 1 Lakh school children.

more than 1.83 lakh cataract operations have been done and free spectacles are provided to more than 1 Lakh school children with refractive error.

7.1.54. Dental Clinics with regular dentist, dental chairs and consumables were established at all DHHs, SDHs and 353 CHCs (out of 388). SCB Dental College is the an nodal centre for monitoring and mentoring.

Specialist Services in Urban PHCs/CHCs (Ama Clinic)

7.1.55. The Government of Odisha has launched 'Ama Clinic' to provide weekly specialist services in the UPHCs and UCHCs to reduce out of pocket expenditure for urban population, especially slum dwellers. The specialist services include Obstetrics and Gynaecology (O&G), Paediatrics, Nutrition, Geriatrics, Psychiatric, Ophthalmology and Physiotherapy services. These services in 'Ama Clinic' are provided depending on availability of the concerned specialists (Govt. or hired contractual) in the urban area.

Place Based Incentives

7.1.56. Place based incentives are provided to doctors and specialists to attract and retain them in inaccessible and remote areas. It is given to the Medical Officers working in different remote areas of the State considering certain key parameters such as backwardness of the location, tribal dominance, left wing extremism, train connectivity, road and transport facilities, social infrastructure, distance from State headquarters, etc. All the peripheral Government Health Institutions of the State are classified into five different categories and declared as V-0 to V-4. Place based incentives are admissible only for doctors who are attending and performing their duty regularly in V-1 to V-4 institutions. This incentive is given along with the salary. It is applicable to contractual, ad-hoc and regular doctors. General (MBBS) doctors working in V-4 CHCs and PHCs get INR 40,000 as incentive whereas a specialist working in V4 CHC gets INR 80,000 as incentive.

To improve the delivery of health care services in backward and remote areas, doctors get INR 40,000-80,000 as an incentive. A corpus fund of INR 1 crore each has been provided to 16 backward districts of the State to improve delivery of health care services

Corpus Fund

7.1.57. Non-availability of doctors at inaccessible remote locations has been a cause of concern to the Department. To address this issue, the Government has initiated several measures to provide necessary flexibility to the district administration. Keeping this in view, a corpus fund of INR 1 crore each has been provided to 16 backward districts of the State to improve delivery of health care services. The main objective of providing this fund is to retain human resources in remote and inaccessible areas, provide flexibility at local level for human resources management and ensure accountability of doctors.

Strengthening of Casualty, Emergency and Trauma Care

7.1.58. The objective of the scheme is to strengthen the existing service delivery mechanism with special focus on management of Trauma Care and Emergency cases at public health facilities. Currently, eight Trauma Care Centres are operational in State at three Medical Colleges and Hospitals (Cuttack, Burla, Berhampur), and RGH, Rourkela and at DHH Puri, Khordha, Balasore and Bhadrak. A special plan has been prepared to establish 25 more trauma care centres under the State budget.

Mukhya Mantri Swasthya Seva Mission

7.1.59. It is a basket of schemes which includes infrastructure development of Public Health Institutions (Non-Residential and Residential); Public Health Response fund to address public health emergencies; Odisha State Treatment Fund to provide financial assistance for critical health care; and Health Investment Promotion Policy.

Free Mental Health Care

7.1.60. The importance of mental health care came to the forefront during the pandemic and now Mental Health programmes are being implemented across 30 districts of Odisha. The programmes provide facilities for screening, counselling, treatment and free psychotropic drugs, capacity building of service providers and ASHAs, establishment of District Crisis Centre (DCCs) or Help Desks, Life Skill Education (LSE), and mass awareness through multi-media approach.

Medical Colleges and Public Health Infrastructure

7.1.61. Establishment of new Medical Colleges and revamping public health infrastructure: 10 new Medical College & Hospitals are being constructed at Bolangir, Koraput, Balasore, Puri, Kalahandi, Keonjhar, Mayurbhanja, Kandhamal, Kalahandi & Sundargarh (Koraput, Balasore, Bolangir & Baripada – Completed & functional). Two new Medical College & Hospitals at Jajpur & Phulbani have been taken up. 20 DHH Buildings have been proposed for construction of new buildings. Construction of 74 Maternal & Child Health Complex in District / Sub-district & Block Level of various bed strength- ranging from 30-125 beds is under progress (Completed & functional – 51, Progress - 15). More than 2067 Sub-Centre buildings have been converted to Health Wellness Centres (Completed – 261 & Progress – 358) and 1054 PHC Buildings are being converted to Health Wellness Centres. (Completed – 88 & Progress – 366).

Cadre restructuring and creation of new posts for doctors and paramedical staff

7.1.62. Several reforms were undertaken through a cadre restructuring of the Odisha Medical Service Cadre with creation of 1330 new posts of doctors in order to increase Human Resources in Public Health Facilities with a focus on equity in difficult areas. In addition, 578 posts have been identified as Public Health posts and 2000 posts of Leave Training Reserve Medical Officer (LTRMO) have been created. Regularisation of services of nurses and other paramedics that had been engaged on contractual basis under different schemes is under process. The creation of 26,000 posts of Paramedics (Pharmacist, Multi-Purpose Health Workers, Radiographers and Laboratory Technicians) as per IPHS norms is also being carried out. There is a corpus fund (For KBK Districts) and DMF Fund used for the engagement of doctors as required

In order to increase Human Resources for Health in Public Health Facilities, new posts for 1330 doctors were created

Establishment of Critical Care Units

7.1.63. 18 Intensive Care Units (ICU) have been established at the DHH level to ensure the availability of critical care units at public health facilities to provide ICU facilities for all types of patients. 44 Special New-Born Care Units (SNCUs) at DHHs, SDHs and Medical College Hospitals have also been set up. Apart from this, many super specialist services like open heart surgery, bone marrow and kidney transplantation, etc. have been made available at Medical Colleges.

7.1.64. The State has substantially enhanced allocations to Department of Health and Family Welfare. The State has nearly doubled allocations to Department of Health and Family Welfare from INR 6,182 crore in 2018-19 to INR 12,342 crore in 2022-23 (Growing at CAGR of 18.9 per cent). This has led to increase in share of Health and Family Welfare Department total budget from 5.2 per cent to 6.2 per cent. On a per capita basis the allocations to Department of Health and Family Welfare have increased from INR 1,378 to INR 2,674 for provision of better healthcare services to the people under various schemes.

Training of personnel: To improve Health Care Services, different Trainings are imparted to ICU personnel, Nursing personnel and others. For this, a budgetary allocation of INR 181.37 lakh has been proposed for 2022-23. **Emergency Medical Ambulance Service (EMAS):** The service is being implemented to provide pre-hospital care

and transportation service across the State for all kinds of medical emergencies. A sum of INR 14858.21 lakh was allocated in the 2022-23 (BE).

MHU (Mobile Health Unit) in PPP Mode: For the continuance of 22 MHUs in PPP mode and to provide patient care in remote areas of the State, a sum of INR 457.04 lakh has been proposed in 2022-23 (BE).

Durgama Anchalare Malaria Nirakarana - DAMaN (Elimination of Malaria in Remote/Inaccessible Areas)

Malaria in infants and children can lead to chronic illness and malnutrition, and vice versa as malnourishment makes people more vulnerable to malaria and both the conditions can lead to death. Along with high incidences of malaria, prevalence of malnutrition and anaemia among children and women is very high in Odisha. Malaria is also considered as a major contributor to anaemia in pregnancy. Therefore, for elimination of malaria in remote and inaccessible areas, Odisha launched DAMAN. The key features of this scheme include: i. Addressing malaria, anaemia, and malnutrition comprehensively; ii. Target the inaccessible, difficult, and hard to reach areas that are vulnerable to malaria; iii. Provide scope to test and treat the population in remote areas on a large scale; iv. Clean parasite reservoir (mass screening & treatment) as well as vector density (LLIN use up scaling & IRS) at one go from the community. The malaria Test Positivity Rate (TPR) has seen a reduction from 5.95 per cent in 2017 to 1.24 per cent in 2021.

7.2. Education

7.2.1. Odisha has made effective policy interventions to promote and ensure inclusive, equitable and quality education. The state government has introduced several initiatives in the School & Mass education sector to revolutionise the school education paradigm of Odisha. Under the 5t initiative of the state government, the Department of School & Mass Education has taken up various steps to bring about equity in the education system, thereby increasing investment and improving efficiency. Mo School Abhiyan, a unique initiative of the state government, was included under the purview of Odisha's 5t Initiative on 12th January 2021. To rebuild the pride of Government schools, the state has launched a unique initiative, called 5t - High School Transformation Programme: "Transformation towards Aspiration" under Mo School Abhiyan. The State Government has taken extensive steps to mobilise CSR funds from different corporate houses to the tune of INR 796.5 crores against which 2X matching grant is provided under Mo School Abhiyan. In the first phase, 781 schools have been selected, 2272 schools in the second phase and 2065 schools in third phase. Apart from funds have also been mobilised from OMBADC and DMF for 1762 schools. Besides, the budget allocation of school education, higher education and ST, SC, and technical education department has increased from INR 18,404 crore in 2017-18 to INR 27,324 crore in 2022-23, registering a growth of 48.5 per cent over five years.

The State Government has mobilised INR 796.5 crores CSR funds from different corporate houses against which 2X matching grant is provided under Mo School Abhiyan to the selected 781 schools in the first phase, 2272 schools in the second phase and 2065 schools in third phase.

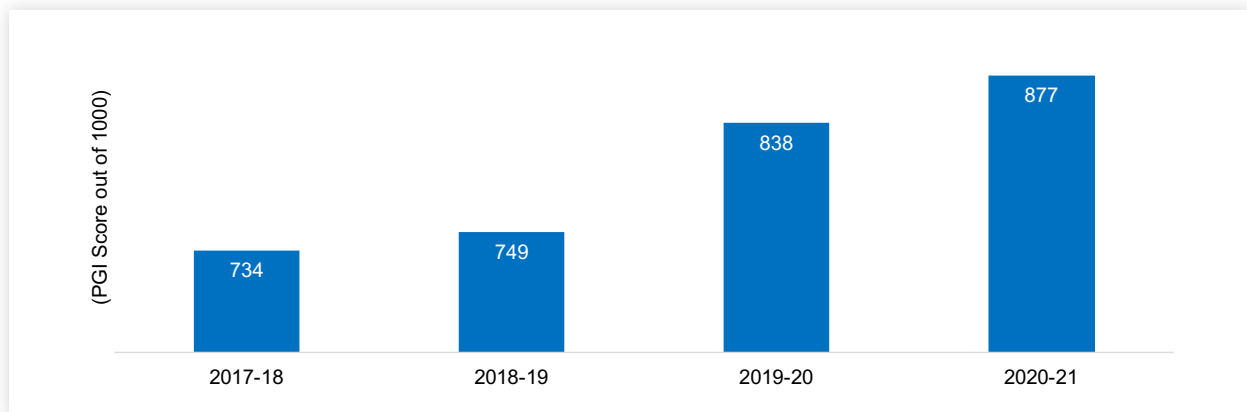
7.2.2. Odisha is leading in the adoption and implementation of SDGs related to education. In order to ensure inclusive and high-quality education for all and to encourage lifelong learning, the Government is committed to achieving SDG 4 for education by 2030. Universal access to a quality higher education, early childhood development and universal pre-primary education are accorded priority in the Government plan, policy, and action. Promotion of an effective learning environment, provision of scholarships, engagement of qualified educators and development

of adequate infrastructure is being emphasised upon. The Government of Odisha has launched Mukhya Mantri Sikhya Puraskar to encourage healthy competition and recognition of excellence for the transformed schools and other schools of the state. These awards will be presented every year to 50,000 students, 1500 teachers and other key stakeholders for their contribution towards the greater cause of strengthening the school education ecosystem of Odisha. The implementation of Right to Education Act, 2009 (RTE), Odisha Right of Children to Free and Compulsory Education Rules, 2010, along with implementation of High School Transformation Programme paves the way forward to achieve the desired education outcomes in the school education sector.

I. Improvement in Performance Grading Index (PGI)

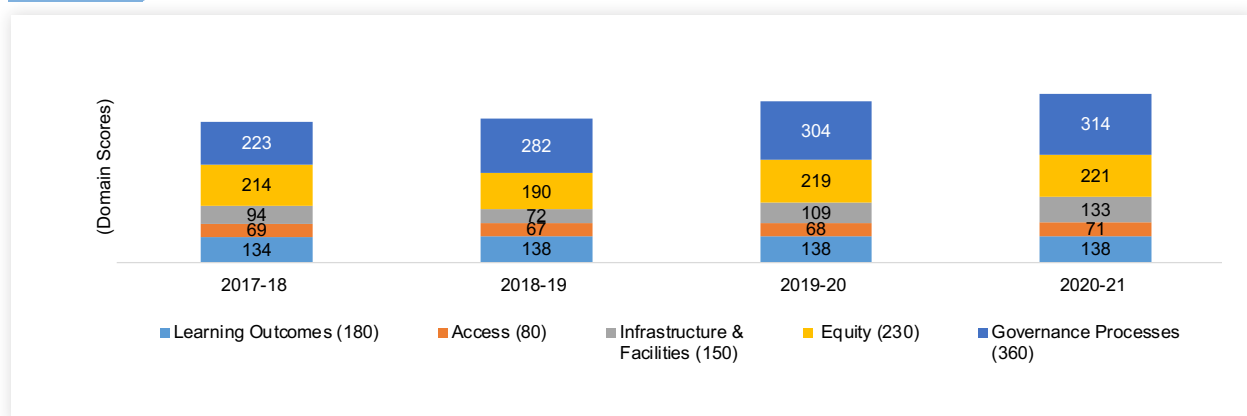
7.2.3. The Performance Grading Index (PGI) report of Government of India includes two categories such as outcomes and governance management under which five important domains are included such as learning outcomes, access, infrastructure and facilities, equity, and governance process. Figure 7.9 shows Odisha's performance on PGI. Due to significant development in the educational infrastructure and increased enrolment, the State's PGI score has increased. In 2020-21, Odisha's PGI has improved by 39 points over the year 2019-20. The domain wise improvement of PGI scores is shown in Figure 7.10.

Figure 7.9 The Overall PGI Scores During 2017-18 to 2020-21 - Odisha



Sources: Performance Grading Index (PGI) 2020-21, Ministry of Education, Govt. of India

Figure 7.10 Domain Wise Improvement of PGI Scores During 2017-18 To 2020-21 - Odisha



Sources: Performance Grading Index (PGI) 2020-21, Ministry of Education, Govt. of India

7.2.4. Figure 7.10 reveals that there is substantial improvement in the school governance process domain and the score has increased from 223 in 2017-18 to 314 in 2020-21. Similarly, due to infrastructure development, improved accessibility and provision of equitable school education facilities, the relevant domain scores have also increased. Moreover, enrolment rates, completion rates and other physical infrastructure such as classroom construction, drinking water infrastructure, restroom infrastructure and teacher hiring are significant thrust areas where development has been observed. Additionally, the ideas of Mo School, Mo College, and the model classrooms represent a step in the right direction.

II. Increasing literacy rate in Odisha with reduced gender gap

7.2.5. Literacy holds the key to enhance personal knowledge and acquire new abilities in order to catch up to the varying rate of human progress in the increasing, complicated, and changing technological environment. Over time, Odisha's literacy performance has been improving significantly. Odisha's literacy rate was 72.9 per cent as per Census 2011. An increase of 9.8 percentage points over the previous ten years has been recorded. The state's literacy rate is at par with the national average (72.99 per cent). In 2011, 64 per cent of women were literate in Odisha which was close to the national average of 65.5 per cent. The gender gap in literacy rate has decreased substantially from 24.9 percentage points in 2001 to 17.6 percentage points in 2011. According to the 71st round of the National Sample Survey (2014), the literacy rate in Odisha was 75.5 per cent overall, with male and female literacy rates of 83.2 per cent and 67.8 per cent, respectively indicating a gender gap of 15.4 percentage points. Further, as per the NSS 75th round survey (2018), the overall literacy rate in Odisha was 77.3 per cent with male and female literacy rates at 84.0 per cent and 70.3 per cent respectively with a gap of 13.7 percentage points.

State Government established residential schools for tribal students, 314 "Odisha Adarsha Vidyalaya" enrolled 1.32 lakh girl students under the 'Odisha Girls' Incentive Programme'.

7.2.6. The improvement in literacy rates is an outcome of the State Government's ongoing efforts to boost educational access and standard. Major initiatives that were undertaken by the State Government include the establishment of residential schools for tribal students particularly for girls in tribal dominant areas establishment of 314 number of "Odisha Adarsha Vidyalaya (OAV)" in Blocks and one iconic Odisha Adarsha Vidyalaya in Bhubaneswar, roll-out of Mo School Abhiyan for Elementary, Secondary as well as Higher Secondary schools and enrolment of 1.32 lakh girl students under the 'Odisha Girls Incentive Programme'.

Box 1: OAVS: Scripting History in School Education-Odisha

The Odisha Adarsha Vidyalaya Sangathan (OAVS) is providing free quality education in English to students, especially from semi-urban and rural areas, from across the state. Total 315 Odisha Adarsha Vidyalayas (OAVs) have been made operational. During the academic session 2022-23, 1,00,253 students are in OAVs out of which 58,343 are girls and 41,910 are boys. Eighty-five KGBV Type-IV Girls' hostels are functional within the premises of OAVs wherein 6,028 girl students are residing to continue their study in a holistic educational environment.



95.71 per cent and 68.51 per cent of students passed Class X and Class XII respectively in the CBSE Board Examinations. Out of these, 1052 students and 82 students secured 90 per cent and above in Class X and XII respectively. Coaching and hostel facilities are free of cost for 500 meritorious students of Iconic OAV, Bhubaneswar. Ten students from various OAVs qualified in examinations like JEE, NEET & NDA and took admission in institutions like IIT Dhanbad, IIT Patna, IIT Bombay, NIT Rourkela, NDA Pune, MKCG Medical College and PRM Medical College.

Odisha Adarsha Vidyalaya Sangathan bagged Skoch Award (Silver) for student skills. OAV Ranibhol, Mayurhanj and OAV Hatiota, Ganjam ranked among 10 best schools as per Education World India School Rankings, 2022. OAVS celebrated its 8th State Level Foundation Day at Vidyalaya, District, Zonal and State level in a befitting manner.

A. Elementary and Secondary education

7.2.7. Elementary and Secondary education equip the students with a fundamental understanding of numerous topics, the ability to think critically and creatively, and learn practical life skills. It also plays a crucial role in achieving SDG 4. Provision of scholarships, recruitment of qualified teachers and educators and the development of adequate infrastructure contribute towards the development of Elementary and Secondary education. The Government of Odisha is committed to foster quality infrastructure and human resources in this area.

7.2.8. Gross and Net enrolment ratio at primary and upper primary levels have consistently improved. The success of universalisation of education is measured using the ratio of gross and net enrolment. The term "Gross Enrolment ratio (GER) refers to the proportion of all students enrolled at a given level of education to the population in the relevant age group, whereas the term "Net Enrolment Ratio" (NER) only considers students who fall within the designated age range (6-11 years for primary and 11-14 years for upper primary level). GER and NER for the State stands at 92.26 per cent and 83.06 per cent respectively in the year 2020-21. Similarly, GER and NER at upper primary level is 98.03 per cent and 68.24 per cent respectively for the year 2020-21 (Sources: OSEPA).

School enrolment and enrolment of women in higher education shows a steady rise. Govt.'s focus has remained building a healthy and educated society and creating an empowered state.

Box 2: Gifting A Chance to Fly High in The Sky of Life: Government High School, Kalimela, Malkangiri

Established in the year 1979, Kalimela Government High School in Malkangiri district has witnessed change over the years. From its humble roots it has now blossomed into a holistic educational space under the 5t High School Transformation Programme of Odisha Government.

The school has adapted to the need of the hour where along with conventional teaching methods, it has also made ICT based interactive sessions a part of its pedagogy. This has not only increased the Gross



Enrolment Ratio (GER) but also helped in bringing back 'out of school' students into the fold of education. Students now enjoy the interactive and fun-filled learning sessions with the introduction of smart classrooms which also help them develop a better understanding of the subject matter. The establishment of a well-equipped science laboratory has provided the children with a hands-on opportunity for practical demonstration. The newly constructed E-library has also added value to the academic excellence of the students. Similarly, the conspicuous increase in the girl student's enrolment rate can be attributed to various interventions like proper care for sanitation and security in school premises like installation of sanitary napkin machines, incinerators and CCTV cameras.

Sri Jagabandhu Satrusulya, Assistant Teacher, Kalimela Government High School quotes, "With the kind support the State Government is offering, we have been able to readily amalgamate the conventional mode of teaching and learning with the digital mode. I believe this unified mode of education will lead our students on the path of progress."

Dropout rates

7.2.9. Dropout rates measure the percentage of students who fail to complete a level of education or do not enrol for the following level. These draw attention to the flaws and gaps in the educational system. Although dropout rates at the primary and upper primary levels in the State change over time, the average dropout rate for the academic year 2020–21 and 2021-22 were found to be zero, showing that pupils were successful in enrolling to the next level (Sources: Directorate of Elementary Education and OSEPA)

7.2.10. In 2021-22, the Secondary school students drop out rate was 27.2 per cent for which the Government is undertaking special measures to strengthen the infrastructure. Odisha has established 182 Kasturba Gandhi Balika Vidyalayas (KGBV) for 32150 students in 23 districts for ST and SC girls, 85 residential girls hostel furnished in OAVs for 8500 students, 21 Residential Hostels for 1297 urban deprived children in 12 districts, 20 Hostels for 551 Out of School Children in 10 districts and 147 seasonal hostels for 6823 migrant children in the districts of Bargarh, Bolangir, Kalahandi, Nuapada, Mayurbhanj, Balasore, Cuttack and Khordha during 2022-23.

7.2.11. To address the problem of language barrier faced by tribal children, mother tongue based multilingual education (MLE) has been introduced at the primary level. In 17 tribal dominant districts with 1485 schools, MLE is operating in 21 tribal languages in 2022-23. To teach the students in their mother tongues, 3200 Shikhya Sahayaks for the MLE programme are placed in MLE adopted schools.

7.2.12. Pupil Teacher Ratio (PTR) is the ratio of students to teachers in a given school year. According to the RTE Act, the PTR in the primary and upper primary levels should be 30:1 and 35:1, respectively. Odisha's PTR for these levels was better than the required standards at 29:1 and 22:1, respectively. PTR in Odisha at the Secondary level stood at 22:1.

7.2.13. The State Government has upgraded 106 High Schools to Higher Secondary Schools to ensure access and arrest drop outs at the Higher Secondary level.

The state has established 182 KGBVs for 32,150 students in 23 districts for ST and SC girls, 85 residential girls hostel furnished in OAVs for 8,500 students, 21 Residential Hostels for 1,297 urban deprived children in 12 districts, 20 Hostels for 551 Out of School Children in 10 districts and 147 seasonal hostels for 6,823 migrant children during 2022-23.

Skill Development, Vocational and Technical Education

7.2.14. Vocational and technical education play a significant role in contributing towards innovation and economic development in a knowledge-driven economy. Therefore, attention must be leveraged on improving the quality of human capital with a focus on skill development, and generation, accumulation, diffusion, and usage of knowledge and technology. Vocational and technical education that places an emphasis on skill development is crucial for rapid economic development in a state like Odisha in a world of frequently evolving technologies, job automation and growing globalisation. The State's growing need for skilled labour in recent years necessitates the need for skill development of children as well. To improve employability, efforts are being made to ensure that the youth would be imparted with skills. There are three Government Technical Universities, (Biju Patnaik University of Technology (BPUT), Rourkela, Veer Surendra Sai University of Technology (VSSUT), Burla, Odisha University of Technology and Research (OUTR), Bhubaneswar,) four Government Engineering Colleges (Indira Gandhi Institute of Technology, Sarang, Dhenkanal, Parala Maharaja Engineering College, Berhampur, Government College of Engineering, Keonjhar and Government College of Engineering, Kalahandi) and two Government Management Colleges (College of IT & Management Education, Bhubaneswar and Institute of Management and Information Technology, Cuttack) in Odisha.

7.2.15. The College of Engineering and Technology (CET), Bhubaneswar has been upgraded to a Unitary Government Technical University in the name of Odisha University of Technology and Research (OUTR), Bhubaneswar in October 2021 to strengthen Graduate and Post-Graduate Education, and Ph.D. programme in the field of engineering and technology in the State. Further to upgrade OUTR, Bhubaneswar to a world class university, Hon'ble Chief Minister has approved a budgetary provision of INR 1500 crore to be utilised over a span of 5 years.

7.2.16. Two Centers of Excellence (CoE), one on Artificial Intelligence and Machine Learning was established in CET, Bhubaneswar in association with Tech Mahindra Ltd. and the other on Space Research and Innovation in VSSUT, Burla is in collaboration with ISRO. This Space Research Center is named as Surendra Sai Space Innovation Center. Table 7.8 lists the technical courses provided by various Government and Private Technical and Professional Institutions, along with the intake capacity and the number of students admitted in 2021–22.

Table 7.8 Technical Institutions: Intake capacity and Admitted Students under various Programme (in Nos.) - Odisha

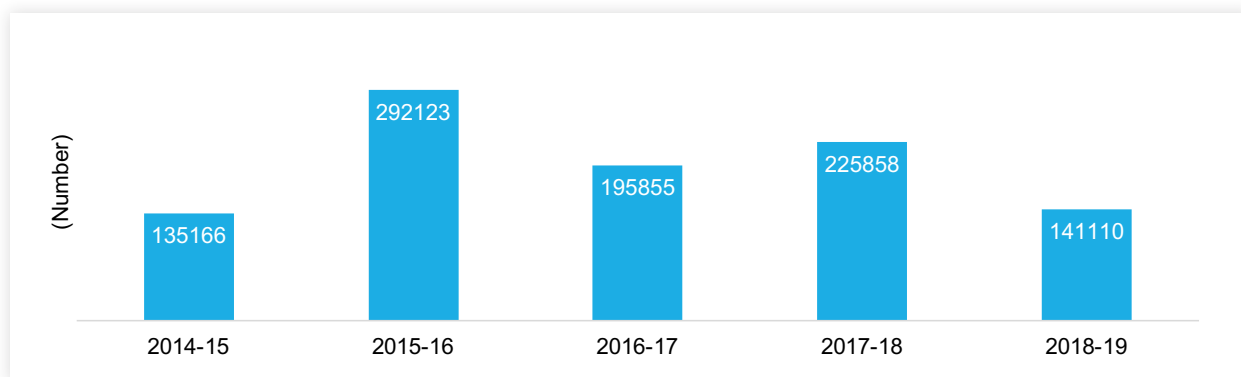
Courses	Regular	Lateral Entry	Total
B.AAC	43	0	43
B.Arch	70	0	70
B.Pharm	2331	173	2504
B.Tech	10942	10190	21132
IMBA	192	0	192
M.Arch	10	0	10
M.Pharm	489	0	489
M.Sc	96	0	96
M.Sc.(I)	26	0	26
M.Tech	703	0	703
MBA	8779	0	8779
MBAP	39	0	39
MCA	2312	0	2312
Total Admission			36395

Source: Skill Development and Technical Education Department (Activity Report 2021-22)

Skill Development through Chief Minister’s Employment Generation Programme

7.2.17. The Government of Odisha has launched Chief Minister’s Employment Generation Programme covering 11 lakh youth (150 from each Gram Panchayat) for imparting employability skill training over a period of five years (2014-15 to 2018-19). Different Departments implement their own scheme for their target groups in convergence with Central and State sector schemes. Ten major Departments are engaged in skill development activities. They include Skill Development and Technical Education Department through Directorate of Technical Education and Training and Odisha Skill Development Authority; Panchayati Raj Department, ST&SC Development Department, Housing and Urban Development Department, Agriculture and Farmers’ Empowerment Department, Handloom, Textiles and Handicrafts Department, Commerce & Transport Department, Fisheries and Animal Resource Development Department, Information and Public Relation Department, Tourism Department, etc. Under this programme, Approximately 10 Lakhs youth have been trained during the first phase from 2014-15 to 2018-2019. The year wise achievements are given in Figure 7.11.

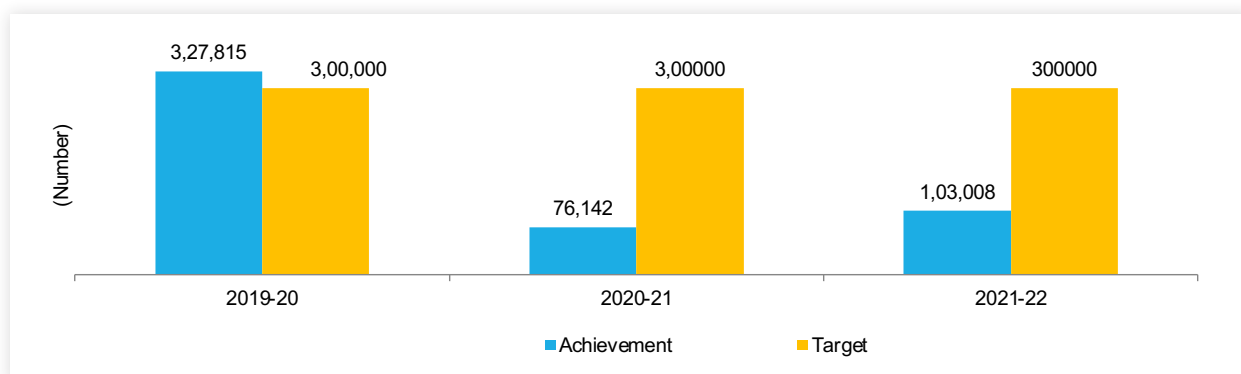
Figure 7.11 Year wise target and achievements of Skill Development Training - Odisha



Source: Skill Development and Technical Education Department, Odisha

7.2.18. The Odisha Government has further set a target of skilling 15 lakh youth in the next 5 years (2019-20 to 2023-24) with a target of training 3 lakh youth per annum. In 2019-20, under this programme 3,27,815 youth have been trained. In 2020-21, despite the suspension of training activities between April to October, 76,142 youth have been trained under the programme. Similarly, in 2021-22, 1,03,008 youth have been trained under the programme even though the training activities were suspended twice on account of COVID (between 22.4.2021 to 13.7.2021 and again from 10.1.2022 to 7.2.2022) (Figure 7.12).

Figure 7.12 Year wise target and achievements of Skill Development Training (2019-20 to 2021-22) - Odisha



Source: Skill Development and Technical Education Department, Odisha

Box 3: World Skill Centre

Odisha aspires to be the most industry friendly and investment attractive state in India. In the year 2012, NSDC prepared a skill gap report that caught the attention of the State Government early as they knew that in future the industries will shift where there is talent availability. Hence Government of Odisha created an organisation called Odisha Skill Development Authority which was mandated to Fix, Scale and Sustain the Skilling ecosystem of the state. Out of many things that was transformed in the state in last few years, the scaling of the skill ecosystem is the most coveted one. Thus came the idea of creating a World Skill Center which would act as a Hub for the entire skilling ecosystem and constantly upgrade the quality of the skilling in terms of service delivery. ITEES, Singapore has been identified as a Technical / Knowledge partner. The center aims to deliver skill development in advanced areas to 1.51 lakh youth through long-term, short-term, entrepreneurship training, etc. It will also act as an incubation ground to build the faculty capacity of the skilling ecosystem by constant induction and release of faculties into WSC.

The main objectives of the WSC are:

- Have a state-of-the-art training infrastructure with the latest training equipment and facilities.
- Focus on hands-on practical training for students in an authentic workshop/lab environment.
- Create a world-class talent pool and top-notch graduates for the Indian industry as well as international players.
- Be differentiated from the mainstream training providers through the injection of innovative practices such as Design Thinking and environmental sustainability.

With support from ITEES as program design and implementing partner, planning and implementation of programme by OSDA, Government of Odisha assures the importance of the programmes and drives them to success with the objective of making “Skilled-in-Odisha” a global identity.

**B. Higher Education**

7.2.19. Higher education is crucial for advancement of humanity, promotion of sustainable economic and social growth and for optimum usage of knowledge, technology, and skills. It can further help in enhancing quality of life and human progress by finding solutions to pressing societal and global concerns.

Increasing number of universities

7.2.20. Odisha has converted three Autonomous Colleges into Universities in 2020. These include Madhusudan Law University in Cuttack, Rajendra University in Bolangir, and Kalahandi University in Kalahandi. By the end of 2021-22, there were 14 public universities and 6 private universities under the aegis of the Higher Education Department. In addition, there are 6 public universities and 3 private universities under other Departments like Skill Development & Technical Education (SD&TE), Health & Family Welfare Dept (H&FW) and Agriculture & Famer's Employment (A&FE) Department. For establishment of Odia University, 9.61 acres land has been acquisitioned and construction works were initiated by Works Department.

Proactive measures of Odisha State Higher Education Council (OSHEC)

7.2.21. Odisha State Higher Education Council (OSHEC) was established in the year 2017 and since then it has undertaken many proactive steps for improving the quality of higher education. These include- introduction of biometric attendance in all colleges, roll-out of common syllabus for UG programmes, examination reforms and question banks, initiation of proctorial system and provision of fellowships to research scholars and seed fund to young faculties of Universities and Colleges in the State.

Recruitment drive for universities

7.2.22. As per the amendment provision of the Odisha Universities Act, 1989, in the year 2020, the Odisha Public Service Commission has been requested to take up selection of 504 Assistant Professors, 320 Associate Professors, and 183 Professors. Out of this, 154 Assistant Professors, 41 Associate Professors, and 20 Professors from different disciplines have been allotted to various universities during 2021-22. To fill up non-teaching posts, 158 Junior Assistants and 10 Junior Stenographers have been allotted to different State Public Universities recommended by SSC, Odisha.

Odisha has a strong base of Higher Educational Institutions (HEIs)

7.2.23. Many HEIs have been established in Odisha to address the State's growing need for higher education. According to the All-India Survey on Higher Education, there are now 24 colleges per lakh people (of age between 18–23 years) in Odisha in 2019–20, which increased from 23 in 2018–19. The average colleges per lakh people for all India was 30 in 2019–20 and 28 in 2018–19.

Table 7.9 Higher Education Statistics at a Glance - Odisha

Particulars	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total Enrolment in Higher Education	7,68,185	8,26,820	9,14,675	9,72,285	10,15,777	10,19,192	9,94,929	9,39,433
Enrolment of Female (per cent)	45	45	46	45	46	45	47	47
GER all Categories	16	18	20	21	22	22	22	21
GER Male	18	20	22	23	24	24	23	21
GER Female	15	16	18	19	20	20	20	20
GER SC	11	12	15	17	19	20	20	20
GER ST	7	8	9	11	13	13	14	14
Gender Parity Index	0.82	0.81	0.83	0.82	0.85	0.82	0.88	0.94
Pupil Teacher Ratio	19	20	21	26	28	27	25	24

Source: AISHE 2020-21

Increasing number of enrolments in HEIs

7.2.24. There has been an increase in higher education enrolment in the State across all categories. Total enrolment in HEIs was around 7.68 lakh in 2013–14 (Male: 4.20; Female: 3.48) which rose to 9.95 lakh (Male: 5.29; Female: 4.66) in 2019–20. Table 7.9 provides a basic overview of key statistics relating to State's higher education system.

7.2.25. Odisha's Gross Enrolment Ratio (GER) in higher education has been on a rise since the last decade. The GER was 16.4 in 2013–14 which increased to 21.7 in 2019–20. The GER for males during 2013-14 was 18 which increased to 23 during 2019-20 and during the same period the GER for females increased from 14.8 to 20.3. During 2019-20, the GER for SC and ST was 20 and 14 respectively whereas the national level GER for SC and ST were on the higher side. The Government has introduced scholarships and fellowships to improve GER among females and SC/ST social groups.

Increasing Gender Parity Index in the State

7.2.26. The Gender Parity Index (GPI) measures how well men and women are represented in higher education. In Odisha, the GPI increased from 0.78 in 2011 to 0.88 in 2019–20. The GPI rates in the State for scheduled castes (0.80) and scheduled tribes (0.85) are found to be lower than the State and national averages. To bridge the GPI gap, the State Government has adopted various policy measures. Scholarship programmes and self-defence programme for girl students at HEIs were initiated to promote higher education among women.

III. Increasing Access to Education among ST and SC children

7.2.27. Odisha has introduced several measures to improve access to education among ST and SC children including provision of hostel facilities and scholarships among others. These initiatives have led to an improvement in access to education among ST and SC children in the state.

A. Hostel Facilities for the ST and SC students

7.2.28. Odisha is one of the leading States in providing residential schooling facility to tribal students. The State has 1,737 residential schools and about 5500 hostels for ST and SC students in the State which provide primary to Senior Secondary education to more than 4.50 lakh ST/SC students of which 2.75 lakh are girls. In the last 16 years, the number of hostels increased by more than 250 per cent. About 70 per cent of these residential schools are concentrated in 12 tribal dominated districts. These schools have a very high proportion of ST students (81 per cent) followed by SC students (11 per cent) and others (8 per cent). The increasing thrust on girls' education is evident from the high proportion of girls (60 per cent) in the total enrolment in these schools. There has been significant thrust on increasing the availability of hostel facility for ST and SC girls, which is one of the flagship programmes of the Government. This also registered a substantial increase in the female literacy among the ST population.

7.2.29. The provision of residential facilities greatly address the challenges of spatial isolation and for facilitating safe and easy access to educational facilities. Besides, they positively impacted the enrolment and retention of tribal students and contributed to the continuance of education and completion of schooling by the disadvantaged ST and SC students. In addition, Government funded residential facilities also reduced the economic burden of the disadvantaged tribal families by supporting their children's education related expenses. A list of educational institutions that fall under the purview of the SC & ST Development Department is given in Table 7.10.

Table 7.10 Educational institutions under ST & SC Development Department in FY 2021-22 - Odisha

Category	No. of Schools
Ekalavya Model Residential Schools (EMRS)	32
Higher Secondary Schools (HSS)	62
High schools (Co-ed)	234
Girls' High Schools	188
Ashram Schools	716
Secondary Teachers Training Schools	02
Residential Sevashrams	04
Educational Complex for PVTGs (15 ECs upgraded to High Schools)	04
Sevashrams	490
Kalinga Model Residential Schools (KMRS)	04
Biju Pattnaik Adarsha Vidyalaya (BPAV)	1
Total	1737

Source: ST & SC Development Department, Odisha

B. Scholarships

7.2.30. Scholarships by the State Government for incentivising educational attainment among tribal students catered to more than 12.87 lakh ST and SC students at pre-matric level and about 4.15 lakh at post-matric level during 2021-22.

7.2.31. A special Financial Assistance Scheme to ST students has been initiated during 2014-15. Under this scheme, the entire cost of education for ST students pursuing their studies in National Level Institutions is borne by the State Government.

7.2.32. Odisha Girls Incentive Programme (OGIP) is an add-on cash incentive programme aimed at increasing the participation of ST and SC girl students in Secondary Education. Under OGIP, 1,32,994 students have been benefitted during 2021-22 with financial assistance of INR 12.63 crore. The girl students of Class IX and X are provided with a cash incentive of INR 950 per annum.

Pre-Matric Scholarship (OBC)

7.2.33. In the year 2021-22, a total expenditure of INR 14.69 crore has been made towards Pre-Matric Scholarship disbursement to 95,769 OBC/SEBC students. Out of INR 14.69 crore, Centre's share is INR 5.97 crore (40.61 per cent), and State's share is INR 8.72 crore (59.39 per cent).

Post Matric Scholarship (OBC)

7.2.34. During the year 2021-22, a total expenditure of INR 79.79 crore has been made for disbursement of Post-Matric Scholarship to 1,76,209 OBC/SEBC students. Out of INR 79.79 crore, Centre's share is INR 46.46 crore (58.23 per cent) and State's share is INR 33.33 crore (41.77 per cent).

Dr. Ambedkar Post-Matric Scholarship (EBC)

7.2.35. During the year 2021-22, a total expenditure of INR 4.97 crore has been disbursed under Dr. Ambedkar Post-Matric Scholarship to 4563 students belonging to Economically Backward Classes (EBC). Out of INR 4.97 crore, Centre's share is INR 3.32 crore (66.81 per cent) and State's share is INR 1.65 crore (33.19 per cent).

C. SARGIFUL

7.2.36. Sargiful was launched in the year 2012 and is a regular annual event for students studying in schools run under the aegis of ST & SC Department. This Children's Fair is an endeavour of the ST and SC Development, Minorities and Backward Classes Welfare (SSD) Department, Government of Odisha to provide children with the opportunity and platform to foster creativity and imagination and facilitate exposure to different art forms, scientific experiments, and many other similar fields. This festival was organised this year by OMTES (Odisha Model Tribal Educational Society) as the Nodal Agency. Students participated in eleven events under this festival in four categories i.e., Sub-Junior, Junior, Senior, Super Senior. The programme also enables the students to meet people from different backgrounds. The State Level Winners are given participation certificates as a token of encouragement. Besides, Sargiful Magazines are also prepared.

More than 17 lakh SC and ST students have received scholarship both at pre-matric and post-matric level during the year 2021-22. Educational Schemes like Anwasha, Akanksha, Mission Suvidya, etc. helping the SC/ST students in attaining better education.

D. Mission SUVIDYA

7.2.37. To spread the joy of literacy and numeracy to tribal children in Odisha, SUVIDYA was launched in December 2019. The ST & SC Development, Minorities & Backward Classes Welfare Department, Odisha has signed a MoU with Akshara Foundation for Mission SUVIDYA in the presence of Hon'ble Chief Minister of Odisha, to improve learning outcomes of the students.

E. Mission ANWESHA

To provide quality education to SC and ST students, ANWESHA was launched by the State Government in Partnership with urban educational institutions. The scheme provides quality education to ST/SC students in 165 good private schools across 17 districts. Besides, free lodging and boarding facilities are being provided to students, including school fees, uniforms, study material, etc. Under this scheme, over 18,887 ST and SC students were given pre and post matric scholarships during the year 2021-22.

F. Mission AKANKSHA

7.2.38. AKANKSHA programme was launched to provide hostel facility in urban areas to ST/SC students studying in post-matric level courses. The programme provides free boarding and lodging facilities to ST/SC students pursuing

post-matric levels of education (like Professional, Technical, Degree and Plus Two courses in Bhubaneswar). Hostels in Bhubaneswar accommodate 550 students. The programme has been expanded to Berhampur, Sambalpur, and Rourkela. Proposals for setting up another 6 hostels is in the pipeline.

G. Odisha State Scholarship Portal

7.2.39. The objective of the scheme is to provide Post Matric Scholarship to eligible SC/ST students through Direct Benefit Transfer (DBT) mode. During 2021-22, 1.81 lakh ST and 2.33 lakh SC students have been benefitted through Odisha State Scholarship Portal. Out of the beneficiaries 52 per cent are boys and 48 per cent are girls.

7.3. Empowerment of Scheduled Castes and Scheduled Tribes

7.3.1. Odisha occupies a unique position among the Indian States and Union Territories for its rich and diverse tribal population. The scheduled tribes (ST) and scheduled castes (SC) constitute about 40 per cent of the State's total population (ST-22.85 per cent and SC-17.13 per cent as per 2011 census). About 44.7 per cent of area in Odisha has been notified as scheduled area. It extends over 119 blocks in 13 districts, covering ST population of about 68 per cent of the total tribal population in the State. Out of 635 tribal communities in India, 62 are found in Odisha and 13 of them are Particularly Vulnerable Tribal Groups (PVTG). There are 93 Scheduled Caste communities in the State.

I. Special Development Councils

7.3.2. The Government has set up Special Development Councils (SDCs) in nine districts which have the highest concentration of tribal population. These districts are Mayurbhanj, Kenonjhar, Sundergarh, Kandhamal, Gajapati, Koraput, Rayagada, Nabarangpur and Malkangiri. They cover 117 blocks, 2,022 Gram Panchayats, 18,687 villages with about 14 lakh ST households and 63.43 lakh ST population. The Special Development Councils have representation from each tribe residing in the district. It is a state plan scheme for tribal development.

7.3.3. The Special Development Councils aim to conserve, document and propagate tribal culture, indigenous knowledge systems, and tribal resources. They also aim to transform the indigenous knowledge and unique culture into a means of livelihood. The SDCs organise exposure visits on various development issues, promote tribal languages and dialects for development communication and organise sports and youth activities. Above all, these SDCs aim at filling a critical gap to ensure last mile connectivity and provision of other basic minimum needs, which are otherwise difficult to obtain from normal development programmes.

7.3.4. The following projects have been completed by nine SDCs as on 31.03.2022 from the projects approved by them out of funds for 2017-18, 2018-19 and 2020-21 (only for Malkangiri and Sundergarh districts):

- i. 4531 sacred groves have been completed out of 4684 proposed.
- ii. 789 tribal weekly markets have been completed out of 828 identified.
- iii. Total number of 344 block level cultural festivals have been organised in 117 blocks. Out of the 9-district level cultural festivals targeted to be held, 6 have been completed.
- iv. As many as 1773 Tribal cultural clubs have been identified out of which 1493 have been completed.
- v. 1604 clubs were provided with musical instruments against a target of 1613
- vi. 716 Dance Troupes have been identified, empaneled, and were provided with dance costumes.
- vii. About 10,605 tribal delegates have undertaken exposure visits out of 10,864 delegates targeted as a confidence building measure.

- viii. Artisan Identity Cards have been issued to 36,309 Tribal artisans.
- ix. Printing of 21 Tribal Bilingual Dictionaries and 21 Tribal Trilingual Proficiency Modules have been completed and these books have been distributed in all 30 districts.
- x. Around 3019 Tribal Youth Clubs have been identified for providing sports kits for promotion of sports. Sports Kits were distributed to 2249 Youth Clubs.
- xi. 42 Tribal Resource centres have been constructed in Sundergarh district out of 49 that were decided to be taken up.
- xii. Land has been identified for construction of Tribal Museums in all the 9 SDCs districts and construction of boundary walls for the museums has been completed in 5 districts namely Gajapati, Kandhamal, Malkangiri, Nabarangpur and Sundargarh.

II. Forest Rights Act (FRA), 2006

7.3.5. Odisha has implemented the Scheduled Tribes and Other Traditional Forest Dweller (Recognition of Forest Rights) Act, 2006. As on 31st March 2022, 6,27,998 Individual Forest Rights, 9,214 Community Rights and 6,068 Community Forest Resource Rights claims were received. Out of these, 4,52,164 Individual Forest Rights, 4,231 Community Rights and 3,393 Community Forest Resource Rights titles have been distributed. Out of 4,52,164 Individual Forest Rights vested with the claimants, 3,51,253 title holders have benefited from with convergence of various schemes of the Government and 2,57,523 titles have been corrected with respect to RoRs. 14 Forest Villages/ Un-surveyed villages/ Habitations etc. have been converted into Revenue Villages through Notification of the Director, Land Record and Surveys, Cuttack.

7.3.6. A new State Sector Scheme titled "Mo Jungle Jami Yojana" has been mooted with the objective to enable saturation of rights recognition process under FRA, 2006. In principle approval has been received from the Finance and the Planning & Convergence Department.

III. Protection of Civil Rights of SC and ST

Legal Aid Assistance

7.3.7. Legal aid is being extended to SCs/STs to fight cases for establishing their rights, titles, interest, and possession over disputed land and also for cases under the PCR (Protection of Civil Rights) Act, 1955 and the POA (Prevention of Atrocities) Act, 1989. The State Government has opened 390 legal aid cells in 314 Block Head Quarters by engaging 697 legal retainers (30 in district headquarters, 46 in Sub-Divisional Headquarters and in 314 blocks of the State). The retainers have been trained to provide free legal services to ST/SC people. Besides this, the State Government has set up 3 special courts in Balasore, Bolangir and Cuttack for speedy trial of cases.

Inter-Caste Marriages

7.3.8. Cash incentive of INR 2.5 lakh is being provided for inter-caste marriages between SCs and other castes of Hindu communities to foster social integration and removal of untouchability. During 2021-22, 2,428 beneficiaries received INR 53.94 crore as incentives for inter-caste marriage and 2,768 beneficiaries received INR 27.2 crore as Monetary Relief under Atrocities Act.

Odisha PVTG Empowerment and Livelihood Improvement Programme (OPELIP)

7.3.9. OPELIP has been launched in 12 districts of Odisha viz. Malkangiri, Rayagada, Angul, Deogarh, Ganjam, Nuapada, Keonjhar, Sundargarh, Gajapati, Kandhamal, Kalahandi and Mayurbhanj covering 1,125 villages and 89 Gram Panchayats of 22 blocks. 17 micro projects are being implemented from 2016-17 to 2023-24 with a financial

outlay of INR 711.25 crore for 96,651 targeted households. Its objectives are to improve food and nutrition security, reduce poverty, support livelihood opportunities adopted by tribal communities, build the capacity of targeted households, improve their agricultural practices, promote income generating micro-enterprises, ensure access to education, health and other services and improve community infrastructure. During 2021-22, funds to the tune of INR 44.43 crore were utilised and for the benefit of 39,396 people under the scheme.

Mission Jeevika

7.3.10. The Ministry of Tribal Affairs provides funds under Special Central Assistance to Tribal Sub-scheme (SCA to TSS) as an addition to State Plan funds for Tribal Development in Odisha. This grant is basically utilised for economic development of tribals residing in the Tribal Sub-plan (TSP) areas. The livelihoods of rural "Scheduled Tribe" (ST) communities are mostly dependent on forest, agriculture and animal husbandry. Over the years, livelihood promotion initiatives for tribal communities were primarily undertaken through the 'Integrated Tribal Development Agencies' (ITDA), under the administrative control of ST and SC Development Department. A new cluster approach of taking a holistic view of the tribal livelihood ecosystem was launched in the year 2019 by promoting cluster-based diversified and gainful livelihoods to raise the income levels and thereby the living standard of the tribal communities.

7.3.11. ST & SC Development Department has been implementing "Livelihood Cluster Development Programme" since 2019 to ensure access to improved and sustainable livelihoods for tribal people in the Tribal Sub-Plan Blocks. Livelihood interventions suitable to the local conditions, available resources and capacities of the tribal communities are being taken up in clusters under Mission Jeevika. The broad objectives of the Mission Jeevika Livelihood Development Programme are:

- Holistic development of livelihood clusters through planned interventions to achieve the main objective of raising income levels and thereby living standards of the tribals.
- Under the cluster development programme, tribal beneficiaries shall be facilitated to take up market linked production of few identified livelihood interventions covering minimum of 50 acres for a farm-based cluster and minimum of 100 beneficiaries in case of any off-farm cluster in a contiguous patch.
- Development of Livelihood clusters will give sustainable competitive advantage of the identified activities through introduction of better production practices, scale of production, better access to quality raw material, skill development, inputs support and marketing assistance.
- Formation of cluster-based producer groups & registration under a suitable Act to protect their product collectivisation, processing, value addition, social and economic needs including marketing, etc.
- To increase the annual income of at least 200 families in identified TSP blocks by 30 per cent in the first year.
- To bring fallow land, wasteland, FRA land and other unutilised land under cultivation and making them more productive through cluster development initiatives.

7.3.12. The Annual Action Plan for Mission Jeevika aims to cover more than 1 lakh tribal families annually. Under this scheme, convergence of Special Central Assistance with National/ State flagship schemes such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), National Horticulture Mission (NHM), Rashtriya Krishi Vikas Yojana (RKVY), Biju Krushak Vikas Yojana (BKVY), etc. are being done for sustainable livelihoods and enhanced household income thereby raising the socio-economic status of tribal people. The various activities under this scheme include agriculture and horticulture development, farm mechanisation support, creation of irrigation potential, promotion of livestock, pisciculture, NTFP, Lac, rubber and sericulture, establishment of production processing units, provisioning of market facility along with financial assistance. training and input

support to Self-Help Groups and Farmer Producer Groups for various Income Generation Activities (IGA) in cluster mode.

Odisha Scheduled Caste and Scheduled Tribe Development Finance Co-operative Corporation Limited (OSDFC)

7.3.13. OSFDC was established in the year 1979-80 to take up various economic programmes for the benefit of the poor Scheduled Castes, Scheduled Tribes and Scavengers of the State. The following programmes are being implemented by OSFDC for livelihood and Skill Development of SC population in the State.

Bankable Income Generating Schemes

7.3.14. Under this scheme, OSFDC provides subsidy to Scheduled Caste Self Help Groups for implementation of different Income Generating Schemes through Banks across diverse sectors like Agriculture and Soil Conservation, Animal Husbandry, Fishery, Horticulture Development, Minor Irrigation, Industry Service and Business Sector. Under the programme, OSFDC pays back-end subsidy of 50 per cent of the unit cost subject to a ceiling of INR 10,000 per beneficiary for Self Help Groups. The subsidy would be 50 per cent of the cost of the scheme or per capita subsidy of INR 10,000 or INR 1.25 lakh for the whole group, whichever is lesser, and the rest of the unit cost comes from the Bank loan. From 2021-22 OSFDC has been implementing the programme in collaboration with Mission Shakti Department. During 2022-23, INR 651.80 lakh was utilised for this purpose.

Skill Development Training

7.3.15. OSFDC provides Skill Development Training to Scheduled Caste youth through different Government and reputed private training institutions free of cost as per the mandate given in SCA (Special Central Assistance) to SCSP (Scheduled Castes Sub-Plan) guideline. PRAYAS mandates providing Skill Development Training to ST, SC, OBC and Minority youth across the State. From the year 2021-22, this programme is being implemented by OSFDC as per the PRAYAS guidelines for ST & SC Development. Under this programme, it is stipulated to provide placement to 70 per cent of the Trainees post training completion are required to provide by the respective Training Institutions.

Infrastructure Development Programme

7.3.16. As per SCA guidelines, there is provision for utilisation up to 30 per cent of grants under SCA to SCSP for Infrastructural Development works in the villages with 50 per cent or more of SC population and lacking adequate infrastructural facilities to foster overall development of SCs. Infrastructural facilities for improving drinking water facilities, roads connectivity, electricity etc. are taken up under this programme. Besides, Infrastructure development of PMAGY villages is also given priority. During 2021-22, INR 393 lakh was utilised for this purpose.

Pradhan Mantri Adarsh Gram Yojana

7.3.17. The objective of the scheme is to ensure integrated development of selected villages with more than 50 per cent SC population, so that the minimum needs and access to basic services of all sections of the society are fulfilled so as to enable dignified living. The villages are selected by Ministry of Social Justice and Empowerment, Government of India based on their SC population. For overall development of villages both Central and State Governments grant funds on 50:50 ratio basis. For each village, a fund of 20 lakh each is provided by Central and State Governments. During 2022-23, INR 4452.68 lakh was utilised to develop 825 villages under this programme.

7.4. Women and Children Development Initiatives

I. Health and Nutrition

7.4.1. The nutritional status of women impacts child nutrition and as well as the health of the overall society. Without proper nutrition, women and their children are at an increased risk of getting affected by diseases. Maternal and child nutrition includes preconception, antenatal and postnatal maternal nutrition, women's nutrition throughout their reproductive years, as well as foetal, neonatal, and child nutrition. Implementation of supplementary nutrition programme, universalisation of Anganwadi services, initiation of pre-school education programme, and improved infrastructure has contributed towards an improvement in the nutrition indicators of Odisha.

A. Integrated Child Development Services (ICDS) Scheme

7.4.2. ICDS scheme caters to children under 6 years of age along with pregnant and nursing women. It comprises a package of six services to improve the nutrition and health status of beneficiaries. The services include Supplementary Nutrition Programme (SNP); Early Childhood Care and Education (ECCE); immunisation; health check-ups; referral services and Nutrition and Health Education (NHED)

B. Supplementary Nutrition Programme (SNP)

7.4.3. Under SNP, Take Home Ration (THR) is provided in the form of chhatua and eggs to children (between 6 months to 3 years), pregnant, and nursing women. They are provided with 12 eggs per month. Additionally, severely underweight children, pregnant and nursing women are provided with laddus/chikkis. Children of the age group 6 months to 3 years are also provided dry ration for consumption through other recipes. Food diversity is being promoted through introduction of millets in such recipes. Pre-school children (3-6 years), who attend Anganwadi Centres (AWCs) are provided morning snacks, eggs, and Hot Cooked Meals (HCM) every week. Fortified rice has been introduced for the 1st time across the State under HCM from FY 2021-22.

C. Allocation for ICDS and Nutrition

7.4.4. Odisha is the first State to introduce Nutrition Budget to assist key Departments such as Women and Child Development, Mission Shakti, Health & Family Welfare, Food Supply & Consumer Welfare and School & Mass Education for allocating resources in the budget for nutrition specific (direct nutrition centric) and nutrition sensitive (indirect nutrition centric) programmes and schemes. The State tabled the Nutrition budget consecutively in third year i.e., Financial Year 2022-23. Total allocation for nutrition has increased over the years and the State has also made significant progress on various nutritional indicators. Universalisation of Anganwadi services, implementation of SNP, ECCE and improved infrastructure has contributed to achieving progress. Incidence of malnutrition in the State has declined across all three parameters like wasting, stunting and underweight as per NFHS-5 report. There has been a 4.7 percentage point (PP) decline in underweight status from NFHS-4 (34.4 per cent) to NFHS-5 (29.7 per cent) whereas the national average reduction is 3.7 percentage point. Likewise, there has been a 3.1 percentage point decline in stunting from NFHS-4 (34.1 per cent) to NFHS-5 (31.0 per cent) whereas the national average reduction is 2 percentage point. In addition, there has been a 2.3 percentage point decline in status of wasting from NFHS-4 (20.4 per cent) to NFHS-5 (18.1 per cent) whereas the national average reduction is 1.7 percentage point.

D. Nutrition Interventions

7.4.5. Apart from the services provided under ICDS, the Department implements a comprehensive range of interventions to improve the nutrition status of children, adolescent girls, and women. The key interventions are as follows:

(a) Focus on the 1000 days from start of pregnancy to the child's second birthday. This has led to improvement in indicators such as early initiation of breast feeding, exclusive breast feeding, complementary feeding, and continued breast feeding till completion of 2 years.

(b) Initiation of Complementary Feeding (CF) at six months through Annaprashan Divas: The concept of complementary feeding of an infant for the first time is observed at AWCs (Anganwadi Centres) on second Thursday of every month. Mothers and caregivers with 6-month-old children attend the AWCs for observance of a ceremony to feed the with cooked rice (anna) for the first time. Along with this, awareness about appropriate feeding, handwashing, and hygiene practices is generated. In addition, recipe demonstration using locally available food is carried out and Take-Home Ration (THR) is given.

(c) Spot feeding Nursing mothers and their infants are provided a boiled egg each thrice a week, for consumption at the AWC which is essential for improving nutrition standard of SAM/MAM Children.

(d) Management of Severely Acute Malnutrition (CMAM) : As part of the SOPAN, State nutrition strategy, Community based management of children with Severe Acute Malnourishment has been implemented in Koraput and Nabarangpur districts. This shall be scaled up to rest of the high priority blocks in 22 districts.

(e) Adoption of Severely Underweight and SAM children : Adoption of severely underweight and SAM children by the functionaries of ICDS is being implemented for ensuring improved nutritional status of such children. The programme entails early screening of children, timely identification, and referral for treatment at NRCs and regular follow-up in the community.

7.4.6. As a part of MoU with World Food Programme, a mechanised THR unit has been set up in Ganjam district for production of fortified THR.

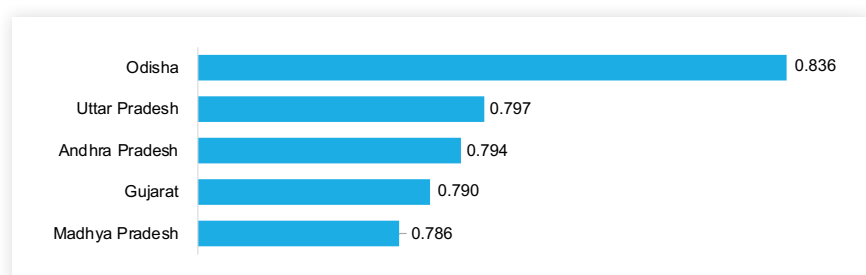
7.4.7. Social and Behaviour Change Communication (SBCC) package has been developed in association with WFP for improved nutrition and health practices.

7.4.8. This includes design for THR package, age-appropriate flyers, posters on THR products, animated recipe videos on the THR products, radio Jingle on THR products and social media collaterals.

7.4.9. Odisha secured top rank amongst the general category of the State Ranking for National Food Security Act (NFSA) as shown in Figure 7.13.

Figure 7.13

Top Five States in NFSA Index – Various States of India, 2022



Source: Ministry of Consumer affairs, Food and Public Distribution, India

E. Dietary Diversity

Fish based nutrition in SNP

7.4.10. In partnership with World Fish, incorporation of fish products has been piloted into the food rations provided to tribals, underprivileged children, adolescent girls, and pregnant and lactating women in Mayurbhanj.

7.4.11. The pilot project has selected and trained Women Self Help Groups (WSHG) to produce hygienically dried marine small fishes for incorporation into THR of adolescent girls, pregnant and nursing women.

7.4.12. WSHGs were provided with appropriate solar dryers for hygienic large-scale production of dried marine small fish. This dried fish shall be certified by Food Safety Standards Authority of India (FSSAI) to ensure adherence to packing, labelling and quality assurance protocols.



Millet
Ladoo:
Innovative
SNP

Introduction of millets in SNP

7.4.13. The pilot project includes provisioning of 2 Ragi ladoos per week per child in Keonjhar district and 4 ladoos per week per child in Sundergarh district in addition to the existing morning snacks under ICDS.

7.4.14. Millet has been introduced as Morning Snacks for 3 to 6-year-old children in DMF districts. Further, Ragi based Take Home Ration for Pregnant and Lactating Mothers and little millet khichdi for pre-school children in Koraput and Malkanagiri districts are introduced. Local SHGs have been roped in for training and preparation of a premix for the Ragi ladoos.

The benefits of the programme are:

- i. The initiative will provide an additional source of income to women SHGs
- ii. An assured price to Ragi farmers is ensured
- iii. Programme will boost local production of Ragi and other millets
- iv. It will ensure improved nutritional status of children

F. Initiatives for Transformation of the Under-nutrition Scenario in the State

Strategy for Odisha's Pathway to Accelerated Nutrition (SOPAN)

7.4.15. SOPAN is a State-funded targeted project that seeks to improve nutrition outcomes among nutritionally vulnerable beneficiaries. It currently, covers 125 nutritionally vulnerable blocks which are going to be expanded to all ICDS projects across the State. It aims at improving nutrition outcomes of the vulnerable and marginalised by adopting a targeted approach for eradicating malnutrition and anaemia among adolescent girls, pregnant women, and children under 6 years of age. The key features under this initiative include- special nutritional inputs (eggs/fruits) for adolescent girls, providing counselling services during weekly Kishori Diwas and linking to anaemia testing facilities (T3); providing additional THR to pregnant and lactating women, encouraging usage of iron and calcium supplements; strengthening nutrition of children under 6 years of age by providing energy dense THR, and comprehensive nutrition counselling services for their mothers especially for the SAM, MAM (Moderate Acute Malnutrition) and SUW (Severe underweight) children, strengthening complementary foods and feeding

practices by promoting use of locally available diverse foods and organising AWC based feeding demonstration sessions. As a result of this intervention, Odisha has witnessed an increase in the proportion of 'children fed a minimal acceptable diet' from 8.5 per cent (NFHS-4) to 20.4 per cent (NFHS-5).

Quality & transparency in Take Home Ration Management

7.4.16. 'Mo-Chhatua' website, Management Information System (MIS) and App has been launched on 17th August, 2019. This platform is being used as an interactive end-to-end platform for real-time monitoring of indenting, issue of work orders, production and supply of THR, and the settlement of payment to the THR producing SHGs. Mo-Chhatua initiative is first of its kind in India. Mo-Chhatua has won SKOCH Award in transformation category in January 2022.

7.4.17. Fixed day approach is institutionalised for mixing ingredients (23rd of the month) and also for distribution (1st of the month) to regulate its quality.

7.4.18. All members of 541 SHGs have been trained on preparation of THR; maintenance of accounts and ensuring quality and quantity. A training protocol has been prepared for this purpose. All district officials have also been trained on the usage of Mo-Chhatua software application.

The app and software together have enabled the stake holders to undertake the following activities in time ensuring quality:

- Submission of indent in time by ICDS Supervisors
- Issuing work order in time by Block officials
- Quality control monitoring through the Mo-Chhatua App on a fixed day approach (23rd of each month)
- Tracking of distribution to Anganwadi centres and distribution to the targeted community on a fixed day (by first day of each month)
- Timely payment to SHGs (Maximum 7-10 days)

Community Based Crèches in hard-to-reach areas

7.4.19. Evidence shows that, maximum (80 per cent) development of the brain takes place in the first two years of life. Neglect during this stage, may render adverse impact on human development. Therefore, 210 community-based crèches have been set up in the hard-to-reach districts of the State which include 30 each in Rayagada, Koraput, Malkangiri, Nabarangpur and Kalahandi districts and 60 in Keonjhar district. This enables working women in the lower stratum of the economy to pursue livelihood by dropping their children in crèches manned by the community. Creche Resource Centre (CRC) has also been set up in hard- to- reach areas.

Kalika: Community based Creches for Children under 3 years of age

7.4.20. Kalika is a State-led strategy to promote appropriate care and nutrition practices among children under three years of age by establishing creches.

Rationale

- a. To strengthen Infant and Young Child Feeding (IYCF) practices through provision of adequate nutrition, hygiene, and early stimulation
- b. Support women to leave homes in pursuit of livelihood

- c. Focus on the hard- to- reach areas which have higher burden of malnutrition

Key Features

- a. To provide a safe and secure environment for the children in a community set up
- b. Undertake growth monitoring and prompt referral; length/height measurement at all crèches
- c. Age-appropriate care and stimulation; tracking of developmental delays
- d. Provision of diverse complementary feeding 3 times a day; linkages with Anganwadi centre to ensure Take Home Rations and growth monitoring.
- e. Linkages with VHSND, routine immunisation and Nutrition Rehabilitation Centre.

Pada Pusti Karyakram

7.4.21. Pada Pusti Karyakram is a special programme to provide nutrition services in remote and hard-to-reach hamlets which either do not have Anganwadi Centre or are located far away from main Anganwadi Centre. The goal is to improve nutritional status of pre-school Children (3-6 Years) in remote villages. Spot Feeding of Morning Snacks and Hot Cooked Meals to children aged between 3-6 years is carried out in a decentralised manner through community participation. Mother Groups voluntarily cook and feed children in the hamlet itself. Growth monitoring of children is undertaken once a month in the hamlet with active participation of mothers. Pada Pusti Karyakram has been rolled out in 100 remote hamlets of ICDS project. Each hamlet has Mother's groups that undertake group-based spot feeding of children as per ICDS food menu. This programme has been piloted in Muniguda block of Rayagada and will be scaled up across the State.

II. Social Empowerment

7.4.22. The principle of gender equality is enshrined in the Indian Constitution. It grants equality to women and empowers the State to adopt measures of positive discrimination in favour of women. SDG 5 also calls for ending all kinds of discrimination against women and girls, as it is not only a basic human right, but also crucial for a sustainable future as women empowerment plays a vital role in economic growth and development. Women, however, experience considerable disadvantage and discrimination in the society due to gender bias. This bias reveals itself in the form of disparities in access to education, health services and other social development indicators.

7.4.23. The status of women in the society and economy can be gauged through numerous demographics, sector-specific and economic indicators-mapped from birth to death. Through these, challenges faced by women and the corresponding policy response to alleviate the same can be ideated. In the following sections, a few of the major indicators have been discussed.

7.4.24. The sex ratio in Odisha compares favourably with the national average. As per Census 2011, there are 979 females for every 1,000 males in Odisha. Similarly, in rural Odisha, the sex ratio is higher (989) and in urban Odisha, it stands at 932. In comparison, India's sex ratio is 943. Odisha is ranked among the top five major States in terms of sex ratio. The child sex ratio of the State (941) is better than the national standard (918) but its declining trend is a major concern.

7.4.25. The State Government has implemented the Biju Kanya Ratna Yojana (Amari Jhia Amari Shakti) with the objective of creating an enabling environment for the birth, survival, and development of the girl child along

with improved enrolment and retention of girls in educational institutions. The focus is largely on creating mass awareness on addressing gender discrimination against girls, improving status of nutrition, health, and education, and increasing sex ratio at birth and child sex ratio. Launched in September 2016 in the districts of Angul, Dhenkanal and Ganjam, which have low child sex ratio, the programme aims to sensitise the community as well as all stakeholders about the importance of girl child.

7.4.26. Odisha State Policy for Girls and Women adopted in 2014, aims to create an enabling environment for girls and women to promote equal opportunities, eliminate discrimination, ensure holistic development and empowerment, and enhance capacities. As discussed in the previous sections, female literacy rate (64 per cent) in Odisha is much lower than male literacy rate (81.6 per cent). Considering the historically underdeveloped status of Odisha, there is clearly a large gap to be filled in order to bring female literacy rate at par with males. However, Odisha is on the path of steady progress and female literacy rates have increased in the past few decades, which has resulted in a reduction of the gender gap from 24.9 per cent in 2001 to 17.6 per cent in 2011.

7.4.27. Even as Odisha has made improvements in education indicators, there is a long way to go in terms of achieving gender parity in access to education. Median years of schooling in Odisha for females (4 years) is lower than males (6.1 years); this phenomenon is also pervasive across the country. Though the dropout rate in 2017-18 for girls was lower than that for boys, for most of the preceding years, it has been higher. GPIs at elementary and secondary level are more than 0.9; the State targets to reach complete parity with GPI of 1. To achieve progress on these indicators, the State has been implementing several initiatives to empower women and foster their socio-economic development.

A. State intervention on Gender Mainstreaming

7.4.28. Odisha Government made concerted efforts in sensitising and implementing various schemes and programmes for women. These schemes and programmes have a direct and indirect bearing on the welfare and development of women in the State especially in the sphere of health, protection, employment, education, etc. These include state sector schemes, central sector schemes, Centrally Sponsored Schemes, EOM and SDRF.

7.4.29. Odisha has improved its healthcare facilities targeting women, as is evident in the progress made in reduction of maternal mortality ratio, access to healthcare facilities for pregnant women and increase in proportion of institutional births. The State now ranks above national average and most states in maternity care indicators. Odisha's institutional delivery rate increased from 85.3 per cent (NFHS-4) to 92.2 per cent (NFHS-5) and has been higher than the all India average of 78.9 per cent (NFHS-4), and 88.6 per cent (NFHS-5). In other indicators also, Odisha has fared reasonably well.

B. Initiatives taken for enabling women to lead life with self-esteem in Odisha

7.4.30. To improve the quality of life of women, Government has launched several schemes and provisions to support women in distress. These schemes not only provide immediate support to the aggrieved girls/women but also help them in developing their skills so as to increase their livelihood opportunities. Some of these are listed below.

Swadhar Greh

7.4.31. Swadhar Greh Scheme envisages a supportive institutional framework for women in distress so that they could lead their life with dignity. The objective is to cater to the primary needs such as shelter, food, clothing, medical treatment, and care of women in distress without any social and economic support. There are 53 Swadhar

Greh in Odisha providing shelter to approximately 1,703 women.

Ujjawala Scheme

7.4.32. The objective of the scheme is to prevent trafficking of women and children for commercial sexual exploitation through social mobilisation, involvement of local communities, awareness generation programmes, and generation of public discourse through workshop, seminars, etc. Out of 19 Ujjawala projects operationalised in Odisha, 12 Ujjawala Homes are being operated in the State.

One Stop Centre

7.4.33. SAKHI is a hospital based One Stop Centre aimed to provide integrated support and assistance to women affected by violence and to facilitate immediate, emergency, and non-emergency access to an integrated range of services including medical, legal, psychological, and counselling support. There are 30 operational One Stop Centres across 30 Districts of the State. During 2021-22, as many as 1,317 awareness programmes were organised.

181 Women Helpline Number

7.4.34. The 24 hours toll free service provides support to women affected by violence to seek support and information. The centre facilitates crisis and non-crisis intervention through referral to the appropriate agencies. It also provides information about the appropriate support services, Government schemes and programmes.

Working Women's Hostels

7.4.35. With the objective of providing safe and affordable hostel accommodation for working, single, divorced, and separated women, Government of Odisha has constructed 4 Working Women's Hostel in the districts of Khordha, Jajpur, Sundargarh and Jharsuguda. The 100 bedded hostels also have provisions of day care centres to support children of working women. Besides, 4 more hostels are under construction in districts Sambalpur, Ganjam, Dhenkanal and Rayagada.

Child Marriage Free State

7.4.36. Odisha is intensively working with partner agencies to make the State child marriage free by 2030. Various districts like Ganjam, Koraput etc. have launched innovative programmes to gather support to the cause and make their districts child marriage free. By January 2022, 10,000 villages across the State had been declared child marriage free.

Reaching out and empowering Adolescents

7.4.37. ADVIKA is a unique initiative of the State aiming to educate and empower all adolescent girls and boys (10-19 years age) to understand the importance of health and nutrition, and practice life skills to voice their opinions. It is a coordinated platform for linking all Government schemes targeted towards adolescents. Saturdays are observed as 'Kishori Diwas'. On this day the Anganwadi Worker engages the adolescent girls and boys in numerous life skill activities through a basket of resources developed as part of the ADVIKA Tool Kit. Within a span of one year, Advika has reached out to a million girls and more than 1.5 lakh Sakhi- Saheli (Peer Leaders) have been identified and engaged through ADVIKA to act as agents of change. Sakhi-Sahelis raise their voices for improving health and nutrition, mobilising communities, supporting frontline workers in home visits, promoting 'no to child marriage, Yes to School', and participate in Gram Sabha and 'Day for Children' meetings in panchayats. To promote digital literacy and enable digital engagement, WhatsApp groups of adolescents have been created. Efforts are being taken for inclusion of families, men, and boys as accountable partners through programmes under Mainstreaming.

State Commission for Women

7.4.38. The Commission has organised District level Camp court to deliver justice at doorstep. Besides, legal awareness camps have also been organised at the district level to create awareness among the women regarding legislation and different Govt schemes and programmes for safeguarding the interest of women in Odisha. During 2020-21, 2,129 cases have been disposed of by the Commission benefiting 2,114 women.

Odisha State Social Welfare Board

7.4.39. It organises regular welfare activities and seminars to generate awareness in the community about women's problems and service grants from the Central and State Governments for the purpose of welfare programmes.

Protection of Women from Domestic Violence

7.4.40. Protection Officers have been appointed at district level to address the issues of Domestic Violence under Protection of Women from Domestic violence Act 2005 (PWDV Act 2005). All the Swadhar Homes, Ujjawala Homes, Short Stay Homes and Family Counselling Centres are declared as Service Providers.

Protecting against Crime

7.4.41. To facilitate integrated approach towards Crime against women and children, 537 Mahila Sishu Desks have been set up in every police station in convergence with Home Department

Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013

7.4.42. The Act aims to provide protection against Sexual Harassment of women at workplace and for prevention, redressal of complaints of sexual harassment. Local Complaints Committees (LCC) are formed and notified in all 30 districts. Internal Complaints Committees (ICC) have been formed at Departments/Directorates/Corporations. Trainings have been provided to the members of ICCs and LCCs. IEC activities such as FAQ, booklet and Leaflet distribution in English and Odia have been taken up.

III. Economic Empowerment

7.4.43. Women Empowerment is one of the key development initiatives supported by the Government of Odisha. It is well-known that the economic empowerment of women significantly contributes to their social empowerment. Therefore, the promotion of Women's Self-Help Groups (SHGs) under the aegis of the 'Mission Shakti' programme was adopted as a key strategy for achieving women empowerment. "Mission Shakti" is the self-help mission for empowering women through the promotion of Women Self Help Groups (SHGs) to take up various socio-economic activities. It aims to empower women through gainful activities by providing credit and market linkage.

7.4.44. Nearly 70 lakh women have been organised into 6 lakh groups across all blocks and urban local bodies of the State so far. To strengthen the activities of the existing SHGs and to provide momentum for the formation of new SHGs, constant handholding and monitoring are undertaken throughout the year. For this purpose, in 2021, a separate Department of Mission Shakti has been created.

A. Livelihood Support through Business Activities Assigned to SHGs

7.4.45. In a pioneering move, the State Cabinet approved the provisioning of Government services and procurement of goods through SHGs in a structured manner amounting to Rs 5,000 crore over five years.

Paddy Procurement (Food Supply & Consumer Welfare Department)

7.4.46. Almost two-thirds of the population in Odisha is dependent on agriculture and the main crop is Paddy. Breaking traditional gender stereotypes, in 2019, Mission Shakti self-help groups were engaged in paddy procurement. SHGs selected by the district-level committees were provided training on paddy procurement using the digital platform. Equipped with P-PAS digital technology, iris scanner, laptops etc, during 2021-22 Kharif Season, 223 SHGs undertook the online registration of farmers for paddy procurement. Till date, 562 SHGs from 20 districts have participated in paddy procurement in Odisha. During 2021-22, 18,60,392.39 MT of paddy has been procured, enabling the SHGs to earn a net service charge of INR 28.73 crore.

Electricity Meter Reading, Billing and Collection of Charges

7.4.47. To increase livelihood of Women SHGs, Mission Shakti in Convergence with the Department of Energy has engaged women SHGs and Federations in electricity meter reading and collection of charges. Members have been engaged by Distribution Companies (DISCOMs under the Energy Department across the State). 1,317 SHGs in 21 districts across the State have been involved which resulted in increased bill collections accompanied by a decrease in meter tampering thereby increasing the transparency of the entire process. In the current financial year, Mission Shakti members have reached out to 9,43,811 consumers, accruing INR 10.15 crore as charges in the process. It is noteworthy that Mission Shakti SHGs have been able to perform better than other agencies in this largely male-dominated sector.



Electricity Meter reading and bill collection by Women

Support to Farmers for Layer Farming in Deep Litter System in SHG Mode

7.4.48. Poultry has been one of the fastest-growing sectors in providing employment to a significant number of people in the State. Poultry rearing is undertaken mostly for egg and meat production. The widespread distribution of poultry birds reduces extreme poverty. In addition, given the variability of food prices in the rural markets, poultry serves as a cost-effective option to obtain animal-source food. To boost poultry production in the State, Agriculture Status has been accorded to poultry farming. Besides, Semi Commercial Layer farming in a deep litter system helps in meeting the nutritional requirement of the growing rural population while becoming an additional source of income for the women farmers.

Training and On-Farm Extension Support to SHGs for Pisciculture in Gram Panchayat Tanks



Photo credit: Arun Padayar/Panemangalore/WorldFish

SHG earning livelihood in Pisciculture

7.4.49. The Government has identified fish farming as one of the potential business activities for the SHGs. Therefore, an inter-departmental convergence program involving Departments of Fisheries & Animal Resources, Women and Child Development & Mission Shakti, Panchayati Raj & Drinking Water with technical support from World Fish was mooted and a flagship scheme named

“Fish Farming in Gram Panchayat Tanks by Women SHGs” was launched during September 2018. The scheme provided financial support of INR 90,000 per hectare to SHGs, which includes 60 per cent of the operational expenses for fish production. Two-crop system per year by promotion of stocking of zero-size fish fingerlings (50–100 gram size) was encouraged for doubling the productivity of GP tanks. The target production is 2.5 tons/ha/crop of 6 months or 5 tons/ha / year. During 2021-22, 1,882.6 hectares of GP tanks have been earmarked for lease to SHGs. During the financial year, 1,823 SHGs were engaged in pisciculture and harvested more than 12,339.14 quintals of fish from GP tanks with a market value of INR 158.96 crore earning a profit of INR 70.73 crore.

7.4.50. The scheme has brought a remarkable change in the knowledge, attitude, and practices (KAP) of SHGs towards fish farming. Due to the scheme, the availability of fresh fish in the villages has increased. In addition, there has been an increase in fish consumption among SHG members which is expected to have a positive impact on nutritional outcomes among women and children in the State.

Livelihood support to Women SHGs through Horticulture - Mushroom and Vegetable Cultivation on a commercial scale

7.4.51. Mushroom Cultivation is one of the most sustainable income generating activities for Self Help Groups of Mission Shakti due to low investment and less space needed for cultivation. In convergence with the Directorate of Horticulture, Mission Shakti SHGs across the State have taken up Mushroom Cultivation. This led to an increase in women farmers’ income and created rural entrepreneurship. Similarly, as Odisha is an



Vegetable Cultivation by SHG: A way of livelihood

agrarian State, most households depend on agriculture and allied sectors to sustain their livelihoods. Capitalising on their traditional knowledge of horticulture, members of many Mission Shakti SHGs have also taken up the management of farm-based resources and initiated vegetable cultivation across 30 districts. This promoted nutrition security while creating an additional income source for the SHG members with less expenditure.

Supply of Pre-School Uniform to Anganwadi Centres (Department of W & CD)

7.4.52. Pre-school education is a crucial component of the package of services envisaged under the ICDS Scheme. It aims at universalisation and qualitative improvement of primary education, by enabling necessary preparation for primary school among children. SHGs/ Federations were involved in the supply of preschool uniforms in AWCs.

B. MARKETING SUPPORT & ENTREPRENEURSHIP PROMOTION

Marketing support to SHGs through Odisha Rural Development and Marketing Society (ORMAS)

7.4.53. Department of Mission Shakti in partnership with ORMAS (Odisha Rural Development and Marketing Society) aims to promote various livelihood initiatives and offers marketing support to women SHGs. The objective of the project is to empower the rural women producers by marketing the rural products in convergence with ORMAS. It aims to create micro-enterprises through Livelihood promotion and Marketing support emphasising on the need for formation and promotion of new Women Producer Groups (PGs), marketing/technology interventions, value addition through capacity building of the institutions and strengthening of the existing business incubation centres which serve towards capacity building of SHGs and PGs. 300 PGs have been formed and 274 PGs have been provided with IB & CB Fund.

Mission Shakti Bazaar

7.4.54. Boosting more than seven million women, from different districts and age groups, Mission Shakti Bazaar features eco-friendly and authentic arts and crafts, along with multiple product lines such as corporate gifts, stationery, home accessories, and fashion related items. With a sustainable voice throughout their creations, the women artisans share ethical values regarding recycling and reusing materials. Each of these unique pieces are 'Made in Odisha' to share the message that specialised handcrafted products are essentially worth preserving. There are 33 number of Mission Shakti Bazaars with 73 outlets. The turnover for the year 2021-22 was INR 3.32 crore and average turn over per SHG was INR 2.51 lakh.



Tailoring- a part of Mission Shakti Bazaar

E-Commerce

7.4.55. To accelerate women's economic empowerment and facilitate the sale of SHG products by leveraging e-commerce and digital marketing, Mission Shakti has established an exclusive e-commerce platform for its women producers. This transformative marketing initiative will augment women's financial freedom in the digital era and increase their bargaining power by reaching out to buyers beyond the District, State, and National boundaries. Under this initiative, the construction of a 'Mission Shakti Bazaar' at the SIRD campus, Bhubaneswar has been approved by Government.

Agriculture Production Cluster

7.4.56. With an aim of doubling the farm incomes of 1 lakh women farmers in 12 tribal-dominated districts, Mission Shakti has been a part of the Special Programme on Agriculture Production Clusters (APC) launched by the Government of Odisha. Over the course of four years, the programme intends to double the farm income of 1 lakh women farmers in 40 backward blocks. Mission Shakti, as part of APC, helps SHG members to have better control and access to farm incomes by forming 363 Producer Groups and 30 Producer Companies. IB&CB funds worth INR 585.58 lakh have been disbursed, aiming at diversifying cropping systems, developing vital agricultural infrastructure, establishing local mechanisms for input services, assuring an improved package of practices, and encouraging the use of non-pesticide management approaches.

Millet Enterprises



SHG Managing Millet Outlet

7.4.57. Mission Shakti, in partnership with the Odisha Millets Mission (OMM), is supporting the establishment of Tiffin Centres and mobile food trucks under the brand name 'Millet Shakti,' generating potential opportunities for Self Help Groups and their Federations. These cafes provide millet-based hot cooked foods, millet drinks, bakery products, ready-to-cook and ready-to-eat products. They will be run entirely by Women Self Help Groups and their Federations. Furthermore, the organisations are assisting in the distribution of 'Ragi Laddus' to preschool children at AWCs. These programmes aim to popularise a variety of millet-

based food products thereby providing nutritious and delicious options to people of all ages at an affordable price. 484 Ragi threshers were provided to selected SHGs for value addition to millets. 104 Millet Shakti tiffin Centres and 3 Millet Shakti Cafés have been set up. 21 SHGs in Keonjhar district and 38 SHGs in Sundergarh district have started production and supply of Ragi laddu mix to AWCs.

Mission Shakti Cafes

7.4.58. Mission Shakti Cafes have been established to increase livelihood opportunities and promote entrepreneurship among women in the State. Currently, 33 cafes are being operated in the State. As many as 1,04,712 number of SHGs were involved in income generating activities during 2021-22 generating a business of INR 2,592.05 crore (Table 7.11).

Table 7.11 Income Generating Activities (IGA) Report (FY 2021-22) - Odisha

Department	SHGs	Turnover (INR in crore)	Commission / Incentive (INR in crore)
Fisheries & Animal Resource Development	11165	402.96	
Agriculture & Farmers' Empowerment	10998	41.2	5.6
Food Supplies & Consumer Welfare	3133	1510.87	31.76
W & CD	2195	397.88	
ST & SC Development, Minority and Backward Classes Welfare	3280	168.55	31.69
Handloom, Textiles and Handicrafts	2241	25.23	
MSME	2256	23	
PR & DW	40592	11.75	
Forest, Environment and Climate Change	1144	6.65	
Health & Family Welfare	33	3.96	
H & UD	16526		153.73
School & Mass Education	7629		
Finance	2203		8.81
Energy	1317		10.15
Total	104712	2592.05	210.05

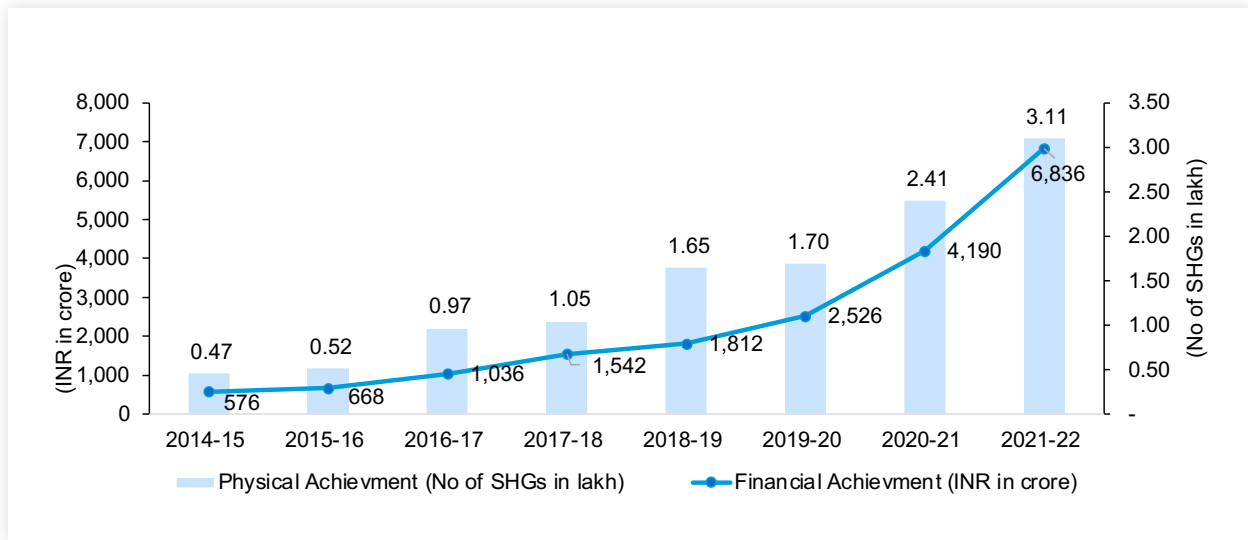
Source: Mission Shakti Dept., Odisha

C. Financial Inclusion

SHG Bank Linkage

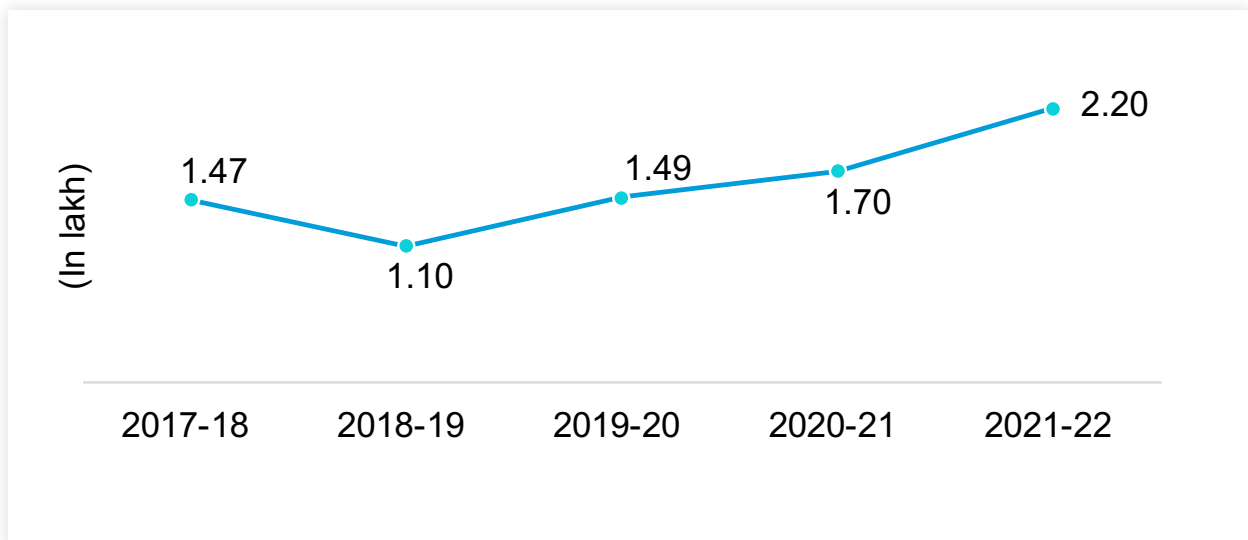
7.4.59. Under Mission Shakti, the SHG-Bank Linkage Programme is a major Financial Inclusion initiative, aimed at ensuring access to institutional credit for WSHGs. During 2021-22, 3,10,819 SHGs were linked for bank transactions against a target of 2,80,150. The financial target was INR 6,002.52 crore and the achievement were INR 6,836.48 crore (114 per cent). The year wise SHG bank linkage and loan size are depicted in Figure 7.14 and Figure 7.15 respectively.

Figure 7.14 Year Wise SHG Bank Linkage - Odisha



Source: Mission Shakti, GoO

Figure 7.15 Year Wise Average Loan Size - Odisha

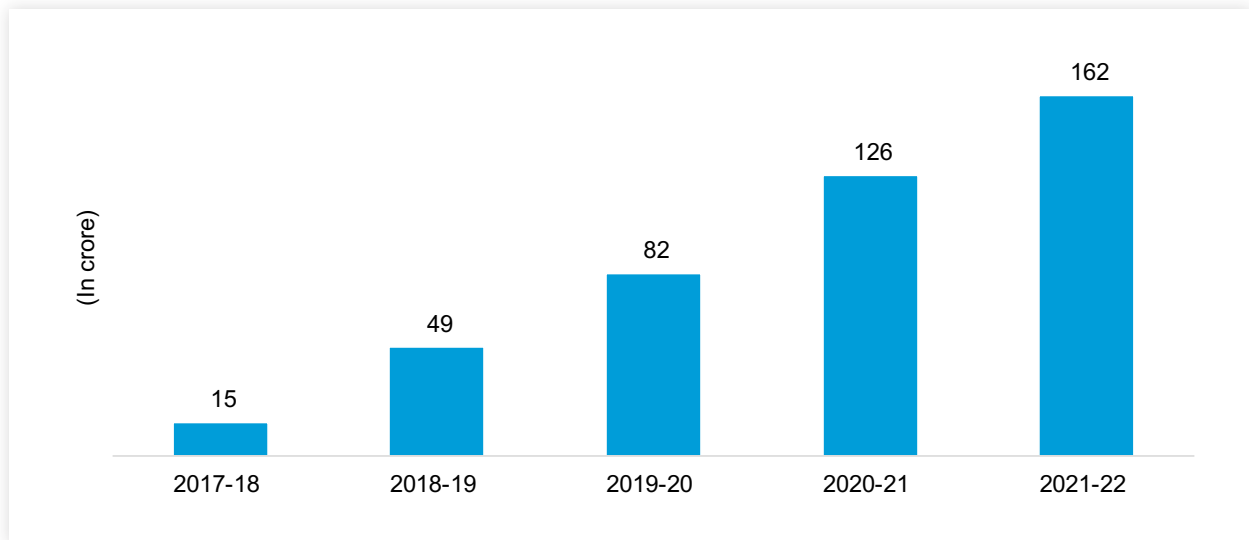


Source: Mission Shakti, GoO

Mission Shakti Loan– State Interest Subvention Scheme

7.4.60. Government announced an Interest Subvention Scheme for SHGs to provide loans at an effective rate of zero per cent per annum up to INR 3 lakh, effective from 1st April 2019. It has been implemented to accelerate the SHG bank linkage programme in the State and to enhance livelihood promotion. In 2021-22, Department of Mission Shakti has settled Interest subvention claims of INR 161.93 crore benefitting 2.87 lakh eligible SHGs. This has been the highest amount of interest subvention claim settled in any financial year since inception. The year wise Interest Subvention Claim Settlements are given in Figure 7.16.

Figure 7.16 Year Wise Interest Subvention Claim Settlement - Odisha



Source: Mission Shakti, GoO

Settlement of IS Claims through the SHG Bank Linkage and Interest Subvention (BLIS) portal

7.4.61. The Department of Mission Shakti has initiated a dedicated MIS bank linkage portal to track the SHG bank linkage status and claim settlement under interest subvention with support from TCS, Tata Steel Foundation and Electronics & Information Technology Department. The Bank Linkage and Interest Subvention (BLIS) Portal was launched by the Hon'ble Chief minister on 8th March 2021. Interest subvention claims amounting to INR 58.81 crore have been settled through the BLIS portal during FY 2021-22.

Engagement of SHG Members as Business Correspondent Agents (BCAs)

7.4.62. To ensure last-mile delivery of banking services in unbanked and under-banked Gram Panchayats, the Odisha Government made a historic decision of engaging Women Self Help Groups and Federation Members as Business Correspondent Agents (BCAs). Cumulatively 2,203 SHG members have been on boarded as BCAs and the required devices have been provided free of cost taking support from NABARD and the Department of Mission Shakti. Transactions amounting to INR 979.94 crore have been undertaken by these BCAs.

Box 4: New Initiatives under Mission Shakti

Transforming SHGs to SMEs



IV. Special Initiatives under Maternal Benefit

7.4.63. MAMATA is a flagship conditional cash transfer maternity benefit scheme of the State launched in September 2011. It aims to reduce maternal and infant mortality by improving the health and nutrition status of pregnant and lactating women, and their infants. The scheme targets to motivate pregnant and lactating women to seek maternal and child health services and adopt optimal nutrition behaviours and practice. It intends to partially compensate wage loss to working women so that they can take adequate rest and consume nutritious diet during critical periods of pregnancy and post pregnancy. This scheme is operational in 30 districts across the State.

Target group

7.4.64. The pregnant and lactating women aged 19 years and above for their first two live births, except all Government/Public Sector Undertakings (Central and State) employees and their wives are eligible to get benefits under the scheme. The two live birth norm is relaxed for Particularly Vulnerable Tribal Group (PVTG) pregnant women from 2019 to 2024.

Benefits

7.4.65. The women receive INR 5000 in 2 tranches i.e., INR 3000/- after 6 months of pregnancy and INR 2000 after the infant completes the age of 10 months upon fulfilling certain conditions. Under the scheme, money is transferred directly to the bank accounts of the beneficiaries. During the year 2021-22, INR 266.21 crore have been transferred to more than 5.18 lakh women beneficiaries.

5T and Mo Sarkar initiatives of MAMATA

7.4.66. To ensure transparency and make MAMATA scheme more citizen centric, hassle and paper free, an App based MIS integrated with a Mobile application has been developed by the Department of Women and Child Development under 5t's initiative. It is operational in all districts from 1st August 2020. The scheme is using 181 Helpline number for grievance management related to MAMATA scheme. Provision of message in Odia language and transfer of online funds through IFMS gateway are the key features of the mobile application. More than 5594 feedback responses were completed by 31st March 2022. Most of the feedback received from MAMATA beneficiaries was positive and the beneficiaries were satisfied with the services of AWWs/AWHs at the grass root level.

Child Care and Welfare

7.4.67. To ensure the best interest of every child in the State, the Juvenile Justice (Care & Protection of Children) Act, 2015 and Odisha Juvenile Justice (Care and Protection of Children) Rules, 2018 are being implemented by the Department of Women and Child Development and Mission Shakti.

7.4.68. All matters pertaining to apprehension, detention, prosecution, penalty, rehabilitation, and social reintegration of children in conflict with law and rehabilitation; adoption; reintegration and restoration of children in need of care; and protection have been taken up through the implementation of "Child Protection Services" "Beti Bachao Beti Padhao" and one State Sector Scheme namely " Biju Kanya Ratna Yojana".



Child Protection Services

7.4.69. Earlier known as Integrated Child Protection Scheme (ICPS). It is a centrally sponsored scheme with a funding ratio of 60:40 (Central: State). The Scheme engages all stakeholders including Government Departments, the voluntary sector, community groups, academia and, most importantly, families and children to create protective environment for children in the State. Statutory bodies like Juvenile Justice Board, Child Welfare Committee and Service delivery structures like State Child Protection Society, State Adoption Resource Agency, District Child Protection Unit, Special Juvenile Police Unit are in place for scheme implementation.

Early childhood Care and Education (ECCE)

7.4.70. Early childhood is the most important developmental phase in a human's life. During this phase, a child's brain grows exponentially and foundations of a range of developmental competencies is established. Early childhood care and education (ECCE) is one of the core services of the Anganwadi centres. ECCE is directed towards ensuring a stimulating environment with emphasis on providing necessary inputs for optimal growth and development of the children. A range of initiatives have been taken up for strengthening of ECCE in the State.

Nua Arunima curriculum

7.4.71. Early childhood care and education (ECCE) curriculum was revised and launched on 19th August, 2019. The revised Nua Arunima focused on pre-primary school readiness, corner activities, inclusiveness, and age specific school readiness activities by involving the parents and community in pre-school education of children aged 3 to 6 years in accordance with NEP 2020.

Mother Tongue based Early Learning programme

7.4.72. It was designed to strengthen Mother tongue based classroom interaction involving culture and context specific stimulation through action, songs, rhymes, stories, games, etc. The initiative includes capacity building of frontline workers i.e., the preschool teachers, supervisors who monitor and handhold the AWWs, parents, and community on importance of Mother Tongue based preschool education. The programme is implemented across 7202 Anganwadis in the State.

7.4.73. The poor educational performance of children from tribal communities is linked to the language barrier they encounter when they begin formal education. Nua Arunima Curriculum developed in 10 Mother tongue languages i.e Bonda, Munda, Koya, Kuvi, Kui, Saura, Shantali, Oram, Kisan and Juang was scaled up in the State. Second phase Desia, Bhunjia, Bhuyan, Gondri, Ho, adaptation and translation is in progress in collaboration with Academy of Tribal Languages and Culture (ATLC), SC&ST Research and Training Institute (SCSTRTI). Ghare Ghare Arunima/Kuni calendar, Vatsalya posters were developed and launched in 10 mother tongue languages. 'First Language First' (ECCE Policy 2013) helps children to comprehend better and prevents cognitive stunting.

Mo Bikash Patra

7.4.74. Child Assessment Card (Mo Bikash Patra) is being provided to all pre-school children to measure the physical, language, aesthetic and creative, motor and social development as per their age through observation and continuous participation process in preschool activities. A total of 16.37 lakh children between 3 to 6 years of age have received the Mo Bikash Patra.

ECCE Day (Ankur Day)

7.4.75. The fixed monthly ECCE day named as "ANKUR DAY" is organised on 19th of every month at AWC level for strengthening Parent and community involvement. It provides a platform for interface between AWW and the parents/community, to organise activities for advocacy, awareness generation, and establish community partnerships for optimum development of young children.

Ghare Ghare Arunima

7.4.76. In view of the continued closure of Anganwadi Centres due to COVID-19 pandemic, Ghare Ghare Arunima a colourful calendar with fun-filled activities, has been released and shared every month as per the theme of Nua Arunima. The calendarised activities stimulated meaningful activities at home to make children school ready. This innovative approach caters to 16,13,775 Anganwadi children across 74,154 AWCs of the State. The program received the SKOCH Platinum award for 2021 in 75th ceremony.

Vatsalya (Renamed as Shaishaba)

7.4.77. Vatsalya/Shashaba, a campaign to institutionalise care and stimulation of children under three years of age has been launched on 17th November 2020. State has undertaken an innovative approach for strengthening brain development of under three children through a home-based parent led early stimulation program. VATSALYA program includes activities such as mainstreaming parent/care givers capacity building, low-cost toy making by parents, stimulating touch, talk, play through WCD Mascot TIKI Maudi, posters on responsive parenting in 11 different tribal languages. In addition, kuni calendar and flip book on happy parenting (Sukhada Lalana palana) are also provided.

Kuni Calendar

7.4.78. It is a calendar of activities focussing on psycho-social, physical and motor, language, creative and aesthetic aspects of Early Childhood Development (ECD). These are distributed physically and digitally to 17,00,000 families with children under three years of age.

Collocated AWCs 2021-22 (SSA/STARS/S&ME)

7.4.79. Convergence meeting and plan of action were developed and shared with OSEPA for implementation of the Balvatika and collocated AWCs for designing State specific curriculum and compilation of ECCE repository by WCD and SCERT (State Council of Educational Research and Training) and revision of pre-primary textbook.

Parents+ programme

7.4.80. Parent+ programme was introduced to strengthen the development of children under the age of three. Parent+ training Manual was developed both for the facilitator and communicator and more than 300 master trainers were trained on this module. All the District Social Welfare Officers, Child Development Project Officers, and 1200 supervisors were orientated on parenting and brain development. Parents Manual along with user friendly pictorial flip book, posters on nurturing care framework, Brain development, parenting, early stimulation, mother tongue -based transaction IECs were distributed to all Anganwadi centres to orient parents on the importance of early years, appropriate parenting during home visit, and parent and community interaction.

7.5. Welfare of Disabled and Elderly Persons

I. Support to the Elderly

7.5.1. The elderly in Odisha (aged 60 and above) account for close to 9.5 per cent of the State's population (Census 2011). In the next few decades, the proportion of elderly is expected to increase. In old age, the need for health care increases. It is imperative to understand the socio-economic conditions of the old-aged people and prepare an appropriate policy response for them in terms of pension requirements and health care infrastructure.

7.5.2. Odisha was the first State in the country to launch the programmes for prevention and control of cancer, diabetes, cardiovascular disease and stroke and the programme for health care for elderly in 2010-11. Apart from this, medical care financed through Odisha Treatment Fund, Old Age Homes with financial support from the

Government and Emergency Feeding Programme in the KBK region include other State schemes for elderly in Odisha. Several schemes for welfare of elderly are discussed below.

Madhu Babu Pension Yojana (MBPY)

7.5.3. MBPY was introduced in the State of Odisha w.e.f. 01/01/08 by merging two pension schemes. i.e., Old Age Pension and Odisha Disability Pension schemes. All the beneficiaries being covered under both the schemes are treated as beneficiaries under Madhu Babu Pension Yojana since its inception. At present 28,33,704 beneficiaries have been covered under the scheme with a budget provision of INR 1742.50 crore. The budget provision for 2022-23 under the scheme is INR 1822.94 crore. INR 500 is provided per beneficiary per month up to the age of 79 years and INR 700 for 80 years and above and INR 900 for beneficiaries having 60 per cent disability and above 80 years of age.

Indira Gandhi National Old Age Pension (IGNOAP)

7.5.4. This is one of the components of the National Social Assistance Programme (NSAP) introduced by the Govt. of India, Ministry of Rural Development w.e.f. 15.08.1995. Under this scheme, old age pension is provided to aged, destitute persons (male/female) of 60 years. The pension has been revised to INR 500 per beneficiary per month (INR 200 (GOI) + INR 300 (State Govt) up to the age of 79 years and INR 700 for 80 years and above (INR 500 (GOI) + INR 200 (State Govt)). This scheme has been transferred to the State Plan from the year 2002-03. At present, 14,18,631 beneficiaries have been covered under the scheme. For the year 2021-22, an amount of INR 859.44 crore has been provisioned under the Programme. The budget provision for the scheme is INR 900.45 crore for 2022-23. In addition to pensions, institutional care is essential to take care of the elderly people. In this regard, Government of Odisha has undertaken the following initiatives:

Old Age Home

7.5.5. In order to provide care and protection to elderly people, the State Government has been extending financial assistance in the form of grant-in-aid through four voluntary Organisations at Nimapara, Jagatsinghpur, Cuttack and Nayagarh. This is a continuing Scheme. 100 elderly people (25 each from three Homes for Aged) irrespective of their sex, caste, creed, colour, and religion are provided free food, clothing, medical treatment, and recreation facilities in these institutions. For the year 2021-22, a provision of INR 61.25 lakh has been made under this programme.

Integrated Infrastructure Complex (IIC)

7.5.6. Integrated Infrastructure Complex are being set up at the District Headquarters of all 30 Districts in phased manner. In the first phase, IIC has been set up in 10 districts. Each IIC will accommodate 400 persons including elderly and PwD.

II. Programmes and Activities for Senior Citizens

7.5.7. Abadana scheme has been launched by the State Government to promote welfare and protection of senior citizens in a mission mode. The main objectives of the scheme are to improve quality of life of elderly through provision of basic services and create facilities for comprehensive rehabilitation of elderly. For the year 2021-22 there is a budget provision of INR 250 lakh for implementation of different welfare programmes for senior citizens in the State. Also, the BAYOJYESTHA SAMMAN Award has been introduced in the year 2017-18 to recognise outstanding contribution of individuals and institutions in the field of elderly care.

III. Empowerment of Persons with Disability (PWDs)

7.5.8. As per 2011 Census, there were 12.44 lakh disabled people in Odisha. Numerous welfare schemes are being

implemented to integrate the differently abled into the mainstream into the society. Some of these are listed below.

Madhu Babu Pension Yojana (MBPY)

7.5.9. State Government provides INR 500/ INR 700 per month to persons with disability under the scheme. About 4 lakh disabled persons are covered under the scheme up to January, 2023.

Indira Gandhi National Disability Pension Scheme (IGNDP)

7.5.10. Government of India has launched this scheme in 2009. Pension of INR 500 (INR 300 (GOI)+ INR 200 (State Govt) per month is provided to people (aged between 18-79 years) belonging to BPL households with severe or multiple disability. At present, 90,754 beneficiaries have been covered under this Scheme. For the year 2021-22, INR 69.05 crore have been provisioned under the Programme. The budget provision for 2022-23 under the scheme is INR 70.57 crore.

Bhima Bhoi Bhinnakhyama Samarthya Abhiyan (BBSA)

7.5.11. This scheme is being implemented since the year 2016-17 for identification, certification, and distribution of Aids/Appliances to the PwDs by conducting single window camps in each block of the State. For the purpose, during the year 2021-22 about 309 BBSA camps were organised at district level and 41,247 nos. of PwDs have been assisted. The budget provision for 2022-23 under the scheme is INR 23 crore.

Accessible India Campaign

7.5.12. Government of India is providing assistance to the State for construction of barrier free environment under the Accessible India Campaign for PwDs. Out of 203 identified buildings, 117 Government buildings have been retrofitted and made accessible under Accessible India Campaign (Government of India). Till date 114 Govt websites have been made accessible through an agency (ERNET) selected by Government of India.

Scholarship & Stipend to Students with Disabilities

7.5.13. The State Government introduced this scheme during the year 1978-79 to award scholarships to day scholars among disabled students in schools and colleges to encourage them to continue their studies and to integrate them into the mainstream of society. The State Government grants scholarships to students from Primary school level up to the University level at prescribed rates through DSSOs. This is a continuing scheme. The budget provision for 2022-23 under the scheme is INR 16 crore.

Rehabilitation of Physically & Mentally Challenged, Socially Disadvantaged Persons.

7.5.14. A scheme for rehabilitating the physically and mentally challenged, socially disadvantaged people has been operational since 2008-09. This scheme is demand driven and for the year 2022-23, a provision of INR 1594.06 lakh has been made to provide services to the disabled persons.

7.5.15. Campaign, Seminar & Sports State Level workshops, seminars, etc. are organised on the occasion of International Women's Day, Children's Day, World Disability Day, etc. For the year 2022-23, an amount of INR 500 lakh has been provisioned for the purpose.

Incentive for Marriage Between PwDs & Non-PwDs

7.5.16. A scheme called Award of Incentive for Marriage between Persons with Disabilities and Other Persons has been operational since 2013-14. The aim of the scheme is to encourage marriage of persons with disabilities (PwDs) with non-PwD persons so as to enable them to lead a dignified life in the society. An incentive amounting to INR 50,000 is being provided for each marriage as per the scheme. For the year 2022-23, INR 1000 lakh has been provisioned under this scheme.

School Uniform for Special School Children.

7.5.17. The Rights of Persons with Disabilities, 2016 ensures free education to the child with disability in an appropriate environment till he/she attains the age of 18 years. Free education also includes supply of the uniforms to the school going children with disabilities. The Government has introduced a new scheme "Uniform to the students at the special schools". The aim of the scheme is to provide two pairs of free uniforms annually to the students of existing 103 such special schools under grant-in-aid fold. An amount of INR 80 lakh have been provisioned for the year 2022-23.

Special ITI for PwDs

7.5.18. A special ITI for persons with disabilities (PwDs) in the State is functioning at Jatni of Khordha District to provide skill development in different trades like electrical, fitter, welder, plumber, dress making, computer operator cum programming assistant, and beautician, etc. A provision of INR 80 lakh has been made in the year 2022-23 for this purpose.

Care & Protection of Intellectual Disability and Spastic Children

7.5.19. The State Government has introduced the scheme for Persons with Intellectual Disability and Protection of Spastic Children with an objective of creating awareness among the public as well as the parents of spastic children. It aims to provide training and education to children with cerebral palsy, in order to make them self-sufficient. Financial assistance is being provided to Voluntary Organisations for this purpose.

Laptops for Visually Impaired Students

7.5.20. The Government of Odisha has decided to provide free laptops and voice recorders to the visually impaired students pursuing higher education. For the year 2022-23, a provision of INR 200 lakh has been made for the scheme.

State Commission for Persons with Disability

7.5.21. The Rights of Persons with Disabilities Act, 2016 is a Central Act. Section 79 of the Act provides for an appointment of a Commissioner for Persons with Disabilities in the State. An independent Commissioner has been appointed as the Commissioner for Disabilities to safeguard the rights and facilities have been made available to persons with disability (PwDs) under the Act. For the year 2022-23, an amount of INR 144 lakh was provided.

Hostel for Women with Disabilities

7.5.22. To meet the accommodation needs of outstation women (students or employees) with disabilities, the Department has set up hostels with appropriate infrastructure. Currently, there is one working women's hostel within the campus of Nibedita Working Women's Hostel and one student hostel each in Rama Devi and Sailabala College, for persons with disabilities.

Rehabilitation Centres including SIDR/ DDRCs/ARC/SIEP

7.5.23. Under National Programme for Rehabilitation of Persons with Disabilities (NRPDP), currently, there is a State Institute of Disability Rehabilitation (SIDR) and eight (8) District Disability Rehabilitation Centres (DDRCs). The SIDR is at Bhubaneswar and the DDRCs are located in Khorda, Kalahandi, Sambalpur, Phulabani, Mayurbhanj, Koraput, Ganjam and Nawarangpur. Funds are provided for staff salaries and maintenance of the SIDR and DDRCs. The Department has taken steps for setting up two specialised units, namely, State Institute for Empowerment of Persons with Disabilities (SIEP) and two Advanced Rehabilitation Centres (ARC) at Bhubaneswar and Sundargarh respectively. For the year 2022-23, the SIEPs have been provided with INR .479 crore and for ARC, the provision is INR 501 crore.

Computerised Braille Press

7.5.24. A high-speed computerised Braille press has been established in Berhampur for supply of Braille books to the visually impaired students. For the year 2022-23, INR 20 lakh was provided under this scheme.

Skill Upgradation Training & Rehabilitation

7.5.25. The Department is supporting skill upgradation, training and economic rehabilitation of persons with disabilities (PwDs). For this purpose, PwDs are being provided vocational training.

IV. Empowerment of Transgenders, Beggars and other Destitute

Indira Gandhi National Widow Pension Scheme (IGNWP)

7.5.26. Government of India has launched this scheme in 2009. Pension of INR 500 per month (INR 300/-from GOI+ INR 200/- from the State Govt) is given to widows belonging to BPL households and aged between 40-79 years. Currently, 5,28,570 beneficiaries have been covered under this scheme. In the Annual Budget 2022-23, an amount of INR 31895.06 lakh has been provisioned for the scheme.

National Family Benefit Scheme (NFBS)

7.5.27. The scheme is one of the components of the National Social Assistance Programme, which is being implemented in the State since 1995. Under this scheme, financial assistance is provided to BPL families upon the death of the primary bread winner of the family within the age of 18 to 59 years w.e.f. 18.10.12. A one-time grant of INR 20,000 is being provided to the bereaved families in each eligible case by the Gol. During this financial year, 19,224 beneficiaries have been identified under the scheme A provision of INR 4000. lakh have been made in the Annual Budget, 2022-23.

SAHAY

7.5.28. SAHAYA Scheme has been launched by the State Government in the year 2017-18 for rehabilitation of beggars and the destitute. For the year 2022-23, there is a budget provision of INR 1500 lakh under this scheme. All districts have conducted a survey of beggars and have put forth their plan for rehabilitation- for beggars in place as per the scheme guidelines.

De-Addiction (Non-Clinical) – Preventive Campaign

7.5.29. This scheme is being implemented from the year 2016-17. The aim of the scheme is to conduct information, education, and communication campaigns. For this purpose, an amount of INR 320 lakh has been provisioned for the year 2022-23. Under the scheme, funds have been provided to NGOs to organise deaddiction campaigns for alcoholics and drug addicts.

SWEEKRUTI

7.5.30. SWEEKRUTI scheme has been launched for the implementation of different programmes for rehabilitation and welfare of transgender people in Odisha. For the year 2022-23, there is a budget provision of INR 300 lakh for the scheme.

7.6. Conclusion

7.6.1. Over the years, Odisha has been implementing multidimensional schemes to ensure inclusive social development. Consistent commitment in revenue expenditure i.e., over 40 per cent of the State budget on social sector indicates the thrust of the Government for social welfare. The schemes spanning from cradle to grave provide care to people at every stage of human life. The focus on the health sector has led to significant improvement in life expectancy, reduction of IMR and increased institutional deliveries above all India level. First-trimester prenatal check-ups among mothers have increased by 12.9 per cent, from 64 per cent (NFHS-4) to 76.9 per cent. (NFHS-5). The institutional delivery rate in the State has also increased from 35.6 per cent in 2005-2006 (NFHS-3) to 92.2 per cent (NFHS-5) and is now well above the national average of 89 per cent.

7.6.2. The 5T intervention in establishing model classrooms in remote areas has improved access to digital education among children in remote areas of the State.

7.6.3. The availability of credit up to INR 5 lakh to SHGs at zero interest rate is a milestone in women empowerment and livelihood. In fact, Mission Shakti has ushered in a revolution for women empowerment in Odisha.



CHAPTER

8

GOVERNANCE REFORMS - EMPOWERING CITIZENS



With its game-changing 5T paradigm and a series of governance changes over the past few years, Odisha has redefined people-centric governance and responsive administration to boost the effectiveness of service delivery and public trust. The 'Mo Sarkar' initiative under 5T has further improved the accountability of the government with better monitoring mechanisms. It has not only induced a behavioural change for tackling grievances of the citizens but also improved transparency through effective feedback collection from citizens/complainants. Along with 'Mo Sarkar', Jana Sunani platform's transparency - with more than 100,000 grievances registered on the platform - is unparalleled with any of its predecessors.

The State is combating corruption with a Zero Tolerance approach, giving citizens direct benefits in their bank accounts, minimizing human interface, and making services available online, as well as by investigating irregularities and malpractices through proper registration, tracking, investigation, and timely closure of cases. Sustainable Development Goals (SDGs) cells are created in all the State departments to ensure improvement in SDGs while keeping local needs in mind so that no one is left behind. Along with the National Indicator Framework, Odisha published its first edition of the Odisha SDG Indicator Framework (OSIF). The Odisha State Disaster Management Authority (OSDMA) is always actively engaged in aiding and providing relief to the disaster prone areas. The 'Zero Casualty' approach of the state has become a global best practice for disaster preparedness and response, both nationally and internationally.

The impact of governance initiatives taken by the State can be seen in the Good Governance Index (GGI) 2021 in which the State's GGI score has improved from 4.44 in 2019 to 4.58 in 2021. The State has become a model for good governance and efficient public service delivery.

8.1. Introduction

8.1.1. Governance, in simple terms, can be defined as the principle of dealing with issues related to the development of a country and improving the future of the nation through implementation of laws. A government having good governance is a value-based government that makes the public administration open, transparent, accountable, and abides by the rules. Good governance is an attempt to widen the scope of public administration by going beyond formal government practices. It should be noted that governance is for all the citizens. Therefore, citizen-centric administration and good governance are complementary to each other. International donor agencies such as the World Bank propagated the concept of good governance in 1990 one of the critical factors explaining the divergence in economic performances of countries. Many countries in the developing world, are trying to pursue good governance in order to achieve the desired level of sustainable economic growth and development.

Building on the 5T paradigm, Odisha government has been one of the pioneers in redefining responsive administration and people-centric governance

8.1.2. The pivot of good governance rests on a bipartite relationship between the government and the governed. When a government is accountable and transparent, acts with integrity and upholds the rule of law, it can increase public trust and enhance effectiveness of delivery of services (Figure 8.1). This can in turn foster the conditions for a more participative democracy where citizens are actively engaged. Good governance is associated with efficient and effective administration in a democratic framework which is citizen friendly and caring with responsive administration. According to the United Nations, good governance is measured by eight factors: participation, rule of law, transparency, responsiveness, consensus oriented, equity and inclusiveness, effectiveness and efficiency and accountability. It precisely includes building competencies, aligning strategies with goals, being accountable, having a high level of ethics and integrity, defining roles and responsibilities. In general, good governance is perceived as a normative principle of administrative law, which obliges the State to perform its functions in a manner that promotes the values of efficiency and eliminates corruption.

Figure 8.1 Framework of Good Governance



8.1.3. The Odisha government has been one of the pioneers in redefining responsive administration and people-centric governance. Building on the game-changing 5T paradigm, the State has rolled out a suite of governance reforms to deliver last-mile delight to its citizens. The 5T charter is underpinned by the philosophy of leveraging Technology, Teamwork, Transparency, Time and Transformation to deliver goods and services to the people in the State. 'Mo Sarkar', literally translating to 'my government', is a watershed and transformative reform under the aegis of 5T.

Odisha has initiated multiple good governance practices and e-governance projects including "Odisha One Portal" and "Odisha Right to Public Services Act" in providing timely services to the citizens

8.1.4. The State has adopted a strategy to strengthen overall governance. It has ushered transparency in the governance process, reduced delays in the provision of services through a single window system, reduced corruption, and enhanced convenience and empowerment of citizens. E-governance also provides a mechanism of direct delivery of public services to the marginal segments of the society in the remotest corners, without having to deal with intermediaries. The use of internet not only delivers the services faster but also brings more transparency between the government and the citizens. Odisha has initiated several good governance practices and various e-governance projects including "Odisha One Portal" and "Odisha Right to Public Services Act" to provide services to people within the stipulated time frame. For quick redressal of public grievances and to ensure timely disposal of pension cases, the e-Abhijog Public Grievance Portal has been converted to Jana Sunani Portal with effect from November 1, 2021. The Zero Tolerance approach to corruption has been adopted by the Government to bring transparency in Administration.

8.2. Public Service Delivery

8.2.1. Delivery of public goods and services in a timely and efficient manner is instrumental in the economic development of the State. The Odisha Right to Public Services (ORTPS) Act, 2012 is an exemplary initiative by the State government to assure service delivery within a stipulated time period. Different services which citizens can obtain from different government departments, along with time limit for delivery of such services have been notified under ORTPS. For the delivery of each notified service, there shall be a designated officer to whom the citizen can make an application. The designated officer will provide the service in a time-bound and transparent manner. In case a citizen is unable to get the desired services within the prescribed time limit, an appropriate penalty will be imposed against the designated officer. In total, 417 number of public services from 31 departments have been notified under the ORTPS Act, 2012 as on October 27, 2022.

8.3. Tackling Corruption: Vigilance

Registration of cases

8.3.1. As on September 30, 2022, the state vigilance has registered 219 criminal cases against 393 persons including 44 Class-I officers, 40 Class-II officers, 149 Class-III employees, 5 Class-IV employees, 30 other public servants and 125 private persons. Out of 219 cases registered, 61 cases were instituted for acquisition of disproportionate assets against 68 public servants and 38 private persons. The total disproportionate assets in all 61 cases are worth INR121.99 crore. Similarly, 92 trap cases were instituted during the period against 97 public servants and 3 private persons for demand and acceptance of bribes amounting to INR 31.05 lakh.

Misappropriation cases

8.3.2. During this period, 66 misappropriation cases relating to misappropriation of public money against 187 persons, including 103 public servants and 84 private persons, involving misappropriation of public funds amounting to about INR16.38 crore have been registered. Misappropriation cases have been registered against 11 Class-I officers, 3 Class-II officers, 64 Class-III employees, 2 Class-IV employee, 23 other public servants and 84 private persons.

Enquiries

8.3.3. During this period, 202 enquiries have been initiated against 35 Class-I officers, 28 Class-II officers, 145 Class-III employees, 5 Class-IV employees, 18 other public servants and 39 private persons on their alleged involvement in various acts of corruption/malpractices. 208 enquiries have been disposed off, out of which 45 enquiries were referred to respective departments for initiation of departmental action, and 108 enquiries were converted to criminal cases.

Submission of Charge Sheet

8.3.4. During this period, 186 cases were disposed after investigation, out of which charge sheets were placed in 174 cases against 296 persons, including 28 Class-I officers, 32 Class-II officers, 143 Class-III employees, 8 Class-IV employees, 16 other public servants and 69 private persons. The percentage of Charge Sheet comes to 93.5 per cent.

Arrest

8.3.5. During this period, 152 persons were arrested, which included 26 Class-I officers, 30 Class-II officers, 79 Class-III employees, 04 Class-IV employees, 05 other public servants and 08 private persons.

Conviction in Court

8.3.6. During this period, 60 cases ended in conviction against 13 Class-I officers, five Class-II officers, 43 Class-III employees, six other public servants and 11 private persons. Thus, altogether, 78 accused persons were convicted during the period. The percentage of conviction in respect of cases disposed of after trial by the courts comes to around 42 per cent.

Dismissal from service

8.3.7. During this period, 16 public servants i.e., 02 Class-I Officers, 04 Class-II Officers and 10 Class-III employees were dismissed from government service following their conviction in vigilance cases.

Stoppage of pension

8.3.8. During this period, pension of 19 retired public servants viz., 02 Class-I Officers, 05 Class-II officers and 12 Class-III employees have been stopped consequent upon their conviction in vigilance cases.

Forest Wing

8.3.9. During this period, the forest wing of vigilance conducted 97 joint raids with the help of local forest officials and seized timber, machineries, and vehicles worth INR 3.06 crore (approx.). In this connection, forest offence cases were initiated against 42 persons.

8.4. Law & Order

8.4.1. Strengthening police machinery, in terms of human resources and infrastructure, has been the priority of the State government. Dedicated Police Stations for Cyber Crime and Economic Offences have been created. All police stations of the State are covered under 'Mo Sarkar' in order to achieve the highest level of accountability and transparency through the feedback from the complainants/ citizens.

8.4.2. Cyber Police Stations: Cybercrime and consequent financial frauds pose a formidable challenge to security at a global and national level. To

Inauguration of virtual police stations in the state is facilitating online registration of FIRs relating to thefts at public places

handle cybercrime, 14 new Cyber Crime and Economic offences Police Stations have been sanctioned and are functioning since December 2021.

Strengthening of Civil Police Set Up

The State has created 336 different categories of posts - Inspector-16, SI-48, ASI-29, CI Havildar-30, Constable-177, and Constable (Communication)-36 – for the establishment of 36 new Police Stations. Besides, all regular outposts of the State now headed by a sanctioned posts of a Sub-Inspector for better command, accountability, and output.

Technological Transformation in Police and related Services

The ambitious Crime and Criminal Tracking Network and Systems (CCTNS) was inaugurated by the Hon'ble Chief Minister on January 1, 2020 under the 5T initiatives. It is an integrated online system of recording crime and criminal data. The system includes Medico Legal Opinion System (MLOS), a new web application, to facilitate Police Officers to submit requisitions for Medico-legal opinion online and for medical officers to download the

Various web-based modules have been launched by the state for tracking and providing real-time services

requisition and upload their Medico-legal opinion. So far, 1,906 administrator users have been created and 6,615 doctors have been registered in this system. Since its launch, till October 28, 2022, 32,283 requisitions have been submitted by the Investigating Officers to Medical Officers through the system in various districts and 11,697 Medico Legal Opinions have been uploaded by the concerned medical officers.

8.4.3. The Virtual Police Station is an online mechanism established and inaugurated by the Hon'ble Chief Minister, Odisha in the State Crime Record Bureau, Bhubaneswar on 28th January, 2020. It facilitates online registration of FIRs relating to thefts at public places and motor vehicle theft cases, thus obviating the need to visit a Police Station. An extremist management module has been developed to assist the police personnel posted in Maoist affected districts of the State for creating a database of Maoist organizations. It contains details of arms looted and monitors the Maoist activities and member of cadres, etc.

8.4.4. Supervisory officers can supervise the SR cases timely by the help of this module, so that there is no delay in communication of instructions, compliance, and supervision. It eliminates all duplicity and reduces manpower deployed at various offices. All SR related case documents are being uploaded in the module for better monitoring. This module has been fully functional from 1st January, 2021. Similarly, supervisory officers can supervise non-SR cases in time by the help of this module. This will reduce the time in communicating the instructions and supervision notes to the IOs and hence improve compliances.

8.4.5. FSL Module is a role-based web application which automates the entire work of the State forensic science laboratory to maintain transparency, efficiency and reduce the workload.

8.4.6. Accident Investigation Module captures data required for analysis to comply with the requirements of the Ministry of Road Transport, Government of India. The module will generate an analytical report which will help in policy formulation for making roads safer, thus reducing fatalities due to road accidents.

8.4.7. Road Accident Case Document Module has been developed for providing insurance related documents to citizens / insurance companies for facilitating early settlement of insurance claims in respect of motor vehicle accident cases. This module was launched on January 28, 2020.

8.4.8. Strengthening Police System in Courts

Following initiatives have been undertaken:

- Establishment of Investigation Support Unit (ISU) in Crime Branch (CB) for improving the quality of investigation and monitoring of important cases and to function as a helpline for investigating officers.
- Augment in the sanctioned strength of CSI office and establishment of 64 new CSI officers with provision of computer, laptop and network connectivity to strengthen the prosecution of cases and improve the conviction rates.
- In-service training wing at CB for LoS in online and offline mode.
- A data analytics wing at CB for professional and systematic analysis of crime data and crime pattern for predictive forecast / analysis to prevent and control crime as well as to monitor trial and conviction statistics.

8.5. e-Governance

8.5.1. Information & Communication Technology (ICT) has been widely used to deliver public services. Odisha has strived to be a model State in leveraging IT to deliver seamless Government to Government (G2G), Government to Citizen (G2C) and Government to Business (G2B) services.

Odisha is using multiple ICT interventions by leveraging new emerging technologies in key sectors like education, healthcare, revenue administration and urban development

8.5.2. Government of Odisha is using various ICT interventions by leveraging new emerging technologies in key sectors like education, healthcare, revenue administration and urban development. Some of the major ICT interventions by departments in different fields are highlighted below.

8.5.3. Odisha Sampad Portal: It is the repository of the State's geospatial datasets consisting of administrative information, natural resources data layers, geo-coordinates/geo-referenced infrastructure details and other socio-economic parameters. The portal aims to cater to the geo-spatial data needs of State administrators, decision makers, resource managers and planners. The portal can be used for planning, especially for community development at block level by using scientific database containing geo-spatial natural resources and infrastructure profile of the block and spatial representation of demographic, socio-economic, agro-economic and utilities/amenities/infrastructure data (generated by GIS-based analysis and visualization).

8.5.4. The State's ICT interventions began at the grassroots with block level computerization in 2003-04. Since 2009-10, all District Rural Development Agencies (DRDAs) and blocks have been provided with alternate internet connectivity. Later, the Project Accounting and Monitoring Information System (PAMIS) was put in place to capture daily financial transactions and generate computerized cash book of the DRDAs and blocks. Pursuant to this, many IT applications have been developed: PRIASoft for facilitating panchayat wise flow of funds, BETAN, the payroll software developed by Odisha Computer Application Centre (OCAC) and National Panchayat Portal (NPP) for uploading information on websites of gram panchayat or blocks.

Electronic Benefit Transfer (EBT)

8.5.5. This scheme ensured electronic disbursement of all social sector benefits, including the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). In addition to EBT, other applications, such as e-Dak, which provides transparency in government communications, and the Sanjog Helpline, the Integrated Grievance Redressal System, consolidated the State government's efforts in digital citizen interface.

Program Management of Information System

8.5.6. A dedicated web portal (<https://rhodisha.gov.in/>) has been developed for managing information about the rural housing programme digitally on a daily basis. The key steps of programme implementation such as sanction of houses transfer of instalments and incentives to beneficiaries are being executed through this portal. This rural housing portal is designed for all stakeholders of the scheme including the beneficiary. All the reports required for planning and implementation including financial information, can be accessed at the Gram Panchayat, Block, District, and State level from the portal. The portal also provides information about beneficiaries covered for public viewing.

AmaGhar App

8.5.7. An android application system called 'Ama Ghar' has been developed and rolled out, which can be directly used by the beneficiary or his/her representative, tag officers and block office officials to report the physical progress of house construction. By using the Ama Ghar app, the beneficiary can initiate his/her instalment process by capturing a good quality photograph of the house with a timestamp and geo-tagging the houses at each construction stage. The next instalment of financial assistance can be provided to the beneficiary without any delay. The tag officers can also use this app to track the houses constructed under rural housing schemes

Online Case Record

8.5.8. A feature called 'Mo Case Record' has been incorporated in the Rural Housing Odisha portal - <https://rhodisha.gov.in> - to empower beneficiaries digitally to view their respective profiles, including their name, address, and pucca house sanction case record by entering the registration number in the portal.

Paddy Procurement Automation System (P-PAS)

8.5.9. It is an automated ICT platform that uses technology to identify genuine farmers through an iris authentication. The system electronically credits MSP payments to farmers' accounts within 24-72 hours of sale. The platform has helped Odisha transform from a paddy deficit to paddy surplus State.

Farmers' Registration

8.5.10. It is a consolidated database of farmers cultivating paddy and selling surplus produce to the State agencies through Primary Agricultural Cooperative Societies (PACS). Technology has helped link this farmers' database with the Odisha government's land records database, thus ensuring that only genuine farmers sell to the PACS.

E-Licensing

8.5.11. This is a single window project-based service delivery system for Agri-inputs, managing the supply chain for seed, fertilizers, and insecticides. While this end-to-end system is made online, making office visits redundant, it requires the Government to reach out to business units proactively to render the time-bound services under Odisha Right to Public Service Act. Fresh application, renewal, and amendment for different types of licenses as well as permission can be obtained through this system.

Integrated Financial Management System (IFMS)

8.5.12. This unified portal enables the finance department to monitor all receipts and expenditure of the State. It provides a host of services such as e-payment, reprint challan, accounts collection, payments status etc

Commercial tax e-services

8.5.13. The commercial tax division has taken up several measures to facilitate trade and business, improve regulatory oversight and encourage voluntary compliance, transforming the interaction between authorities and dealers.

Automation of Local Fund Audit (ALFA)

8.5.14. Systematization of audit workflows under Directorate of Local Fund Audit: As many as 13,585 institutions like ULBs, Panchayat Samities etc. are covered under the annual audit purview.

Budget Execution Technique Automation (BETA)

8.5.15. Submission of online budget proposals by Administrative Departments for generation of budget documents in the form of reports (bilingual).

College Accounting Procedure Automation (CAPA)

8.5.16. Role based web-application for accounting implemented in all the Aided Colleges under Higher Education Department

Automation of Small Savings Activities (ASSA)

8.5.17. Automation of online lucky coupons' generation under Small Savings Schemes. This has been implemented in all districts under Directorate of Small Savings

Odisha Central Audit Management Portal (OCAMP)

8.5.18. This is an online portal for audit compliance of audit trail reported by AG, Odisha. This system has been implemented in 40 Administrative Departments, 182 Directorates and 6779 Drawing and Disbursing Offices (DDO).

Contractor Database Management System

8.5.19. This system strengthens the government's 'Oversight Mechanism' by registering all existing and new contractors and tracking the status of contracts, thus plugging leakages, and avoiding delays

e-Muster Roll

8.5.20. This end-to-end integrated platform has access to the workers' cycle from registration to labour tagging, attendance, payments, and compliance with EPF and ESI. The system fetches labour details from the labour database and ensures timely payment of Minimum Wages.

e-Municipality

8.5.21. This is a state flagship project implemented across all urban local bodies, offering G2C services like water bill payments, birth and death certificates, payment of property tax, marriage certificate, trade license, etc

Bhubaneswar Smart City (Grievance Redressal)

8.5.22. Bhubaneswar, a unified portal acting as a service aggregator, makes available a string of services - electric bill payment, water bill payment, passport seva, employee verification, transfer of vehicle ownership etc. - for Smart City citizens. Equipped with an interactive Artificial Intelligence (AI) based chat box, the portal also brands Bhubaneswar as a visitor's destination.

Crime and Criminal Tracking Network and Systems (CCTNS)

8.5.23. It is a Mission Mode Project implemented by the Odisha Police. The Odisha Police has launched the Citizen Portal, enabling citizens to access information, request for different police services and get a copy of an FIR.

e-Bhawan (Odisha Bhawan Management System)

8.5.24. It enables citizens and Government Officials to apply online for room reservations and booking of conveyance facilities at Odisha Bhawan/Niwas/Sadan situated across the country. It also facilitates processing and allotment by Home Department, check-in and check-out, integrated billing, and digital payment at Bhawan desks.

Agni-Shama Seva online portal

8.5.25. It issues fire safety recommendations and certificates to various categories of buildings. The entire process is automated end to end, and all certificates are issued with digital signatures.

Integrated Mines and Minerals Management System (i3MS)

8.5.26. i3MS is a critical G2B initiative rolled out by Odisha for ushering in transparency and efficiency in mineral administration since 2010. It tracks the entire activities from ore extraction to transportation. By on boarding lessees, licensees, government officials and truckers, i3MS has created a seamless ecosystem for stakeholders in mining. The system checks ore pilferage by issuing e-transit permits and auto calculates royalty for the government.

Single Window System

8.5.27. The online Single Window portal 'GO SWIFT', launched in 2017, is a first-of-its-kind portal to facilitate ease of doing business in the State. The portal acts as a Single Window for Investor Facilitation and Tracking, to promote a conducive business environment through transparency and time-bound clearances. With the launch of GO SWIFT, the approval process for 34 services from 15 State Government Departments has been made available online, including online application submission, payment, tracking and processing of applications. Going forward, more services will be progressively added to the portal. The portal provides updated information relating to latest rules, policy initiatives and reforms undertaken by the Government of Odisha for prospective investors. This platform has integrated all applications of the Industries Department including GO PLUS, GO SMILE, GO CARE, Automated Post Allotment Application, State Project Monitoring Group portal and GoiPAS. GO SWIFT has been recognised as a best practice by the Centre.

e-MARKFED

8.5.28. Automation of Fertilizer Business Process of Markfed: Real-time tracking of stock, sale/distribution of fertilizer from companies (IFFCO, PPL, NFCL etc.) to warehouse, from warehouse to PACs/LAMPs and trade-off between PACs/LAMPs, etc.

Real Time Automation of Liquor Supply Chain Management System of Odisha

8.5.29. 8.5.29. State Beverages Corporation Limited: Supports faster turnaround of indent to permit, online indent generation, online purchase order generation, online ED payment, online road permit generation, online re-validation request, provisioning of alerts according to the user role, SMS gateway integration, Quick Response (QR) - coded Permit passes, home delivery of liquor, online purchase order by the retailers, online payment by retailers for purchase of liquor, etc.

Automation of Excise Directorate & District Excise Offices/Stations

8.5.30. This supports label registration, issue of licenses to different stakeholders, NOC for RAW materials, collection of excise duties, excise adhesive label accounting, enforcement activities and chemical examination laboratories.

HRMS

8.5.31. Human Resources Management System (HRMS) envisages automation of transaction relating to personnel matters. HRMS software automatically prepares all related accounts and registers like Service Book, Leave Account, Loan Account, Salary Account, Incumbency Chart etc, and retrieves relevant data from transactions. Moreover, it will also help retiring employees to prepare their own pension papers on the click of a button and help authorities to process pension papers easily and quickly. e-Disciplinary proceeding (eDP), e-Quarter management system (eQMS), and e-Service book (eSB) are further additions to the system which makes it more inclusive and effective.

Odisha Birth Death Registration System

8.5.32. The 'Odisha Birth Death Registration System' has been envisioned as a pioneering initiative by the department. As a part of this project, end-to-end delivery of Birth and Death certificates are being done online, without a single visit to municipality office, health office or any other designated health institutions.

8.5.33. Odisha Human Resources for Health portal captures all information of doctors and paramedical staff working at different hospitals in the State.

e-Blood Bank Management

8.5.34. Blood Collection, blood issue, inventory, camp management, etc.

Online Training Management System for RIPAE & S

8.5.35. Regional Institute of Planning, Applied Economics and Statistics (RIPAE&S) functioning under the aegis of the Planning & Convergence Department imparts in-service training to statistical personnel and undertakes specific training programmes.

OKH (Odisha Knowledge Hub Lecture Series portal)

8.5.36. The portal captures information related to events of OKH, like profile of the guest, video of the talk, photo gallery, etc.

e-Registration

8.5.37. The e-Registration project is in operation in all registration offices of the State since January 4, 2010. More than 95 per cent of documents are registered within the ORTPS timeline (three days), and more than 91 per cent of documents are delivered within one day. During the period from April 1, 2020 to February 9, 2021, 2.56 lakh documents were registered and 4.93 lakh encumbrance certificates and 0.58 lakh certified copies of previously registered documents were issued through the e-Registration system. The e-Registration application has been integrated with the Aadhaar database of UIDAI and PAN database.

e-Stamping

8.5.38. Collection of stamp duty through e-Stamping is in operation in the State since June 27, 2016. During the period from April 1, 2020 to February 9, 2021, 67,325 number of e-Stamp certificates have been issued through which stamp duty amounting to INR 1287.86 crore have been collected.

Bhulekh (Computerization of Land Records)

8.5.39. Digitization of land records of the raiyats of the State, showing the ownership of the land has been done, which is available in the Bhulekh website (Figure 8.2). Computerized RoRs are being issued and delivered through speed post to the citizens after online mutation through the LRMS software.

Figure 8.2 Bhulekh website for computerisation of land records



Bhunaksha (Digitization of cadastral maps)

8.5.40. Approximately 1,13,000 cadastral maps have been digitised in respect of 51,637 revenue villages of the State and hosted in the Bhunaksha website (<http://bhunakshaodisha.nic.in/>) for public view.

Online mutation (LRMS)

8.5.41. The mutation process has been made mandatorily online in all 317 Tahasils of the State with effect from March 2018. After the registration of land, Sale Transaction Report (Form 3) is transmitted electronically to the concerned Tahasil office for initiation of mutation case and correction of RoR. The status of the mutation case is also available in the Tahasil website (<http://dwistodisha.nic.in/CaseStatus.aspx>). 4.93 lakh mutation cases have been disposed in the LRMS software in the State from April 1, 2020 to February 9, 2021.

Survey/Re-survey using modern technologies

8.5.42. Hi-tech survey operations using aerial photography, followed by ground-truthing by DGPS/ETS, are going on in the districts of Sundargarh, Deogarh, Sambalpur, Bolangir and Subarnapur. In total, 4851 villages have been notified in these districts for carrying out hi-tech survey work.

ORTPS Daily Bulletin

8.5.43. ORTPS Daily Bulletin (<http://bhulekh.ori.nic.in/ortpsa/>) on registration and mutation services is being published w.e.f. July 31, 2018, by collecting data on real time basis from e-Registration, LRMS and RCCMS application software through web services to monitor effective delivery of notified public services.

Revenue Minister's Helpline

8.5.44. Revenue Minister's Helpline was started on October 31, 2018, for effective redressal of the grievances of citizens pertaining to services of the Revenue and DM Department. Citizens who did not receive services related to Revenue Administration within the prescribed time limit can lodge their grievances by mentioning the name of the office and district, case number and date of application through the toll-free number (1800-1218-242), SMS, e-mail ID, online portal or WhatsApp (9437704414).

Online payment of land revenue

8.5.45. e-PAUTI Portal ([http:// odishalandrevenue.nic.in](http://odishalandrevenue.nic.in)) introduced on August 15, 2019, to facilitate the online payment of land revenue by citizens. The tenant's ledger has been digitized for the purpose. Details of 1.70 crore Khatiyans, 5.70 crore plots and 3.57 crore tenants have been digitized. Considering the overwhelming response from citizens to the e-PAUTI Portal and penetration of smartphones, the mobile app (PAUTI) was developed and launched on December 28, 2019. This app is available on both android and iOS-based platforms. This app has been integrated with the BHIM App to offer more choices and flexibility to citizens.

Online delivery of Public Services in Revenue administration

8.5.46. Physical interface of public has been reduced by providing all 34 public services online except statutory requirements of physical presence. All the certificate services can be applied, processed and availed online through <https://edistrict.odisha.gov.in>. An applicant can apply for all certificate services anytime, anywhere without going to the native Tahasil. Communication between different Tahasils is also facilitated electronically through this application based on service plus platform. After disposal, the applicant can download the certificate from their mailbox, Portal and DigiLocker.

The Land Acquisition, Rehabilitation and Resettlement Management System (LARRMS)

8.5.47. Revenue & Disaster Management Department is the nodal department for land acquisition, rehabilitation, and resettlement (LARRMS). The entire process has been automated, and all stakeholders can access the web-based application (<http://larrmsodisha.nic.in>) through respective login credentials. Ten departments, including Works, Water Resources, Industries, Commerce & Transport, Health & Family Welfare, Steel & Mines, Housing & Urban Development, Co-operation, Rural Development and Panchayati Raj & Drinking Water, can file requisition for land acquisition through LARRMS. It has been linked with the Bhoomi Rashi Portal of Government of India for NHA projects. The public can view different notifications and declarations published in the LARRMS Portal and submit their grievances and feedback through this. Till February 12, 2021, 110 Projects and 543 proposals have been processed through this system.

Works and Accounts Management Information System (WAMIS)

8.5.48. WAMIS is a generic public infrastructure project management and monitoring framework. It has been designed and developed with a view to aid the line departments involved in the creation and maintenance of public infrastructure assets to enhance their planning and operational efficiency, leading to effective service delivery. The solutions encompass the entire lifecycle management of a typical construction project from its inception to its final completion in the form of various modules and tools. WAMIS also enables integration with other allied departments and nodal agencies such as the State Treasuries and AG's System for real time reconciliation of revenue & expenditure, thereby impacting the overall time and quality of fiscal consolidation. A comprehensive decision support tool (WAMIS Analytics) has also been developed to aid the officials at appropriate levels to monitor and track the physical and financial progress of various projects based on chart of accounts, schemes, category, cost, timelines and other delivery parameters to give a snapshot of ongoing project activities.

Integrated Odisha Tourism Portal

8.5.49. The use of analytics and tools of Artificial Intelligence (AI) in the revamped Odisha Tourism Portal has helped create a seamless online ecosystem for all players in the tourism value chain.

E-Despatch

8.5.50. Odisha has been a pioneering State in introducing electronic transfer of letters which is used by all departments in the State. This has led to transparency in official communication among different government offices.

Central RTI Portal

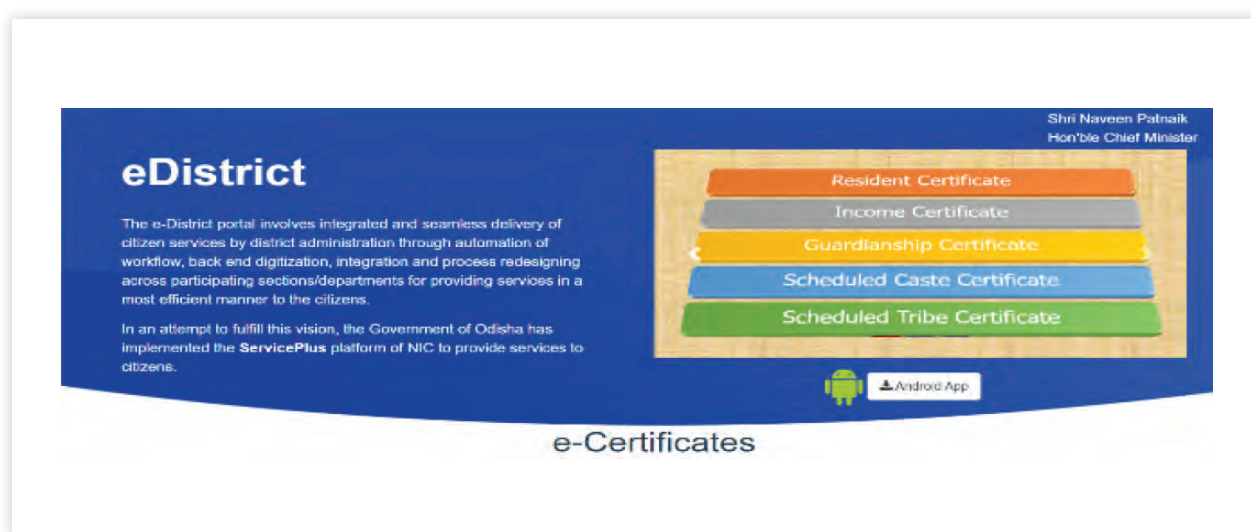
8.5.51. It is a central monitoring mechanism by the Odisha government to ensure implementation of the Right to Information Act, 2005 across all departments and organisations. It provides a single point access of all RTI related information, spurring proactive disclosure.

E-District

8.5.52. The portal involves integrated and seamless delivery of citizen services by the district administration through automation of workflow, back-end digitization and process redesigning across participating departments (Figure 8.3). The system generates a host of e-certificates like resident certificates, SC & ST certificates, OBC certificates, income and asset certificates, legal heir certificates, etc.

Figure 8.3

The eDistrict portal for integrated and seamless delivery of citizen services



Integrated Legal Monitoring System (ILMS)

8.5.53. The ICT enabled monitoring system not just records a legal case but tracks different phases of a case. It includes a mail messaging system with a workflow model for effective communication among government officials and government advocates.

Automated PDS

8.5.54. The end-to-end Public Distribution System (PDS) ensures that only the genuine beneficiaries get the entitlements. The automation of Fair Price Shops checks pilferages, transit loss of food commodities and optimizes demand-supply.

CM Social Media Grievance Cell

8.5.55. The CM Grievance Cell is an application used for addressing public grievances in the State with the use of social media. Citizens can air their grievances on social media platforms like Facebook and Twitter and get responses from the concerned officials within 24 hours.

Odisha One Portal

8.5.56. It's the one-stop access to Public Services. The State Electronics & IT Department has developed this common front-end interface to make it convenient for citizens to access G2C services. It is an integrated service delivery framework for G2C services, either through self-mode or Common Service Centres named Mo Seva Kendra. All G2C services like birth certificate, death certificate, caste certificate, residence certificate, payment of water and electricity bills, etc. among more than a hundred services will be delivered online through the portal.

8.6. Responsive Governance through 5T

8.6.1. Ever since the adoption of the 5T (Teamwork, Transparency, Time, Technology, and Transformation), the government of Odisha has taken a leap in people-centric and responsive governance. The 5T charter is based on optimal use of technology for reducing the time taken in decision-making and enabling better understanding of government schemes. It is underpinned by transparency in administration and time-bound goal tracking. The entire State machinery works as a team to transform the overall governance under the 5T framework. To reduce the compliance burden for citizens in availing government services, the State has undertaken major e-governance transformation under the 5T initiatives in different sectors. The Electronics and Information Technology Department has been transformed into an enabler for ensuring citizen-centric governance, delivering citizen services at the doorstep. Each Department has a 5T cell with a nodal officer to track the Action Plans while the Department of Planning & Convergence is the nodal Department for coordinating and documenting the 5T charter of all Departments.

8.6.2. As part of the '5T' agenda, the State Government aims for transformational and not incremental changes in governance in all its departments and to help the government reduce information asymmetry in society. Under the 5T umbrella, the State government has launched another initiative termed 'Mo Sarkar' or My Government. It strives to upgrade the quality of public services and fix accountability of government officers by sourcing general feedback through ICT. Under this system, phone numbers are collected on a random basis. Feedback about the behaviour and professionalism of government officers is taken from the people in order to improve the governance system. By making government decisions more transparent and evidence-based, 'Mo Sarkar' reinforces last-mile democracy.

8.7. The 5T Impact

8.7.1. The State has undertaken major e-Governance transformation as a part of 5T initiatives in sectors such as education, cyber security, public grievance redress, tourism, investment and trade, land records, health, and disaster management. All major hospitals are being covered under 5T initiatives with the state-of-the-art facilities to provide best of healthcare facilities to the common man. Public service delivery through Rajaswa Ratha is a initiative of revenue administration in addressing the issues and delivering various revenue services to the public at their doorsteps under the ambit of 5T and 'Mo Sarkar' in view of the surging infection due to COVID-19 pandemic.

5T ushers a new era of people centric, engaging, and responsive administration in the state

8.7.2. This is also a part of ethical Governance through which 76,924 numbers of RoRs have been delivered and 1,50,904 certificates issued and provided to the general public through the programme. With 5T at the core of the governance model, the Government of Odisha has rolled out a host of people-centric reforms. At the unveiling of the Good Governance Index (GGI) 2021 by the Government of India, Odisha was adjudged first in two categories- human resource development and economic governance in the Category of Group B States. The State also improved its GGI score from 4.44 in 2019 to 4.58 in 2021.

I. Technology-driven solutions under 5T initiative

Electricity distribution

8.7.3. The Distribution Utilities of Odisha (TPCODL, TPNODL, TPWODL & TPSODL) are going to be part of 5T programmes of Government of Odisha. Under this initiative, people can avail new electricity connections, make online bill payments and lodge their grievances online. Permanent Connection will be provided up to 5KW (Single Phase) within 48 hours of the submission of application with the completion of payment

SAACAR Portal

8.7.4. Under the 5T initiative, the Government of Odisha has launched a web portal SAACAR – ‘Single Window Application Atrocity Compensation Assistance and Relief’— for end-to-end processing of atrocity cases registered in various police stations. This portal will facilitate faster investigation and payment of compensation in first phase to the victims in SC-ST cases within a period of 21 days.

Bhubaneswar Land Use Intelligent System (BLUIS)

8.7.5. It is a geo-tagged repository of all government lands in the city to detect changes in lands by leveraging high-resolution satellite imagery.

HRMS 2.0

8.7.6. This mobile and web-based application serves as a single window for all personnel related transaction of State Government employees.

LMS 2.0

8.7.7. Litigation Management System: This is an online application to record information of legal cases and enable end-to-end communication between government officials and advocates during different stages of a case.

ORTPSA Online Module (www.central.ortpsa.in)

8.7.8. The Odisha Right to Public Services Act (ORTPSA) online module is a dynamic dashboard for monitoring delivery of notified public services including integration of online services with a central monitoring system.

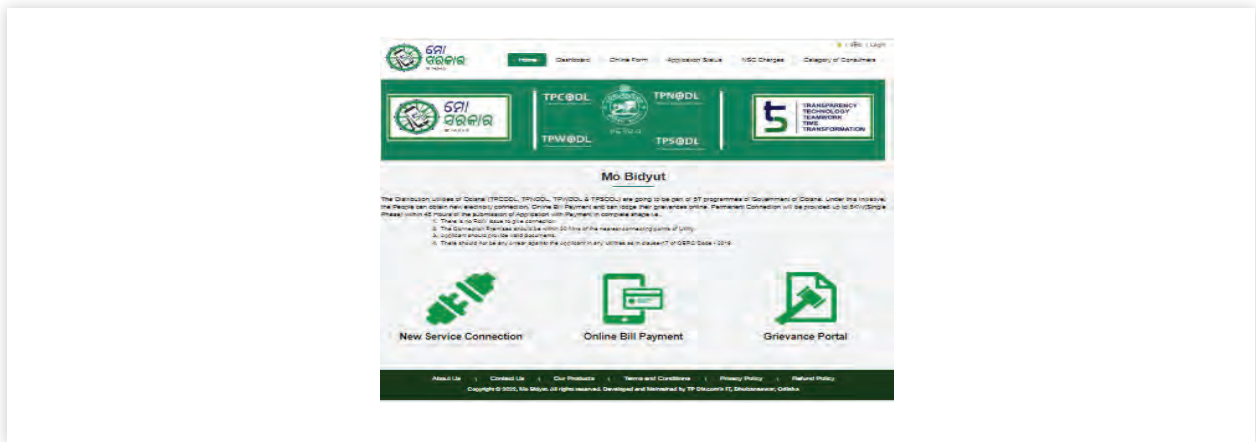
8.7.9. Integrated Recruitment Management System (IRMS) has been implemented and operationalised in Odisha Public Service Commission (OPSC) & Odisha Staff selection Commission (OSSC) under the 5T program of the Government.

8.7.10. Krushak Odisha portal contains an authentic database of 4.95 million (till 25 May 2022) farmers. This database includes small, marginal, landless cultivators and agricultural labourers. The information of all farmers in the database such as residential details, land details, crops cultivated, livestock reared, and fisheries practised has been verified by government extension workers.

Mo Bidyut Portal Odisha

8.7.11. The Odisha government has released a portable application on Mobidyut.com (Figure 8.4) for power purchaser administration. Through Mo Bidyut Portal, people can obtain a new power association, file complaints (customer protests), and pay their bills online. One can submit an online application to avail a new service connection in the State within two days.

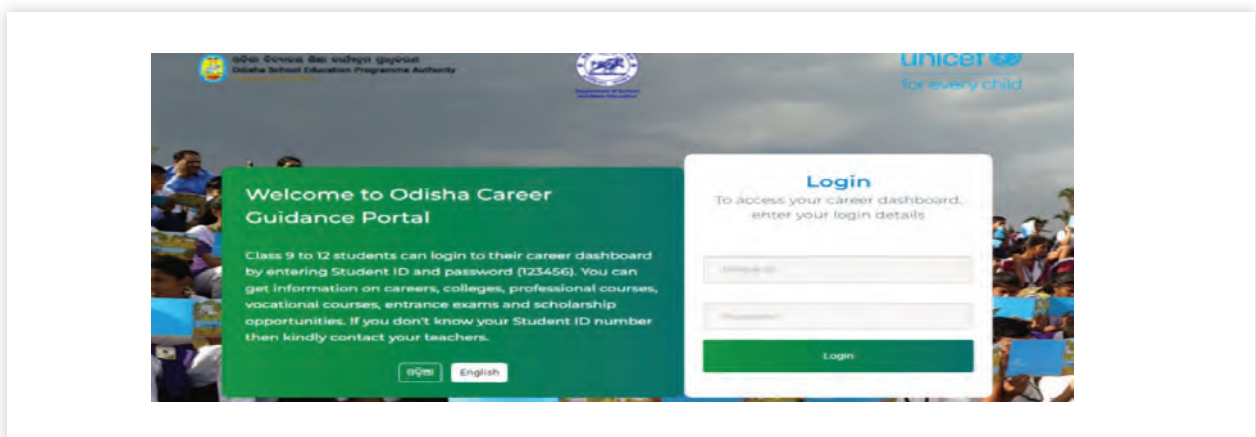
Figure 8.4 MoBidyut for power purchaser administration



Odisha Career Portal

8.7.12. The Government of Odisha has launched the Odisha Career Portal (Figure 8.5) for secondary and higher secondary students. Through this portal, students can access information about different career options. This portal will also provide opportunities for the students to interact with teachers. The Department of School and Mass Education has launched this portal in collaboration with UNICEF. Career guidance will be provided through this portal. This portal has been made available in the local Odia language. Information regarding careers, colleges, professional courses, vocational courses, entrance exams, and scholarship opportunities will be aggregated through this portal

Figure 8.5 Odisha Career Portal for secondary and higher secondary students



Odisha Caste Certificate

8.7.13. The main objective of Odisha caste certificate is to facilitate online application for a caste certificate through E-district Odisha. Now, citizens are not required to visit government offices to apply for the benefits of availing various government services. They can apply from the comfort of their homes through the official website. This will save time and money and will also bring transparency in the system. All the citizens of Odisha can apply through the portal. Application has been made accessible to every citizen of Odisha. No fee has been charged from the applicant for applying for various certificates.

Odisha Farmer Registration Portal

8.7.14. The main objective of Odisha Farmer Registration Portal is to prepare a database of all the farmers who want to sell their produce at the minimum support price (Figure 8.6). By registering farmers on the portal, the government can keep track of all the farmers who have their marketable surplus and commence procurement. The application details of the farmers will be uploaded on the website of the Food Supplies and Consumer Welfare Department through a web-based Farmer Registration software application. Planning in advance will help manage procurement operations in each crop season. Farmers who want to sell their paddy must register afresh. Usually, the procurement of paddy starts from the first week of November. All the 30 districts will conduct farmer registrations for the procurement within the given timeline.

Figure 8.6 Odisha Farmer Registration Portal



Odisha Inter-Caste Marriage Scheme

8.7.15. Under this scheme inter-caste marriages in the State of Odisha are encouraged and Rs 1.5 lakh is given to the couples as an incentive. To get the benefit the beneficiary should apply through the official website (Figure 8.7).

Figure 8.7 Official website for inter-caste marriage



Odisha State Scholarship Portal

8.7.16. The main objective of introducing the Odisha State Scholarship portal (Figure 8.8) is to provide financial aid to the students from Scheduled Castes and Scheduled Tribes so they can complete various professional projects.

Figure 8.8 Odisha State Scholarship portal



8.7.16. Public service delivery through Rajaswa Ratha is a unique and innovative initiative of revenue administration in addressing the issues and delivering various revenue services to the public at their doorsteps in the ambit of 5T and 'Mo Sarkar' in view of the surging of infection due to COVID-19 pandemic situation when citizens were not able to visit Government offices for their various needs. This is also a part of ethical Governance through which 76,924 numbers of RoRs have been delivered and 1,50,904 certificates issued and provided to the general public through the programme

II. Mo Sarkar: An Integrated Citizen Feedback System

8.7.17. 'Mo Sarkar' is an integrated Citizen Interaction System which provides a single platform for citizens' feedback about public services that lead to accountability and efficiency in governance. It is a feedback-based governance model through which the Honourable CM, Ministers, and senior officials seek feedback directly over the phone regarding the kind of services citizens received from various

Mo Sarkar, through its feedback-based governance model, provides a single platform for citizens towards integrating grievance and feedbacks on public services

government offices. Based on their feedback, the State government takes the necessary steps to improve service delivery system. As many as 257 services of 31 Departments, including Finance, Works, Commerce, and Transport have been covered under the purview of 'Mo Sarkar'. In the last two decades, the State has shown progress and it has become a model for good governance. The initiative has brought a change in public perception towards the government and government institutions. It has also built trust between the public and the government.

A. Scenario before Mo Sarkar

8.7.18. Before commissioning the 'Mo Sarkar', the Odisha State machinery faced challenges in eliciting feedback from the citizens and felt the need for creating a citizen-centric contact centre as a communication interface between the government and the citizens. 'Mo Sarkar' seeks to dismantle the perception barrier by using a randomized feedback system where ministers and top-ranked officials call up citizens to gauge their experience of availing public services. It is a watershed reform in responsive governance, empowering citizens to have a direct dialogue with the authorities and voice their discontent. With its thrust on citizen centricity, 'Mo Sarkar' fits well into the 5T Governance paradigm.

B. Workings of the System

8.7.19. The 'Mo Sarkar' system has two modes of getting feedback and listening to the grievances of the citizens. In the first mode, the citizens visiting the offices for grievances shall register their phone numbers, which is followed up directly by the Chief Minister, Chief Minister's Office (CMO) and other higher officials. This is to find out the status of the action taken to resolve the issue and the satisfaction level of the service. In the second mode, the citizen can also ring up the toll-free number 14545 for their grievances and feedback. The list of registered complainants is displayed in all block and tehsil offices. This initiative of Government of Odisha aims to ensure efficient service delivery at the ground level by establishing direct connection with the citizens through a centralized feedback system. 'Mo Sarkar' is one of the best practices of citizen-centric governance. By being a unified database of citizens' details and their feedback, the system acts as a single point contact centre for connectivity.

8.7.20. 'Mo Sarkar' has induced a behavioural change among the officers for tackling citizens' grievances. Further, it has improved the monitoring mechanism for ensuring accountability. The implementation of 'Mo Sarkar' status as of October 2022 is presented below.

- i. Feedback collected randomly for 257 services in respect of 31 departments
- ii. Contact details stored for 3,48,64,861 citizens (about twice the population of New York)
- iii. Total feedback received for 3,66,841 services from Authority
- iv. Total 370 users created
- v. Average 18,000 no of calls made by ministers and officials each month against which 7486 feedback are being received

8.8. 'Jana Sunani' -A Citizen Friendly & Responsive Platform

8.8.1. 'Jana Sunani', as a unified omnichannel grievance redressal platform ensures convenience to the last rung of the ladder. The system infuses greater transparency and accountability. The top-down hierarchy of grievance ownership counts for better accountability and cohesive immersive citizen experience by timely updates on their grievances. A common platform for grievance and related queries eases the tracking of grievances. Multiple modes of grievance redressal namely web portal, web chat-bot, WhatsApp chat-bot, mobile application, social media, physical application, email, and letters offer convenience to the citizens for filing their grievances (Figure 8.9). Higher transparency regarding grievances offers enhanced citizen experience. Ease of registering grievances on WhatsApp and updates on the status of grievance resolution has facilitated voicing of the grievance from the convenience of anywhere and anytime. Thus, an omnichannel platform encompasses and caters to the last-mile citizens, saving a lot of time and effort establishing a strong faith on the government. The 24x7x365 system also increases transparency and accountability with a grievance redressal response time as little as 24 hours.

Figure 8.9 Online Citizen Friendly & Responsive Platform



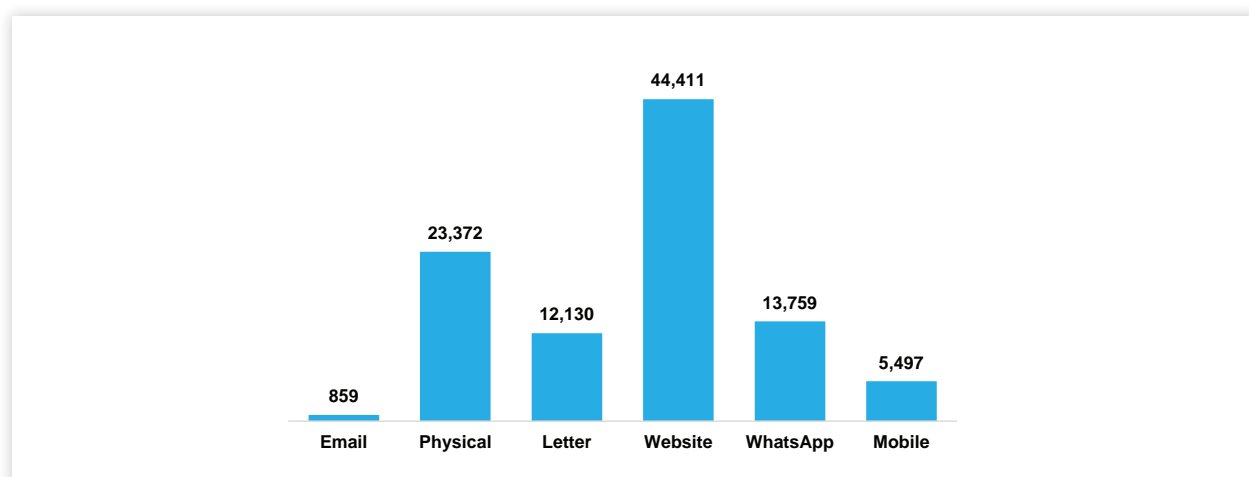
Impact

8.8.2. With more than 100,000 grievances registered on the platform, the transparency that 'Jana Sunani' offers is unmatched by any of its predecessors. The platform has onboarded as many as 2400 users across all departmental hierarchies (Table 8.1). Though numbers would not tell the complete story of the importance and impact of 'Jana Sunani' has, here are some facts and figures to get a sense of the usability and faster turnaround time the omnichannel grievance redressal platform offers.

Table 8.1 Statistics of Jana Sunani-Odisha

Data Points	Figures
Total User On-Boarded	2,400
Active Users	2,200
Legacy Data	27,929
Daily Average Grievance Registered	300
Daily Average Grievance Disposed	196
Grievance Received	100,028
Grievance Resolved	64,837
Grievance Pending	35,191
Mobile App Downloaded	3.37K
Sub-Ordinate Office	2200
Grievance Resolution Ratio	65%

Figure 8.10 Grievances Registered on Different Channels-Odisha



8.9. The Centre for Modernizing Government Initiative (CMGI)

8.9.1. The Centre for Modernizing Government Initiative (CMGI) has its origins in the recommendations of Government of Odisha (GoO) to help achieve its goal of transforming the government in accordance with its vision. It is a unique organization operating in the meta-space of e-Government. In its five years of existence, CMGI has handled a wide-range of projects, providing consulting support in developing and implementing e-Government projects to both Central and State Governments in India. CMGI coordinates and supports the designing and implementation of Governance Reform Programme. It undertakes action research, provides professional advice and conducts change management programmes for Government departments and agencies to help them implement their reform agenda. It also works closely with policy makers like Ministers, officials, and other stakeholders, especially citizens, to promote Simple, Moral, Accountable, Responsive and Transparent (SMART) government. CMGI believes in e-governance initiatives to have effective administration, day to day transactions and public service delivery. The goals are-

- Better service-delivery to citizens.
- Ushering in transparency and accountability.
- Empowering people through information.
- Improving efficiency within governments.
- Improve interface with business and industry.

8.10. State Commitment to Leave No One Behind

8.10.1. In September 2015, the UN Sustainable Development Summit adopted a new framework to guide development efforts between 2016 and 2030, entitled "Transforming our world: the 2030 Agenda for Sustainable Development". At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. The SDGs made room for 'bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path' with no one left behind. It set off a collective journey to free humanity from the tyranny of poverty and deprivation and to 'heal and secure our planet'.

8.10.2. The commitment to achieve the 2030 Agenda necessitates a global alliance among the nations. Achieving the goals will require efforts at the local level. While NITI Aayog monitors the SDGs for the nation, for the State of

Odisha, Planning & Convergence (P&C) Department is the Nodal department in the State to coordinate the efforts and monitor the progress for achieving the SDGs.

8.10.3. Being a champion of the SDGs from the very outset, the Government of Odisha is committed to achieving the SDGs and has been taking strategic initiatives to localise the SDGs. As a step in this direction, in line with the National Indicator Framework devised by Ministry of Statistics and Programme Implementation (MoSPI), GoI, Odisha published its first edition of Odisha SDG Indicator Framework (OSIF) in 2019 with 367 indicators. To enable OSIF to capture the recent developments and to incorporate the changes in scheme parameters, OSIF 1.0 has now been reviewed and reframed with indicators, wherein the indicators are mapped to departments, targets and data sources. Thus, the second edition of the Odisha SDG Indicator Framework (OSIF 2.0) consists of 293 indicators, of which 106 indicators are specific to Odisha's context.

8.10.4. Odisha has been a pioneer in ensuring that in our march towards achievement of SDGs, no one is left behind and the development undertaken is relevant to local needs and aspirations. To create the necessary coherence among the multiple departments of the State, SDG Cells have been created in all the Departments. Further, the Nodal and Programme Officers of thirty-seven SDG implementing Departments of the State have been sensitized on SDGs. As a next step towards localising the SDGs and taking it closer to the people to prompt relevant actions locally, SDG Cells have been constituted in all the districts. To gain a better understanding of the local context, training programmes were conducted in all the 30 Districts of the State where almost 2000 number of District officials, who are the implementers of the SDGs at the District level, were sensitised on their role in strengthening the monitoring & evaluation ecosystem for better implementation and monitoring of SDGs.

8.10.5. As a part of the two-days training programme that was conducted in the districts, the participants visited two Gram Panchayats (GPs) of the districts to further understand the necessary convergence required at the ground level for achievement of SDGs. The GPs visited are now being developed by aligning their Annual Action Plans and GPDPs for 2023-24 with SDGs. Through this exercise, it is being ensured that all the stakeholders come together and develop strategies and prepare the roadmap for the road ahead for achieving the Agenda 2030 of the State

8.11. A Model State in Disaster Management

8.11.1. Nearly one third of the cyclones on India's east coast occur in Odisha. Districts like Balasore, Bhadrak, Jajpur, Cuttack, Puri, Ganjam, Kendrapara, Jagatsinghpur, Khordha and Gajapati are more prone to cyclones. After the Super Cyclone, Government of Odisha constituted Odisha State Disaster Management Authority (OSDMA) to have a systematic and planned approach to disaster mitigation and management in the State. Government has implemented UNDP sponsored Disaster Risk Management Programme at multi-level and constructed Emergency Operation Centers or Control Rooms. Over the years, the OSDMA has improved its performance in managing natural disasters and in the process Odisha's identity as the best-equipped State to manage disasters has been given world-wide recognition. Since the Super Cyclone of 1999 a paradigm shift has been made in the approach to disaster management and auto triggered response mechanisms have been put in place from GP level to State level. The result of this has been felt during recent years. It is considered as a role model in India and internationally as well, for efficient preparedness and swift response to disasters.

8.11.2. Odisha has come a long way in the last two decades and been able to protect its people from the wrath of devastating cyclones in a planned manner. In order to tackle the disasters, Odisha took a conscious decision and gradually built upon its capacity, particularly at the community level. It has successfully started community-level warning, built multi-purpose cyclone shelters under National Cyclone Risk Mitigation Project, and developed an Early Warning Dissemination System (EWDS) with last-mile connectivity. The capacity to deal with natural disasters

has increased tremendously at the community level. The Odisha model of disaster preparedness is exemplary for others. In April 2018, Odisha became the first Indian State to have an early warning system for natural disasters such as cyclones and tsunami. The EWDS is a fool-proof communication system to address the existing gap in disseminating disaster warning by strengthening the emergency operation centres in the State. At present, as many as 1,205 villages from 22 blocks in the coastal districts of Balasore, Bhadrak, Jagatsinghpur, Puri and Ganjam have been covered under the EWDS. 'Zero Casualty' approach of Odisha government created global best practice norms for disaster preparedness and response not only in the country but internationally as well.

8.11.3. The State faced four major disasters such as Cyclone Yaas, Gulab, Jawad and Heavy rain & flood along with natural disasters like heat wave, drowning, snakebite, fire accident, lightning, hailstorms and whirlwind in the year 2021-22. Prompt and timely response of the State Government helped overcome the situation.

III. Regional Conclave on Disaster Management

8.11.4. The First Regional Conclave on Disaster Management was organized by the Tamil Nadu State Disaster Management Authority in collaboration with the National Disaster Management Authority and the Ministry of Home Affairs on March 8-9, 2022, at Chennai. SRC, Odisha and other Officers as representatives from the State participated in that conclave and shared best practices in managing very severe cyclonic storm "FANI" and other disasters effectively with zero casualty

8.12. Conclusion

8.12.1. Odisha has undergone a transformation and has become one of the fastest developing States in the Country. The State has become a model in the Public Service delivery and Governance domain. The concept of 5T has brought revolutionary change and has set high stands in public service delivery. 'Mo Sarkar' is an important transformation initiative under the 5T chapter of Governance ensuring behavioural change and accountability.

8.12.2. The State has ensured timely and hassle-free delivery of public services under ORTPS Act. The State has undertaken citizen centric initiatives like redressal of public grievances, online services, online public service delivery and other good governance practices. The vision is to extend the outreach of service delivery system, making them more effective. In order to ensure quick redressal of peoples' grievances, 'Jana Sunani' Portal became effective from November 2021 which ensures people centric Governance through e-Governance models.

8.12.3. All the initiatives and steps as enumerated above taken by the present Government of Odisha will make the entire gamut of public administration people centric and would positively impact the quality of life of the people.

CHAPTER

9

FISCAL DEVELOPMENT
AND MANAGEMENT



Public finance deals with the management of revenue, expenditure and debt-load and is associated with the budget. The budget analysis helps in framing various government policies and setting priorities. It also helps in identifying the un-tapped sources of revenue as well as potential avenues of expenditure, which in turn can unleash the new opportunities of development. Fiscal indicators like revenue deficit, fiscal deficit, debt to GSDP ratio, etc. help in maintaining fiscal discipline.

The state has taken several steps to strengthen appropriate institutional measures for efficient management of public finances. Developmental challenges like healthy housing conditions, safe water supply, and waste management are best understood at the ground level. For this purpose, various developmental functions are devolved to local bodies to take care of region-specific developmental needs. However, with low revenue mobilization capacity, local bodies are heavily dependent on transfers from the State Government to fund their various needs. Government of Odisha is committed to providing for the developmental needs of the state.

In spite of economic uncertainty due to pandemic followed by economic recession and natural calamities, the State has undertaken all efforts to ensure well-being of the people over stringent fiscal prudence. In reality, these uncertainties have disrupted normal revenue receipts of the State and the pandemic induced fiscal measures pushed up expenditure obligations of the Government. To support the economy and alleviate the damage caused by the economic slowdown and the pandemic (as a counter cycle fiscal policy), the State had to press the pause button on fiscal consolidation efforts. On the other hand, the government has initiated a comprehensive programme of action for sustainable, inclusive growth and development through an integrated strategy encompassing growth, development, equity, welfare, and good governance. The developmental revenue expenditure of the state has increased more than four times in 2022-23 BE, from its level in 2011-12.

Fiscal performance of Odisha continued to be satisfactory during 2021-22 and it is expected to continue this trend in 2022-23. The state has consistently reported a revenue surplus and has maintained gross fiscal deficit within the threshold limit set by the FRBM Act.

VAT and State Excise are the largest contributors to the state's own tax revenue, while the industry sector drives the own non-tax revenues of the state. Post the introduction of GST, the revenue from SGST is also a significant contributor to the state's own tax revenues. The state has great potential to increase its non-tax revenues from forestry and tourism. The cost recovery rates in Odisha are lower than the median for non-special category states. On the expenditure side, the state's expenditure has been witnessing double-digit growth during the last few years. Both revenue expenditure and capital outlay have been focused on the socio-economic sector. Committed expenditure (Establishment, Operation and Maintenance) has been one of the lowest in India when we compare it with other states. Education and rural development receive the largest share of revenue expenditure, while majority of capital outlay is focused on irrigation and transport. Focus on these sectors is in line with the state's developmental needs.

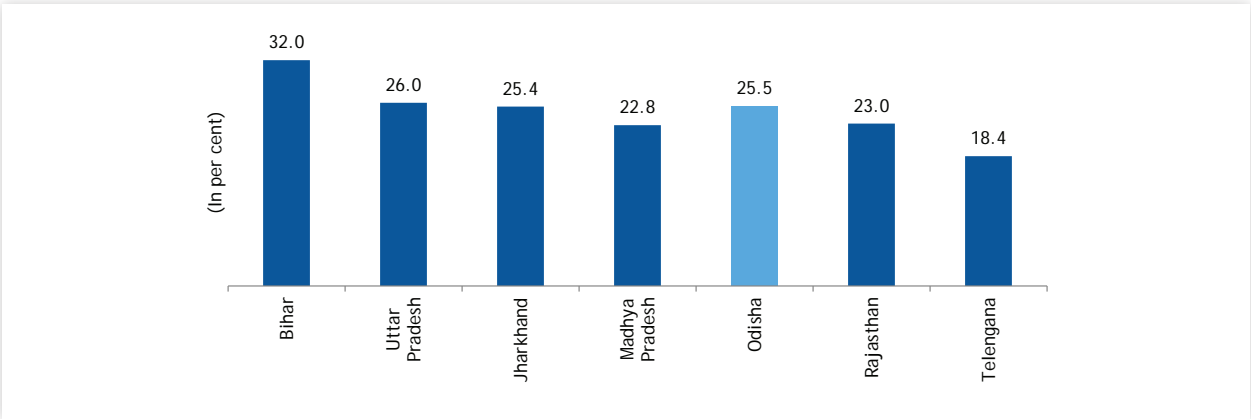
Debt stock to GSDP ratio in the state has been maintained below the 25 per cent threshold consistently for 15 years. The current debt position of the state puts it at low risk relating to both debt repayment and interest burden. Odisha is one of the only two low-income states with low risk on both these parameters. The maturity profile of outstanding government securities is comfortable for the state when compared with other states.

9.1. Introduction

9.1.1. Government resources play an important role in the growth of an economy. Expenditure on physical and human capital formation is a prerequisite for sustained development. Historical and geographical disadvantages related to high poverty and frequent natural disasters have restricted the development of Odisha. Despite these, the State has been orienting its limited fiscal resources towards developmental needs of the economy. On an average, between 2016-17 and 2021-22 RE, Odisha’s total expenditure to GSDP ratio stood at around 25.5 per cent (Figure 9.1). Further, nearly 65.3 per cent of this expenditure or 22.9 per cent of GSDP was allocated towards developmental purposes, with focus on education, healthcare, rural development, irrigation, and transportation.

Odisha’s total expenditure to GSDP at 25.5 per cent is indicative of its commitment towards socio-economic development

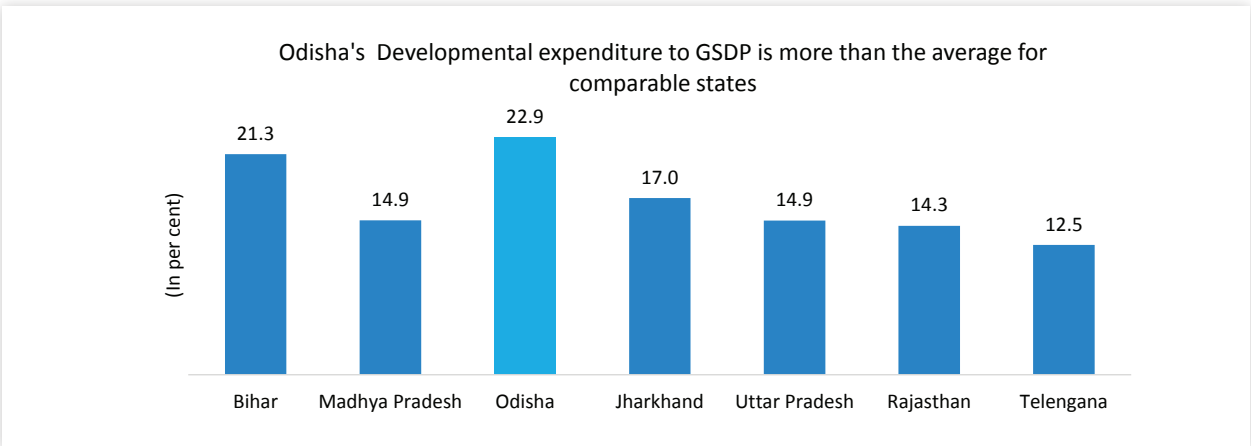
Figure 9.1 Total Expenditure as Percentage of GSDP (Average of 2015-16 to 2021-22 RE) - India



Source: State Finances: A Study of State Budgets, RBI

9.1.2. Among comparable states, the state has the third highest proportion of total expenditure among comparable states allocated towards developmental heads as shown in Figure 9.2. This is indicative of its commitment towards the state’s socio-economic development, despite the historical challenges it has faced.

Figure 9.2 Development Expenditure to GSDP – Various States of India (Average for 2015-16 to 2021 -22 BE)



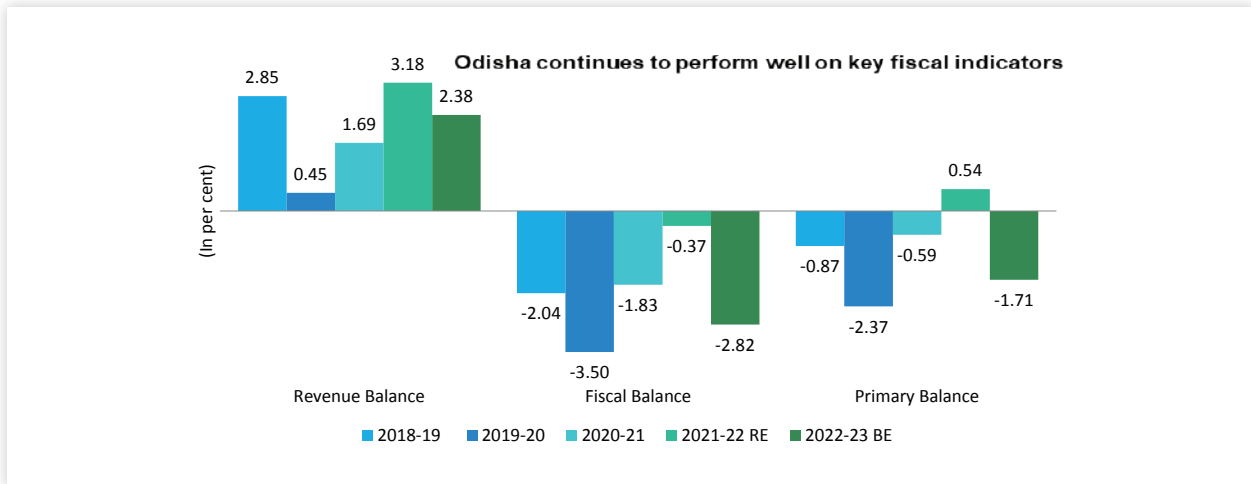
Source: State Finances: A Study of State Budgets, RBI and Annual Budget Documents, GoO

9.2. Major Fiscal Indicators

9.2.1. Odisha's performance on the fiscal front continued to be satisfactory in 2022-23 as has been the trend in the past. The state has been taking prudent measures to keep the fiscal indicators stable. Since 2005-06, stringent efforts have been put in place to ensure a revenue surplus and the state has been successful in maintaining it.

Odisha has maintained a revenue surplus since 2005-06

Figure 9.3 **Key Fiscal Indicators - Odisha (as percentage of GSDP)**

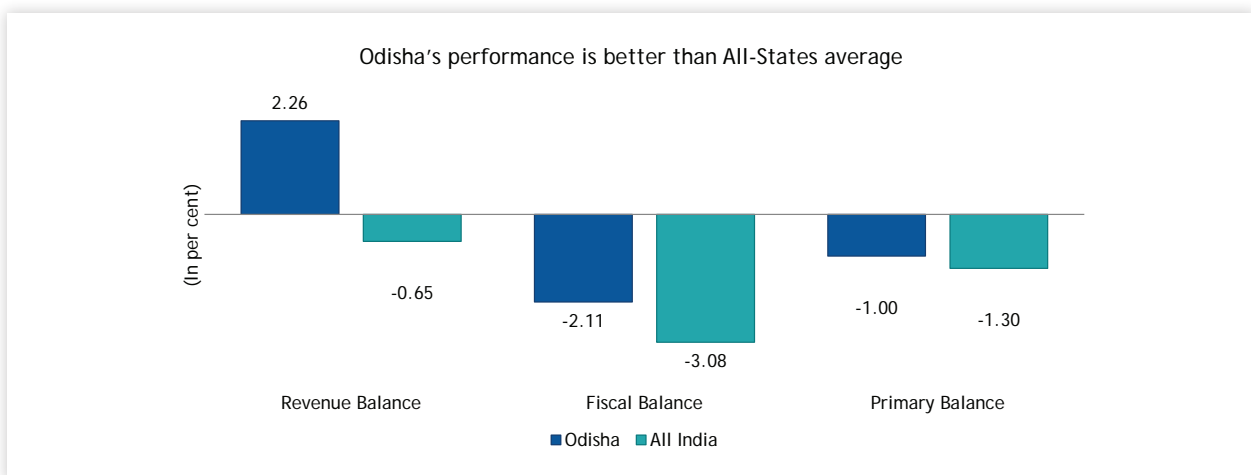


Note: +ve values indicate surplus and -ve values indicate deficit
Source: Annual Budget Documents, GoO

9.2.2. Odisha has been successful in complying with the Odisha Fiscal Responsibility and Budget Management Act to maintain fiscal deficit under 3.5 per cent of its GSDP. The zero fiscal deficit position in 2012-13 has moved to 0.37 per cent and 2.82 per cent of GSDP as estimated for 2021-22 RE and 2022-23 BE respectively which is well below 3.5 per cent on GSDP.

Successful compliance to FRBM Act

Figure 9.4 **Key Fiscal Indicators as a percentage of GSDP (Average for 2017-18 to 2022-23 BE)**



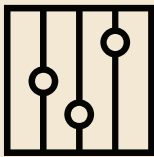
Note: +ve values indicate surplus and -ve values indicate deficit
Source: State Finances: A Study of State Budgets, RBI

9.2.3. Odisha's performance in comparison to other states has been much stronger. The state has successfully managed to maintain an average revenue surplus (as a percentage of GSDP) during the last 6 years (2017-18 to 2022-23 BE), while the average for the all the states shows a deficit. The state's average revenue surplus (2017-18 to 2022-23 BE) stood at 2.26 per cent against the all-states average of -0.65 per cent, i.e. deficit. The fiscal deficit of Odisha on an average is lower than the average of the states, as highlighted in Figure 9.4. The average primary deficit is, also, lower than the average of the states.

Odisha has maintained an average revenue surplus of 2.3 per cent during the last 6 years

Box 9.1

Success in maintaining fiscal discipline



Fiscal discipline is an important determinant of the sustainability of the fiscal and macro-position of an economy. It improves the decision-making capacity of the governments by prioritising the developmental needs and helps to cut down operational expenses. State governments are accountable for multiple functional responsibilities that span across social and economic sectors. Thus, they are faced with the key question of prioritising the fiscal resources across the various developmental needs. Lack of fiscal stability may endanger the choices in terms of policy objectives and resource availability.

Fiscal Responsibility and Budget Management Act was implemented across the states between 2005 and 2006. The Act aimed to create fiscal discipline and improve the management of public funds. The intended outcome was to reduce deficit and stabilise debt burden, control the growth of expenditure, and improve tax performance. Odisha is amongst the few states that have successfully complied with the targets set by the Act every year.

The major concern about this success is that it has been achieved by containing public spending. The relatively low per-capita income of the state, historically high poverty ratio, and high concentration of backward classes are some of the factors that have constrained the revenue generating capacity of the state. Thus, the state has resorted to expenditure tightening to achieve the targets of the FRBM Act. However, the developmental needs of the State continue to be large, for the same reasons as mentioned above. Committing to the Act may have limited the resources for the state's developmental needs.

Nonetheless, The state has started to expand its expenditures in the recent years. The developmental revenue expenditure of the state has grown more than 3 times in a span of 10 years.

9.3. Revenue receipts of the State

9.3.1. Revenue receipt of Odisha has been maintained at over 17 per cent of the GSDP since 2011-12, and it was 21.4 per cent in 2022-23 BE. Revenue receipt for 2022-23 BE is more than 3.7 times that in 2012-13, growing at an average rate of 14 per cent annually. Growth of revenue receipts had shrunk to 2 per cent and 2.8 per cent during 2019-20 and 2020-21 owing to slow growth of all tax collection during the general recession and then following the unprecedented crisis of COVID-19. Revenue receipt was estimated at INR 141395.66 crores in 2021-22 RE. Outlook for revenue receipt indicates continuation of this upward growth with revenue crossing INR 163966.52 crores which would be 21.4 per cent of GSDP in 2022-23 BE and representing a growth of 16 per cent over the previous year.

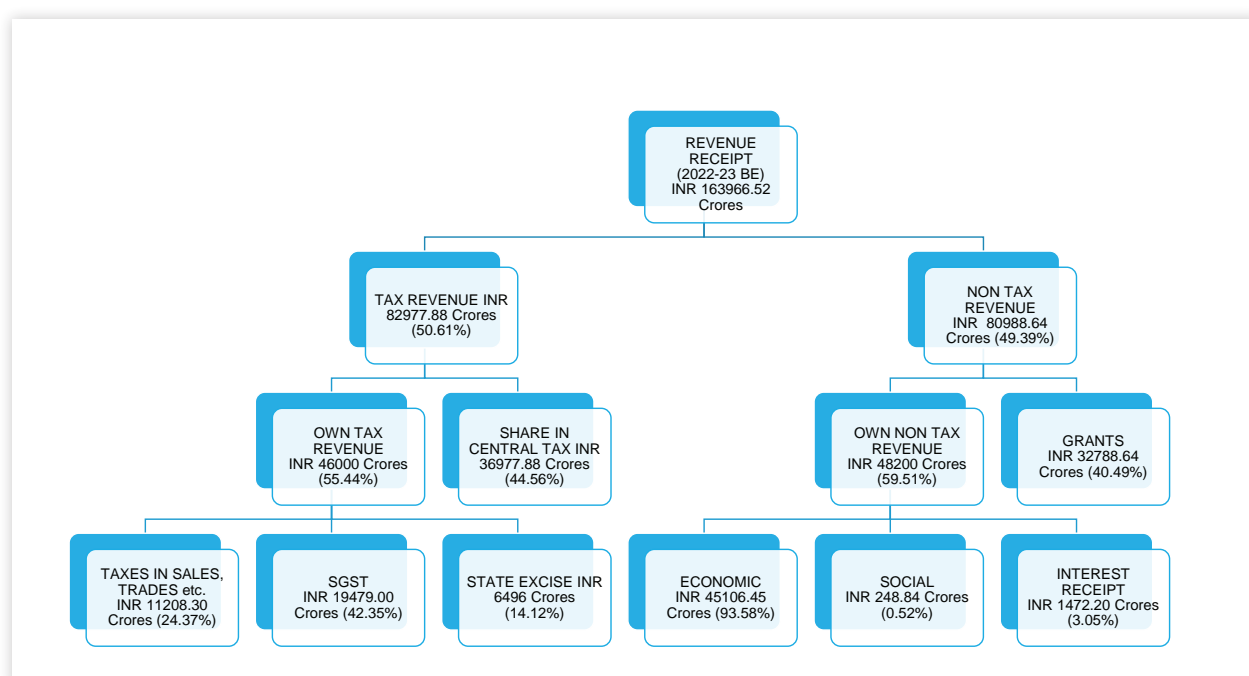
Revenue receipts have grown to more than 3.7 times in 10 years

I. Composition of revenue receipts

9.3.2. Tax revenues account for more than half of the state's revenue receipts. Additionally, the state share has been growing over the years, owing to the growth in own tax and its share in central taxes. Tax revenues for 2022-23 BE were INR 82977.88 crores. This represented a share of 50.61 per cent in total revenue receipts. Tax revenues constitute the state's own tax revenue and transfers from the divisible pool of taxes at the national level. Over the years, the composition of tax revenues has undergone a transition.

Tax revenues for 2022-23 (BE) is 50.6 per cent of total revenue receipts and this share has been growing over the years.

Figure 9.5 Composition of Revenue Receipts-Odisha



Source: Annual Budget Documents, GoO

9.3.3. Non-tax revenues and grants from the centre contribute around 49.39 per cent of the state's revenue receipts (2022-23 BE). Having grown on an average at 17.7 per cent annually since 2011-12, non-tax revenues reached INR 80988.64 crores in 2022-23 BE. The composition of non-tax revenues has undergone a transition during the last 10 years, with growth in state's own non-tax revenues witnessing a fluctuating trend ranging from as low as 1.2 per cent to 55.5 per cent traceable largely to revenue from minerals.

II. State's Own Revenue

9.3.4. State's own revenue (SOR) as a proportion of GSDP shows a fluctuating trend contributed by variation in both, tax, and non-tax revenues. Own tax revenues have always held a larger share in SOR. However, in 2021-22 RE and 2022-23 BE, the trend has changed. The share of non-tax revenue has increased in this period due to increase in mining revenue. SOR shows a fluctuating trend in between 7.9 per cent and 13.0 per cent of GSDP during the period 2012-13 to 2022-23 BE. In the estimates for 2022-23, SOR as a proportion of GSDP is likely to attain the level of 12.3 per cent.

A. State's Own Tax Revenue

9.3.5. The share of state's own tax revenue in tax revenues has marginally declined up to 2018-19. However, in the recent years, it has shown an upward trend. From a share of 52.4 per cent in 2011-12, the share is estimated to increase to 55.4 per cent in 2022-23 BE. Own tax revenues for 2022-23 BE were INR 46,000 crores or 6.0 per cent of the GSDP. Growth in own tax revenues has been fluctuating with an average growth rate of 12 per cent annually. Post a slowdown in growth to 1.4 per cent in 2016-17 (traceable to a stagnancy in VAT collections and a significant drop in stamp duty collections), own tax revenues grew at 21.04 per cent in 2021-22 RE, the highest in last five years. Budget Estimates for 2022-23 indicate increase in their growth to 10.93 per cent over 2021-22 RE.

Table 9.1 State's Own Tax Revenues as a Proportion of GSDP - Odisha (per cent)

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22 (RE)	2022-23 (BE)
State's Own Tax	5.7	6.3	6.9	5.8	6.3	6.1	6.0	6.4	6.3	6.0
SGST	NA	NA	NA	NA	1.5 (23.7)	2.4 (39.4)	2.5 (40.9)	2.4 (38.1)	2.6 (41.2)	2.6 (43.0)
Sales Tax (VAT)	3.6 (63.5)	3.8 (59.6)	4.0 (58.1)	3.4 (58.6)	2.6 (41.3)	1.5 (24.1)	1.4 (23.1)	1.5 (22.7)	1.5 (23.9)	1.5 (24.4)
State Excise	0.6 (10.5)	0.6 (10.3)	0.8 (11.3)	0.7 (12.2)	0.7 (11.5)	0.8 (12.9)	0.8 (13.9)	0.8 (11.8)	0.9 (13.6)	0.8 (14.1)
Stamp duty registration fees	0.2 (3.6)	0.3 (4.0)	0.7 (9.6)	0.3 (6.0)	0.2 (3.7)	0.2 (4.1)	0.3 (4.4)	0.5 (8.6)	0.3 (5.5)	0.3 (4.4)
Motor Vehicle Tax	0.3 (5.1)	0.3 (4.6)	0.3 (4.6)	0.3 (5.3)	0.3 (5.5)	0.4 (5.8)	0.3 (5.7)	0.3 (4.5)	0.3 (4.3)	0.3 (4.6)
Electricity duty	0.2 (4.0)	0.5 (8.7)	0.4 (5.4)	0.4 (7.2)	0.4 (7.1)	0.7 (10.7)	0.5 (8.7)	0.7 (11.5)	0.6 (9.3)	0.5 (8.2)
Land Revenue	0.1 (2.6)	0.2 (3.3)	0.2 (2.6)	0.1 (2.0)	0.1 (1.9)	0.1 (1.7)	0.1 (2.2)	0.1 (1.8)	0.1 (1.4)	0.1 (1.3)

Note: Figures in parenthesis indicate share in State's own tax revenue
Source: Annual Budget Documents, GoO

9.3.6. The state's own taxes as a proportion of GSDP are presented in Table 9.1. SGST, sales tax and state excise are the major contributors to the state's own tax revenues with a combined share of over 81.5 per cent with a strong growth, particularly in the case of state excise, each year. Post the introduction of GST, the share and growth of sales tax (primarily VAT on motor fuel and liquor in the post-GST scenario) has witnessed a decline, with majority of taxes being subsumed under GST. The contribution of SGST to own tax revenues was 41.2 and 43 per cent in 2021-22 RE and 2022-23 BE, respectively. On the other hand, with 16.4 per cent annual average growth between 2013-14 and 2022-23 BE, the share of revenues from the state excise under own tax revenue has witnessed a growing trend up to 2019-20, although declining in 2020-21. However, it has shown an upward trend in 2021-22 RE and 2022-23 BE. Revenues from electricity duty are also witnessing a fluctuating trend. Estimates for 2022-23 indicate that SGST, VAT, and state excise will continue to be the lead contributors.

B. State's Own Non-Tax Revenue

9.3.7. Industries, primarily the minerals sub-sector of industries, with a share of 90.1 per cent, are the driver of the state's revenue from non-tax sources. The high volatility in prices for minerals, has led to fluctuations in revenues earned from non-tax sources. Further, income from interest and dividends, which are significant contributors to the non-tax revenues, has been fluctuating adding to the volatility in the state's own non-tax revenues.

9.3.8. The State Government has acknowledged the substantially higher realization of mining revenue as a positive fiscal shock. Because of volatility in international commodity prices, the State is exposed to a risk of fluctuation of mining revenue, which may affect the State Budget and public expenditure. As a risk mitigation measure to neutralize the risk of price fluctuations in metals on the State Budget, a Budget Stabilization Fund (BSF) has been created, which is the first of its kind initiative by a State in the country. Provision of INR 13,700 Crore was made during 2022-23 for transfer to the fund. This would help in stabilizing the State budget in times of unexpected revenue shortfall or budget deficit.

Odisha is the first state in India to create a Budget Stabilization Fund (BSF).

9.3.9. State's revenue from own non-tax sources stood at INR 48,200 crores in 2022-23 BE, equivalent to 6.29 per cent of GSDP. Post a contraction of 7.7 per cent in 2016-17, revenues from this source have grown by 70 per cent in 2018-19 over 2017-18 and 128.4 per cent in 2021-22 RE over 2020-21. There is substantial growth of 26.4 per cent in 2022-23 BE over 2021-22 RE contributed by mostly in interest and industries.

Box 9.2

Growing non-tax revenue base



Odisha's own non-tax revenues have been witnessing a fluctuating trend in the recent years. The industries sector is the major contributor to the non-tax revenues for the State. However, the sector's revenues are highly susceptible to fluctuations in prices of minerals, which are passed onto the non-tax revenues of the State. Odisha can diversify to other revenue sources to increase revenues from these sources.

Recovery rates, defined as the ratio of revenue receipts to revenue expenditure for various sectors, were analysed for non-special category states for the period 2020-21 to 2022-23 (BE). Odisha's recovery rates for various sectors are presented below, along with the median recovery rate. Odisha, being the mineral hub, of the country has the highest recovery rate, out of all the Non-Special Category (NSC) states for industries. However, Odisha has great scope to increase its revenues from forests and tourism. The recovery rates in these sectors are lower than the median value and thus, user charge in these sectors can be increased. Further, with the fourth largest share of national forest area and various tourism opportunities, revenues from these sectors can be enhanced.

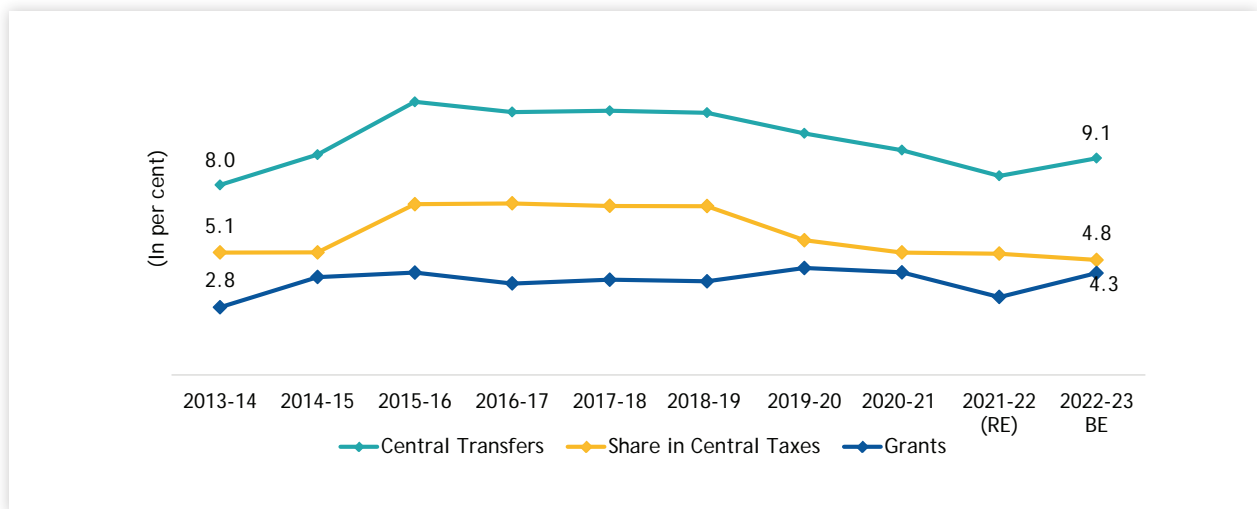
Odisha's recovery rates for various sectors (per cent)

Sectors	Odisha	Best Performing State	Median Value	
Education	0.2	Madhya Pradesh	6.1	1.1
Healthcare	0.9	Telangana	14.8	3.9
Housing	6.3	Jharkhand	36.8	3.9
Water Supply and sanitation	1.0	Goa	23.9	1.1
Crop Husbandry	0.2	Jharkhand	22.2	0.4
Forests & wildlife	3.8	Madhya Pradesh	78.7	16.6
Major & medium irrigation	107.5	Goa	385.5	16.9
Minor irrigation	1.19	Chhattisgarh	332.7	3.1
Industries	8911.0	Odisha	8911.0	418.1
Tourism	0.3	Gujarat	62.9	1.9

III. Central Transfers

9.3.10. The contribution of central transfers has grown from 48.4 per cent of revenue receipts (8 per cent of GSDP) in 2013-14 to 55.20 per cent (11 per cent of GSDP) in 2018-19 due to increased devolution in the 14th FC period. But with decline in the share for Odisha in 15th Finance Commission recommendation, the budget estimates for 2022-23 indicate share of central transfer has declined to 42.5 per cent. Central transfers include both share of central taxes and grants from the Centre. Figure 9.6 presents the proportion of each of these transfers as a proportion of the GSDP.

Figure 9.6 Central Transfers as a Proportion of GSDP - Odisha



Source: State Finances: A Study of State Budgets, RBI and Annual Budget Documents, GoO

9.3.11. Direct taxes, i.e., corporation and income taxes are the major contributors to the share in central taxes received by the state. Together, these contribute over 32.5 per cent of the share in central transfers in 2022-23 BE. Consistent double-digit growth in income tax and high growth in corporation tax continued up to 2018-19. Subsequently, there was negative growth in 2019-20 and 2020-21. The share of direct taxes in central taxes stood at INR 20005.92 crores in 2021-22 RE, and it is estimated to grow further to INR 22696.80 crores in 2022-23 BE. Grants, on the other hand, stood at INR 21646.98 crores and INR 32788.64 crores in 2021-22 RE and 2022-23 BE respectively. Grants for Centrally Sponsored Schemes (CSSs) and statutory grants are the major contributors to this component.

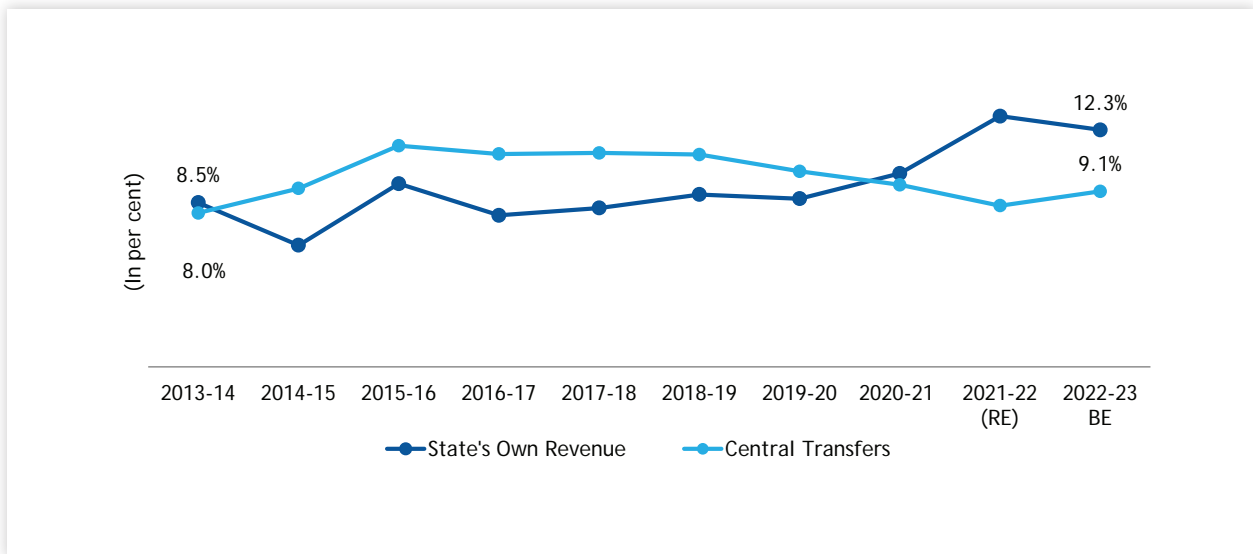
IV. Key Revenue Indicators

9.3.12. Key revenue indicators are a measure of a state's tax base, the efficiency of its tax collection, and its scope to increase tax collections. They present a picture of the state's dependence on the centre to fund its expenditure needs.

A. Revenue sources as a proportion of GSDP

9.3.13. The state's dependence on own sources to mobilise revenues has been started. Own revenues as proportion of GSDP have grown from 8.5 per cent in 2013-14 to 12.3 per cent in 2022-23 BE, after witnessing a peak of 13.0 per cent in 21-22 RE. Central transfers, which form the largest share of revenue receipts, have been declining. A sharp jump in their proportion to GSDP has been witnessed from 2015-16 and after it declines slowly to 9.1 per cent in 2022-23 BE as reflected in Figure 9.7.

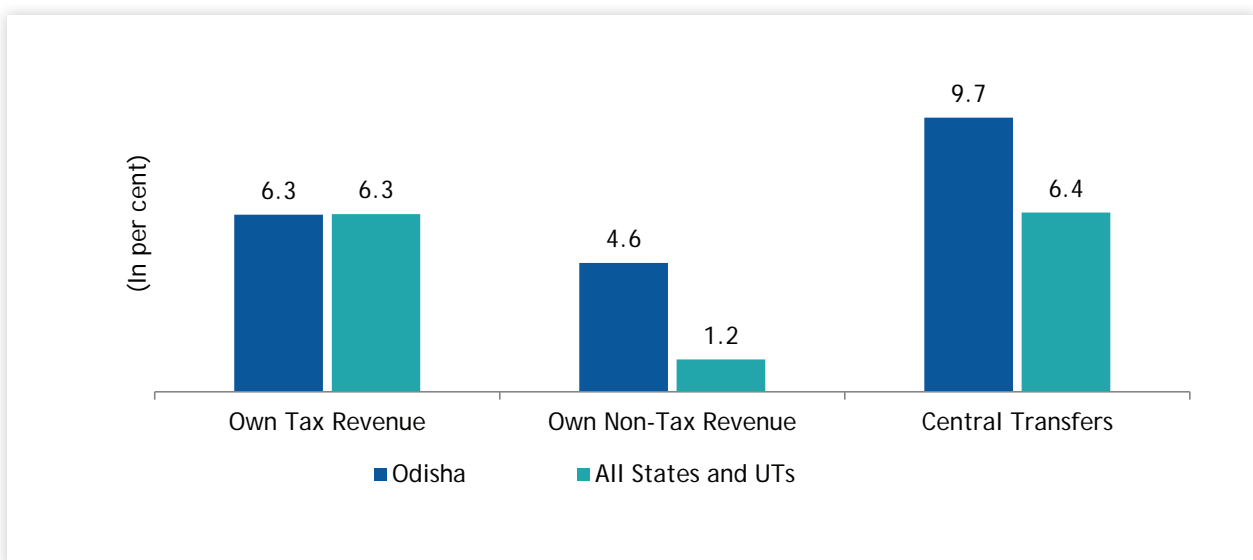
Figure 9.7 Revenue from different sources as a proportion of GSDP



Source: State Finances: A Study of State Budgets, RBI and Annual Budget Documents, GoO

9.3.14. Odisha’s performance on revenue indicators in comparison to other states shows mixed trends. The state’s own tax revenue as a proportion of GSDP during the five-year period (2018-19 to 2022-23 BE) has been at par with the average for all states. The average for own non-tax revenues as a proportion of GSDP for Odisha during 2018-19 to 2022-23 BE is more than triple the average for all states in the same period. However, the State’s share of Central transfers to GSDP is 9.7 per cent against the all States & UTs average of 6.4 per cent.

Figure 9.8 Revenue from different sources as a proportion of GSDP vis-a-vis other states (2018-19 to 2022-23 BE)

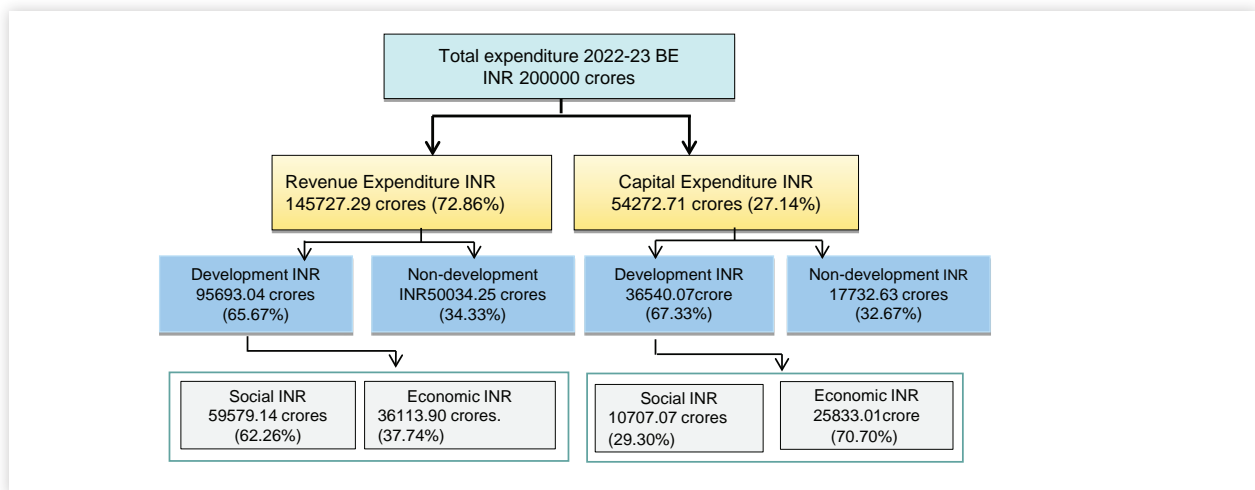


Source: State Finances: A Study of State Budgets, RBI

9.4. Expenditure of the state

9.4.1. Odisha's expenditure has been witnessing consistent double-digit growth over the years (2012-13 to 2018-19). But it slowed down to 9.85 per cent in 2019-20 and even showed a negative growth in 2020-21 due to pandemic of Covid-19. After that it witnessed an upward trend of 32.95 per cent and 21.21 per cent in 2021-22 RE and 2022-23 BE respectively. Growing at an average rate of 15.5 per cent annually since 2012-13, the total expenditure stood at INR 2,00,000 crores in 2022-23 BE.

Figure 9.9 Composition of State Expenditure - Odisha



Source: Annual Budget Documents, GoO

9.4.2. Revenue expenditure is the largest component of total expenditure by the state and continue to be so in 2022-23 BE with a share of 72.86 per cent. It stood at INR 145727.29 crores in 2022-23 BE, growing 21.06 per cent over 2021-22 RE. The share of revenue expenditure has witnessed a decline in its share in the total over the years, from 82.3 per cent in 2013-14 to 74.9 per cent in 2018-19. But the share increased to 79.2 per cent in 2019-20, declining again subsequently. With the focus of the government on building infrastructure to ensure sustainable growth, the share of capital outlay has increased nearly five times in last ten years. Capital outlay (Development) stood at INR 36540.07 crores in 2022-23 BE at an estimated growth rate of 66.45 per cent over 2021-22 RE, to ensure continuation of economic activities after the breakout of the Covid-19 crisis and economic recession.

Capital outlay in the state has increased nearly five times in last ten years

I. Revenue Expenditures

9.4.3. Revenue expenditure can be classified under three heads: developmental (which includes social sector and economic sectors), non-developmental, and grants assigned to local bodies and program-related investments (PRIs). With a focus on development and growth of the economy, developmental expenditure has the highest share of revenue expenditures. Developmental expenditure stood at INR 95693.04 crores in 2022.23 BE, accounting for 65.67 per cent of revenue expenditures. Non-developmental expenditure accounted for 34.33 per cent. Sector wise, education (16 per cent), rural development (9.8 per cent), water supply & sanitation (5.2 per cent) and medical & public health (6.5 per cent) receive the highest allocation out of total revenue expenditures. Given the literacy levels of the state and concentration of population in rural areas, focus of expenditure on these sectors is in harmony with the developmental needs of the state.

9.4.4. Social sector accounts for the majority share of developmental expenditure and spent 62.26 per cent of it in 2022-23 BE. Within the social sector, education, health, and water supply and sanitation are the sectors with higher allocations. Given the high concentration of tribal population in the state, expenditure on welfare of these social groups also forms an important component of social expenditure. Outlook for expenditure in social sector, indicates that the share of these sectors continue to get stable allocations in 2022-23 (BE).

Social sector spending accounts for major chunk of developmental expenditure in the state

9.4.5. On the other hand, rural development, agriculture, irrigation, and roads and bridges are the lead claimants to the economic sector expenditure, underlining the State's commitment to developing the infrastructure and rural sector of the economy. The committed expenditures on interest payments and pension form most of the non-developmental expenditure. The fiscal prudence of the state has kept the share of these components limited to 18.3 per cent in 2022-23 BE ().

Table 9.2 Composition of Revenue Expenditure (in per cent) - Odisha

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22 (RE)	2022-23 (BE)
Developmental exp.	68	70	72.8	72.7	70	70.2	69.7	68.9	70.3	65.7
Social services	41	41	41.9	42.4	41.1	42.7	43.9	41.9	44.8	40.9
Education	18.2	19.2	18.8	18.2	19.2	19	17.4	18.1	17.5	16
Medical	3.6	4.9	5.1	5.7	5.3	5.5	5.3	7.2	7.5	6.5
Water supply and sanitation	1.6	2.1	3.4	3.6	2.4	3.5	4	2.4	6.4	5.2
Economic services	27	29	30.9	30.3	28.9	27.5	25.8	27.1	25.6	24.8
Agriculture and allied services	10.3	11	9.9	10	8.1	9.2	11.1	9	8.7	8
Rural development	6.5	8.7	12.6	12.3	12.6	11.6	9.8	11.9	10.2	9.8
Irrigation and flood control	3.1	2.7	3.1	2.9	2.7	2	1.3	1.8	2.2	2.1
Roads and bridges	3.7	3.7	3.1	3	3.1	2.2	1.9	2.4	2.3	2
Non-developmental exp.	30	28.4	25.6	25.7	28.2	28.2	28.8	29.7	28.4	33.2
Interest payments	6.3	5.5	5.7	6.2	6.9	6.8	6.1	7	5	5.8
Pensions	13	12.5	10.8	10.5	12.1	12.3	14.4	14.3	13.3	12.5
Grants to ULBs and PRIs	2	1.6	1.6	1.6	1.8	1.6	1.4	1.4	1.3	1.1

Source: State Finances: A Study of Budgets, RBI and Annual Budget documents, Odisha

9.4.6. Revenue expenditure has witnessed consistent double-digit growth during the last ten years (except a negative growth of 3.9 per cent in 2020-21) growing at an annual average rate of 14.6 per cent. This high growth is expected to continue in the coming years as well. Revenue expenditure is estimated to grow at 21.1 per cent in 2022-23 (BE) over 2021-22 RE. The developmental sector, with its high share and annual average growth rate of 14.6 per cent is the driver of growth in the revenue expenditures. However, growth in various components of revenue expenditure has been volatile.

II. Capital Expenditure

9.4.7. Capital outlay of the state has been witnessing high growth, in harmony with the state's focus on improving the social and economic infrastructure of Odisha. The capital outlay in 2022-23 BE was INR 36540.07 crores, almost 8.6 times of its value in 2011-12. Capital outlay has witnessed high double-digit growth almost every year (except for 2016-17) till 2018-19. But in 2019-20 and 2020-21 RE there was contraction in capital outlay. However, capital outlay increased by 29.6 per cent and 66.5 per cent in 2021-22 RE and 2022-23 BE respectively. The majority share of these expenditures is allocated to economic activities. In 2022-23 BE, 66.7 per cent of capital outlay was directed towards economic services, while social services were allocated 27.6 per cent of the total capital outlay. The remaining was for non-developmental purposes (). Economic services drive the growth in capital outlay. But the COVID-19 pandemic forced a resort to lockdown that had a sudden and intense impact on the economic activity and financial market. It affected the growth of economic services negatively in 2019-20 and 2020-21. As such, on an average, economic services have grown at 20 per cent annually between 2013-14 and 2022-23 BE, while social services grew at 25.9 per cent.

Box 9.3

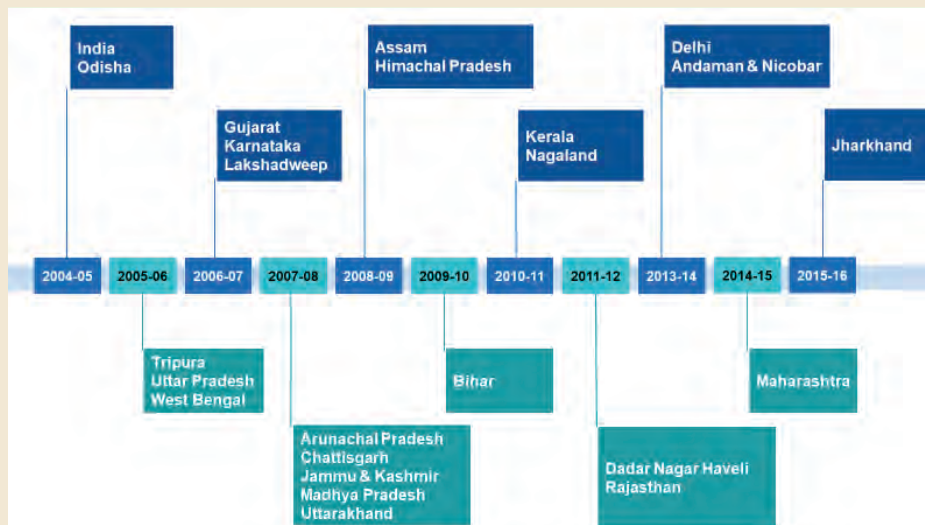
Mainstreaming Gender Through Budget - Odisha



Odisha became the first state in the country to adopt the practice of gender budgeting in 2004-05. Initially, the gender budgeting involved only the Women Component Plan (WCP) in its annual budget, with the mandate that at least 30 per cent of the funds should flow to women.

In subsequent years, WCP evolved into Gender Budget Statement (GBS), constituting two parts: one reflecting women-specific schemes having 100 per cent allocation for women, and the other concerned with pro-women schemes, where at least 30 per cent of the fund allocation is for women.

State wise Adoption of Gender Budgeting in India



Source: Annual Report 2019-20, Ministry of women and Child Development, Gol.

Odisha started presenting Gender Budget Statement as a part of State Budget from 2016-17. As evident from the table below Odisha has consistently been translating gender commitments into budgetary commitments.

Odisha's Gender Budget over the years (in INR crore)

Year	Part A 100 per cent Gender Specific Schemes	Part B Pro-Gender Schemes	Total Gender Budget	Share of Total Expenditure (in per cent)
2016-17	1301.1	20835.6	22136.8	23.7
2017-18	1703.8	30907.3	32611.1	28.5
2018-19	2643.7	40294.7	42938.3	37.7
2019-20	2653.7	44927.9	47581.6	41.6
2020-21	3263.1	39656.7	42919.9	33.7
2021-22 (RE)	4157.8	44387.7	48545.4	38.1
2022-23 (BE)	6079.7	50767.1	56846.8	44.7

Source: Odisha Budget at Glance, various years, Odisha; Gender Budget, 2020-21, 2021-22 & 2022-23 Odisha.

Gender responsive budgeting has proven instrumental in mainstreaming gender in the design, implementation, and evaluation of financial allocations, across all levels of government. As a result, it has emerged as one of the fundamental pathways towards achieving and mainstreaming gender equality, women empowerment, development, and inclusive growth. States with gender budgeting efforts have made relatively higher progress in gender equality than those without. This is quite visible in the case of Odisha when it comes to progress made in reduction of maternal mortality ratio in the health sector or increased Gross Enrolment Ratio for females in the education sector.

Over the past years, Odisha has made admirable strides in empowering women and mainstreaming them into the system. Even during the pandemic, women have been at the frontline of the response, be it as health professionals, frontline workers, Women Self Help Groups, ASHA workers, ANMs, Anganwadi Workers, caregivers at home, community leaders, police, teachers, scientists or more. From rolling out Mission Shakti for women empowerment in 2001 to reserving 33 per cent for women in parliament in 2019, as an attempt to address the under representation of women in the political space, Odisha government has continually been putting efforts to make Odisha a land of equal opportunities.

9.4.8. Capital outlay has been responsive to the developmental needs of the state. Consistently during the last 10 years, and on an average 60 per cent of total outlay has been allocated for major and medium irrigation, flood control, and transport infrastructure. Odisha continues to be highly dependent on agriculture for livelihood purposes. With high susceptibility to droughts, the earning capacity of almost half the population is volatile and linked to weather conditions. Hence, the state has been focusing on providing a sustainable irrigation network. On an average, 25 per cent of capital outlay has been directed towards major and medium irrigation and flood control in the last ten years. In 2022-23 BE, INR 7881.85 crores was spent on such projects, which accounted for 20.3 per cent of the capital outlay. Another focus area of the government is the up gradation of the transport system. The state still has one of the lowest rail connectivity amongst all non-hilly states. In 2022-23 BE, 32.2 per cent of capital outlay was allocated for transport infrastructure and services.

Odisha is undertaking massive capital outlay (nearly 5.1 per cent of GSDP in 2022-23 BE). Roads, Bridges, New Airport, Healthcare facilities, sports facilities, water supply and sanitation, energy sector, other infrastructure sector has seen huge capital expenditure.

9.4.9. In capital outlay on social services, the bulk is spent on the welfare of SC/STs. These marginalised groups constitute close to 40 per cent of Odisha’s population and thus, their welfare has been a priority for the state. Education, medical welfare, and housing also receive significant share of social services’ capital outlay.

Table 9.3 Composition of Capital Outlay (in per cent) - Odisha

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22 (RE)	2022-23 (BE)
General Services	6.1	3.5	2.5	2	2.2	3.1	4	4.8	4.1	5.7
Social services	22.2	20.7	17.1	16.2	19.9	19.4	26	25.2	27.8	27.6
Education	2	3.3	2.9	1.9	3.5	3.5	3.9	3.2	5.2	4.3
Medical & public Health	1.9	3.7	3.1	3.6	3.7	2.6	2.5	3.5	7.7	6.2
Housing	2	2	1.8	1.7	1.4	1.5	1.7	1.3	1.9	1.8
Water supply and Sanitation	7.3	4.8	4	4.9	7.5	9.1	15.4	12.3	9.9	8.8
Welfare of SC/ST	5.4	3.9	3.3	2.5	2.5	1.6	0.8	1.5	1.7	2.3
Economic services	71.7	75.8	80.4	81.7	77.9	77.5	70.1	70	68.1	66.7
Major & Medium Irrigation and flood control	28.5	25.7	24.4	31.4	32.4	24.3	23.4	17.3	22.3	20.3
Transport	28.4	41.2	44.2	36.6	33.9	38.2	31.9	37.2	28.4	32.2

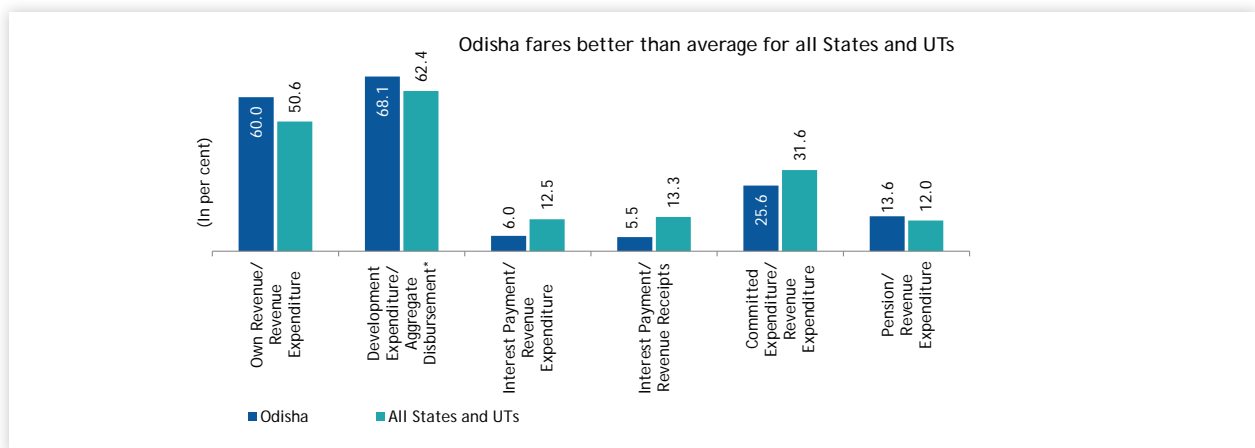
Source: State Finances: A Study of Budgets, RBI and Annual Budget documents, Odisha

9.5. Quality of Expenditure

9.5.1. Odisha’s performance on various indicators of quality of expenditure fares well in comparison to all-states averages. Figure 9.10 compares the performance of Odisha vis-à-vis all states, on average during 2019-20 to 2022-23(BE).

9.5.2. It is evident that Odisha has allocated expenditure more efficiently in comparison to other states. Odisha has the second highest allocation of aggregate disbursement towards developmental purposes, which is much higher than the average for other states. Further, allocation of expenses towards committed expenditure like interest payments, pensions, salaries, and wages has been considerably lower than the average for other states. Pension expenditure as a proportion of total revenue expenditure, however, is marginally higher in Odisha.

Figure 9.10 Quality of Expenditure (2019-20 to 2022-23 BE) - Odisha



Note: *The term 'Aggregate Disbursement' is summation of 'Aggregate Expenditure' and debt repayments. The term 'Aggregate Expenditure' is defined as summation of revenue expenditure, capital outlay and loans and advances.

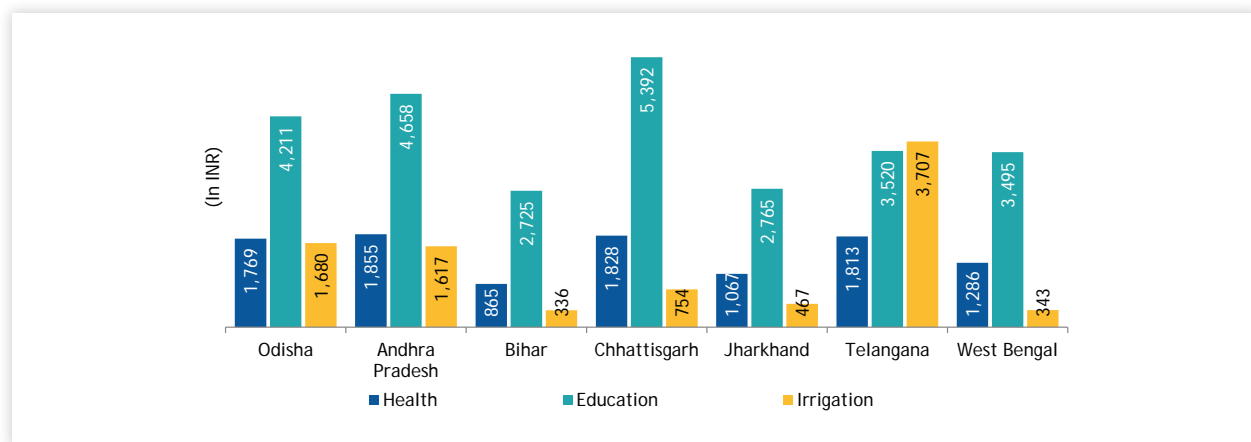
Source: State Finances: A Study of State Budgets, RBI

III. Per Capita Expenditure

9.5.3. Odisha’s expenditure has been focused on developmental purposes, as highlighted in the previous section. The state has one of the highest developmental expenditure to aggregate disbursement ratio. On an average, the Government of Odisha has annually spent INR 20731 per capita for developmental purposes between 2017-18 and 2022-23 BE.

9.5.4. The average per capita spending during the period 2017-18 to 2022-23 (BE) on health, education and irrigation of Odisha and adjoining/ nearby states i.e., Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Telangana and West Bengal has been derived, taking into consideration the data published by RBI in the “State Finances – A Study of Budgets” in 2018-19, 2019-20, 2020-21, 2021-22 and 2022-23 issue and projected population for states in Report on Population Projection-2019 (2011-2036) published by MOSPI, Government of India on per capita GSDP.

Figure 9.11 Average Per Capita Expenditure on Health, Education and Irrigation – Various States of Indian



Source: State Finances: A Study of State Budgets, RBI

9.5.5. Figure 9.11 reflects the average per capita spending on health, education and irrigation of Odisha, Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Telangana, and West Bengal. On comparison, it is revealed that the average per capita spending in Odisha on Irrigation is second highest i.e., INR 1680, fourth highest in respect of per capita spending on Health i.e., INR 1769 and third highest in Education amounting to INR 4211 among the seven states included for comparison. The state has been successful in providing for the developmental needs across most sectors along with maintaining fiscal discipline.

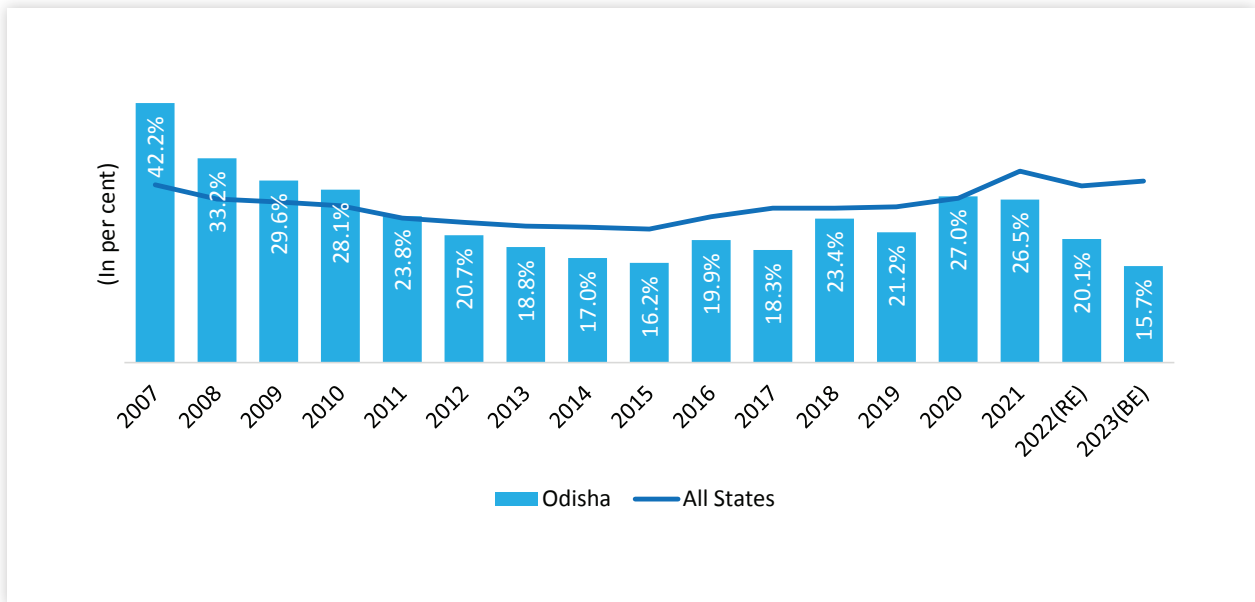
9.6. State’s Liabilities

I. Outstanding Liabilities

9.6.1. Outstanding liabilities of Odisha have witnessed a sharp decline, with prudent measures undertaken to stabilise the fiscal position of the state. Odisha had the fourth highest total outstanding liabilities-to-GSDP ratio at 57 per cent on 31st March 2003, against the all-states’ average of 31 per cent. The consistent efforts of the State Government have brought down the liabilities by a significant proportion (Figure 9.12). The total outstanding liabilities of the state stood at INR 1,13,856.4 crores as per the budget estimate for 2022-23. While it was budgeted to be around 15.7 per cent of the GSDP, due to more than expected growth in state GSDP, the ratio now stands at 14.9 per cent for the year 2022-23.

Figure 9.12

Ratio of Outstanding Liabilities to GDP (end-March 2023) – Odisha and other Indian States

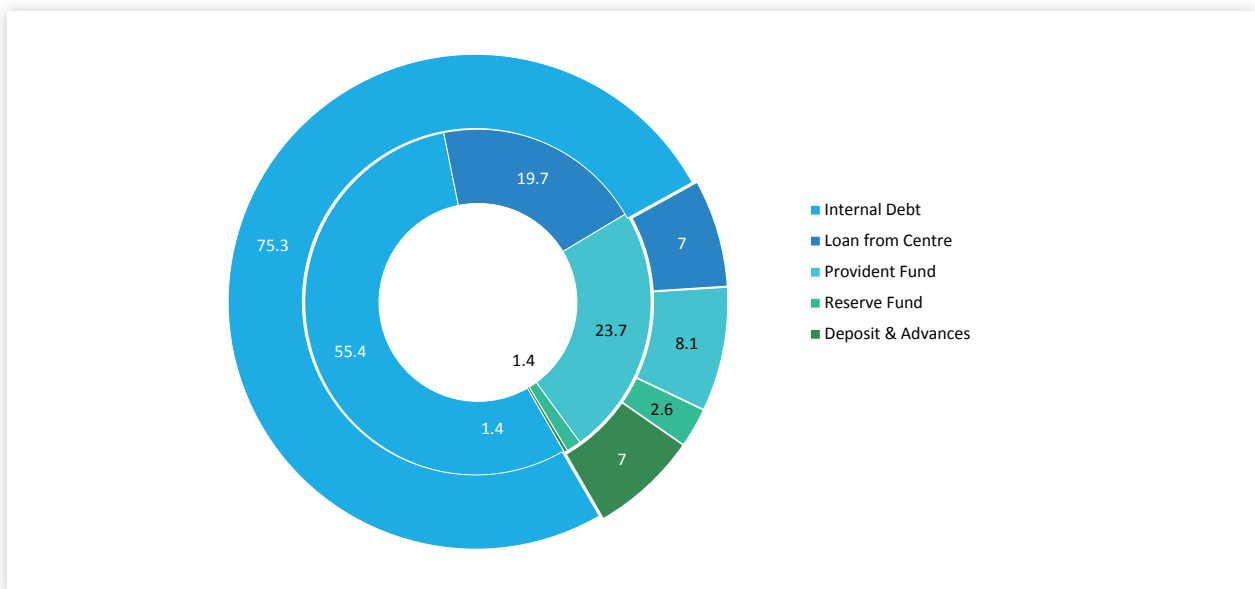


Source: State Finances: A Study of State Budgets, RBI

9.6.2. Internal debt, the stock of unpaid loans and accumulated interest thereon at a point of time, includes debt owed towards market borrowings, borrowings from commercial banks and other financial institutions, and excludes those from the Government of India. Most of these are medium- to long-term borrowings. This forms the largest share (55.4 per cent) of outstanding liabilities for Odisha as against the all-states & UTs average of 75.3 per cent (Figure 9.13). The inner ring represents Odisha while the outer represents all states and UTs together.

Figure 9.13

Composition of Total Outstanding Liabilities (in per cent) - Odisha vis-à-vis India (end-March 2023, Budget Estimates)

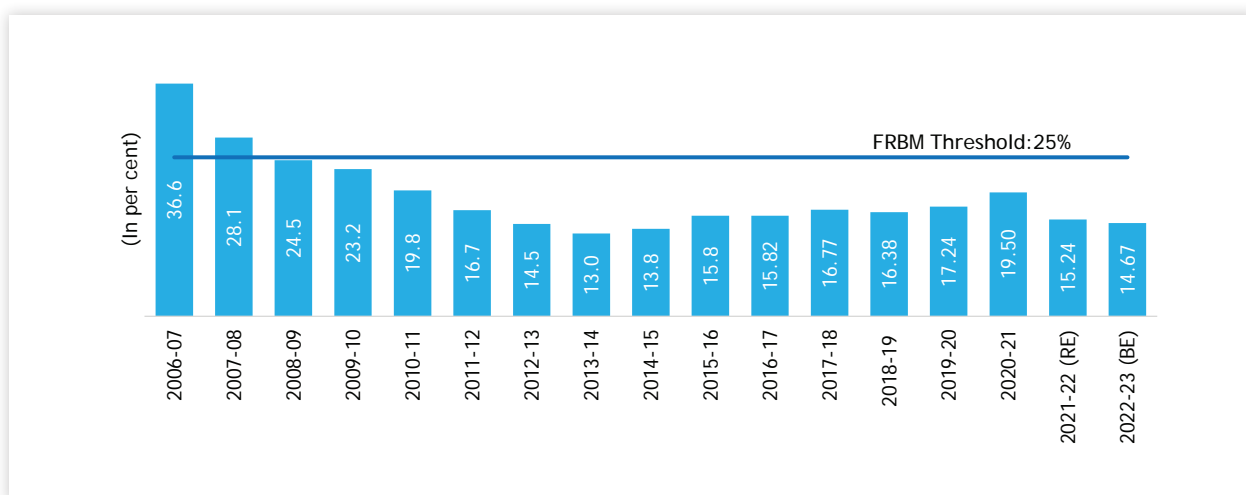


State Finances: A Study of Budgets, RBI

9.7. Debt Stock

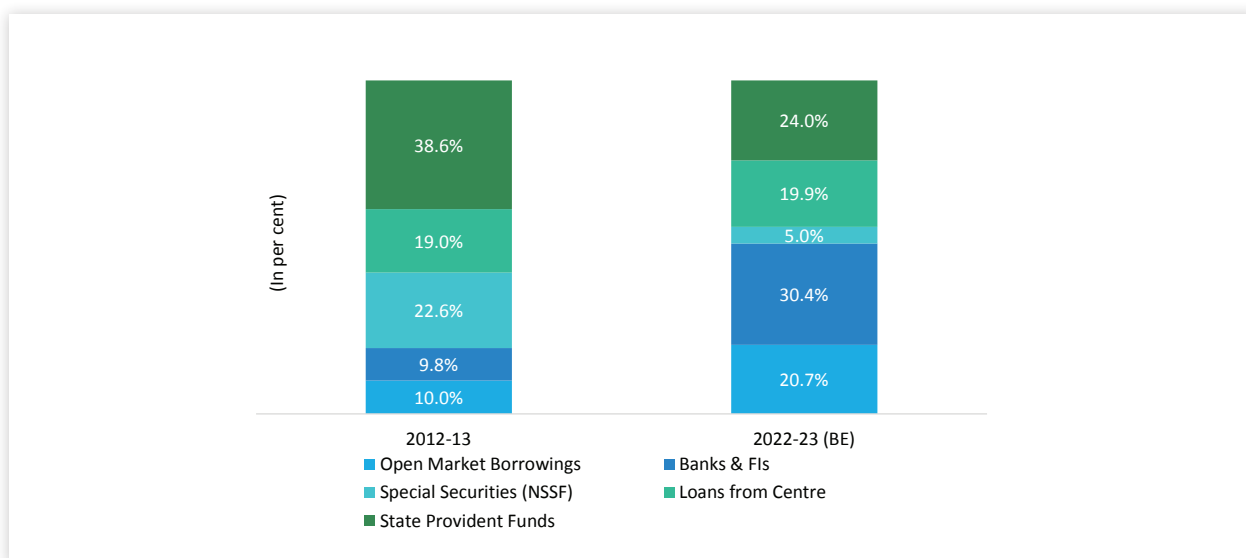
9.7.1. Debt stock that forms the largest component of outstanding liabilities has also witnessed a decline over the years. Debt stock as a proportion of GSDP stood at 36.6 per cent in 2006-07, much higher than the limit of 25 per cent set under the Fiscal Responsibility and Budget Management Act, 2005. The state had resolved to commit to the thresholds prescribed by the Act, and it took strict measures in this context. The state has been able to contain debt-GSDP ratio below the threshold limit since 2008-09, as presented in Figure 9.14. However, with rising developmental needs, the debt to GSDP ratio had witnessed a rising trend from 2014-15 to 2020-21 and after that it declines. The total debt to GSDP ratio is estimated to be at 14.67 per cent in 2022-23 BE, after declining to 13 per cent in 2013-14.

Figure 9.14 Debt Stock to GSDP - Odisha



Source: Annual Budget Documents, GoO

Figure 9.15 Composition of Debt Stock - Odisha



Source: Annual Budget Documents, GoO

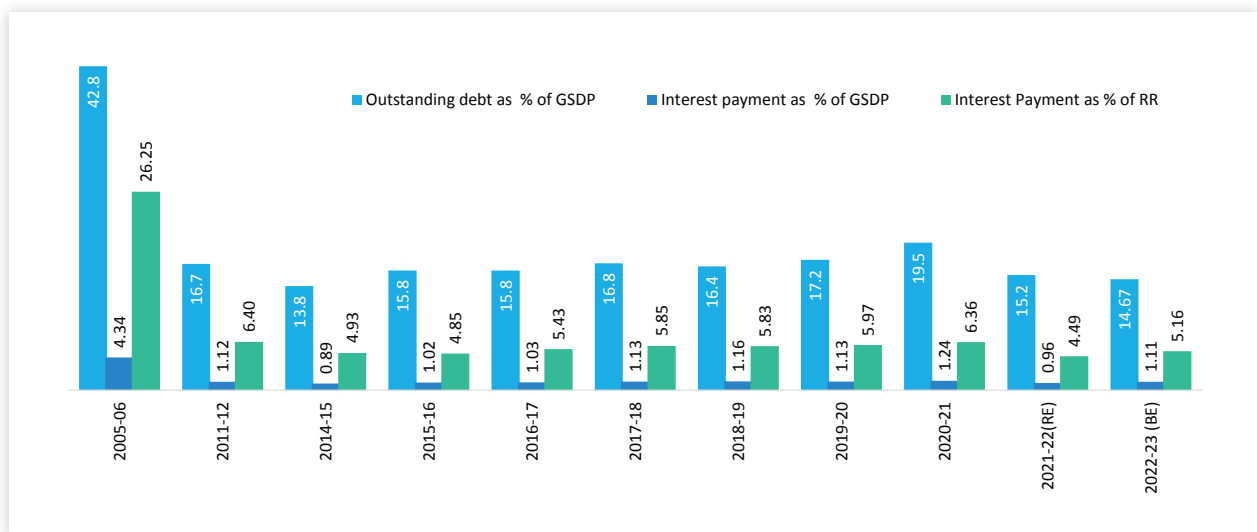
9.7.2. Composition of debt stock in the state has also witnessed a transition as the state has moved towards open market borrowings and borrowings from banks and other financial institutions (Figure 9.15). State provident funds and special securities (NSSF) were the largest contributors to the debt stock in 2012-13, contributing 38.6 per cent and 22.6 per cent respectively. With reduced dependence on state provident fund, the share of open market borrowings and bank/FI loans has increased to 51.4 per cent.

9.7.3. Higher growth rate in GSDP compared to growth in debt stock, coupled with low cost of borrowing, has made the fiscal policy of the state more sustainable. FRBM legislation as a fiscal policy rule has helped to achieve stability in state finances and efficiency in expenditure allocation. With a more stable fiscal position, the focus of the state is on improving the quality of expenditure, regular expenditure review, expanding the coverage of public services, and investing in social and physical infrastructure. These are critical to achieve higher inclusive growth on a sustainable basis. The state now has the fiscal space to opt for higher capital receipts to fund capital outlay in developmental sectors to fulfil this objective.

9.8. Debt Sustainability

9.8.1. The efforts of the state have allowed the debt position of the state to be relatively stable. The debt ceilings in the original FRBM Acts were linked to three indicators, viz., GSDP, revenue receipts and receipts in the consolidated fund of the state. The debt-GSDP ratio of a state represents the final outcome of all the budgetary transactions and is an important indicator of fiscal correction initiatives undertaken during the year. Consistent with the lower debt-GSDP ratio, an improvement has been noted in the debt sustainability. The consolidated outstanding debt of the state Government as a proportion of GSDP declined steadily from 2005-06 (42.8 per cent) to 2022-23 BE (14.67 per cent), reflecting the impact of the debt relief mechanism that incentivised the states' adherence to a rule-based fiscal regime.

Figure 9.16 Debt Sustainability - Odisha



Source: Annual Budget Documents, GoO

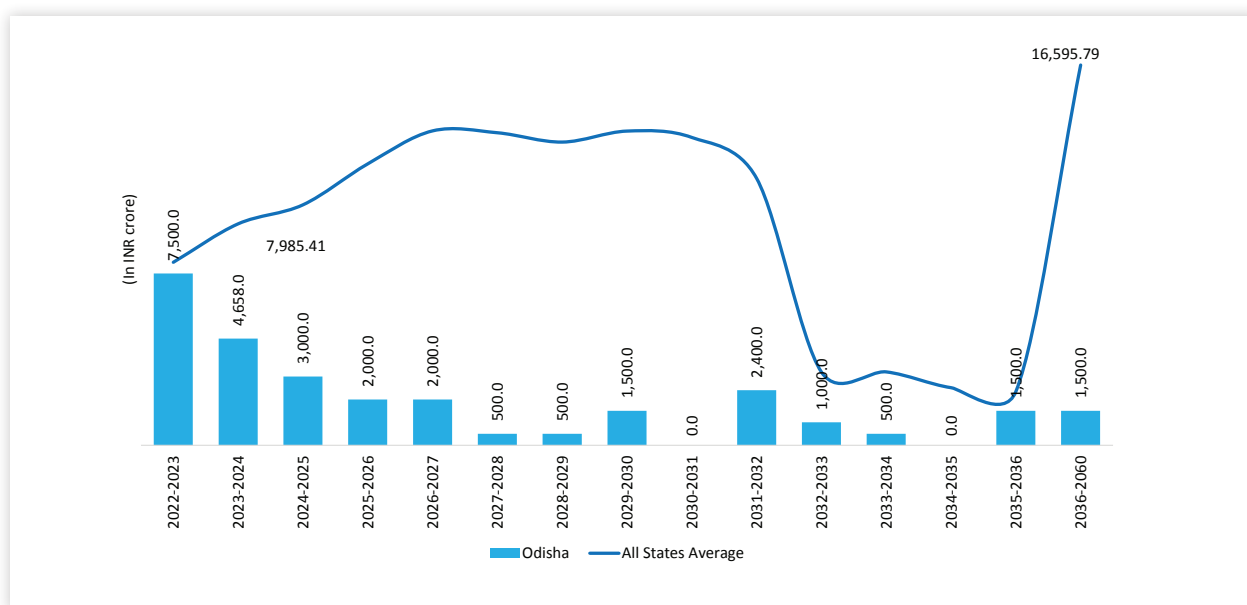
9.8.2. The State Government could successfully contain its interest payments to revenue receipts ratio (IP-RR), which decreased from 26.3 per cent in 2005-06 to 5.16 per cent in 2022-23 BE (within 15 per cent). The consolidated debt-GSDP ratio of the State Government declined from 42.84 per cent in 2005-06 to 14.67 per cent in 2022-23 (BE), which is much lower than the target of 25 per cent stipulated by the 15th FC.

II. Maturity profile of outstanding state government securities' liabilities

9.8.3. The maturity profile of Odisha highlights near term redemption, reaching INR 7500 crores in 2022-23. About 50 per cent of total amount outstanding is expected to be repaid/refinanced in the next five years (as per the status on end March 2022). In comparison to other states, the maturity profile of Odisha is much less worrying (Figure 9.17). With low borrowing, the state has much less debt obligations.

Figure 9.17

Maturity Profile of Odisha vis-a-vis Other States – Odisha and other Indian States



Source: State Finances: A Study of State Budgets, RBI

9.9. Impact of Goods and Services Tax

9.9.1. GST was introduced with effect from 1st July 2017 across the country. 17 taxes/ surcharges levied by Centre and states have been subsumed in GST. As per the provisions made in the Constitution (One Hundred and First Amendment) Act, 2016, the states will be compensated for any loss on account of introduction of GST for five years. To determine the compensation, collection of the taxes subsumed in GST in the year 2015-16 has been taken as the base year collection and 14 per cent has been taken as the annual growth rate. Growth rate of 14 per cent is applied annually to the base year's collection to determine the projected collection in a year.

I. GST collection and compensation

9.9.2. Goods and Services Tax collection in Odisha has remained below the protected revenue every year since implementation mainly because of structural issues – tax base that could not be taxed any more or had to be

taxed at low rates was considerably bigger than the tax base gained through the widening of the tax base. The revenue loss sustained on account of lower- and zero-rated GST items like food items and minerals could not be made good from the items covered under service tax. The compensation scheme has ended on 30th June, 2022 (i.e. after five years from introduction of GST). The state will have to adjust its overall fiscal stance to manage the revenue loss arising from the cessation of the compensation flow. The compensation claim position since inception of GST is presented in Table 9.4.

Table 9.4 Claim of Compensation Position 2017-18 to June 2022 (In INR Crore) - Odisha

Base Year Revenue (2015-16): 11049.34							
Sl. No	Description	2017-18 (From July-March)	2018-19	2019-20	2020-21	2021-22	2022-23 (Up to June, 2022)
1	Protected Revenue	10769.8	16370.1	18661.9	21274.6	24253.0	6912.1
2	Actual Revenue collected as per Section 7 of GST Compensation Act	8421.7	12129.0	13329.8	13209.1	16536.6	4828.1
3	Compensation claimed	2348.1	4241.1	5331.9	8065.4	7716.4	2084.0
4	Compensation received	2348.1	4241.1	5331.9	8065.4	6430.2	523.5
5	Balance to be received	0.0	0.0	0.0	0.0	1286.2	1560.5

Source: Commercial Tax Department, GoO

9.10. Reforms in the budget-making proces

9.10.1. The State Government has been laying emphasis on bringing reforms in the budget making process in the areas of accessibility, understanding and participation by the ordinary citizens in the budget-making process and improving budget credibility. Recognizing the outcomes of the reform efforts, Odisha has been ranked third among all states in India in the recently published Second report of the Transparency International on “Transparency in Budget process”. With the objective of further improving our budget credibility, the State Government has introduced ‘Strategic Budget making process’ in preparation of the budget for the ensuing year.

9.10.2. A Medium-Term Fiscal Framework (MTFF) has been introduced to provide a three-year outlook for the fiscal deficit, revenue, and a spending ceiling consistent with the deficit. This framework will significantly enhance the credibility of fiscal policy, allow for improved planning, and give a better signal to stakeholders on what to expect from future budgets. The annual budget making process is anchored on the medium-term projection made through this framework.

9.10.3. **Strategic Budgeting** has three components: (i) the top-down process of determining the resource envelope; (ii) the bottom-up process of costing key expenditure categories; and (iii) reconciling these technical inputs with priorities of the people in order to formulate budget ceilings. The resource envelope is estimated based on sensitivity/buoyancy of revenues with respect to overall economic activities and borrowing ceiling of the Government as stipulated by the FRBM Act. This is the **top-down process of strategic budgeting**. The formulation of the resource envelope is largely a technical process of macroeconomic and fiscal forecasting. Strategic budgeting also involves determining (i) what level of expenditure has already been pre-committed to existing objectives, and (ii) what level of expenditure is available for allocation to new priorities. Outlays for the spending department are prepared considering expectations of citizens through various levels of budget consulting processes. This is the **bottom-up approach of strategic budgeting**.

9.10.4. **Fiscal Strategy Report (FSR)** is an outcome of the Medium-Term Fiscal Framework (MTFF) process. The MTFF and the Fiscal Strategy Report form part of Odisha's public financial management reforms, which aim to secure fiscal sustainability in the interests of development. The FSR outlines the broad objectives of Odisha's public financial management reforms. It is a pre-Budget disclosure on the macroeconomic outlook on which the fiscal strategy is based. It provides the medium-term fiscal outlook, with revenue and expenditure projections, and an assessment of available fiscal space for new programmes.

9.10.5. **Fiscal Risk Management document** has been published for the first time in an endeavour to enhance fiscal transparency and bring out reforms in public finance management in the State. This document discusses the fiscal risk exposure of the State Government and corresponding risk mitigation measures. While ensuring stronger management of fiscal risk, the Fiscal Risk Statement will also contribute to enhance sustainability of public service delivery in the State, to increase credibility to the Medium-Term Fiscal Framework (MTFF), and to increase the confidence of all stakeholders in Odisha's fiscal management.

9.10.6. **Status paper on public debt** is a disclosure document on various aspects of debt position of the State Government. The document looks at current debt portfolio, debt sustainability, and debt outlook of the State.

8.10.7. **Fiscal Risk Committee:** the biggest institutional arrangement for oversight of fiscal risk is the creation of Fiscal Risk Committee in Finance Department under the chairmanship of Principal Secretary Finance. The broad functions of the committee are:

- (i) To monitor the framework for fiscal risk management, quantifying risks and developing risk mitigation measures in priority areas.
- (ii) To evaluate Fiscal Risk Statements, drawing on inputs from Strategic Macro Fiscal Planning Unit and other parts of Finance Department and Government.
- (iii) Reviewing fiscal flows and transaction between government and PSUs; Financial performance and the position of PSU sector and individual PSUs.

I. New Initiatives

9.10.8. **Budget Stabilization Fund:** Collection of Mining Revenue has been unprecedented during last two years requiring risk mitigation measures to make good the shortfall, if any, in the coming years. To hedge the risk of volatility in mining revenue, a Budget Stabilization Fund has been constituted in the 2022-23 (BE) so as to enable transfer to and draw-down from the fund.

9.10.9. **Communication of multi-year Budget ceilings:** To have predictability of budgetary outlay and aid in multi-year project planning, Departments have been indicated the broad expenditure ceilings in advance for the Budget Year Y, Y+1 and Y+2. In this regard, the Annual Budget Circular has already been issued for preparation of Revised Estimates for 2022-23 and Budget Estimates for 2023-24. The multi-year ceilings in respect of Programme Expenditure have also been communicated in the Budget application (BETA).

9.10.10. **E-Budget Presentation:** As a green initiative, the annual budget has been presented in completely electronic form through the National e-Vidhan Application (NeVA) since 2021-22. Odisha is one of the first States in the country to use the NeVA platform for e-budget presentation. The printing of bulky budget documents has been done away with. Further, to make the budget documents and information about the State Budget available and accessible to all, a Mobile App for Odisha Budget has been made available both in Android and IOS versions.

9.10.11. **Artificial Intelligence (AI) based video or selfie-based e-KYC for Pensioners:** The pensioners/ family pensioners can submit their life certificate through their mobile phone / computer /Laptop etc. to the Pension Disbursing Authority (PDA) through the Artificial Intelligence (AI) based online verification of identity and proof of life (Video-KYC) without having to visit the Pension Disbursing Authority concerned physically. This facility can also be used for the identification of the pensioner for disbursement of first pension. This facility will help the old age pensioners to dispense with physical visits to the PDA for submission of life certificate during the pandemic. Further, this will ensure timely disbursement of their first pension and other retirement benefits.

9.10.12. **Implementation of e-Voucher:** End-to-End Digital Transaction/ Accounting (e-voucher) is implemented in 5 District Treasuries (Khurda, Cuttack, Ganjam, Jharsuguda & Deogarh) and Special Treasuries which have done away with manual intervention. Above Treasuries are rendering e-Accounts to AG, Odisha. Roll out in all Treasuries across the State to be completed by the end of FY 2022-23.

9.10.13. **Online Processing of Pension Application for Employees of Aided Institutions:** The module was developed in IFMS for online receipt of Pension documents in case of retirement of employees of Taken-over/ Aided Educational Institutions/ ULBs by Controller of Accounts for authorization of pensionary benefits. This has been rolled out with issuance of detailed guidelines / procedure in Finance Department OM No.5726/F dt.09.03.2022.

9.10.14. **Electronic Disbursement:** Electronic disbursement through IFMS facilitates transfer of various entitlements directly to beneficiary's accounts using the e-Kuber platform of RBI through NEFT. To enhance the service delivery, a new facility i.e., Bulk Disbursement has been introduced. This facility is beneficial for those departments where the number of beneficiaries is very large such as disbursement of scholarship, ex-Gratia payments, etc. It helps in facilitating Scheme Based Direct Benefit Transfer.

9.10.15. **Scheme-wise Bank Account Management System (SBMS):** An IT facility is being developed in IFMS to track scheme funds that are drawn out of the government accounts and parked in different bank accounts. This ensures better utilization and timely release of government money to various scheme implementing agencies.

9.10.16. **Aadhaar Based Account Verification:** Under various schemes, State Government disburses payments/ benefits to the beneficiaries enrolled under the schemes. The Aadhaar based account verification facility is being put in place to verify bank account details of the beneficiaries to check the correctness of bank account number and Indian Financial System Code (IFSC) of beneficiaries. The purpose of this verification is to ensure that the account details of the beneficiaries is correct before the State Government initiates a debit or credit transaction to the account in the nature of payments, collection or refund under the schemes.

9.10.17. The State has undertaken various initiatives to manage fiscal risks emanating from various areas such as termination of GST compensation to states, volatile revenues from mining, decline in Odisha's share in tax devolution, state's contingent liabilities in power sector and public private partnerships especially infrastructure, and the frequent natural disaster.

9.11. In conclusion

9.11.1. Odisha has put its finances in order since it committed to the FRBM norms, initially by rationalising expenditures which brought down the deficits and along with it the need to borrow. As debt burden started to decrease, interest payments also started falling, opening up opportunities of a careful stepping up of developmental expenditures, without risking an increase in deficits. This strategy has allowed the state to reach a stage where it can step up capital expenditures, maintain a reasonably high level of developmental expenditures and yet remain within the FRBM limits on indebtedness and deficits. The outlook appears to be a comfortable

fiscal scenario in the medium term, even after the negative impact of the the pandemic shock in 2020-21 and general recession due to economic recession.

9.11.2. However, there are two possible risks. First, since the introduction of GST, the state has been assured of a 14 per cent growth in GST revenue every year, supported by the statutory compensation scheme. This compensation scheme was ended on 30th June, 2022. Now, the State have to look for alternative ways to adjust its fiscal stance to meet the cessation of compensation payments. It will not be easy to raise the SGST revenue because the introduction of GST along with the loss of autonomy in setting the tax rates has meant that the state lost a substantial part of its sales tax revenue raised from food grains and minerals. The addition to the tax base – services – being relatively small is not likely to cover the loss in the medium term. However, higher non-tax revenues from minerals should help to offset the loss of tax revenue to some extent.

9.11.3. The second risk lies in the state's dependence on central transfers – share in central taxes and grants. This dependence was above 50 per cent in not-so-distant past, and still more than 45 per cent. The entire central transfers are either discretionary (depending on the relevant central policies) or contingent upon the subsequent Finance Commissions. In fact, a reduction in the horizontal share of the state for tax devolution as awarded by the 15th Finance Commission has dampened growth of revenue receipts. As Odisha inches up the ranking of states on per capita income with consistent growth, its share in future is likely to contract, impacting the tax devolutions and central transfers. These risks point to an imperative to step up its own tax revenue collection in the medium term and further reduce its dependence on central transfers without affecting the expenditure side.

ANNEXURE



Annexure 1.1: Key aggregates of state domestic product at current prices

Sl. No.	Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Gross State Value Added at basic prices	22023169	24916295	28044263	29520164	30450599	35497589	39087730	44786570	47496759	47548894	58000235	66767489
2.	Taxes on Products	2031089	2340292	2715614	3082180	3529971	4920611	6124238	6312958	7646957	8150657	10025354	11584853
3.	Less Subsidies on Products	955550	1086627	1112340	1177349	1125620	1137833	1172436	1238402	1345027	2131315	1882761	1756065
4.	Gross State Domestic Product (1+2-3)	23098708	26169960	29647538	31424995	32854950	39280367	44039532	49861126	53798689	53568236	66142828	76596277
5.	Consumption of Fixed Capital	2676113	2838712	3549800	3932653	4457048	5047197	5287839	5896251	6450688	7029379	7035197	7050216
6.	Net State Value Added at basic prices (1-5)	19347056	22077583	24494463	25587511	25993551	30450392	33799890	38890319	41046071	40519515	50965038	59717274
7.	Net State Domestic Product (4-5)	20422595	23331248	26097737	27492342	28397902	34233170	38751692	43964875	47348001	46538857	59107630	69546061
8.	Population (Lakh)	422.07	426.05	430.04	434.01	438.00	441.68	445.14	448.60	452.05	455.52	458.65	461.56
9.	Per Capita Gross State Domestic Product (Rupees)	54727	61425	68941	72406	75011	88934	98934	111148	119010	117598	144212	165951
10.	Per Capita Net State Domestic Product (Rupees)	48387	54762	60687	63345	64835	77507	87055	98005	104741	102166	128873	150676

Annexure 1.2: Key aggregates of state domestic product at constant (2011-12) prices

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Agriculture, Forestry and Fishing	3934537	5342867	5674967	6556959	6163541	7425208	7494152	8694180	11213091	12245724	13285851	15035435
1.1	Crops	2555039	3750538	3802014	4436266	3765010	4707586	4427627	5078111	7044030	7720934	8271386	9446519
1.2	Livestock	538911	637320	729849	803496	880542	909690	1188323	1417110	1608663	1735485	1952649	2022996
1.3	Forestry and Logging	572223	619884	784937	864086	957598	1108049	1022004	1249921	1472892	1573753	1629193	1746364
1.4	Fishing and Aquaculture	268365	335124	358168	453110	560391	699883	856198	949037	1087506	1215551	1432623	1819556
2.	Mining and Quarrying	2648738	2666989	2868392	2703161	2862080	3292604	3467115	4139377	3909386	3814464	6281667	6814241
	Primary	6583276	8009855	8543359	9260120	9025621	10717812	10961268	12833556	15122477	16060187	19567518	21849677
3.	Manufacturing	4116404	4212453	5168498	4724215	4654610	6741508	8000596	10384919	8852296	9454662	12455878	15090476
4.	Electricity, Gas, Water Supply & Other Utility Services	775701	937278	1044477	1008706	1218871	1318939	1313855	1237963	1316103	1388566	1598573	1912566
5.	Construction	2059629	2074164	2314669	2393041	2370792	2609537	2975353	3263912	3298309	3077816	3452532	3750057
	Secondary	6951734	7223895	8527644	8125962	8244272	10669984	12289804	14886794	13466708	13921044	17506983	20753099
6.	Trade, Repair, Hotels and Restaurants	2035854	2436044	2769620	3030218	3352591	3538166	3995610	4499319	4873301	3751712	4844481	6219626
6.1	Trade & Repair Services	1838866	2218946	2533465	2782577	3082291	3240394	3665665	4120463	4463426	3569077	4505833	5705079
6.2	Hotels & Restaurants	196989	217098	236155	247641	270300	297771	329945	378856	409875	182635	338649	514547
7.	Transport, Storage, Communication & Services related to Broadcasting	1347538	1560857	1771254	2048455	2257036	2502715	2740357	2652195	2897452	2829663	3214161	3642902
7.1	Railways	179466	233719	266785	343229	395310	371338	404929	412861	500808	537115	559938	618848

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
7.2	Transport by means other than Railways	819369	940402	1039368	1149260	1223740	1469071	1687454	1570332	1616521	1385092	1620913	1877307
7.2.1	Road transport	693450	802859	892415	972267	1036673	1239514	1387446	1263306	1271641	1039272	1213529	1387682
7.2.2	Water transport	41962	42597	42862	47988	44899	72289	86993	115961	125238	135881	149925	176351
7.2.3	Air transport	3421	7232	5311	8947	17220	19573	23801	15364	25666	15912	30398	50098
7.2.4	Services incidental to Transport	80536	87715	98780	120058	124947	137695	189214	175701	193976	194027	227061	263175
7.3	Storage	13967	15384	18233	18781	20245	22462	23279	27217	28543	28607	33879	38972
7.4	Communication & Services related to Broadcasting	334737	371354	446868	537185	617741	639843	624694	641785	751580	878849	999432	1107776
8.	Financial Services	796303	910354	962328	1065147	1184299	1148781	1338585	1506464	1723736	1832263	1977276	2143366
9.	Real estate, Ownership of Dwelling & Professional Services	1707147	1901721	2146627	2321999	2439614	2671043	2816271	2982475	3054082	3051424	3710688	4242737
10.	Public Administration and Defence	863077	980808	1390657	1517496	1573618	1609037	1752524	1945082	2293750	2310449	2726437	2999601
11.	Other Services	1738239	1892760	1932774	2150766	2373548	2640051	3193310	3480684	4065252	3792153	4452689	4916481
	Tertiary	8488159	9682545	10973261	12134082	13180706	14109793	15836658	17066219	18907574	17567663	20925734	24164714
12	TOTAL GSVA at Basic Prices	22023169	24916295	28044263	29520164	30450599	35497589	39087730	44786570	47496759	47548894	58000235	66767489
13	Gross State Domestic Product	23098708	261699602	29647537.5	31424995.1	32854950.3	39280367.5	44039531.7	49861125.7	53798689	53568235.7	66142827.6	76596277
14	Per capita GSDP (Rupees)	54727	61425	68941	72406	75011	88934	98934	111148	119010	117598	144212	165951

Annexure 1.3: Gross State Value Added by economic activity at current basic prices

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
		3	4	5	6	7	8	9	10	11	12	13	14
1.	Agriculture, Forestry and Fishing	3934537	5342867	5674967	6556959	6163541	7425208	7494152	8694180	11213091	12245724	13285851	15035435
1.1	Crops	2555039	3750538	3802014	4436266	3765010	4707586	4427627	5078111	7044030	7720934	8271386	9446519
1.2	Livestock	538911	637320	729849	803496	880542	909690	1188323	1417110	1608663	1735485	1952649	2022996
1.3	Forestry and Logging	572223	619884	784937	864086	957598	1108049	1022004	1249921	1472892	1573753	1629193	1746364
1.4	Fishing and Aquaculture	268365	335124	358168	453110	560391	699883	856198	949037	1087506	1215551	1432623	1819556
2.	Mining and Quarrying	2648738	2666989	2868392	2703161	2862080	3292604	3467115	4139377	3909386	3814464	6281667	6814241
	Primary	6583276	8009855	8543359	9260120	9025621	10717812	10961268	12833556	15122477	16060187	19567518	21849677
3.	Manufacturing	4116404	4212453	5168498	4724215	4654610	6741508	8000596	10384919	8852296	9454662	12455878	15090476
4.	Electricity, Gas, Water Supply & Other Utility Services	775701	937278	1044477	1008706	1218871	1318939	1313855	1237963	1316103	1388566	1598573	1912566
5.	Construction	2059629	2074164	2314669	2393041	2370792	2609537	2975353	3263912	3298309	3077816	3452532	3750057
	Secondary	6951734	7223895	8527644	8125962	8244272	10669984	12289804	14886794	13466708	13921044	17506983	20753099
6.	Trade, Repair, Hotels and Restaurants	2035854	2436044	2769620	3030218	3352591	3538166	3995610	4499319	4873301	3751712	4844481	6219626
6.1	Trade & Repair Services	1838866	2218946	2533465	2782577	3082291	3240394	3665665	4120463	4463426	3569077	4505833	5705079
6.2	Hotels & Restaurants	196989	217098	236155	247641	270300	297771	329945	378856	409875	182635	338649	514547
7.	Transport, Storage, Communication & Services related to Broadcasting	1347538	1560857	1771254	2048455	2257036	2502715	2740357	2652195	2897452	2829663	3214161	3642902

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
7.1	Railways	179466	233719	266785	343229	395310	371338	404929	412861	500808	537115	559938	618848
7.2	Transport by means other than Railways	819369	940402	1039368	1149260	1223740	1469071	1687454	1570332	1616521	1385092	1620913	1877307
7.2.1	Road transport	693450	802859	892415	972267	1036673	1239514	1387446	1263306	1271641	1039272	1213529	1387682
7.2.2	Water transport	41962	42597	42862	47988	44899	72289	86993	115961	125238	135881	149925	176351
7.2.3	Air transport	3421	7232	5311	8947	17220	19573	23801	15364	25666	15912	30398	50098
7.2.4	Services Incidental to Transport	80536	87715	98780	120058	124947	137695	189214	175701	193976	194027	227061	263175
7.3	Storage	13967	15384	18233	18781	20245	22462	23279	27217	28543	28607	33879	38972
7.4	Communication & Services related to Broadcasting	334737	371354	446868	537185	617741	639843	624694	641785	751580	878849	999432	1107776
8.	Financial Services	796303	910354	962328	1065147	1184299	1148781	1338585	1506464	1723736	1832263	1977276	2143366
9.	Real estate, Ownership of Dwelling & Professional Services	1707147	1901721	2146627	2321999	2439614	2671043	2816271	2982475	3054082	3051424	3710688	4242737
10.	Public Administration and Defence	863077	980808	1390657	1517496	1573618	1609037	1752524	1945082	2293750	2310449	2726437	2999601
11.	Other Services	1738239	1892760	1932774	2150766	2373548	2640051	3193310	3480684	4065252	3792153	4452689	4916481
	Tertiary	8488159	9682545	10973261	12134082	13180706	14109793	15836658	17066219	18907574	17567663	20925734	24164714
12.	TOTAL GVA at Basic Prices	22023169	24916295	28044263	29520164	30450599	35497589	39087730	44786570	47496759	47548894	58000235	66767489
13.	Gross State Domestic Product	23098708	26169960.2	29647537.5	31424995.1	32854950.3	39280367.5	44039531.7	49861125.7	53798689	53568235.7	66142827.6	76596277
14.	Per capita GDP (Rupees)	54727	61425	68941	72406	75011	88934	98934	111148	119010	117598	144212	165951

Annexure 1.4: Percentage distribution of Gross State Value Added by economic activity at current basic prices

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Agriculture, Forestry and Fishing	17.87	21.44	20.24	22.21	20.24	20.92	19.17	19.41	23.61	25.75	22.91	22.52
1.1	Crops	11.60	15.05	13.56	15.03	12.36	13.26	11.33	11.34	14.83	16.24	14.26	14.15
1.2	Livestock	2.45	2.56	2.60	2.72	2.89	2.56	3.04	3.16	3.39	3.65	3.37	3.03
1.3	Forestry and Logging	2.60	2.49	2.80	2.93	3.14	3.12	2.61	2.79	3.10	3.31	2.81	2.62
1.4	Fishing and Aquaculture	1.22	1.34	1.28	1.53	1.84	1.97	2.19	2.12	2.29	2.56	2.47	2.73
2.	Mining and Quarrying	12.03	10.70	10.23	9.16	9.40	9.28	8.87	9.24	8.23	8.02	10.83	10.21
	Primary	29.89	32.15	30.46	31.37	29.64	30.19	28.04	28.65	31.84	33.78	33.74	32.73
3.	Manufacturing	18.69	16.91	18.43	16.00	15.29	18.99	20.47	23.19	18.64	19.88	21.48	22.60
4.	Electricity, Gas, Water Supply & Other Utility Services	3.52	3.76	3.72	3.42	4.00	3.72	3.36	2.76	2.77	2.92	2.76	2.86
5.	Construction	9.35	8.32	8.25	8.11	7.79	7.35	7.61	7.29	6.94	6.47	5.95	5.62
	Secondary	31.57	28.99	30.41	27.53	27.07	30.06	31.44	33.24	28.35	29.28	30.18	31.08
6.	Trade, Repair, Hotels and Restaurants	9.24	9.78	9.88	10.26	11.01	9.97	10.22	10.05	10.26	7.89	8.35	9.32
6.1	Trade & Repair Services	8.35	8.91	9.03	9.43	10.12	9.13	9.38	9.20	9.40	7.51	7.77	8.54

Annexure 1.5: Gross State Value Added by economic activity at constant (2011-12) basic prices

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Agriculture, Forestry and Fishing	3934537	4558109	4368529	4711024	4111533	4930742	4389513	4773229	5421541	5760490	5897809	6250498
1.1	Crops	2555039	3153542	2864360	3154054	2454137	3025226	2417149	2622730	3111370	3396135	3340466	3521777
1.2	Livestock	538911	550337	603389	581686	609794	628974	681784	757037	791425	793624	874017	894686
1.3	Forestry and Logging	572223	552477	604105	638507	675204	822447	758933	815486	887629	915109	931937	982745
1.4	Fishing and Aquaculture	268365	301753	296675	336777	372398	454096	531646	577977	631117	655622	751389	851290
2.	Mining and Quarrying	2648738	2596740	3097752	2851914	3674187	4179914	3805346	4184511	4020770	3528293	4295328	4614096
	Primary	6583276	7154850	7466281	7562938	7785720	9110657	8194858	8957740	9442311	9288783	10193138	10864594
3.	Manufacturing	4116404	3985120	4830204	4374503	4840719	6449059	7773873	9214682	8154216	8639034	9439463	9932196
4.	Electricity, Gas, Water Supply & Other Utility Services	775701	924884	987637	919544	1105926	1189992	1172431	1075432	1112795	1178085	1269678	1357877
5.	Construction	2059629	2009633	2144855	2138636	2146416	2300759	2493035	2592606	2597656	2316539	2544831	2706537
	Secondary	6951734	6919638	7962695	7432683	8093061	9939810	11439339	12882720	11864667	12133657	13253971	13996611
6.	Trade, Repair, Hotels and Restaurants	2035854	2274231	2454254	2652360	3052006	3165618	3475494	3757458	4007893	3048081	3466424	4028308
6.1	Trade & Repair Services	1838866	2071553	2245248	2435870	2806083	2899397	3188573	3441003	3670546	2899395	3224581	3696820

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
6.2	Hotels & Restaurants	196989	202677	209006	216490	245923	266221	286921	316455	337347	148686	241844	331488
7.	Transport, Storage, Communication & Services related to Broadcasting	1347538	1509441	1639446	1841387	2037154	2168882	2316191	2128965	2214958	1853032	1963965	2097759
7.1	Railways	179466	222896	247615	297269	336282	285709	305253	305144	304240	263640	274843	303759
7.2	Transport by means other than Railways	819369	914347	966706	1045914	1123670	1302119	1457009	1281676	1291970	958222	1028369	1110324
7.2.1	Road transport	693450	780615	830026	884837	951901	1098650	1197971	1031087	1016332	718980	769909	820107
7.2.2	Water transport	41962	41416	39866	43673	41228	64074	75113	94645	100094	94004	95118	104222
7.2.3	Air transport	3421	7031	4939	8143	15811	17349	20550	12540	20513	11008	19286	30461
7.2.4	Services Incidental to Transport	80536	85284	91875	109262	114730	122047	163374	143404	155031	134230	144056	155534
7.3	Storage	13967	14039	14304	13838	15730	19924	20259	22719	23435	23186	24300	25449
7.4	Communication & Services related to Broadcasting	334737	358160	410822	484366	561472	561130	533670	519426	595312	607984	636453	658227
8.	Financial Services	796303	898381	929172	1018384	1097064	1065757	1152675	1212766	1316548	1388623	1498525	1624400
9.	Real estate, Ownership of Dwelling & Professional Services	1707147	1770647	1889542	2002383	2154941	2310192	2450903	2489709	2507930	2419625	2586066	2766078
10.	Public Administration and Defence	863077	923056	1249332	1340689	1434156	1445570	1529026	1628944	1889011	1875749	1998213	2029958
11.	Other Services	1738239	1741648	1665455	1733178	1810066	1891454	2176801	2241357	2528766	2253874	2559058	2763203
	Tertiary	8488159	9117405	9827201	10588381	11585388	12047474	13101089	13459199	14465107	12838985	14072250	15309706
12	TOTAL GVA at Basic Prices	22023169	23191892	25256176	25584002	27464169	31097941	32735286	35299658	35772085	34261425	37519359	40170911
13	Gross State Domestic Product	23098708	24336348	26589153	27066534	29222893	33734806	36111668	38673286	39778643	37807525	42171914	45468196
14	Per capita GSDP (Rupees)	54727	57121	61829	62364	66719	76378	81124	86209	87996	82999	91948	98510

Annexure 1.6: Growth rate of Gross State Value Added by economic activity at constant (2011-12) basic prices

Sl. No.	Economic Activity	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Agriculture, Forestry and Fishing	15.85	-4.16	7.84	-12.73	19.92	-10.98	8.74	13.58	6.25	2.38	5.98
1.1	Crops	23.42	-9.17	10.11	-22.19	23.27	-20.10	8.51	18.63	9.15	-1.64	5.43
1.2	Livestock	2.12	9.64	-3.60	4.83	3.15	8.40	11.04	4.54	0.28	10.13	2.36
1.3	Forestry and Logging	-3.45	9.34	5.69	5.75	21.81	-7.72	7.45	8.85	3.10	1.84	5.45
1.4	Fishing and Aquaculture	12.44	-1.68	13.52	10.58	21.94	17.08	8.71	9.19	3.88	14.61	13.30
2.	Mining and Quarrying	-1.96	19.29	-7.94	28.83	13.76	-8.96	9.96	-3.91	-12.25	21.74	7.42
	Primary	8.68	4.35	1.29	2.95	17.02	-10.05	9.31	5.41	-1.63	9.74	6.59
3.	Manufacturing	-3.19	21.21	-9.43	10.66	33.23	20.54	18.53	-11.51	5.95	9.27	5.22
4.	Electricity, Gas, Water Supply & Other Utility Services	19.23	6.78	-6.89	20.27	7.60	-1.48	-8.27	3.47	5.87	7.77	6.95
5.	Construction	-2.43	6.73	-0.29	0.36	7.19	8.36	3.99	0.19	-10.82	9.85	6.35
	Secondary	-0.46	15.07	-6.66	8.88	22.82	15.09	12.62	-7.90	2.27	9.23	5.60
6.	Trade, Repair, Hotels and Restaurants	11.71	7.92	8.07	15.07	3.72	9.79	8.11	6.67	-23.95	13.72	16.21
6.1	Trade & Repair Services	12.65	8.38	8.49	15.20	3.33	9.97	7.92	6.67	-21.01	11.22	14.64

Sl. No.	Economic Activity	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (3rd RE)	2020-21 (2nd RE)	2021-22 (1st RE)	2022-23 (A)
6.2	Hotels & Restaurants	2.89	3.12	3.58	13.60	8.25	7.78	10.29	6.60	-55.93	62.65	37.07
7.	Transport, Storage, Communication & Services related to Broadcasting	12.01	8.61	12.32	10.63	6.47	6.79	-8.08	4.04	-16.34	5.99	6.81
7.1	Railways	24.20	11.09	20.05	13.12	-15.04	6.84	-0.04	-0.30	-13.34	4.25	10.52
7.2	Transport by means other than Railways	11.59	5.73	8.19	7.43	15.88	11.90	-12.03	0.80	-25.83	7.32	7.97
7.2.1	Road transport	12.57	6.33	6.60	7.58	15.42	9.04	-13.93	-1.43	-29.26	7.08	6.52
7.2.2	Water transport	-1.30	-3.74	9.55	-5.60	55.41	17.23	26.00	5.76	-6.08	1.18	9.57
7.2.3	Air transport	105.53	-29.75	64.86	94.18	9.72	18.46	-38.98	63.58	-46.34	75.19	57.95
7.2.4	Services Incidental to Transport	5.90	7.73	18.92	5.00	6.38	33.86	-12.22	8.11	-13.42	7.32	7.97
7.3	Storage	0.51	1.89	-3.25	13.67	26.66	1.68	12.14	3.15	-1.06	4.80	4.73
7.4	Communication & Services related to Broadcasting	7.00	14.70	17.90	15.92	-0.06	-4.89	-2.67	14.61	2.13	4.68	3.42
8.	Financial Services	12.82	3.43	9.60	7.73	-2.85	8.16	5.21	8.56	5.47	7.91	8.40
9.	Real estate, Ownership of Dwelling & Professional Services	3.72	6.71	5.97	7.62	7.20	6.09	1.58	0.73	-3.52	6.88	6.96
10.	Public Administration and Defence	6.95	35.35	7.31	6.97	0.80	5.77	6.53	15.97	-0.70	6.53	1.59
11.	Other Services	0.20	-4.37	4.07	4.44	4.50	15.09	2.97	12.82	-10.87	13.54	7.98
	Tertiary	7.41	7.79	7.75	9.42	3.99	8.75	2.73	7.47	-11.24	9.61	8.79
12	TOTAL GSVA at Basic Prices	5.31	8.90	1.30	7.35	13.23	5.27	7.83	1.34	-4.22	9.51	7.07
13	Gross State Domestic Product	5.36	9.26	1.80	7.97	15.44	7.05	7.09	2.86	-4.96	11.54	7.82
14	Per capita GSDP	4.37	8.24	0.86	6.98	14.48	6.21	6.27	2.07	-5.68	10.78	7.14

Annexure 1.7: State-Wise Average Inflation (CPI) - General

State/Union Territory	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9
Andaman & Nicobar	6.7	6.4	6.2	3.6	6.9	6.5	6.3	5.2
Andhra Pradesh	5.5	7.4	5.2	3.4	1.1	3.5	9.0	5.2
Assam	6.0	4.8	2.6	4.4	5.9	6.0	8.5	3.2
Bihar	6.7	4.5	3.9	2.7	3.9	2.2	7.3	3.8
Chandigarh	6.4	3.6	3.9	3.8	4.0	4.8	4.8	4.8
Chhattisgarh	6.4	6.8	3.5	2.7	2.4	2.5	8.0	4.2
Dadra & Nagar Haveli	4.3	5.3	5.6	2.8	1.8	4.7	4.2	6.9
Daman & Diu	7.0	9.2	5.0	6.5	-1.9	0.8	6.9	6.0
Delhi	5.6	4.9	5.3	4.8	2.7	3.7	3.3	5.4
Goa	6.5	4.7	5.1	3.8	2.6	4.3	6.9	4.2
Gujarat	5.5	4.9	5.1	2.6	2.5	3.7	5.9	4.9
Haryana	5.6	4.0	4.4	4.1	2.9	4.3	5.9	5.6
Himachal Pradesh	6.2	4.3	4.6	4.6	0.5	3.5	5.2	6.0
Jammu & Kashmir	6.0	6.0	5.3	6.8	5.3	4.3	6.3	6.5
Jharkhand	4.7	5.1	5.3	3.9	3.7	4.1	6.0	3.7
Karnataka	6.5	6.7	4.4	3.0	3.3	5.6	5.8	5.6
Kerala	7.3	4.2	4.3	6.0	4.9	6.1	6.0	4.0
Lakshadweep	7.6	5.1	1.1	5.0	5.7	8.3	11.1	2.3
Madhya Pradesh	5.5	4.4	3.5	2.7	3.5	5.5	7.6	5.9
Maharashtra	5.5	4.4	4.4	4.1	3.1	4.4	6.8	5.2
Manipur	4.7	5.1	10.1	12.4	8.7	6.9	6.7	1.4
Meghalaya	12.3	7.5	0.6	1.5	2.2	2.8	9.2	3.0
Mizoram	6.5	4.0	2.1	1.9	2.5	5.1	10.3	5.7
Nagaland	10.5	5.8	5.1	3.4	6.0	3.8	4.8	4.8
Odisha	6.8	6.4	4.9	2.2	2.6	4.6	7.9	3.1
Puducherry	6.9	8.4	1.3	2.3	4.2	6.2	8.4	4.8
Punjab	5.7	3.5	4.4	3.7	3.8	5.0	5.3	4.4
Rajasthan	6.6	5.7	5.4	3.2	2.3	5.3	4.4	4.2
Sikkim	6.2	7.0	9.9	4.0	3.9	3.2	7.1	6.6
Tamil Nadu	6.2	5.7	3.9	4.9	3.7	5.7	7.5	5.2
Telangana	4.7	5.5	6.1	3.9	2.6	4.5	8.7	6.4
Tripura	13.0	2.7	4.1	3.4	4.3	6.3	9.5	3.2
Uttar Pradesh	5.9	4.1	4.3	2.4	3.8	5.9	6.1	5.1
Uttarakhand	5.0	3.2	3.7	3.9	4.0	5.9	8.1	5.1
West Bengal	5.4	3.5	5.0	3.7	5.1	4.6	8.7	5.1
All India	5.9	4.9	4.5	3.6	3.4	4.8	6.2	5.5

Source: Ministry of Statistics and Programme Implementation, Government of India.

Notes: 1. Data for Arunachal Pradesh is not available.

2. For calculating State-wise Consumer Price Index (CPI) inflation in 2020-21 the average CPI Index for ten months has been taken due to unavailability of CPI data for the months of April and May 2020

Annexure 1.8: Commodity-wise inflation in December 2022 over December 2021 (in per cent), Combined

Category	Major States* Average	Neighboring States**	Odisha
1	2	3	4
General Index (All Groups)	5.6	5.7	3.8
Food and beverages	4.4	3.6	1.6
Cereals and products	12.2	12.4	9.9
Meat and fish	5.2	5.6	6.9
Milk and products	7.9	7.3	6.1
Non-alcoholic beverages	3.5	3.4	2.6
Oils and fats	0.6	0.7	0.5
Fruits	2.5	3.8	5.4
Pulses and products	3.2	4.4	4.7
Spices	18.6	17.6	14.9
Sugar and confectionery	0.9	2	0.4
Vegetables	-13.1	-19.2	-19.4
Egg	4.6	7.7	2.4
Prepared meals; snacks; sweets etc.	7.2	7.2	5.1
Pan; tobacco; and intoxicants	2.1	1.9	2.1
Clothing and footwear	8.9	9.4	8.1
Clothing	9.2	9.7	8.4
Footwear	11.1	12.3	10.5
Fuel and light	12.5	16.6	10
Miscellaneous	5.9	6.3	5.6
Household goods and services	7.3	5.5	7.6
Education	6	6.5	3.2
Health	6.1	5.8	5.7
Personal care and effects	7.7	7.7	6.3
Recreation and amusement	5	3.9	3.9
Transport and communication	4.5	6.9	5.5

Note: 1. The 20 major states are: Odisha, Uttar Pradesh, Punjab, Himachal Pradesh, Madhya Pradesh, Jharkhand, Chhattisgarh, Haryana, Goa, Karnataka, Uttarakhand, Bihar, Telangana, Gujarat, Rajasthan, Tamil Nadu, West Bengal, Maharashtra, Andhra Pradesh, and Kerala

2. Neighboring states are: Chhattisgarh and Jharkhand

Source : MoSPI, Government of India

Annexure 1.9: Commodity Group-wise Rate of Inflation in Odisha, Neighboring States and In All India

State	SI No.	Group	Rate of Inflation in 2022 over 2021		
			Rural	Urban	Combined
1	2	3	4	5	6
ALL India	1	Clothing and footwear	9.9	9	9.6
	2	Food and beverages	6.9	6.7	6.8
	3	Fuel and light	9.5	11.1	10
	4	Miscellaneous	6.1	6.8	6.4
	5	Pan; tobacco; and intoxicants	2.3	1.5	2.1
	6	General Index (All Groups)	6.9	6.4	6.7
Andhra Pradesh	1	Clothing and footwear	13.3	11	12.6
	2	Food and beverages	6.2	6.3	6.3
	3	Fuel and light	14.9	16.1	15.3
	4	Miscellaneous	7.4	9.4	8.1
	5	Pan; tobacco; and intoxicants	-5.5	-8.3	-6.1
	6	General Index (All Groups)	6.9	7.3	7
Chhattisgarh	1	Clothing and footwear	4.9	3.5	4.4
	2	Food and beverages	5.8	5.3	5.6
	3	Fuel and light	18.4	15.3	17.6
	4	Miscellaneous	3.2	4.2	3.6
	5	Pan; tobacco; and intoxicants	1.4	2.3	1.6
	6	General Index (All Groups)	6.4	4.5	5.7
Jharkhand	1	Clothing and footwear	8.1	10.8	9
	2	Food and beverages	6.2	6.6	6.4
	3	Fuel and light	13.8	11.2	12.9
	4	Miscellaneous	4.6	6.7	5.5
	5	Pan; tobacco; and intoxicants	2	4.3	2.6
	6	General Index (All Groups)	6.7	6.6	6.7
Odisha	1	Clothing and footwear	8.1	8	8.1
	2	Food and beverages	6.3	5.3	6.1
	3	Fuel and light	10.7	11.8	10.9
	4	Miscellaneous	6	6.1	6.1
	5	Pan; tobacco; and intoxicants	2.4	3.4	2.6
	6	General Index (All Groups)	6.7	5.4	6.3
West Bengal	1	Clothing and footwear	13.3	7.1	10.7
	2	Food and beverages	8.5	7.9	8.3
	3	Fuel and light	17.1	16.9	17
	4	Miscellaneous	5.6	5.4	5.5
	5	Pan; tobacco; and intoxicants	4.3	-2.3	2.1
	6	General Index (All Groups)	8.8	6.8	7.8

Source: MoSPI, Government of India

Annexure 2.1: Land Utilization Pattern in Odisha

Year	Geographical Area	Forest Area	Misc. Tree	permanent pastures	Culturable waste	Land put to non-agri. Use	Barren and uncultivable land	Current fallow	Other fallow	Net area sown
1	2	3	4	5	6	7	8	9	10	11
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
2012-13	15571	5813	342	494	375	1298	840	849	229	5331
2013-14	15571	5813	342	494	375	1298	840	756	229	5424
2014-15	15571	5813	342	494	375	1298	840	684	229	5496
2015-16	15571	5813	342	494	375	1298	840	572	229	5608
2016-17	15571	5813	342	494	375	1298	840	528	229	5652
2017-18	15571	5813	342	494	375	1298	840	824	229	5356
2018-19	15571	5813	342	494	375	1298	840	818	229	5362
2019-20	15571	5813	342	494	375	1298	840	850	229	5330
2020-21	15571	5813	342	494	375	1298	840	765	229	5415
2021-22	15571	5813	342	494	375	1298	840	766	229	5414

Source: Directorate of Agriculture and Food Production, Odisha

Annexure 2.2: Cropping Pattern in Odisha

Crops	2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22	
	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
(A) Cereals														
Rice	3942	75.31	3963	60.55	3766.39	52.90	3706.95	53.15	3940.71	54.77	4040.93	55.88	3947.75	54.94
Wheat	0.3	0.01	0.06	0.00	2.90	0.04	2.20	0.03	2.40	0.03	2.16	0.03	2.31	0.03
Maize	55	1.05	72	1.10	247.61	3.48	251.43	3.61	254.14	3.53	260.41	3.6	272.15	3.79
Ragi	46	0.88	47	0.72	114.35	1.61	117.88	1.69	116.85	1.62	124.47	1.72	140.94	1.96
Others	34	0.65	35	0.53	36.56	0.51	42.13	0.60	40.55	0.56	42.02	0.58	46.07	0.64
Total (A) Cereals	4077	77.90	4117	62.90	4167.81	58.54	4120.59	59.08	4354.65	60.52	4469.99	61.81	4409.22	61.36
(B) Pulses														
Gram	39	0.75	40	0.61	32.94	0.46	30.57	0.44	27.82	0.39	29.19	0.4	35.30	0.49
Arhar	138	2.64	136	2.08	137.89	1.94	144.06	2.07	128.63	1.79	129.69	1.79	126.06	1.75
Other pulses	598	11.42	1811	27.67	1876.52	26.36	1776.82	25.48	1765.79	25.36	1744.38	24.12	1742.45	25.36
Total (B) Pulses	775	14.81	1987	30.36	2047.35	28.76	1951.45	27.99	1922.24	27.54	1903.26	26.32	1903.81	26.50
Total Food grains (A+B)	4852	92.70	6104	93.26	6215.16	87.30	6072.04	87.07	6276.89	88.06	6373.25	88.93	6313.03	87.86
(C) Oilseeds														
Groundnut	51	0.97	45	0.69	198.01	2.78	192.08	2.75	204.82	2.85	171.27	2.37	187.98	2.62
Sesamum	20	0.38	16	0.24	203.72	2.86	202.99	2.91	200.43	2.79	170.16	2.35	174.73	2.43

Crops	2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22	
	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total	Area	percent to Total
Nizer and mustard (Rape seed & Mustard)	7	0.13	25	0.38	109.57	1.54	106.30	1.52	109.98	1.53	107.92	1.49	121.37	1.69
Caster seeds	11	0.21	9	0.14	7.77	0.11	7.24	0.10	6.79	0.09	6.52	0.09	7.64	0.11
Others	48	0.92	98	1.50	84.30	1.18	81.48	1.17	80.07	1.11	72.54	1.00	71.05	0.99
Total (C) Oil seeds	137	2.62	193	2.95	603.37	8.47	590.09	8.45	602.09	8.37	528.41	7.31	562.77	7.83
(D) Fibres														
Cotton	125	2.39	136	2.07	144.57	2.03	157.88	2.26	169.56	2.36	171.24	2.37	193.11	2.69
Jute	1	0.02	1.00	0.01	4.37	0.06	3.99	0.06	3.66	0.05	3.96	0.05	5.22	0.07
Other fibers	14	0.27	11	0.17	11.23	0.16	11.85	0.17	9.57	0.13	9.58	0.13	10.83	0.15
Total (D) Fibres	140	2.67	147	2.25	160.17	2.25	173.72	2.49	182.79	2.54	184.78	2.56	209.16	2.91
(E) Other crops														
Sugarcane	9	0.17	5	0.08	27.00	0.38	24.80	0.36	18.76	0.26	20.78	0.78	21.05	0.29
Tobacco	1	0.02	1	0.02	0.31	0.01	0.19	0.00	0.13	0.00	0.07	0.00	0.05	0.00
Potato	6	0.11	6	0.09	25.09	0.35	25.03	0.36	24.71	0.34	39.39	0.54	26.93	0.37
Chillies	72	1.38	72	1.10	71.72	1.01	71.70	1.03	72.12	20.52	60.00	0.83	34.88	0.49
Ginger	17	0.32	17	0.26	16.58	0.23	16.58	0.24	17.53	0.24	25.00	0.35	17.67	0.25
Total (E) other crops	105	2.01	101	1.54	140.70	1.98	138.30	1.99	133.25	1.85	145.237	2.00	100.58	1.40
Grand Total (A+B+C+D+E)	5234	100	6545	100	7119.40	100.0	6974.15	100.0	7195.02	100.00	7271.67	100.0	7185.54	100.00

Source: Directorate of A & F P.Odisha / Directorate of Horticulture, Odisha/ Directorate of E & S, Odisha.

Annexure 2.3: District Wise Area, Production & Yield Rate of Paddy Crops Grown During 2021-22

Sl. No	District	Autumn Paddy					Winter Paddy				
		Area	Yield Rate		Production		Area	Yield Rate		Production	
			Paddy	Rice	Paddy	Rice		Paddy	Rice	Paddy	Rice
1	2	3	4	5	6	7	8	9	10	11	12
1	Anugul	2.79	2569	1696	7.17	4.73	65.34	3473	2292	226.93	149.77
2	Balangir	64.33	1379	910	88.70	58.54	114.33	2447	1615	279.80	184.67
3	Balasore	-	-	-	-	-	186.60	3672	2423	685.13	452.19
4	Bargarh	37.16	545	360	20.25	13.37	187.39	3214	2122	602.34	397.54
5	Bhadrak	-	-	-	-	-	158.69	3771	2489	598.39	394.94
6	Boudh	2.29	3418	2256	7.83	5.17	65.70	4816	3179	316.42	208.84
7	Cuttack	1.31	2709	1788	3.54	2.34	107.94	3951	2607	426.45	281.46
8	Deogarh	20.13	2584	1705	52.00	34.32	23.30	3007	1985	70.09	46.26
9	Dhenkanal	0.48	1913	1263	0.92	0.61	70.80	4477	2955	317.02	209.23
10	Gajapati	-	-	-	-	-	37.55	3424	2260	128.57	84.85
11	Ganjam	-	-	-	-	-	256.99	3204	2114	823.32	543.40
12	Jagatsinghpur	0.60	2547	1681	1.53	1.01	87.37	2563	1691	223.92	147.79
13	Jajpur	12.54	1359	897	17.04	11.25	84.70	2644	1745	223.96	147.81
14	Jharsuguda	23.71	539	356	12.78	8.43	22.32	1163	768	25.95	17.13
15	Kalahandi	26.96	1993	1316	53.75	35.48	170.48	3519	2322	599.87	395.91
16	Kandhamal	1.43	1702	1123	2.43	1.60	32.71	2707	1787	88.56	58.45
17	Kendrapara	0.38	2848	1879	1.09	0.72	121.31	2420	1597	293.57	193.76
18	Keonjhar	20.79	4024	2656	83.67	55.22	128.54	4652	3071	598.00	394.68
19	Khurda	0.01	2927	1936	0.04	0.02	85.72	3370	2224	288.89	190.67
20	Koraput	16.79	3032	2001	50.90	33.59	85.92	4575	3019	393.05	259.42
21	Malkangiri	11.89	2120	1399	25.19	16.63	103.20	3925	2590	405.02	267.31
22	Mayurbhanj	17.79	3021	1994	53.72	35.46	298.54	4020	2653	1200.14	792.09
23	Nuapada	32.24	2793	1843	90.06	59.44	59.13	3468	2289	205.07	135.34
24	Nayagarh	0.02	2260	1493	0.03	0.02	88.44	3088	2038	273.11	180.25
25	Nawarangpur	15.68	3417	2255	53.58	35.36	118.22	4331	2859	512.00	337.92
26	Puri	0.02	3995	2636	0.09	0.06	101.52	1883	1243	191.14	126.15
27	Raygada	0.72	3058	2019	2.21	1.46	58.97	4652	3070	274.32	181.05
28	Sambalpur	42.19	2383	1573	100.57	66.38	84.29	3761	2482	316.99	209.21
29	Subarnapur	10.36	2269	1498	23.50	15.51	88.08	5211	3439	459.00	302.94
30	Sundargarh	80.45	2628	1734	211.39	139.51	111.28	3095	2043	344.47	227.35
	Orissa-State	443.06	2176	1436	963.98	636.23	3205.37	3554	2346	11391.49	7518.38

Sl. No	District	Total Kharif Paddy						Summer Paddy						Total Paddy					
		Area		Yield Rate		Production		Area		Yield rate		PRODUCTION		AREA		Yield rate		Production	
		Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice
		13	14	15	16	17	18	19	20	20	20	21	22	23	24	25	26	27	
1	Anugul	68.13	3436	2268	234.10	154.50	0.12	3744	2471	0.43	68.25	3437	2268	234.53	154.79				
2	Balangir	178.66	2063	1361	368.50	243.21	5.74	5388	3556	30.92	184.40	2166	1430	399.42	263.62				
3	Balasore	186.60	3672	2423	685.13	452.19	38.94	5704	3765	222.16	225.54	4023	2655	907.29	598.81				
4	Bargarh	224.55	2773	1830	622.59	410.91	91.14	6762	4463	616.34	315.69	3924	2590	1238.93	817.69				
5	Bhadrak	158.69	3771	2489	598.39	394.94	0.64	4085	2696	2.62	159.33	3772	2490	601.01	396.67				
6	Boudh	67.99	4769	3148	324.25	214.01	3.54	4307	2843	15.24	71.53	4746	3133	339.49	224.07				
7	Cuttack	109.25	3936	2598	429.99	283.80	2.57	5806	3832	14.94	111.82	3979	2626	444.93	293.66				
8	Deogarh	43.43	2811	1855	122.09	80.58	0.01	3050	2010	0.03	43.44	2811	1855	122.12	80.60				
9	Dhenkanal	71.28	4460	2944	317.94	209.84	0.15	5416	3574	0.83	71.43	4462	2945	318.77	210.39				
10	Gajapati	37.55	3424	2260	128.57	84.85	0.36	3167	2090	1.13	37.91	3421	2258	129.70	85.60				
11	Ganjam	256.99	3204	2114	823.32	543.40	0.28	3583	2365	0.99	257.27	3204	2115	824.31	544.05				
12	Jagatsinghpur	87.97	2563	1691	225.45	148.80	0.81	3836	2532	3.12	88.78	2574	1699	228.57	150.86				
13	Jajpur	97.24	2478	1636	241.00	159.06	3.10	4712	3110	14.61	100.34	2547	1681	255.61	168.70				
14	Jharsuguda	46.03	842	555	38.73	25.56	1.21	6808	4493	8.21	47.24	994	656	46.94	30.98				

15	Kalahandi	197.44	3310	2185	653.62	431.39	24.63	5249	3464	129.27	85.32	222.07	3525	2327	782.89	516.71
16	Kandhamal	34.14	2665	1759	90.99	60.05	0.44	3944	2604	1.72	1.14	34.58	2681	1770	92.71	61.19
17	Kendrapara	121.69	2421	1598	294.66	194.48	1.30	3653	2411	4.76	3.14	122.99	2434	1607	299.42	197.62
18	Keonjhar	149.33	4565	3013	681.67	449.90	1.66	5827	3846	9.70	6.40	150.99	4579	3022	691.37	456.30
19	Khurda	85.73	3370	2224	288.93	190.69	0.94	5190	3425	4.88	3.22	86.67	3390	2237	293.81	193.91
20	Koraput	102.71	4322	2853	443.95	293.01	29.04	4600	3036	133.57	88.15	131.75	4384	2893	577.52	381.16
21	Malikangiri	115.09	3738	2467	430.21	283.94	0.81	3474	2293	2.82	1.86	115.90	3736	2466	433.03	285.80
22	Mayurbhanj	316.33	3964	2616	1253.86	827.55	4.34	4046	2670	17.55	11.59	320.67	3965	2617	1271.41	839.14
23	Nuapada	91.37	3230	2132	295.13	194.78	6.57	4684	3091	30.77	20.31	97.94	3328	2196	325.90	215.09
24	Nayagarh	88.46	3088	2038	273.14	180.27	0.03	2282	1507	0.06	0.04	88.49	3088	2038	273.20	180.31
25	Nawarangpur	133.90	4224	2788	565.58	373.28	1.12	4109	2712	4.59	3.03	135.02	4223	2787	570.17	376.31
26	Puri	101.54	1883	1243	191.23	126.21	33.59	4794	3164	161.05	106.29	135.13	2607	1721	352.28	232.50
27	Raygada	59.69	4632	3057	276.53	182.51	1.44	3586	2367	5.15	3.40	61.13	4608	3041	281.68	185.91
28	Sambalpur	126.48	3301	2179	417.56	275.59	10.60	7332	4839	77.72	51.30	137.08	3613	2384	495.28	326.89
29	Subarnapur	98.44	4901	3235	482.50	318.45	33.46	6104	4029	204.27	134.81	131.90	5206	3436	686.77	453.26
30	Sundargarh	191.73	2899	1913	555.86	366.86	0.74	3394	2240	2.50	1.65	192.47	2901	1915	558.36	368.51
	Orissa-State	3648.43	3387	2235	12355.47	8154.61	299.32	5753	3797	1721.95	1136.49	3947.75	3566	2354	14077.42	9291.10

Source: Directorate of Economics and Statistics, Odisha, Bhubaneswar

Annexure 2.4: Productivity of some Major crops during 2011-12 to 2021-22.

Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11	12
Rice	1472	2361	1821	2363	1491	2472	1739	2004	2475	2730	2354
Maize	2321	2407	2785	2788	2786	2956	2948	2993	2886	3195	3194
Ragi	895	863	867	868	867	874	880	890	1102	1105	1107
All Cereals	1495	2293	1837	2324	1533	2433	1777	2017	2444	2690	2346
Arhar	812	912	896	898	886	884	897	1022	1124	1166	1036
Mung	414	476	476	477	470	448	487	491	495	503	503
Biri	418	457	455	456	448	469	482	486	483	468	480
Total Pulses	460	508	507	508	502	502	526	540	544	548	544
Total Food grains	1175	1737	1426	1761	1225	1832	1365	1554	1862	2050	1803
Groundnut	1707	1774	1787	1787	1750	1795	1808	1796	1894	1822	1805
Til	406	409	403	406	392	391	399	402	411	407	401
Mustard	416	422	421	424	421	424	435	436	440	444	434
Oilseeds	867	919	927	917	895	889	887	887	945	907	902
Cotton	386	482	410	423	404	478	480	490	580	547	551
Sugarcane	72000	66498	71980	72455	72717	73370	73565	73119	72798	72268	73198

Source: Directorate of Economics and Statistics, Odisha, Bhubaneswar

Annexure 2.5: Procurement of Ragi by TDCCOL as State Procurement Agency

Sl.No	District	2019-20		2020-21		2021-22	
		Quantity Procured (In qtls.)	Procurement (Value in Lakh)	Quantity Procured (In qtls.)	Procurement (Value in Lakh)	Quantity Procured (In qtls.)	Procurement (Value in Lakh)
1	2	3	4	5	6	7	8
1	Angul	-	-	-	-	909.50	30.71
2	Bargarh	718.35	22.63	3989.46	131.45	10715.11	361.85
3	Bolangir	2056.53	64.78	7981.55	262.99	12492.70	421.88
4	Gajapati	4345.6	136.89	7594.57	250.24	12945.90	437.18
5	Ganjam	611.56	19.26	3565.82	117.49	11232.82	379.33
6	Kalahandi	5377.57	169.39	14767.73	486.60	29878.14	1008.98
7	Kandhamal	4952.93	156.02	14388.78	474.11	17905.85	604.68
8	Keonjhar	46.91	1.48	1129.94	37.23	2392.59	80.80
9	Koraput	36164.59	1139.18	71365.13	2351.48	97116.92	3279.64
10	Malkangiri	12708.06	400.30	23237.35	765.67	32153.54	1085.83
11	Mayurbhanj	1011.6	31.87	2073.00	68.31	3415.00	115.32
12	Nawarangpur	1983.01	62.46	4985.98	164.29	12697.10	428.78
13	Nuapada	1288.74	40.60	7148.36	235.54	11791.16	398.19
14	Rayagada	21448.32	675.62	34596.13	1139.94	53428.96	1804.30
15	Sundargarh	2031.4	63.99	7019.92	231.31	13943.76	470.88
Total		94745.17	2984.47	203843.72	6716.65	323019.05	10908.35

Source: Tribal Development Cooperative Corporation of Odisha Limited.

Annexure 2.6: Season wise & KMS wise Paddy Procurement Status from 2018-19 to 2021-22

Sl No	District	KMS 2018-19			KMS 2019-20			KMS 2020-21			KMS 2021-22		
		Quantity of Paddy Procured in Kharif Season	Quantity of Paddy Procured in Rabi Season	Total Paddy Procured	Quantity of Paddy Procured in Kharif Season	Quantity of Paddy Procured in Rabi Season	Total Paddy Procured	Quantity of Paddy Procured in Kharif Season	Quantity of Paddy Procured in Rabi Season	Total Paddy Procured	Quantity of Paddy Procured in Kharif Season	Quantity of Paddy Procured in Rabi Season	Total Paddy Procured
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Angul	87,654	168	87,822	86,292	-	86,292	99,586	-	99,586	1,00,078	-	1,00,078
2	Balasore	1,73,866	31,758	2,05,623	1,93,901	83,881	2,77,782	2,13,912	54,624	2,68,536	2,15,844	65,713	2,81,558
3	Bargarh	6,78,280	5,64,960	12,43,240	6,39,382	5,71,410	12,10,793	7,21,600	5,10,408	12,32,009	6,14,102	5,24,655	11,38,757
4	Bhadrak	1,91,841	-	1,91,841	2,10,095	-	2,10,095	2,73,060	-	2,73,060	2,63,309	-	2,63,309
5	Bolangir	2,81,939	4,958	2,86,897	3,12,838	26,654	3,39,492	3,83,182	15,857	3,99,040	2,84,732	25,889	3,10,621
6	Boudh	1,39,388	10,498	1,49,887	1,54,190	23,528	1,77,719	1,70,258	18,034	1,88,292	1,65,380	17,318	1,82,698
7	Cuttack	1,28,848	5,841	1,34,688	1,37,378	12,043	1,49,421	1,64,035	9,802	1,73,837	1,52,842	9,076	1,61,918
8	Deogarh	48,386	-	48,386	50,938	-	50,938	54,116	-	54,116	53,964	-	53,964
9	Dhenkanal	1,31,813	-	1,31,813	1,28,610	-	1,28,610	1,41,244	-	1,41,244	1,30,585	-	1,30,585
10	Gajapati	54,315	-	54,315	52,089	-	52,089	70,088	-	70,088	52,937	-	52,937
11	Ganjam	3,70,378	-	3,70,378	3,74,223	-	3,74,223	4,50,419	-	4,50,419	4,05,202	-	4,05,202
12	Jagatsinghpur	1,12,843	-	1,12,843	1,21,758	-	1,21,758	1,46,551	-	1,46,551	1,01,744	-	1,01,744
13	Jajpur	1,14,578	1,430	1,16,008	1,11,797	14,218	1,26,015	1,42,337	9,136	1,51,473	1,42,382	12,132	1,54,514

14	Jharsuguda	61,832	1,702	63,534	80,099	9,292	89,392	92,911	3,770	96,682	72,626	3,693	76,319
15	Kalahandi	3,67,793	2,31,886	5,99,679	4,42,641	2,69,134	7,11,775	5,03,071	2,30,723	7,33,795	4,66,117	1,15,921	5,82,037
16	Kandhamal	10,872	308	11,180	9,949	-	9,949	10,528	-	10,528	8,826	-	8,826
17	Kendrapara	78,683	-	78,683	80,156	-	80,156	98,717	-	98,717	94,920	-	94,920
18	Keonjhar	1,19,146	-	1,19,146	1,30,524	-	1,30,524	1,65,102	-	1,65,102	1,62,976	-	1,62,976
19	Khordha	1,34,924	1,960	1,36,884	1,37,078	11,314	1,48,391	1,50,731	5,647	1,56,378	1,29,370	5,538	1,34,909
20	Koraput	1,93,283	1,04,399	2,97,682	2,00,962	1,39,403	3,40,365	2,80,756	1,28,743	4,09,500	2,41,389	1,22,776	3,64,165
21	Malkangiri	1,14,662	-	1,14,662	1,08,993	-	1,08,993	1,16,858	-	1,16,858	1,21,625	-	1,21,625
22	Mayurbhanj	1,41,585	928	1,42,513	1,34,416	7,732	1,42,147	1,78,182	7,698	1,85,880	1,93,412	6,807	2,00,219
23	Nawarangpur	1,54,291	1,746	1,56,037	1,52,455	9,967	1,62,422	1,94,635	4,465	1,99,100	1,71,611	3,402	1,75,014
24	Nayagarh	1,41,992	-	1,41,992	1,26,081	-	1,26,081	1,49,330	-	1,49,330	1,44,022	-	1,44,022
25	Nuapada	1,19,858	31,440	1,51,298	1,25,574	51,733	1,77,307	1,59,298	38,011	1,97,308	1,65,244	47,499	2,12,743
26	Puri	1,03,073	4,448	1,07,520	96,563	51,380	1,47,943	1,21,232	35,557	1,56,788	1,09,451	55,333	1,64,784
27	Rayagada	1,28,377	7,481	1,35,858	1,20,080	11,319	1,31,399	1,25,996	6,993	1,32,988	97,876	1,138	99,014
28	Sambalpur	2,96,065	1,49,690	4,45,755	2,97,848	1,55,234	4,53,082	3,40,903	1,28,812	4,69,715	2,96,280	1,27,072	4,23,352
29	Subarnapur	3,07,267	2,38,415	5,45,682	3,29,331	2,77,079	6,06,410	3,42,466	2,34,879	5,77,345	3,38,655	2,37,404	5,76,059
30	Sundargarh	1,69,010	-	1,69,010	1,84,943	-	1,84,943	2,28,450	-	2,28,450	2,24,802	-	2,24,802
Sub-Total		51,56,843	13,94,015	65,50,857	53,31,186	17,25,321	70,56,507	62,89,555	14,43,160	77,32,715	57,22,304	13,81,366	71,03,670

Source: Food Supply and Consumer Welfare Deptt., Odisha, Bhubaneswar

Annexure 2.7: District-wise Consumption of Fertilizer-2021-22

Name of the District	Fertilizer Consumption			Total Consumption (N+P+K)	Consumption in Kg. per Hectare
	Nitrogenous	Phosphatic	Potassic		
	(N)	(P)	(K)		
1	2	3	4	5	6
Angul	4500	2630	990	8120	26.85
Balasore	19970	13890	5600	39460	117.64
Bargarh	37960	17240	6570	61770	119.95
Bhadrak	12850	8520	3250	24620	119.75
Bolangiri	15200	8140	4370	27710	60.70
Boudh	3120	1680	570	5370	45.04
Cuttack	10950	4090	2140	17180	53.13
Deogarh	2880	1790	630	5300	57.31
Dhenkanal	5040	2570	1080	8690	31.39
Gajapati	3810	1410	410	5630	43.98
Ganjam	26770	8090	2620	37480	60.01
Jagatsingpur	4880	2860	1030	8770	45.08
Jajpur	8470	4880	2460	15810	72.43
Jharsuguda	3180	1470	700	5350	50.70
Kalahandi	23500	11240	3840	38580	62.22
Kandhamal	1220	1110	260	2590	14.99
Kendrapara	5840	3100	620	9560	36.07
Keonjhar	9710	6200	2110	18020	48.91
Khordha	6880	3360	1740	11980	65.64
Koraput	14220	7710	3560	25490	67.88
Malkangiri	6120	2680	1050	9850	50.73
Mayurbhanj	16130	9580	3310	29020	52.10
Nabarangpur	33850	9300	4950	48100	185.80
Nayagarh	4550	2570	770	7890	35.42
Nuapada	6660	3610	1200	11470	42.07
Puri	11880	6280	2540	20700	79.08
Rayagada	9990	4330	1580	15900	67.50
Sambalpur	23660	10170	3530	37360	143.61
Subarnapur	10590	4090	1620	16300	72.65
Sundargarh	7340	4140	1890	13370	31.31
Odisha	351720	168730	66990	587440	66.78

Source: Directorate of Agriculture and Food Production, Odisha

Annexure 2.8: State -wise Production of Total Foodgrains

State/Union Territory	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1	2	3	4	5	6	7	8	9
Andhra Pradesh	10522.3	10494.1	10633.7	10365.4	12159.8	10838.8	12356.8	11299.0
Arunachal Pradesh	384.6	409.0	327.5	343.3	359.1	365.2	373.2	377.1
Assam	5096.8	5458.8	5358.6	4952.5	5525.9	5465.9	5236.4	5487.5
Bihar	12905.8	13208.6	14507.9	16530.8	17036.9	15600.1	14233.0	15382.6
Chhattisgarh	7598.0	7463.1	6654.3	9324.1	5958.7	7558.6	7501.8	8225.5
NCT of Delhi	122.1	118.1	111.7	111.2	106.9	106.3	106.2	111.8
Goa	135.5	128.6	115.3	119.1	107.8	105.2	94.2	91.1
Gujarat	9179.6	7109.3	6279.3	7422.0	7664.7	6803.6	8153.4	8973.9
Haryana	16974.1	15235.1	16358.7	17162.7	16191.8	18145.0	17863.5	18309.5
Himachal Pradesh	1528.4	1432.0	1615.0	1740.6	1488.3	1501.0	1530.1	1535.5
Jammu and Kashmir	1777.9	1220.3	1732.6	1618.9	1570.8	1892.5	1671.2	1594.9
Jharkhand	4285.7	4777.0	4092.1	5664.4	6001.3	4399.7	4792.3	4871.7
Karnataka	12208.9	12138.0	9924.0	9794.7	11791.2	10888.4	12783.7	14550.1
Kerala	512.4	563.8	553.8	439.0	523.8	581.2	608.4	636.4
Madhya Pradesh	22978.0	28687.00	30385.6	33224.4	33450.4	32208.7	33523.1	32844.2
Maharashtra	13846.2	11311.9	8754.4	15331.6	13246.7	10304.1	12819.9	15766.1
Manipur	492.6	429.3	435.7	525.1	706.5	495.0	421.4	697.1
Meghalaya	320.0	353.8	357.7	260.1	361.8	260.7	360.8	353.3
Mizoram	72.8	75.3	77.4	75.2	74.2	76.9	76.5	80.7
Nagaland	624.6	649.6	515.8	536.9	552.3	558.1	565.4	570.2
Odisha	8359.4	8980.5	6408.1	9061.3	7151.3	8315.2	9030.1	9523.6
Puducherry	50.4	54.0	44.7	52.8	44.1	64.3	60.3	50.7
Punjab	29480.4	26698.0	28400.8	28536.9	31691.9	31532.3	29857.3	30418.3
Rajasthan	17899.6	19621.9	18039.9	19353.6	19957.0	21288.8	23227.1	24282.3
Sikkim	102.4	102.2	94.1	101.3	93.9	92.0	92.1	91.8
Tamil Nadu	8783.2	9623.7	11478.5	4141.6	10713.6	10390.1	11269.8	10823.6
Telangana	9142.9	7114.8	5129.0	8484.6	9421.1	9275.2	11125.0	12745.6
Tripura	726.7	761.5	818.3	859.6	855.4	836.3	853.3	867.6
Uttar Pradesh	50027.5	39594.0	42550.8	49903.4	51369.9	54643.4	56169.1	58106.9
Uttarakhand	1776.5	1626.0	1746.0	1873.0	1903.2	1876.1	1886.0	2001.8
West Bengal	17078.9	16531.8	17980.6	17146.3	16877.5	18689.9	18794.3	20004.6
ALL INDIA	265048	252025.0	251541.6	275111.7	285013.2	285209.1	297504.0	310741.7

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Annexure 2.9: District wise Created Irrigation Potential ending 03/2022(Provisional)

Sl. No.	Name of the District	Cultivated Area	Maj & Med	Mega	Minor flow	Maj & Med	Mega	Minor flow
			Khariff	Rabi	Khariff	Rabi	Khariff	Rabi
1	2	3	4	5	6	7	8	9
1	Angul	216.009	21.855	5.487	5.482	0.000	27.840	3.963
2	Balasore	250.550	32.530	7.180	0.000	0.000	17.076	3.763
3	Bargarh	348.747	91.220	57.060	6.095	0.000	38.564	3.880
4	Bhadrak	176.000	92.095	12.000	0.000	0.000	4.709	0.280
5	Boudh	89.000	30.835	3.522	13.574	0.000	16.745	1.351
6	Cuttack	188.150	92.360	56.936	16.751	0.000	30.485	4.418
7	Deogarh	66.950	8.100	5.700	10.581	0.000	8.216	0.459
8	Dhenkanal	186.030	76.657	49.167	2.857	0.000	36.021	6.161
9	Gajapati	76.555	0.000	0.000	5.409	0.000	25.304	2.906
10	Ganjam	406.000	132.697	13.930	14.361	0.000	121.758	8.577
11	Jagatsingpur	104.335	36.885	18.523	0.000	0.000	0.000	0.000
12	Jajpur	145.250	67.885	38.639	12.689	0.000	10.833	1.751
13	Jharsuguda	87.783	0.000	0.000	6.322	0.000	9.852	1.609
14	Kandhamal	127.790	2.390	1.200	0.000	0.000	14.070	4.064
15	Kendrapada	152.000	82.015	42.865	2.796	0.000	0.884	0.047
16	Keonjhar	297.873	28.814	6.090	0.000	0.000	40.507	6.179
17	Khurda	128.530	44.924	26.210	0.000	0.000	26.736	2.529
18	Mayurbhanj	437.000	92.495	45.894	10.536	0.000	51.247	6.281
19	Nayagarh	133.606	10.930	3.020	0.000	0.000	29.017	5.020
20	Puri	188.745	116.166	74.160	0.000	0.000	0.947	0.099
21	Sambalpur	194.020	31.510	23.000	13.002	0.000	27.729	2.964
22	Sundergarh	312.990	18.570	9.166	36.637	0.000	29.912	4.093
23	Kalahandi	378.387	145.458	86.290	10.039	0.000	45.590	6.126
24	Koraput	303.977	54.451	32.891	1.719	0.000	11.500	2.004
25	Malkangiri	141.561	70.030	34.650	3.823	0.000	5.011	0.443
26	Nowrangpur	185.824	4.250	2.250	4.314	0.000	13.041	1.089
27	Nuapada	189.170	30.358	8.461	7.277	0.000	19.111	2.284
28	Sonepur	128.318	58.590	25.760	3.901	0.000	10.075	0.769
29	Rayagada	193.504	9.800	3.000	2.232	0.000	33.181	6.391
30	Bolangir	345.592	26.122	5.989	17.928	0.000	30.557	3.351
	Odisha	6180.246	1509.992	699.040	208.325	0.000	736.518	92.851

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Annexure 2.10: District Wise Forest Area (2021-22)

Sl. No.	Name of the District	Geo-graphical Area	Total Forest Area	Forest Land under control of Forest Dept.			Forest land under control of Revenue Deptt.		
				Reserve Forest	Prote cted For-est	Un-classi-fied forests (Forest Deptt . Building, Forest roads, nurs-eries etc.)	Demar-cated Prote cted Forests (DPF)	Underma-cated Prote cted Forests (UDPF)	Other For-est Under Revenue Deptt.
1	2	3	4	5	6	7	8	9	10
1	Angul	6375	3106.6	2052.91	8.34	0.73	65.17	0	979.44
2	Balaswar	3806	360.91	227.24	0	0.02	0	22.65	111
3	Bargarh	5837	1329.38	1027.38	0.2	0.19	0.19	1.38	300.03
4	Bhadrak	2505	97.66	4.01	0	0.02	0	32.96	60.67
5	Balangir	6575	1611.29	1109.31	0	0.14	0	0	501.84
6	Boudh	3098	1280.47	1006.27	0	1.07	11.87	249.34	11.93
7	Cuttack	3932	890.47	589.97	1.28	0.02	0.83	0	298.37
8	Deogarh	2940	1550.91	985.73	0	0.04	0	0	565.14
9	Dhenkanal	4452	1912.45	1141.02	8.34	0.04	130.08	568	64.97
10	Gajapati	4325	2477.13	472.46	0.04	0.15	90.32	1116.67	797.5
11	Ganjam	8206	3069.38	1618.07	0.65	0.81	593.66	506.49	349.69
12	Jagatsinghpur	1668	46.66	2.75	0	0.01	0	0	43.9
13	Jaipur	2899	316.43	47.64	9.84	0	241.99	0	16.96
14	Jharsuguda	2081	450.3	131.92	0.49	0.05	28.72	0	289.11
15	Kalahandi	7920	2854.07	1934.54	7.7	0.54	405.41	0.4	505.48
16	Kandhamal	8021	5859.85	3043.42	0	2	763.65	74.31	1976.49
17	Kendrapada	2644	356.24	158.9	151.4	4.5	0	0	41.44
18	Keronjhar	8303	3269.82	2159.84	19.37	0.22	233.93	5.26	851.21
19	Khurdha	2813	669.74	273.73	0	0.84	260.34	0	134.83
20	Koraput	8807	2355.94	1204.91	291.88	0.68	353.9	0	504.56
21	Malkangiri	5791	3541.57	1078.17	226.16	0.3	188.65	636.64	1411.65
22	Mayurbhanj	10418	4458.1	3475.75	12.6	2.2	77.98	65.78	823.81
23	Nuapada	3852	1907.35	1494.17	0	0.44	24.33	0	388.41
24	Nayagarh	3890	2002.52	1522.71	0	3.77	81.77	0	394.27
25	Nabarangapur	5291	2826.51	1221.12	296.54	0.07	0	0	1308.8
26	Puri	3479	187.83	107.57	0	0.12	0	0	80.14
27	Rayagada	7073	3567.48	1950.15	0	0.96	334.35	0	1282.03
28	Sambalpur	6657	4010.56	2579.03	0.33	1.18	46.61	460.81	922.6
29	Sonepure	2337	428.75	316.52	0	0.03	0	0	112.2
30	Suindargarh	9712	4407.78	3111.6	50.08	0.92	245.85	532.22	467.12
	Total	155707	61204.15	36048.81	1085.24	22.06	4179.6	4272.91	15595.59

Source: PCCF, Odisha, Bhubaneswar

Annexure 2.11: District-Wise Production of Fish & Crab in Odisha, 2021-22 (PROV.)

SL.	District	Inland Fish Production		Marine	Total	Crab Production
		Freshwater	Brackish water			
1	2	3	4	5	6	7
1	Balasore	59.73	34.65	42.62	137.00	0.01
2	Bhadrak	31.47	31.43	18.12	81.02	0.01
3	Cuttack	25.52			25.52	0.06
4	Jagatsinghpur	18.55	18.39	54.27	91.22	2.75
5	Jajpur	23.53			23.53	0.00
6	Kendrapara	18.92	12.38	20.29	51.59	1.36
7	Khurda	22.21	10.22		32.43	0.12
8	Mayurbhanj	35.67			35.67	0.00
9	Nayagarh	14.31			14.31	0.00
10	Puri	24.31	26.77	45.06	96.14	2.59
11	Boudh	12.08			12.08	0.00
12	Gajapati	5.27			5.27	0.00
13	Ganjam	70.24	5.79	20.24	96.26	0.65
14	Kalahandi	29.38			29.38	0.00
15	Kandhamal	1.72			1.72	0.00
16	Koraput	9.87			9.87	0.00
17	Malkangiri	14.17			14.17	0.00
18	Nawarangpur	10.28			10.28	0.00
19	Nuapada	6.41			6.41	0.00
20	Rayagada	8.12			8.12	0.00
21	Angul	24.72			24.72	0.00
22	Bolangir	12.22			12.22	0.00
23	Bargarh	37.32			37.32	0.00
24	Deogarh	11.76			11.76	0.00
25	Dhenkanal	15.93			15.93	0.00
26	Jharsuguda	12.38			12.38	0.00
27	Keonjhar	29.72			29.72	0.00
28	Sambalpur	32.59			32.59	0.00
29	Subranapur	10.50			10.50	0.00
30	Sundargarh	20.71			20.71	0.00
	TOTAL	649.62	139.62	200.60	989.84	7.54

N.B. District-wise crab production included in District-wise total fish production

** Total fig. may not tally due to use of decimal*

Source: Directorate of Fisheries, Govt. of Odisha

Annexure: 2.12: District wise Milk and Egg Production in Odisha

Districts	2020-21		2021-22	
	Milk (000'MT)	Egg (Mil.Nos.)	Milk (000'MT)	Egg (Mil.Nos.)
1	2	3	4	5
Anugul	57.27	26.34	66.12	29.58
Balangir	128.24	365.05	104.878	474.57
Balasore	102.16	65.31	129.24	51.58
Bargarh	101.35	106.21	103.22	128.37
Bhadrak	117.38	27.98	105.153	35.69
Boudh	20.77	4.08	20.987	1.64
Cuttack	353.71	30.40	345.83	44.00
Deogarh	9.45	4.83	9.575	13.71
Dhenkhal	49.10	110.74	63.147	216.11
Gajapati	18.21	10.63	18.299	10.33
Ganjam	99.77	708.75	105.199	1031.16
Jagatsingpur	205.91	2.74	210.52	5.98
Jajpur	114.17	33.58	120.145	42.12
Jharsuguda	24.65	3.31	20.42	3.05
Kalahandi	60.15	66.61	65.421	87.11
Kendrapara	124.29	12.53	124.42	11.68
Keonjhar	62.83	74.11	63.79	79.66
Khordha	104.00	236.07	105.615	144.85
Koraput	35.25	41.35	36.343	65.83
Malkangiri	39.27	10.30	34.551	11.90
Mayurbhanja	71.63	94.14	75.8	109.57
Nawarangpur	27.66	13.00	28.66	14.43
Nayagarh	27.96	78.42	28.032	97.13
Nuapada	12.11	4.92	12.523	4.53
Phulabani	9.28	19.84	10.543	24.86
Puri	224.89	9.46	222.388	22.97
Rayagada	34.68	58.33	34.439	70.70
Sambalpur	55.17	48.87	55.058	67.58
Sonepur	39.37	96.67	35.751	119.57
Sundargarh	42.11	59.72	45.993	58.26
TOTAL	2372.81	2424.27	2402.06	3078.52

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

Annexure 3.1: Value of Mineral production of Major states from 2015-16 to 2021-22 and its percentage to all India Total

State Name	2016-17 (April-March)	2017-18 (April-March)	2018-19 (April-March)	2019-20 (April-March)	2020-21 (April-March)	2021-22 (April-February)
1	3	4	5	6	7	8
Odisha	16019.51	19610.1	30444.83	34126.08	27997.33	52413.40
Odisha (Per cent)	33.52	32.78	41.17	43.86	35.68	45.38
Rajasthan	9653.22	11177.75	12999.83	13499.72	16096.82	13106.49
Rajasthan (Per cent)	20.20	18.68	17.58	17.35	20.52	11.35
Chhatisgarh	7067.99	9241.13	10827.54	11097.79	14440.59	20353.55
Chhatisgarh (Per cent)	14.79	15.45	14.64	14.26	18.40	17.62
Karnataka	5552.18	8680.92	8480.31	8268.35	9921.89	16366.88
Karnataka (Per cent)	11.62	14.51	11.47	10.63	12.65	14.17
Jharkhand	1716.04	2415.67	3116.63	3187.74	2752.12	5346.04
Jharkhand (Per cent)	3.59	4.04	4.21	4.10	3.51	4.63
Madhya Pradesh	1814.56	2318.64	2609.49	2602.61	2587.30	2897.65
Madhya Pradesh (Per cent)	3.80	3.88	3.53	3.35	3.30	2.51
Maharashtra	1115.99	1240.53	1310.52	1137.20	1191.87	1453.90
Maharashtra (Per cent)	2.34	2.07	1.77	1.46	1.52	1.26
Andhra Pradesh	933.08	1143.51	1302.83	1094.12	1002.93	1061.34
Andhra Pradesh (Per cent)	1.95	1.91	1.76	1.41	1.28	0.92
Tamilnadu	747.81	655.3	723.01	746.91	591.32	612.22
Tamilnadu (Per cent)	1.56	1.10	0.98	0.96	0.75	0.53
Gujarat	857.59	785.05	739.93	696.29	643.29	613.49
Gujarat (Per cent)	1.79	1.31	1.00	0.89	0.82	0.53
Telangana	502.61	554.96	613.99	530.11	480.93	513.64
Telangana (Per cent)	1.05	0.93	0.83	0.68	0.61	0.44
Meghalaya	254.06	286.3	295.05	298.83	267.67	271.42
Meghalaya (Per cent)	0.53	0.48	0.40	0.38	0.34	0.24
Himachal Pradesh	218.55	246.65	251.95	274.82	262.01	271.78
Himachal Pradesh (Per cent)	0.46	0.41	0.34	0.35	0.33	0.24
Uttar Pradesh	51.52	77.38	84.84	93.28	72.52	60.13
Uttar Pradesh (Per cent)	0.11	0.13	0.11	0.12	0.09	0.05
All India	47788.80	59830.52	73952.15	77802.22	78461.15	115492.04
All India (Per cent)	100	100	100	100	100	100

Source: Monthly Statistics of Mineral production, IBM Nagpur

Annexure 3.2: 5 Year 2015-16 to 2019-20 CAGR of Output in Manufacturing Sector of Odisha

Sl No	Manufacturing sector	NIC 2 digit code	2015-16	2016-17	2017-18	2018-19	2019-20	CAGR
1	Manufacturing of crop and animal product, hunting etc.	01	16432	37340	42553	42670	34191	20.10
2	Manufacture of food products	10	822880	858263	1012200	1262538	1403833	14.29
3	Manufacture of beverages	11	182252	175296	98529	181130	196710	1.93
4	Manufacture of tobacco products	12	13689	12505	12010	10139	9026	-9.89
5	Manufacture of textiles	13	38957	35240	25389	23392	25867	-9.73
6	Manufacture of wearing apparel	14	972	833	3093	2136	3090	33.53
7	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	16	7890	5635	4935	2674	2644	-23.92
8	Manufacture of paper and paper products	17	274028	288666	346948	393130	356602	6.81
9	Printing and reproduction of recorded media	18	15650	16380	17269	18392	17551	2.91
10	Manufacture of coke and refined petroleum products	19	538482	705118	4115824	6091068	6141787	83.77
11	Manufacture of chemicals and chemical products	20	995024	1041620	1188177	1478344	1531407	11.38
12	Manufacture of pharmaceuticals, medicinal chemical and botanical products	21	3862	5565	5254	5152	5843	10.91
13	Manufacture of rubber and plastics products	22	159622	174895	231231	107190	138505	-3.49
14	Manufacture of other non-metallic mineral products	23	540476	497482	524929	1413108	614035	3.24
15	Manufacture of Basic Metals	24	8401242	9504559	12660959	16995015	15226143	16.03
16	Manufacture of fabricated metal products, except machinery and equipment	25	150225	234833	71725	119663	206849	8.32
17	Manufacture of electrical equipment	27	290105	341578	1228129	684130	750640	26.83
18	Manufacture of machinery and equipment n.e.c.	28	19346	46763	29221	43218	71591	38.70
19	Manufacture of motor vehicles, trailers and semi-trailers	29	6556	7487	11512	30470	11987	16.28
20	Manufacture of other transport equipment	30	2050	1830	14712	20255	15232	65.10
21	Manufacture of furniture	31	20181	12052	8670	18571	17497	-3.50
22	Repair and installation of machinery and equipment	33	30087	-557	20169	28581	59	-78.96
	Other		1181816	1105835	1323599	1268025	889744	-6.85
	All		13711825	15109219	22997037	30238991	27670833	19.19

Source: CSO, Govt. of India

Annexure 3.3: District wise MSME Scenario in Odisha

Sl.No	Name of the District	No. of MSME Units		Investments (Rs. in Lakhs)		Total Employment	
		2020-21	2021-22	2020-21	2021-22	2020-21	2021-22
1	2	3	4	5	6	7	8
1	Bargarh	1200	775	3601.26	4932.37	2864	2383
2	Jharsuguda	1330	1124	12369.20	9633.51	4833	6352
3	Sambalpur	1321	2084	5074.73	13393.29	2895	3365
4	Deogarh	611	440	1090.87	771.05	1695	868
5	Sundargarh	4019	4376	11424.27	17890.55	6963	9783
6	Keonjhar	1270	1984	12659.12	6122.23	3709	4804
7	Mayurbhanj	3400	3402	12039.38	12199.18	8769	8733
8	Balasore	4105	4129	13446.39	6157.65	11956	9214
9	Bhadrak	2100	1501	5333.94	3202.91	4386	3837
10	Kendrapara	1333	947	6346.12	1538.05	3111	2090
11	Jagatsinghpur	1566	316	6842.93	3154.11	4235	818
12	Cuttack	1798	1105	7631.02	7266.85	4288	2552
13	Jajpur	1660	946	10054.23	10315.15	3849	2542
14	Dhenkanal	2072	1123	9164.08	3207.12	4294	2135
15	Angul	1682	1485	6680.40	7846.69	3972	3055
16	Nayagarh	700	702	3054.01	3493.46	1727	1829
17	Khurda	1016	3751	4986.63	28745.40	2984	14578
18	Puri	2452	1500	8445.05	2792.65	5267	3436
19	Ganjam	1174	1426	2222.48	2136.96	2687	2857
20	Gajapati	484	125	1845.18	63.95	1501	165
21	Phulbani	840	534	2600.55	2150.49	2065	1349
22	Boudh	35	14	96.65	18.90	100	29
23	Sonepur	602	600	1155.77	1318.76	1434	1851
24	Bolangir	1516	2222	8781.55	12021.97	5778	8865
25	Nuapada	442	459	2314.42	2041.77	1345	1588
26	Kalahandi	1281	1500	7688.64	7224.08	6165	6972
27	Rayagada	1642	1255	9274.08	6465.54	6253	5022
28	Nawarangpur	662	842	3208.68	3972.87	2000	3177
29	Koraput	1610	1270	8027.20	15008.82	6610	8086
30	Malkangiri	350	351	1320.39	1574.40	1283	1242
	TOTAL	44273	42288	188779.22	196660.73	119018	123577

Source: Directorate of Industries, Cuttack

Annexure: 3.4: Mineral Resource Scenario of Odisha during 2021-22, (Upto March 2022) (contd.)

Mineral	Total Resource (in mt)	District	Area
1	5	6	7
Iron Ore	9220.728	Keonjhar	Jajang, Roida-Bhadrasahi, Thakurani, Jurudi, Unchabali, Khandbandh, Roida-I, Kedasala, Kendudihi etc
		Sundargarh	Baliapahar, Mankarnacha, Netrabandha, Jhumka-Pathriposi, Patabeda, Kenamenta etc
		Mayurbhanj	Badampahar, Suleipat, Gorumahisani, etc.
		Jajpur	Daitari
		Nabrangpur	Hirapur
Limestone	2192.091	Sundargarh	Biramitrapur, Kutra, Langibarna, etc
		Balangir	Pipalmunda & Lukapada
		Koraput	Sunki-Umpavalley, Gupteswar-Godaghati, Dumajodi-Kundajodi, etc
		Malkangiri	Uskalvagu-Kottametta
		Nuapada	Putka, Deobahal, Garmura etc
		Sambalpur	Sulai
Graphite	21.851	Baragarh	Dunguri, Nuapada-Putaka, Jampalli-Pikirijharan, Behera-Banjhipali etc
		Dhenkanal	Dandatopa, Karabira etc.
		Balangir	Lakhanpur, Telenpalli, Dhanmunda, Sargimunda, Tamiya, Rengali, etc
		Rayagada	Bandhamandi, Bhoragam, Jagdalpur, Gundurgam, Malimunda, Panchubai, Birli, Bondili etc
		Kalahandi	Sattapali, Laikera, Dengasatta
		Boudh	Ambagam, Rajakhandi, Debenmal etc.
		Kandhamal	Madaguda, Matrugam, Saradapur, Mahabali etc
		Baragarh	Temrimal, Dahigaon etc
Chromite	328.677	Deogarh	Adash
		Keonjhar	Baula, Nuasahi, Bangur, etc.
		Jajpur	Kaliapani, Talangi, Bhimtangar, etc.
		Dhenkanal	Maulabhanj, Dangakata, etc
Quartzite	142.695	Balasore	Rangamatia, Bhalukasuni etc
		Dhenkanal	Karanda etc
		Jajpur	Gopapura
		Nabrangpur	Jharigaon, Chacha etc
		Jharsuguda	Bagdihi, Chuinpalli, Bhramanipalli etc
		Kalahandi	Batigurha, Moter etc
		Keonjhar	Barpada, Baliparbat, Bhaliadihi, Raruanguda etc
		Sundargarh	Barsuan, Bhalulatha etc
		Mayurbhanj	Dubulabera, Bhagbandha etc
		Sambalpur	Knajijhara etc
Koraput	Ramgiri & Dalapur etc		

Mineral	Total Resource (in mt)	District	Area
Quartz	75.07	Keonjhar	Anjer etc
		Sundargarh	Amjhor, Lathikata, Lephripa etc
		Mayurbhanj	Mudrajodi- Pokharia , Bhatuabeda-Chiringdih, Thaparsahi, Jamuti etc
		Nabarangpur	Jharigaon, Chacha
		Balangiri	Kadalimunda, Sainital & Ttalagarh area
		Boudh	Bausuni , Lumurajhala etc
		Subarnapur	Burbuda
		Angul	Pallalahara
		Sambalpur	Jujumura, Huma etc
		Rayagada	Gatigurha-Tadema, Arjunaguda, Balapada etc

Mineral	Total Resource (in mt)	District	Area
1	5	6	7
Pyrophyllite	13.664	Keonjhar	Anjer, Rampakot, Nitigotha, Raduan, Madrangajodi etc
Basemetal	22.811	Sundargarh	Sargipali
		Mayurbhanj	Kesharpur, Dudhisol, Madansahi
		Deogarh	Adash
Coal (CMP-DIL Source)	85021.937	Jharsuguda, Sambalpur & Sundargarh	IB valley coal field & Talchir Coal field
		Anugul, Dhenkanal & Deogarh	Talchir Coal field
Decorative stone	262.2314 mcu.m	Angul	Gobinda, Durgapur, Panasahi, Nalataranga etc
		Dhenkanal	Mahapara, Haripur, Radhadeipur, Tulasipal, Sarpa etc)
		Gajapati	Tentulikhunti, Derab (W), Derab (E), Baharpada-Jamurhiha , Nuagan(Nuagad), Paramkonda South, Paramkonda North, Lingipur, Garabandha-Metu Hill, Lausahi, Jhadpada, Deulakhani, Kampoguda-I, Kampoguda-II etc.
		Ganjam	Gudiapali areas, Dakhsinapura, Lanja & adjoining areas, Sukunda, Lathi & adjoining areas, Badadamula, Kandasara, Dasipura & Gurubudi etc.
		Nabarangapur	Cheptiamba, Karlapada etc
		Nuapada	Bhaira, Dalipathara area, Damarakhola)
		Cuttack	Murdamekha, Jagannathprasad, Saradapura, patna, Jogibahali etc
		Nayagarh	Chaupali, Mardarajpur, Khuntabandha, Singhapada, Kantilo etc
		Kandhamal	Pandimaha, Nilungia, Gambuli, Kurumungia, Kulakanda, Tudipaju etc
		Boudh	Bakapali, Chataranga, Baisipada etc

Mineral	Total Resource (in mt)	District	Area	
Decorative stone		Sambalpur	Badmal, Bhoipali, Chanchanapali, Sahaspur, Salesinha	
		Subarnapur	Gaudagada, Mahukhandi, Sarasadadar etc.	
		Keonjhar	Kalikaparasad	
		Mayurbhanj	Mdrangajodi, Khaparasahi,	
		Malkangiri	Peta	
		Koraput	Barniput, Beragaon, Santoshpur, Gangarajpur, Ajjai, Girigan etc	
		Artisan grade stone		
		Khurda	Bhogpur, Kurumpada	
		Jajpur	Chandia, Sukhuaparha, Teligarh etc	
		Cuttack	Govindpur	
		Mayurbhanj	Jamuti Sialgothani, Kesna Adipura etc	
		Ganjam	Mathura	

Source: Directorate of Geology, Odisha

Annexure 3.5: Performance of Manufacturing sectors over the years 2015-16, 2016-17, 2017-18, 2018-19 and 2019-20

Sl. No	Indicator/All values in INR lakhs, except number)	2015-16			2016-17			2017-18			2018-19			2019-20		
		All India	Odisha	Share in all India	All India	Odisha	Share in all India	All India	Odisha	Share in all India	All India	Odisha	Share in all India	All India	Odisha	Share in all India
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Number of Registered Factories	233116	2948	1.26	234865	3051	1.30	237684	3066	1.29	242395	3063	1.26	246504	3079	1.25
2	Fixed Capital	280964722	26957833	9.59	319038649	33800626	10.59	328588927	33907302	10.32	346606975	30927574	8.92	364135165	31867015	8.75
4	Total output	686235375	13711825	2.00	726551423	15109219	2.08	807217258	22997037	2.85	928179908	30238991	3.26	898330129	27670833	3.08
5	Total Input	558907407	11326286	2.03	589746374	12025645	2.04	660520215	18895455	2.86	774377980	24933019	3.22	749755617	23481405	3.13
6	Gross Value Added	127327968	2385539	1.87	136805049	3083574	2.25	146697043	4101582	2.8	153801928	5305972	3.45	148574512	4189428	2.82
7	Net Value Added	107248509	1444942	1.35	114591911	1847663	1.61	122967418	2698489	2.19	127646637	3722012	2.92	121264771	2727609	2.25
8	Total no. of Employees	14299710	257842	1.80	14911189	272508	1.83	15614619	279496	1.79	16280211	281520	1.73	16624291	281911	1.70
9	Output/Input	1.23	1.21		1.23	1.26		1.22	1.22		1.20	1.21		1.20	1.18	

Source: Directorate of Industries, Cuttack

Annexure 3.6: Status of Finalised Geological Reports during 2021-22 (up to March, 2022)

Mineral	Location (Area/District)	Resource Estimated
1	2	3
Manganese & Iron ore	Kenamenta, Sundargarh district	Manganese:43480 tonnes Iron: 0.0126 mt (G4)
Limestone	Lukapada, Balangir district	1.42 million tonnes (G2)
Chromite	Karadapal, Dhenkanal district	Not assessed
Chromite	Quarry 2 of Talangi Chromite Mines of IDC Ltd, Jajpur district	Not assessed
Diamond	Darrimunda, Nuapada district	Not assessed
Diamond	Nangalbod, Nuapada district	Not assessed
Diamond	Arkholi & Kathiwadi, Nuapada district	Not assessed
Dolomite	Tumelbud, Sundargarh district	7.18 mt (G3)
China clay	Bhairpur, Dhenkanal district	Not assessed
DDS	Deulakhani DDS block, Gajapati district	1.925 million cu. m (G3)
DDS	Kampoguda-I DDS block, Gajapati district	0.094 million cu. m (G3)
DDS	Kampoguda-II DDS block, Gajapati district	0.757 million cu. m (G3)
DDS	Nalatangar DDS block, Angul district	36707cu m (G3)
DDS	Sarapa DDS block, Dhenkanal district	26494.2 cu m (G3)
DDS	Tulsipal DDS block, Angul district	64899 cu m (G3)
DDS	Nuagaon (Raghunathpur) DDS block, Dhenkanal district.	3513.6 cu m (G3)

Source: Directorate of Geology, Odisha

Annexure 4.1: Road Length since 2000-01 to 2020-21

Year	National Highway	State Highway	Major District Road	Other District Road
1	2	3	4	5
2000-01	2739.49	5048.68	3676.82	4576.50
2001-02	2739.49	5048.68	3676.82	6176.50
2002-03	3175.49	5048.68	3287.589	6153.379
2003-04	3175.49	5048.68	3287.589	6138.379
2004-05	3557.49	5014.477	3287.589	6138.379
2005-06	3592.027	5102.477	3189.474	6122.379

Year	National Highway	State Highway	Major District Road	Other District Road
2006-07	3592.027	3886.966	4277.195	6314.049
2007-08	3595.027	3886.966	4277.195	6314.049
2008-09	3595.027	3886.966	4277.195	6314.049
2009-10	3592.932	3686.889	4057.127	6812.699
2010-11	3594.162	3686.889	4057.127	6812.699
2011-12	3594.162	3695.475	4198.266	7024.769
2012-13	3593.282	3607.128	4298.046	7521.854
2013-14	3593.282	5124.576	2805.341	8589.837
2014-15	3876.537	4840.491	2820.721	9804.953
2015-16	4510.712	4175.901	2696.711	11997.863
2016-17	4855.325	4139.006	2627.036	13666.819
2017-18	4857.365	4137.530	2815.936	15328.71
2018-19	4848.058	4143.053	2811.784	18835.008
2019-20	4848.058	4172.80	2780.96	18840.81
2020-21	5753.03	4124.37	2631.4	18792.37
2021-22	5753.03	4172.80	2740.83	18854.52

Source: Works Department, Govt. of Odisha and C.E., National Highway, Bhubaneswar

Annexure 4.2: District wise Length of Railway Routes and Railway Stations/Passengers Halt in Odisha,2021-22 (As on 31.03.2022)

Sl. No.	District	Single Line Route (Km)			Double Line Route (Km)			No. of Stations	No. of Passenger Halts	Railway Route Electrified
		Broad Gauge	Narrow Gauge	Total	Broad Gauge	Narrow Gauge	Total			
1	2	3	4	5	6	7	8	9	10	11
1	Angul	19	0	19	99	0	99	11	1	118
2	Balasore	6	0	6	109	0	109	14	4	115
3	Bargarh	31	0	31	14	0	14	4	0	45
4	Bhadrak	61	0	61	34	0	34	9	2	95
5	Bolangir	35	0	35	159	0	159	13	1	193
6	Boudh	0	0	0	0	0	0	0	0	0
7	Cuttack	0	0	0	95	0	95	12	7	95
8	Deogarh	0	0	0	0	0	0	0	0	0
9	Dhenkanal	6	0	6	65	0	65	5	4	71

Sl. No.	District	Single Line Route (Km)			Double Line Route (Km)			No. of Stations	No. of Passenger Halts	Railway Route Electrified
		Broad Gauge	Narrow Gauge	Total	Broad Gauge	Narrow Gauge	Total			
10	Gajapati	50	0	50	0	0	0	1	6	50
11	Ganjam	0	0	0	86	0	86	9	2	86
12	Jagatsinghpur	14	0	14	76	0	76	8	6	90
13	Jajpur	51	0	51	90	0	90	18	1	141
14	Jharsuguda	32	0	32	62	0	62	12	1	94
15	Kalahandi	54	0	54	34	0	34	8	3	88
16	Kandhamal	0	0	0	0	0	0	0	0	0
17	Kendrapara	33	0	33	0	0	0	4	0	33
18	Keonjhar	62	0	62	129	0	129	15	0	191
19	Khordha	54	0	54	114	0	114	18	8	168
20	Koraput	173	0	173	67	0	67	23	0	240
21	Malkangiri	0	0	0	0	0	0	0	0	0
22	Mayurbhanj	140	0	140	0	0	0	9	10	71
23	Nabarangpur	0	0	0	0	0	0	0	0	0
24	Nayagarh	36	0	36	0	0	0	4	0	36
25	Nuapada	0	0	0	25	0	25	2	0	25
26	Puri	0	0	0	44	0	44	7	3	44
27	Rayagada	87	0	87	118	0	118	15	1	205
28	Sambalpur	43	0	43	125	0	125	16	0	168
29	Subarnapur	0	0	0	27	0	27	1	0	27
30	Sundargarh	139	0	139	161	0	161	26	0	300
	Odisha	1126	0	1126	1733	0	1733	264	60	2789

Source: System Maps of Railways

N.B. - Dhamara and Haridaspur-Paradip lines have been included

Annexure 4.3: District wise No of Motor Vehicle on Road as on 31.03.2022

Sl. No.	Name of District	Goods Vehicle			Bus		Car		Taxi	Jeep	Auto Rickshaw	Motor Cycle	Tractor	Trailer	Trekker	Others	Total
		Truck	Tempo	Govt.	Non-G/SC	Non-G/CC											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	Angul	17566	957	11	307	306	20175	776	2251	1477	286330	1828	927	0	1824	334735	
2	Balasore	8910	1062	0	276	143	22227	654	2599	1122	414448	5754	944	0	505	458644	
3	Bargarh	4213	243	14	228	227	12187	215	1238	397	235517	6056	1015	0	739	262289	
4	Bhadrak	3460	1030	0	238	155	4432	174	800	869	214121	2287	853	0	237	228656	
5	Bolangir	3663	83	9	142	26	11118	237	1675	535	226956	3117	937	0	458	248956	
6	Boudh	498	45	0	31	37	833	62	138	187	37088	637	193	0	102	39851	
7	Cuttack	34891	1677	67	1210	845	61972	1687	8755	3118	814241	5148	2304	0	2030	937945	
8	Deogarh	649	19	4	77	5	1087	80	256	139	18710	401	163	0	84	21674	
9	Dhenkanal	2116	313	0	133	196	3660	137	257	433	125348	1160	360	0	464	134577	
10	Gajapati	284	43	6	60	69	1035	86	134	96	30349	1045	769	0	80	34056	
11	Ganjam	10142	2435	19	785	911	19922	582	1837	5011	481535	4962	3143	0	1132	532416	
12	Jagatsinghpur	2947	382	0	55	34	1812	85	454	526	153671	1628	876	0	345	162815	
13	Jajpur	2031	674	0	52	74	3891	310	420	423	133980	1290	311	0	258	143714	
14	Jharsuguda	7706	285	0	120	144	12209	318	1267	432	141253	804	338	0	1349	166225	
15	Kalahandi	3225	116	12	119	548	7118	130	1641	552	184497	2746	1141	0	563	202408	
16	Kendrapara	3762	813	0	42	43	1262	119	463	868	93532	1907	901	0	129	103841	
17	Keonjhar	22489	1029	13	332	442	6863	645	2738	1281	206082	2049	730	0	892	245585	

Sl. No.	Name of District	Goods Vehicle			Bus			Car	Taxi	Jeep	Auto Rickshaw	Motor Cycle	Tractor	Trailer	Tractor	Others	Total
		Truck	Tempo	Govt.	Non-G/SC	Non-G/CC											
18	Khordha	23510	2892	58	1074	1037	244291	7169	10388	10660	978271	4334	1155	0	4362	1289201	
19	Koraput	3799	278	30	167	78	14164	581	1551	760	194365	1745	812	0	539	218869	
20	Malkangiri	1083	115	13	22	56	1605	85	164	433	50500	930	189	0	105	55300	
21	Mayurbhanj	4371	1016	0	463	270	10906	412	2214	1515	238370	3555	1824	0	279	265195	
22	Nawarangpur	1509	90	9	59	15	3287	84	771	369	76063	1985	1139	0	147	85527	
23	Nayagarh	1437	324	0	105	75	1309	86	351	784	136292	1367	763	0	99	142992	
24	Nuapada	736	23	9	48	31	2381	44	510	64	63600	1871	130	0	155	69602	
25	Phulbani	616	234	12	143	84	969	60	454	1608	50720	556	413	0	72	55941	
26	Puri	1145	520	16	186	134	3610	408	315	1391	186472	1292	338	0	65	195892	
27	Raygada	3035	83	2	120	78	3527	207	870	544	104587	1857	840	0	522	116272	
28	Sambalpur	9231	378	11	327	52	25667	498	2599	1014	203911	2660	1035	0	878	248261	
29	Sonepur	808	43	0	21	18	2052	55	224	153	95409	1875	394	0	206	101258	
30	Sundergarh	20906	985	45	573	144	45194	785	2613	2798	353499	3097	1488	0	973	433100	
	Total	200738	18187	360	7515	6277	550765	16771	49947	39559	6529717	69943	26425	0	19593	7535797	

Source: State Transport Authority, Odisha

Annexure 4.4: State wise Installed Capacity of Power (in MW) and Per-capita availability of Power*(Kilowatt-Hour)

State/Union Territory	2018-19		2019-20		2020-21		2021-22	
	Insta lled Capa city	Per -capita availa bility	Insta lled Capa city	Per -capita availa bility	Insta lled Capa city	Per -capita availa bility	Insta lled Capa city	Per -capita availa bility
1	2	3	4	5	6	7	8	9
Andaman and Nicobar island	57	850.1	57	850.1	75	850.1	75	876.7
Andhra Pradesh	24184	1289.4	24854	1321.9	25484	1254.5	25727	1378.6
Arunachal Pradesh	337	618.4	379	539.2	765	514.0	771	629.8
Assam	1710	295.3	1757	296.9	1794	313.7	1844	346.0
Bihar	4566	287.3	5792	303.8	6321	327.7	7323	344.5
Chandigarh	198	1480.1	207	1631.8	215	1434.9	225	1519.9
Chhattisgarh	14044	1021	12835	1163.6	13076	1176.8	13372	1231.7
Dadra and Nagar Haveli	276	18424.8	493	19085.5	509	16071.3	503	19986.9
Daman and Diu	206	10526.5	224	10592.3	256	9147.9	256	10672.6
Delhi	7237	1926.9	7582	1974.4	7590	1764.1	7617	1857.8
Goa	567	2936.1	581	2975.8	596	2793.1	608	3046.4
Gujarat	32291	1930.5	35211	1890.4	37893	1852.0	42208	2051.9
Haryana	11268	2116.7	12290	2149.3	12481	2094.7	12990	2177.5
Himachal Pradesh	4068	1402.7	4007	1509.9	4155	1477.4	4532	1763.3
Jammu and Kashmir & Ladakh	3394	1264.5	3417	1316.6	3478	1394.5	3510	1492.5
Jharkhand	1774	256.7	2514	268.2	2548	292.5	2735	320
Karnataka	28075	1172.7	29825	1190.7	30091	1125.9	30578	1184.6
Kerala	5083	746.2	5696	787.2	5837	752.3	5956	796.4
Lakshadweep	1	714	1	714.0	1	869.2	3	869.2
Madhya Pradesh	23334	1042.3	24821	1043.9	25489	1143.5	25385	1184.9
Maharashtra	44144	1407.4	43496	1380.8	44166	1340.7	43446	1537.8
Manipur	259	332.8	268	341.0	262	360.3	278	378.9
Meghalaya	582	658.9	609	695.3	616	675.4	621	752.7
Mizoram	206	605.9	212	613.5	207	689.9	234	613.2
Nagaland	170	408.5	175	415.7	179	422.4	206	437.9
Odisha	7654	757.6	8567	700.4	8594	704.1	7808	904.1
Puducherry	370	2210.6	375	2282.8	380	2120.8	385	2321.6
Punjab	13432	1995.2	14205	2047.7	14389	2105.6	14512	2251
Rajasthan	22589	1160.6	25360	1183.9	26045	1241.9	33544	1301.7

State/Union Territory	2018-19		2019-20		2020-21		2021-22	
	Insta lled Capa city	Per -capita availla bility	Insta lled Capa city	Per -capita availla bility	Insta lled Capa city	Per -capita availla bility	Insta lled Capa city	Per -capita availla bility
Sikkim	962	842.5	674	885.7	678	872.9	743	968.1
Tamil Nadu	31059	1514.8	32840	1506.9	33695	1401.4	35139	1520.6
Telangana	15826	1888.4	16024	1941.7	17218	1904.5	18069	2004.9
Tripura	752	500.4	764	411.8	724	402.5	674	429.7
Uttar Pradesh	25130	581.9	26162	606.2	27896	618.1	29230	642.8
Uttarakhand	3403	1359.4	3550	1421	3731	1365.8	3950	1524.9
West Bengal	10568	570.1	11027	587.2	11037	572.9	10700	599.7
ALL INDIA	356100	1028.9	370106	1042.6	382151	1031.4	399497	1115.3

Source: State Transport Authority, Odisha

∴ Not Applicable.

Note: State totals may not tally with All India due to exclusion of certain items like Damodhar Valley Corporation, etc.

* : Per Capita Availability of Power is worked out based on Census Population and the population for Andhra Pradesh and Telangana drawn from both Governments' portals for the years 2014-15 and 2018-19.

Source: Central Electricity Authority, Ministry of Power, Government of India

Annexure 4.5: District-wise Abstract of 815 Multipurpose Cyclone/ Flood Shelters (MCS/ MFS) by OSDMA

Sl. No.	Name of the District	Nos. of Block/ ULB covered	Total MCS/ MFS
1	2	3	5
1	Balasore	10	128
2	Baragarh	3	3
3	Bhadrak	8	85
4	Boudh	3	4
5	Cuttack	12	25
6	Dhenkanal	6	8
7	Gajapati	2	4
8	Ganjam	16	103
9	Jagatsinghpur	7	42
10	Jajpur	10	26

Sl. No.	Name of the District	Nos. of Block/ ULB covered	Total MCS/ MFS
11	Jharsuguda	1	2
12	Kalahandi	4	4
13	Kendrapara	7	98
14	Keonjhar	2	4
15	Khurda	9	51
16	Koraput	3	3
17	Malkangiri	3	4
18	Mayurbhanj	6	10
19	Nawarangpur	6	10
20	Nayagarh	6	17
21	Nuapara	1	1
22	Puri	13	170
23	Rayagada	3	3
24	Sambalpur	2	4
25	Subarnapur	5	6
	Total	148	815

Source: Odisha State Disaster Management Agency (OSDMA)

Annexure 5.1: Percentage of projected Urban population to total population of Odisha by sex (2011 -2036)

Year	Person	Male	Female	Gender Gap in Urbanization
1	2	3	4	5
2011	16.75	17.18	16.31	0.87
2012	16.92	17.43	16.41	1.02
2013	17.1	17.69	16.51	1.18
2014	17.28	17.95	16.61	1.34
2015	17.46	18.21	16.72	1.49
2016	17.64	18.48	16.82	1.66
2017	17.82	18.75	16.93	1.82
2018	18.01	19.02	17.03	1.99
2019	18.19	19.3	17.14	2.16
2020	18.38	19.58	17.25	2.33

2021	18.57	19.86	17.36	2.5
2022	18.76	20.14	17.47	2.67
2023	18.95	20.43	17.58	2.85
2024	19.14	20.72	17.69	3.03
2025	19.33	21.01	17.81	3.2
2026	19.53	21.31	17.92	3.39
2027	19.73	21.61	18.04	3.57
2028	19.92	21.92	18.15	3.77
2029	20.12	22.23	18.27	3.96
2030	20.33	22.54	18.39	4.15
2031	20.53	22.86	18.51	4.35
2032	20.74	23.18	18.63	4.55
2033	20.95	23.51	18.75	4.76
2034	21.16	23.84	18.88	4.96
2035	21.37	24.18	19.00	5.18
2036	21.58	24.52	19.13	5.39

Note: Values in Percentage

Source: Source: Report of Tech group on population projection, July,2020, National commission on population, Ministry of Health & Family welfare, July,2020

Annexure 5.2: District wise Length of Municipal Roads (Corporation/Municipalities/NACs) as on 31 March,2022

Name of the District	Total Length (5+6)	Surfaced			Total un- surfaced
		WBM/WMM	BT/CC	Total (3+4)	
Angul	732.39	112.03	355.34	467.37	265.02
Balangir	750.99	202.48	353.04	555.51	195.48
Balasore	1026.90	252.96	720.09	973.05	53.86
Bargarh	696.22	99.68	471.80	571.48	124.74
Bhadrak	662.46	124.11	455.98	580.09	82.36
Boudh	45.53	0.00	36.50	36.50	9.03
Cuttack	1346.73	118.18	1172.51	1290.69	56.04
Deogarh	57.72	2.81	53.23	56.04	1.68
Dhenkanal	567.77	105.59	322.47	428.06	139.72
Gajapati	72.71	2.32	63.22	65.54	7.17

Ganjam	1186.99	105.04	961.16	1066.20	120.79
Jagatsinghpur	316.08	60.15	226.72	286.87	29.21
Jajpur	445.77	19.32	310.26	329.57	116.19
Jharsuguda	746.15	66.36	634.67	701.03	45.13
Kalahandi	449.85	43.53	352.37	395.90	53.95
Kandhamal	392.49	34.10	316.40	350.50	41.99
Kendrapara	514.31	26.86	468.84	495.70	18.61
Keonjhar	820.05	63.90	586.37	650.28	169.78
Khordha	444.22	44.85	342.08	386.93	57.29
Koraput	934.08	160.19	639.24	799.44	134.64
Malkangiri	132.86	17.16	110.00	127.16	5.70
Mayurbhanj	620.54	100.14	360.63	460.77	159.76
Naabarangpur	249.93	32.73	130.77	163.49	86.44
Nayagarh	565.51	30.18	288.74	318.92	246.59
Nuapada	175.04	19.45	107.28	126.73	48.32
Puri	663.24	192.87	381.51	574.38	88.86
Rayagada	465.45	94.85	253.92	348.77	116.68
Sambalpur	1389.99	465.57	828.47	1294.04	95.95
Subarnapur	139.02	15.41	105.50	120.91	18.11
Sundargarh	1284.69	75.70	877.98	953.68	331.00
Odisha	17895.70	2688.50	12287.09	14975.59	2920.10

Annexure 5.3: Key Statistics of water supply and sewerage schemes under State Plan during 2021-22 (Up to March 2022)

SI No	Scheme	No of Projects		Budget Provi- sion (INR in Lakhs)	Expenditure incurred (INR in Lakhs)
		Sanctioned	Completed		
1	2	3	4	5	6
1	Urban Water supply programme	676	147	20345.46	20207.15
2	Household service connection	313	191	3495.88	3476.61
3	Hand pump Tube wells	44	3	130.82	130.82
4	Water supply to Anganwadi and School	130	7	15.91	15.91
5	DG on Wheel	88	14	836.73	797.09
6	Water supply for 24 x 7	33	33	4162.49	3704.07

Sl No	Scheme	No of Projects		Budget Provi- sion (INR in Lakhs)	Expenditure incurred (INR in Lakhs)
		Sanctioned	Completed		
	Total water supply	1284	395	28987.29	28331.65
7	Information, Education, Communication	387	59	267.15	232.72
8	Service level Bench (SLB) marking	58	3	100	47.01
9	Automation of Water treatment plant & system	82	10	912.8	652.73
10	Computerization and e-Governance	127	31	237.09	234.02
11	Development of water testing laboratory	23	3	20	7.98
12	Efficiency measures for urban water supply system.	112	24	267.53	241.21
13	Land Acquisition charges	6	0	18.5	0
14	Payment of Decretal dues	3	2	50	21.45
15	Capacity Development and preparation of DPR	161	10	653	246.3
16	Urban Sewerage	33	14	904.5	816.12
17	RLTAP (Revised Long-Term Plan)	0	0	0	0
	Grand Total	2276	551	32417.86	30831.19

Source: H&UD, Department, Odisha

Annexure 5.4: Key Achievement - (Deen Dayal Antyodaya Yojana – National Rural Livelihoods Mission) DAY-NRLM (2021-22)

Key Performance Indicators	2021-22			Cumulative Ach.
	(As on Mar'22)			
	Target	Ach.	%	
1	2	3	4	5
GP Coverage	1,088	962	88	6,642
Promotion of Women Self Help Group	4,860	37,777	254	4,99,743
Promotion of Cluster Level Forum (CLF)	6,522	367	52	45,962
Promotion of Gram Panchayat Level Federation (GPLF)	1,063	676	64	5,540
GPLFs received Start-up & IB Fund (Nos.)	1,175	1,211	103	4,590
SHGs received Revolving Fund (Nos)	20,500	18,462	90	1,73,385
CLFs received Vulnerability Reduction Fund (Nos.)	7,951	9,813	123	21,147
GPLFs received Community Investment Fund (Nos.)	889	1,145	129	3,725
Community Investment Fund to SHG through GPLF (Nos.)	34,000	46,854	138	1,79,809
SHG Bank Linkage (Nos)	2,80,150	3,10,405	111	
Amount of Linkage (In Cr.)	6,002.52	6,828.07	114	

Key Performance Indicators	2021-22			Cumulative Ach.
	(As on Mar'22)			
	Target	Ach.	%	
Engagement of Business Correspondent (Nos.)	400	355	89	1,039
Establishment of Poultry Clusters (Nos.)	281	411	146	1,208
Establishment of Goat Clusters (Nos.)	1,000	864	86	1,838
Establishment Common Facilitation Centres (Nos.)	311	401	129	2,305
Establishment of Organic Clusters (Nos.)	100	123	123	324
Coverage of HHs under Nutrition Garden (in lakh)	7.52	6.42	85	6.42
Formation of Farm & Non-Farm PGs (Nos.)	730	745	102	3,124
Expenditure under NRLM (In Cr.)	1,234	904.9	73	
Expenditure under NRETP (In Cr.)	100	44.27	44	
Rural Self Employment Training Institute (RSETI)				
Youth trained (Nos.)	14,032	15,464	110	1,88,485
Start-up Village Entrepreneurship Programme (SVEP)				
Promotion of Entrepreneurs (Nos.)	12,210	12,857	105	12,857

Source: Odisha Livelihood Mission (OLM)

Annexure 5.5: Person days of Employment Generated under MGNREGS in Odisha

Year	No. of Person days Generated (in lakh)									
	SCs	% to Total	STs	% to Total	Others	% to Total	Total	Women	%age Share of	
									Women	SC / ST
2015-16	141.8	15.9%	372.8	41.8%	378.1	42.4%	892.7	339.4	38.0%	57.6%
2016-17	124.3	16.1%	292.3	37.8%	356.8	46.1%	773.4	307.9	39.8%	53.9%
2017-18	152.9	16.6%	338.7	36.7%	430.5	46.7%	922.1	386.0	41.9%	53.3%
2018-19	133.7	16.1%	294.6	35.5%	402.0	48.4%	830.3	348.6	42.0%	51.6%
2019-20	171.7	15.4%	397.9	35.7%	544.3	48.9%	1113.9	482.3	43.3%	51.1%
2020-21	292.6	14.1%	743.8	35.7%	1044.3	50.2%	2080.7	931.0	44.7%	49.8%
2021-22	271.6	13.7%	697.5	35.3%	1008.6	51.0%	1977.7	912.6	46.1%	49.0%

Source: PR & DW Department, Govt. of Odisha

Annexure 5.6: Percentage of women who had 4 or more Antenatal Care Coverage (ANC) visits

District	NFHS-4	Improvement between NFHS-4 and NFHS-5	NFHS-5
1	2	3	4
Anugul	68.4	15.2	83.6
Balangir	76.5	18.9	95.4
Baleshwar	57.3	-0.7	56.6
Bargarh	63.5	6.6	70.1
Baudh	73.7	5.3	79
Bhadrak	34.9	40	74.9
Cuttack	51.4	32.8	84.2
Debagarh	58.4	19.1	77.5
Dhenkanal	69.9	5.9	75.8
Gajapati	49.1	33.9	83
Ganjam	51.3	31.4	82.7
Jagatsinghapur	80.4	2.2	82.6
Jajapur	50.8	23	73.8
Jharsuguda	74.4	19.7	94.1
Kalahandi	46.7	36.1	82.8
Kandhamal	64.8	16.3	81.1
Kendrapara	53.3	23.8	77.1
Kendujhar	39.6	17.5	57.1
Khordha	60.5	30.5	91
Koraput	58.4	20.8	79.2
Malkangiri	69.3	13.5	82.8
Mayurbhanj	72.5	-19.6	52.9
Nabarangapur	70.5	17.2	87.7
Nayagarh	58.1	32.2	90.3
Nuapada	75.5	-3.9	71.6
Puri	81.8	13.1	94.9
Rayagada	59.5	25.8	85.3
Sambalpur	83	5.9	88.9
Subarnapur	85.3	2.5	87.8
Sundargarh	80.6	-7.5	73.1

Source: NFHS-4 & NFHS-5

Annexure 5.7: Headcount Ratio for Rural & Urban Odisha

Districts	Rural	Urban
1	2	3
Anugul	26.11	17.42
Balangir	29.6	10.80
Baleshwar	25.84	11.65
Bargarh	25.50	18.72
Bauda	33.82	11.21
Bhadrak	29.76	19.77
Cuttack	17.50	7.58
Debagarh	38.79	10.89
Dhenkanal	33.40	2.30
Gajapati	42.90	8.84
Ganjam	26.18	5.89
Jagatsinghapur	11.70	13.13
Jajapur	20.39	24.68
Jharsuguda	24.25	9.97
Kalahandi	50.24	7.70
Kandhamal	46.88	20.72
Kendrapara	22.27	8.73
Kendujhar	46.87	15.97
Khordha	17.91	13.34
Koraput	56.92	15.33
Malkangiri	61.25	27.98
Mayurbhanj	47.91	8.10
Nabarangapur	62.43	21.51
Nayagarh	21.73	5.78
Nuapada	39.12	20.53
Puri	12.86	5.49
Rayagada	54.42	14.78
Sambalpur	28.79	14.24
Subarnapur	29.18	14.04
Sundargarh	29.86	14.66

Source: National Multidimensional poverty Index, NITI Aayog

Annexure 5.8: District wise target and achievements under rural housing during 2021-22

District	PMAY (G)			BPGY, Titli, NSPGY			Total			Incomplete
	Target	Complete	% Complete	Target	Complete	% Complete	Target	Complete	% Complete	
Angul	7583	1496	19.7	283	59	20.8	7866	1555	19.8	6311
Baleshwar	34206	8384	24.5	772	140	18.1	34978	8524	24.4	26454
Bargarh	21259	8514	40	396	80	20.2	21655	8594	39.7	13061
Bhadrak	14866	5564	37.4	470	289	61.5	15336	5853	38.2	9483
Bolangir	17648	9347	53	164	39	23.8	17812	9386	52.7	8426
Boudh	12355	5055	40.9	197	44	22.3	12552	5099	40.6	7453
Cuttack	5018	1420	28.3	566	232	41	5584	1652	29.6	3932
Deogarh	1443	416	28.8	47	14	29.8	1490	430	28.9	1060
Dhenkanal	3074	1344	43.7	106	25	23.6	3180	1369	43.1	1811
Gajapati	2062	587	28.5	1214	407	33.5	3276	994	30.3	2282
Ganjam	2822	472	16.7	639	217	34	3461	689	19.9	2772
Jagatsinghpur	3327	423	12.7	162	29	17.9	3489	452	13	3037
Jajpur	11325	2821	24.9	495	135	27.3	11820	2956	25	8864
Jharsuguda	744	288	38.7	23	5	21.7	767	293	38.2	474
Kalahandi	24475	11798	48.2	318	70	22	24793	11868	47.9	12925

Kandhamal	1156	407	35.2	89	19	21.3	1245	426	34.2	819
Kendrapara	12692	2891	22.8	506	84	16.6	13198	2975	22.5	10223
Kendujhar	14681	5428	37	1399	252	18	16080	5680	35.3	10400
Khordha	1947	355	18.2	239	43	18	2186	398	18.2	1788
Koraput	3951	1272	32.2	551	66	12	4502	1338	29.7	3164
Malkangiri	1456	196	13.5	180	81	45	1636	277	16.9	1359
Mayurbhanj	44493	14392	32.3	1778	260	14.6	46271	14652	31.7	31619
Nabarangapur	11596	4701	40.5	442	123	27.8	12038	4824	40.1	7214
Nayagarh	3761	892	23.7	210	40	19	3971	952	23.5	3039
Nuapada	11192	7119	63.6	242	80	33.1	11434	7199	63	4235
Puri	5593	1211	21.7	490	80	16.3	6083	1291	21.2	4792
Rayagada	7563	2129	28.2	202	35	17.3	7765	2164	27.9	5601
Sambalpur	369	25	6.8	34	5	14.7	403	30	7.4	373
Sonepur	11418	3908	34.2	174	16	9.2	11592	3924	33.9	7668
Sundargarh	5094	1804	35.4	526	115	21.9	5620	1919	34.2	3701
All Districts	299169	104659	35	12914	3084	23.9	312083	107743	34.5	204340

Source: SLBC, 167th Issue, March, 2022

Annexure 6.2: Issuance of Digital Products During the Last 3 Years

Sl. No.	DISTRICTS	Total no of atm cards issued			Total no of internet banking issued			Total no of mobile banking issued			Total no of aeaps enabled accounts			Total no of qr code/pos enabled accounts		
		2019-20	2020-21	2021-22	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Angul	1097910	1340313	1623216	130636	159528	189371	262902	359902	499947	2354422	2698735	2943788	81942	85881	96090
2	Balasore	671861	738456	843295	121667	154248	186008	187167	255469	293906	1228562	1344597	1466691	65157	68289	76407
3	Bargarh	345292	387033	428276	69287	85758	102281	119783	147426	173463	870951	936422	1021452	48890	51240	57331
4	Bhadrak	513689	565083	660860	81155	99864	130917	129336	165211	199078	873572	993421	1083627	42615	44664	49973
5	Bolangir	378997	420708	478049	88044	110041	126575	138662	177989	220798	1047697	1133450	1236371	61986	64966	72688
6	Boudh	92419	108831	111466	14587	19522	23365	21831	31676	43721	276620	302210	329652	16184	16962	18978
7	Cuttack	792487	888962	1001404	218083	292436	388765	282260	397388	468285	1242994	1358281	1481617	64212	67299	75299
8	Deogarh	83186	96377	106687	31331	39994	47543	43018	55790	67731	187160	202384	220761	10827	11347	12696
9	Dhenkanal	286369	325532	366553	51893	70829	92520	96888	128982	159356	635072	697413	760740	33229	34826	38966
10	Gajapati	109547	130679	160168	23215	32710	46041	28526	45565	81543	282982	313812	342307	16493	17286	19341
11	Ganjam	782885	881809	987184	141109	194232	250977	203732	301196	353879	1812752	1968747	2147515	105955	111048	124248
12	Jagatsinghpur	445650	493831	554485	71184	89864	116671	122107	160362	195697	554435	612142	667726	29607	31030	34718
13	Jajpur	518751	568697	613401	95704	118377	163520	166357	215400	255775	873075	1002446	1093471	42210	44239	49498
14	Jharsuguda	334303	366883	390114	85560	103130	122978	126062	155554	178111	422674	468982	511567	23201	24316	27207

15	Kalahandi	267154	296896	328688	54545	64261	76221	99354	122690	158499	825672	905725	987968	47683	49975	55916
16	Kandhamal	143770	166696	179797	23247	29190	33613	35853	48888	61380	431220	468229	510746	23906	25055	28033
17	Kendrapara	334169	366219	410579	79769	97047	116313	127260	151446	176368	593838	652221	711445	33545	35157	39336
18	Keonjhar	336229	359714	397249	97559	111061	136015	160523	196246	226300	559278	569117	620795	27783	29119	32580
19	Khurda	1327872	1442060	1594482	593437	736432	937704	568093	775662	910080	1479763	1598544	1743697	72242	75715	84715
20	Koraput	220031	251452	284741	48905	67051	82410	72220	109983	164765	688123	770718	840702	38549	40402	45205
21	Malkangiri	80548	94644	110333	20209	30330	36235	37332	55223	74624	278996	316727	345487	15696	16450	18405
22	Mayurbhanj	392567	434988	479311	71232	92730	105401	115545	146007	166735	660511	712922	777658	39793	41706	46664
23	Nabarangpur	166124	182399	199966	24564	33077	40684	45151	58646	75055	537330	592920	646759	31121	32617	36494
24	Nayagarh	266832	305899	344474	45410	54135	65841	104431	123604	145016	405704	461514	503421	21739	22784	25492
25	Nuapada	161876	182174	194962	28752	36527	42316	47628	60024	67318	437321	462253	504227	25601	26832	30021
26	Puri	548987	611251	652278	104001	126552	163989	166329	208077	248157	720347	793868	865954	38366	40210	44990
27	Rayagada	194664	222968	251629	38710	49181	57467	75117	101847	145496	531253	601204	655795	31019	32510	36374
28	Sambalpur	444183	494009	532741	115368	145886	173653	169097	209911	247155	681460	764783	834228	38534	40386	45187
29	Sonepur	163226	183579	213858	36463	45157	53719	65042	80270	95322	408443	455622	496994	23585	24716	27655
30	Sundargarh	659686	730372	781038	188277	240351	278462	218434	285299	329588	1246564	1368372	1492627	67904	71172	79632
TOTAL		12161264	13638514	15281284	2793903	3529501	4387575	4036040	5331733	6483148	23148791	25527781	27845788	1219574	1278199	1430139

Source: SLBC, 167th Issue, March, 2022

Annexure 6.3: Market Share of Commercial and Cooperative Banks in Dispensing Crop Loan

Year	Commercial Banks	Cooperative Banks	Total	Market Share of Banks (%)	
				Cooperative	Commercial
1	2	3	4	5	6
2011-12	2270.13	4415.89	6686.20	66	34
2012-13	3175.67	5426.49	8457.02	62	38
2013-14	3103.86	7096.64	10200.50	70	30
2014-15	4590.89	8351.11	12942.00	65	35
2015-16	6520.90	9572.22	16093.12	59	41
2016-17	5330.44	10200.65	15531.09	66	34
2017-18	5524.00	11005.80	16529.80	67	33
2018-19	5922.46	12809.99	18732.45	68	32
2019-20	7353.01	13071.03	20424.04	64	36
2020-21	9427.83	15190.03	24617.86	62	38
2021-22	11558.55	15897.76	27462.36	58	42

Source: 167th State Level Bankers Committee

Annexure 6.4: Tourist Composition and Inflow of money via Tourist spending in Odisha

Year	Tourist (in nos.)			Growth Rate(%)	Inflow of money (Rs. In crore)			Growth Rate(%)
	Domestic	Foreign	Total		Domestic	Foreign	Total	
1	2	3	4	5	6	7	8	9
2008-09	64,82,213	42,303	65,24,516	4.32	3254.65	135.46	3390.11	6.1
2009-10	71,04,079	47,105	71,51,184	9.60	3566.89	150.83	3717.72	9.66
2010-11	77,70,741	53,212	78,23,953	9.41	3901.61	170.39	4072.00	9.53
2011-12	84,72,208	62,816	85,35,024	9.09	4253.81	201.14	4454.95	9.40
2012-13	92,91,734	65,522	93,57,256	9.63	4665.29	209.81	4875.10	9.43
2013-14	1,00,64,072	67,400	1,01,31,472	8.27	10288.60	308.94	10597.54	117.38
2014-15	1,10,51,351	72,215	1,11,23,566	9.79	11297.91	331.01	11628.92	9.73
2015-16	1,20,67,695	67,364	1,21,35,059	9.09	12336.93	308.78	12645.71	8.74
2016-17	1,31,12,728	77,496	1,31,90,224	8.69	13405.27	355.22	13760.49	8.82

Year	Tourist (in nos.)			Growth Rate(%)	Inflow of money (Rs. In crore)			Growth Rate(%)
	Domestic	Foreign	Total		Domestic	Foreign	Total	
2017-18	1,42,61,546	1,02,995	1,43,64,541	8.90	14579.72	472.10	15051.82	9.38
2018-19	1,55,09,529	1,13,721	1,56,23,250	8.76	15441.67	474.00	15915.67	5.74
2019-20	1,50,35,593	1,00,567	1,51,36,160	(-)3.12	14,969,81	419.17	15388.98	(-)3.31
2020-21	23,76,523	652	23,77,175	(-)84.29	2375.04	2.72	2377.76	(-)84.55
2021-22	38,98,770	3,153	39,01,923	64.14	3881.71	13.14	5894.85	64.42

Source: Department of Tourism, Odisha

Annexure 6.5: District wise Progress on SHG Bank Linkage for the Financial Year-2021-22(01.04.2021 to 31.03.2022)

Sl. No.	District Name	Target		Achievement		% of Achievement	
		Physical (SHG)	Financial (Rs in Lakh)	Physical (SHG)	Financial (Rs in Lakh)	Physical	Financial
1	2	3	4	5	6	7 (5/3)	8 (6/4)
1	Angul	11381	23525.86	13689	31537.9	120%	134%
2	Baleshwar	17998	44935.72	23010	62318.9	128%	139%
3	Bargarh	7159	15146.55	8517	17189.89	119%	113%
4	Bhadrak	13483	33834.78	14141	36074.15	105%	107%
5	Bolangir	7858	11861.71	8350	14676	106%	124%
6	Boudh	3218	7359.54	3464	7260.08	108%	99%
7	Cuttack	19063	48458.26	19511	48858.66	102%	101%
8	Deogarh	3991	6630.12	4335	7504.08	109%	113%
9	Dhenkanal	8464	17595.39	9133	22513.65	108%	128%
10	Gajapati	4886	8506.58	5083	8703.6	104%	102%
11	Ganjam	17839	32941.62	24588	52552.78	138%	160%
12	Jagatsinghapur	9852	22114.8	10125	22829.29	103%	103%
13	Jajpur	14039	32322.14	15305	34470.37	109%	107%
14	Jharsuguda	3531	7463.66	4101	8001.2	116%	107%
15	Kalahandi	6237	9877.99	7572	11285.19	121%	114%

Sl. No.	District Name	Target		Achievement			% of Achievement	
		Physical (SHG)	Financial (Rs in Lakh)	Physical (SHG)	Financial in Lakh	(Rs)	Physical	Financial
16	Kandhamal	5481	10189.92	5614	11200.21		102%	110%
17	Kendrapara	9152	18947.34	9630	19652.06		105%	104%
18	Kendujhar	11302	21520.83	12221	23828.31		108%	111%
19	Khordha	12540	32565.2	12903	33375.59		103%	102%
20	Koraput	7395	12114.31	7485	12256.64		101%	101%
21	Malkangiri	3201	5489.49	3940	5852.18		123%	107%
22	Mayurbhanj	19451	47279.36	21655	46919.19		111%	99%
23	Nabarangapur	5796	9180.23	5968	9391.14		103%	102%
24	Nayagarh	8405	21774.02	8960	23759.34		107%	109%
25	Nuapada	3844	6103.14	4194	7045.76		109%	115%
26	Puri	13909	33643.84	14159	36357.78		102%	108%
27	Rayagada	5889	10720.22	6261	11455.61		106%	107%
28	Sambalpur	7286	13681.13	8217	16794.85		113%	123%
29	Sonepur	5043	9282.89	5210	10394.14		103%	112%
30	Sundargarh	12457	25185.4	13478	29589.3		108%	117%
Grand Total		280150	600252.02	310819	683647.83		111%	114%

Annexure 7.1: Interstate comparison of IMR (2001-2020)

Name of the States	2001	2002	2004	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Andhra Pradesh	66	62	59	57	52	49	46	43	41	39	39	37	34	32	29	25	24
Assam	74	70	66	68	64	61	58	55	55	54	49	47	44	44	41	40	36
Bihar	62	61	61	61	56	52	48	44	43	42	42	42	38	35	32	29	27
Gujrat	60	60	53	54	50	48	44	41	38	36	35	33	30	30	28	25	23
Haryana	66	62	61	60	54	51	48	44	42	41	36	36	33	30	30	27	28
Karntak	58	55	49	50	45	41	38	35	32	31	29	28	24	25	23	21	17
Kerala	11	10	12	14	12	12	13	12	12	12	12	12	10	10	7	6	6
Madhya Pradesh	86	85	79	76	70	67	62	59	56	54	52	50	47	47	48	46	43
Maharastra	45	45	36	36	33	31	28	25	25	24	22	21	19	19	19	17	16
Odisha	91	87	77	75	69	65	61	57	53	51	49	46	44	41	40	38	36
Punjab	52	51	45	44	41	38	34	30	28	26	24	23	21	21	20	19	18
Rajastan	80	78	67	68	63	59	55	52	49	47	46	43	41	38	37	35	32
Tamilnadu	49	44	41	37	31	28	24	22	21	21	20	19	17	16	15	15	13
Uttar Pradesh	83	80	72	73	67	63	61	57	53	50	48	46	43	41	43	41	38
West Bengal	51	49	40	38	35	33	31	32	32	31	28	26	25	24	22	20	19
India	66	63	58	58	53	50	47	44	42	40	39	37	34	33	32	30	28

Source: Sample Registration System Bulletin

Annexure 7.2: Odisha Status on Nutritional Indicators (NFHS-5 vis -a-vis NFHS-4)

Indicators	Odisha		India	Improvement / Decline (NFHS-4 to NFHS-5)-	
	NFHS-5 (2020-21)	NFHS-4 (2015-16)	NFHS-5 (2020-21)	Odisha	Odisha Status
1	2	3	4	5	6
Maternity Care (for last birth in the 5 years before the survey)					
1. Mothers who consumed iron folic acid for 100 days or more when they were pregnant (%)	60.8	36.5	44.1	24.3	improved
2. Mothers who consumed iron folic acid for 180 days or more when they were pregnant (%)	34.4	4.2	26	30.2	Improved
Child Vaccinations and Vitamin A Supplementation					
3. Children age 12-23 months fully vaccinated based on information from either vaccinated or mother's recall (%)	90.5	78.6	76.4	11.9	Improved
4.a Children age 12-23 months who have received three doses of rotavirus vaccine (%)	88.1	na	36.4		
4.b. Children age 9-35 months who received a vitamin A dose in the last 6 months (%)	87.1	75.6	71.2	11.5	Improved
Child Feeding Practices and Nutritional Status of children					
5. Children under age 3 years breastfed within one hour of birth ¹⁵ (%)	68.5	68.5	41.8	0	Change
6. Children under age 6 months exclusively breastfed (%)	72.9	65.6	63.7	7.3	Improved
7. Children age 6-8 months receiving solid or semi- solid food and breastmilk (%)	67.5	54.9	45.9	12.6	Improved
8. Breastfeeding children age 6-23 months receiving an adequate diet ^{16, 17} (%)	20.3	8.9	11.1	11.4	Improved
9. Non-breastfeeding children age 6-23 months receiving adequate diet ^{16, 17} (%)	22.5	5	12.7	17.5	Improved
10. Total children age 6-23 months receiving an adequate diet ^{16, 17} (%)	20.4	8.5	11.3	11.9	Improved
11. Children under 5 years who are stunted (height-for-age) ¹⁸ (%)	31	34.1	35.5	-3.1	Improved
12. Children under 5 years who are wasted (weight-for-height) ¹⁸ (%)	18.1	20.4	19.3	-2.3	Improved
13. Children under 5 years who are under-weight (weight-for-age) ¹⁸ (%)	29.7	34.4	32.1	-4.7	Improved
Nutritional Status of Adults (age 15-49 years)					
14. Women whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m ²) ²¹ (%)	20.8	26.5	18.7	-5.7	Improved
Anaemia among Children and Adults					
15. Children age 6-59 months who are anaemic (<11.0g/dl) ²² (%)	64.2	44.6	67.1	19.6	Increase
16. Pregnant women age 15-49 years who are anaemic (<11.0 g/dl) ²² %	61.8	47.6	52.2	14.2	Increase
16. All women age 15-49 years who are anaemic ²² %	64.3	51	57	13.3	Increase

Source : National Family Health Survey- 4 (2015-16) & 5 (2020-21)

Annexure: A.7.3 : Progress of Immunization Programme in Odisha

Programmes	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11	12	13
TT(PW)	7.67	7.73	7.14	7.55	7.32	7.3	6.7	6.85	6.9	6.7	6.68	6.74
DPT	7.17	7.27	7.58	7.01	7.23	5.33	6.74	6.49	6.61	6.6	6.67	6.89
Polio	7.2	6.61	7.44	7.03	7.24	6.88	6.72	6.49	6.5	6.65	6.64	6.54
BCG	7.85	8.02	7.4	7.3	7.34	7.03	6.62	6.38	6.39	6.23	6.3	6.25
Measles	6.98	7.08	7.57	6.86	7.08	6.85	6.8	4.72	5.32	6.75	6.86	6.98
DT	5.68	5.53	6.39	6.19	6.24	6.46	7.19	4.9	5.99	5.75	6.79	6.89
TT(10 Yrs)	8.74	7.62	7.78	6.78	6.78	6.5	6.12	5.33	5.43	8.08	5.6	6.49
TT(16 Yrs)	8.15	7.22	7.77	6.77	6.58	6.16	5.82	5.13	5.11	7.67	5.11	5.83

Source: Directorate of Family Welfare ,Odisha ,Bhubaneswar

Annexure: 7.4 : District Wise number of Health Institutions

Sl. No.	District		MCH	DHH	SDH	CHC/ UCHC				PHC / OH/ UPHC					IDH	Sub Center
						CHC	UCHC	UCHC (H & UD)	Total	OH	PHC (N)	UPHC	UPHC (H & UD)	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Angul			1	3	9			9		31	1		32		166
2	Balasore	Tribal	1	1	1	17			17		71	3		74		275
3	Baragarh			1	1	15			15		47	1	1	49		204
4	Bhadrak			1		7			7	2	50	3		55		178
5	Bolangir		1	1	2	15			15	2	44	2		48		226
6	Boudh			1		5			5		12			12		67
7	Cuttack		1	1	2	19	2		21	2	58	9	4	73	1	332
8	Deogarh	Tribal		1		4			4	1	7			8		42
9	Dhenkanal			1	2	10			10	4	33	1		38		167

Sl. No.	District		MCH	DHH	SDH	CHC/ UCHC				PHC / OH/ UPHC					IDH	Sub Center
						CHC	UCHC	UCHC (H & UD)	Total	OH	PHC (N)	UPHC	UPHC (H & UD)	Total		
10	Gajapati	Tribal		1		8			8	1	20		1	22		136
11	Ganjam		1	1	4	28			28		93	8		101		460
12	Jagatsinpur			1		11			11		35	1		36		189
13	Jajpur			1		12			12	3	59			62		260
14	Jharsuguda			1		6			6		16	4		20		66
15	Kalahandi	Tribal		1	1	17			17	2	43	1		46	1	242
16	Kandhamal	Tribal		1	1	14			14	4	36	1		41		172
17	Kendrapara			1	1	8			8	1	45	1		47		227
18	Keonjhar	Tribal		1	2	17			17	6	60	2	1	69		351
19	Khurda			2		12		1	13	4	43	2	5	54		202
20	Koraput	Tribal	1	1	0	16			16		47	4		51		307
21	Malkangiri	Tribal		1	2	6			6	3	24	1		28		158
22	Mayurbhanj	Tribal	1	1	3	28			28	4	82	2	1	89		589
23	Nawarangpur	Tribal		1	1	10			10	1	40	1		42		289
24	Nayagarh			1		12			12		38			38	1	166
25	Nuapada			1	1	5			5		17			17		95
26	Puri			1		16			16	3	44	3	2	52	1	241
27	Rayagada	Tribal		1	1	11			11	2	36	3		41		235
28	Sambalpur	Tribal	1	1	2	11			11		28	6	2	36	1	167
29	Sonepur			1	1	5			5	2	18			20		89
30	Sundargarh	Tribal		2	1	20	1		21	3	56	12		71		390
31	Bhubaneswar						3		3	4		17		21		
	Total		7	32	32	374	6	1	381	54	1233	89	17	1393	5	6688

Source : NHM, Odisha

Annexure: A.7.5 : Progress of Family Welfare Programmes in Odisha

Year	Sterilisation	IUD Insertion	Conventional contraceptive users	Oral pills users	Medical Termination of Pregnancy	No. of Equivalent Sterilisation
1	2	3	4	5	6	7
2017-18	0.88	1.67	1.27	1.51	NA	NA
2018-19	0.82	1.64	1.26	1.38	0.18	1.59
2019-20	0.79	1.77	1.27	1.31	0.15	1.59
2020-21	0.56	1.84	1.11	1.52	0.12	1.39
2021-22	0.83	1.54	1.18	1.34	0.13	1.56

Source: Directorate of health and Family Welfare, Odisha ,Bhubaneswar

Annexure:7.6: District Wise School, Enrolment and Teacher of all Management

Sl no	District name	PRIMARY SCHOOL			UPPER PRIMARY SCHOOL			SECONDARY SCHOOL		
		No of school	Enrolment	No of teacher	No of school	Enrolment	No of teacher	No of school	Enrolment	No of teacher
1	2	3	4	5	6	7	8	9	10	11
1	Angul	789	39006	2188	657	89006	4473	293	81585	3143
2	Balasore	1461	90856	4405	1180	151184	7425	579	134523	5314
3	Baragarh	750	39925	2024	716	96905	4473	352	79237	3606
4	Bhadrak	942	54356	2873	744	107198	5313	357	92617	3285
5	Bolangir	1113	53033	2761	913	127777	5190	406	111249	4185
6	Boudh	359	14813	874	317	40477	1936	82	21789	704
7	Cuttack	1147	59709	3238	998	141514	7350	576	165428	7183
8	Deogarh	242	9696	689	236	21732	1388	97	17891	866
9	Dhenkanal	626	33092	1617	671	86889	4110	287	65533	2567
10	Gajapati	657	21940	2004	277	38321	1812	174	46779	1919
11	Ganjam	1849	104107	4920	1297	215672	9131	704	223650	7996
12	Jagatsinghpur	609	26805	1661	513	61063	4172	289	63736	2949
13	Jajpur	1049	64919	3115	936	127473	6028	493	116872	4757
14	Jharsuguda	311	12628	882	283	31359	1763	146	45003	1999
15	Kalahandi	1382	60940	3362	777	113988	4759	373	99475	3514

Sl no	District name	PRIMARY SCHOOL			UPPER PRIMARY SCHOOL			SECONDARY SCHOOL		
		No of school	Enrolment	No of teacher	No of school	Enrolment	No of teacher	No of school	Enrolment	No of teacher
16	Kandhamal	903	28881	2010	673	64025	3457	234	55881	2131
17	Kendrapara	908	49770	2275	746	91719	4516	373	83023	3304
18	Keonjhar	1610	79148	3802	1000	130647	5456	526	123853	4899
19	Khurdha	713	46918	2561	827	136213	7205	409	198897	7423
20	Koraput	1381	56189	3032	826	101880	4184	314	100705	3204
21	Malkangiri	804	33348	1747	407	60477	2032	145	42443	1287
22	Mayurbhanj	2597	109574	6398	1345	168634	7927	682	151372	6449
23	Nabarangpur	1100	59103	2612	588	105659	3467	245	83322	2281
24	Nayagarh	620	28689	1713	445	54719	3024	247	54603	2478
25	Nuapada	443	22335	1129	452	64393	2678	163	40360	1571
26	Puri	1215	51478	3076	846	96634	5125	378	87949	3772
27	Rayagada	1169	44984	2776	558	63909	2914	242	72978	2474
28	Sambalpur	706	29965	1768	529	64158	3378	251	69820	3007
29	Sonepur	464	17141	1134	391	46626	2426	142	31970	1281
30	Sundergarh	1407	66443	3812	901	109813	5534	477	159915	5974
Grand Total		29326	1409791	76458	21049	2810064	132646	10036	2722458	105522

Source: UDISEPLUS 2021-22

Annexure: 7.7 : State Ranking Index for National Food Security Act.2022

State/Union Territory	Index score	Rank
1	2	3
Odisha	0.836	1
Uttar Pradesh	0.797	2
Andhra Pradesh	0.794	3
Gujarat	0.79	4
Tripura	0.788	5
Dadra & Nagar Haveli and Daman Diu	0.787	6
Madhya Pradesh	0.786	7
Bihar	0.783	8
Karnataka	0.779	9

State/Union Territory	Index score	Rank
Tamil Nadu	0.778	10
Himachal Pradesh	0.758	11
Jharkhand	0.754	12
Kerala	0.75	13
Telangana	0.743	14
Sikkim	0.71	15
Maharashtra	0.708	16
West Bengal	0.704	17
Rajasthan	0.694	18
Punjab	0.665	19
Haryana	0.661	20
Delhi	0.658	21
Chhattisgarh	0.654	22
Nagaland	0.648	23
Uttarakhand	0.637	24
Goa	0.631	25
Mizoram	0.609	26
Assam	0.604	27
Arunachal Pradesh	0.586	28
Lakshadweep	0.568	29
Jammu & Kashmir	0.564	30
Andaman and Nicobar Islands	0.562	31
Manipur	0.522	32
Meghalaya	0.512	33
Ladakh	0.412	34

Source: Ministry of Consumer Affairs, Food & Public Distribution

³ DBT cash UTs-Chandigarh and Puducherry have not been listed in the country level index due to variation in the scoring criteria, however separate ranks and scores have been generated for these UTs in all categories.

Annexure: 7.8 : Placement Linked Training Programme under Skill Development Authority

Year	No. of PIAs	Achievement	
		Trained	Placed
1	2	3	4
2011-12	3	637	10
2012-13	23	5952	1466
2013-14	21	23421	4744
2014-15	25	10601	2000
2015-16	30	13181	3978
2016-17	13	8662	2100
2017-18	22	14178	4304
2018-19	17	9048	4037
2019-20	18	9256	4000
2020-21	15	3115	1499
2021-22	15	5451	1733
	Total	103502	29821

Source: Skill Development & Technical Education Department.

Annexure: A.7.12: Type and number of Higher Education Institutions in Odisha

Category of Degree Colleges/ Universities	Number
Government Colleges	51
Autonomous College (Govt and Non-Govt)	28
Aided colleges	872
Block Grant Colleges	284
Non-government unaided colleges	153

University	23
a) Government University	31
b) Private Universities	10

Source: Higher Education Department, Odisha.

Annexure: 7.10 : Progress under Livelihood Convergence Initiatives (2021-22)

Sl. No.	Activity	SHGs	Turnover (Rs. In Crore)	Commission Incentive (Rs. In Crore)
1	2	3	4	5
1	Fisheries & Animal Resource Development	11165	402.96	
2	Agriculture & Farmers' Empowerment	10998	41.2	5.6
3	Food Supplies & Consumer Welfare	3133	1510.87	31.76
4	W & CD	2195	397.88	
5	ST & SC Development, Minority and Backward Classes Welfare	3280	168.55	31.69
6	Handloom, Textiles and Handicrafts	2241	25.23	
7	MSME	2256	23	
8	PR & DW	40592	11.75	
9	Forest, Environment and Climate Change	1144	6.65	
10	Health & Family Welfare	33	3.96	
11	H & UD	16526		153.73
12	School & Mass Education	7629		
13	Finance	2203		4.31
14	Energy	1317		10.15
	Total	104712	2592.05	237.24

Annexure: 7.11 : Fish Farming by Women SHGs in GP Tanks

Sl. No.	Name of the District	No. of BLFs	Revolving Funds to BLFs (Rs. in Lakh)			Financial Assistance for (Rs. in Lakh)		
			2020-21 Upto March 2021	2021-22 Upto March 2022	Total	2020-21 Upto March 2021	2021-22 Upto March 2022	Total
1	2	3	4	5	6	7	8	9
1	Angul	8	-	200	200	6.88	6.88	13.76
2	Balasore	15	-	375	375	12.9	12.9	25.8
3	Bargarh	13	-	325	325	11.18	11.18	22.36
4	Bhadrak	8	-	200	200	6.88	6.88	13.76
5	Bolangir	14	-	350	350	12.04	12.04	24.08
6	Boudh	3	-	75	75	2.58	2.58	5.16

Sl. No.	Name of the District	No. of BLFs	Revolving Funds to BLFs			Financial Assistance for		
			(Rs. in Lakh)			(Rs. in Lakh)		
			2020-21 Upto March 2021	2021-22 Upto March 2022	Total	2020-21 Upto March 2021	2021-22 Upto March 2022	Total
7	Cuttack	16	-	400	400	13.76	13.76	27.52
8	Deogarh	3	-	75	75	2.58	2.58	5.16
9	Dhenkanal	8	-	200	200	6.88	6.88	13.76
10	Gajapati	7	-	175	175	6.02	6.02	12.04
11	Ganjam	24	-	600	600	20.64	20.64	41.28
12	Jagatsinghpur	8	-	200	200	6.88	6.88	13.76
13	Jajpur	11	-	275	275	9.46	9.46	18.92
14	Jharsuguda	7	-	175	175	6.02	6.02	12.04
15	Kalahandi	14	-	350	350	12.04	12.04	24.08
16	Kandhamal	12	-	300	300	10.32	10.32	20.64
17	Kendrapara	9	-	225	225	7.74	7.74	15.48
18	Keonjhar	14	-	350	350	12.04	12.04	24.08
19	Khurda	13	-	325	325	11.18	11.18	22.36
20	Koraput	15	-	375	375	12.9	12.9	25.8
21	Malkangiri	7	-	175	175	6.02	6.02	12.04
22	Mayurbhanj	26	-	650	650	22.36	22.36	44.72
23	Nabarangpur	10	-	250	250	8.6	8.6	17.2
24	Nayagarh	8	-	200	200	6.88	6.88	13.76
25	Nuapada	5	-	125	125	4.3	4.3	8.6
26	Puri	12	-	300	300	10.32	10.32	20.64
27	Rayagada	11	-	275	275	9.46	9.46	18.92
28	Sambalpur	10	-	250	250	8.6	8.6	17.2
29	Sonepur	6	-	150	150	5.16	5.16	10.32
30	Sundergarh	21	-	525	525	18.06	18.06	36.12
	Total	338	-	8450	8450	290.68	290.68	581.36

Source: Mission Shakti Department

Annexure:7.12: Agriculture Production Clusters (APC) launched by the Government (2021-22)

Sl. No.	Dist/ Coverage	No of PC Formed	No of PG formed	No of members covered	Amount of Agri-produce sold through collective marketing (In Quintal) by 932 PGs	Turnover through Collective marketing (Rs.in Lakh) by 932 PGs
1	2	3	4	5	6	7
1	Dhenkanal	1	7	840	2022	35.3
2	Mayurbhanj	3	30	3379	19290	228.2
3	Keonjhar	4	35	4230	11872.4	290.7
4	Koraput	5	56	6825	29894	764.9
5	Rayagada	3	28	2035	11556	283
6	Kandhamal	2	21	2051	6048	158.6
7	kalahandi	3	69	8219	14622	371.3
8	Boudh	1	7	855	2173	138.8
9	Bolangir	5	35	4391	15910	334.7
10	Jharsuguda	1	47	6062	3768	207.5
11	Nuapada	1	14	1702	10103	228.2
12	Sambalpur	1	14	1593	2797	228.2
	Total	30	363	42182	132599	3214

Source: Mission Shakti Department

Annexure : 7.17: Status on Key Indicators : Odisha & India

Sl. No.	Indicators	Odisha		India
		NFHS-5 (2020-21)	NFHS-4 (2015-16)	NFHS-5 (2020-21)
1	2	3	4	5
1	Total fertility rate (children per woman)	1.8	2.1	2
2	Neonatal mortality rate (NNMR)	27	28.2	24.9
3	Infant mortality rate (IMR)	36.3	39.6	35.2
4	Under-five mortality rate (U5MR)	41.1	48.1	41.9
5	Mothers who had an antenatal check-up in the first trimester (%)	76.9	64	70
6	Mothers who had at least 4 antenatal care visits (%)	78.1	61.9	58.1
7	Institutional births (%)	92.2	85.3	88.6
8	Children age 12-23 months fully vaccinated based on information from either vaccination card or mother's recall ¹¹ (%)	90.5	78.6	76.4
9	Women age 15-24 years who use hygienic methods of protection during their menstrual period ²⁶ (%)	81.5	47.4	77.3
10	Maternal Mortality Rate (MMR)	136 SRS 2017-19	150 SRS 2016-18	103 SRS 2017-19

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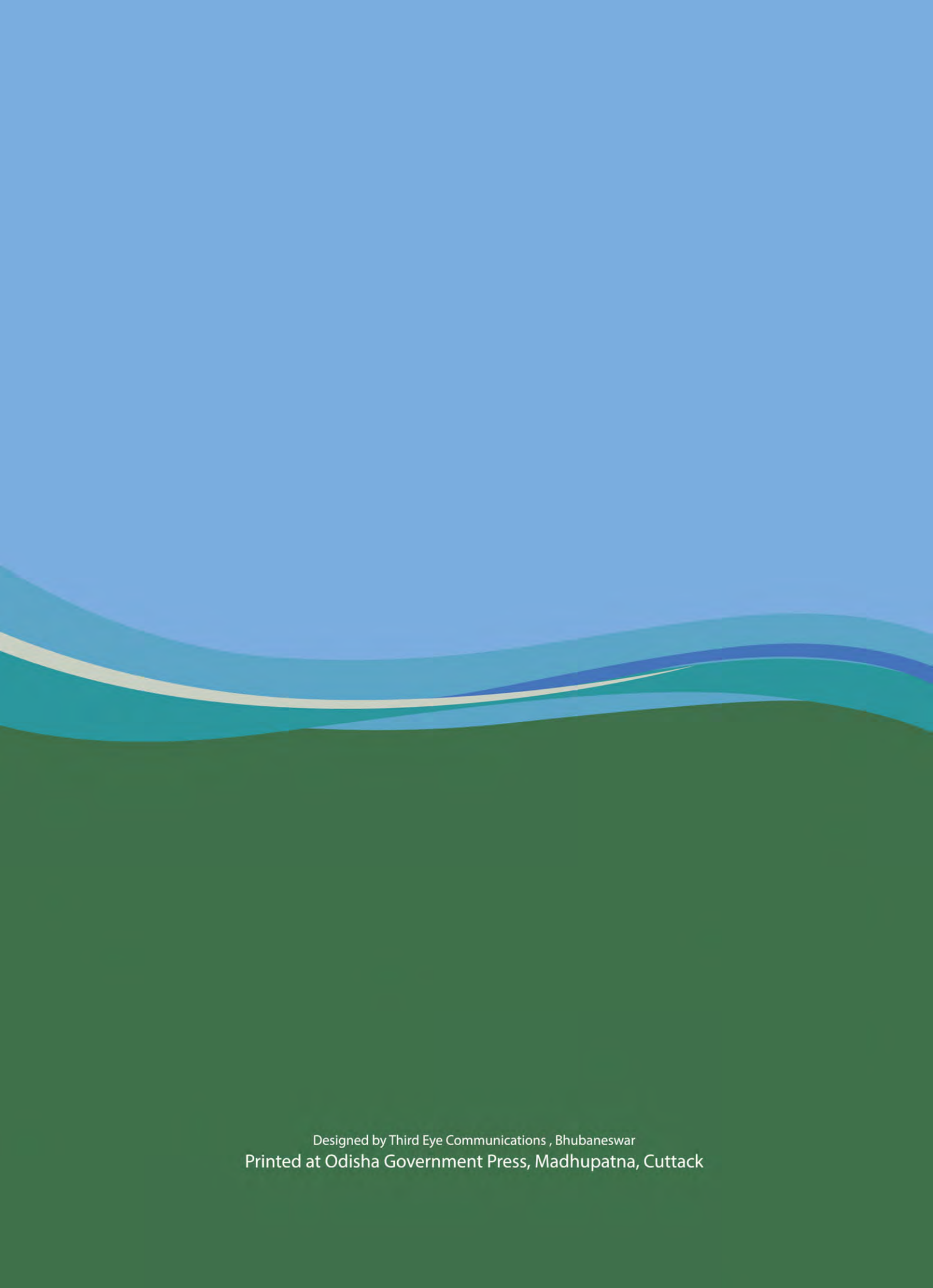
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