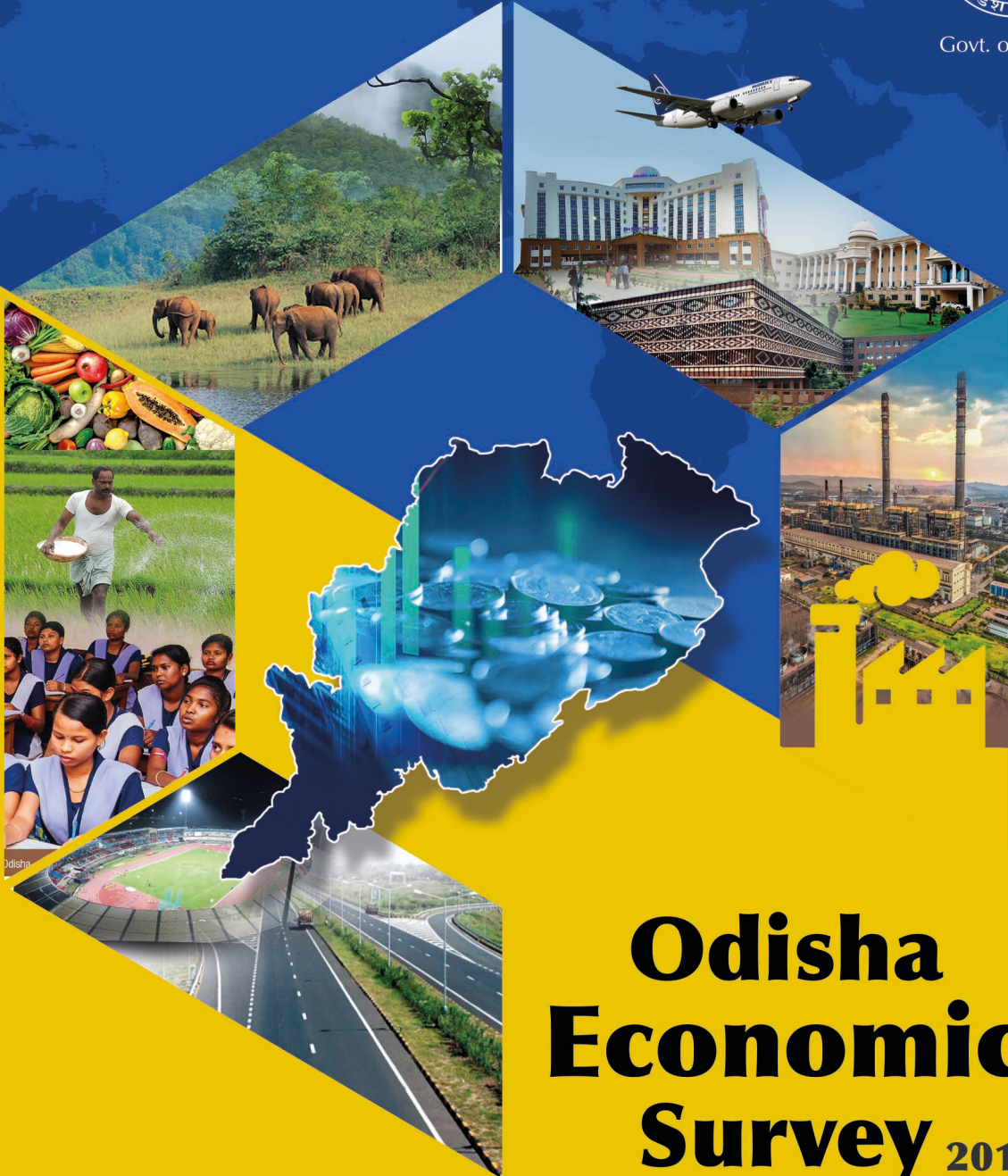




Govt. of Odisha



Odisha Economic Survey 2019-20

Odisha Economic Survey

2019-20

February 2020

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

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FOREWORD



Asit Tripathy, IAS
Chief Secretary
Government of Odisha

Odisha Economic Survey, 2019-20 highlights the sectorwise challenges and opportunities of the State's Economy. Advance estimate for 2019-20 indicates a growth of 6.16 % in GSDP at constant price and 7.66% at current price for the State compared to 5.0% growth at all India level at constant price. The slump is attributed to lower agricultural production due to natural calamities and softening of growth in Mining and Manufacturing sector. The moderate growth inspite of adverse circumstances is indicative of the resilient and sustainable character of Odisha's economy during the past decades.

Uncertain weather conditions make agriculture volatile affecting contribution of agriculture to the State's economy. The severe cyclone "Titli" in 2018 had led to decline in foodgrains production in the State. With the aim of augmenting and stabilizing farmer's income, the Government has come up with a novel initiative- "KALIA" (Krushak Assistance for Livelihood and Income Augmentation) with an unique feature covering landless farmers too. The contribution of Mining sector at 11.08 % Manufacturing sector at 18.05 % to GSDP in 2019-20 (AE) at current prices is substantial. A structural change in the State's economy has been observed during the recent past. The Service sector with 40.5 % of contribution to GSDP in 2019-20(AE) has overtaken other leading sectors of the economy. The Industry sector being the second largest sector contributed 39.06 % to the GSDP.

Odisha Economic Survey, 2019-20 highlights the emergency trends in State's economy. It presents the growth trajectory under different sectors and provides a comprehensive analysis of the development performances. It gives glimpses of the economic polices and development strategies that have turned Odisha into a State on the move alongwith the developmental and governance challenges for the State.

I compliment the efforts of Planning and Convergence Department and the Directorate of Economics and Statistics for preparation of the Odisha Economic Survey, 2019-20 and wish the publication all success.

I hope, this document will serve as a useful reference material for policy makers, planners, academicians, researchers and other stakeholders and will help shaping public policy for sustainable and inclusive growth of Odisha's economy in future.

(Asit Tripathy)

P R E F A C E



Suresh Chandra Mahapatra, IAS

Development Commissioner-cum-Additional Chief Secretary
Government of Odisha

The Odisha Economic Survey, 2019-20 makes a comprehensive assessment of the performance and structural changes in Odisha's economy in respect of social, economic and infrastructure sectors. The report highlights growth analysis and Government initiatives in key areas of Development. It outlines fiscal dimensions and effective reform measures taken by the State Government to ensure economic stabilization.

The State's economy has registered a growth of 6.16 % in the year 2019-20 (AE) surpassing the projected All India growth i.e. 5.0 %. Similarly, the State's per capita income i.e. Rs.101587/- is 6.75 % higher than the previous year. The state has reported revenue surplus and maintained gross fiscal deficits within FRBM stipulations. Moreover, the Debt to GSDP ratio has been maintained below the threshold limit of 25% consistently from 2008-09 to 2019-20 (BE), it is 20% which is really encouraging. The Capital Outlay of the State is 4.6 % of GSDP (2019-20 (AE)), which is the highest amongst the major States. State's own tax buoyancy has grown in last 7 years from 1.19 in 2011-12 to 2.05 in 2017-18. Odisha has the second highest allocation of aggregate disbursement towards development purpose, which is much higher than other States.

Among the three sectors, namely, 1) Agriculture and Allied activities, 2) Industry 3) Services Sector, Industry sector has the fastest growth due to Government's pro-active initiatives like Make-in-Odisha Conclave, Start-up Policy, Ease of doing Business framework etc.

The share of Manufacturing and Mining Sector in the State GDP is 39.6 % in 2019-20 (AE), where as the all India level contribution is 29.1 %. The steady pace of industrialization in the State has positive implications for employment generation.

To enhance the farmer's income, Government of Odisha have launched a progressive farmers welfare scheme, named KALIA. About 42.65 lakh farm households have been covered under KALIA for livelihood and income augmentation. The State Government continues to provide significant thrust for enhancing irrigation potential and public investment in the sector has increased substantially. Allocation of INR 2076 crore to this sector in the year 2007-08, has increased to INR 10,196 crore in 2018-19 which has contributed to creation of a total of 69.0 lakh ha. of irrigation potential by the end of 2018-19.

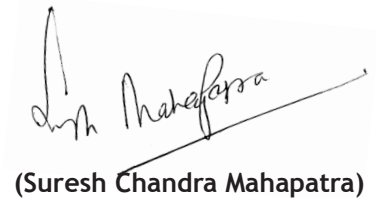
Government's commitment to equity and inclusive growth under Social Services sector has been reflected in year marking of 42.5 % of revenue expenditure for the sector. Remarkable reduction in IMR (Infant Mortality Rates) and Birth rate is due to the Government interventions in Health Sector, through different welfare schemes. In order to face the challenges in health sector, the schemes like Free Blood services, Nirmal, Khusi, (Free sanitary napkin distribution), Sunetra, Nidan and Swastha Sanjog (Mobile health units) were implemented which translated into landmark achievements in the health scenario of Odisha. Government have launched a flagship health assurance programme "Biju Swasthya Kalyan Yojana" to propel the State on a healthy trajectory.

The State's historic achievements during the time of natural calamities, evacuation and saving lives as well as quick restoration of public properties has established an international benchmark. Future challenges extends to creation of disaster resilient power infrastructure and housing for the disaster affected areas in the State.

Operationalisation of "Five Ts: i.e. Technology, Teamwork, Transparency, Time leading to Transformation" and "Mo Sarkar" as a part of 5 T programme envisions effective and transparent service delivery with the mechanism of receiving citizen's feedback on government services through ICT.

I take this opportunity to acknowledge the sincere and dedicated efforts of the Officers of Planning and Convergence Department and Directorate of Economics and Statistics and all related offices/ organizations in making this report possible.

I hope, Odisha Economic Survey, 2019-20 will be of use to the policy makers, planners, academicians, students and general public as well.

A handwritten signature in black ink, appearing to read 'Suresh Chandra Mahapatra', is written over a light blue rectangular background. The signature is written in a cursive style with a long horizontal stroke extending to the right.

(Suresh Chandra Mahapatra)

ACKNOWLEDGEMENTS



Gopabandhu Satpathy, IAS
Special Secretary
Planning and Convergence Department
Government of Odisha

The Odisha Economic Survey, 2019-20 presents both the challenges and opportunities of the State's economy with wider perspectives. The Planning and Convergence Department with the support of D E & S has prepared this important document. The concerted efforts of officers of various institutions and Department are gratefully acknowledged.

We are deeply grateful to Sri Suresh Chandra Mahapatra, Development Commissioner-cum-Additional Chief Secretary who has supported, guided and shared his intellectual inputs through Steering Committee meetings throughout.

We express our gratitude to all Departments of Govt. of Odisha, to all Additional Chief Secretaries, Principal Secretaries and Commissioner-cum- Secretaries, for their support and feedback which has enriched the report.

Our special gratitude to Sri Ashok K. Meena, IAS, Principal Secretary, Finance Department for his continuous technical support in preparing this Report.

Our appreciation to the dedicated team of Officers and staff of Planning and Convergence Department and Directorate of Economics and Statistics, Odisha and other Officers in deputation to different departments/ organisations who extended their sincere and tireless supports in preparing and compiling the Report with the schedule time.

Our thankful acknowledgement of the support provided by :

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Our thanks to all the Officers and staffs of Odisha Government Press , Cuttack for their co-operation and sincerity in printing of this report.

We extend our sincere thanks to IT Profession team of "Third Eye" for design and layout of document.

We hope "Odisha Economic Survey 2019-20" will be helpful for policy designing, strategising and analysing development initiatives of the State in future. Any suggestion from any quarters for improving the document is most welcome.

(Gopabandhu Satpathy)



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Acronyms

AABY	Aam Aadmi Bima Yojana
AAI	Airport Authority of India
AAY	Antyodaya Anna Yojana
ABMCPL	Aditya Birla Management Corporation Private Limited
ACP	Annual Credit Plan
AE	Advance Estimate
AMRUTI	Atal Mission for rejuvenation and Urban Transmission
ASI	Annual Survey of Industries
BBSA	Bhima Bhoi Bhinnakshyama Samarthya Abhiyan
BCBMP	Bhubaneswar City Bus Modinisation Programme
BGGY	Biju Gan Gadi Yojana
BGJY	Biju Gram JyotiYojana
BGS	Bus Queue Shelter
BSSY	Biju Sishu Surakshya Yojana
BKVY	Biju Krushak Vikas Yojana .
CAGA	Compound Annual Growath Aggregatge
CAGR	Compound Aggrate Growth Rate
CD Ratio	Credit Deposit Ratio
CDF	Co-operative Development Fund
CPGRAMS	Centralized Public Grievance Redressal and Monitoring System
CPP	Captive Power Plant
CRUT	Capital Region Urban Transport
CUTSL	Cuttack Urban Transport Service Limited
DAMaN	Durgama Anchalare Malaria Nirakaran
DAY	Deendayal Anoday Yojana
DBT	Direct Benefit Transfer
DCCB	District Central Co-operative Banks
DDUGJY	Deendayal Upadhaya Gramjyoti Yojana
DeGS	District e-Governance Society
DSA	Debt Sustainability
DRR	Disaster Risk Reeduction
DISE	District information system for education
DWPS	Drinking Water Pump System
EMRS	Ekalavya Model Residential Schools
ENMR	Early Neonatal Mortality Rate
ETM	Electronic Ticketing Machine
EBT	Electonic Benefit Transfer
FIF	Financial Inclusion Fund
FPO	Farmer Producer Organisation
FRUs	First Referral Units
FRBM	Fiscal Responsibility and Budget Management
FSCS	Farmers Service Co-operative Societies
GCF	Green Climate Fund
GEDCOL	Green Energy Development Corporation Limited
GGY	Gopabandhu Gramin Yojana
GKS	Gaon Kalyana Samiti
GPLF	Gram Panchayat Level Federation
GSSY	Gopanbandhu Sikhya Sahayata Yojana
GST	Goods and Services tax
HDU	High Dependency Unit
ICT	Information & Communication Technology
IDCF	Intensified Diarrhoea Control Fortnight
IDCO	Indstrial Infrastructure Development Corporation Odisha
IFMS	Integrated Financial Management System
IGNDPS	Indira Gandhi National Disabled Pensions scheme
IMR	Infant Mortality Rate
IPC	Irrigation Potential Created
IPM	Integrated Pest Management

IHH	Individual Household Latrine
IUD	Intra Uterine Device
IST	Intensive Skill Training
ISBMT	Inter State Bus Terminal
ISID	Inclusive and sustainable Development
JSSK	Janani Sishu Surakshya Karyakram
JSY	Janani Surakya Yojana
KALIA	Krushak Assistance for livelihood and Income Augmentation
KGBV	Kasturba Gandhi BalikaVidyalaya
KKGC	Kalinga Kissan Gold Loan
KMC	Kangaroo Mother Care
KVIC	Khadi and village Industries Commission
LAMPS	Large Sized Adivasi Multi-Purpose Cooperative Society
LFPR	Labour Force Participation Rate
LTIF	Long Term Irrigation Fund
LTL	Long Term Loan
LEP	Long Enhancement Programme
MAY	Mantri Awas Yojana
MBPY	Madhu Babu Pension Yojana
MDM	Midday Meal
MDPVPY	Malati Devi Prak Vidyalaya Poshak Yojana
MEG	Mono-Ethylene Glycol
MFI	Micro Finance Institution
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act.
MMB	Mukhyamantri Medha Bruti
MSME	Micro, Small and Medium Enterprise
MSP	Minimum Support Price
N.H.Ed	Nutrition and Health Education
NAFCC	National Adaptation Fund for Climate Change
NUHM	National Urban Health Mission
NBSU	New born stabilisation units
NFHS	National Family Health Survey
NHM	National Health Mission
NIF	National Indicator Framework
NIMZ	National Investment and Manufacturing Zone
NMS	National Mineral Statistics
NPA	Non-Performing Asset
NRLM	National Rural Livelihood Mission
NSAP	National Social Assistance Programme
NSC	Non-Special Category states
NSPGY	Nirman Shramik Pucca Ghar Yojana
NVU	Mobile Veterinary Unit
OBS	Odia Bhasa Bruti,
OFPO	Off Farm Producer Organisation
OGIP	Odisha Girls Incentive Programme
OIPS	Odisha Integrated Paribahan Seva
OLM	Odisha Livelihood Mission
OMC	Odisha Mining Corporation
OMMC	Odisha Minor Mineral Concession
ONAP	Odisha Nutrition Action Plan
ODF	Open Defecation Free
OPELIP	Odisha PVTG Empowerment and Livelihood Improvement Programme
OPMS	Odisha Permit Management System
ORPSA	Odisha Right to Public Services Act
ORSAC	Odisha Remote Sensing Application Centre
OSDA	Odisha Skill Development Authority
OSFDC	Odisha SC and ST Development Finance Co-operative Corporation
OSTF	Odisha State Treatment Fund

OSWAN	Odisha State wide Area Network
OSWAS	Odisha Secretariate Workflow Automation System
OTELP	Odisha Tribal Empowerment and Livelihood Programme
OTPC	Odisha Thermal Power Corporation
OUHM	Odisha Urban Housing Mission
PACS	Primary Agriculture Co-operative Societies
PATA	Pacific Asia Travel Association
PBS	Public Bicycle Sharing
PCPIR	Petroleum, Chemicals and Petrochemical Investment Region
PEETHA	Pepoles Employment Enabling Transparency & Accountability
PES	Panchayat Enterprise Suite
PF	Provident Fund
PFMS	Public Financial Management System
PMAY	Pradhan Mantri Awas Yojana
PMEGP	Prime Ministers Employment Generation Programme
PPGrant	Panchayat Performance Grant
PTR	Pupil Teacher Ratio
PMFBY	Pradhan Mantri Fasal Bima Yojana
PMKKKY	Pradhan Mantri Kisan Kalyan Yojana
PMSMA	Pradhan Mantri Surakshit Matritva Abhiyan
PNMR	Peri Natal Morality Rate
PPCs	Paddy Procurement Centers
PRIASoft	Panchayati Raj Institutions Accounting Software
PVTG	Particularly Vulnerable Tribal Groups
RBSK	Rastriya Bal Surakshya Karyakrama
RIDF	Rural Infrastructure Development Fund
RKVY	Rastriya Krushi Vikash Yojana
RMNCHA	Reproductive Maternal, Neonatal, Child Health and Adolescent
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RPL	Recognition of Prior Learning
RRB	Regional Rural Bank
RTI	The Right to Information
SAB	Skilled Attendant at Birth
SAMMPuRNA	Sishu Abong Matru Mutryuhara Purna Nirakaran Abhigan
SCA	Special Central Assistance
SGRP	State Grievances Redressal Portal
SGSY	Swarna Jayanti Gram Swaraj Yojana
SRDH	State Resident Data Hub
SSDG	State Service Delivery Gateway
SSY	Sukanya Samridhi Yojana.
STPI	Software Technology Park of India
SUH	Shelter For Urban Homeless
SUY	Shilpi Unnati Yojana
SWM	Solid Waste Management
SWAN	State Wide Area Network
TDCCOL	Tribal Development Co-operative Corporation Ltd
TFG	Tenants Farmer Groups
TFR	Total Fertility Rate
TRIPTI	Targeted Rural Initiatives for Poverty Termination and Infrastructure
TSS	Tribal Sub-Scheme
UASRRC	Urban Area Slum Rehabilitation and Redevelopment Committee
UCB	Urban Co-operative Bank
U5MR	Under 5 Mortality Rate
UPSS	Usual Principal & Subsidiary Status
VHSND	Village Health Sanitation and Nutrition Day
WIF	Warehouse Infrastructure Fund
WPR	Workers Population Ratio
WSHG	Women Self Help Group
WTO	World Trade Organisation

Overview

A. Odisha's Economic Outlook

1. Economic growth of the State is accelerating. As per advance estimate of 2019-20, it is expected to grow at 6.16% of GSDP as against 7.90% in 2018-19 (1st RE) due to lower agriculture production being affected by cyclone and deceleration in mining and manufacturing. The national economy is also projected to decelerate to 5.0% in 2019-20 (AE).
2. Per-capita income of Odisha in 2019-20 (AE), is expected to reach Rs. 1, 01,587 up from Rs 95,164 in 2018-19. As per advance estimate, 2019-20, the State's per-capita net domestic product at current price is estimated to grow at 6.75%. During the same period, the per capita net national income is estimated as Rs 1,35,050 making an increase of 6.84% as compared to Rs 1, 26,406 during 2018-19.
3. Services sector is the largest contributor to Odisha's GVA with 40.51% followed by Industries sector with 39.60% and Agriculture & allied with 19.90% in 2019-20 (AE). During the same period Agriculture & allied is expected to achieve growth at constant price (2011-12) of 7.61%, while Industries sector will attain growth of 4.88% and services sector with 6.84%. Whereas at National level the growth of Agriculture, Industry and Services sector will attain 2.80%, 2.49% & 6.86% respectively. As agriculture and industry sector is concerned, Odisha surpasses the all India growth whereas in services sector, the State's growth is at par with National figure. There is scope to further tap the service sectors' growth potential by providing supporting infrastructure. The expansion of services sector will also have immense potential to generate employment in formal sector.
4. The average annual inflation in Odisha based on CPI remained stable, between 2% and 3%, during 2017-18 to 2018-19 and increased to 3.8% in 2019-20 (till Dec). Inflation in India recorded at 4% in 2019-20 (up to Dec, 2019). Inflation in rural Odisha was mainly driven by miscellaneous groups followed by food items and fuel & light, whereas inflation in urban Odisha is influenced by miscellaneous groups followed by housing and food items.
5. Odisha is slowly moving towards production of high value crops. The share of cropped area under vegetables, fruits, oil seeds, pulses has increased from 42.37% in 2014-15 to 43.79% in 2018-19. There has been remarkable increase in production of livestock products like milk, egg and meat. Fish production has increased from 6.85 lakh MT in 2017-18 to 7.59 lakh MT in 2018-19.
6. The Government has given due importance for housing to all eligible households living in kutcha houses or homeless through programmes like Pradhan Mantri Awas Yojana (Grameen), Biju Pucca Ghar Yojana, Pucca Ghar Yojana (Mining) and Nirman Shramik Pucca Ghar Yojana. From 2014-15 to 2018-19, record target of 21.76 lakh houses have been constructed to help people live better lives.
7. The industrialization scenario of the State is changing at a rapid pace. The share of the Industry sector in State Gross Value Added (GVA) has remained around 39.6% since 2011-12. To provide impetus to State's industrialization, the Government organizes Make in Odisha Conclave since 2016 and is

emerged as number one State in the country in terms of attracting investments during April-Sep' 2019 as per CMIE.

8. To provide clean power to all, the mission of “Electricity to All” is bearing fruits. Out of 47,675 villages in Odisha, 99.64% in habited revenue villages have been electrified by the end of 31st March 2019.
9. Odisha is steadily heading towards transforming the lives of urban poor to liveable habitats and to improve the lives of the poor through JAGA Mission, being acclaimed as world’s largest slum land titling project.
10. The Government has embarked on an ambitious ‘Drink from Tap’ mission. It aims to provide 24x7 drinking water supply to all urban households through metered connections. In FY 19-20, pilots have been initiated in 8 zones across 2 ULBs (Bhubaneswar and Puri) covering approximately 22,000 households and a population of approximately 1.2 lakh urbanites. Through “Jal Jogan Melas”, the Government aims to all the ULBs in the State to achieve 100% coverage of all Urban Households under the Piped Water Supply Scheme in the State by providing new connections in the project area with exemption of connection fee for the urban poor where distribution networks have been laid and also in those areas where distribution network is existing but sufficient connections have not been given.
11. Trade and repair sector is the largest contributor to the service sector’s output in the State and grew at an average rate of 7.9%. Tourism sector is also a major engine of economic growth in services sector that contributes significantly in terms of GSDP, foreign exchange earnings and employment. About 155.10 lakh domestic tourists and 1.14 lakh foreign tourists visited Odisha during 2018-19, registering growth rate of 8.75% and 10.41%, respectively.
12. The State had a total road length of 2,68,656 kms by the end of 2018-19, growing 1.65% over 2017-18. Other District Roads (ODR) witnessed the highest growth of 25.06% over the last year. Thus emphasis has been given to road infrastructure in the State that provides last mile connectivity.
13. 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. 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. During 2018-19, a total of 1,31,027 SHGs have been credit linked with banks, availing a total credit of Rs,1,98,270.87 lakh. The State bagged national award for outstanding performance in Financial Inclusion under DAY-NRULM in 2018.
14. Government of Odisha has maintained its share of social spending in overall expenditure. As per budget estimate 2019-20, social sector spending was 42.5% of total expenditure as against 43.3% in 2018-19(RE).
15. Odisha has made significant strides in improving health outcomes through particular emphasis on health sector reforms.

Key Health Indicators	Odisha (NFHS-2015-16)	India (NFHS(2015-16)
IMR	40	41
U5 Mortality	48	50
Use of Family Planning Method(Any method(%))	57.3	53.5
Mother who had full antenatal care(%)	23	21
Institutional birth(%)	85.4	78.9
Children age(12-23 months) fully immunized	78.6	62.0
Children under 5 who are stunted(%)	34.1	38.4
Children under 5 who are wasted (%)	20.4	21.0
Children under 5 who are underweight (%)	34.4	35.8

16. Woman and child nutrition is a major public health challenge faced by many developing states including Odisha. The State Government accorded priority to nutrition by increasing total allocation for nutrition from 41.35% in 2016-17 to 49.77% in 2018-19.
17. PTR (Pupil Teacher Ratio) is defined as the average number of pupils per teacher in a school in a given year. The RTE Act prescribes that the PTR should be 30:1 and 35:1, at the primary and upper primary level, respectively. Odisha's PTR for the corresponding levels stood at 20:1 and 23:1 during 2018-19, which are better than the prescribed norms. At the secondary level, PTR in Odisha was 23:1 during this period.
18. Gender Parity Index (GPI) in education reflects the discrimination against girls in access to educational opportunities. Closer the GPI is to one, higher is the State to achieving gender equality. The GPI of primary education, upper primary education and secondary education are 0.93, 0.92 and 1.01 respectively during 2017-18.
19. Learning outcomes in Odisha seem to improve with advancements in the education level incase of Maths and Science subjects. The NAS, 2017 for Class VIII indicates that, on an average, percentage of correct responses in Maths by students in Odisha (44) was higher than the national average (42). In case of science, the scores were same.
20. Mission Shakti has become a silent revolution in the state transforming the lives of women with 6,02,013 WSHGs comprising of 70,00,010 women. 3.11 lakh SHGs have received financial assistance for digital empowerment during 2018-19 in the first phase. Remaining SHGs will be provided with financial assistance in the financial year 2019-20 in second phase.
21. In order to ensure tribal development more effective, inclusive and participatory, Government has set up Special Development Council in 9 Districts of the State having the highest concentration of tribal population, such as Mayurbhanj, Kenonjhar, Sundergarh, Kandhamal, Gajapati, Koraput, Rayagada, Nabarangpur and Malkangiri. During 2017-18 and 2018-19, projects like 2974 scared groves, 598 tribal weekly markets, 445 tribal cultural clubs, exposure visit of 10724 Tribal delegates completed.

22. Despite the development expenditure requirements, the State has shown attributes of effective fiscal discipline. The State has successfully managed to maintain an average revenue surplus (as a percentage of GSDP) i.e 2.5% during the last 5 years, (from 2014-15 to 2018-19 RE), while all states average shows a deficit.
23. Odisha is the most affected state by natural disasters and is therefore experienced the greatest human and economic impacts. During the last decade, the State has faced one or other forms of disasters like flood, cyclone, tornado or drought year after year. The Government takes various measures to face natural disasters and to minimise loss of life and property by creating disaster resilient infrastructure.
24. To make the governance more people centric, the Government has launched Mo Sarkar programme in which ministers and higher authority would dial common citizens to seek feedback on the kind of response they get during recent visits to Government offices.
25. With the availability of resources and opportunities ahead, a more proactive approach in advocating policies and development of institutions and administrative system, enhanced collaboration with national and international institutions could lead the State to one of the best performing economies across the globe.

Overview

A. Odisha's Economic Outlook

1. Economic growth of the State is accelerating. As per advance estimate of 2019-20, it is expected to grow at 6.16% of GSDP as against 7.90% in 2018-19 (1st RE) due to lower agriculture production being affected by cyclone and deceleration in mining and manufacturing. The national economy is also projected to decelerate to 5.0% in 2019-20 (AE).
2. Per-capita income of Odisha in 2019-20 (AE), is expected to reach Rs. 1, 01,587 up from Rs 95,164 in 2018-19. As per advance estimate, 2019-20, the State's per-capita net domestic product at current price is estimated to grow at 6.75%. During the same period, the per capita net national income is estimated as Rs 1,35,050 making an increase of 6.84% as compared to Rs 1, 26,406 during 2018-19.
3. Services sector is the largest contributor to Odisha's GVA with 40.51% followed by Industries sector with 39.60% and Agriculture & allied with 19.90% in 2019-20 (AE). During the same period Agriculture & allied is expected to achieve growth at constant price (2011-12) of 7.61%, while Industries sector will attain growth of 4.88% and services sector with 6.84%. Whereas at National level the growth of Agriculture, Industry and Services sector will attain 2.80%, 2.49% & 6.86% respectively. As agriculture and industry sector is concerned, Odisha surpasses the all India growth whereas in services sector, the State's growth is at par with National figure. There is scope to further tap the service sectors' growth potential by providing supporting infrastructure. The expansion of services sector will also have immense potential to generate employment in formal sector.
4. The average annual inflation in Odisha based on CPI remained stable, between 2% and 3%, during 2017-18 to 2018-19 and increased to 3.8% in 2019-20 (till Dec). Inflation in India recorded at 4% in 2019-20 (up to Dec, 2019). Inflation in rural Odisha was mainly driven by miscellaneous groups followed by food items and fuel & light, whereas inflation in urban Odisha is influenced by miscellaneous groups followed by housing and food items.
5. Odisha is slowly moving towards production of high value crops. The share of cropped area under vegetables, fruits, oil seeds, pulses has increased from 42.37% in 2014-15 to 43.79% in 2018-19. There has been remarkable increase in production of livestock products like milk, egg and meat. Fish production has increased from 6.85 lakh MT in 2017-18 to 7.59 lakh MT in 2018-19.
6. The Government has given due importance for housing to all eligible households living in kutcha houses or homeless through programmes like Pradhan Mantri Awas Yojana (Grameen), Biju Pucca Ghar Yojana, Pucca Ghar Yojana (Mining) and Nirman Shramik Pucca Ghar Yojana. From 2014-15 to 2018-19, record target of 21.76 lakh houses have been constructed to help people live better lives.
7. The industrialization scenario of the State is changing at a rapid pace. The share of the Industry sector in State Gross Value Added (GVA) has remained around 39.6% since 2011-12. To provide impetus to State's industrialization, the Government organizes Make in Odisha Conclave since 2016 and is

emerged as number one State in the country in terms of attracting investments during April-Sep' 2019 as per CMIE.

8. To provide clean power to all, the mission of “Electricity to All” is bearing fruits. Out of 47,675 villages in Odisha, 99.64% in habited revenue villages have been electrified by the end of 31st March 2019.
9. Odisha is steadily heading towards transforming the lives of urban poor to liveable habitats and to improve the lives of the poor through JAGA Mission, being acclaimed as world’s largest slum land titling project.
10. The Government has embarked on an ambitious ‘Drink from Tap’ mission. It aims to provide 24x7 drinking water supply to all urban households through metered connections. In FY 19-20, pilots have been initiated in 8 zones across 2 ULBs (Bhubaneswar and Puri) covering approximately 22,000 households and a population of approximately 1.2 lakh urbanites. Through “Jal Jogan Melas”, the Government aims to all the ULBs in the State to achieve 100% coverage of all Urban Households under the Piped Water Supply Scheme in the State by providing new connections in the project area with exemption of connection fee for the urban poor where distribution networks have been laid and also in those areas where distribution network is existing but sufficient connections have not been given.
11. Trade and repair sector is the largest contributor to the service sector’s output in the State and grew at an average rate of 7.9%. Tourism sector is also a major engine of economic growth in services sector that contributes significantly in terms of GSDP, foreign exchange earnings and employment. About 155.10 lakh domestic tourists and 1.14 lakh foreign tourists visited Odisha during 2018-19, registering growth rate of 8.75% and 10.41%, respectively.
12. The State had a total road length of 2,68,656 kms by the end of 2018-19, growing 1.65% over 2017-18. Other District Roads (ODR) witnessed the highest growth of 25.06% over the last year. Thus emphasis has been given to road infrastructure in the State that provides last mile connectivity.
13. 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. 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. During 2018-19, a total of 1,31,027 SHGs have been credit linked with banks, availing a total credit of Rs,1,98,270.87 lakh. The State bagged national award for outstanding performance in Financial Inclusion under DAY-NRULM in 2018.
14. Government of Odisha has maintained its share of social spending in overall expenditure. As per budget estimate 2019-20, social sector spending was 42.5% of total expenditure as against 43.3% in 2018-19(RE).
15. Odisha has made significant strides in improving health outcomes through particular emphasis on health sector reforms.

Key Health Indicators	Odisha (NFHS-2015-16)	India (NFHS(2015-16)
IMR	40	41
U5 Mortality	48	50
Use of Family Planning Method(Any method(%))	57.3	53.5
Mother who had full antenatal care(%)	23	21
Institutional birth(%)	85.4	78.9
Children age(12-23 months) fully immunized	78.6	62.0
Children under 5 who are stunted(%)	34.1	38.4
Children under 5 who are wasted (%)	20.4	21.0
Children under 5 who are underweight (%)	34.4	35.8

16. Woman and child nutrition is a major public health challenge faced by many developing states including Odisha. The State Government accorded priority to nutrition by increasing total allocation for nutrition from 41.35% in 2016-17 to 49.77% in 2018-19.
17. PTR (Pupil Teacher Ratio) is defined as the average number of pupils per teacher in a school in a given year. The RTE Act prescribes that the PTR should be 30:1 and 35:1, at the primary and upper primary level, respectively. Odisha's PTR for the corresponding levels stood at 20:1 and 23:1 during 2018-19, which are better than the prescribed norms. At the secondary level, PTR in Odisha was 23:1 during this period.
18. Gender Parity Index (GPI) in education reflects the discrimination against girls in access to educational opportunities. Closer the GPI is to one, higher is the State to achieving gender equality. The GPI of primary education, upper primary education and secondary education are 0.93, 0.92 and 1.01 respectively during 2017-18.
19. Learning outcomes in Odisha seem to improve with advancements in the education level incase of Maths and Science subjects. The NAS, 2017 for Class VIII indicates that, on an average, percentage of correct responses in Maths by students in Odisha (44) was higher than the national average (42). In case of science, the scores were same.
20. Mission Shakti has become a silent revolution in the state transforming the lives of women with 6,02,013 WSHGs comprising of 70,00,010 women. 3.11 lakh SHGs have received financial assistance for digital empowerment during 2018-19 in the first phase. Remaining SHGs will be provided with financial assistance in the financial year 2019-20 in second phase.
21. In order to ensure tribal development more effective, inclusive and participatory, Government has set up Special Development Council in 9 Districts of the State having the highest concentration of tribal population, such as Mayurbhanj, Kenonjhar, Sundergarh, Kandhamal, Gajapati, Koraput, Rayagada, Nabarangpur and Malkangiri. During 2017-18 and 2018-19, projects like 2974 scared groves, 598 tribal weekly markets, 445 tribal cultural clubs, exposure visit of 10724 Tribal delegates completed.

22. Despite the development expenditure requirements, the State has shown attributes of effective fiscal discipline. The State has successfully managed to maintain an average revenue surplus (as a percentage of GSDP) i.e 2.5% during the last 5 years, (from 2014-15 to 2018-19 RE), while all states average shows a deficit.
23. Odisha is the most affected state by natural disasters and is therefore experienced the greatest human and economic impacts. During the last decade, the State has faced one or other forms of disasters like flood, cyclone, tornado or drought year after year. The Government takes various measures to face natural disasters and to minimise loss of life and property by creating disaster resilient infrastructure.
24. To make the governance more people centric, the Government has launched Mo Sarkar programme in which ministers and higher authority would dial common citizens to seek feedback on the kind of response they get during recent visits to Government offices.
25. With the availability of resources and opportunities ahead, a more proactive approach in advocating policies and development of institutions and administrative system, enhanced collaboration with national and international institutions could lead the State to one of the best performing economies across the globe.

Chapter-1

Economy of Odisha

Economic Growth

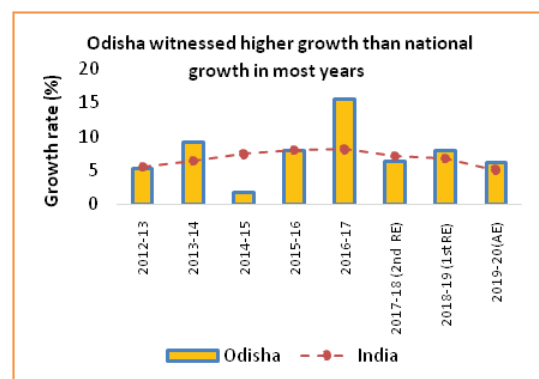
Odisha registered higher economic growth of 6.16% in the year 2019-20 compared to all India growth of 5.0%(AE). The State's real Gross State Domestic Product (GSDP) growth in 2019-20 declined compared to the growth in 2018-19 due to lower agriculture production and deceleration in mining and manufacturing. Growth in the economy of the state is largely driven by agriculture(crops), manufacturing & mining sub sectors. The industries sector showed rising trend from 2015-16 to 2018-19 before declining marginally at 39.6% in 2019-20, while share of services sector exceeded both industries and agriculture & allied sector and kept on rising from 38.5% in 2011-12 to 43.3% in 2015-16 and thereafter 39.9% in 2016-17, 41.6% in 2017-18. But it again decelerated to 40.2% in 2018-19 and remained at 40.5% in 2019-20. The expansion of services sector has also immense potential to generate employment in formal sector. Tourism sector is also a major engine of economic growth that contributes significantly in terms of GSDP, foreign exchange earnings and employment. It needs further improvement to attract more tourist' arrivals.

The Government emphasizes on further growth with initiatives like Make in Odisha Conclave, adoption of Industrial Policy Resolution, 2015 and Ease of Doing Business framework and new Agriculture Policy, 2019-20.

The Cyclone of 2019-20 may cause a contraction in agricultural output. The sector needs boost in activities like livestock rearing and aquaculture to support higher growth in agriculture and allied sector and these have the potential to be the drivers of sustainable agricultural growth.

1.1.1 After dip in growth in 2014-15, as mining and manufacturing decelerated, the growth of Odisha recovered in 2015-16 to 8% and thereafter it jumped to 15.6% in 2016-17 due to high production in agriculture, more fiscal consolidation and increase in manufacturing output. Growth softened further in 2017-18 with 6.3% owing to reduced agriculture production and contraction in manufacturing and mining sector. In 2018-19, it rose further to 7.9% due to higher agriculture production along with fiscal consolidation. In 2019-20,

Figure 1.1: Comparison of GDP growth rate for Odisha and India



Source: Directorate of Economics & Statistics (DES), Odisha and Central Statistics Office (CSO), based on GSDP/GDP, 2019-20

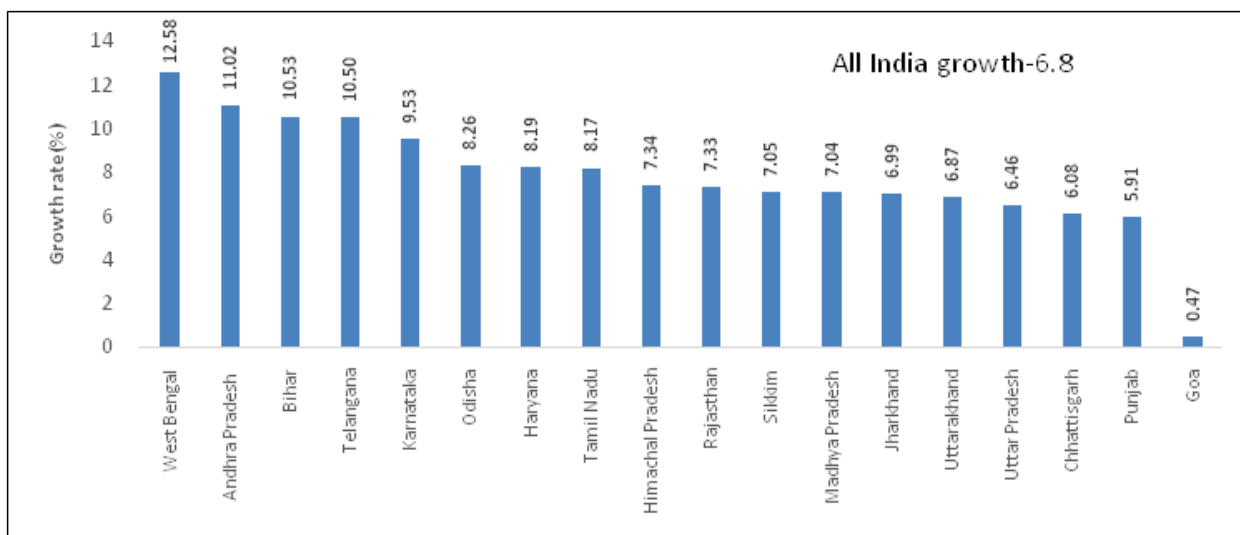
it is expected to grow at 6.16% as per advance estimate of GSDP due to lower agriculture production and deceleration in mining and manufacturing.

1.1.2 Since 2012-13, the GDP of the state has been growing at an average annual rate of 7.5%; this has enabled the state's output to grow at a faster pace than the national GDP in the last 8 years, except in 2014 -15 (Figure 1.1). During the same period, the growth at national level is averaging at 6.8%.

GSDP growth across states for 2018-19

1.1.3 In the year 2018-19, states like West Bengal, Andhra Pradesh, Bihar and Telangana were having growth rate of above 10%. Out of 18 states, growth of 14 states including Odisha was above all India level with 6.8%. The states like Uttar Pradesh, Chhattisgarh, Punjab, and Goa grew below national level.

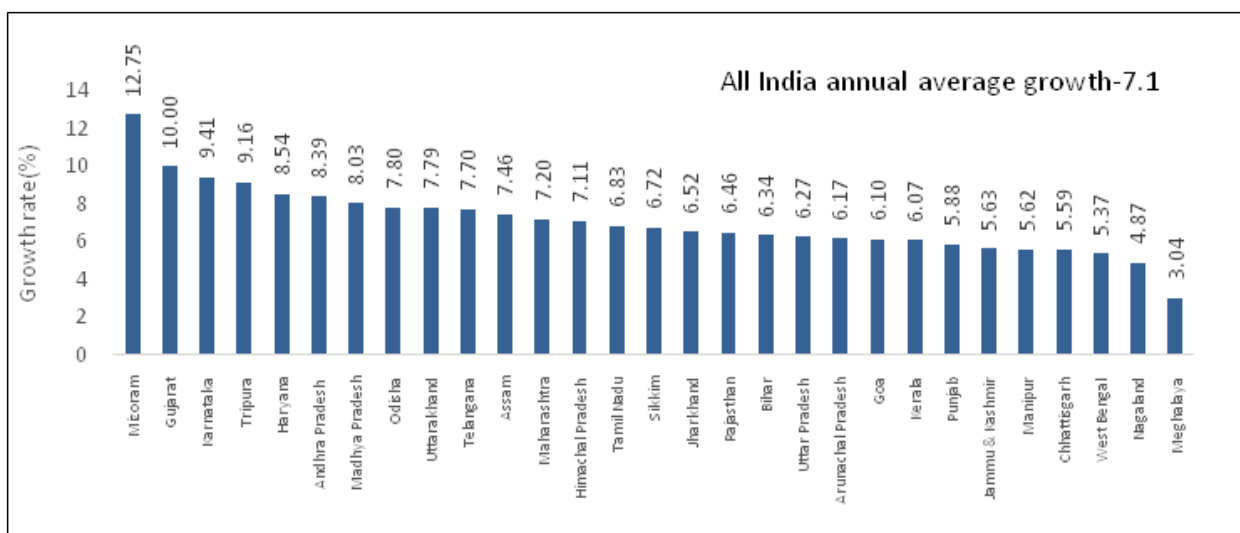
Figure-1.2: GSDP growth rate across states for 2018-19



Source: CSO, Govt of India (Data based on GSDP, 2018-19)

1.1.4 Between 2012-13 to 2017-18, thirteen states including Odisha recorded higher average growth which is above all India growth of 7.1%. The details are shown in Fig.1.3 below.

Figure 1.3 Average annual GSDP growth rate (2012-13 to 2018-19)

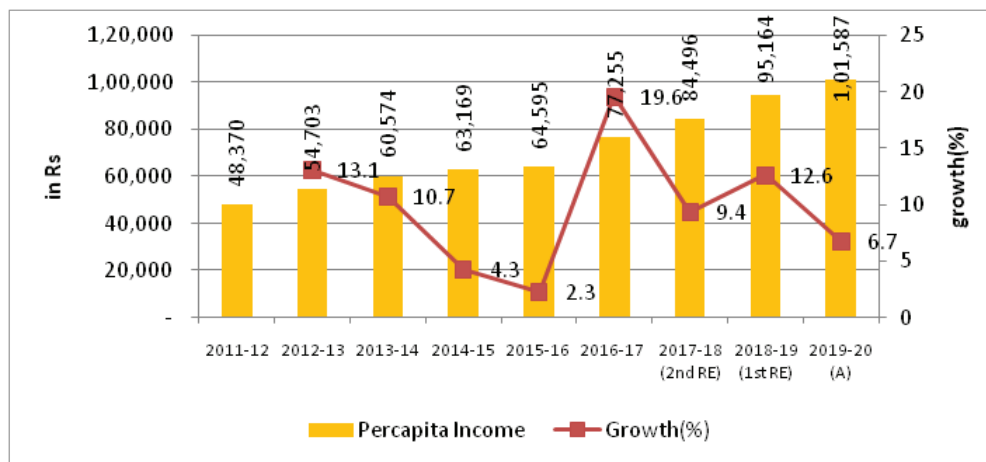


Source: CSO, Govt of India, based on GSDP, 2018-19

Per-capita Income

1.1.5 Per capita income measures the standard of living of a state/nation. The figure-1.4 presents per capita income of Odisha from 2011-12 to 2019-20 and its growth from 2012-13 to 2019-20. It is increasing over the years reflecting rise in income of the state. But the growth of Per-capita income witnessed fluctuating trend over the years as it reached the highest level with 19.6% growth in 2016-17 from 2.26% in 2015-16. It again leaped to 12.63% in 2018-19 after a decline in 2017-18 with 9.4%. During 2019-20, it is expected to grow at 6.75%.

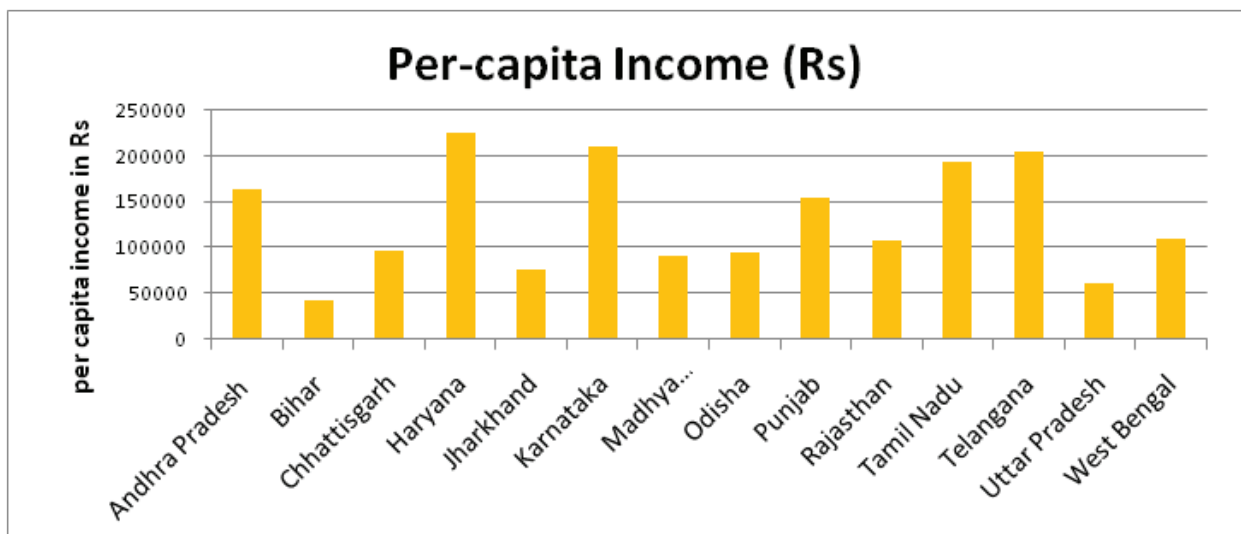
Figure:1.4: Per-capita Income(in Rs) of Odisha and Growth(%)



Source: GSDP, 2019-20, DES, Odisha

1.1.6 Per-capita income varies across the states with Rs 1,64,025 for Andhra Pradesh, Rs. 96,887 for Chhattisgarh, Rs. 2,26,644 for Haryana. Rs. 210827 for Karnataka and Rs. 95,164 for Odisha during 2018-19. The all India per capita income stands at Rs. 1,26,406 in 2018-19.

Figure-1.5: Per capita Income of major States



Source: CSO, New Delhi/ DES, Odisha based on GDP/GSDP, 2018-19

1.1.7 The per-capita income level of different states for 2011-12 and average growth of per-capita income from 2012-13 to 2014-15 and per-capita income for 2014-15 with its average growth from 2015-16 to 2018-19 have been analyzed to find out whether states with lower per capita income move or converge towards high per capita income states on sustained basis. The two time period graphs below show a positive relationship between per capita income level of a state and its growth i.e., the states with higher per capita income continue to move faster, thereby creating a distance from states with low per capita income.

Figure-1.6: Percapita Income of States in 2011-12 and growth from 2012-13 to 2014-15

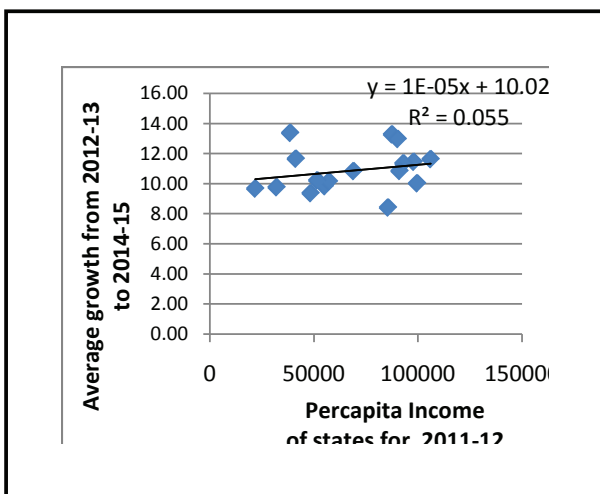
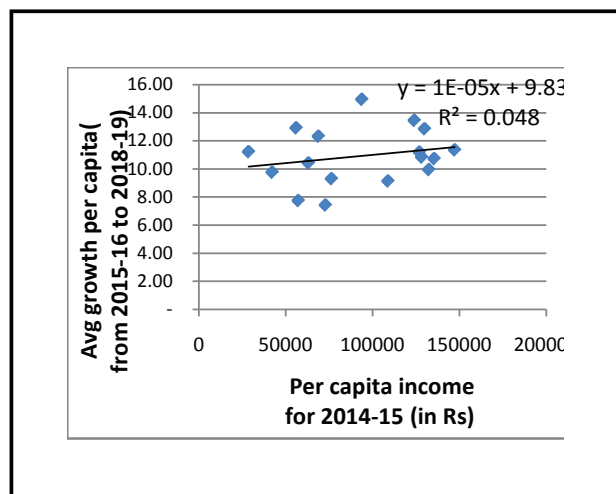


Figure-1.7: Percapita Income of States in 2014-15 and growth from 2015-16 to 2018-19

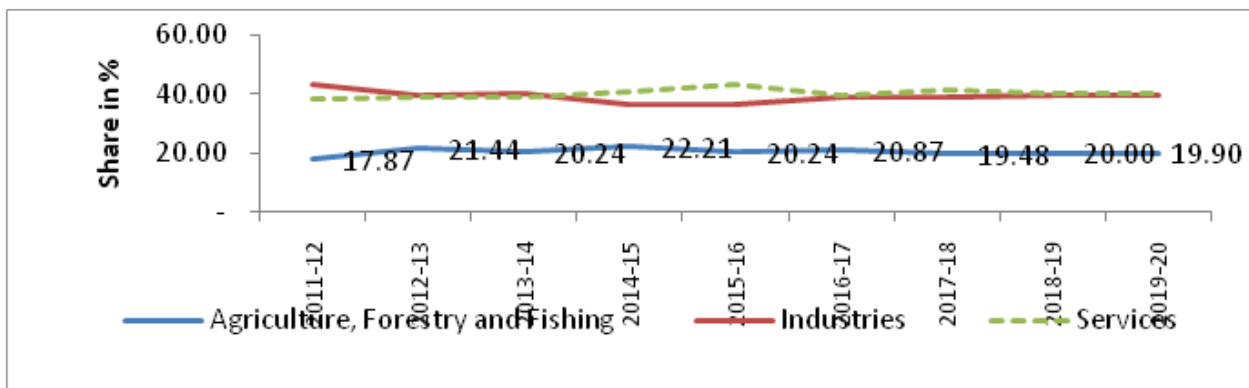


Source: CSO, New Delhi/ DES, Odisha based on GDP/GSDP, 2018-19

Sectoral Composition

1.1.8 In respect of sectoral composition of GSDP since 2011-12, a skewed pattern existed, wherein the share of agriculture & allied sector was fluctuating overtime due to natural shocks. The share of Industries sector showed rising trend from 2015-16 to 2018-19 before declining marginally to 39.6% in 2019-20, while share of services sector exceeded both industries and agriculture & allied sector and kept on rising from 38.5% in 2011-12 to 43.3% in 2015-16 and thereafter 39.9% in 2016-17, 41.7% in 2017-18. But it again declined to 40.2% in 2018-19 and remained at 40.5% in 2019-20.

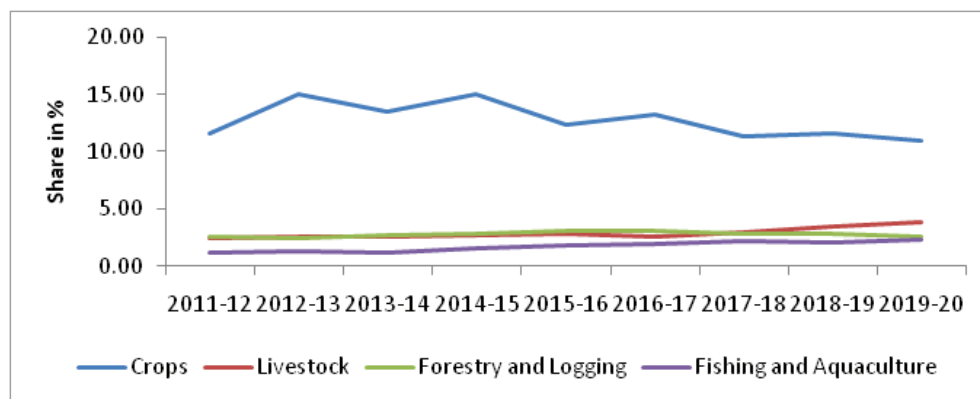
Figure 1.8: Sectoral share of GSDP from 2011-12 to 2019-20



Source:GSDP, 2019-20,DES, Odisha

1.1.9 As regards components of Agriculture & allied sector, it is found that share of crop sector dominated others, although it fluctuated more compared to other sub sectors like livestock, forestry and fishery. But its average share remained at 12.7% over the years. In 2019-20, the share of crops declined to 11% from 11.6% in 2018-19 due to lower production. The share of livestock averaged at 2.9%. It increased to 3% in 2017-18 from 2.6% in 2016-17 and showed increasing trend with 3.5% in 2018-19 and 3.9% in 2019-20. Although the average share of forestry sector remained at 2.8%, its share has been declining from 3.1% in 2016-17 to 2.9% in 2017-18, 2.8% in 2018-19 and 2.6% in 2019-20. Fisheries sector with average share of 1.8% kept on increasing from 2014-15 with 1.5% and increased to 2.4% in 2019-20.

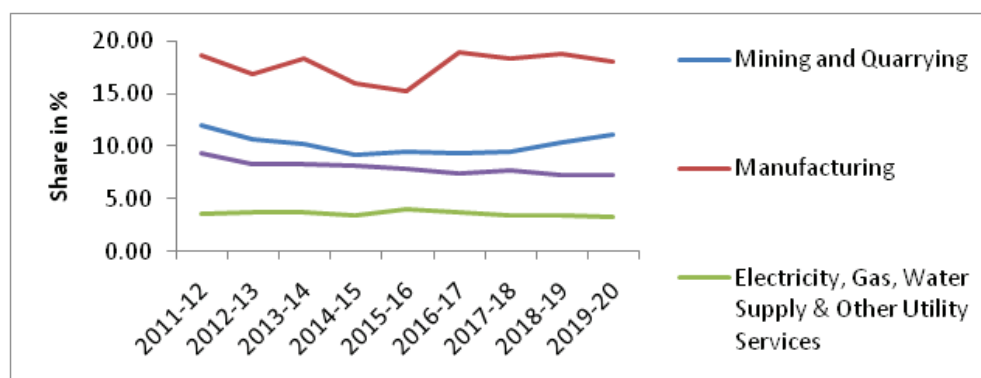
Figure-1.9: Share of sub-sectors of agriculture & allied to total GSVA



Source: GSVA, 2019-20, DES, Odisha

1.2.0 Regarding components of Industries sector, manufacturing with average share of 17.7% overtook mining, construction, electricity, gas & water supply showed upward movements from 2016-17 with 19% and remained at 18.4% in 2017-18, 18.9% in 2018-19 and 18.1% in 2019-20. Mining with average share of 10.2% showed increasing trend from 2017-18 to 2019-20 with 9.4% in 2017-18, 10.3% in 2018-19 and 11.1% in 2019-20. The average share of construction sector was 7.9% and it exhibited downward movements from 2014-15 onwards, while the share of electricity, gas & water supply sub-component remained constant at about 3.6% over the years.

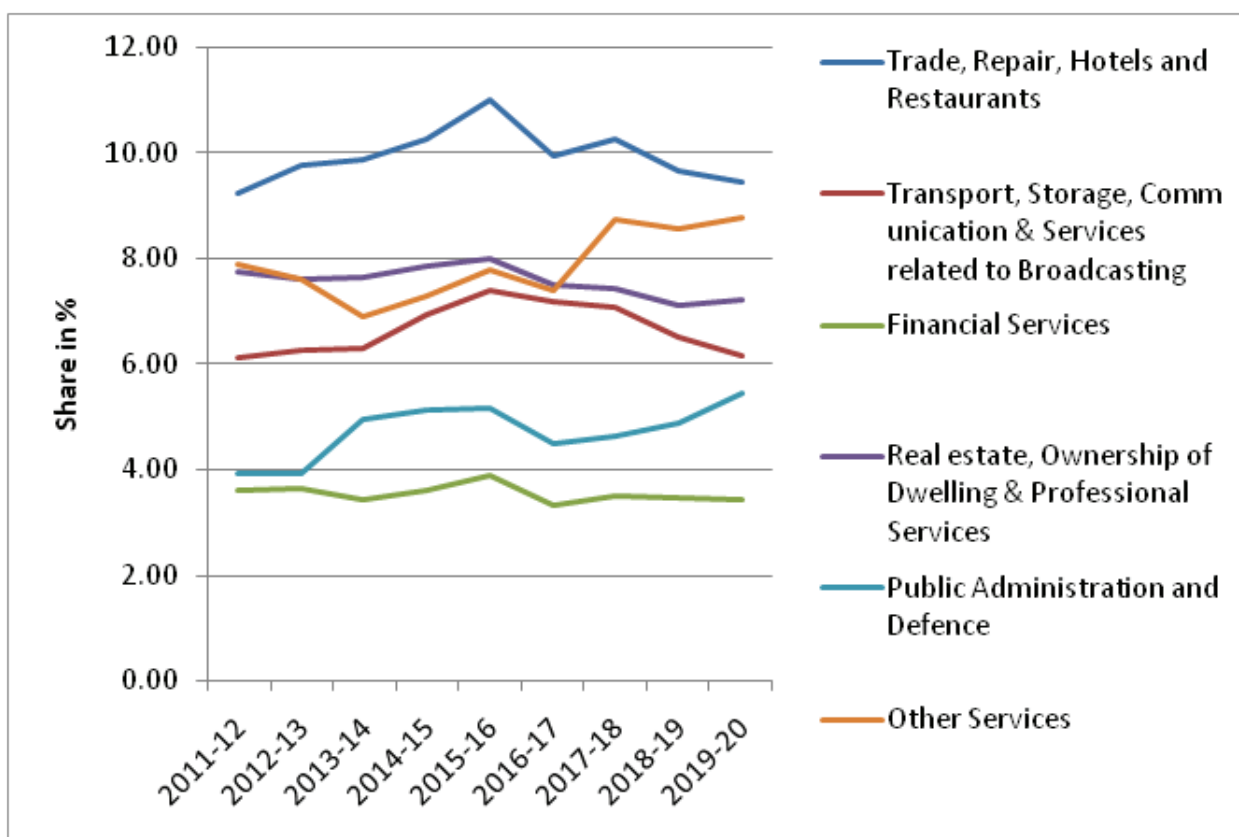
Figure-1.10: Share of sub-components of Industries Sector



Source: GSVA, 2019-20, DES, Odisha

1.2.1 Among the components of services sector, trade, hotel & restaurant contributed highest average share of 9.9% followed by other services with 7.9% and Real estate etc with 7.6%. The average contribution of transport & communication etc remained at 6.7%, while it is 4.7% for public administration and 3.6% for financial services. Further it is noticed that the share of other services increased to 8.8% in 2019-20 from 8.6% in 2018-19. As regards public administration, it increased to 5.5% in 2019-20 from 4.9% in 2018-19. It is found that public administration and financial services almost had the same share in GSDP during 2011-12 and 2012-13. From 2013-14 onwards, public administration overtook financial services due to efficient fiscal consolidation at Government level. The trade & hotel sector and transport & communication sector have seen its share shrinking in 2019-20 as compared to 2018-19.

Figure-1.11: Share of sub-components of Services Sector



Source: GSDP, 2019-20, DES, Odisha

Sectoral Growth

Agriculture and allied activities

1.2.2 The agriculture sector in Odisha constituted 19.9% of GSVA in 2019-20(AE). The growth of crop sub sector appeared to be more volatile due to natural shocks like cyclone in 2013-14, drought in 2015-16 and pest attack in 2017-18 which affected crop production. In 2012-13 and 2016-17, the growth of crops sub sector was at its peak with 23.4% and 23.1% respectively. During 2012-13 to 2019-20, the crop sector growth averaged at 2.5% only.

Table 1.1: The growth rates of various components in the agriculture sector in Odisha (in %)

Economic Activity	Growth over previous year							
	2012-13	2013-14	2014-15	2015-16	2016-17 (3rd RE)	2017-18 (2nd RE)	2018-19 (1st RE)	2019-20 (A)
Agriculture, Forestry and Fishing	15.85	-4.16	7.84	-12.73	19.84	-8.15	8.42	7.61
Crops	23.42	-9.17	10.11	-22.19	23.14	-17.53	9.11	2.93
Livestock	2.12	9.64	-3.60	4.83	3.15	7.39	14.26	20.68
Forestry and Logging	-3.45	9.34	5.69	5.75	21.79	0.49	1.34	7.64
Fishing and Aquaculture	12.44	-1.68	13.52	10.58	21.93	17.08	8.72	12.08

Source: Directorate of Economics & Statistics (DES), Odisha

1.2.3 The growth trends in livestock and fishery sector showed upward movements, while forestry sector growth showed fluctuation. The Government has initiated measures like new Agriculture Policy, 2020 and implementation of agriculture production cluster including measures in livestock and fishery sector to boost up growth in agriculture & allied sector.

Industry Sector

1.2.4 The Industry sector continues to have a growing contribution in the state's GVA, with a 39.6% share and a growth rate of 4.9% in 2019-20 (AE). This sector comprises Mining & Quarrying; Manufacturing; Electricity, Gas & Water-supply and Construction activities. Manufacturing is the leading sub-sector under industries, which grew at 10.7% in 2015-16, 33.2% in 2016-17, 8.6% in 2017-18 and 7.6% in 2018-19 except a dip in 2012-13 and 2014-15. The growth rate is expected to decline to 5.9% in 2019-20(AE).

Table 1.2: The growth rates of various components in the Industries sector in Odisha (in %)

Economic Activity	2012-13	2013-14	2014-15	2015-16	2016-17 (3rd RE)	2017-18 (2nd RE)	2018-19 (1st RE)	2019-20 (A)
Mining and Quarrying	-1.96	19.29	-7.94	28.83	13.74	-3.38	16.18	3.42
Manufacturing	-3.19	21.21	-9.43	10.66	33.17	8.56	7.61	5.92
Electricity, Gas, Water Supply & Other Utility Services	19.23	6.78	-6.89	20.27	7.35	-1.91	10.05	5.14
Construction	-2.43	6.73	-0.29	0.36	7.12	7.88	7.68	4.42

Source: GSDP, 2019-20, DES, Odisha

1.2.5 The Government of Odisha has been taking numerous measures to harness the state's potential in manufacturing. The state aspires to be the industrial gateway for eastern region of India. Make in Odisha and reforms under Ease of Doing Business are some of the examples through which the state endeavours to attract private investment and boost Industry sector's growth.

1.2.6 The growth in mining (16.2% in 2018-19 and 3.4% in 2019-20) and construction sector (7.7% in 2018-19 and 4.4% in 2019-20) showed fluctuations and therefore need more attention for its balanced growth. The Electricity, Gas & Water-supply sub-sector is expected to grow at 5.1% in 2019-20.

Services Sector

1.2.7 Services sector is the largest contributor in Odisha's GVA (40.5% estimated for 2019-20 AE). Over the last few years, this sector's growth has been relatively more stable than the primary sectors, making it one of the drivers of the economy. In 2019-20, the sector is expected to grow at 6.8%.

1.2.8 Ancillary services to the industry sector contribute the largest share in output and witnessing growth. As manufacturing and mining activities increase, the demand for services such as transport, finance, communications, logistics etc. increase correspondingly. During 2019-20, growth in manufacturing and mining sectors are expected to decline, resulting in lower growth in services sectors like trade, transport, communication etc. Accordingly, these sub-sectors are expected to exhibit lower growth in 2019-20 compared to 2018-19. Real estate, Public Administration and other services trended higher growth in 2019-20 over 2018-19.

Table 1.3: Growth rates of various components in the Services sector in Odisha (in %)

Activity	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Trade, Repair, Hotels and Restaurants	11.71	7.92	8.07	15.07	3.69	9.12	4.09	3.50
Transport, Storage, Communication etc	12.01	8.61	12.32	10.63	7.65	7.76	0.58	0.89
Financial Services	12.82	3.43	9.60	7.73	0.61	18.91	13.56	6.20
Real estate, OD Professional Services	3.72	6.71	5.97	7.62	7.33	8.44	5.9	7.43
Public Administration and Defence	6.95	35.35	7.31	6.97	0.20	8.92	18.92	20.82
Other Services	0.20	-4.37	4.07	4.44	3.98	22.54	26.82	6.62
Tertiary	7.41	7.79	7.75	9.42	4.38	11.70	6.93	6.84
TOTAL GSVA at Basic Prices	5.31	8.90	1.30	7.35	13.36	5.08	8.59	6.05

Source: GSDP, 2019-20, DES, Odisha

1.2.9 Due to increasing financial consolidation, growth in public administration accelerated to 7.0% in 2015-16, 18.9% in 2018-19 and 20.8% in 2019-20. The growth in financial services remained volatile with 7.7% in 2015-16, 0.6% in 2016-17, 18.9% in 2017-18, 13.6% in 2018-19 and 6.2% in 2019-20.

1.3.0 The Services sector has huge growth potential in Odisha. Being a major contributor to GVA, services sector is the key driver of economy followed by industries sector. The share of services sector in overall economy has been increasing and now stands at little over 40%. Within services sector, trade & hotel is the largest component (9.9%) followed by other services (7.9%) and real estate (7.6%). There is scope to further tap the service sectors' growth potential by providing supporting infrastructure. The expansion of services sector will also have immense potential to generate employment in formal sector. Tourism sector is also a major engine of economic growth that contributes significantly in terms of GSDP, foreign exchange earnings and employment. It needs further improvement to attract more tourist arrivals.

1.3.1 Odisha's digital economy has also received boost through various Government initiatives. These initiatives assisted by new technologies are creating IT led opportunities for revenue and job creation in various sectors.

1.3.2 Agriculture & allied sector, industry and services sector are interdependent and complementary to each other. Agriculture enjoys production and demand linkages with industry and services sector. Agriculture depends on industry for its expansion, whereas industry is tied up with development of

agriculture. Similarly Agriculture also raise the demand for services like trade, transport, banking and insurance services. Both industry and services sector are also significantly associated. With the expansion of industry sector, demand for services like trade, transport, hotel, education, banking etc increases. In turn, the service sector growth depends on the development of manufactured inputs.

External Trade of Odisha

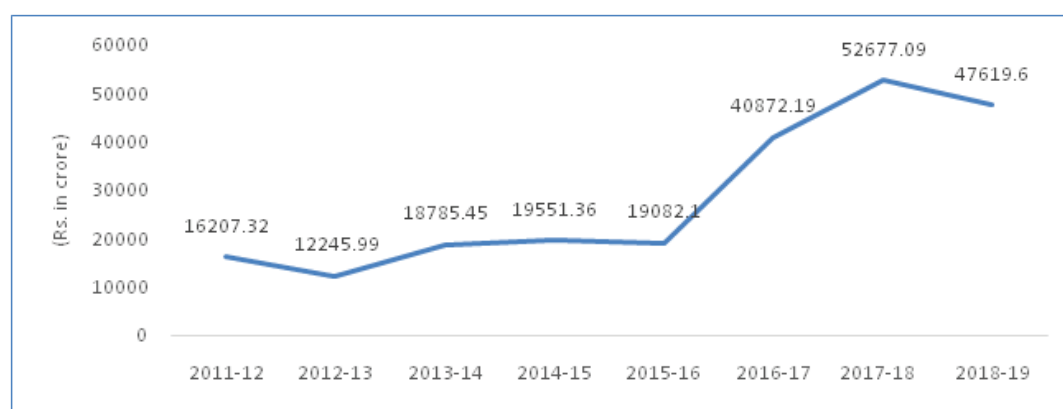
1.3.3 The role of foreign trade is quite important to the States' economy. Having diverse agro-climatic zones, above national average forest cover and high deposit of mineral resources, Odisha has growth potential in external trade due to export-friendly policies and incentives of the government. The value of export of goods from Odisha shows an increasing trend from 2011-12 to 2017-18 except in the year 2012-13 & 2015-16. During 2018-19, the value of exports decreased marginally over 2017-18 due to global economic slowdown. The trend of year-wise exports of goods from Odisha is displayed in fig.1.12 and table 1.4.

Table- 1.4 : Year-wise and category wise Export of Goods from Odisha

Sl. No	Category of products	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Metallurgical	4806.68	5382.60	7682.25	10836.98	12335.80	25185.93	31566.46	26082.97
2	Engineering / Chemical & Allied	196.21	693.21	3531.21	3383.25	1497.65	4478.72	5892.73	5415.62
3	Mineral	9259.48	3150.76	3546.78	634.00	2762.49	8389.53	8117.91	9483.26
4	Agriculture & Forest	0.02	0.05	2.92	4.38	253.53	16.51	165.22	210.02
5	Marine	521.34	821.06	1699.41	2069.00	2141.86	2508.32	3086.97	2825.52
6	Handloom	0.01	0.58	0.64	0.84	0.01	235.16	0.53	0.07
7	Handicraft	0.17	0.20	0.85	0.67	1.76	2.73	1.63	1.39
8	Textile	0.01	20.01	10.00	40.29	62.18	5.44	15.31	74.14
9	Pharmaceutical	0.05	0.02	0.93	2.52	1.84	6.30	13.67	8.45
10	Software's / Electronics	1414.78	2169.94	2300.46	2567.42	1.46	5.65	3776.11	3500
11	Others (Services)	8.59	7.56	10.00	12.01	23.52	37.90	40.55	18.16
	Total	16207.32	12245.99	18785.45	19551.36	19082.10	40872.19	52677.09	47619.60

Source : Directorate of EPM, Odisha

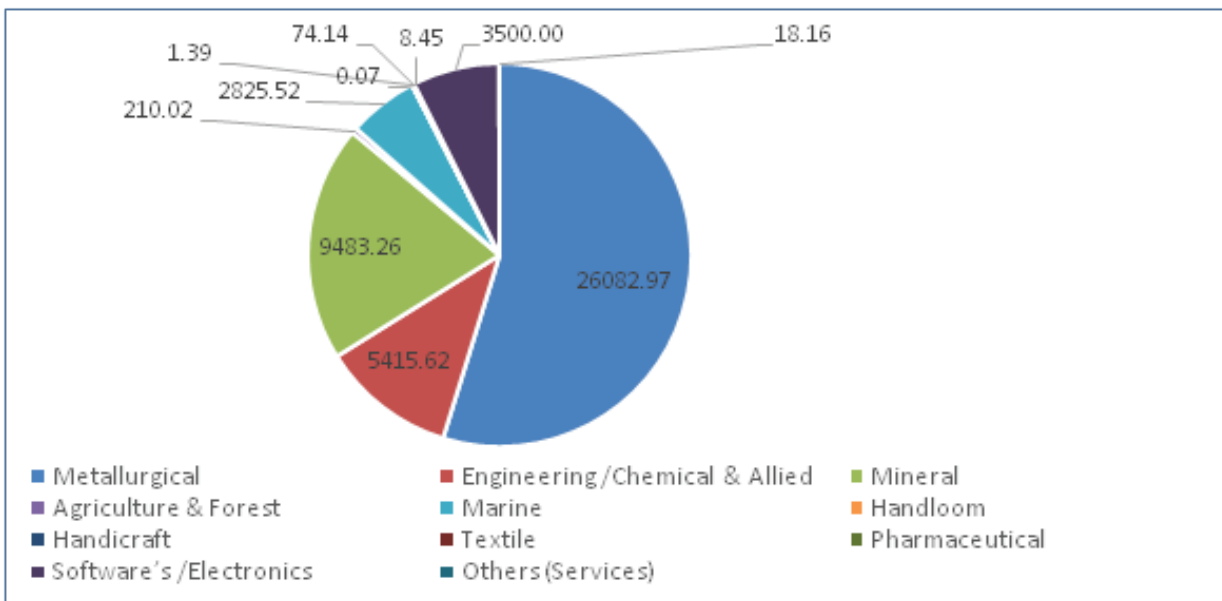
Fig- 1.12 : Year-wise Value of Exports of goods from Odisha



Source : Directorate of EPM, Odisha

1.3.4 Out of different category of products contributing to Odishas' exports, Metallurgy is dominant and contributes 55% of the total in 2018-19. Mineral category constitutes the second highest exporting item contributing 20% of the total value of exports during the year. The other leading categories are Engineering/ Chemical & Allied (Rs.5415.62 Cr.), Softwares / Electronics (Rs.3500 Cr.) Marine (Rs.2825.52 Cr.) and so on. The category-wise contribution under export of items is displayed in figure 1.13.

Fig- 1.13 :Category wise contribution of value of exports during 2018-19

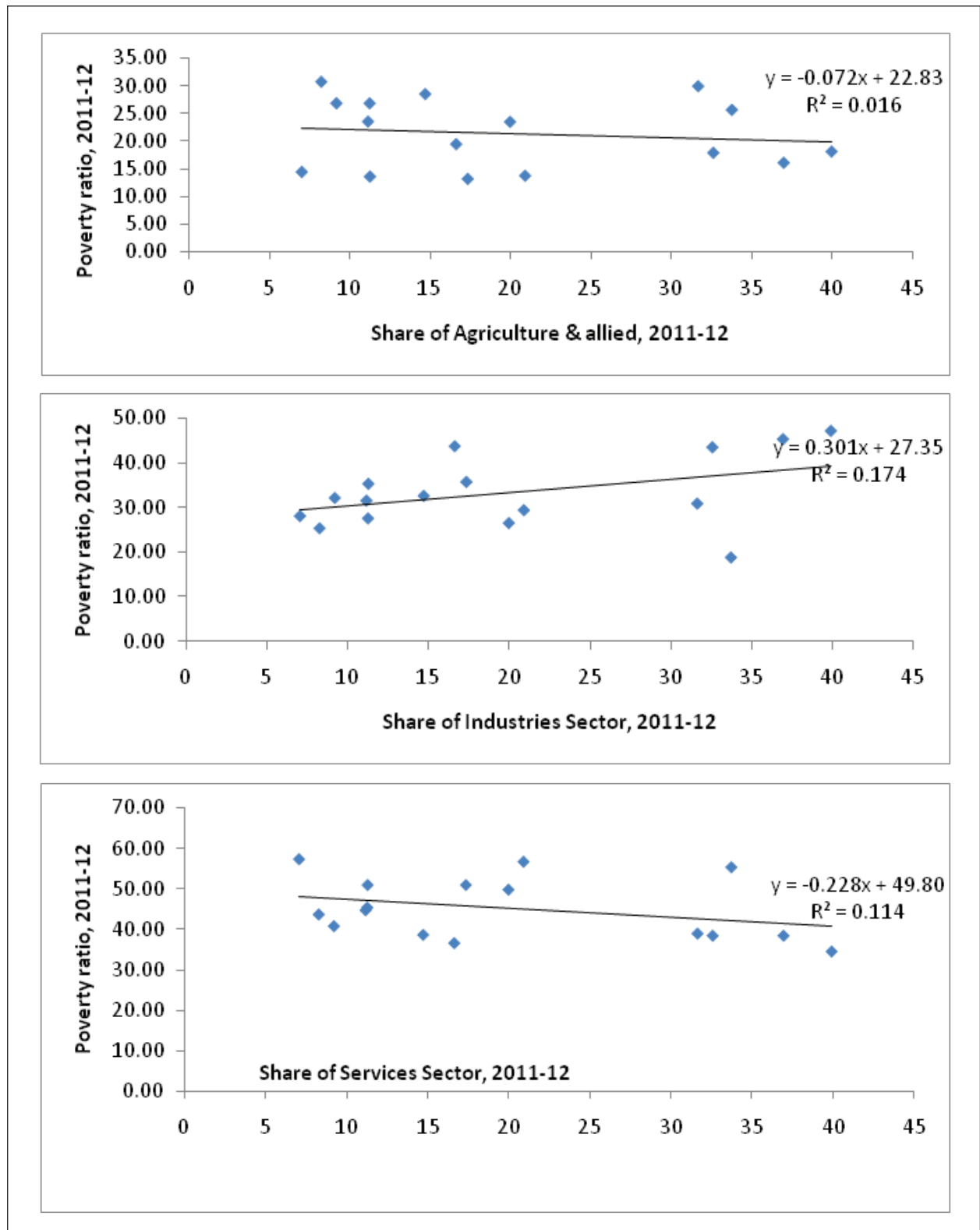


Economic growth and Poverty reduction

1.3.5 The importance of economic growth to poverty reduction needs no emphasis. Growth can generate prosperity and opportunity, and therefore advances human development, which in turn promotes economic growth.

1.3.6 As regards poverty ratio and share of agriculture & allied sector, it shows a positive relationship between them. Therefore the growth in agriculture & allied sector impacts on reduction of poverty. Increase in productivity raises farm income, reduces food prices and keeps inflation in control. Similarly, services sector has also seen increasingly as means to reduce poverty as there is a positive relationship between poverty ratio and share of services sector. However, the services sector is highly diverse, ranging, from infrastructure services such as telecommunications, transportation, trade, financial services to tourism to business services that directly affect firm competitiveness, to social services such as health or education. Infrastructure services support all types of enterprises. Education, health, and recreational services influence the quality of labour available to enterprises. Business and professional services provide specialized expertise to increase enterprise competitiveness. Thus the sector needs to be expanded to drive development.

Figure: 1.14 Relationship between Poverty ratio, 2011-12 and Share of Agriculture, Industries and Services sectors to GSDP, 2011-12



Source: CSO, Govt. of India & Directorate of Economics & Statistics (DES), Odisha

Employment

1.3.7 The state's working age population (15-59 years) is expanded to 25.8 million in 2011 from 21.5 million in 2001, growing annually at 2%. The rising working age population is of course a challenge before the Government to provide employment. Employment indicators from the Periodic Labour Force Survey (2017-18) indicate that the labour force participation in the State was 51.7%, where as it was 53.0% at all India level. The proportion of workers under informal sector combining self-employment and casual labour constituted more than 80%. The agriculture, forestry and fishing sector were the highest source of employment across the states. It accounts for 48.76% in Odisha and 44.14% at all India level, while other half was distributed between Industries and Services sector. Policy to promote faster expansion of labour oriented industries in services and industry sector is needed for providing greater job opportunities with decent remuneration. Both educated and uneducated individuals with skill training (formal or informal) are more likely to find jobs. The Government is continuously making strides in creating employment opportunities and improving employability of the youth. Initiatives like Make in Odisha to attract private investment in diverse sectors and the Odisha State Employment Mission's (OSEM) placement linked training programme aim to work in this direction.

I. Latest employment scenario

1.3.8 The basic indicator of employment is the proportion of working age population (15-59 years) who are employed. The state's working age population is expanded to 25.8 million in 2011 from 21.5 million in 2001, growing annually at 2%. The share of working population to total population is 61.5% in 2011, up from 58.4% in 2001. The working age population will grow to 30.4 million in 2021 (projected). The rising working age population is of course a challenge before the Government to provide employment. Recently Government has been making concerted efforts in skilling youth, initiating Make in Odisha, Invest Odisha and Start up policy for sustained growth and creating employment opportunities.

Table-1.5: Working age population (15-59) in Odisha

Year	Unit	Total	Rural	Urban
2001	million	21.5	17.9	3.6
2011	million	25.8	21.1	4.7
Decadal growth	%	20	18	31
2021(proj)	million	30.4	24.3	6.1
Share of working age population to total population				
2001	%	58.4	57.4	64.1
2011	%	61.5	60.3	67.0

Source: Census, 2011

Employment by type

1.3.9 The proportion of workers under self-employment, regular wage and casual labour was estimated as 57.4%, 15.4% and 27.2% respectively. Thus workers under informal sector combining self-employment and casual labour constituted more than 80%

Table-1.6: Distribution of workers in usual status (ps+ss) by broad status of Employment in the State (2017-18)

Sex	Rural			Urban			Total		
	Self employment	Regular wage/ Salary	Casual labour	Self employment	Regular wage/ Salary	Casual labour	Self Emp	Regular wage	Casual labour
Male	61.6%	11.3%	27.1%	45.9%	40.5%	13.6%	59.3%	15.7%	25.1%
Female	52.6%	9.5%	38.0%	34.8%	46.5%	18.7%	50.3%	14.2%	35.5%
Total	59.7%	10.9%	29.4%	43.8%	41.6%	14.5%	57.4%	15.4%	27.2%

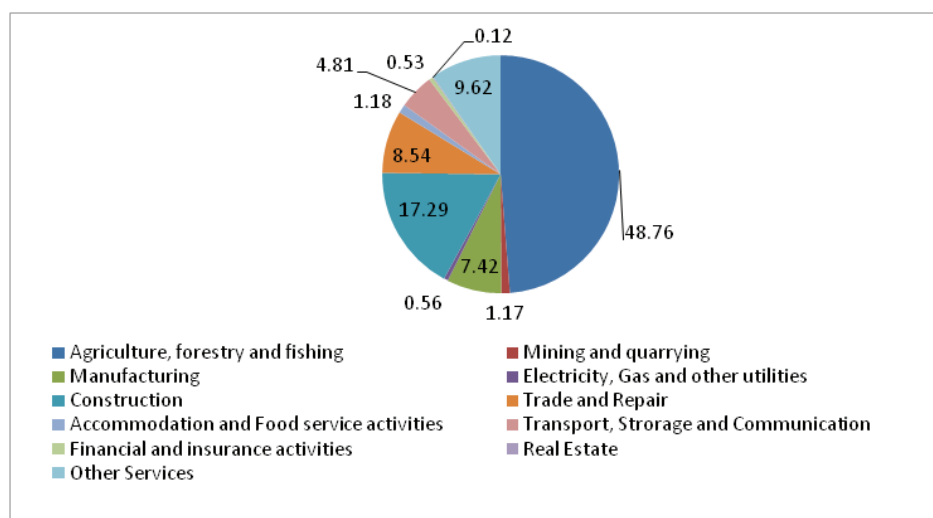
Source : Periodic Labour Force Survey, 2017-18, NSSO

1.4.0 As regards employment in rural areas, the proportion of workers under self-employment among rural male was as high as 61.6%, whereas rural female workers constituted 52.6%. Both male and female regular wage earners in rural areas were 11.3% and 9.5% respectively. In rural areas, share of under casual labourers was 27.1% among male workers and 38% among female workers. In regular wage/ salary category, the share in rural Odisha was 11.3% for male workers and 9.5% for female workers. On the other hand, in urban areas, the share of workers in regular wage / salaried workers was 40.5% among male workers and 46.5% among female workers.

Employment across broad Industry group

1.4.1 The distribution of workers across industrial classification highlights that agriculture, forestry and fishing sector was the highest source of employment across the states. It accounts for 48.76% in Odisha and 44.14% at all India level, while other half was distributed between Industries and Services sector. Industry was the second highest source of employment in Odisha with 26.44% followed by services sector with 24.80%.

1.4.2 Among the eleven sub-sectors of economy in the State, the proportion of workers engaged in construction was second highest with 17.3% after Agriculture & allied with 48.76%. The other sub sectors which held higher workers were other services, trade & repair and manufacturing sub sector held with 9.62%, 8.54% & 7.42% respectively. The workers concentrated in transport, storage and communication sectors were 4.81%, while real estate held lowest proportion of workers with 0.12%.

Figure-1.15: Percentage distribution of usually working persons (ps+ss) by 11 industry groups of work in Odisha

1.4.3 State has taken various policy interventions to promote faster expansion of labour oriented industries in services and industry sector for providing greater job opportunities with decent remuneration.

Labour Welfare

1.4.4 The State strives to ensure a conducive industrial climate through enforcement of different labour laws and promoting welfare of the workers in organized and unorganized sector, welfare of migrant workers including provision for women labours.

Regulating Safety, health and welfare of organized /un-organized workers

1.4.5 Odisha Building and Other Construction Workers Welfare Board is constituted with a focus on registration of building and other construction workers, collection of cess @1% of cost of construction and extending benefits to construction workers and their families for their sustainable development. From 2013-14 to 2018-19, a total of 27.15 lakh beneficiaries have been registered under OB & OCWW Board and benefits such as marriage, education, working tools, bi-cycle, skill training, NSPGY, NSPY, drinking water, death, funeral etc to the tune of Rs 1390.51 crore has been disbursed. Various welfare schemes such as BKKY for Agriculture workers, dividends and incentive allowance for Kendu-leaf workers, health package for artisans, MUY for fishermen etc are being implemented.

1.4.6 The whole State is covered under ESI scheme to cater health facilities to the workers of business establishment and industries.

Welfare of Inter-State Migrant Workers and Reducing Distress Migration

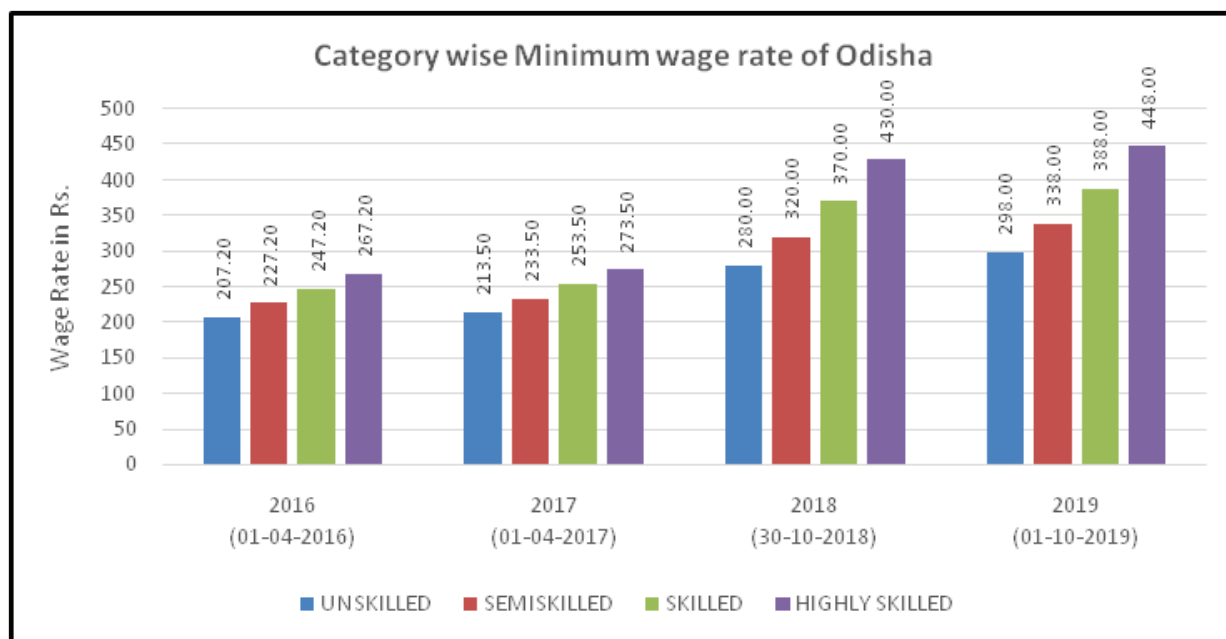
1.4.7 For the safety and welfare of inter-state migrant workers, Odisha has implemented the State Action Plan which focuses on tracking the migrant workers at GP level, convergence of various departments to link migrant workers with welfare schemes, mechanism to improve worksite facilities and facilitated rescue where it is needed. Toll-free ShramikSahayata helpline has been made operational. Besides, Odisha migrant labour help desk has been initiated in Telangana, Andhra Pradesh, Tamil Nadu and Delhi. The help desks functions as a first point of contact for Odia workers living in distress. The mechanism helped in rescuing 1,349 distressed Odia migrant workers from other States in 2018-19.

1.4.8 Seasonal Hostels, in convergence with School & Mass Education Department, for the children of migrant workers are in place in Bolangir, Bargarh, Kalahandi, Nuapada and Khordha, to ensure continuity in education for children when their parents migrate. 124 such hostels have been opened in the year 2018-19 which had enrolled 5,060 children. Pilot Project in 30 GPs of Bolangir and Nuapada is in progress to curb distress migration in convergence with seven other Government departments focusing on livelihood alternatives.

Enforcement of Labour Laws- Enhancement of Minimum Wage

1.4.9 Enhancement in minimum rate of wages in 89 time-rated and 15 piece-rated scheduled employments has been made. The minimum wage for unskilled labourers has been raised from INR 200/- to INR 298/- and for semi-skilled, skilled and highly skilled labourers has been raised to INR 338/-, INR 388/- and INR 448/- respectively w.e.f. November, 2019.

Figure 1.16 Minimum wage rate of Odisha



Source: Labour Commissioner, Odisha

1.5.0 Due to State's continuous effort, the informal sector has seen a rise in labour wages, thus reducing the inequality in wages compensation. Its labour friendly policy has lessened gender disparity in wages, particularly in informal sector.

Table 1.7 Gender wise Average Daily Wage rates of agricultural labourers in Odisha (in Rs.) - 2015-16 to 2018-19

Sl No.	Agricultural Occupations	2015-16			2016-17			2017-18			2018-19		
		Male	Female	% diff	Man	Woman	%diff	Man	Woman	%diff	Male	Female	% diff
1	Sowing & Broadcasting	208.65	168.39	23.91	233.04	190.82	22.13	245.23	210.09	16.73	272.50	237.20	14.88
2	Weeding	206.89	168.23	22.98	230.06	186.45	23.39	257.08	219.99	16.86	272.98	238.33	14.54
3	Transplanting	208.84	170.25	22.67	236.48	190.04	24.43	267.17	221.27	20.74	288.86	247.73	16.60
4	Reaping & Harvesting	239.62	183.75	30.40	244.89	193.14	26.79	305.92	247.67	23.52	305.10	258.27	18.13
5	Watering in the Field	208.60	171.22	21.83	228.33	184.79	23.56	252.24	217.39	16.03	274.50	237.86	15.40
6	Carrying Load	216.64	180.63	19.93	242.21	195.61	23.82	291.08	241.84	20.36	302.53	255.29	18.50
7	Digging Well	342.65	227.92	50.34	361.62	272.21	32.85	511.82	329.62	55.27	502.07	326.67	53.70
8	Cleaning silt from water ways	215.43	176.61	21.98	239.59	192.16	24.68	255.50	220.58	15.83	279.02	240.43	16.05
9	Preparing Embankment	224.53	180.76	24.21	252.98	200.21	26.36	304.73	248.48	22.64	313.06	264.73	18.26
10	Others	232.20	183.06	26.84	243.38	189.68	28.32	320.31	253.43	26.39	308.03	258.60	19.11
11	Herdsmen	193.53	155.68	24.31	211.36	168.62	25.34	243.01	209.22	16.15	262.72	224.44	17.05

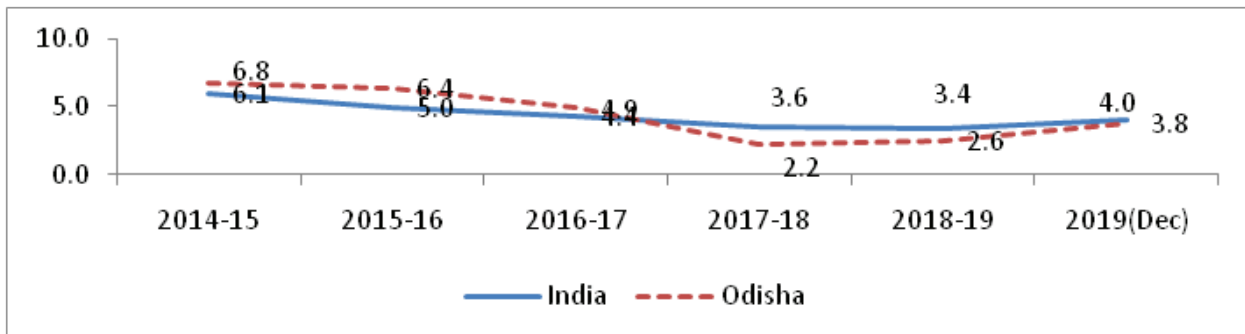
Source: DES, Odisha

Inflation

Trends in inflation in Odisha

1.5.1 Odisha exhibited a declining trend in inflation (as measured by the Consumer Price Index) from 2014-15 to 2017-18 owing to various factors. Similar trend is noticed at all India level. The average annual inflation in Odisha remained stable, between 2% and 3%, during 2017-18 to 2018-19 and increased to 3.8% in 2019-20 (till Dec). During 2014-15 to 2018-19, India witnessed decreasing annual inflation from 6.1% to 3.4%, before accelerating to 4.0% in 2019-20 (till Dec).

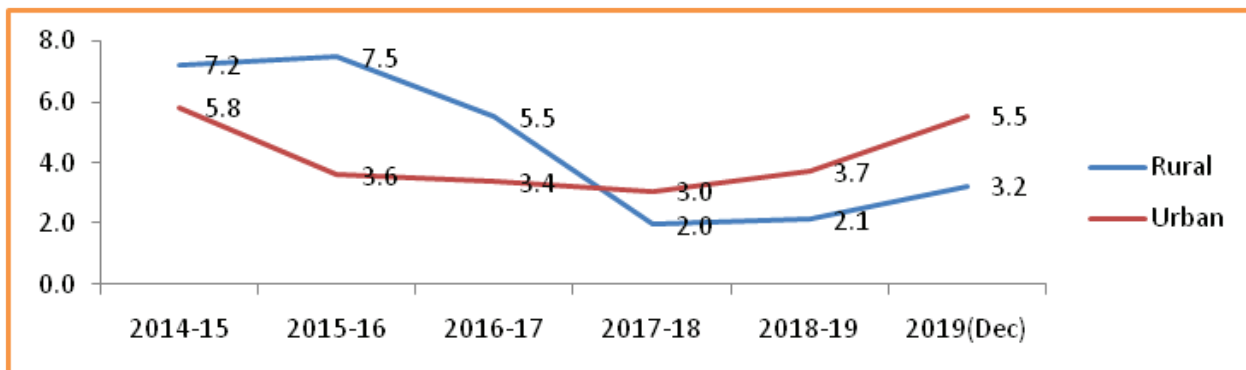
Figure 1.17 CPI inflation trends- Odisha and India (in %)



Source: Central Statistics Office (CSO)

1.5.2 Inflation was high in rural Odisha from 2014-15 to 2016-17 in comparison to urban Odisha. But it declined to the lowest level at 2.0% in 2017-18, when inflation in urban area was 3.0%. Urban Odisha also showed declining trend in inflation from 5.8% in 2014-15 to 3.0% in 2017-18. From 2018-19, inflation showed upward trend in rural Odisha with 2.1% in 2018-19 and 3.2% in 2019-20. Similar trend is noticed for urban Odisha with 3.7% in 2018-19 and 5.5% in 2019-20. Thus from 2018-19, inflation in urban Odisha remained high compared to rural Odisha.

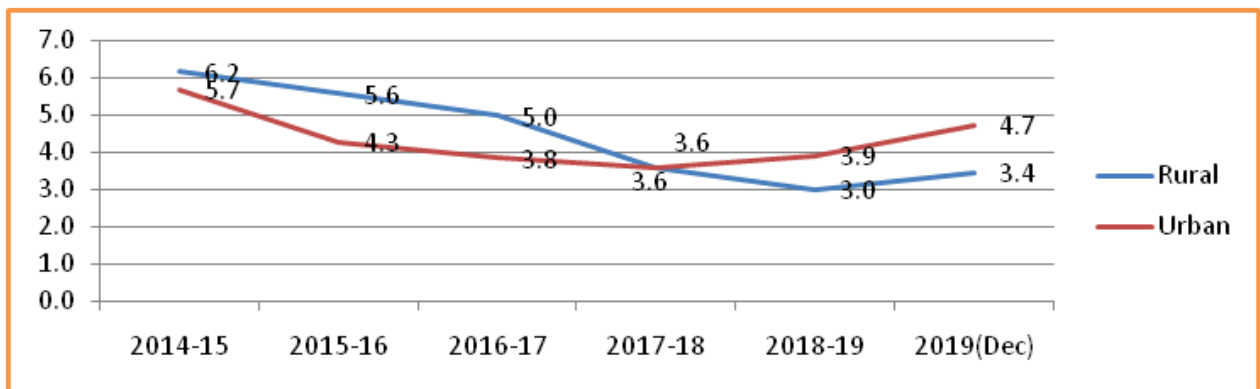
Figure-1.18:- Inflation in Rural-Urban Odisha



Source: Central Statistics Office (CSO)

1.5.3 Similar trend was seen at all India level, where inflation in rural India was high from 2014-15 to 2016-17 compared to urban India. In 2017-18, inflation remained at 3.6% each for rural and urban India. But urban inflation moved faster at 3.9% in 2018-19 and 4.7% in 2019-20 in comparison to rural India. The inflation in rural India declined to 3.0% in 2018-19 from 3.6% in 2017-18 and it again rose to 3.4% in 2019-20.

Figure-1.19: Rural-Urban inflation at all India level

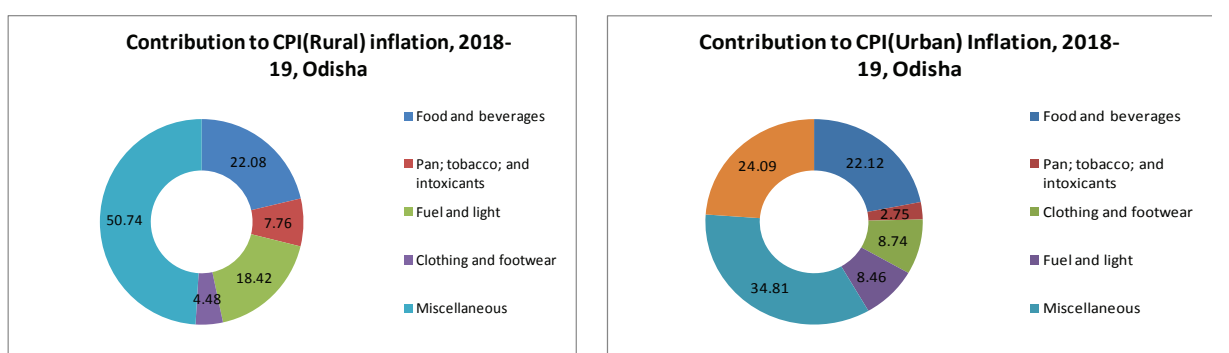


Source: Central Statistics Office (CSO)

Drivers of Inflation, 2018-19

1.5.4 At the State level, CPI(rural) inflation for 2018-19 was mainly driven by miscellaneous groups followed by food items and fuel & light. Miscellaneous groups contributed the most to it during 2018-19. CPI(urban) inflation for 2018-19 is influenced mainly by miscellaneous groups followed by housing and food items. Thus in urban areas, it is the miscellaneous groups which contributed most to inflation during 2018-19.

Figure-1.20: Contribution of food and non-food groups to Inflation during 2018-19 by rural-urban divide



1.5.5 While looking at the contribution to CPI(food & beverages) inflation during 2018-19 by sub group items of it in rural Odisha, it is found that the inflation was driven by cereals and products followed by prepared meals, snacks and sweets etc and meat & fish. In urban Odisha, cereals and products was also the main drivers of inflation, while prepared meals, snacks and sweets contributed second highest to inflation followed by milk and products. Thus cereals & products and prepared meals, snacks and sweets contributed most to CPI (food & beverages) inflation in rural and urban Odisha in 2018-19.

Figure-1.21: Contribution of food items to CPI (food & beverages) in Rural Odisha

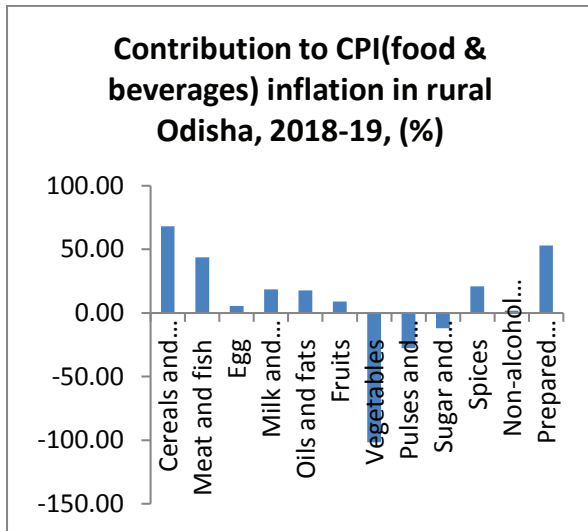
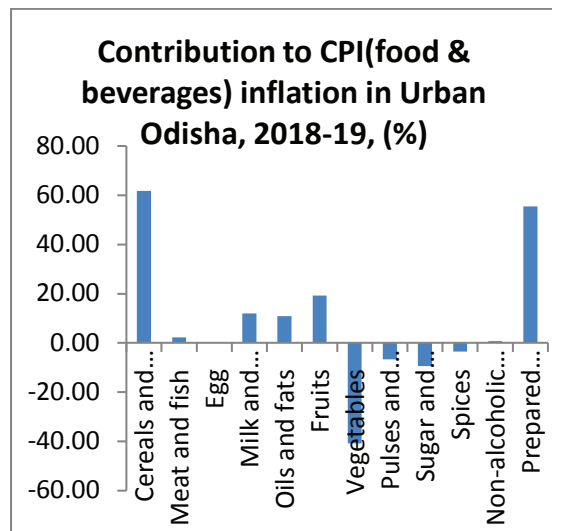


Figure-1.22: Contribution of food items to CPI (food& beverages) in Urban Odisha



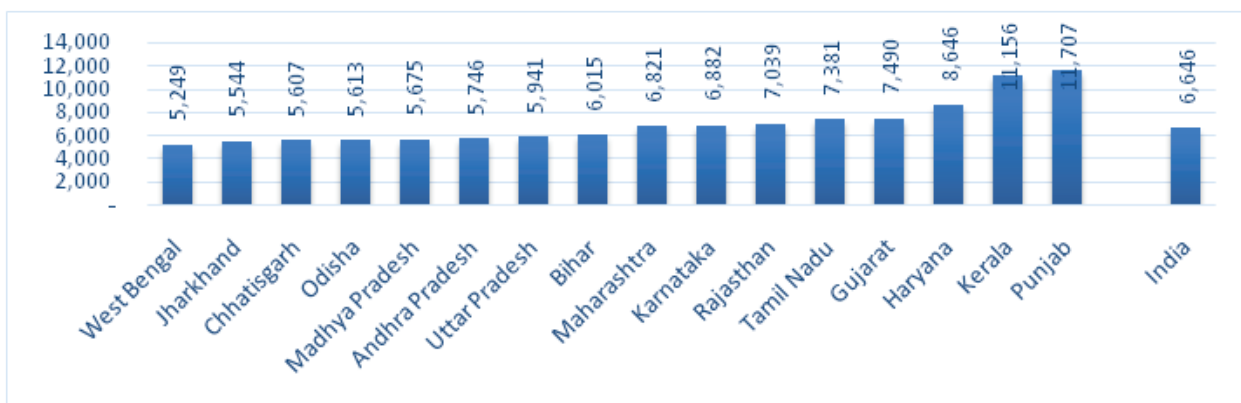
Consumption and Economic growth

1.5.6 Consumption is the essential driving force of economic growth. As the economy grows, the households tend to change their spending patterns, which include wide variety of goods and services. According to Engel's law, the share of household spending on food tends to decline as households grow richer. Affluent households consume a wide variety of goods, expensive goods and services. Middle class households also spend in similar manner. The changing character of consumption pattern has important implications on growth of economy.

Consumption Expenditure

1.5.7 According to NABARD all India Rural Financial Inclusion Survey (NAFIS), 2016-17, the monthly consumption expenditure per household in Odisha stood at Rs 5613 as against Rs 6646 at all India level. The States like Punjab and Kerala topped the list with reported monthly expenditure per household of Rs 11,707 and Rs 11,156 respectively. On the other hand the States like West Bengal, Chhattisgarh and Jharkhand fared poorly with lower monthly expenditure per household of Rs 5249, Rs 5607 and Rs 5544 respectively.

Figure-1.23: Average Monthly Consumption Expenditure per HH by States (in Rs)



NAFIS was conducted in 2016-17 covering rural and some semi urban areas in 29 States. In Odisha it covered 12 districts, 72 villages and 1440 households. The survey used the NSSO approach to measure the level of consumer expenditure.

Trends in Consumption Expenditure

1.5.8 The monthly consumption expenditure of rural households based on NSSO, 2011-12 and NAFIS, 2016-17 is compared. For rural Odisha, monthly expenditure is seen to have grown from Rs 4313 in 2011-12 to Rs 5613 in 2016-17, an increase of about 30% over 04 years. The rural India has seen lower growth from Rs 6578 in 2011-12 to Rs 6646 in 2016-17, an increase of 1% only.

Table-1.8: Monthly Consumption expenditure of rural household in Odisha and India

Source	Year	Region/Recall Period	Odisha	India	Gap (Rs)
NSS-68th round	2011-12	Rural/MMRP	4313	6578	2265
NAFIS	2016-17	Rural/MMRP	5613	6646	1033
Growth (%)			30.1	1.03	

Source: NSSO

Note: Average MPCE of rural Odisha for 2011-12 was Rs 1003 and household size was 4.3
Average MPCE of rural India for 2011-12 was Rs 1430 and household size was 4.6

Increasing Share of Expenditure in Non-food category with economic growth

1.5.9 The distribution of consumption expenditure between food and non-food items reflects the economic wellbeing of population. In general poor households used to spend more on food items as against non-food items. With the development and economic growth, the share of food expenditure is expected to decline.

1.6.0 The data from NSSO survey shows the increase in share of non-food expenditure in total consumption over time. The share of food in total consumption is more than 10 percentage points lower in urban areas (2004-05 and 2011-12) as compared to rural areas. Besides above the share of food in total consumption has gone down by 10 percentage points both in rural and urban areas from 2004-05 to 2011-12. This shows that the shift towards basic needs has been gradually decreasing while spending on non-food categories has been increasing.

Table-1.9: Share of Monthly Per-capita Consumption Expenditure to total expenditure(%) in Odisha

Item	Rural		Urban	
	2004-05	2011-12	2004-05	2011-12
Food	61.56	51.97	49.93	39.26
Non Food	38.43	48.02	50.06	60.73

Source: NSSO

Odisha's vulnerability to natural disasters

1.6.1 The geographic location and physical environment make Odisha's coastal zone more vulnerable to frequent cyclonic disturbances. During the last decade, the State has faced one or other forms of disasters like flood, cyclone, tornado and drought year after year. From 1891 to 2000, 98 nos. of cyclones/ severe cyclones had crossed the Odisha coast, which is more than that of other States. Similarly other natural disasters like flood, heavy rainfall, drought, pest attack also pose the greatest threats to human life, production and productivity. During 2019-20, the Cyclone "Fani" made landfall in the state and affected 14 districts covering 16659 villages. Cyclone 'Titli' made the landfall in 2018-19, very severe cyclonic storm 'Hudhud' made landfall in 2014 and very severe Cyclonic Storm (VCS) "Phailin" made the landfall in 2013. Apart from loss of life, power supply, water supply system and communication system were totally disrupted and lakhs of people were rendered homeless. Apart from above, in 2017-18, the state experienced flood in two phases covering southern, central and northern divisions during July. Nearly 528 villages covering 1.81 lakh people were affected due to flood. Frequent disasters also increase the fiscal pressure and adversely affect the economic growth of the State.

Table-1.10: Disasters in Odisha from 2014-15 to 2019-20

year	Disaster	Live lost	People affected	Crop area affected / damage(ha)	Estimated damage(Rs)
2014-15	Floods, Heavy rain and Landslide	61	40.00 lakh	397538	--
	Cyclone(Hudhud)	03	33.43 lakh	2,47,557	--
	Fire Accident	25	0.34 lakh	--	3,09,500,951
2015-16	Heavy rain	09	4.94 lakh	46135	--
	Drought	--	--	1492565.72	--
	Fire Accident	26	0.29 lakh	--	17,81,51,661
	Lightning	400	--	--	--
2016-17	Heavy rain, Floods, hails storm and landslide	13	0.15 lakh	--	--
	Drought	--	--	22658.35	--
	Fire Accident	92	0.31 lakh	--	33,58,21,691
	Lightning	398	--	--	--
2017-18	Floods	09	6.95 lakh	73887	--
	Drought	--	--	335548.06	--
	Pest Attack	--	--	142723.18	--
	Lightening	459	--	--	--
2018-19	Cyclone (Titli)	—	--	--	--
2019-20	Fani	64	165.55	181711.4	--

Source: SRC, Odisha

1.6.2 It is important to work towards minimising disaster losses on all fronts. The Government has taken various measures to face natural disasters and to minimise loss of life and property as follows:

- State Emergency Operation Centre has been made operational, with state of the art communication network, to coordinate with offices for administrative and financial decisions at the time of disasters.
- Preparedness enabling activities like planning, awareness & education, exercises, regular testing of warning systems and plans for evacuation backed with clear-cut guidelines, allocation of responsibilities & budgetary provisions improves the response mechanism to a disaster in terms of timely and effective rescue and relief operations.
- The State Disaster Management Plan (SDMP) for disaster management for the entire State has been prepared under the Section 23 of Disaster Management Act, 2005. It provides a framework and direction for all phases of disaster management cycle. It covers disaster risk reduction, mitigation, preparedness, response, recovery and better reconstruction.
- Activation of District Emergency Operation Centres and control rooms of other offices.
- Early Warning Dissemination System (EWDS) for Last Mile Connectivity aims at establishing a fool-proof communication system to address the existing gap of disseminating disaster warning up to the community level especially for cyclone and tsunami.
- 879 Multi-purpose cyclone/ flood shelters of OSDMA are kept in readiness for sheltering people to be evacuated.

Agriculture and Rural Development

Odisha is slowly moving towards production of high value crops. The share of cropped area under vegetables, fruits, oil seeds, pulses has increased from 42.37% in 2014-15 to 43.79% in 2018-19. There has been remarkable increase in production of livestock products like milk, egg and meat. The value of output of vegetables, fruits and livestock products also increased from Rs 37204 crore in 2015-16 to Rs 43246 crore in 2017-18. Irrigation is vital for sustained agriculture growth. About 61 lakh ha of irrigation potential was created in 2018-19 compared to 51.8 lakh ha in 2014-15.

Agriculture and allied sector continues to be important for Odisha contributing 18.9% to the State's Gross Value Added (GVA) in 2018-19. The sector is also a major source of livelihood for majority of the population. As per latest available estimates for 2017-18, 48.8% of worker population in the State is engaged in the agriculture sector. Further, the output of the sector forms critical inputs to various agro-based industries, adding to the significance of the sector in Odisha's economy.

Odisha's susceptibility to natural disasters leads to year-on-year fluctuations in cropping. A drought and pest attack in 2017 impacted crop production in the State. With a good monsoon in 2018, the sectors' output is estimated to bounce back and grow at 8.3% in 2018-19. With the aim of ensuring sustainability of the sector, the government has been pushing for diversification into horticulture and organic farming. These crops are also more resistant to climatic conditions and natural disasters and can help in keeping the sector buoyant during such years. Millet Mission has been launched in the State with a view to promote climate resilient crops like Ragi and other minor millets in tribal pockets of Odisha. These would not only supplement the sustainability but also bring in nutritional security as well. Input usage in the state has been rising over the years and it has continued to do so during the last year. Investments in irrigation, a major input for agriculture have increased significantly. Between 2007-08 and 2017-18, investment in irrigation has grown from INR 2,076 crores to INR 9,216 crores annually. There is scope for further enhancements of investments in irrigation. Water tables in Odisha are within a reach of few metres below the surface, which gives an opportunity to further address water availability through improved basic infrastructure.

While the crops sub-sector was impacted by natural conditions, the relative resilience of allied sectors to the frequent natural calamities was prominent. The years 2017-18 and 2018-19 shown strong real growth in these allied activities, especially livestock rearing and fisheries. Production of meat, milk, egg and fishes continued to witness growth during the last year. Advance estimates indicate that livestock and fisheries will be the fastest growing sub-sectors of 2018-19, i.e., growing at a rate of 11.7% each.

With majority population live in rural areas, this sector's development is strongly associated with two elements like end poverty and ease of living. As per Census 2011, over 83% of Odisha's population reside in rural areas. Continuous efforts are being undertaken to uplift the rural areas through various poverty alleviation schemes and provide the population with suitable housing and basic services. These efforts have successfully reduced rural poverty in Odisha by over 25 percentage points between 2004-05 and 2011-12, much higher than the national reduction of 16 percentage points in rural poverty.

2.1 Agriculture and Allied Sector

I. Introduction

2.1.1 Located in the eastern coast of India, Odisha covers over 1.56 million ha of land which is 4.7% of total land mass in the country. It is divided into four geographical regions - the Northern plateau, Central river basins, Eastern hills and Coastal plains - and ten agro-climatic zones. With diverse agro climatic zones, crop diversification in Odisha is a general phenomenon.

2.1.2 As in the case of all-India level, Odisha economy also has shown structural changes with share of agriculture and allied activities falling from 26% in 2000-01 to 19.9% in 2019-20. Despite its declining share in total GSDP, these activities continued to be the main source of livelihood in the State. Around 49% of the total workforce is dependent on agriculture as per PLFS2017-18 as against 44% at all-India level. However, the gross cropped area continued to decline from 90.10 lakh ha in 2014-15 to 85.41 lakh ha in 2016-17 and 83.38 lakh ha in 2018-19. As a result, there is growing pressure in productivity of land.

2.1.3 Given the high dependence on agriculture for employment, the sector can play an important role in overall development of the State as it impacts on two critical goals - eliminating poverty and ending hunger under SDG. Unfortunately, the growth of agriculture and allied activities are often adversely affected by various natural phenomena like cyclone, flood, pest attack, drought etc. Between 2011 to 2018, there have been two cyclones, three droughts and one pest attack which have affected agricultural production and productivity in the State. Thus, although growth in agriculture and allied activities plays an effective role in providing livelihoods and reducing poverty, such benefits have been limited and also volatile on account of various external factors like frequent natural disasters.

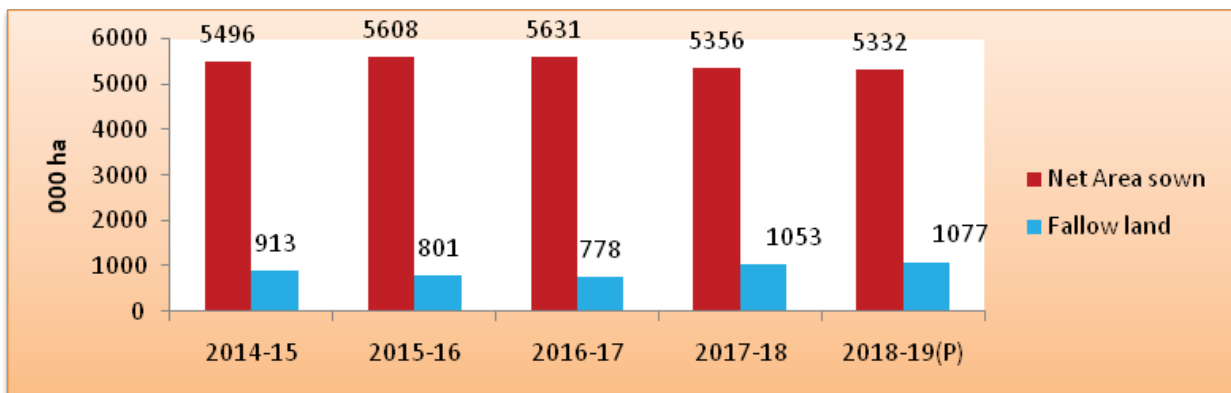
With majority population live in rural areas, this sector's development is strongly associated two elements like end poverty and ease of living . As per Census 2011, over 83% of Odisha's population resides in rural areas. Continuous efforts are being undertaken to uplift the rural areas through various poverty amelioration schemes and provide the population with suitable housing and basic services. These efforts have successfully reduced rural poverty in Odisha by over 25 percentage points between 2004-05 and 2011-12, much higher than the national reduction of 16 percentage points in rural poverty.

I. II. Odisha's Agricultural Scenario

Land Utilization

2.1.4 Over the years the net area sown in the State appears to be decreasing with increase in fallow land. The former was recorded as 56.91 lakh ha in 2005-06 and decreased to 56.08 lakh ha in 2015-16 due to drought. After an increase to 56.52 lakh ha in 2016-17, it again declined to 53.56 lakh ha in 2017-18. During 2018-19 (P), net area sown was recorded as 53.32 lakh ha, which was a further reduction compared to 2017-18. On the other hand, the area under fallow land continued to increase from 7.85 lakh ha in 2007-08 to 10.53 lakh ha in 2017-18 and 10.77 lakh ha in 2018-19. Gross cropped area was 89.29 lakh ha in 2005-06 and it rose to 90.54 lakh in 2013-14 only to shrink to 83.61 lakh ha in 2017-18.

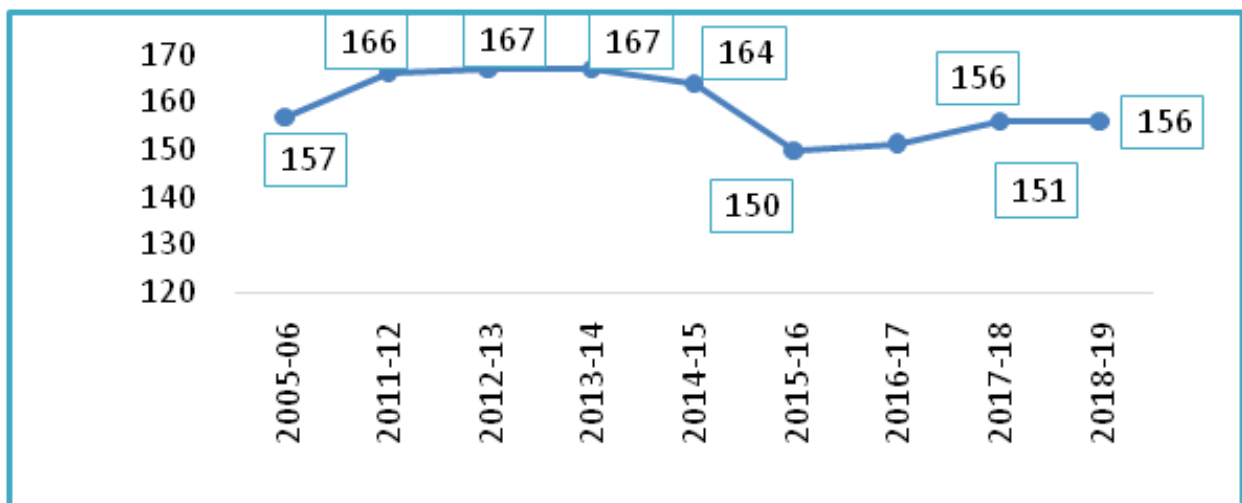
Figure-2.1: Trends in Net area sown and fallow land in the State



2.1.5 The pattern of net area sown across the districts varies with 3.87 lakh ha in Mayurbhanj being the highest, and the lowest recorded in Jharsuguda with 0.60 lakh ha in 2017-18. The northern region, with 19.57 lakh ha (36.5% of the total) contributed the most to the net area sown followed by the southern region with 18.82 lakh ha (35.1%), and the coastal region with 15.18 lakh ha (28.3%) in 2017-18. Although natural calamities remained the major factor for the fluctuating trend in net area sown, other factors such as lack of irrigation, rainfall, increased use of land in non-agricultural activities, farmers' ability to undertake sowing, and ease of marketing also impacted on its growth.

2.1.6 The declining trend in net area sown and increase of fallow land may paint a worrying picture, but can be overcome through policies like contract farming and higher incentives to farmers for optimum use of land. A higher intensity of cropping is also desirable for full utilization of land. The trend of cropping intensity in the State can be seen in figure-2.2.

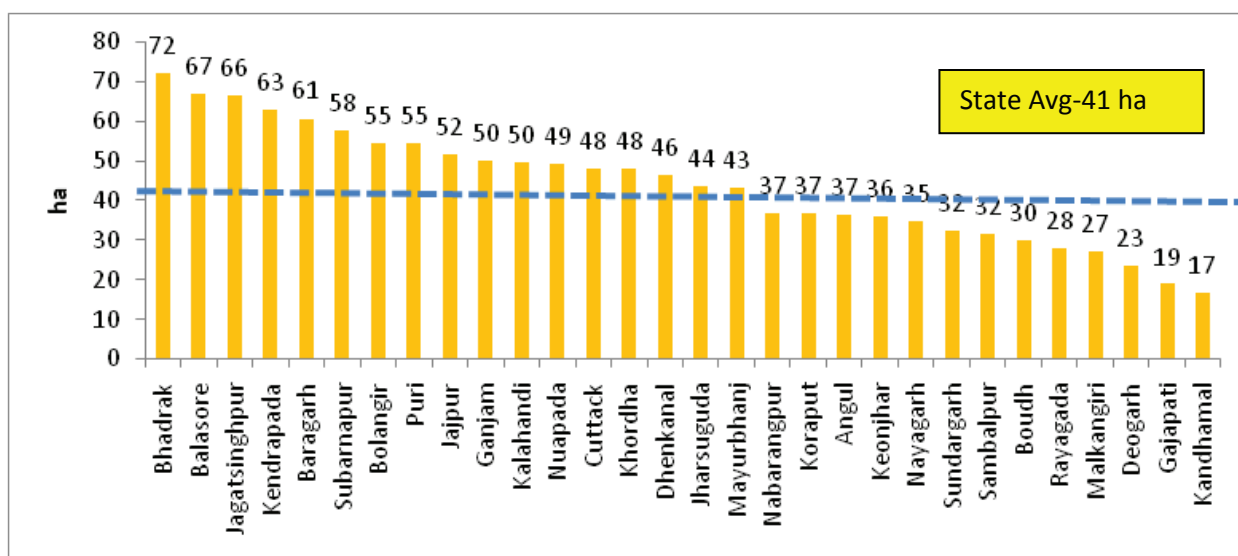
Figure-2.2: Cropping Intensity



2.17 In Odisha, the cropping intensity (defined as ratio of gross cropped area to net area sown) increased marginally during the period 2005-06 to 2013-14, but shows decline after that, the sharpest drop seen in 2015-16. The decline does not appear to be temporary, despite an increase in 2017-18 that reversed in the following year; the drop from the peak of 167 to 156 in 2018-19 (Figure 2.2) is substantial enough to cause concern, but can be overcome with planned initiatives. These trends need to be properly understood and the reasons ascertained, since these negative trends defy the efforts of the State Government to promote multiple sowing, provision of better irrigation facilities, and measures to reduce risks attached with natural disasters.

2.1.8 Availability of cultivable land per 100 ha area can be seen in figure-2.3. The State recorded 41 ha of cultivable area per 100 ha area in 2017-18. Among the districts, Bhadrak, Balasore and Jagatsinghpur topped with 72 ha, 67 ha and 66 ha respectively and the bottom three districts were Kandhamal, Gajapati and Deogarh with 17 ha, 19 ha and 23 ha respectively. The Districts having higher cultivable area need better methods of farming and agricultural extension with special focus in the districts with lower cultivable area to support agriculture development.

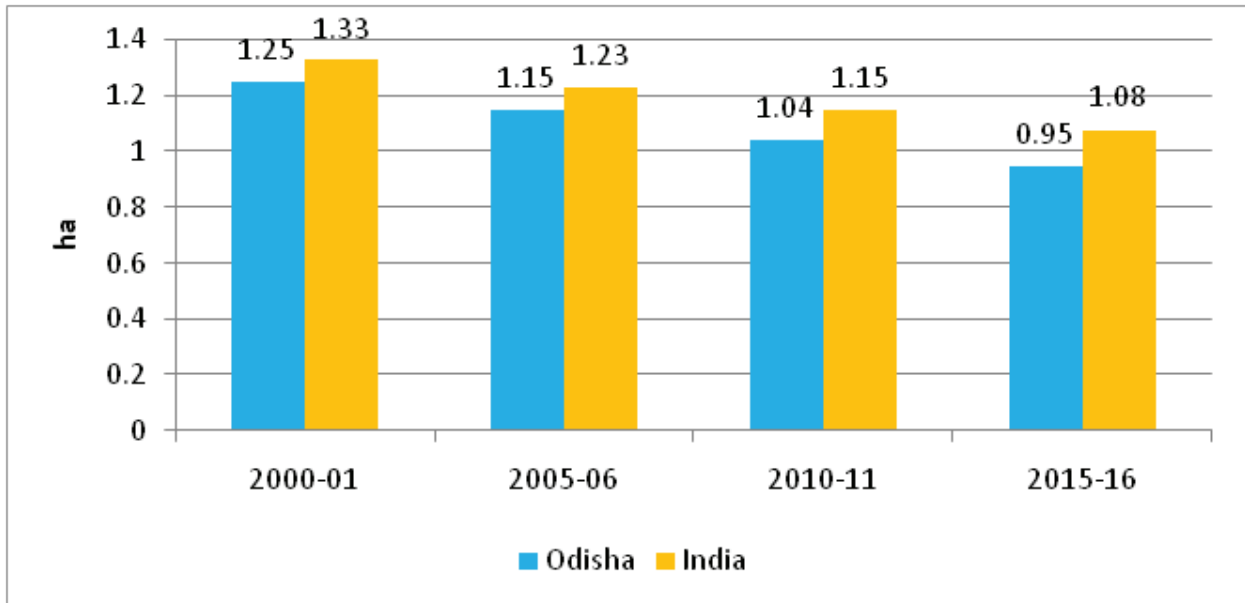
Figure-2.3: District-wise availability of cultivable area per 100 ha of area, 2017-18



Operational Holding: Declining size of holding

2.1.9 Shrinking size of operational holding is a trend noticed across the nation. According to Agricultural Census 2015-16, the average size of operational land holding in the State contracted from 1.04 ha in 2010-11 to 0.95 ha in 2015-16. The average size of holding at national level shrank to 1.08 ha in 2015-16 from 1.15 ha in 2010-11. As regards size class of holdings, the proportion of large, medium and semi-medium land holdings have shrunk, while a significant rise has been witnessed in the proportion of marginal land holdings. About 93% of operational holdings represent marginal and small holdings. With the declining trend in net sown area, fragmentation of land has become a common concern in the State as well as at the national level. As families break into smaller units, the common piece of land continues to be fragmented, leading to rise in the number of marginal land holdings.

Figure-2.4: Declining average size of holding in Odisha and India

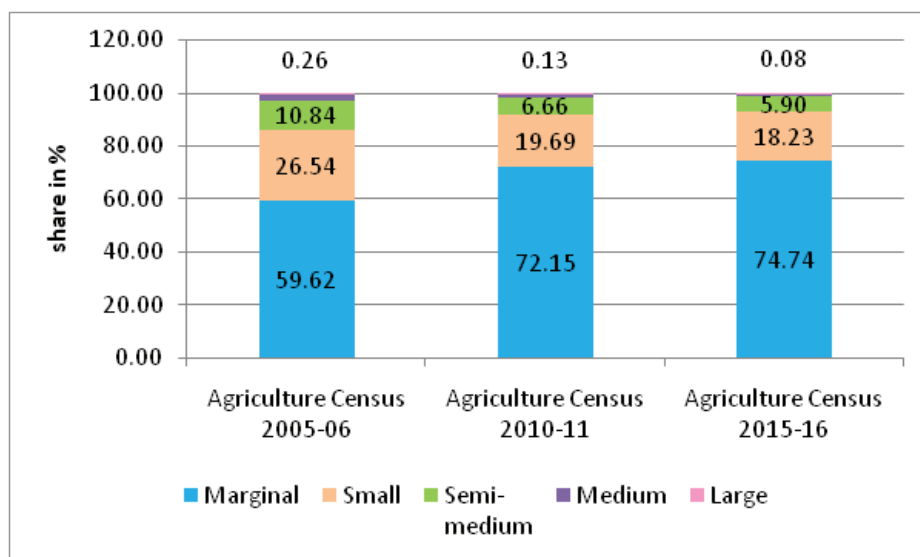


2.2.0 Declining size of holding may be a matter of concern but can be countered through practices like increased cropping intensity with higher productivity, and providing support of livestock (cattle/goat rearing), poultry, fishery and forestry activities to each agricultural household to make them sustainable.

Structure of operational holdings

2.2.1 According to the Agricultural Census 2015-16, the marginal and small holdings taken together (0.00-2.00 ha) constitute 92.98% of total holdings in 2015-16 against 84.97% in 2010-11, up by 8.01 percentage points. At the same time, the marginal and small holdings at India level constitute 86.21%. The number of small and marginal holdings increased over the years because of fragmentation of land among the families which break into smaller units. Although the share of these farmers in land possessed is less compared to their numbers, but they contributed more to the agriculture output.

Figure-2.5: Share of Marginal and Small holdings during different Agriculture Census (%)



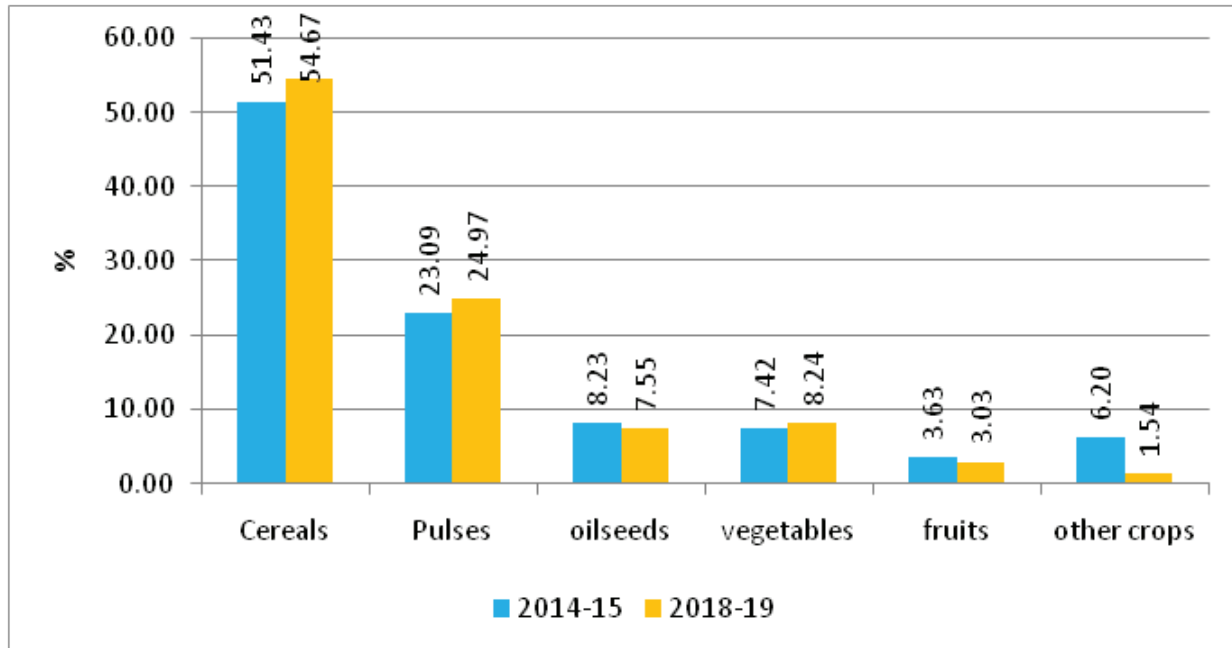
Cropping Pattern Crop Area

2.2.2 Food grain production is predominant in the State. Around 55 per cent of its gross cropped area is used for food grain production. Rice is the dominant crop. Some changes in the cropping pattern are noticed in 2018-19 over 2014-15. There is an increase in the share of high value crops like pulses and vegetables. But in the case of oilseeds and fruits, the share declined marginally. The share of area under cereals has increased from 51.4% in 2014-15 to 54.5% in 2018-19(P). Similarly, the share of area under of pulses and vegetables increased to 25% and 8.2% in 2018-19(P) from 23% and 7.4% respectively in 2014-15. But share of area under oil seeds and fruits decreased to 7.5% and 3% respectively in 2018-19 from 8% and 3.6% in 2014-15.

2.2.3 The floriculture system of the State constitutes of marigold, rose, gladioli and tube rose, cultivated area under these were recorded as 2378 ha, 1870 ha, 2374 ha and 511 ha respectively in 2014-15. The area under marigold and tuber rose in 2018-19 increased to 2615 ha and 513 ha respectively. The area under rose and gladioli, in contrast, decreased to 1867 ha and 1576 ha in 2018-19.

2.2.4 The Government has been continuously taking initiatives for diversification of crops with emphasis on high value crops like pulses, oilseeds, vegetables, and fruits through various developmental schemes like RKVY, NFSM, MIDH, PMKSY, and Management of Soil health.

Figure-2.6: Distribution of area under cereals, pulses, oilseeds, vegetables and fruits (%)



Production and Productivity

2.2.5 The total area under food crops consisting of paddy, pulses, maize, wheat, jowar, and millets constitutes 62 lakh ha in 2018-19, which is 79% of total cropped area. Production of paddy touched 117 lakh MT in 2018-19 with yield rate of 3036 kg/ha. Yield rate of maize increased to 2993 kg/ha in 2018-19 from 2055 kg/ha in 2014-15. The yield rate of pulses touched 540 kg/ha in 2018-19 from 508 kg/ha in 2014-15. Among the pulses, Mung (green gram) is extensively grown covering an area of 8.33 lakh ha followed by Biri or urad (black gram) with 4.89 lakh ha, Kulthi (horse gram) with 2.05 lakh ha and Arhar (pigeon pea) with 1.44 lakh ha in 2018-19. The yield rates of Mung, Biri, Arhar and Kulthi were reported as 491 kg/ha, 486 kg/ha, 1022 kg/ha, and 448 kg/ha respectively. The corresponding figures for the above pulses in 2014-15 were 476 kg/ha, 455kg/ha, 896 kg/ha, and 385 kg/ha respectively.

2.2.6 Out of the total acreage of 5.90 lakh ha under oilseeds in 2018-19, one third is under sesame with 2.02 lakh ha followed by groundnut with 1.92 lakh ha and mustard with 1.02 lakh ha. The other oilseeds like sunflower, linseed, niger, and castor are also grown in the State with low coverage. The yield rate of sesame is 402 kg/ha, while it is 1796 kg/ha for groundnut. The corresponding yield rates of above oilseeds in 2014-15 were 403 kg/ha and 1787 kg/ha respectively.

2.2.7 Among the fibres, 90% of the area under all of them put together is covered under cotton, whereas mesta, jute and sunhemp are cultivated in rest of the area. The yield rate of cotton increased to 490 kg/ha in 2018-19 from 410 kg/ha in 2014-15.

2.2.8 Onion, potato and sweet potato are grown with a share of 5%, 4% and 6% respectively in the total area under vegetables. The yield rates of onion, potato and sweet potato in 2018-19 stand at 11279 kg/ha, 11756 kg/ha, and 9386 kg/ha respectively, declining from the corresponding figures for the above vegetables in 2014-15 of 12066 kg/ha, 16655 kg/ha and 9426 kg/ha respectively.

Chillies, turmeric, coriander and ginger account for the bulk of the area under condiments and spices with 45%, 17%, 12% and 10% shares respectively in 2018-19. The productivity of chillies, turmeric, coriander and ginger is 1003 kg/ha, 7854 kg/ha, 552 kg/ha and 7734 kg/ha respectively in 2018-19, while it was 969 kg/ha, 7878 kg/ha, 547 kg/ha and 7878 kg/ha in 2014-15.

2.2.9 The nutritious millets traditionally occupied substantial part of the diets and crop systems in tribal areas of Odisha. Millets require less water and are more resilient to climate vulnerability. A special programme for promotion of millet has been undertaken in the State to revive millets for household consumption. During 2014-15, the area under small millet was 0.19 lakh ha and it rose to 0.33 lakh ha in 2018-19, up by 74%.

The production of mango, guava and banana stood at 8.05 lakh MT, 1.05 lakh MT and 4.49 lakh MT respectively in 2018-19.

Table-2.1: Area, Yield and Production of different crops, (Area in 000 ha, Yield- kg/ha and Prod- 000 MT)

Crops	2014-15			2018-19			Change		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
Paddy	4180	2760	11535	3859	3036	11718	-7.7	10.0	1.6
Maize	279	2785	778	251	2993	752	-10.0	7.5	-3.3
Mung	857	476	407	837	491	412	-2.3	3.2	1.2
Arhar	139	896	124	144	1022	147	3.6	14.1	18.5
Biri	598	455	272	260	509	132	-56.5	11.9	-51.5
Seasamum	212	403	85	203	402	82	-4.2	-0.2	-3.5
Groundnut	267	1787	478	192	1796	345	-28.1	0.5	-27.8
Potato	15	16655	250	25	11756	290	66.7	-29.4	16.0
Sweet Potato	42	9426	396	40	9386	378	-4.8	-0.4	-4.5
Onion	36	12066	432	33	11279	373	-8.3	-6.5	-13.7
Cotton	124	410	299	158	490	455	27.4	19.5	52.2
Small millets	19	502	9	33	518	17	73.7	3.2	88.9

Source: Directorate of Agriculture and FP, Odisha

Trends in growth of Agriculture

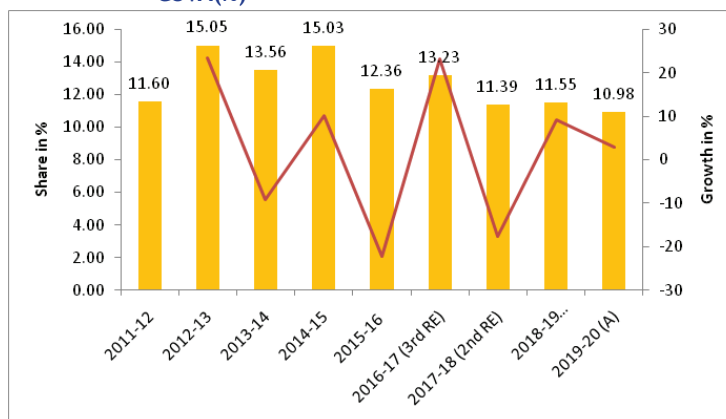
2.3.0 The State's GSDP from agriculture grew at 4.4% per annum from 2016-17 to 2019-20. During 2012-13, the growth rate of agriculture reached a peak of 23%, but it fell to -9% in 2013-14 due to impact of cyclone and flood. In 2014-15, the growth rate again moved to 10% and later due to severe drought in 2015-16, the growth was further affected and recorded a negative growth of 22%. Though the growth rate in 2016-17 increased to 27%, it again shrank to 17% on account of severe pest attack in 2017-18.

2.3.1 The share of agriculture in GSVA is around 11%. During 2011-12, the share in total GSVA was 11.60%. Immediately thereafter, it rose to 15% in 2012-13, but the fluctuating growth of the sub-sector naturally caused fluctuations in the share in GSVA too, but within a band of 11%-15%. Moreover, the medium-term trend seems to indicate a declining share, which in general is the case in most of the States and the country as a whole. The share and growth of agriculture from 2011-12 to 2019-20 has been given in Figure-2.7.

2.3.2 The share of horticulture crops like fruits & vegetables, and spices & condiments in total value of crop output constitutes the highest share with 46.4% followed by cereals with 37.5% in 2016-17. The share of pulses, oilseeds, fibres, sugarcane and narcotics are 4.62%, 1.78%, 1.57%, 0.19% and 1.58% respectively. The share of rest of agricultural activities like kitchen garden, flowers, fodders, rubber, grass and by-products amounts

to 6% of total value of output from crops. The main source of agriculture growth thus remains with horticulture crops, which needs greater attention to their production and productivity.

Figure-2.7: Annual growth and Share of Crop sub-sector in total GSVA(%)



Value of Output in Agricultural production

2.3.3 During 2016-17 the value of output of Cereals, Odisha contributed 3.68% of total value of Output of India and ranks 11th among the States. Paddy being the principal crop of the State contributes 98% of the total value of Cereals of the State. In crops like Cowpea and Pumpkin, Odisha is the highest producer having contribution of 71.38% and 21.29% of all India value of output respectively. The share of Cowpea in the total value of Output of Pulses is 4.3%. Similarly, Pumpkin contributes 3% of total Fruits and Vegetables in the State. Crops like lemon and Brinjal, Odisha is the 2nd highest producer having contribution of 21.29% and 17.54% of India respectively. Similarly the share of Brinjal is 17% of the total value of Fruits and Vegetables in the State. The detail is given in table 2.2.

Table 2.2: Share of value of Agriculture Output of Odisha to India Year 2016-17

Items	Percentage Share of value of Output of Odisha to India	Rank of Odisha among States
Cereals	3.68	11
Paddy	7.17	4
Jowar	0.06	13
Bajra	0.01	14
Cowpea	71.38	1
Lemon	21.29	2
Brinjal	17.54	2
Pumpkin	30.61	1

Source: MOSPI

Factors influencing Agricultural Production and Productivity

Rainfall and Climatic risk

2.3.4 Rainfall plays a vital role in agricultural production and productivity. The average rainfall in Odisha is around 1,451.2 mm with about 75-80 percent of the rainfall being recorded between mid-June and end-September (Kharif season). During 2018, the State received 1,643.3 mm of rainfall, which was 13.2% surplus above the normal rainfall. However, in the year 2017, the State received 1,336.4 mm rainfall with a deficit of 7.9%.

2.3.5 Natural calamities like cyclone, drought, floods and pest attack are common features in Odisha. Almost every alternate year, one part or the other of the State is hit by natural calamities of varying intensity. Agricultural production was affected by cyclone hudhud in 2014, drought in 2015, pest attack in 2017 and cyclone Fani in 2019.

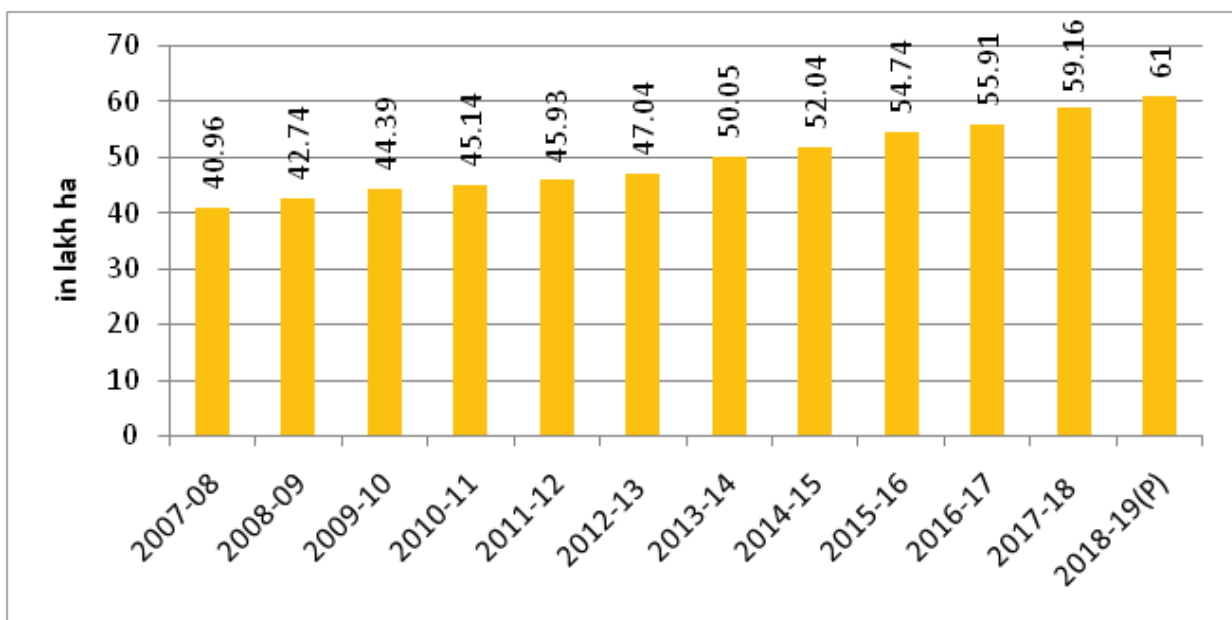
2.3.6 In spite of risks, the Government's timely interventions could ameliorate farmers' distress and the State has now become self-sufficient in food grains.

2.3.7 The Government has taken initiatives to support these marginalized farmers through livelihood support (KALIA) scheme and agriculture production clusters.

Irrigation

2.3.8 Irrigation has played a vital role in the growth and development of agriculture in the State. During the year 2018-19, Irrigation Potential Created (IPC) was 61 lakh ha, out of which IPC of minor schemes (flow and lift) constituted 41%. The major and medium including mega lift irrigation projects created 22 lakh ha of irrigation and other sources added 13.6 lakh ha. Over the years, IPC recorded an increasing trend from 40.96 lakh ha in 2007-08 to 61 lakh ha in 2018-19, up by 48.9% (Figure-2.8).

Figure-2.8: Irrigation Potential Created in the State since 2007-08



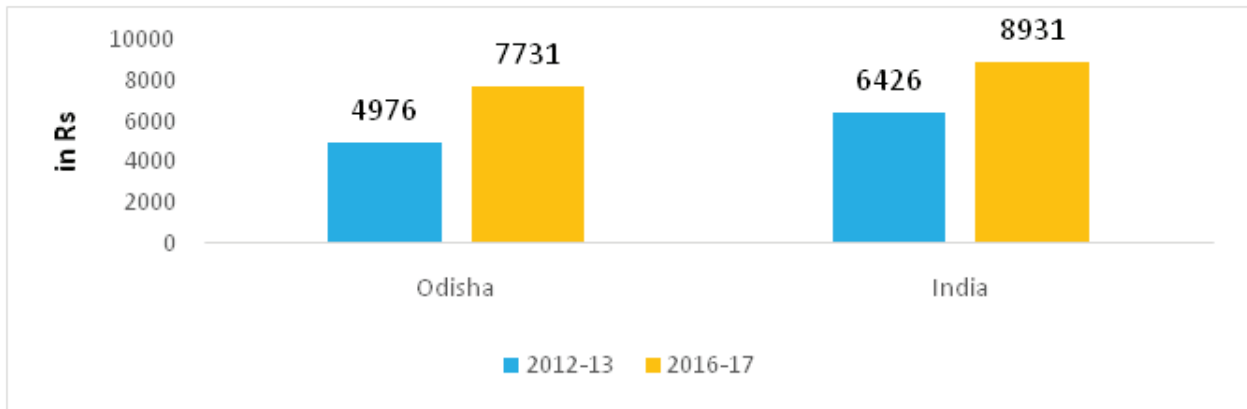
Farmers' Income

2.3.9 Increasing farmers' income is critical to agricultural growth. Average monthly income of agricultural households of the State stood at Rs 4976 in 2012-13 (NSS) as against all India figure of Rs 6426. In four years, the income rose to Rs 7731 in 2016-17 (NAFIS, 2016-17), an increase of Rs 2755/month. Similarly, at the national level, the income of agricultural household increased by Rs 2505/month.

2.4.0 On an annual basis, agriculture household income in Odisha over the period 2012-13 to 2016-17 increased by 11.6% as compared with 8.6% at all India level. Even so, rural households remain indebted, of which the majority are agricultural households according to the 70th round of NSS.

2.4.1 The farmers' welfare programme (KALIA) introduced by the State Government to accelerate agricultural prosperity and reduce poverty in the State is designed to address the issue of farmers' income.

Figure-2.9: Average monthly Income of agriculture households from 2012-13 and 2016-17(in Rs.)

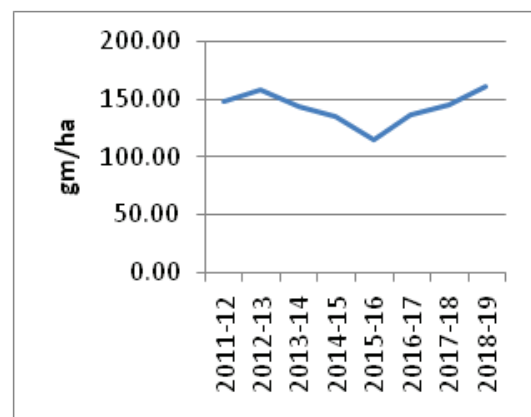
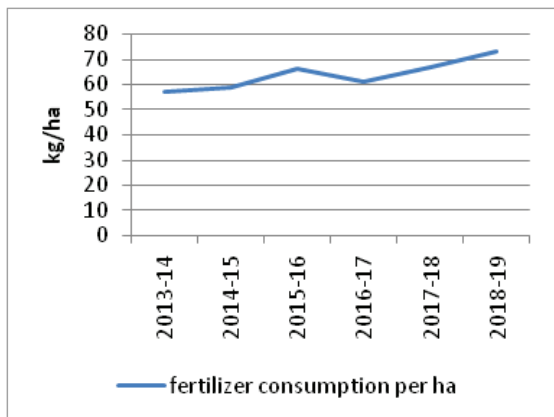


Fertilizer Consumption and use of pesticides

2.4.2 Fertilizer use is one instrument implemented as a means of raising agriculture production and yield. There are many studies on fertilizer use as one factor impacting agricultural output, although in recent times some evidence of the negative effect of overusing chemical fertilizers has also gained credence. The State also witnessed rising use of fertilizer, which can be seen in figure 2.10. From 57.1 kg/ha in 2013-14, the use of fertilizer increased to 68.6 kg/ha in 2017-18 and 72.9 kg/ha in 2018-19. The balance use of fertilizer (NPK use ratio) is the key to better crop production and maintaining soil health. Against an ideal NPK use ratio of 4:2:1, the State’s NPK use ratio was 4.68:2.02:1 that is closed to ideal.

2.4.3 Pesticides are also important and they protect crops from pests, diseases and weeds as well as raising productivity per hectare. The use of pesticides in the State was 144 gm/ha in 2013-14 and it increased to 146 gm/ha in 2017-18 and 161 gm/ha in 2018-19. In addition to increased use of pesticides, the adoption of eco-friendly techniques like integrated pest management(IPM), biological control measures, seed treatment campaign helps to contain the pest problems.

Figure-2.10: Consumption of fertilizer in the State Figure-2.11: Pesticide Consumption in Odisha



Box-2: Organic Farming

The practice of organic farming, is said to be the best known alternative to the conventional method, which aims at human welfare without harm to the environment being affected by excessive use of fertilizer and pesticides. It is being promoted through PGS and third certification in the state. The area under organic certification process under third party is around 127851.77 ha. during 2018-19 as reported by APEDA (cultivated farm area and wild harvest).

Under Paramparagat Krishi Vikas Yojna (PKVY), promotion of Organic Farming has been initiated in the State since 2017-18 covering 10 districts of Odisha like Khurda, Cuttack, Kandhamal, Nayagarh, Kalahandi, Koraput, Rayagada, Sundergarh, Sambalpur and Bargarh. It is a cluster based three year programme (1 cluster=20 ha.).

Govt of India has allotted 720 no. of clusters (14400 Ha.) implemented during 2018-19. Out of 720 clusters, 200 clusters have been implemented during 2018-19 in 8 districts. Rest 520 clusters are being implemented in 18 districts of Odisha during 2019-20.

The Govt. has approved the brand name of organic produce as 'Kalinga Organic' & Logo of PKVY produce. Trade Mark registration of the Logo has already been processed.

Odisha Organic Farming Policy-2018 has been launched in the State to promote Organic Farming to the tune of 2 lakh ha. during coming 5 years.

Farm Mechanization

2.4.4 Mechanization greatly increases farm worker productivity. Studies reveal that there is a positive correlation between application of improved technologies and the land productivity. Further, farm mechanization has great significance for enabling farmers to take up timely and quality agricultural operations, thus reducing the costs of production. The State is implementing 'Popularisation of Agricultural implements, equipment and diesel pump sets' under State sector and central sector schemes through provision of subsidy. The supply of farm implements has been increasing in the State.

Table-2.3 Farm Implements supplied under Farm Mechanization

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	1071	949	9990

Source: D A&FP, Odisha

Power Consumption

2.4.5 In Odisha, share of agriculture in total power consumption has increased from 1.14% in 2010-11 to 2.56% in 2017-18. Between 2016-17 and 2017-18, power consumption in agriculture increased by more than 1.5 times, from 281.7 MU to 453.9 MU (Table 2.4). Power consumption in agriculture acts as a catalyst for other inputs, i.e., for pumping of bore wells and tube wells for irrigation, for farm mechanization, etc.

Table-2.4: Power consumption in the agriculture sector in Odisha

Year	Share of power consumption for agriculture purpose	
	In MU	Percentage to total power consumption
2010-11	149.98	1.14
2011-12	176.99	1.36
2012-13	154.65	1.14
2013-14	162.94	1.13
2014-15	185.10	1.20
2015-16	222.75	1.39
2016-17	281.74	1.71
2017-18	453.90	2.56

Source: D A&FP, Odisha

Supply of Quality Seeds

2.4.6 Seed quality plays an important role in the production of agriculture and horticultural crops. Use of high yielding varieties seeds has been rising in the State in the last few years. During 2017-18, 2,24,078 quintal of quality seeds of paddy was supplied covering 2.43 lakh beneficiaries. But it increased to 2,82,973 quintals in 2018-19, up by 25%. Even in the case of quality non paddy seeds, 6162 quintal seeds were supplied in 2018-19 from 1627 quintals in 2017-18.

Table-2.5: Distribution of quality seeds in Odisha

Year	Quality Paddy seeds (in qtl.)	Quality non paddy seeds (in qtl.)	Beneficiaries (nos.)
2017-18	224078.20	1627.22	243555
2018-19	282973.60	6162.04	244824

Source: D A&FP, Odisha

2.4.7 The seed replacement ratio(SRR) of paddy also increased from 22.46 to 24.09 during the current period.

Post-Harvest Management

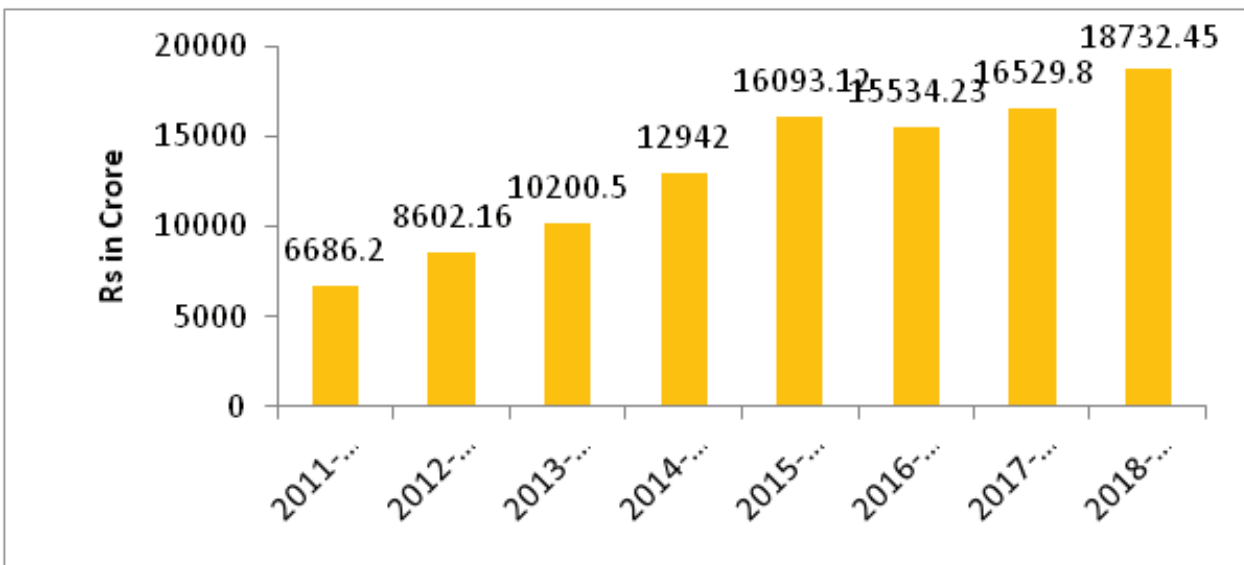
2.4.8 Post-harvest management is a system of handling, storing, and transporting agricultural commodities after harvest. It is an important aspect of maintaining crop quality and consequent price realisation. During 2013-14to2017-18,19 Multi-commodity Cold Storages,35 Cashew Processing Plants, 619 Small scale preservation units, 1237 Pack Houses, 2348 low cost onion structures have been created under post-harvest management to horticultural crops. In 2017-18 alone, 2499 different post-harvest activities have been implemented.

2.4.9 Under the scheme of Infrastructure Development, APEDA has sanctioned financial assistance of Rs.528.35 lakh for setting up an Integrated Post Harvest pack house as common facility for preservation of fresh fruits and vegetables at Titilagarh in Bolangir District of Odisha.The farmers/ FPOs/ Traders of Bolangir and adjacent areas are likely to utilize the facility available.

Agriculture credit

2.5.0 Agricultural credit is an important input given the increasing capital intensive and technology driven nature of agriculture, such as for irrigation, farm implements and machines, HYV seeds, etc. In Odisha, as majority of the farmers are small and marginal sharecroppers, the need for institutional credit for seasonal operations and capital investment is large. Disbursement of crop loans has been increasing in the State, indicating the increased demand by farmers.

Figure:2.12: Disbursement of crop loan to farmers: An increasing trend (Rs in Crore)



Minimum Support Price for agricultural crops

2.5.1 To give guaranteed price and assured market to the farmers, the Government introduces minimum support prices of selected agricultural crops. The main objective of Minimum Support Price (MSP) is to avoid losses of farmers by helping them to realize a minimum level of price at which they can sell their produce. The Government announces Minimum Support Prices (MSPs) for 22 mandated crops and fair and remunerative price (FRP) for sugarcane. MSPs for all mandated crops with a return of at least 50 percent over all India weighted average cost of production for the season 2018-19 had also been announced, with an increase over the previous year.

Box-3: Impact of MSP

The NITI Aayog has conducted a study entitled “Efficacy of minimum support prices on farmers”. The study covered 14 States, 36 Districts, 72 Blocks, 144 Villages and 1440 Households. The study is based on both primary and secondary data. The study reference period was from the year 2007-08 to 2010-11. The study has found that MSP declared by the Government has encouraged 78% of the farmers covered under the study to adopt improved methods of farming such as high yielding varieties of seeds, organic manure, chemical fertilizer, pesticides and improved methods of harvesting etc., enabling them through the remunerative price. As such, the Government may consider encouraging farmers to diversify crops with the incentive of higher MSP.

Evidence based Agriculture

2.5.2 Evidence is a critical element in successful decision making. Important and fruitful farming decisions require adequate evidence.

2.5.3 As per 70th round NSS on situation of agriculture households (2012-13), about 60% of rural agricultural households in Odisha reported cultivation as principal source of income, while 25% depend on wage/salaries as principal source. The average outstanding loan per agricultural household for all classes was Rs 28,200 for Odisha, but it increases with the increase in size class of land. The households in Kerala, Andhra Pradesh and Punjab had the highest outstanding loan with Rs 2.13 lakh, Rs 1.23 lakh and Rs 1.19 lakh respectively. During that period, average monthly income of an agricultural household in Odisha was Rs 4976.

2.5.4 As per Rural Financial Inclusion survey by NABARD (NAFIS report, 2016-17), about 27% agriculture households in Odisha leased in land as against 12% at all India level. The average monthly income in Odisha stood at Rs 7421 for Odisha during 2015-16, which registered a compound growth of 14.3%. As regards indebtedness of households, about 54% households in the State showed indebtedness. In Karnataka, AP and Telangana, the proportion is above 70%.

2.5.5 The evidence on agriculture households showed an increase of household income during 2015-16 as compared to NSS 70th round survey in 2012-13 and it further highlighted that 27% agriculture households leased in land. Thus the survey provides a meaningful database for measuring the performance of households and its practices. The analysis draws attention of policy makers for agriculture development in the State.

2.5.6 Recent efforts by the Government to build a large database of farmers under KALIA scheme that identifies farmers and landless with respective Aadhar is noteworthy. Besides a large volume of administrative data on land use pattern, production and productivity, use of fertilizers, seeds are being generated in the concerned Departments, which ought to be combined/integrated along with farmers' database for better planning, monitoring and strategy formulation on agriculture development. administrative data on land use pattern, production and productivity, use of fertilizers, seeds are being generated in the concerned Departments, which ought to be combined/integrated along with farmers' database for better planning, monitoring and strategy formulation on agriculture development.

Government initiatives through Schematic Intervention

KALIA

2.5.7 A farmer's welfare programme - Krushak Assistance for Livelihood and Income Augmentation (KALIA) has been introduced to accelerate agricultural prosperity and reduce poverty in the State through providing support to cultivators for cultivation @ Rs.10,000/- per family for small and marginal farmers both for Kharif and Rabi seasons, livelihood support of Rs.12500/- per family for landless agricultural households for taking non-farm activities such as goat, sheep, poultry farming, mushroom cultivation, bee keeping and fishery activities, financial assistance to vulnerable households, life insurance support to cultivators and landless agricultural labourers and interest free crop loan up to Rs 50,000 to the farmers.

2.5.8 More than 37 lakh farmers have been covered under the programme. This initiative of the State Government has been recognised and appraised at various forums in the country. KALIA scheme of the State Government is perhaps the 1st Universal Basic Income (UBI) scheme of the country.

Odisha Farmer Producer Organisations (FPOs) Policy

2.5.9 Launched during Krushi Odisha 2018, the objective of the scheme is to make the State the most sought after destination for agri-business and food processing sectors with focused attention and handling support to Farmer Producer Organisations (FPOs) in production and aggregation. The State has also come up with a dynamic FPO policy and signed MOU with organizations like Navkisan Trust to take it forward.

Millet Mission

2.6.0 Steps have been taken for promotion of non-paddy crops among the farmers of the State as Odisha has become a surplus State in Paddy production and has become the 4th largest paddy producing State in the country. In order to provide nutritional security, the Millets Mission programme was strengthened for promotion of millets in the State. Implementation of Odisha Millets Mission (OMM) was started in 53 blocks of 11 districts by involving 40 NGOs and 53 CBOs. Steps have been taken for extension of OMM programme to 72 blocks covering 14 districts of the State. During 2018-19, 12,257 hectares have been covered by involving 27,876 farmers under the programme. Besides, steps have been taken for procurement of millets from the farmers under the millets mission programme to provide remunerative price to the millets farmers and so far 17,986 quintals of Ragi have been procured from the farmers. The initiative of Odisha Millets Mission programme of the State received the SKOCH Order-of-Merit Award attention all level. Besides, the State Government received an award for the best government initiative from Indian Institute of Food Processing Technology, Thanjavur in 2018 for the programme.

Price Support System(PSS)

2.6.1 With a view to provide remunerative prices to the farmers for non-paddy crops namely, green gram, black gram, arhar, groundnut and sunflower, the Price Support Scheme has been introduced for these crops through involvement of NAFED in the State. During 2017-18 under the programme, 2670 MT of green gram, 4220 MT of black gram, 2640 MT of groundnut, and 130 MT of sunflower seeds were procured from the farmers of the State through MARKFED.

Soil Health Management

2.6.2 Soil testing has become an important aspect of modern crop husbandry. The Government have established 30 static and 17 mobile soil testing laboratories, greatly enhancing the soil testing capacity. Besides, 314 mini soil testing labs have been established, on each block level to cater to the soil testing needs. These will enable the concerned officials to issue around 15 lakhs soil health cards annually with recommendations for balanced fertiliser use. This capacity is proposed to be enhanced through establishment of more mobile STLs. The State has equipped all the static and 11 mobile STLs with testing facilities for secondary boost to production and productivity.

Organic farming

2.6.3 It is being promoted in around 10400 hectares under Paramparagat Krishi Vikas Yojana. It is planned to extend the programme to another 10,400 hectares during 2019-20. Further, organic clusters are also being promoted under Millet Mission. During 2018-19, State Organic Farming Policy was brought in to force with an objective of bringing 2 lakh hausered organic farmers in next 5 years. This will be a giant leap towards achieving sustainability. Besides, integrated farming is being promoted for ushering in an era of sustainable crop production.

Ama Krushi

2.6.4 As a part of digital initiative, the Dept of Agriculture & FE has launched a two way interactive voice response system (IVRS) named “ Ama Krushi” In the past year, over 200,000 farmers across all 30 districts in Odisha have been on-boarded onto PAD’s flagship “two way Interactive Voice Response (IVR)”service, which has been named ‘Ama Krushi’. Through this service, farmers receive a weekly advisory message on recommended best practices for cultivation in the entire crop cycle designed by expert agronomist.

Crop Insurance

2.6.5 To popularise enrolment under crop insurance by non loanee farmers, massive capacity building and awareness generation programme have been taken up across the State to bring more farmers under crop insurance. As a result under crop Insurance, registration of non-loanee farmers has increased more than 4 times i.e., from 30, 000 during 2016-17 to 2.91 lakh during 2018-19.

2.6.6 The State has been able to settle insurance claims of the farmers faster than most of the States in the country. During 2018-19, around Rs 1726.78 crore of claims pertaining to 2017-18 have been settled. During 2018-19, around 20.75 lakh farmers, including 2.91 lakh non-loanee farmers, have enrolled under crop insurance.

Agriculture Policy: 2020 (SAMRUDHI)

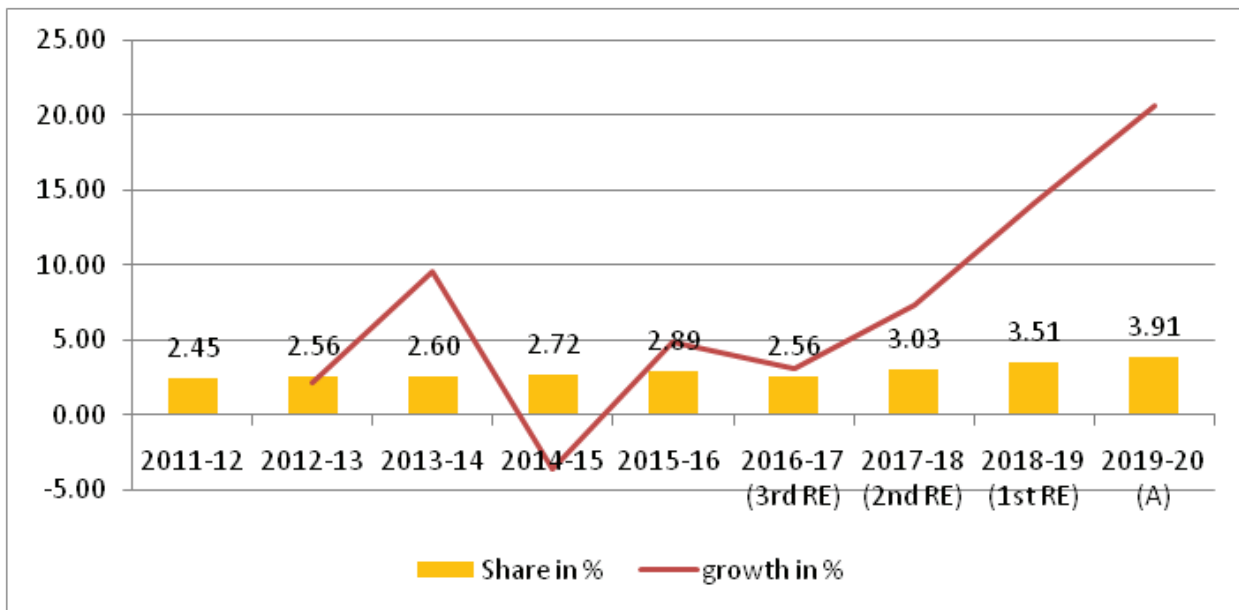
2.6.7 The objective of Agriculture Policy of 2020 is to ensure continuous growth in farmer’s income, making the growth process inclusive of small and marginal farmers, landless farmers and ensuring sustainable, stable and scalable agricultural growth. The sector specific strategy in the policy are designed on eight pillars: “SAMRUDHI”.

- S: Leveraging Science and Technology
- A: Adaptation to climate change
- M: Markets (domestic and global), physical and financial, sport and future
- R: Resource use efficiency ensuring higher productivity
- U: Upscaling appropriate infrastructure
- D: Diversification of production to high value agriculture
- H: Human resource upgrading and skilling
- I: Strengthening Institutions

Livestock

2.6.8 Livestock play a significant role in rural livelihoods and economies of the Indian States. It supplements family income and generates gainful employment in rural areas. It is the second largest segment after crops, contributing around 14% of total GVA of Agriculture & allied activities. The milk segment contributes around 43% of total value of output from livestock and the meat segment contributes around 48%. The livestock sector’s share in GVA has been increasing from 2.54% in 2011-12 to 3.51% in 2018-19 and it is expected to increase 3.91% in 2019-20. The average growth in this sector stood at 7.3% over the years which is higher compared to crops sector.

Figure-2.13: Share and growth in livestock sector from 2011-12 to 2019-20



Livestock Population

2.6.9 As per the last conducted Livestock Census 2012, Odisha has 4.05% share of India's total livestock and 2.73% of the total poultry in India, ranking 11th and 10th respectively out of the 28 States. The total livestock population in the State stood at 2.07 lakhs, while poultry population was over 1.99 lakhs. Cattle form the largest share of livestock population with a share of over 60%. (Odisha has a share of over 6% in the total cattle population in India, ranking the State 7th amongst all the States). Majority of the total male cattle 92.7% is reared for draught purposes only, the remaining are reared for breeding purposes. For female cattle, almost 50% are milking, while a significant 40% are dry. Exotic and crossbreeds of female cattle show positive composition, with over 60% milking cows.

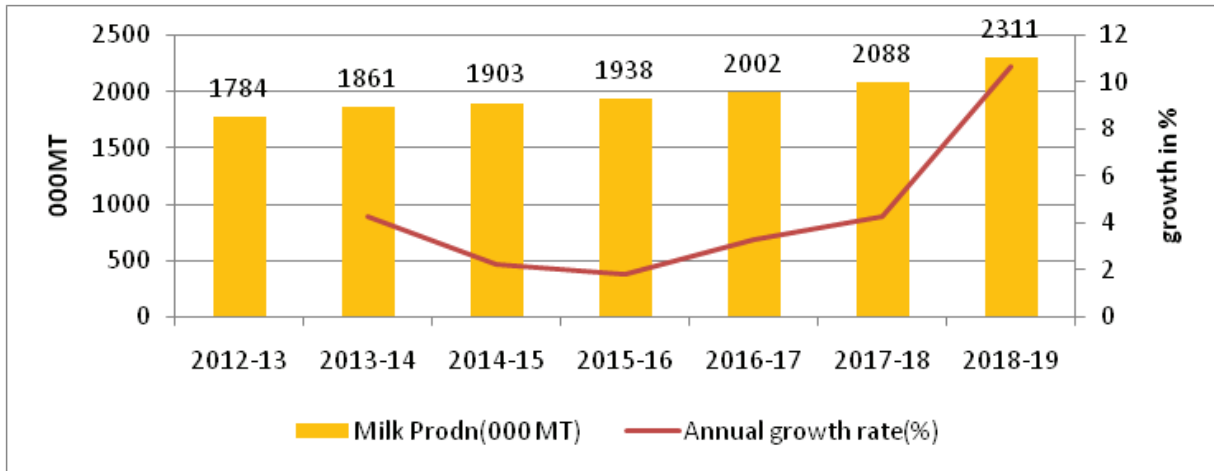
2.7.0 The declining trend in livestock population is an area of concern: between 2007 and 2012, the livestock population was reduced by 10% to 207.33 lakhs in 2012 from 230.57 lakh in 2007. All livestock species witnessed a decline with the largest dip witnessed for pig population. The number of pigs in the State reduced to less than half in a span of 5 years. Buffaloes witnessed the second largest population decline. The percentage share of exotic/cross-breed cattle in total cattle population is increasing, but for indigenous cattle, it is decreasing compared to previous Census. Significantly, there is an increase of 34% of crossbreed female cattle population in the 2012 Census.

2.7.1 Though the absolute livestock population has been declining, the composition has shown positive trends. Share of crossbred cattle has almost doubled to 6.3%. This indicates the rising share of higher productive animals and the same is reflected in the rising milk production in the State, even when the absolute number of cattle is declining. Further, the share of goats has increased by 7 percentage points. As of 2012, goats had almost one-third share of the entire livestock population.

Milk Production

2.7.4 As mentioned above, notwithstanding a declining livestock population, Milk production in Odisha has grown from 1784 thousand MT in 2012-13 to 2311 thousand MT in 2018-19, a CAGR of 9%. Around 85% of milk production is cow milk and 13% is buffalo milk.

Figure-2.14: Milk production in Odisha and growth(%)

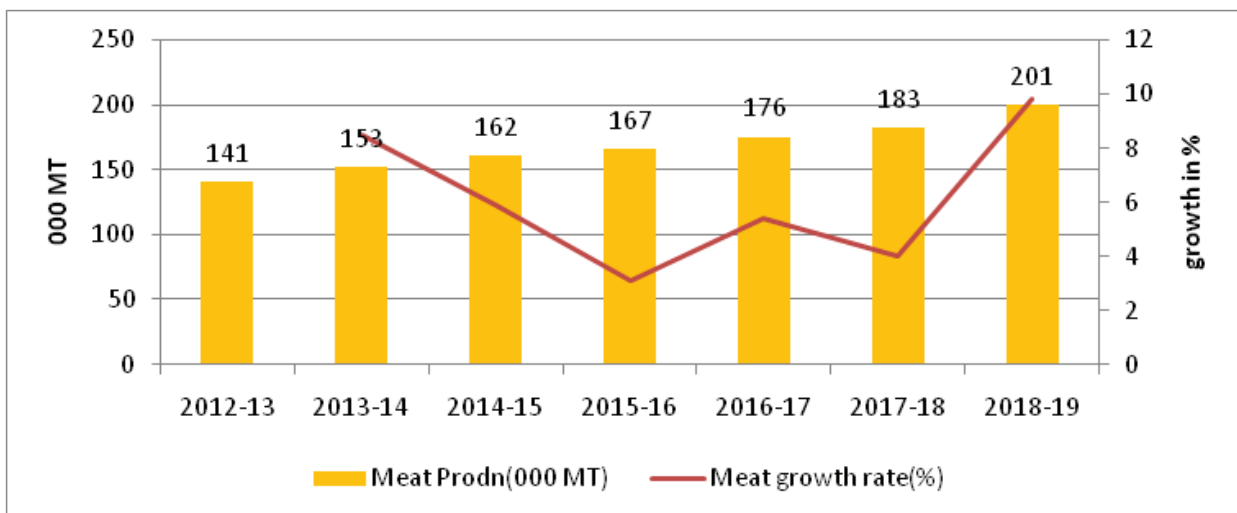


2.7.5 In terms of per capita availability of milk, it was 113 gm/day in 2012-13, which increased to 123 gm/per day in 2017-18 and 135 gm/per day in 2018-19.

Meat and Egg Production

2.7.6 Meat accounts for 27% of total GVA in Livestock sector. Of the total meat produced, 47% is poultry meat and 53% is goat/lamb meat. As regards per capita availability of meat, it was 3.29 kg/annum in 2012-13 and 3.86 kg/annum in 2018-19. But in 2018-19, the per capita availability of meat was 4.29 kg/annum.

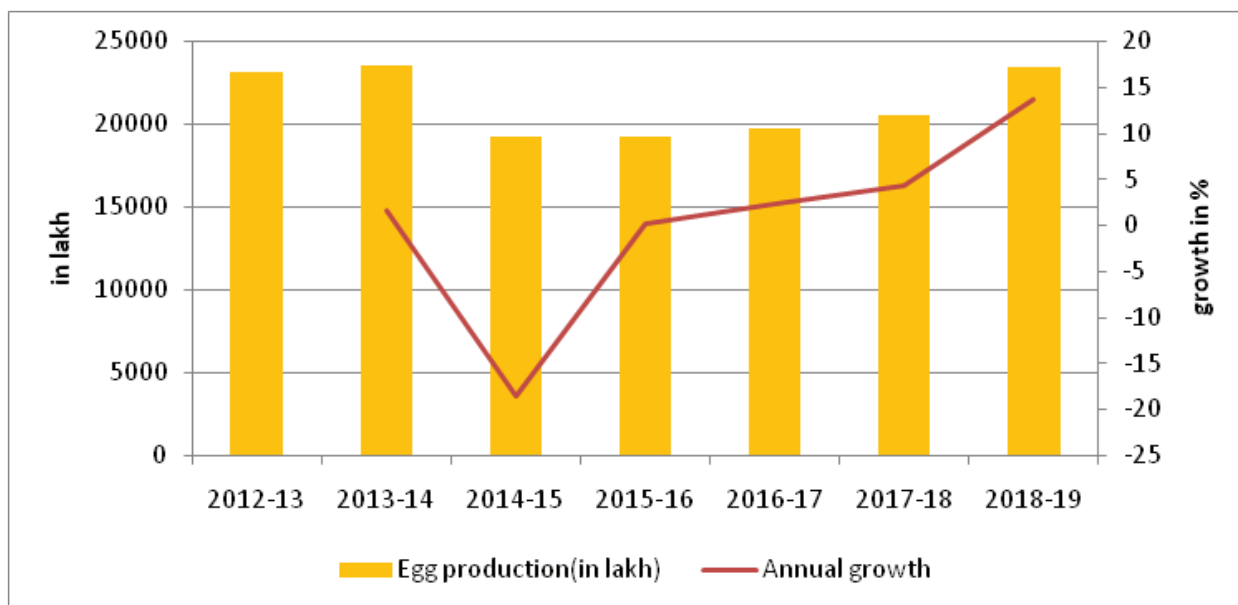
Figure-2.15: Meat Production in Odisha and growth(%)



Egg Production

2.7.7 Egg production in Odisha has also increased significantly from 23,229 lakh in 2012-13 to 23,452 lakh in 2018-19. However, the per capita availability of egg has decreased to 50 (per annum) in 2018-19 from 54 in 2011-12.

Figure-2.16: Egg production in Odisha and growth(%)



2.7.8 At present OPOLFED, a Govt of Odisha undertaking carries out various marketing activities like supply of eggs, packet eggs and chicken meat in twin cities of Bhubaneswar and Cuttack through 73 sales booth and chicken centres. To increase its marketing outreach, the Government decided to establish 53 fresh chicken centres across the State in Kandhamal, Puri, Jagatsingpur etc.

Government Initiatives

National Mission on Bovine Productivity (NMBP):

2.7.9 Under this scheme, Animal Health cards (Nakul Swasthya Patra) along with UID identification and creation of an e-market portal for bovine germplasm for connecting breeders and farmers by uploading data on National Data Base has been initiated.

Mobile Veterinary Unit (MVU):

2.8 MVUs are operational in all 314 blocks of the State. The MVUs are operating for 20 days in a month and conduct one camp covering at least two villages per day from Monday to Saturday.

Rural Backyard Poultry Development:

2.8.1 The marginal and small farmers in the natural calamities affected districts are supplied with 50 nos. of day-old chicks to promote backyard poultry farming. During the year 2018-19, 1600 WSHGs to be supported with small layer units of 200 capacity with a unit cost of Rs.0.90 lakh with 60% subsidy per unit.

Assistance to “KALYANI” project through BAIF Research and Foundation

2.8.2 Under this scheme, Integrated Livestock Development programme through Dairy Development in 10 districts and comprehensive goat development programme in 5 districts has been taken up through BAIF.

Genetic Improvement of Cattle and Buffalo

2.8.3 State government has given priority to this scheme for enhancement of income of farmers through artificial insemination for genetic improvement of indigenous cattle and buffalo. It is targeted to cover 10 lakh breedable bovine under this scheme during 2019-20.

Mukhya Mantri Krushi Udyog Yojana (MKUY)

2.8.4 In this scheme a beneficiary can apply for minimum 10,000 bird capacity for layer farming or 4000 bird capacity for broiler farming. This is a simple transparent online method. In this scheme a General category farmer can avail subsidy up to 40%, Women SC/ST farmers can avail subsidy upto 50% subject to maximum of Rs 50 lakhs for any project.

Fodder Development Activities

2.8.5 Under state plan scheme during 2018-19 perennial cultivation at farmer's field covering 1826 acres of land has been covered. Total 7064.48 acre of land have been cultivated involving perennial & seasonal fodder cultivation. Initiation has been taken to increase the limit of cultivation of 0.5 acre per farmer to cover unlimited areas per farmer to achieve more areas in perennial fodder cultivation

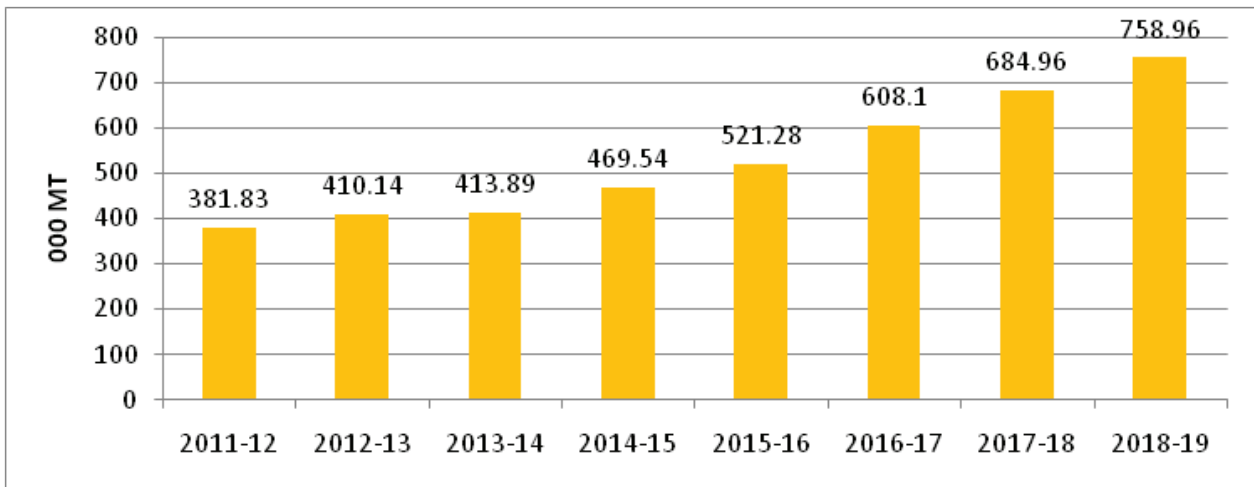
Fisheries

2.8.6 Odisha being a maritime State, is endowed with rich potential of inland brackish water and marine fishery resources. 480km long coastline and 24,000 sq. kms of shelf area along the Bay of Bengal offers tremendous potential for development of fresh water, brackish water and marine fisheries with scope of fish production together with employment and income generation for socio-economic prosperity. The Government has taken up a mission for doubling of inland fish production and tripling the present level of export.

2.8.7 Fish production has increased from 6.85 lakh MT in 2017-18 to 7.59 lakh MT in 2018-19. Of the total fish production, fresh water fish constitutes 67%, brackish water 12% and marine fish 21%. Per-capita consumption of fish was 14.4 kg in 2017-18 and it jumped to 15.4 kg in 2018-19. Crab production increased to 4.76 (000 MT) in 2018-19 from 3.88(000 MT) in 2017-18. Major source of fresh water fish is tanks/ponds followed by reservoirs, rivers/canals and swamps/lakes.

2.8.8 The production of spawn and fry stood at 38876 lakh and 8962 lakh respectively in 2018-19, with over 69% contribution from the private sector.

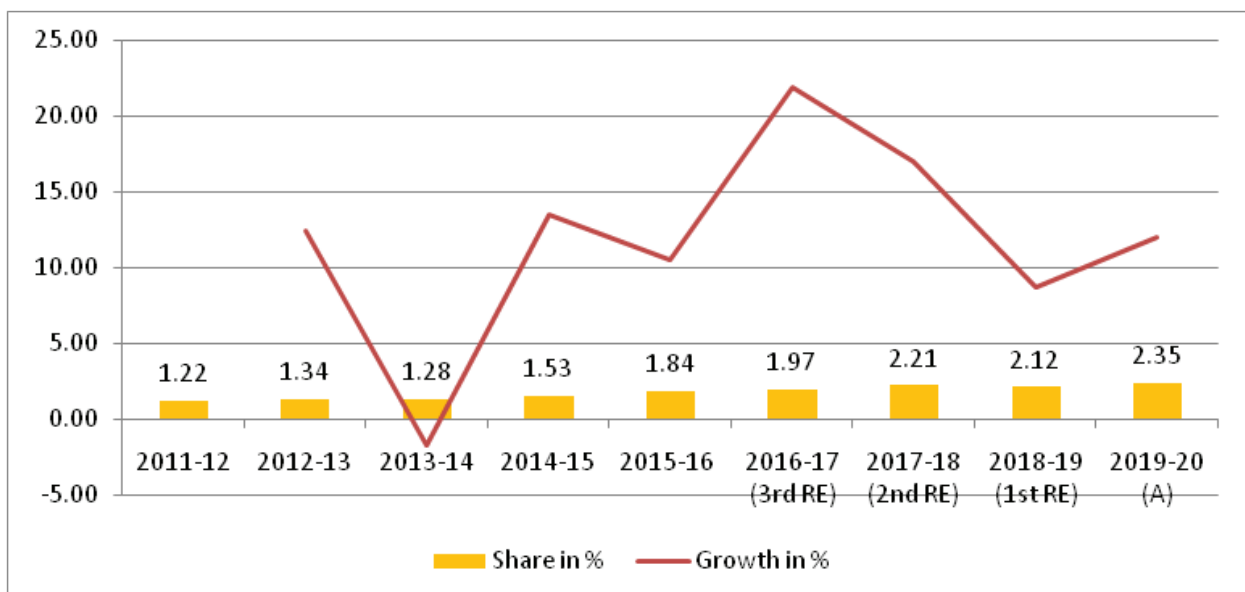
Figure-2.17: Fish production in Odisha



2.8.9 The quantity of fish exported to other States and countries has been rising and reached at 197.92 (000 MT) in 2018-19 from 192.82(000 MT) in 2017-18. Marine fish holds the major share with 44% in export followed by brackish water fish with 32%.

2.9 In terms of contribution to GSDP, the share of fishery sector is rising continuously from 1.22% in 2011-12 to 1.84% in 2015-16 and 2.12% in 2018-19. It is expected to increase 2.35% in 2019-20. The sector registered a growth of 12.4% in 2012-13, decelerated to (-)1.7% in 2013-14 on account of the direct effect and damages to fishing equipment caused by the cyclone Phailin, and subsequently grew at an average rate of 14% from 2014-15 to 2019-20.

Figure-2.18: Share and growth rate in Fisheries Sector from 2011-12 to 2019-20



Fish (Marine and Inland)

2.9.1 Indian fish market has two important sources like marine and inland fish. Both of them contributed Rs 18166278 Lakh during 2016-17 out of which the share of Inland fish was Rs 10270692 Lakh (56.54%) and that of Marine fish was Rs 7895586 Lakh (43.46%). In both the categories, Odisha come within top 10 in case of Inland fish, Odisha contributed Rs 495667 Lakh (4.8%) and ranked 7th among the States. West Bengal topped the list with 26.8% share followed by Andhra Pradesh (20.6%), Bihar (7.7%), Assam (6.8%) and so on.

Odisha having 480 km coastline is also a major contributor to Indian marine fish market. During 2016-17, the contribution of the State was Rs 326411 lakh which comes about 4.13% of the total. The rank of the state was 8th among the States. The top ranking states are Andhra Pradesh (37.73%), Kerala (11.59%), Tamil Nadu (11.30%) and Gujarat (10.82%). As the State has a long coastline, there is opportunity for raising the marine fish production in future. Percentage of Value of Output of Odisha to India and also rank is given in table-2.6

Table 2.6 Share of value of Fishery Output of Odisha to India, 2016-17

Items	Percentage Share of value of Output of Odisha to India	Rank of Odisha among States
Inland fish	4.80%	7
Marine Fish	4.13%	8

Source: MOSPI

Government Initiatives

Odisha Fishery Policy, 2015

2.9.2 The Government issued the latest Odisha Fishery Policy in 2015, which offers great opportunities for development of fresh water, brackish water and marine fisheries in the State. Under Inland sector, with technical support of "World Fish", activities like Carp-Mola poly culture, GIFT tilapia demonstration, cage culture in reservoirs and GIS spatial planning cell are initiated.

Matsya Pokhari Yojana

2.9.3 The scheme was introduced in 2017-18 for taking up fresh water fish production creating new water bodies with unit cost of Rs 8.50 lakh/ ha with 50% subsidy assistance.

Matsyajibi Unnayan Yojana

2.9.4 The scheme envisages providing awards to meritorious children of fishermen community and financial assistance to fisherwomen SHGs.

Skill up gradation training

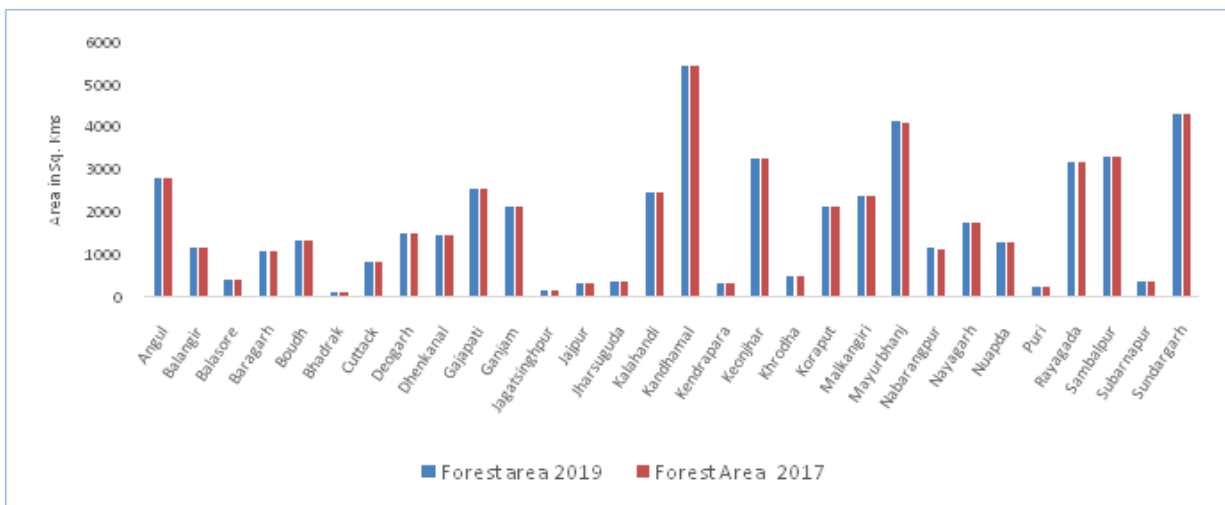
2.9.5 15 days training for skill development is imparted to fish/shrimp farmers in fresh water/brackish water sector to popularise fisheries programmes and technologies.

Forestry

2.9.6 Rapid socio-economic changes have profound impacts on all sectors including forestry. The demand for forest-driven goods and services have increased the complexity of forest management. Concerns over climate change and deepening water deficits have moved forestry into spotlight of national development. Many people rely on forest resources for their livelihoods and use tress on farm to generate food and cash. Apart from maintaining the ecological balance and providing a habitat for wildlife, forestry generates revenue by production of variety of products like wood, leaves and wild flowers.

2.9.7 As per Forest Survey Report, 2019, the forest cover in the State is 51,619 sq km which is 33.15% of the State's geographical area. In terms of forest canopy density classes, the State has 6970 sq km under very dense forest, 21552sq km under moderately dense forest and 23,099 sq km under open forest. As compared with other States, Odisha has 7.25% of the total forest cover in the country.

Figure-2.19: District wise forest area in 2017 and 2019



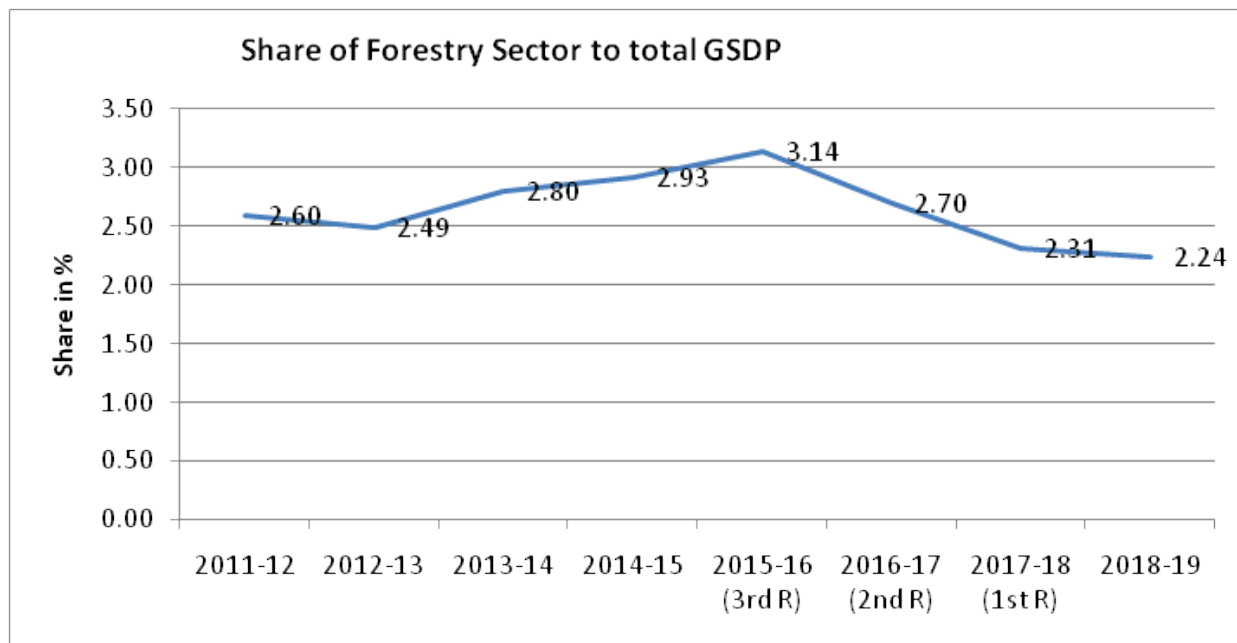
Source : ISFR, 2019

2.9.8 The last assessment of forest cover, prior to 2019, was conducted in 2017. During the two years between the assessments, Odisha has increased its forest cover by 274sq km. The reasons for a net increase of 274sq km in forest cover can be attributed to plantation and conservation activities both within and outside the Recorded Forest Areas. The district-wise forest area, 2017 and 2019 is presented in Figure-2.19. The reason for decrease in forest cover observed in some districts can be attributed to developmental activities.

Value of output of Forestry

2.9.9 Significant forest products in the State include timber, fuel wood, sal seeds, kendu leaves, gums and resins, cane, bamboo, grass and fodder, drugs, spices and condiments, herbs etc. Value of output from forestry sector is estimated covering items like industrial wood (recorded), trees outside forest, fuel wood, Non-timber forest products (minor forest products and fodder) and input. The share of forestry sector works out to 2.7% of GSDP. The value of output from major forest products like industrial wood and fuel wood constitutes 77%, while share of minor forest produce (minor forest products and fodder) is estimated as 23%.

Figure-2.20: Share of Forestry Sector to total GSDP



Forest Revenue

2.10. Odisha generates revenue by production of timber and related products, firewood, bamboo and kendu leaf from its forests. Over the years, the revenue generated from all these products has been rising steadily. Production, average sale price and value of forest production for 2018-19 is given in table-2.7.

Table-2.7: Production, quantity sold and revenue from forest products

Forest Product	Units	Production	Quantity sold	Revenue INR in lakh	Average sale price (in INR)
Timber					
Round	Cu.m	34446	34025	10644.63	27270
Sawn	Cu.m	225	898	332.87	37048
Firewood					
Round	MT	29376	45986	1417.13	3081
Sawn	MT	215	309	16.73	5413
Kendu Leaf	Quintal	2.85	2.73	46431.31	16978
Bamboo	Sale Unit	5803	5773	158.13	2940

Source: PCCF, OFDC, Odisha

Wildlife

2.10.1 Protection, conservation and management of wildlife are other activities of the State is being undertaken by the forest department. There are 19 sanctuaries, one National Park (Bhitarkanika), and one proposed national park (Similipal) which have been notified under the provisions of the wildlife protection act, 1972 for in-situ conservation. These protected areas constitute 10.37% of the total forest area of the State. There is one bio-sphere reserve named Similipal bio-sphere reserve and three elephant reserves (ERs) namely Mayurbhanj ER, Mahanadi ER and Sambalpur ER notified to conserve prime elephant habitats and to launch various management interventions. One large zoological park (Nandankanan), 3(three) small zoos and 7(seven) mini zoos have been established across the State for management of wildlife outside the protected areas. The State has the singular distinction of having three stretches of mass nesting beaches of endangered olive ridley sea turtles. The world's largest nesting ground of olive ridleysea turtle (*lepidochelysolivacea*) is at Gahirmatha. It has many natural wetlands including the largest wetland of Asia (Chilika) and Bhitarkanika which are declared as "Ramsar Sites".

Rural Development

2.10.2 Rural Development is the backbone for any country's economic development, and it helps the economy to grow and sustain. This sector's development may depend on two main elements: (i) end of poverty and (ii) ease of living.

Table 2.8: Total Area and Rural Population, 2011

Region	Area (in 000, Sq KM)	Rural Population(in crore)	% to Total Population
Odisha	156	3.50	83.3
India	3288	83.3	68.8

Source : Census of India

End of Poverty

2.10.3 Nationally, over 65% of the population live in rural areas as per 2011 Census. With a total area of 1,15,707sq KM, Odisha is home for 3.50 crore rural population, which constitutes 83.3% of total population in the State. The population of the State increases by 1.4% annually. The situation at national level indicates that about 83.3 crore people live in rural areas, which is 69% of total population. The State provides shelter to 4.2% of total rural population at all India level, while about one-fourth of total rural population live in India. The share of rural population at world level stands at 49.5%.

2.10.4 As per NSS-61st round survey (2004-05), the rural poverty ratio of the State was 60.8% as against 41.8% at all India Level. It came down to 39.2% in 2009-10(NSS 66th round) and then to 35.7% in 2011-12 (NSS 68th round). During the same period, the poverty ratio at national level reduced to 25.7% in 2011-12 from 41.8% in 2004-05. The reduction in rural poverty ratio of the State from 2004-05 to 2011-12 was highest with 25.1 percentage points as against reduction at the national level of 16.1 percentage points. A total of more than seven million individuals were lifted out of poverty during this period.

Table- 2.9: Rural Poverty Ratio: Odisha and India (%)

Year	Odisha		India	
	Poverty Ratio	No of persons (in lakh)	Poverty Ratio	No of persons (in lakh)
2004-05	60.8	197.3	41.8	3266.6
2009-10	39.2	135.5	33.8	2782.1
2011-12	35.7	126.1	25.7	2166.6
% point decrease(2004-05 to 2011-12)	25.1		16.1	

Source: NSSO/DES, Odisha

2.10.5 Obviously, the estimated incidence of poverty based on consumption expenditure may not depict the true picture of poverty. A person who is poor can suffer multiple disadvantages at the same time - for example, they may have poor health or malnutrition, a lack of clean water or electricity, poor quality of work or little schooling. Thus, poverty is a multi-dimensional phenomenon and only an examination of all these dimensions can truly reveal who is poor and how they are poor. However, there are several practical problems with the application of this methodology; as such, the poor beneficiaries under different programmes are being selected using parameters of deprivation under SECC, 2011.

2.10.6 SDG1 and SDG2 highlights on the achievement of no poverty and zero hunger by improving the livelihoods of poor through Government interventions. About 37% of the total budget goes to expenditure on social services like education, health, social welfare, and empowerment of women, which play critical roles in poverty reduction. Some of the areas in rural development like acceleration in poverty alleviation programmes, provision of basic amenities like housing and drinking water for the rural poor have received much attention in recent times. The total budget relating to poverty alleviation programmes including women empowerment (PR&DW, W & CD, RD Depts.) has been increased from Rs 7,409 crore in 2012-13 to Rs 18,055 crore in 2015-16, up by 41%.

Ease of living

2.10.7 Ease of living refers to availability of basic amenities for the people to lead a comfortable life. The government has launched various schemes and programmes to improve the quality of life of the people with access to various rights and entitlements, better livelihood opportunities, community assets, employment, housing, health services, education, production and productivity etc through credible public delivery system. Substantial public investment has been incurred for the well-being of the people in the State in the recent past through flagship schemes of Panchayati Raj and DW Dept, Rural Development Dept, Health & FW Dept, School and Mass Education Deptt.etc. The increased investment, social empowerment and financial inclusion have boosted the rural economy, registering a transformational shift in rural lives and livelihood.

Access to Housing

2.10.8 Housing is an important component of growth and development of human being. Along with the requirement of shelter, other facilities in the micro environment of housing such as type of dwelling unit, drinking water, sanitation, hygiene, etc., form vital components of the overall quality of life of the population. Rural housing poses challenges to the Government to ensure pucca houses to all eligible rural households living in kutcha houses. According to 2011 Census, only 25% rural households out of the total rural households of 79 lakh in the State were in living in houses in good condition, while households with housing in liveable condition accounted for 65%; about 8% of the rural households were living in houses in dilapidated condition.

Table-2.10: Number of HH with condition of housing in Odisha (2011 census)

Household	Total				Residence			
	Total	Good	Livable	Dilapidated	Total	Good	Liveable	Dilapidated
Total HH	9,661,085	2,853,361	6,002,903	804,821	9,406,413	2,785,699	5,834,935	785,779
%	100.0	29.5	62.1	8.3	100.0	29.6	62.0	8.4
All India %	--	--	--	--	100	50.3	44.5	5.2
Rural HH	8,144,012	2,071,449	5,355,835	716,728	7,923,086	2,020,195	5,203,743	699,148
%	100.0	25.4	65.8	8.8	100.0	25.5	65.7	8.8

Source: Census, 2011

2.11 As per NSS-69th round (2012), 44% of total rural households in the State lived in pucca houses, while 27% households had semi pucca houses and remaining 29% households lived in kutcha houses. The NSS 76th round report (2018) revealed that housing conditions have improved with 59.5% of rural households living in puuca houses, 23% in semi pucca and 16% in kutcha houses in the State.

2.11.1 The Government also attached much importance in the recent past for housing to all eligible households living in kutcha houses or homeless through programmes like Pradhan Mantri Awas Yojana (Grameen), Biju Pucca Ghar Yojana, Pucca Ghar Yojana (Mining) and Nirman Shramik Pucca Ghar Yojana. The total number of houses completed from 2014-15 to 2018-19 under different schemes are given in Table-2.11.

Table-2.11: No of houses constructed from 2014-15 to 2018-19

Year	PMAY/IAY	State Funded Scheme	Total Houses Completed
2014-15	320895	31526	352421
2015-16	502092	114726	616818
2016-17	117967	46016	163983
2017-18	458454	73800	532254
2018-19	463767	46719	510486

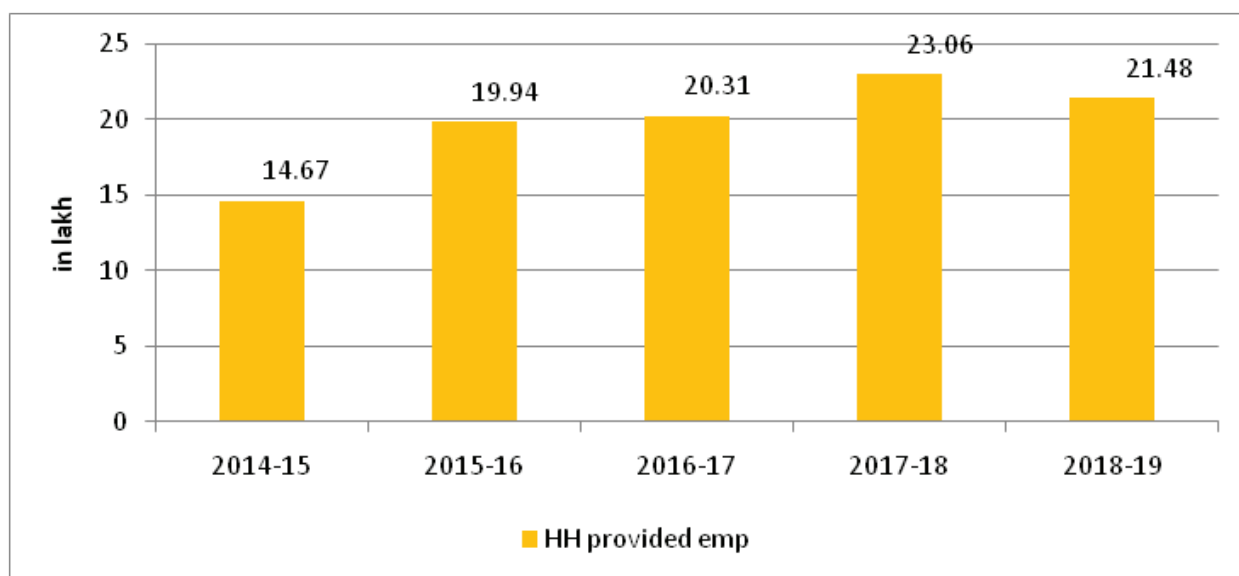
Source: PR&DW Deptt

2.11.2 Indira Awaas Yojana (IAY), the flagship scheme of the Ministry of Rural Development, Govt. of India has been revamped to Pradhan Mantri Awaas Yojana (Grameen). The houseless poor families and those living in less than two kutcha rooms as per SECC-2011 Survey are eligible for availing housing assistance to construct minimum of 25 Sq. Mtr. of house. The housing assistance is Rs. 1.3 Lakh in IAP District and Rs. 1.2 Lakh in Non-IAP Districts. Besides it, through convergence with MGNREGS, the beneficiary avails Labour Component of 90 / 95 days (IAP-95, Non-IAP- 90) and Rs. 12,000/- for construction of toilet out of Swatch Bharat Mission / MGNREGS.

Rural Employment through MGNREGS

2.11.3 MGNREGA has been playing pivotal role in rural employment and enhancing rural livelihood. It opened up large scale employment at block/village levels in rural areas since its operation. It covered the entire state generating 922.11 lakh person days in 2017-18 and 830.37 lakh person days in 2018-19. It has also provided employment to 37.54 lakh persons belonging 23.06 lakh households in 2017-18 and 33.68 lakh persons belonging 21.48 lakh households in 2018-19. During the year 2018-19, 21.48 lakh households were provided employment (figure-2.21).

Figure-2.21: Households provided employment under MGNREGS



MGNREGS as effective targeting to Disadvantaged groups

2.11.4 The poorest of the poor and the most vulnerable groups seek employment under the programme. It been designed to allow women equity in both access to work and in the payment of wages. The participation of women also increased over the years. During 2015-16, the women person days was 38% and it increased to 40% in 2016-17 and 42% in 2018-19. The increase in women participation treats MGNREGA as potential scheme for employment of women in supplementing household income.

2.11.5 The workforce participation of SC/STs in terms of person-days generation was more than 50%. During 2015-16, SC/ST person days generated was 58% and it was 53% in 2017-18 and 52% in 2018-19. Thus the scheme is well targeted to reach the most disadvantage group.

Table-2.12: Person days generated and share of Women, SC/ST under MGNREGS

Sl. No.	Year	No of Person-days generated (in lakh)					
		SCs	STs	Total	Women	%Women	%SC/ST
1	2015-16	141.8	372.8	892.7	339.4	38.0	57.7
2	2016-17	124.3	292.3	773.4	307.9	39.8	54.0
3	2017-18	152.9	338.7	922.1	386	41.9	53.3
4	2018-19	133.7	294.6	830.3	348.6	42.0	51.6

Source: PR&DW Deptt, Odisha

Drinking Water:

2.11.6 Water is a fundamental human need. Safe drinking water is important for public health. As per NSS 2012(69th round survey), about 82.4% of rural households have improved source of drinking water. The 'improved source' of drinking water includes: 'bottled water', 'piped water into dwelling', 'piped water to yard/plot', 'public tap/standpipe', 'tube well/borehole/hand pump', 'protected well', 'protected spring', and 'rainwater collection' etc. As per 76th round NSS(2018), percentage of rural households having improved source of water was 89.7%, up by 7.3 percentage points over 2012.

Table-2.13: Percentage of households by principal source of drinking water

Year	Tube well/ borehole/ Hand pump	Public taps/stand pipe	Unprotected well	Piped water	others
NSS,2012	67.0%	10.5%	16.1%	3.1%	3.3%
NSS, 2018	72%	10.2%	8.9%	5%	4%

Source: NSSO

2.11.7 The Rural Water Supply Programme has been included in the State to provide potable water supply for the people of rural areas under different programmes such as BASUDHA, JJM, RIDF etc. To ensure provision of safe drinking water in mineral bearing areas of the state, Pipe water supply projects are taken up under Odisha Mineral Bearing Area Development Corporation (OMBADC) and District Mineral Fund (DMF) programs.

By the end of April, 2019, there were 11282 PWS schemes commissioned and 455537 tube wells were installed.

Table-2.14: Tube well/hand pump installed, PWS commissioned and HH tap connection

Year	Tube well/hand pump installed (No)	Pipe Water Supply commissioned (no of habitations)	Household tap connection(Nos)
2018	427661	42636	308840
2019	455132	44201	319955

Better Livelihood for poor households

2.11.8 Providing better livelihoods to the poor is the mandate of Odisha Livelihood Mission(OLM) which has been functioning since 2011-12. With the launching of Mission Shakti Campaign in Odisha in 2001, priority concern for livelihoods and economic empowerment issues, particularly for rural women was highlighted. By 2009, each revenue village of the State was covered with Women Self Help Group(WSHG), which showed ways to economic independence and empowerment to poor women. The Income and entrepreneurial skill of women increased substantially. The World Bank assisted TRIPTI in 2009 also reinforced SHGs in livelihood promotion and empowerment of rural women. The OLM also formed SHGs and revived SHGs, which in turn federated into higher level institutions at village as Cluster Level Forum(CLF) and GP as Gram Panchayat Level Federation (GPLF).

Table-:2.15 Livelihood Status in Odisha, 2018-19

Total WSHGs formed	3.56 lakh
SHGs covered under intensive approach	2.86 lakh
Total CLF formed	23056
Total GPLF formed	3145 , out of which 2640 received Start up and IB fund
SHGs linked with bank	131027
Credit availed	Rs 1,98,270.87 lakh(Avg of Rs 1.51 lakh per SHG)

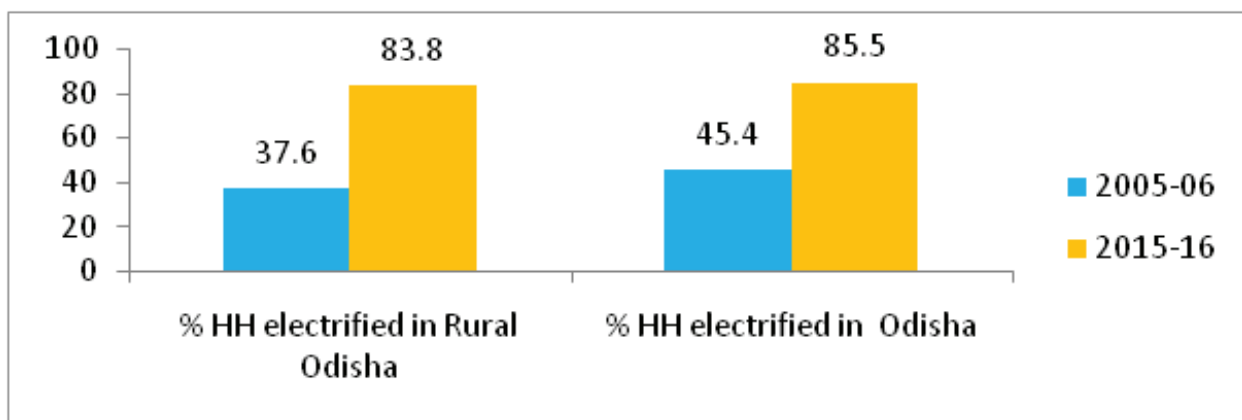
Source: PR&DW Deptt

Access to electricity

2.11.9 SDG-7 is about access to 'Affordable, Reliable, Sustainable and Modern Energy for All'. This is the key element to economic development. As it is an intermediate input with widespread use in almost all sectors; modern society cannot thrive without electricity. Odisha is the first State in the country that took up Power Sector Reform to ensure stable and quality power at a reasonable cost for rural and urban households.

2.12. Flagship programmes like Biju Gram Jyoti Yojana (BGJY), Biju Saharanchal Bidyuti Karan Yojana (BSVY), Rajiv Gandhi Grameen Vidyuti Karan Yojana (RGGVY), Deendayal Upadhyaya Gram Jyoti Yojna (DDUGJY) and Biju KBK provide opportunities for access to electricity and improved living conditions. As per NFHS, access to electricity of rural households in the State has substantially improved from 37.6 percent in 2005-06 to 83.8 percent in 2015-16, a gain of 46.2 percentage points. The rate of accessibility grew rapidly at the rate of 4.6 percentage points per year in rural areas as against 1.04 percentage points in urban areas.

Figure-2.22:- Percentage of HH Electrified from NFHS-2005-06 and 2015-16



Source: NFHS

Connectivity

2.12.1 Rural Roads connectivity is a key component of rural development, since it promotes access to economic and social services, thereby generating increased agricultural productivity, non-agricultural employment as well as non-agricultural productivity, which in turn expands rural growth opportunities and real income.

2.12.2 The road infrastructure in the State has seen consistent improvement and has become a focus for developmental efforts. Recognizing its importance, the Government is keen to build quality roads to connect all rural regions to the existing road network.

2.12.3 Village roads need priority for rural growth and human development. Odisha fares somewhat better than India as a whole with 62% of the villages connected with all-weather roads (Census 2011). During 2017-18, the status of connectivity improved with 82.9% villages connected with all-weather roads, an improvement of about 20 percentage points.

2.12.4 The total length of rural roads in the State in 2013-14 was 217163 km, increasing to 217919 km in 2015-16, which accounted for 5.5% of total length of rural roads.

2.12.5 Connectivity to villages is provided through implementation of various schemes like Gopabandhou Gramin Yojana and MGNREGS.. The total length of village road in Odisha is 1,62, 476 Km, out of which 71, 739 Km has been covered under concrete road during 2017-18, which works out to 44%.

2.12.6 The Government provides for newrural roads and missing link bridges through implementation of schemes like Pradhan Mantri Gram SadakYojana, Mukhya Mantri Sadak Yojana, Biju Setu Yojana and Biju KBK Yojana in the State. 11638 roads with a length of 46,972.83 Km have been constructed in this fashion till 2017-18. Besides, 218 missing link bridges have been constructed covering 16,133 habitations with all-weather connectivity.

2.12.7 Under MMSY, 552 roads have been taken up since 2015-16 and 249 roads measuring 1238.96 Km have been completed till 2017-18, which link up 291 unconnected habitations.

Under Biju Setu Yojana which is an exclusive bridge scheme, 1032 bridges have been taken up, out of which 583 bridges have been completed and provided access to household

Sanitation

2.12.8 Under the Swachh Bharat Mission- Gramin, the state has reached 100% toilet construction as per the government baseline data and state has been declared Open Defecation Free. More than 390000 households have been identified who were lefty out of baseline and being provided with toilets. Besides, over 91% of the toilets have been geo-tagged. All villages, gram panchayats, blocks and districts have been declared and verified as ODF.

Chapter 3

Industrial Development and Mineral Resources

Industrial Development and Mineral Resources

The industry sector currently leads the developmental change of the State, constituting nearly 40% of State's Gross Value Added (GVA) relative to 30% at the all-India level. The sector has also experienced strong growth in the recent past. The industry sector, due to its linkages with services like transportation, storage, trade and tourism, has the capacity to pass on the growth impetus to the entire economy, truly acting as the growth driver. The fast-growing Industrial sector of Odisha has also increased the visibility of the State at national and international level.

The State has been making all possible attempts to create a pro-industry environment. At present the sector is dominated by medium-tech industries (such as metal and petroleum products). The share of high-tech industries (automobiles, electronics, and pharmaceuticals) in total manufacturing output stands at only 10.3%. Greater reliance on high-tech industries can fast track economic growth further given the high-value nature of the output and associated productivity gains. Mining and manufacturing are the leading sub-sectors in the industry sector as the State is a mineral hub of India. Odisha has substantial production of minerals like iron, chromite, coal and bauxite, making it an ideal location for mining and mineral-based manufacturing. Although quantum of identified mineral reserves has been enhanced in the State through exploration, the positive impact of increasing production of majority of minerals has been moderated by softening of mineral prices. The strategy for this sector would be to promote domestic industry, reduce dependency and feed in to the Make in Odisha initiative.

In the power sector, installed capacity has remained stable, barring fluctuations on account of maintenance work. By the year 2022, Odisha envisages a generation of 2,200 MW of solar power, 200 MW of wind power, 180 MW of biomass power, 150 MW of small hydropower and 20 MW of Waste-to-Energy (WTE) power. The domestic sector is the largest consumer of electricity in Odisha, accounting for about 81% of total consumption. This has its implications on the distribution costs.

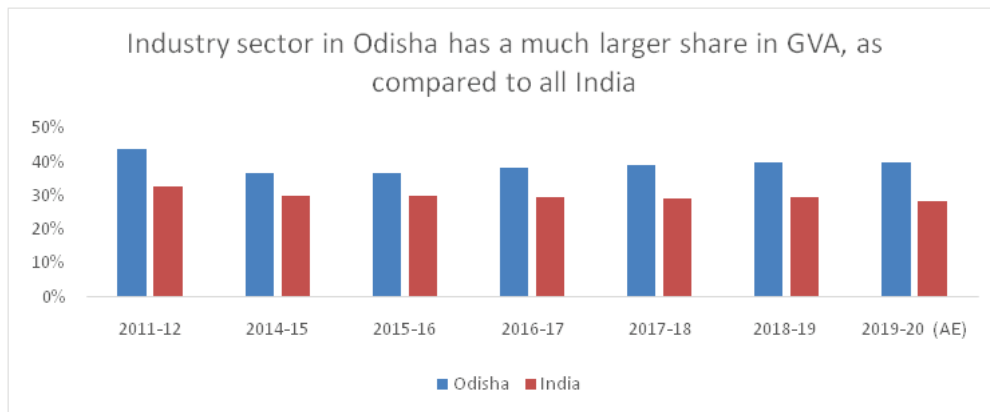
Among large industries, Odisha is the largest producer of stainless steel in India and one of the leading producers of aluminium. Micro, Small and Medium Enterprises (MSME) are largely into repair and services. Diversification of the industrial base in the MSME sector has great potential.

3.1 Introduction

3.1.1 Odisha is industrialising at a rapid pace. The share of the Industry sector in State Gross Value Added (GVA) (an indicator of industrialisation) has remained around 40% since 2011-12 (39.6% as per advance estimates for 2019-20). The share of industries in all-India GVA is 28.3%, as highlighted in Figure 3.1. This is primarily due to the significantly high share of the mining sector in Odisha. The Industry sector has also been growing at a rapid pace. The real annual average growth rate of the industry sector in Odisha during the last seven years has been 9%, with the sector estimated to grow at 4.9% in 2019-20(A.E).

¹All sectoral/ sub-sectoral shares in the chapter have been calculated at current prices

²Growth rates of sector/sub-sectors calculated at 2011-12 prices, throughout the chapter

Figure 3.1: Share of industry sector in gross value added (in %)

Note: Shares calculated at current prices.

Source: Directorate of Economics & Statistics (DES), Odisha

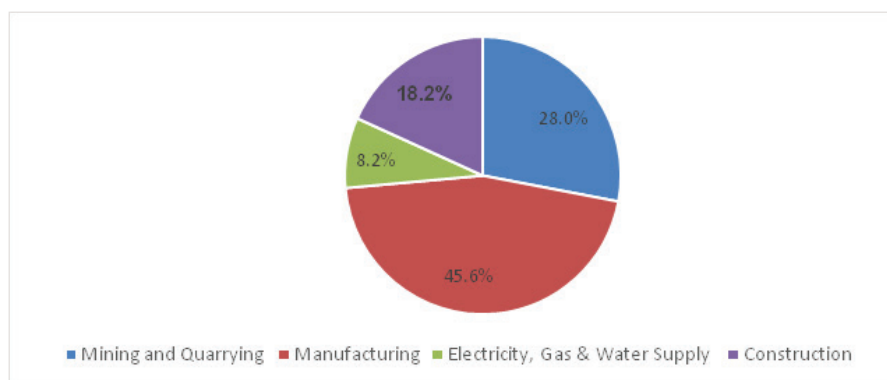
3.1.2 Strong linkages with other sectors like services makes the industry sector one of the prime movers of sustained growth of Odisha. Appreciation of this importance of the sector and the growth potential of leveraging the natural wealth endowed to the State in the form of minerals, Odisha has been consistently formulating policies to encourage investments in this sector and adopting measures to implement the same.

3.2 Overview of industrial performance

3.2.1 The industry sector comprises of four sub-sectors: (i) mining and quarrying, (ii) manufacturing, (iii) electricity, gas and water supply and (iv) construction.

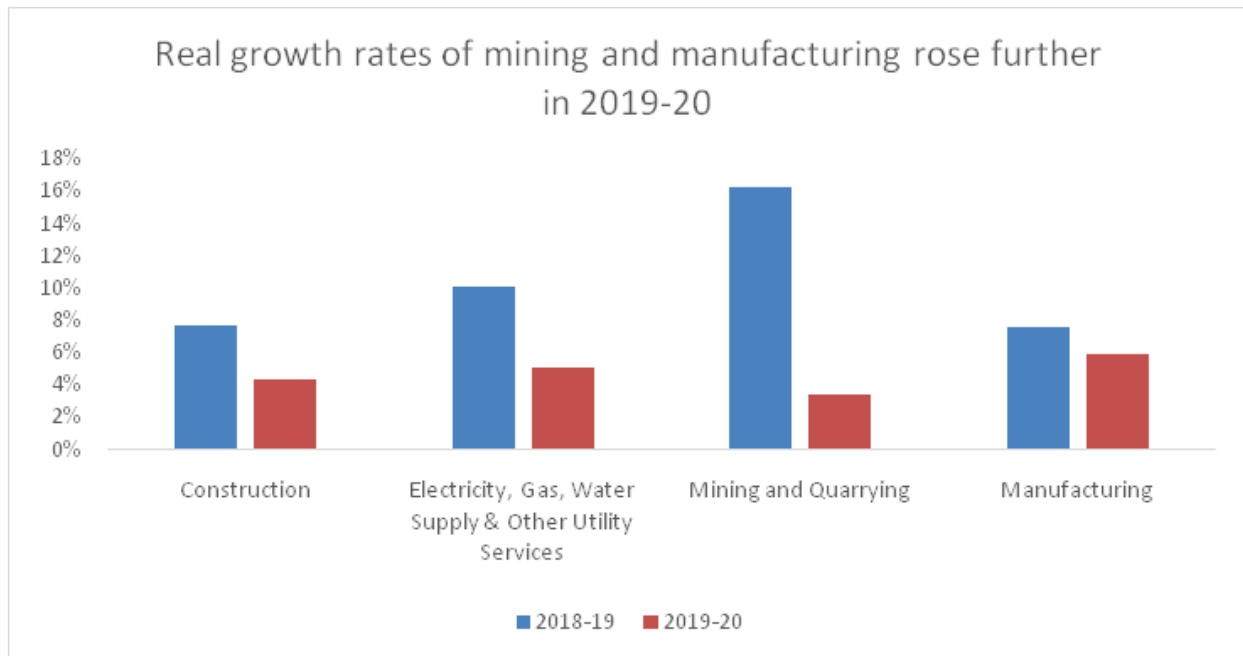
I. Performance of sub-sectors

3.2.2 The manufacturing sector is the largest contributor with a share of over 45.6% in 2019-20, followed by the mining sector (28.0%) as presented in Figure 3.2. Manufacturing and mining are also the largest contributing sub-sectors to the overall GVA of the State. This pattern of the share of the sub-sectors has remained constant over the last eight years. A slight dip has been witnessed in the share of the construction sector, majority of which has been transferred to manufacturing.

Figure 3.2: Share of sub-sectors in industry GVA in Odisha, 2019-20 (in %)

Note: Shares calculated in current prices.

Source: Directorate of Economics & Statistics (DES), Odisha

Figure 3.3: Growth rate of sub-sectors in Odisha (in %)

Source: Directorate of Economics & Statistics (DES), Odisha

3.2.3 The growth of manufacturing sector declined in 2019-20 (AE) (5.92%) followed by, Electricity, Gas & Water supply and other utility services, which witnessed a growth rate of 5.14% .

In comparison to 2018-19, all the sub-sectors witnessed a lower growth as highlighted in Figure 3.3. The growth of Manufacturing and construction witnessed a slight dip compared to other sub-sectors.

II. Inclusive and Sustainable Industrial Development (ISID)

3.2.4 Under the Lima Declaration adopted by the member states of the United Nations Industrial Development Organization in December 2013, a new vision for inclusive and sustainable industrial development was agreed upon, highlighting the role of industries to drive growth. Inclusive and Sustainable Industrial Development concept is part of new Sustainable Development Goal-9 to build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. Goal 9 has 8 number of targets and 33 indicators, out of which 17 are from National Indicator Framework (NIF) and 16 are Odisha specific indicators. ISID has three parts: advancing economic competitiveness, creating shared prosperity and safeguarding the environment.

III. Role of technology in industrialisation

3.2.5 The State aims at diversifying its industrial portfolio with those characterised by greater infusion of value added. At present, this sector is dominated by mineral processing units like iron and steel, aluminium and to a much smaller extent, cement. Petroleum refineries would also fall in this category. All of these produce intermediate goods with relatively low proportion of value added; a greater proportion of value is added during the stage that converts intermediate goods into final consumer goods. It is the latter category of units that would raise both the technology quotient and value added in the output, accelerating growth in the State. In comparison, the country as a whole has a more balanced structure of manufacturing.

3.2.6 At the same time, it would not be advisable to lose sight of the issue of weaning labour away from the overcrowded agriculture into other sectors. From this point of view, the industrial diversification should consider the employment potential along with the technological considerations.

3.2.7 Over the past two decades, Odisha has emerged as a preferred investment destination for industries, from within India and across the globe. The State is consistently ranked amongst the top three States in terms of live manufacturing investments in India. Odisha experienced a 16.5% year-on-year growth in live investments during 2016-17, compared to just 4.6% growth in India during that period. During the last round of Make in Odisha Conclave in 2018, the State received an overall investment intent of Rs. 4,19,574 crore across 15 sectors.

3.2.8 The State has recognised five manufacturing sectors, (from among six focus sectors) for sustainable growth of industries and the economy, as highlighted below. These identified sectors are expected to generate significant employment opportunities in the State.

Box 3.1: Focus Sectors of Odisha Government

The Odisha government has recognised six sectors as its focus sectors for sustainable growth of industries and the economy of these, five are manufacturing sectors, as highlighted below. These sectors were highlighted during the Make in Odisha Conclave 2018. Three of these six sectors are labour intensive in nature and are expected to generate large employment opportunities in the State.



Agro Food Processing including Seafood: To support these agro-based industries, the State government has established Mega Food Parks at Rayagada and Khurda and a sea food park at Deras.



Textiles including technical textiles: Odisha is a leader in skilled and quality workforce for the textile sector, which leads a sunrise opportunity to invest in this field. Dedicated apparel parks have been established at Ramdaspur and Chhatabar.



Ancillary and Downstream Industries in Metals Sector: Odisha is the mineral hub of India and the largest aluminium, steel and stainless steel producer in the country. To facilitate growth of ancillary and downstream sectors, a National Investment and Manufacturing Zone has been set up at Kalinganagar along with downstream park at Angul and Jharsuguda.



Chemicals, Plastics and Petrochemicals: One of the four Petroleum, Chemicals and Petrochemicals Investment Regions (PCPIR) in India has been established at Paradip. The PCPIR is anchored by a 15 MMTPA refinery set up by IOCL.



Electronics Manufacturing: To enhance electronic manufacturing in the State, a dedicated electronics manufacturing cluster has been established near Bhubaneswar. A revised special package incentive scheme has also been introduced to facilitate investments in the sector.

IV. Environmental sustainability

3.2.9 Environmental sustainability is a growing global concern. The idea of environmental conservation gains real momentum if we can conserve resources and use them in a manner that adequate availability for the coming generation is ensured. The goal of environmental sustainability is to conserve natural resources and reduce pollution and harm to the environment. 'Clean' sources of energy is an important requirement but industrial technology also needs to minimize damage to the environment. Research and development is also needed in these areas to balance sustainable Industrialisation with sustainable environment. Climate Action is the 13th goal of SDG (Sustainable Development Goals) having 5 targets and 8 indicators (4 each from State level and from National framework).

3.3 Mining sector

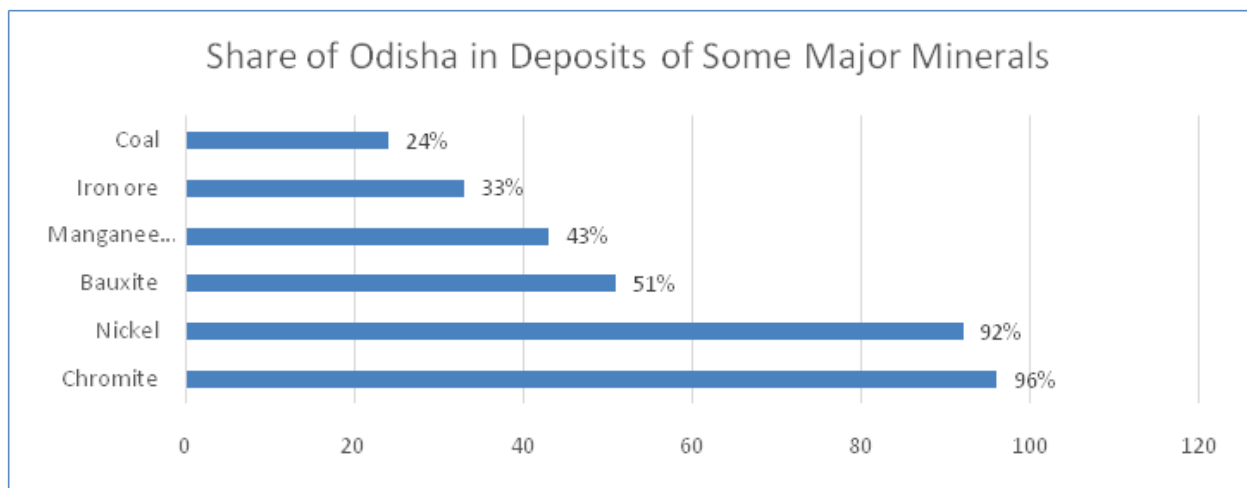
I. Performance of the mining and quarrying sector

3.3.1 Odisha's rich mineral resources contribute multi dimensionally to its economic development. The mining and quarrying sector contributed 11.08% of State GVA in 2019-20 (AE) which was 10.31% during 2018-19. Odisha occupies a prominent place in the country as a mineral rich State. The reserve scenario of India is available for 2015, as the study has conducted in every 5 years gap. Between 2010 & 2015 one more study had conducted during 2013 due to mining litigation throughout the Nation. The share of Odisha reserve of major selected minerals for the year 2015 with reserve of India is given in (Figure 3.4).

II. Major minerals

3.3.2 The share of Odisha reserve of major selected minerals for the year 2015 with reserve of India is given in (Figure 3.4).

Figure 3.4: Odisha's share of major mineral production in India



Source: Activity Report of Steel and Mines Department, Govt. of Odisha

3.3.3 The State has managed to increase the quantum of identified reserves for major minerals (Table 3.1). With regular exploration, the size of reserves for majority of key minerals such as iron ore, chromite, coal, bauxite has increased since 2010-11 as shown in Table 3.1.

Table 3.1: Change in mineral/ores reserves in Odisha (in million tonnes)

Minerals/Ores	2010-11	2016-17	2017-18	2018-19	Change in Reserves in 2018-19 over 2010-11 (in %)
Iron ore	5,008.3	7,168.2	7,874.6	8065.4	61
Chromite	166.1	300.8	319.8	315.8	90
Coal	65,010.3	75,895.7	77,284.8	76994.2	18
Bauxite	1,800.9	2,047.7	2,039.2	2083.6	16
Lime stone	1,000.7	1,764.5	2,163.8	2158.7	116
Mineral sands	222.3	266.4	363.9	366.1	65
Graphite	4.4	18.9	19.2	19.2	336
Manganese ore	118.6	211.9	217.8	217.3	83

Source: Directorate of Geology, Govt. of Odisha.

III. Mineral Production

3.3.4 Odisha was the leader in 2017-18 in mineral production in the country. The State contributed 34.3% of the total mineral production in the country, followed by Rajasthan, Chhattisgarh, Karnataka, Madhya Pradesh and Jharkhand.

3.3.5 The State is richly endowed with vast resources of a variety of minerals and therefore occupies a predominant place in the country's minerals map. Total production of different minerals and their value is given in Table 3.2.

Table 3.2 Change in Production & value of Major minerals in Odisha (Production in Lakh tonnes, Value Rs..in Crores.)

Minerals / Ores	2016-17		2017-18		2018-19	
	Quantity	Value	Quantity	Value	Quantity	Value
Iron ore	1026.63	14233.05	1049.82	19947.00	1209.73	26614.11
Chromite	41.30	5653.57	36.48	3647.91	40.65	4411.04
Coal	1353.14	19539.39	1433.27	12899.00	1453.90	15992.85
Bauxite	119.14	798.24	113.67	1085.53	154.16	1618.71
Lime stone	47.62	189.06	51.11	209.55	50.59	239.79
Graphite	0.20	1.33	0.19	0.95	0.55	2.79
Manganese ore	6.28	865.37	5.35	647.77	4.77	626.37

Source : Directorate of Mines, Odisha

3.3.6 Odisha is the leading State in terms of deposit and production of minerals as well as exports of basic metals. However, private investment in mining is very much dependant on the value received from mineral resources and the fluctuations in mineral prices can create uncertainty. Significant price fluctuations create uncertainties for investors in mineral-processing industries too. During 2017-18 the value of Chromite declined by 35% over 2016-17 whereas production declined by 12%, but again it revived in 2018-19 and increased by 21% over 2017-18. Prices of coal also declined in 2017-18 by 34%, and the value declined despite 6% increase in quantity produced over 2016-17. The price increased by 24% in 2018-19. For minerals like Manganese ore, the quantity produced and price both declined from 2016-17 to 2018-19. Prices of other metals were either stable or increased slightly over years.

3.3.7 The percentage share of major mineral production of Odisha to India is presented in table below and also rank of Odisha among all states. Odisha occupies rank 1 in production of Bauxite, Chromite and Iron Ore. In case of Coal and Manganese Ore, Odisha's rank is 2 and 3 respectively. Besides the above it also produces Graphite, Limestone and other minerals. The State is a mineral hub with ample opportunities of Industrial Units.

Table 3.3: Share of Mineral Production of Odisha to India

Year - 2018-19(Apr 2018-Feb 2019)

Items	Percentage Share of Mineral Production of Odisha to India	Rank of Odisha among States
Coal	19.75	2
Bauxite	65.68	1
Chromite	100	1
Iron Ore (total)	54.98	1
Manganese Ore	16.71	3

Source: Indian Bureau of Mines

IV. Mineral Revenue

3.3.8 A sum of INR 10,479.12crore has been collected during 2018-19 towards mineral revenue out of the production of 293.49 million tonnes and despatch of 310.81 million tonnes in the State. The production, despatch and collection of mineral revenue in Odisha from 2013-14 to 2018-19 has been presented in Table 3.4.

Table 3.4: Production and despatch of, and Revenue collection from Minerals - 2013-14 to 2018-19

Year	Production	Despatched	Revenue collection INR Crore
2013-14	201.81	226.35	5,519.58
2014-15	190.35	193.19	5,310.09
2015-16	239.64	241.60	5,797.79
2016-17	285.26	264.85	4,925.66
2017-18	270.84	287.80	6130.97
2018-19	293.49	310.81	10479.12

Source: Directorate of Mines, Odisha

3.3.9 Mining has gained a significant role in State's own revenues over time. The share of mining in the State's own revenues increased from 2.6% in 1990-91 to 23.50% in 2018-19.

V. Employment in the mining sector

3.4.0 Mining and quarrying provides employment to different sections of population including tribal groups. Table 3.5 depicts the number of workers directly engaged in various mining activities in different years. By the end of 2018-19, around 58,600 workers were employed directly in major mineral activities. Coal mining directly employs the largest number of workers (22,700) followed by iron ore (19,850 workers), chromite (6,374workers) and Manganese (4,115 workers) on the same basis. The sector has been increasingly employing labour-saving and capital-intensive production techniques and technology over the years. It was noted that 73% of the workers are employed in iron ore and coal sub-sectors.

Table 3.5: Number of workers directly employed in major mineral activities, during the period 2015-16 to 2018-19 (Provisional)

Mineral ores/District	2015-16	2016-17	2017-18 (P)	2018-19 (P)
Bauxite (Koraput, Sundargarh)	896	1,215	1,350	1650
Chromite (Dhenkanal, Jajpur, Keonjhar)	5,974	5,974	6,074	6374
Coal (Angul, Jharsuguda, Sundargarh, Sambalpur)	19,800	20,800	22,200	22,700
Dolomite and lime stone (Bargarh, Bolangir, Koraput, Sundargarh)	450	450	550	660
Iron ore (Jajpur, Keonjhar, Mayurbhanj, Sundargarh)	18,100	18,600	19,600	19,850
Manganese ore (Keonjhar, Sundargarh, Rayagada, Bolangir)	2,415	2,915	3,915	4115
Others (China clay, Quartz and Quartzite, Graphite, Mineral sand, Gemstone, Pyrophilite etc.)	1,451	2,451	2,251	3251
Total	49,086	52,405	55,940	58,600

Source: Directorate of Mines, Odisha

VI. Mining leases and auction of mineral blocks

The State Government has decided to grant mining leases through auction in pursuance of the relevant provisions of Mines and Minerals Development Regulation (Amendment) Act 2015. As per Mineral Auction Rules, 2015, the mineral bearing blocks, which have been explored up to G2 level, are now being processed for auction. Necessary steps have been taken for e-auction of 38 number of mineral blocks during the year 2019-20. Sixteen (16) number of mineral blocks explored to G2 level besides 22 numbers of working leases expiring in March 2020 have been readied for auction during the year. The details of Mining leases (working) during 2017-18 and 2018-19 are given in Table 3.6.

Table 3.6: Details of mining leases (working) during 2017-18 and 2018-19

Mineral Name	2017-18	2018-19
Bauxite	2	4
Chromite	8	11
Chromite and pyroxenite	1	1
Dolomite	2	3
Iron and manganese	18	21
Iron Ore	31	39
Limestone	2	3
Limestone and dolomite	7	7
Manganese ore	11	13
Sand (Stowing)	3	4
Iron and bauxite	2	2
China clay	1	1
Pyrophilite and quartzite	1	1
Graphite	1	1
Total	90	111

Source: Deptt. Of Steel & Mines

Out of the total of 111 extended leases, 78 leases have been executed so far. Besides, in pursuance of the provision of section 10 A 2(c) of the MMDR Act, 1957 the State Government has granted eighteen (18) mining leases, out of which 16 mining leases have been executed and registered for different major minerals in the State.

3.4 Policy and promotion initiatives

3.4.1 In pursuance of the provision of Section 8A(3) and 8A(6) of MMDR (Amendment) Act, 2015, the State Government has extended the period of mining lease in respect of 103 leases so far. The break-up of the said mining leases is shown in Table 3.6.

Odisha Minor Mineral Concession Rules, 2016

3.4.2 The State Government has framed OMMC Rules, 2016, after the amendment of MMDR Act 1957 and declaration of 31 major minerals as minor minerals by the Ministry of Mines, Govt. of India. These rules have further been amended on 18 July 2017 to bring in more clarity and facilitate more effective implementation.

Enforcement activities

3.4.3 The IT based i3 MS project has been implemented by the Steel and Mines Department w.e.f. November 2010 in conformity with Government of India's E-Gov. process. The Directorate of Mines and all 14 circle-mining offices have been included in this project. The project is self-sustaining (user fee INR1/- per transaction is realised) and aims at bringing a transparent and effective management system for monitoring and supervision of mineral transition in the State in totality, i.e., from source point to destination through one Project Management Unit (PMU) at headquarters, Bhubaneswar and has linked it with Project Implementation Units (PIUs). E-pass and E-permit is being followed to avoid unnecessary delay and hassles faced in manual process earlier. During 2018-19, 128452 number of e-permits and 9910485 e-passes have been issued. There are around 485 electronic weigh bridges, for monitoring of weight of minerals. The online system i3MS of Odisha has received a positive and encouraging recognition and extended for another 5 years from 2017-18 to 2021-22.

3.4.4 To check the illegal transportation of minerals, the above project has been integrated with the online system at six seaports, commercial tax, commerce & transport departments and railways. A mobile application named National Mineral Statistics (NMS) has also been developed wherein the production, despatch and sale value of minerals are captured on real time basis. Apart from these, the following major steps have been taken to further strengthen the checking and monitoring system.

i3MSOdisha has received a positive recognition and extended for another 5 years from 2017-18 to 2021-22

- Space based surveillance system (through ORSAC) for monitoring of iron and manganese mining lease area.
- GPS based tracking system in the mineral carrying vehicles to reduce unauthorised transportation and despatch of minerals.
- Software for District Mineral Fund has been developed and integrated with i3MS project for monitoring of collection & utilisation of funds.

District Mineral Foundation (DMF)

3.4.5 The Odisha District Mineral Foundations Rules, 2015 have been framed and notified by the State Government and was last amended on 20th September 2018. District Mineral Foundations came into existence w.e.f. 12th January 2015. The guidelines on 'Pradhan Mantri Khanij Kshetra Kalyan Yojana' (PMKKKY) was incorporated into the DMF Rules with the objective to work for the interest and benefit of persons and areas affected by mining related operations. Accordingly, District Mineral Foundation Trusts have been constituted in all 30 districts with the Collector as the Chairperson of the Trust and with other designated members. So far, INR 6088.44 crore as on 31 st March, 2019 has been collected in various DMFs of the State. To monitor the progress of functioning of DMFs in the State, a State Level Committee under the Chairmanship of the Chief Secretary has been constituted. The subject of implementation of DMF (other than framing of rules) has been assigned to the Planning and Convergence Department.

Odisha Mining Corporation (OMC)

3.4.6 The Odisha Mining Corporation Limited, established in 1956, held 34 leases covering an area of 18,292.46 ha at the end of the year 2018-19. Out of 34 leases only 9 are in operation covering an area of 5574.75 hect. of area.

Production of minerals by OMC

3.4.7 Table 3.7 shows the production of minerals by OMC during 2014-15 to 2018-19. Iron ore is produced from three mines of OMC, i.e., Daitari, Gandhamardhan and Kurmitar mines, while chrome ore is produced in three mines of OMC, i.e., South Kaliapani, Bangur and Sukurangi mines. During 2018-19, the OMC has produced 104.79 lakh MT of iron ore and 11.89 lakh MT of chrome ore.

Table 3.7 Production of minerals by the OMC (in lakh MT)

Minerals/Ores	2014-15	2015-16	2016-17	2017-18	2018-19
Iron ore	32.06	60.20	63.66	79.20	104.79
Chrome ore	7.01	9.60	11.71	8.93	11.89
Manganese ore	Nil	Nil	Nil	0.00	-
Bauxite	Nil	Nil	Nil	Nil	27.00
Chrome concentrate	0.37	0.30	0.35	0.00	-
Total	39.44	70.10	75.72	88.13	143.68

Source: Odisha Mining Corporation, Bhubaneswa

3.4.8 Table 3.8 gives a detailed picture of domestic sales of minerals made by OMC during the years from 2016-17 to 2018-19. During the year 2018-19, OMC made domestic sales of 103.38 lakh MT, 11.25 lakh MT and 16.90 lakh MT of Iron ore, Chrome ore, and Bauxite respectively.

Table 3.8: Domestic sales of minerals/ ores by OMC (2016-17 to 2018-19) (Quantity in lakh MT; Value in INR crore).

Minerals/ Ore	2016-17		2017-18		2018-19	
	Quantity	Value	Quantity	Value	Quantity	Value
Iron Ore	71.62	1,257.80	74.19	1,700.94	103.38	2559.54
Chrome Ore	8.18	1,026.58	9.97	1,108.25	11.25	1353.54
Chrome Concentrate	0.31	47.05	0.42	41.53		
Bauxite	-	-	-	-	16.9	138.97
Total	80.11	2,331.43	84.58	2,850.72	131.53	452.05

Source: Odisha Mining Corporation, Bhubaneswar

3.4.9 During 2018-19, Odisha Mining Corporation has signed sales agreement with 51 domestic buyers for supply of 90,07,386 MT of iron ore per year and 9 domestic buyers for supply of 9,54,021 MT of chrome ore per year under Long Term Linkage (LTL) basis. OMC sells iron ore and chrome ore to both in-State and out-of-State companies/buyers through national e-auction. OMC has also entered the business of bauxite mining at Kodingamali and based on the amended LTL policy, it will facilitate supply to State based Alumina Refineries as well. Table 3.9 shows the annual turnover, profit and dividend paid to the State Government from 2014-15 to 2018-19.

Table 3.9: Annual turnover, profit and dividend paid to the State government from 2014-15 to 2018-19. (in crore of INR)

Year	Turnover	Profit before tax	Dividend paid to Government
2014-15	1,881.26	1,456.25	500.00
2015-16	1,546.42	1,017.42	500.00
2016-17	2,331.43	1,320.51	500.00
2017-18	2,853.09	836.85	-
2018-19	4,052.05	1259.59	500.00

Source: Odisha Mining Corporation, Bhubaneswar

OMC is committed to its environmental responsibilities along with its commercial remit. During the financial year 2018-19, 3158 number of saplings were planted in different lease hold areas of OMC along with 474.30 hect. of geographical mapping and 13,943 mtrs. of core drilling.

3.5 Geological surveys and exploration

3.5.1 Directorate of Geology, Odisha, with an objective to fulfil the need of mineral-based industries and to augment the mineral resources of the State, executes various mineral exploration programmes from its headquarters in Bhubaneswar and six zonal offices at Bolangir, Berhampur, Dhenkanal, Keonjhar, Koraput and Sambalpur. During the year 2018-19, fifteen (15) investigation programmes for minerals like iron ore, chromite, limestone, graphite, base metal, garnet, decorative stones, pyrophyllites and quartz have been undertaken in the State for up scaling of resources. The achievement of geophysical surveys under the Directorate of Geology, Odisha, during 2017-18 and 2018-19 are shown in Table 3.10.

Table 3.10: Geological exploration in Odisha during 2018-19

Item of work	Achievement/area covered /Samples collected	
	2017-18	2018-19
No. of geological explorations	13 (upto January 2018)	15 (upto March' 2019)
Geological mapping(1:25000)	432 sq. km	533 sq. km
(1:2000)		8.308 sq. km
Trial excavation	178.2 cu.m.	367.41cu.m
Drilling	2,020.25 m	4502.36m (in house), 5001.5(out sourcing)
Sampling -mineral rock	714 nos.Garnet-1125 kg (abrasivegrade)	2319 nos.
Sampling -coal	70 m	335.64 m
Geophysical survey	0.55 sq. km	1.41 sq. km
i) Self potential survey (50m x 10m)		
ii) Resistivity sounding		2 nos.
Technical evaluation of prospecting reports	12 nos.	22 nos. mineral block
Finalization of geological reports of auctionable blocks	7 nos.	14 nos.
Identification of mineral blocks for up gradation of resource	-	6 nos.
i)No. of Gems tested in a laboratory	i) 2,837 nos.	2,398
ii) Testing charge collected	ii) 6,10,693	8,81,065
Rock Sample	i) 119	87 Nos.
Heavy minerals	ii) 10	40 Nos.

Source: Directorate of Geology and Activity Report 2018-19 of Steel and Mines, Odisha

- The Gem testing laboratory has certified 2829 precious stones and collecting revenue of Rs.11,39,458/-
- The technical committee evaluated 24 Geological Reports of Mining Lease expiring in March'2020.
- Geological Report of 19 (6 major & 13 minor minerals) auctionable mineral blocks have been finalised and submitted to DM(O).
- 9 Mineral Blocks have been identified for upgradation.
- 354 mining plans of minor minerals have been approved

3.5.2 The major achievements of the exploration programme during 2018-19 are presented in Table 3.11.

Table 3.11: The major achievements of the exploration programme during 2018-19

Mineral	Location(Area/District)	Resource Estimated
Iron ore	DholtaPahar, Sundargarh district	23.922 mt.
Limestone	Lukapada, Balangir district	GR is under progress
Graphite	Jagdapur, Rayagadadistrict	0.981 mt.
Chromite	Mathakargola of Dhenkanal district.Madhuban of Keonjhar district	GR is under progress
Quartz	Sundargarh district	0.295 mt.
Quartz & quartzite	Mudrajodi-Pokharia in Sadar Sub-division of Mayurbhanj district	6759.21 tonnes
Garnet	Birlamunda and Sarai village, Angul and Keonjhar district	GR is under progress
Decorative stone and other minor minerals in freehold areas	Around Taraba and Lubarsing, Gajapati district	GR is under progress
Decorative stone and other minor minerals	Antarba and KandhaAdaba of Gajapati district	GR is under progress
Decorative stone and other minor minerals	Tulsipal,Nalatangra, Nuagon and Sarapa of Dhenkanal & Angul district	GR is under progress
Pyrophyllite	Roduan in Keonjhar district	GR is under progress
Basemetal	North of Kesharpur, Mayurbhanj	GR is under progress
Coal	Mahdupur block of Ib valley coalfield, Jharsuguda	GR is under progress
Bauxite	Tikiriguraha, Podapadar and Dasmanthpur blocks of Rayagada.	45,555mt.

Source: Directorate of Geology, Odisha

3.5.3 Considering the need for minerals in the State, the Directorate of Geology has taken the following exploration programmes for the financial year 2019-20.

In house investigation programmes

- Exploration for iron ore in Thakurani- A block of Keonjhardistrict.
- Exploration for iron ore in baliapahar block and Mankarnacha block of Keonjhar and Sundargarh district respectively.
- Continuation of exploration for Iron and Manganese ore in SGB mines in Keonjhar District.
- Graphite exploration around Khalpadar area of Rayagada district and Beheramunda area of Bolangir district.
- Exploration of Limestone around Dahijira and Tumelbud of Sundargarh district and continuation of exploration for limestone around Telipadar of Bolangir district.
- Investigation for Manganese ore around Tentuliguda of Koraput district.
- Continuation of exploration for China clay in Mayurbhanj district.
- Geophysical prospecting for chromite around north Mathkargola, Dhenkanal district.
- Geophysical exploration for graphite mineralisation around Bandhabhuin,Dhenkanal district.
- Investigation for DDS around Endrima area of Gajapati district and around Paburia, Kandhamal district.
- Exploration for quartz around Debjharan, Kalahandi district.
- Investigation for quartz and quartzite around Purunapani, Mayurbhanj district.
- Assessment of quartz and quartzite and silica and around Rajbahal, Sundargarh district.
- Continuation exploration for coal in Madhupur Block,Ib Valley Coalfield, Jharsuguda district.
- Exploration for pyrophyllite around Jamudiha, Keonjhar district.
- Assessment Of pyroxinite/serpentine and examination of PGE potentiality in the contact of ultramafics around Kalihata area, Keonjhar district
- Assessment of magnetite around Kumudabari area, Mayurbhanj district.

Outsourcing investigation programme

- Exploration for iron ore in Baliapahar block of Sundargarh district.
- Exploration for iron ore in Mankarnacha Block of Keonjhar and Sundargarh district.
- Exploration for iron and manganese ore in SGB Mines of Keonjhar district
- Exploration for limestone/dolomite Sundargarh district.

3.6 Manufacturing sector

3.6.1 High mineral concentration in the State makes it a favourable investment destination for various metal producing firms and other firms that use these metals as raw materials, making manufacturing an important sector for Odisha. It is evident that the manufacturing sector is the driving force for Odisha's economy. The sector is also the fastest growing sub-sector in the State. In the past as well, the sector's growth showed highest positive correlation (76.9%) with the State's total output growth, out of all sub-sectors in the economy during the high growth period of the economy between 2003 and 2008. With revival of the mining sector in 2018-19, the manufacturing sector is expected to continue being the fastest growing sub-sector in Odisha.

3.6.2 The manufacturing sector's share of Odisha in India's total value of output in manufacturing sector has increased over the years. In 2010-11, Odisha's share was 2.0%, which increased to 2.8% in 2017-18. The manufacturing sector grew tremendously by 150% between 2011-12 and 2017-18. The annual average growth rate is 21% up to 2016-17, but it jumps in 2017-18. The growth in 2017-18 over 2016-17 was 52% (Table 3.12).

Table 3.12: Performance on select indicators of registered manufacturing industries in Odisha

Indicator (All values in INR lakhs, except numbers)	2010-11		2016-17		2017-18	
	Odisha	Share in All India (in %)	Odisha	Share in All India (in %)	Odisha	Share in All India (in %)
No. of registered factories	2,536	1.2	3,051	1.3	3,066	1.3
Fixed capital	1,21,66,281	7.5	3,38,00,626	10.6	3,39,07,302	10.3
Total output	92,14,154	2.0	1,51,09,219	2.1	2,29,96,998	2.8
Total input	70,69,789	1.8	1,20,25,645	2.0	1,88,95,455	2.9
Gross value added	21,44,365	2.6	30,83,574	2.3	41,01,543	2.8
Net value added	16,93,137	2.4	18,47,663	1.6	26,98,449	2.2
Total number of employees	2,82,860	2.2	2,72,508	1.8	2,79,496	1.8
Output/Input	1.30		1.25		1.22	

Source: DES(ASI Division), Odisha

3.6.3 There has been a remarkable increase in fixed capital of this sector in Odisha relative to all India. Odisha's share in total fixed capital in the manufacturing sector has gone up from 7.5% to 10.3% between 2010-11 and 2017-18. As per the latest data released by CSO, fixed capital Odisha ranked 3rd among all states, next to Gujarat and Maharashtra. As regards to Invested Capital, Odisha ranked 4th next to Gujarat, Maharashtra and Tamilnadu.

Odisha has 3rd largest share in fixed capital in the country (2017-18)

3.6.4 Output/Input ratio has declined over-time. In 2010-11, output/Input ratio was at 1.30, which declined to 1.22 in 2017-18. The sector has been subjected to various exogenous shocks. This includes natural disasters, Mining ban in 2014-15 and fluctuating commodity prices.

Table 3.13: Estimate of some important characteristics of Odisha/India for the year 2017-2018(P)

Sl.No	Characteristics	All India growth (%) 2017-18(P)over 2016-17	Growth of Odisha (%) 2017-18 (P) over 2016-17	Share of Odisha(in%)2017-2018(P)	Rank 2017-2018(P) (in Numbers)
1	Fixed Capital	3.2	0.3	10.3	3
2	Invested Capital	4.0	2.0	8.4	4
3	Number of Workers	4.8	2.8	1.9	15
4	Wages to Workers	11.1	14.1	2.6	12
5	Value of Output	11.2	52.2	2.8	12
6	GVA	7.8	33.0	2.8	13
7	Net Value Added	8.0	46.0	2.2	14

Source: CSO, Government of India

3.7 Performance of industries by size

I. Large industries

3.7.1 The State has become a promising industrial hub for establishment of a number of large and medium industrial units. During the past 18 years, the State has witnessed a remarkable growth in the production of alumina, aluminium, steel and stainless steel. Two of the largest aluminium plants in India are in Odisha, viz., NALCO and Vedanta Ltd.

Odisha is the largest Aluminium producer in India

Steel Industries and Downstream in metals

3.7.2 With one-third of the total iron ore reserves, Odisha stands today as the largest steel and stainless steel producer in the country. JSW Steel Ltd. has received approval to set up a 12 MTPA steel plant in Jagatsinghpur district with an investment of INR 50,000 crore. Tata Steel is expanding its Kalinganagar facility from 3 MTPA to 8 MTPA. In addition to the major steel plants set up by the private sector, the State also has two large PSUs: Rourkela Steel Plant (RSP) and Nilachal Ispat Nigam Limited (NINL) (1.0 MTPA). Government of India now promotes steel production through Greenfield investment; Odisha as the leading producer of steel is an eligible State for producing more steel in the “Greenfield steel production proposal.”

3.7.3 To further boost the steel industry, a National Investment and Manufacturing Zone (NIMZ) is being set up at Kalinga Nagar, which will be spread over 160 km². The zone is envisaged to become a self-contained eco-system along with residential, commercial and social amenities and will enable potential investors to establish downstream facilities for value addition. The State aims to add value to the metal produced in the State and a vision document identifying various initiatives to provide a conducive ecosystem for downstream units in the sector is being developed by the State. To add this dedicated downstream steel parks are being developed in the State at Kalinganagar and Angul. The “Scrap recycling Policy” has been formulated by Govt. of India for reuse of Ferro Scrap in street making process to bring down the cost of steel production and saving natural resources to a great extent. In the process, using scrap will create green steel production which is environment-friendly.

3.7.4 To promote investment in Iron and Steel sector, the State Government in the past had signed 49 MoUs with total approved capacity of 90.45 MTPA. Subsequently, 4 nos. of project proposals have been withdrawn and the said capacity now stands at 60.97 MTPA. At present, the installed capacity of MoU based Steel Plant is 25.38 MTPA which is an increase of around 21.1% over the year 2016-17. Besides, 34 nos. of iron ore-based industries are coming up through non-MoU route, out of which 12 with installed capacity of 7.10 MTPA are already in production. In addition, Pellet Plants and Sponge Iron units have also been established utilizing the vast Iron ore resources in the State. The aforesaid projects have been facilitated as part of the mineral development policy of the State Government with the aim of pursuing value additions, mass employment generation and welfare-oriented revenue collection. The Iron Ore particles in the form of Pellets now used in steel Industries in the production process, which reduces the input cost and is also environment friendly.

Table 3.14: Status of Iron-ore based Industries in Odisha (capacity and production)

Company type	MOU/Approved capacity	Installed capacity	Annual production 2018-19
Steel			
MoU	60.97	25.38	13.27
Non-MoU	39.97	07.10	04.36
SI units producing steel	--	00.49	00.16
Total steel		32.97	17.79
Sponge iron	--	15.29	06.70
Pellet	41.30	29.20	19.52
Pig iron/ Ferro shots	-	-	01.63
Grand total (Iron ore-based industry)			45.64

Source: Deptt. of Steel & Mines, Odisha.

Aluminium industries

3.7.5 Odisha is the highest producer of aluminium in the country today. To further enhance the production of aluminium, NALCO has planned to expand its aluminium smelter in Angul district by 0.5 MMTPA at an estimated investment of INR10,000 crore. Besides, it is also expanding its alumina refinery at Damanjodi from 2.275 MMTPA to 3.275 MMTPA with an investment of more than INR 4,000 crore. The State also has seen private sector large scale investments from large companies in the sector including Hindalco and Vedanta. Hindalco Industries Limited is setting up a 0.375 MMTPA Aluminium Flat Rolled Product plant at Lapanga with an investment of INR5,000 crore. Similarly, Vedanta is expanding its alumina refinery capacity by 5 MMTPA at Kalahandi and its aluminium smelter capacity by 0.2 MMTPA at Jharsuguda with an investment of INR7,500 crore which will create employment for about 7,700 people.

3.7.6 Bauxite is the basic raw material for aluminium production. Production of aluminium metal is primarily in the public sector units viz. National Aluminium Company Ltd. (NALCO), BALCO, HINDALCO Industries, and the private sector Vedanta Ltd. Production of above units are given in Table 3.15.

Table 3.15 Significant growth Aluminium Production (in lakh mt)

Name of the Company	Cumulative Target by March 2019	Cumulative Production by March 2019	Production During 2018-19
NALCO	3.80	4.40	0.38
BALCO	5.70	5.72	0.49
HINDALCO	4.10	4.09	0.34
VEDANTA Ltd.	5.43	5.45	0.47
Total	19.03	19.66	1.68

Source: Monthly Summary Report, Ministry of Mines, March'2019

3.7.7 To promote downstream and ancillary industries, NALCO has committed 50,000 tonnes of hot metal to the Aluminium Park at Angul, which has been established in Joint Venture (JV) mode with IDCO. The park is one-of-its-kind facility in the sub-continent.

Textiles and Apparel

3.7.8 Apparel, being a high employment generating sector, is a focus sector of the State. A dedicated Apparel policy has been promulgated by the State for the development of the sector.

3.7.9 As a result of investor friendly policy in this sector, the State has seen significant investments from apparel sector companies in recent times. Shahi Exports has setup an apparel manufacturing unit at Khordha with an annual capacity of 3.6 million pieces. Aditya Birla Fashion has received approval for setting up an apparel manufacturing unit at Rayagada. Besides, a textile park is being developed at Bhadrak. This park is expected to generate significant employment in the sector through development of an ecosystem for synthetic fibres in the State.

Due to pro-industrial Policy of the State and investor friendly eco-system created by the state the industry sector has shown tremendous growth. As per latest data released by CSO, in 2017-18 (P), number of factories in manufacturing wearing apparels has risen by 33.33% from previous year. Growth of Fixed Capital, Workers and emoluments are increased by 1890.72% (2nd highest), 613.07% (4th highest) and 409.32% (3rd highest) respectively in comparison to previous year.

Table 3.16 Manufacture of Textiles & Wearing apparels (NIC-13 & NIC-14)

	Indicator	2013-14	2014-15	2015-16	2016-17	2017-18(P)
Odisha	GVA (Rs in Lakhs)	5091	4781	4571	4936	4811
	Total no of employees (in Nos.)	3153	2680	2799	2596	3849
India	GVA (Rs in Lakhs)	8704020	8389635	9328440	9767760	10720565
	Total no of employees (in Nos.)	2474903	2526610	2650026	2697123	2868081

Source : CSO, Govt. of India

3. 8 Chemicals, Plastics and Petrochemicals

3.8.1 Chemicals and Petrochemicals is also one of the identified focus sectors of the State. Indian Oil Corporation is operating a 15 MMTPA refinery at Paradip and is planning to further expand its capacity. Besides, it has also commenced commercial production from Polypropylene unit which will supply raw material to the Plastic Park at Paradip Mono-Ethylene Glycol (MEG) unit and Paraxylene-PTA units which are at different stages of implementation and will help create a large downstream ecosystem for chemicals and textiles sector in the State. The State has also received investment intent from various other national and international companies in the sector.

Table 3.17 Manufacture of Chemical & Chemical products (NIC-20)

	Indicator	2013-14	2014-15	2015-16	2016-17	2017-18 (P)
Odisha	GVA (Rs in Lakhs)	231234	214559	71247	336314	408461
	Total no of employees (in Nos.)	9247	8349	7023	7522	5917
India	GVA (Rs in Lakhs)	9319352	9529278	13534634	13613122	14407842
	GVA (Rs in Lakhs)	708401	712994	747212	790263	828425

Source : CSO, Govt. of India

Food processing including sea food

3.8.2 The State is blessed with ten agro-climatic zones and more than 60 lakh hectares of cultivated land. It is one of the largest producers of rice, vegetables, fruits, sea food, spices, oil seeds and various other crops in the country. Keeping this in consideration, the State has also promulgated an exclusive Food Processing Policy 2016, providing competitive incentives to units setting up in the State. The State has also a conducive ecosystem for investments in the sector in the form of food parks at Khordha and Rayagada and a dedicated sea food park at Deras. As a result, the Gross Value Added in manufacture of food products has increased from INR 49,089 lakhs in 2016-17 to INR 1,48,100 lakhs in 2017-18. Further this has resulted in creation of additional employment of 2,623 number in 2017-18 over 2016-17.

Table 3.18 : Manufacture of Food products (NIC-10)

	Indicator	2013-14	2014-15	2015-16	2016-17	2017-18
Odisha	GVA (Rs in Lakhs)	50219	68385	85218	49089	148100
	Total no of employees (in Nos.)	23204	23532	27248	28025	30648
India	GVA (Rs in Lakhs)	7266585	7583200	8563467	10393631	11106840
	GVA (Rs in Lakhs)	1582839	1612698	1599035	1693736	1772399

Source : CSO, Govt. of India

Electronics Manufacturing

3.8.3 A 215 acres ready-to-use dedicated Electronic Manufacturing Cluster has been developed close to Bhubaneswar. An attractive incentive framework of Special Package Incentive Scheme over and above the m-SIPS Programme of Government of India has been promulgated to facilitate investments in this sector.

Odisha has become the number one State in the country in terms of attracting investments during April-Sep' 2019 as per CMIE

Odisha is emerging as a manufacturing hub of the east

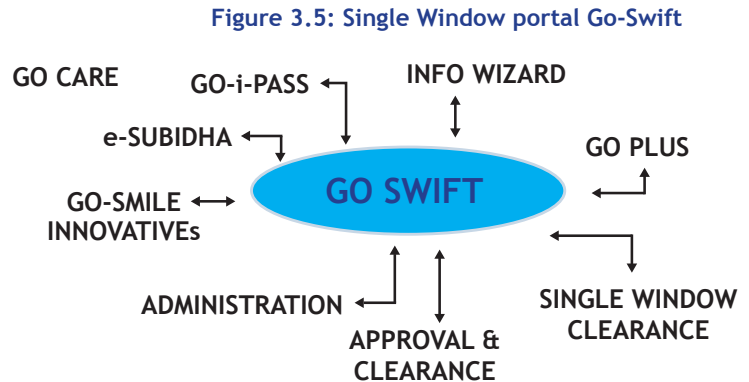
- Occupies significant place in the mineral map of India produces mineral costs of Rs.41, 621 crore with 13.88 % values of India's total.
- Produced more than 50% aluminum in India.
- Major Steel producing state contributing half of steel production in India.

Make in Odisha Conclave 2018

3.8.4 Make in Odisha Conclave is Odisha's flagship biennial business event showcasing the policy & regulatory environment, investment opportunities across focus sectors and manufacturing prowess of the State. The State Government organized the first such Conclave in 2016, which saw eight sectoral sessions and attracted investment worth INR 2.03 lakh crore. Today, more than 65 of these investments are at various stages of approval and implementation. Buoyed by the success of the 1st edition of the Conclave, the State organised the 2nd Make in Odisha Conclave during November 11-15, 2018 at Bhubaneswar. The Conclave attracted investments worth INR 4.23 lakh crore across 17 diversified sectors, an unprecedented feat in the history of State's industrial development. The event was a watershed moment in the industrial development journey for the State.

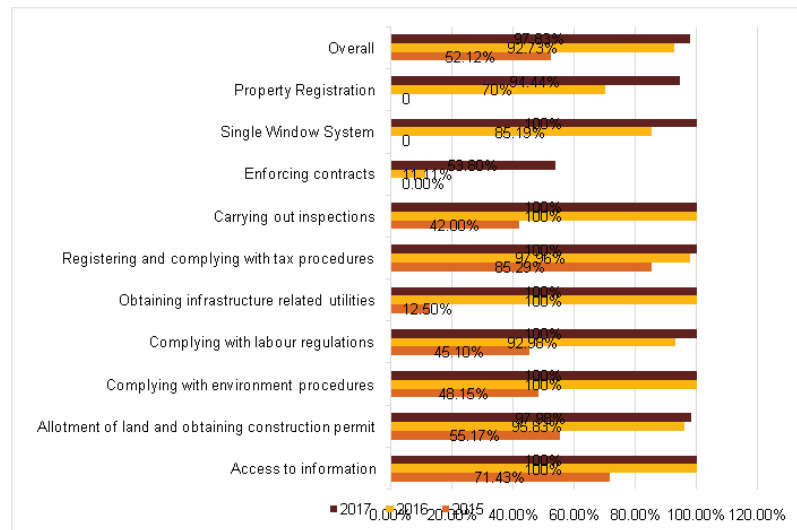
21 and 44 units proposed during the two conclaves in 2016 and 2018 have commenced construction, while 5 and 2 units respectively have started production. 29 and 53 units respectively have acquired necessary land, making a total of 55 and 99 units already committed with at least fixed investments made. 52 and 86 proposals respectively are in various stages of processing.

The State govt. has undertaken various initiatives to ensure a hassle-free business environment by introducing a single window portal Go-Swift. The details are given in Fig. 3.5.



3.8.5 Several business reforms have been implemented by various State Government Departments to make it easy for businesses to set up and operate (Figure 3.6). From Figure 3.6 it can be seen that Odisha reached 100% compliance in most of Ease of Doing Business indicators during 2017 & 2016. During 2015 the achievement was very low which got momentum during 2017. During 2015 assessment, the areas of property registration and Single Window System were not included in the parameters of Ease of Doing Business.

Figure 3.6: Status of Ease of Doing Business - 2015-17



Source: Industries Department, Govt of Odisha

Various awareness and dissemination campaigns have been organised across the State to inform the investors regarding the different reforms initiatives.

The State has also promulgated 2 new policies: Odisha Aerospace & Defence Manufacturing Policy 2018 and Odisha State Film Policy 2019 to facilitate investments in the sector.

3.9 Micro, Small and Medium Enterprises (MSME)

3.9.1 The MSME sector has great potential for employment generation in Odisha; thus, with low capital investment it has been a focus for the State government as indicated in the Industrial Policy Resolution 2015 and MSME Development Policy 2016. During 2018-19 around 69,673 MSME units were set up with an investment of INR 3,196.53 crore, leading to employment generation for 1.95 lakh persons. Altogether 3,91,701 MSMEs are established with an investment of INR 19,141.83 crore and employment to 15,29,463 persons till March 2019.

3.9.2 Sector-wise disaggregation indicates that repairing services account for the majority share in MSMEs, with almost 60.9% share of total MSMEs setup in the State and generating 46.4% of the total employment opportunities created through MSME units (Table 3.19). A possible reason for the high concentration of MSMEs in the repairing services can be attributed to challenges related to literacy, skills, opportunities, marketing, credit facility etc., pushing young entrepreneurs to engage themselves in repairing services units. Food and Allied sectors follow the Repairing services in terms of units, investment and employment generation. However, the Gross Value Added in Chemical and Allied Sector has increased by 21.45% in 2017-18 over 2016-17.

Table 3.19: MSME units set up in Odisha

Category	No. of units set up	Investment (in crore)	Employment (persons)
Repairing and services	2,38,375 (60.9)	11,680.19 (61.0)	7,09,363 (46.4)
Food and allied	41,284 (10.5)	2,334.27 (12.2)	2,01,359 (13.2)
Misc. manufacturing	29,360 (7.5)	1,248.40 (6.5)	1,08,389 (7.1)
Engineering and metal based	18,513 (4.7)	1,351.99 (7.1)	1,19,544 (7.8)
Textiles	19,520 (5.0)	435.23 (2.3)	84,822 (5.5)
Forest and wood based	19,047 (4.9)	292.02 (1.5)	75,954 (5.0)
Glass and ceramics	11,333 (2.9)	786.90 (4.1)	1,51,413 (9.9)
Chemical and allied	4,480 (1.1)	349.42 (1.8)	29,291 (1.9)
Paper and paper products	4,425 (1.1)	198.08 (1.0)	21,505 (1.4)
Electrical and electronics	2,393 (0.6)	137.78 (0.7)	11,292 (0.7)
Rubber and plastics	2,235 (0.6)	310.09 (1.6)	13,183 (0.9)
Livestock and leather	736 (0.2)	17.46 (0.1)	3,348 (0.2)
Total	3,91,701	19,141.83	15,29,463

Source: Directorate of Industries, Govt. of Odisha

Entrepreneurship Development

3.9.3 To inculcate entrepreneurship culture, the State has initiated Entrepreneurship Development Programmes (EDP) organised by Regional Industries Centres (RICs) / District Industries Centres (DICs) across the State. These are held for two weeks' duration. During 2018-19 EDP has provided training to 12,809 youths and covering 32,858 youths through 1,118 number of training batches during last five years. The youth participating in sensitisation programmes are encouraged to undergo "online L&D programme" of four weeks duration available in the start-up portal. District Level Facilitation Cell (DLFC) in the all districts was set up and have so far cleared 785 projects with proposed investment of Rs 3012.75 crore and 33,810 persons employed directly.

3.9.4 Apart from conducting entrepreneurial development programmes, the State government also provides financial support to youth in setting up MSMEs under the Prime Minister's Employment Generation Programme (PMEGP). The Scheme is implemented through Khadi and Village Industries Commission (KVIC) and State/UT Khadi & V.I. Boards (KVIB) in rural areas, and through District Industries Centres (DICs) in Urban and Rural areas. 15% and 35% of the project cost is provided as Margin Money Assistance to General and Special category applicants, respectively. In the past ten years, 27,722 units have been promoted, with an employment generation of 2,23,499. The yearwise detail progress of PMEGP is given in table 3.20.

Table 3.20 Progress of PMEGP in Odisha (from 2016 to 2018-19)

Year	Margin Money Received (INR in lakh)	Units promoted	Employment Generated
2016-17	2041.63	841	6728
2017-18	1540.87	627	4689
2018-19	2290.68	854	6878

Source: Odisha Khadi & Village Industries Board

3.9.5 Odisha Khadi & Village Industries Board has provided Bee-keeping training to 498 persons during 2018-19 and covering total 1575 persons by the end of 2018-19. The Board has produced raw honey valued Rs. 8.92 lakh in 2018-19, which was Rs. 9.42 lakh during 2017-18. The cost of the total processed honey sales by KVIC during 2018-19 was Rs. 14.50 lakh and Rs. 14.16 lakh during the previous year.

3.9.6 The State Government has provided encouragement to Khadi industries by renovating the “GRAMODYOG SALES DEPOT”. This proved to be a landmark in giving a new dimension to sales of Khadi & Village industries product. Total sales of KVIB increased by 256% during 2018-19 over the previous year. Government of Odisha has provided Rs. 2.00 crore for revival of 15 Khadi societies.

Achievements of MSME Department during the last five years

- 2,48,014 MSME Enterprises have ‘gone into production’ with total investment of INR 12,835 crore and employment to 7.54 lakh persons in the last five years. Thus, altogether 3, 91,701 MSMEs have gone into production with an investment of INR 19, 141.83 crore and employment to 15, 29,463 persons till March, 2019.
- 1,277 downstream enterprises based on the usage of steel, aluminium, waste and paper sludge etc. are providing employment to 8,796 persons. Besides, 786 fly ash based industries are providing employment to 12,645 persons.
- In order to boost systematic development of MSMEs, Food Processing industry and Start-ups, Odisha MSME Development Policy, Odisha Food Processing Policy and Odisha Start-up Policy have been operationalised since 2016.
- As regards food processing sector, MITs Mega Food Park at Rayagada has already become operational; Marine Food Park at Deras is at advance stage of development.
- 5 MSME Multi-product Parks in Sambalpur, Sundargarh, Angul, Cuttack and Khordha districts have been approved to provide land with developed infrastructure to MSMEs.

Box 3.3: Startup Odisha: Boosting Innovation

Odisha has been recognised as ‘Top Performer’ by DIPP, Government of India in States’ Start-up Ranking 2018.

The Government of Odisha recognises the fact that the seeds of entrepreneurship and the instinctive ability to innovate must be nurtured through an enabling ecosystem, such as:

- Creation of world class physical infrastructure to support Start ups;
- Promoting the culture of innovation through academic interventions;
- Institutionalizing the culture of entrepreneurship by providing training for the requisite Skills

The Odisha Start-up Policy was thus launched on 26th August 2016, notified on 2017’May with an objective of developing a world class ‘Start-up Hub’ in Odisha by 2020 and to create an enabling environment and supporting eco-system that facilitates at least 1,000 Start-ups and bringing the state amongst the top three start-up hubs by 2020.

Highest monetary benefits in India

STARTUPS	INCUBATORS
Monthly Allowance of INR 20,000 (INR 22,000 for women/transgender/SC/ST/SEBC/PH led Startups)	One-time capital grant upto a maximum of INR one Crore
Product development and marketing/publicity assistance upto INR 15 lakhs (INR 16 lakhs for Women/Transgender/SC/ST/SEBC/PH led Startups)	Unique provision of matching Grant of INR five crore
Need based assistance for equipment/raw material purchase	Performance capital grant of INR five lakhs per incubate
Subsidized incubation (50% of monthly rental upto INR 5000 per month) for one year	Reimbursement of utility expenses of INR one lakh p.a. for three years

3.9.7 Till date, 423 Start-ups have been recognised in the State and benefits given to 55 Start-ups, out of which, 16 are women-led. The assisted start-ups are providing employment to more than 1210 persons. Further, 12 incubators are registered with total incubation area of 4.5 lakh sft. For effective monitoring, screening & evaluation, 12 Nodal Agencies have been empanelled. Mentorship support is also provided to start-ups with a network of 110 mentors. Odisha has also registered its first angel network ‘Bhubaneswar Angels’.

3.9.8 Odisha Youth Innovation Fund has been setup to support grassroots innovations, which are essentially technological solutions and development of successful business models by youths in different sectors. The fund provides INR 50,000 for any new idea, INR 1,00,000 for any demonstrative product, prototypes, patents, incubated products/services and INR 3,00,000 for development of any enterprise/ Startup based on eligible innovative idea/ products/services. The scheme is implemented through OSIC Ltd. So far Rs. 43.5 lakh has been disbursed for 71 project/ideas.

- District Level Single Window Clearance Authorities (DLSWCA) have approved 785 projects with total project cost of INR 3012.75 crore and employment potential to 33,810 persons. Out of these,

94 projects have already started production and 168 are under implementation. In order to fast-track project clearance, District Level Facilitation Cells (DLFC) have been constituted in all DICs to recommend proposals to DLSWCA for approval. DLFC meetings are held on a fixed day of the month.

- 1,204 MSMEs have been provided financial assistance of INR 151.72 crore under Govt. Policies.
- Under PMEGP, total 11,374 units have been promoted with margin money assistance of INR 261.27crore approximately by generating employment to 81,773 persons from 2015-16 to 2018-19.

- 31,482 youth have been trained in entrepreneurship through 1076 EDPs. 4362 motivational camps have been organised which were attended by 3,90,913 youths.
- Altogether, 467 bank branches have been designated as 'MSME Specialised Branches' to facilitate smooth credit to MSMEs.
- Government has started the Start-up Odisha Initiative with the launch of Start-up Odisha Policy and Start-up Odisha Portal. Till date, 423 start-ups are registered under the initiative and 55 of them have been extended assistance under the Policy. Besides, a network of 12 Nodal Agencies, 12 Incubators, 110 mentors and one Angle Network has been set up to assist start-up.
- The export turnover of the State has increased to INR 52,677 crore in 2017-18 against INR 40,870 crore in 2016-17, but the scenario was affected due to global slowdown and total value of exports during 2018-19 was Rs. 47,619.60 crore declined by 9.6% over 2017-18.
- In order to provide single point facilitation to exporters, RaptaniBhawan has been operationalised with export agencies namely, DEPM, DGFT, MPEDA and FIEO being accommodated under a single roof.
- International Air Cargo facility at BPIA has commenced since January, 2017. Multi Modal Logistic Park Jharsuguda, Portside Container Terminal Paradip & Inland Container .Depot at Balasore have commenced operations. Testing Laboratories of EIA & MPEDA have also started their operations.
- Under an innovative partnership with Facebook, total 3,300 micro entrepreneurs and SHG members were provided 'digital marketing training' under their #SheMeansBusiness# and 'Boost Your Business' programmes.

Salt industry

3.9.9 The long coastline of 480 kms has allowed for salt manufacture in the coastal districts of Ganjam, Puri and Balasore. To uplift the living standards of salt workers, various initiatives have been undertaken. Under a joint venture of the Government of India and State Government, construction of school buildings, provision of scholarships to the meritorious students, etc. have been taken up to extend educational facilities to the children of salt workers. Health Centres have also been constructed in the locality for extending health facilities to the salt workers. Under the scheme, 'Namak Majdoor Awaas Yojana', 244 dwelling units have been constructed for providing shelters to bona fide salt workers. Drinking water facilities are also being provided in the vicinity of the salt producing area.

3.10 Handicrafts and cottage industry

3.10.1 Odisha is considered as land of handicrafts. Presently, as many as 50 different crafts are practised by about 1.30 lakh artisans dispersed throughout the State. The Odisha Handicrafts Policy 2018 aspires to focus on handicrafts sector and to leverage the unique selling proposition of the skilled workforce of Odisha.

3.10.2 The Directorate of Handicrafts and Cottage Industries is the apex body working towards promotion and development of handicrafts sector in the State. The Odisha State Co-operative Handicrafts Corporation Limited (UTKALIKA) and the State Institute for Development of Arts and Crafts (SIDAC) function under the Directorate to facilitate the development of handicrafts sector. The State has best craftsmanship in the country having highest number of Artisans honoured with national awards including Padma Award.

3.10.3 During 2018-19, 2,296 handicrafts units were set up in the State, growing by 69% over 2017-18 and a total investment of INR 26.19 crore. The status of handicrafts industry in Odisha over the last six years is highlighted in Table 3.21. The growth of units shows a record high of 69% during 2018-19 over 2017-18. Total profit out of the sales of handicraft products during 2018-19 was Rs.15.53 Crores, by investing a total of Rs. 168.74 crore.

Table 3.21: Handicraft industry in Odisha, 2013-14 to 2017-18

Year	Number of units established	Investment (in crore)	Employment generated (Number of persons)
2013-14	1,204	3.45	1,507
2014-15	1,596	7.15	1,952
2015-16	2,278	8.44	3,867
2016-17	2,759	23.93	5571
2017-18	3,320	24.05	5,793
2018-19	5,616	26.19	9,004

Source: Directorate of Handicrafts and Cottage Industries, Odisha.

3.10.4 In the cottage industry sector, there is a shift in people's preferences from products of the cottage industries to alternative products available from other sources. In order to address this, the State Government has taken various measures for strengthening infrastructure and financial base of this sector by assisting co-operatives and artisans to intensify production and sale. The following activities have been undertaken during 2018-19 for the development of the sector that is shown in Table 3.22.

Table 3.22: Activities undertaken during 2018-19 for development of handicrafts and cottage industries

Scheme	Objective	Achievement (No. of artisans trained)
State Level Training In Various crafts	Promotion of the handicraft industry(managed by SIDAC)	118
District Level Training In Various Crafts	Promotion of the handicraft industry	151
Guru SishyaParampara Training	Transfer of traditional skill of national/ state level awardees to new generation artisans	405
MCM	Impart training to handicraft artisans for self-employment.With minimum capital investment	2310
Marketing Support Through Exhibitions	Assistance for participation for promoting sales turnover.	2, 909 (Sales: INR 21.22crores)
Craft Village Scheme	Sustained livelihood support through skill up gradation training to artisans in SHGs along with distribution of tools and equipment.	134 SHGs covering 2010 Artisans
Shilpi Unnati Yojana (SUY)	Financial assistance to handicraft artisans.	690
Construction ofworkshed-cum housing for Handicraft Artisans	Providing heigenic working environment	66

Source: Directorate of Handicrafts and Cottage Industries, Odisha.

3.10.5 Besides the above-mentioned schemes, the following achievements have been made during the year 2018-19:

- The handicraft policy-2019 was declared in January' 2019.
- Export worth Rs. 1.68 lakh made by "UTKALIKA".
- During the current year, the focus is in four major crafts viz. Golden Grass Craft, Sabai Grass Craft, Coir Craft and Jute Craft.
- The prestigious Odisha Crafts Museum "Kalabhoomi" now displays the Handloom Trail in every Thursday, Saturday and Sunday.

3.11 Handloom sector

3.11.1 Odisha is the land of art and culture. Production of handloom has been a tradition in Odisha. The skill and knowledge imbibed over generations has given Odisha's hand-woven textiles industry an unparalleled depth, range, strength and vigour. As per the handloom census in 2019-20, there were 63,223 weaver households having 47,625 looms.

3.11.2 By end of 2018-19, there were 1,156 Primary Weavers Co-operative Societies (PWCS), of which 479 (41%) were working PWCs while 109 (9.4%) were dormant and 568 (49.3%) were under liquidation. In comparison to 2017-18, 5 new PWCs have been established and the number of dormant PWCS has increased by 56. Of the total 40,888 looms in these PWCS, over 89% were working and produced 75.09 lakh sq. mtrs of handloom products valued at INR 160.22 crores. The productivity per loom per annum decreased to 378 sq. mtrs during 2018-19 in the Co-operative fold as against 416 sq. mtrs in 2017-18.

3.12 Sericulture sector

3.12.1 Sericulture is a traditional natural resources-based industry, providing employment to the tribal poor on a large scale. The Government of Odisha has focused on Sericulture as a sustainable livelihood programme, particularly for scheduled tribe and scheduled caste population of the State. The major activity of sericulture comprises of food-plant cultivation to feed the silk worms, rearing of silkworms to spin silk cocoons and reeling of the cocoons for unwinding of the silk filament for value added benefits such as processing and weaving.

3.12.2 Tassar farming is the predominant sericulture activity in the State. The State has a rich heritage of tassar culture adopted mostly by tribal farmers concentrated in 14 districts of the State with forests. As per latest estimates, about 46,828 farmers are enrolled in different TRCS for tassar culture in Odisha. Growing from 75,000 kahans in 2016-17, 76,252 kahans of tassar cocoons were produced in the State. Further, tassar forest was created on 845 hectares of land with plantation of primary tassar food plants such as Asan/ Arjun seedlings and 25.43 lakhs Dfls were reared during 2018-19. With area under Tassar food plants utilized for rearing, the increased production of Dfls indicates growing productivity. A total of 1,232.80 lakh reeling cocoons and 123.28 MT of raw silk were produced in the State. In comparison to 2017-18, production of reeling cocoons and raw silk witnessed a slight decline in 2018-19 owing to prevalence of bad weather in case of Eri & Mulberry, but it increased in case of Tassar.

Table 3.23: Activities undertaken in tassar sector

Activities	2016-17	2017-18	2018-19
Tassar Plantation (Ha)	1,682	765	845
Production of Dfls (lakh nos.)	20.95	20.20	20.43
Procurement of Dfls (lakh nos.)	4.98	5.05	5.00
Consumption of Dfls(lakh nos.)	25.93	25.25	25.43
Production of reeling cocoons (lakh nos.)	1,320.528	1,220.03	1,232.8
Production of Raw Silk (est. in MT)	115.5	106	123.28
Production of Silk Waste (est. in MT)	21	19	25
Farmers covered (nos.)	16,294	16,041	16,514

Source: Directorate of Textile, Odisha

Table 3.24 Activities undertaken in eri and mulberry sectors

ERI Sector	2016-17	2017-18	2018-19
Castor plantation (Acres)	1,520	1,600	1720
Consumption of Dfls (Lakh)	1.48	1.39	1.00
Production of cut cocoons (est. in MT)	7.9	8	6.59
Production of Raw Silk (est. in MT)	6.3	7	5.27
No. of farmers covered (Nos.)	3,040	3,200	3440
Mulberry Sector			
Mulberry Plantation (Acre)	255	102	78
Procurement of Dfls (lakh nos.)	1.14	1.23	1.03
Consumption of Dfls (lakh nos.)	1.14	1.23	1.03
Production of reeling cocoons (lakh nos.)	27.4	22.48	24.94
Production of Raw Silk (est. in MT)	3.3	3	2.77
Production of Silk Waste (est. in MT)	0.3	0.3	0.28
No. of farmers covered (Nos.)	1,455	1,717	1216

Source: Dept. HT&H, Odisha

3.12.3 Apart from tassar culturing, eri rearing is a traditional activity in 13 districts. During 2018-19, castor plantation covered 1,720 acres, rising from 1,600 acres in 2017-18, with a production of 6.59 MT of cocoons. The third type of sericulture limitedly practiced in the State is mulberry sericulture in limited pockets of 11 districts in the State. Mulberry farming is highly climate dependent and requires irrigation for its sustainability. The status of eri culture and mulberry sericulture is highlighted in Table 3.24.

3.12.4 To support Sericulturists in Tassar, Eri and Mulberry sector, several schemes have been implemented including MGNREGS & RKVY. Under these schemes, farmers are being provided necessary support like plantation of host plants, supply of silkworm seed, incentives towards procurement of reelable tassar cocoons, supply of castor seed, disinfectants and marketing support through Primary Rearers Co-operative Societies. Besides, extension service programmes like awareness camps, technology upgradation, exposure visits and trainings were carried out for farmers and private graineures to improve productivity and their earnings.

3.12.5 In Manufacture of Textiles and Wearing apparels sector though the Gross Value Added has decreased from INR 4,936 lakh in 2016-17 to INR 4,811 lakh in 2017-18, the employment has increased to 3,849 numbers in 2017-18 as compared to employment of 2,596 numbers in 2016-17.

3.13 Export performance

3.13.1 Despite active initiation and export promotion activities of the State, the export turnover of Odisha has decreased from INR 52,677 crore in 2017-18 to INR 47,620 crore in 2018-19, witnessing a decline of 10% on account of the ongoing global slowdown. Owing to high concentration of metal related industries in the State, metallurgical products, mineral products and electronics are the key exports from Odisha. Marine products are also an important export item from the State.

3.13.2 Table 3.25 presents the destination countries and value of exports in 2018-19. While metallurgical products had the highest value, engineering, chemical and allied products were shipped to the largest number of countries (70) as has been the trend in the past as well. A trend that can be observed is that while metal related products are exported to several countries, those of agricultural products are less diversified.

Table 3.25: Number of destination countries and value of export from Odisha in 2018-19

Products	No. of countries to which exported	Total Value of minerals (in%)
Metallurgical	41	54.78
Engg./Chemical	70	11.37
Minerals	18	19.91
Agriculture and Allied	8	0.44
Marine	42	5.93
Handloom	17	Nil
Handicraft	9	-
Textile	5	0.16
Pharmaceutical	5	0.02
Electronics and software	40	7.35
Others	20	0.04
Total		100

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

3.14 Major State level institutions

Odisha Industrial Infrastructure Development Corporation (IDCO)

3.14.1 IDCO acts as the Nodal Agency for providing industrial infrastructure and land for industrial and infrastructure projects in the State. The corporation has already developed 116 Industrial Estates/Areas (IEs/IAs) in different strategic locations. During the year 2018-19, IDCO has taken up development of around 150.12 acres of land allotted to medium and small industrial units in new Industrial Estates at Jayamangal, Bisiapada and Chhatabar in Khurda district, Ramdaspur in Cuttack district and Balarampur in Dhenkanal district.

IDCO: Infrastructure projects under implementation

- IDCO has taken several initiatives to develop three investment regions in the State with an objective to promote both domestic and foreign investments in the State.
- Under the scheme 'Petroleum, Chemicals and Petrochemicals Investment Regions' (PCPIRs) of Government of India, the State Government is developing a PCPIR at Paradip on 284.15 sq km (70,214 acres) of land spread over Jagatsinghpur and Kendrapara district. IDCO has acquired 7400 acres for industrial development in PCPIRs. These are expected to attract investment up to Rs. 2.74 lakh crore.

3.14.2 Proposals have also been received from large industries such as Jindal Stainless (downstream stainless steel products), Jindal Steel & Power (downstream steel products), Vedanta (downstream aluminium products), Welspun (multi-product) etc. to set up private industrial parks in the State.

IDCO: Downstream units' promotion

- Angul Aluminium Park at Angul over an area of 223 acre
- Seafood Park at Deras over an area of 152.78 acre
- Plastic Park at PCPIR at Refinery Complex of IOCL over an area of 120 acres
- Textile Park and Food Park over an area of 234 acres near Dhamnagar in Bhadrak district.
- Development of Electronic Hardware Manufacturing Cluster at Info Valley, Bhubaneswar over an area of 203.37 acre
- IT hub at Info Valley, Bhubaneswar
- Development of two IT/ITES SEZs, namely, SEZ at Chandaka (Bhubaneswar) over an area of 145.91 acres and Infocity-II IT SEZ at Gaudakashipur near Bhubaneswar (Info Valley) over an area of 262 acres.
- Establishment of an IT Incubation Centre with a built-up space of 33,048 sqm. At Infocity SEZ, Chandaka, Bhubaneswar.
- Developing an Inland Navigation System for movement of cargo from industries and mines to ports. MOU has been signed between Govt. Of Odisha and Inland Waterways Authority of India, Paradeep Port Trust and Dhamra Port.
- An Agro Industrial Estate has been developed by IDCO on behalf of Agriculture & F.E Department in Papahandi block of Nawarangpur district at the cost of Rs.12.76 crore and covering an area of 69.81 acres.

IDCO: Land acquisition

- During the year 2018-19, 3058.09 acres of land has been acquired and allotted to both existing and upcoming MOU/Non-MOU projects.
- So far, over 67,476.316 acres of land has been allotted to both MoU/non-MoU industries like steel, aluminium, ferro-alloys, cement and power sector in the State. A few major industrial projects that have been allotted land are as under:

Table 3.26: Major Industrial Projects that have been allotted land

Sl.No.	Project Name	District Name	Area in acre)
1	TATA Steel Ltd.	Ganjam	1720.609
2	Jindal Steel & Power Ltd.	Jajpur	300.00
3	Nalco Utkal E (Coal Block)	Angul	505.153

Source: Directorate of Steel Mines

IDCO: Land bank scheme

- IDCO is the Nodal Agency for creation of 'Land Bank' and allotment of such land for industrial use and infrastructure in designated industrial estates, industrial areas, industrial parks and growth centres etc. Under the land bank scheme, IDCO has filed requisition for lease/acquisition of 1, 52,939.31 acres of land with district authorities in 29 districts as on March 2019.
- In total, 1,925.795 acres of land has been added to the Land Bank during the year 2018-19.
- Cumulative extent of area sanctioned under category A is 12,728.816 acres and under category B is 49,996.234, under the Land Bank scheme, as on March 2019.
- The total extent of area under the Land Bank Scheme comes to 62,725.05 acres.

IDCO: Construction activities

- IDCO also provides comprehensive project construction and management services for execution of civil, electrical, public health and engineering projects in social sectors.

IDCO: Financial achievement

- For the year 2018-19, the turnover was INR 391.14 crore.
- Industrial Promotion and Investment Corporation of Odisha Ltd. (IPICOL)

3.14.3 IPICOL is the nodal investment promotion and facilitation agency for the State. The major activities of IPICOL are to extend Single Window Facilitation & Aftercare services to investors and to take up Investment Promotional activities for creation of employment for the State.

3.14.4 IPICOL has taken significant steps in increasing the visibility of the State as an investment destination at National & International level and to broadbase and diversify industrial development in the State. Several investment promotion events were organised/ participated in by IPICOL during 2018-19 at Chennai, New Delhi, Mumbai, Kolkata, Goa and International road shows at Italy, Saudi Arabia, South Korea and Japan.

3.14.5 During the past five years, the State has received investment intent from investors in multiple sectors. The number of approved projects along with their investment and employment potential is shown in Table 3.27

Table 3.27: Number of approved projects along with their investment and employment potential in Odisha

Year	Number of Approvals	Investment Amount (in INR crore)	Employment Potential
2014-15	12	3,907.27	3,904
2015-16	28	32,024.36	12,085
2016-17	38	7,778.89	44,033
2017-18	46	2,04,110	98,308
2018-19	47	67,417.41	41,643

Source: IPICOL, Govt. of Odisha

3.14.6 To ensure a hassle-free business environment to investors, IPICOL is coordinating and simplifying the process of business establishment and technology intervention of various Departments. Single window portal “Go-SWIFT” facilitates online application submission, payment, status approval of insurance for 34 industrial services of 15 Departments. Till 31st March 2019, the portal has received 651 proposals from a variety of sectors.

3.14.7 To bring in higher focus towards commissioning of projects, IPICOL has introduced ‘Industry Care’ mechanism in December 2018. Fortnightly district-wise industry-care meetings are being organized in each district to resolve issues faced by industries operating or planning to setup there.

3.14.8 IPICOL is also leading institutionalization of CSR activities in the State through first-of-its kind portal i.e., GOCARE- Government of Odisha CSR Administration and Responsive Engagement portal. The portal provides one-stop information with respect to all the CSR activities being undertaken in the State. The welfare departments and District Collectors have proposed projects in various districts. These projects have been made available on the GO CARE portal for consideration of the corporates to take up as part of their CSR initiatives. 1st Odisha CSR Awards were organized in the State during the Make in Odisha Conclave 2018 to recognise the CSR efforts of various corporates operating in the State.

3.15 Electricity, gas, water supply and other utilities

I. Electricity

3.15.1 Energy is an essential input of economic development of an economy, either in the form of finite resources such as coal, oil and gas or in renewable forms such as hydroelectric, wind, solar and biomass, or its converted form of electricity. The energy sector not only profoundly influences the diversified economic activities but also has direct bearings on the quality of the State’s air, water, land, forest resources, and climate changes. The power sub-sector along with gas and water supply sub-sectors contributed about 3.33 percent of the Odisha’s GSDP during 2019-20(AE). The growth of this sub-sector has however, widely fluctuated from year to year due to several factors including availability of inputs such as coal, gas or oil, environmental constraints and natural shocks. The value added in current and constant prices is depicted in the Table given below.

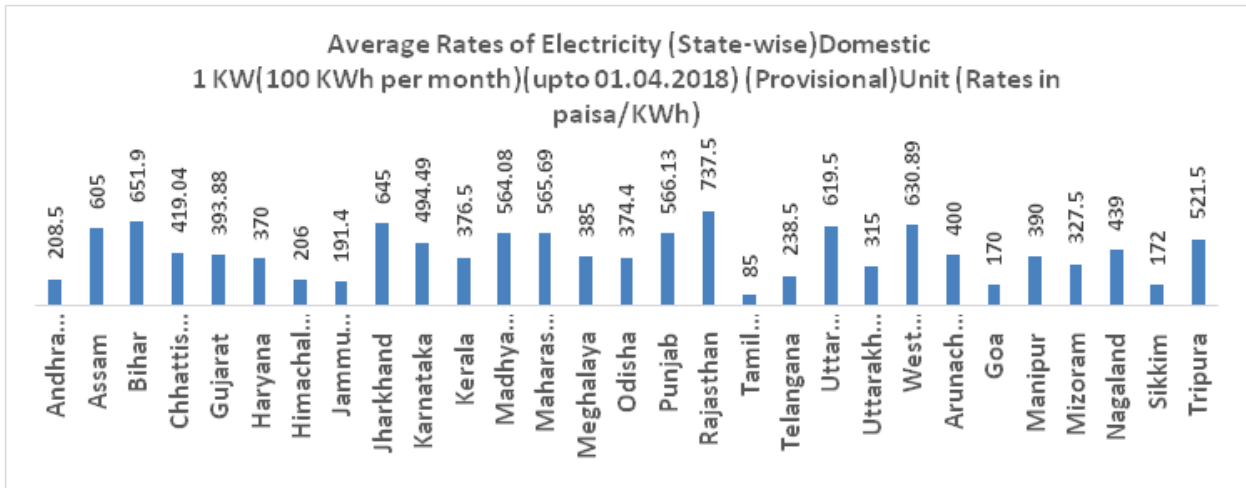
Table 3.28 : State Gross Value Added from Electricity Sub-sector

Year	At Current Prices		At 2011-12 Prices	
	GVA (Rs in Lakhs)	Growth Rate (In %)	GVA (Rs in Lakhs)	Growth Rate (In %)
2011-12	762791	-	762791	-
2012-13	925791	21.37	921185	20.77
2013-14	1018387	10.00	982999	6.71
2014-15	924820	-9.19	874948	-10.99
2015-16	1099164	18.85	1043840	19.30
2016-17	1135904	3.34	1090119	4.43
2017-18	1038123	-8.61	1001082	-8.17
2018-19	1219777	17.50	1112935	11.17
2019-20	1254495	2.85	1152706	3.57

Source: DES, Odisha

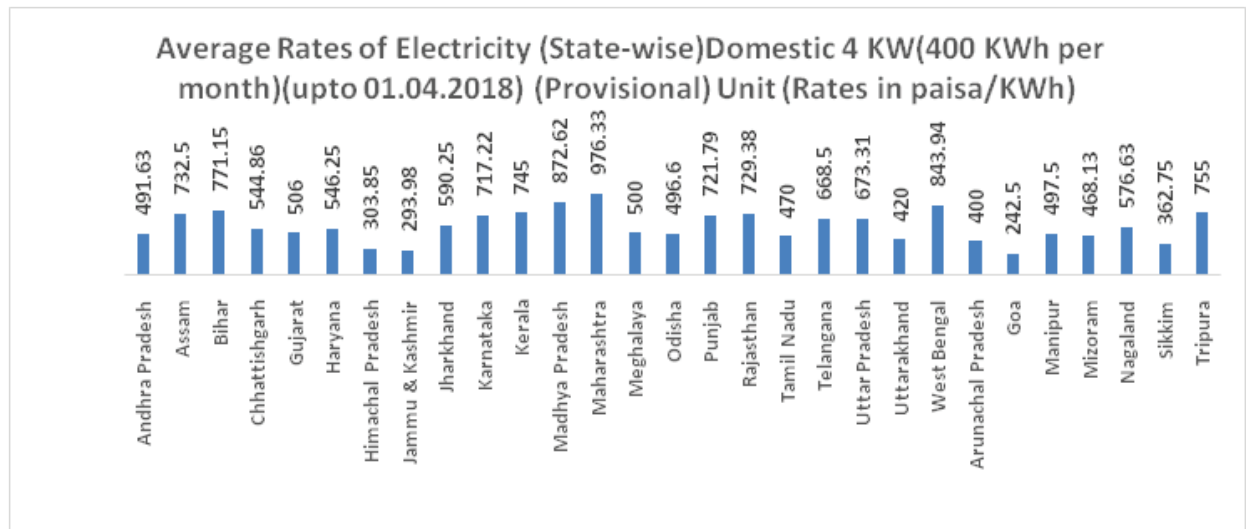
3.15.2 Electricity being a part of modern life has many uses both in domestic and industrial appliances / machineries. It has a greater role in industrialization and transforming the economy of the state. The state has taken many pro-industrial policies and pro-consumer tariffs in this sector. As per the latest data released by Central Electricity Authority (CEA), a comparative graph on average rates of Electricity is given in figures given below.

Figure 3.7: Average Rates of Electricity (State-wise) Domestic 1 KW



Source: CEA

Figure 3.8: Average Rates of Electricity (State-wise) Domestic 4 KW



Source: CEA

Figure 3.9: Average Rates of Electricity (State-wise) Domestic 10 KW

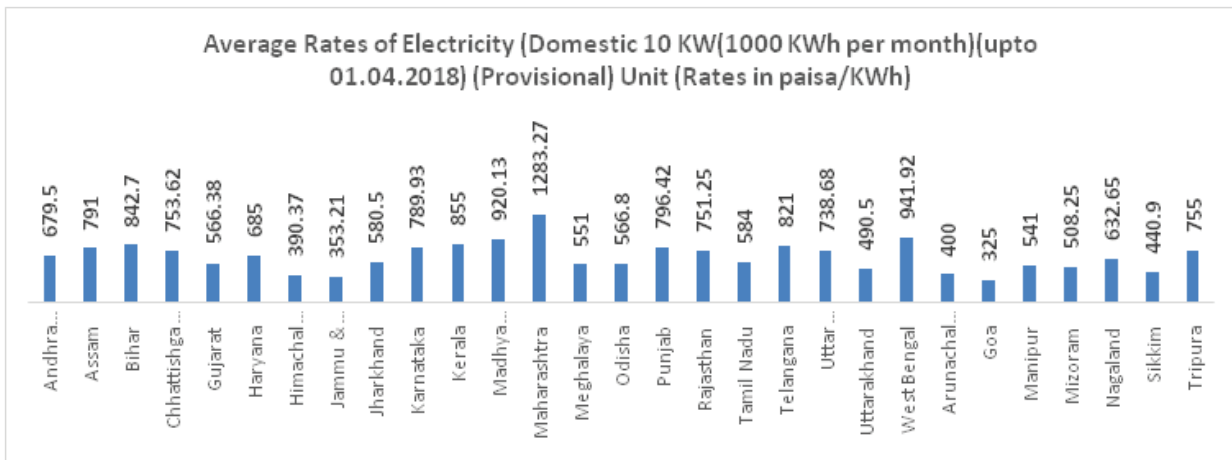
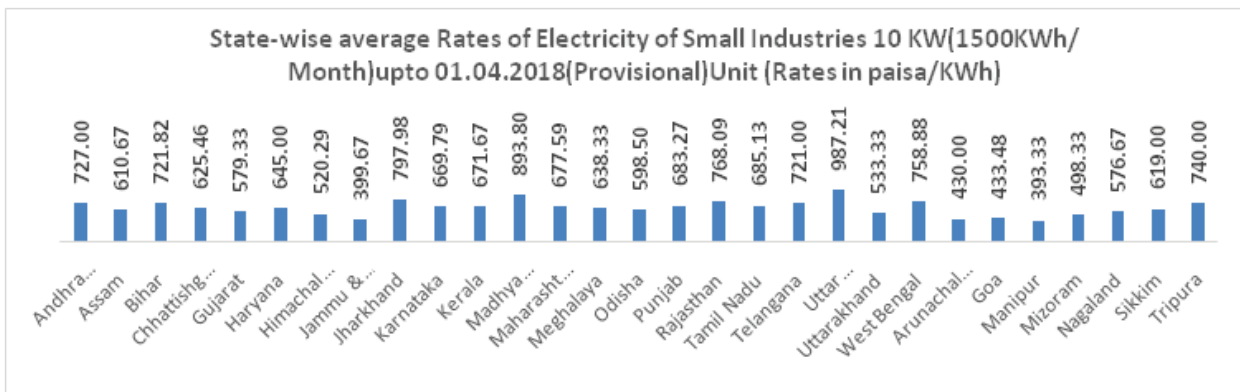
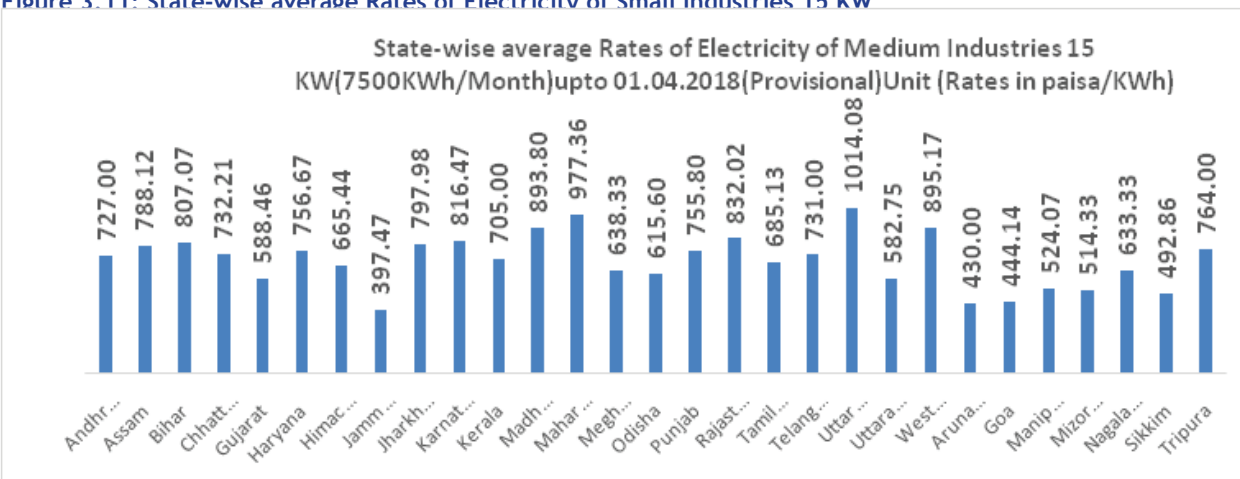


Figure 3.10: State-wise average Rates of Electricity of Small Industries 10 KW



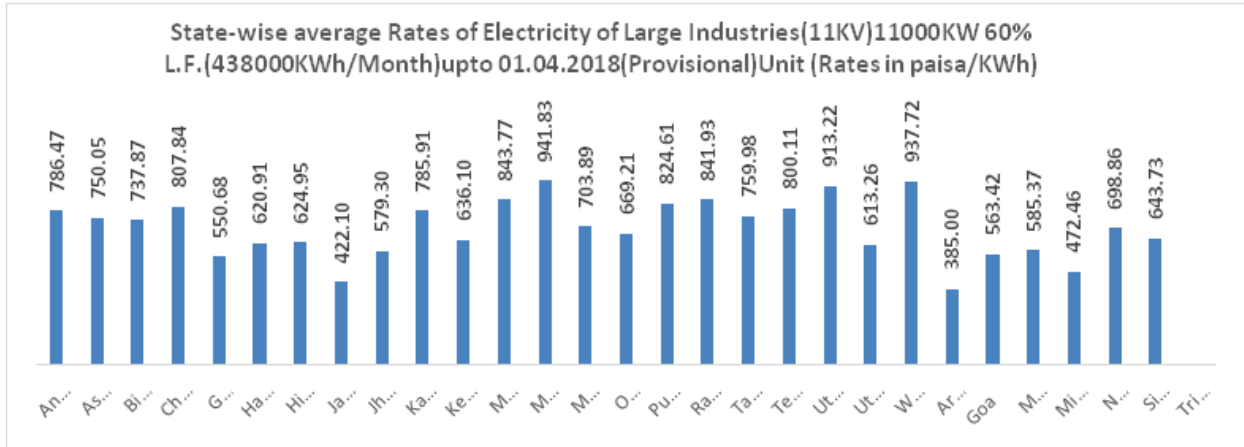
Source: CEA

Figure 3.11: State-wise average Rates of Electricity of Small Industries 15 KW



Source: CEA

Figure 3.12: Statewise average Rates of Electricity of Small Industries 11KV



Source: CEA

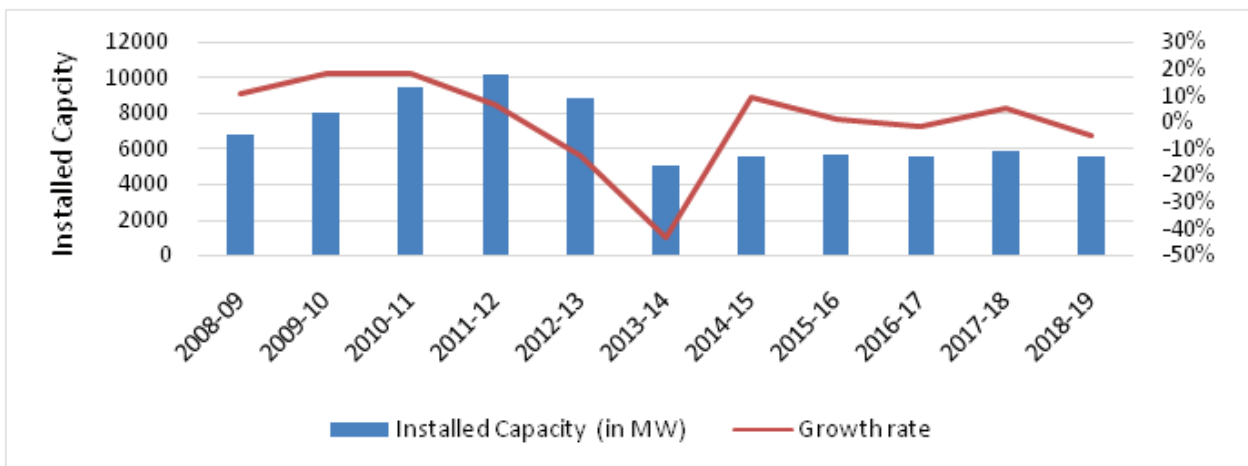
II. Power: Power Supply-demand scenario as per procurement by GRIDCO

3.15.3 Estimated demand for power has been well below the installed capacity in the State for several years now. There has been no addition to capacity in recent years, and the utilization of the capacity essentially determines the supply. Several private industrial units have set up their own captive power plants, and their excess production provides a small cushion to the State to manage additional demand. Although the drawal of power for industrial purposes is less to the extent of captive generation, the public supply caters largely to domestic and industrial demands - consumption by other consumers is relatively small; that by agricultural sector is also quite small compared to many other States of India.

A. Installed capacity

3.15.4 The total installed capacity of all power projects (including share of power from central & other sources) in the State was 5810.82MW in 2017-18 which declined to 5540.08 MW in 2018-19. Table 3.29 presents time series data of both installed capacity of power and availability of power from different sources. The decrease in installed capacity is due to the on-going renovation and modernisation work at Hirakud and Chipilima Hydro Station. The installed capacity has remained roughly the same since 2014-15.

Figure 3.13 Installed capacity as per procurement by GRIDCO



Source: GRIDCO

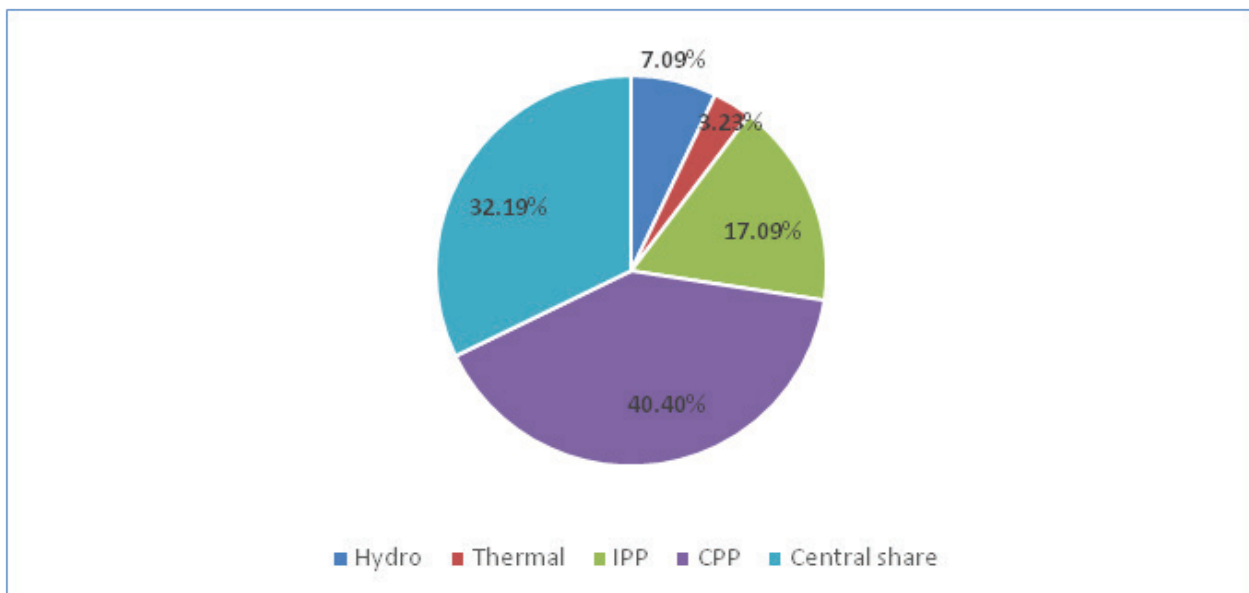
Table 3.29 Demand and Availability of Power by GRIDCO

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		
2010-11	2398	1295	814	-	729	2838	9456.60	128
2011-12	2674	1136	1170	68	225	2599	10114.00	49
2012-13	2674	1226	1221	89	239	2776	8859.00	136
2013-14	2746	1521	1223	67	89	2900	5054.00	213
2014-15	2910	1552	1310	33	124	3019	5532.00	137
2015-16	2934	1466	1275	85	75	2900	5593.08	44
2016-17	3020	1851	998	28	85	2962	5509.14	156
2017-18	3062	1674	1205	74	45	2998	5810.82	45
2018-19	3060	1771	1193	54	145	3163	5540.08	47

Source: GRIDCO

3.15.5 The power projects include State sector, central sector, other power sources and captive power plants (CPP) of some industries in the State. Power is generated by hydro power, thermal power and renewable energy sources like solar and bio-mass plants in Odisha. As in 2018-19, the State had 10 hydro power and 10 thermal power projects (State and Central sectors), one bio-mass project, two small hydroelectric projects, 18 Solar Photo-Voltaic (SPV) projects and 30 captive power plants in major industries to supply power to the State. Power is also supplied to Odisha through other trading companies' sources like ER UI Pool, PTC, APPCPL, and MPPL, when needed.

3.15.6 Installed capacity scenario of Odisha includes Hydro, Thermal, IPP, CPP and Central share of all the power projects within the state boundary. The percentage share of all the above mentioned shares to total installed capacity during the year 2018-19 is given in figure 3.14 below. The total installed capacity of power during 2018-19 was 27,214 MW out of which the share of captive power plants was highest i.e 40.40% followed by central sector projects 32.19% .

Figure 3.14: Percentage share of different power sector to total Installed Capacity

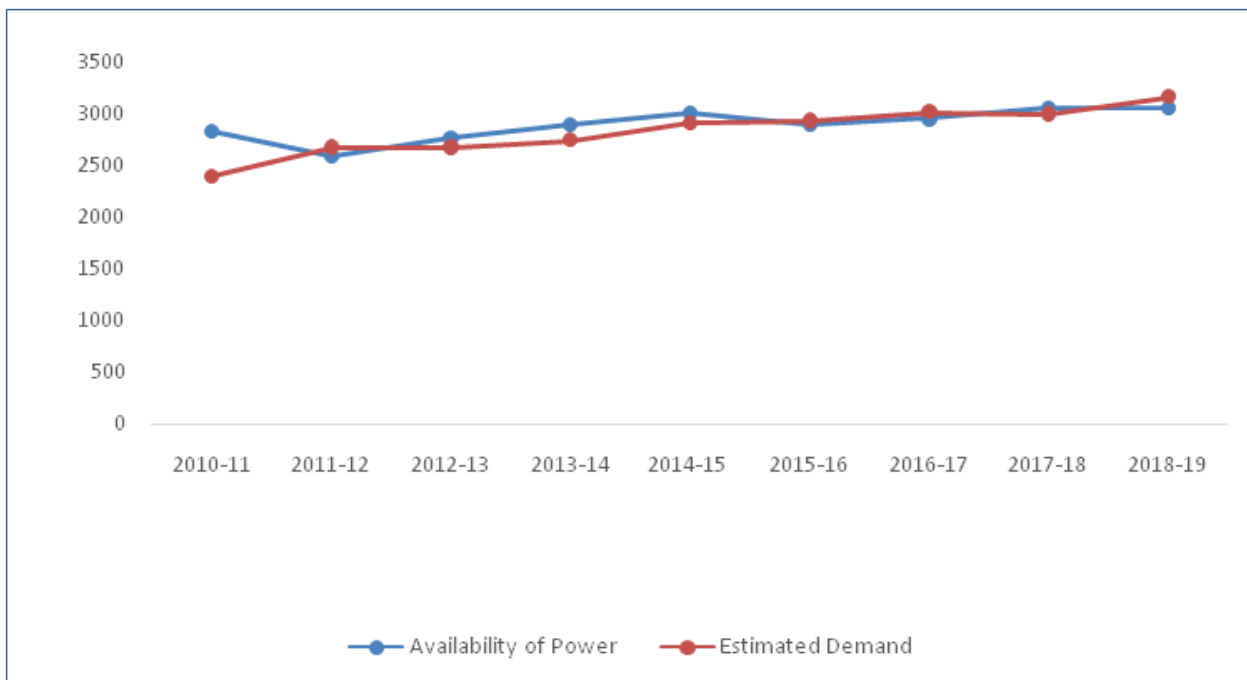
B. Power Generation (availability):

3.15.7 During 2018-19, 3163 MW of power was available for consumption from all sources that stood at 57 percent of total installed capacity of power projects in the State. The State sector, central sector and other sources (including CPP) contributed 56, 38 and 1.7 percent respectively of total power generation in Odisha during 2018-19 (Table 3.26). Among the 30 CPP that supplied 53.50 MW to GRIDCO in 2018-19, Bhushan Power & Steel Ltd, Jharsuguda (15.71 MW), JSL, Duburi (4.74 MW), Bhushan Stainless Ltd, Meramandali (3.75), and Vedanta Aluminium Ltd, Jharsuguda (4.51 MW) are the leading ones. Global climate change necessitates developing alternative renewable energy sources like biomass and solar power to ease the pressure on ecology caused by the process of thermal and hydro power generation. The Renewable Energy policy of 2016 aims at augmenting the generation of renewable energy with more emphasis on solar energy. By the year 2022, Odisha envisages generation of 2200 MW of solar power, 200 MW of wind power, 180 MW of bio-mass power, 150 MW of small hydro power and 20 MW of Waste-to-Energy (WTE) power. During 2018-19, installed capacity of renewable power by GRIDCO from various units was 539 MW, out of which State sector was 414 MW and 125 MW was from Central or outside State. In the State sector capacity of 414 MW, S.P.V. power plants contributed a major share (81.4%) and the rest was by small Hydro and Bio-mass plants.

C. Estimated Demand for power:

1.15.8 The demand for power in Odisha in 2018-19 is estimated at 3060 MW as against 3062 MW in 2017-18. The estimated demand during 2018-19 increased by 27.6 percent over 2010-11 (2398 MW). If we compared the estimated demand with availability of power, the State has surplus in 2018-19. The details are shown in Figure 3.15.

Figure 3.15 Trend of Estimated Demand & Availability of Power in Odisha (in MW)



Source: GRIDCO

III. Power consumption

3.15.9 The total power consumption of Odisha was 21843 MU in 2018-19 as against 7177.29 MU in 2017-18. Industrial and domestic consumption together share about 65.6 percent of total power consumption of the State. The domestic consumption is increasing continuously, but the proportion of consumption to total declined over years. Industrial consumption was revived slightly during 2017-18 with a wide range of government incentives, but it has dropped again in 2018-19. This may be an effect of the global slowdown. The State has a total of 80.69 lakh power consumers in 2018-19, which was 68.53 lakh during the previous year. About 88% of the total number of power consumers belongs to the domestic sector (both rural and urban). Rural consumers (in all sectors) consists of 77% of total consumer. The details are given in Table 3.30.

Table 3.30: Power Consumption in Odisha

(Consumption in MU)

Year	Total Consumption	Consumption Sector							
		Domestic	Commercial	Industrial	Public Lighting	Irrigation & Agriculture	Railways	Public Water Works	Bulk Supply & Others
2010-11	13099	3533	1113	6755	58	179	797	189	475
		(26.97)	(8.50)	(51.57)	(0.44)	(1.37)	(6.08)	(1.44)	(3.63)
2011-12	13054	3946	1349	6246	61	151	891	200	210
		(30.23)	(10.33)	(47.85)	(0.47)	(1.16)	(6.82)	(1.53)	(1.61)
2012-13	13552	4261	1513	6147	65	162	930	213	261
		(31.44)	(11.16)	(45.36)	(0.48)	(1.20)	(6.86)	(1.57)	(1.93)
2013-14	14213	4585	1559	6291	72	186	1015	222	283
		(32.26)	(10.97)	(44.26)	(0.51)	(1.31)	(7.14)	(1.56)	(1.99)
2014-15	15440	5473	1703	6344	81	229	1031	236	343
		(35.45)	(11.03)	(41.09)	(0.52)	(1.48)	(6.68)	(1.53)	(2.22)
2015-16	15923	6042	1845	5970	88	261	1088	247	382
		(37.95)	(11.59)	(37.49)	(0.55)	(1.64)	(6.83)	(1.55)	(2.40)
2016-17	16343	6296	2035	5793	92	338	1118	260	411
		(38.53)	(12.45)	(35.45)	(0.56)	(2.07)	(6.84)	(1.59)	(2.51)
2017-18	17729	6757	2145	6425	100	422	1177	254	449
		(38.09)	(12.10)	(36.25)	(0.56)	(2.38)	(6.65)	(1.44)	(2.54)
2018-19	21843	6957	2363	7073	117	579	1206	297	778
		(31.85)	(10.82)	(32.38)	(0.54)	(2.65)	(5.52)	(0.01)	(3.56)

Sources: CESU, NESCO, SOUTHCO and WESCO

Note: Figure in bracket indicates percentage to total consumption

3.16 Electricity in Rural Odisha

3.16.1 Odisha has witnessed a massive transformation in availability of power over the last decades. Constant and dedicated efforts of the Government through different schemes to achieve the mission of “Electricity to All” is bearing fruits. Out of 47,675 villages in Odisha, 99.64% villages have been electrified by the end of 31st March 2019. Within India, 20 States and Union Territories have achieved 100 percent village electrification. In Odisha, all districts have achieved 100% of rural electrification except Puri and Kendrapara. Only 50 villages are left behind - 20 in Puri district and 30 in Kendrapara. During 2018-19, 1611 no. of villages are covered under electricity supply. The detailed picture is given in Annexure-I. The State had a total of 80.69 lakh power consumers in 2018-19 with 61% of rural consumers and 19% of urban consumers. The detailed scenario is given in table 3.31.

Table 3.31 Sector-wise Distribution of Power Consumers, 2018-19

(No. in lakhs)

Sector	Rural Consumer	Urban Consumer	Total	% of Rural Consumer to Total Consumer
Domestic	57.22	13.62	70.84	80.77
Commercial	2.01	1.84	3.85	52.76
Industrial	0.07	0.21	0.28	25.00
Others	2.61	3.15	5.76	45.31
Total	61.91	18.78	80.69	76.73

Sources: CESU, NESCO, SOUTHCO & WESCO

3.16.2 Major initiatives in Energy Sector

A. Biju Gram Jyoti Yojana (BGJY):

In order to ensure ‘Electricity to all’ the State Government has launched a flagship scheme called Biju Gram Jyoti for electrification of habitations having a population of less than 100. Initially there was a target to cover 10,000 habitations during the 11th Five Year Plan which have already been achieved. During 2018-19, a plan provision of Rs.150.00 crore has been made under the scheme.

B. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

This flagship programme of Government of India was launched in April 2005 to provide access to electricity to villages having population of 100 or more. Its financing envisages 90 percent capital subsidy and 10 percent as loan component for the State. Under RGGVY -XII Plan period, work is under progress to electrify 3144 unelectrified villages and 16533 habitations, for which Government of India have sanctioned Rs.3550.75 crore. During the financial year 2018-19, a plan provision of Rs.125.00 crore has been made for this purpose.

C. Biju Saharanchal Vidyutikaran Yojana (BSVY)

BSVY was launched in 2010-11 for providing electricity to the people living in un-electrified areas of urban local bodies. Five Municipal Corporations, 45 Municipalities and 61 NACs of the State have been covered under the Scheme. During 2018-19, a plan provision of Rs.10.00 Crore has been made in the budget under the scheme.

3.17 Energy Conservation:

3.17.1 Conservation of energy means generation of energy. As such, the State government has initiated several measures to avoid energy loss/ conserve power as listed below:

- Implementation of UJALA has been launched 2016; under this programme, 4 crore LED bulbs, 1.53 lakh LED tube lights and 35000 BEE Star rated 'UJALA' fans have been distributed.
- Replacing the defunct lift irrigation points in phased manner, which will result in an estimated annual energy saving of 15 MU and capacity avoidance of 17 MW.
- Replacement of old street lights with energy efficient LEDs.
- Repair and replacement of Drinking Water Pump Systems (DWPS).
- For quality supply of power to the consumers and to address the low voltage problem in rural areas, a project to construct 473 number of 33/11 KV sub-stations at a cost of Rs. 3843.00 crore is being executed by OPTCL as the Nodal Agency. This will help to reduce T&D loss of DISCOMS which will reduce their financial burden. In the year 2018-19, a provision of Rs. 500.00 crore has been made under the scheme.
- Government of Odisha has adopted the concept of State Capital Region Improvement of Power System (SCRIPS) with an objective of 24X7 uninterrupted stable power supplies to all classes of consumers including public services in the target area. Underground cabling work is in progress. In the financial year 2018-19, Rs. 150.00 crore of plan provision has been made available under the scheme.
- Odisha Power Sector Improvement Projects (OPSIP): The State Government has evolved new schemes and projects like Radial to Ring Conversion Project, Disaster Response Centre, Disaster Resilient Power System, District Headquarters Projects for reliable and un-interrupted power supply to the consumers during natural shocks by adoption of ultra-modern technology and creating new (and renovating the existing) infrastructure.
- Smart Grid: Government of Odisha has taken initiatives for adaption of Smart Grid Technology in power sector (transmission and distribution) having the component name viz. GIS, SCADA, OPGW and AMI for un-interrupted and reliable power supply to the consumers of the State. During 2018-19 a Plan provision of Rs. 55. 00 crore has been made under this scheme.
- Green Energy Development Corporation Ltd. (GEDCOL) is a subsidiary of OHPC that has started its operation from 2013-14 to promote green energy in the State. Both GEDCOL and SAIL have agreed to develop Mandira SHEP (10MW) in joint venture mode with the help of M/S MECON. GEDCOL has successfully completed commissioning of 20MW Solar Power Plant at Manamunda in Boudh district and is developing 4 MW Cuttack-Bhubaneswar Roof-Top Solar Power Projects. It is also replicating the Roof Top Solar Projects in 15 other towns of the State. During the financial year 2018-19, a Plan provision of Rs. 10.00 crore has been made under the scheme.
- Deendayal Upadhyaya Grama Jyoti Yojana (DDUGJY) is a Government of India scheme. It aims at strengthening the sub transmission and distribution infrastructure in the rural areas with separation of agriculture and non-agricultural feeders to regulate power supply to agricultural consumers, as and when needed for effective Demand side Management Scheme (DSM). Under this scheme, detailed survey of un-electrified villages has been completed. During 2018-19, a Plan provision of Rs. 200.00 crore has been made under the scheme.

- Integrated Power Development Scheme (IPDS) has been introduced in 2015-16 by the Government of India in order to create a strong infrastructure for strengthening sub-transmission and distribution network. Rooftop solar projects, installation of solar panels and smart and net metering are mandatory components under the scheme. The scheme subsumed the RAPDRP scheme. In the financial year 2018-19, a Plan provision of Rs.100.00 crore was made under the scheme.
- Radial to Ring Conversion Project: In this system one substation can be fed from two sources of power which is capable of supplying power at the time of need from other sources to ensure uninterrupted power supply to consumers. Plan provision for 2018-19 was Rs.40.00 crore under this scheme.
- Disaster Resilient Power System: This State scheme is aimed at creation of energy infrastructure having capability to combat natural calamities like cyclone and flood. A Plan provision of Rs.35.00 crore has been made for financial year 2018-19.
- Disaster Response Centre: Energy Department have launched this project to restore power supply within minimum time span to meet the requirement at the time of natural calamities. A budget provision of Rs.40.00 crore has been made in the financial year 2018-19 under this scheme

3. 18 Institutions

A. Grid Corporation of Odisha Ltd (GRIDCO Ltd)

GRIDCO presently carries out its bulk supply function as a Deemed Trading Utility. Being designated as State Designated Entity for procurement and sale of power in bulk to meet the State demand, GRIDCO procures the State share of power from inside and outside the State and supplies the same in bulk to the electricity distribution companies (DISCOMs) for onward retail sale to the consumers of the State.

GRIDCO: Power scenario

- Odisha has 5,540 MW of installed capacity including its share from central and other sources including CPPs. OPGC expansion Thermal power Unit No.3 & 4 are likely to be commissioned and supplying power by the end of 13th plan period (2016-20)
- There will be availability of 1,320 MW of power after the Date of Commercial Operation (COD) of Units 3 & 4 of OPGC, out of which Odisha share is 990 MW. Further, additional 800 MW of power will also be available from NTPC's Darlipali Generating station after its COD expected in March 2020 and 396 MW from North Karanpura STPS, NTPC. Thus, the total availability of power will be 2,186 MW after the completion of the projects. In addition to the above, the State may also harness the unutilized surplus power which may be available from Captive Generating Units having total capacity of 7,000 MW to meet the upcoming demand of the State including industrial requirement.

GRIDCO: Power procurement and sale

- During 2018-19, GRIDCO procured 27,632 MU of energy at a cost of INR 7,377.47 crores which included renewable energy (solar and non-solar) of about 663.6 MU.
- GRIDCO sold around 27,631.70 MU of energy to the four DISCOM utilities amounting to INR 7,377.47 crores for retail sale to the State consumers during 2018-19.
- GRIDCO has also sold 731 MU of energy through trading and 130 MU through UI mechanism.

GRIDCO: Power banking

- GRIDCO has been very active in supplying electricity through power banking. During 2018-19, it has transacted about 795.574 MU of power through power banking. It has availed 372.46 MU from April 2019 to September 2019 through Power Banking.
- Being a cashless transaction, power banking has helped GRIDCO to balance the State's power supply position effectively and at the same time provide much needed financial relief to its coffers.

GRIDCO: Power for all

- Power supply to each household under the "24x7 Power for All" has been successfully completed by March 2019.

GRIDCO: Finance

- During the Financial year 2018-19, GRIDCO has witnessed a turnover of Rs.7974.99 crore but still suffered losses of Rs.281.04 crore. The financial position is expected to improve further during coming years with improvement in operational areas like power sourcing, trading, power banking and recovery of dues from DISCOM utilities and above all due to low hydel condition alongwith lower availability of IPP Power leading to sourcing of more costly Thermal Power.

B. Odisha Hydro Power Corporation Ltd. (OHPC):

Odisha Hydro Power Corporation (OHPC) Ltd., set up in 1995, has six ongoing Hydro-Electric projects and one joint Hydro-Electric project having total installed capacity of 2,063.50 MW which is a distinct improvement over its initial capacity of 1,272 MW at the time of incorporation.

- OHPC provides the cheapest power to the State Grid. The average tariff approved by OERC for the financial year 2018-19 is 88.55 paise/kwh
- During 2018-19, 6,031.66 MU of electricity was generated with a gross revenue collection of INR 480.09crore. The profit after tax for the year 2018-19 is INR 144.39 crore.
- OHPC is categorized as Gold rated PSU.

C. Odisha Power Generation Corporation (OPGC):

OPGC is a Gold category State PSU incorporated in 1984 and jointly managed by the Government of Odisha and AES, a private US Company. The paid-up share capital of OPGC is Rs.1,822.49 Crore as on 31.03.2019, of which the share of the Government of Odisha is 51%. It works to establish, operate and maintain electric power generation station, tie lines, sub-stations and transmission lines & connections therewith. It develops and deals in fuels i.e., coal, lignite, coke, coal-bed methane etc.

- The company has set up two thermal power plants of 210 MW each in the IB Thermal Power Station, Banaharpali in Jharsuguda district at a project cost of Rs.1,135 crore.
- The State Government has decided to provide financial assistance through equity infusion to OPGC. For this purpose, Govt. of Odisha has invested INR 679.46 crore up to March 2019.
- During 2018-19, the Corporation generated 3,085 MU power with Plant Load Factor (PLF) of 83.86% with a turnover of Rs.897.86crore(Provisional) and net profit after tax of Rs.166.88 crore (Provisional). OPGC is pursuing expansion project comprising of (2 x 660 MW) power plants in IB Thermal.

D. Odisha Power Transmission Corporation Ltd. (OPTCL):

Odisha Power Transmission Corporation Limited (OPTCL) ensures development of an effective and economical system of Intra-State and Inter-State transmission lines for smooth flow of electricity from generating station to load centre.

3.19 The infrastructure of OPTCL network is as follows: -

- 148 nos. of Grid Sub-Stations including Switching Station with transmission capacity of 19231 MVA and 13995 Ckt.Kms. of transmission lines of 400 kV, 220 kV and 132 kV levels. The present peak demand of the State is around 4500 MW, which is handled by the existing network and equipment of the system. The ongoing projects of OPTCL include construction of new Grid substations, EHT Lines, augmentation of existing substation capacity, up-gradation/replacement of conductor of transmission lines, OPGW connectivity, and provision of Digital Tele Protection Coupler etc.

Important Operation & Maintenance Activities (from 04/2018 to 03/2019)

- 600 MVA Transmission capacity addition in 15 nos. of Grid S/s.
- Completed replacement of old conductors with new ones in 220 kV Meramundali-Bhanjanagar-I, 132kV TTPS-Duburi-I, 132 kV Burla PH-Sambalpur, 132 kV Burla PH-Budhipadar, 132 kV Chainpal- Choudwar Ckt-I, 220 kV Joda-TTPS-II Line, Jajpur Road-Bhadrak, 132kV Paradeep-IFFCO DC, 132 kV Paradeep-PPT DC, 132 kV Budhipadar-Rajgangpur Ckt-II.
- Conversion of S/C (Single Circuit) to D/C (Double Circuit) of 132 kV New Bolangir-Patnagarh line, 132 kV Akhusingh-Paralakhemundi line.
- Installation of Capacitor Banks 10 MVAR at Sonapur has been completed.
- Addition of 132 kV Feeder bays at New Bolangir, Patnagarh.
- Addition of 220 kV and 132 kV Transformer bays at Therubali, Mendhasal, New Bolangir, Rairakhole and Padampur.
- Substation Automation System (SAS): A protection upgradation and SAS is completed for 132/33 kV Grid Substation at Jajpur Road and Kendrapara. The substation has been equipped with IEC 61850 complied IED and distributed architecture with Bay Control Units.
- Substation Automation System having IEC 61,850 complied protection relays adopting distributed architecture with retrofitting Bay Control Units has been completed for Basta, Arugul and Anandpur Grid Substations.

E. Odisha Thermal Power Corporation Ltd (OTPC):

The Odisha Thermal Power Corporation Limited (OTPC) is a joint venture company having equal shares of Odisha Mining Corporation Ltd (OMC) and the Odisha Hydro Power Corporation Ltd (OHPC).

- OTPC is setting up a coal based super critical thermal power plant of 3,200 MW (3x800 +1x800MW) future capacity in Kamakhyanagar Tahsil of Dhenkanal district. The total land for the project including the railway corridor is finalized at 1,833.927 acres. The cost of the project is estimated at INR 18,218 crores (Rs.7.59 crore per MW).
- Power Purchase Agreement (PPA) for the sale of entire power of OTPC has been executed with GRIDCO.

- The coal requirement of the above Power Plant is 12.07 million tonnes per annum. Tentuloi coal block was allocated to OTPCL by the Government of India.

F. Odisha Renewable Energy Development Agency (OREDA):

Thermal and hydro-based energy continue to dominate the energy supply sources in Odisha. However, the State Government is keen to tap alternative energy sources. The Odisha Renewable Energy Development Agency is the Nodal agency for implementation of various renewable energy programmes from natural resources for the benefit of the society, environment and to ensure energy securing for the people. It works towards a long-term solution for meeting energy needs and reducing dependence on conventional energy sources and achieving the climate change objectives. Major initiatives of OREDA during the year 2018-19 are highlighted below:

- 20 villages electrified under DDG and DDUGJY
- 7088 households electrified under SAUBHAGYA
- Saura Jalanidhi is the new State sponsored scheme. This is the first scheme to enhance the livelihood of marginal farmers with holdings of 0.5 acre or less. Total 105 numbers achieved in 2018-19.
- During 2018-19, 3070 number of solar pumps have been commissioned in the State.
- 3.74 MW on-grid with net metering roof top solar power plant commissioned under GCRTS Scheme.
- During 2018-19, 1.24 MW capacity SPV Power Plants have been installed to provide electricity to Ashram School/PHC/CHC/Police Station.
- For irrigation purpose 665 number of Solar Pumps have been installed.
- 2144 number of Solar Street lights have been installed.
- Improved cooking stoves have been provided to 345 schools.
- 84 Bio-gas plants were commissioned.
- 5513 Solar lanterns were distributed to handicraft and handloom artisans.

G. Odisha Coal & Power limited (OCPL):

OCPL is a joint venture company of Odisha Power Generation Corporation Ltd. (OPGC) and Odisha Hydro Power Corporation Ltd. (OHPC) having a share ratio of 51:49 Manoharpur Coal Blocks have been allotted to OCPL by Govt. Of India for exclusively to OPGC expansion power plant (4X660 MW). Land area of 1007.32 Acre. Out of 1041 acre of government land allotted to OCPL.

3.20 Construction sector

3.20.1 The construction sector forms an important sector for Odisha, contributing 7.2% (2019-20 AE) of the State's GVA and the second largest employer after agriculture. The construction sector contributed 7.2% of the State's total GVA and 18.2% of the industry sector GVA in 2019-20 (AE). However, the share of the sector has been witnessing a declining trend, like the trend observed at all-India level. From 21.5% of industry GVA (9.4% in total GVA) in the year 2011-12, the share is estimated to decline to 18.2% in 2019-20 (7.2% in total GVA). Growth in the sector has been volatile with the annual average growth of around 2.1% between the years 2012-13 and 2019-20. However, the year 2017-18 witnessed the highest growth in the last eight years, growing at 7.88%.

3.20.2 Given the poor working conditions, owing to the intrinsic nature of the sector, the State Government has undertaken various initiatives on the social and economic security of the construction workers in the State. 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 extends benefits to BOC workers in the form of educational assistance, assistance for purchase of working tools, bi-cycle and safety equipment, marriage assistance, maternity benefit, death and funeral assistance, accident, medical expense for treatment of major ailments, assistance for Recognition of Prior Learning (RPL) and skill development.

3.20.3 New schemes like 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.

3.20.4 A new scheme, 'Construction of Rental Housing Complex (RHC) 'Ashraya' in urban areas' has been undertaken by the Board for providing temporary accommodation with basic amenities at affordable rent to the migrant construction workers during 2017. Fund of INR 40 crores has already been placed for implementation of the scheme. In the first phase, 10 urban areas have been selected for grounding the RHC, which include five Municipal Corporations and five Municipalities. The construction activity is under process.

Initiative	Objective	Progress in brief
IPR-2015	To create a conducive environment for sustainable industrial growth, generate employment opportunities and augment revenue in the state through providing quality industrial structure, creation of land bank, three-tier single window clearance system and to develop new industrial estates.	Establishment of National Investment and Manufacturing Zone (NIMZ) at Kalinganagar, Dhamra & Gopalpur; similarly Petroleum, Petrochemicals investment Regions (PCPIR) at Jagatsinghpur and Kendrapara district.
MSME Development Policy 2015	To attract new investments and provide supports to the existing enterprises. The Policy targets some fiscal incentives towards MSMEs such as providing land at concessional rates, interest subsidy, marketing supports and assistance for technical knowhow,.	Creation of single window facilitation cell, cluster development approach, facilitate setting of ancillary and downstream units of existing and upcoming large industries, flow of credit and industry institutional linkage.
Special Economic Zone (SEZ) Policy-2015	To attract investments, stimulate for efficient use and value of local resources, increase of goods services, develop world-class infrastructure and increase employment opportunities.	It has covered thrust areas like, IT, biotechnology, manufacturing, automobiles, textile & handlooms, pharmaceuticals, tourism and primary metal based downstream and ancillary industries.
Ease of doing business	To ensure a hassle-free business environment to the investors for investing in the state.	GO_SWIFT has been introduced in the state as a single window system. All existing technological applications of the Industry Department including GO-PLUS, GO-SMILE, GO-CARE, Automated post allotment application and state project monitoring group portal have been integrated with GO-SWIFT and access to all the services is now available through a single sign-on user credential.
Single Window Concept and Public Private Partnership (PPP)	To mobilise the private sector efficiency for development of economic and quality infrastructure in the state.	Establishment of an info park in Bhubaneswar, Development of Haridaspur- Pardeep Rail link jointly by Rail Bikas Nigam Ltd. and user Industries, Promotion of SEZs at different locations, Establishment of Bio-Tech Park and development of second Info-City for establishment of IT industry at BBSR.
Make-In Odisha Conclave 2018	To showcase the policy and regulatory environment, investment opportunities across the focus sector and manufacturing process of the state.	Receipt of overwhelming response from the investor community and investment intents worth over INR 4.23 Lakh crore were announced. The project is expected to provide employment to over 6.03 Lakh people in the state.
Odisha Start-Up Policy 2016	To offer incentives to start-ups and other stakeholders over and above the start-up policy of Govt. of India and other existing policies in the state.	Comprehensive end-to-end Start-Up Odisha Portal (www.stratupodisha.gov.in) was launched to serve as on stop destination for start-ups and incubators). 356 start-ups have been recognised under this policy.

Urban Development

Urbanization is an outcome of economic development. With development of economy, production of more complex goods and services increases. Growth in scales of production is observed. This requires specialized skills and dedicated labor force. Demand for specialized labor force leads to division of labor, which ends self-sufficiency of the individuals to meet their own consumption needs. Hence an agglomeration that is mutually beneficial for all evolves. This process essentially is reflected in the form of urbanization, that takes place in different ways - through expansion of villages, village-to-city migration, or absorption of non-urban habitations into urban agglomerations.

The natural rise in urbanization with economic development has been observed in Odisha as well. As per Census of India, urban population as a percentage of total State population rose from 14.97% in 2001 to 16.67% in 2011. The number of towns also rose from 138 in 2001 to 223 in 2011. Rising urbanization presents economic opportunities to the inhabitants. It also helps government to efficiently deliver public goods and services. Along with advantages urbanization also brings challenges like rapid rural to urban migration straining existing basic urban infrastructure and services. Unless addressed, this can aggravate issues such as poverty and unemployment. Lack of space and uneven gains of economic value created leads to problems related to housing and slums. The concerted efforts and initiatives of the Government of Odisha on urban governance and urban infrastructure play a major role in stabilizing and improving the trend and process of urbanization in the State. UNNATI shows the way to urban transformation. State Government's Slum Development Policy and Slum Dwellers Act play the prime role in alleviating urban poverty in Odisha.

4.1 Growth of Urban Areas

4.1.1 The State had a mere 4% urbanization after independence in 1951. But in the following decade ending in 1961 witnessed rapid urbanization with the highest decadal growth of urban population of 87% recorded. Thereafter, the decadal growth rates decelerated in subsequent censuses. The decadal growth rate in 2011 showed 27% growth in urban population against 30% in 2001. In Odisha, around 70 lakh population live in urban areas out of 4.20 crore population as per 2011 census.

4.1.2 Composition of aggregate economic activity is shifting from agriculture to manufacturing and services in the State of Odisha. Urban areas provide conducive environment for manufacturing and services sector. This is the primary factor that is driving the process of urbanization in the State. Better employment prospects is a related factor.

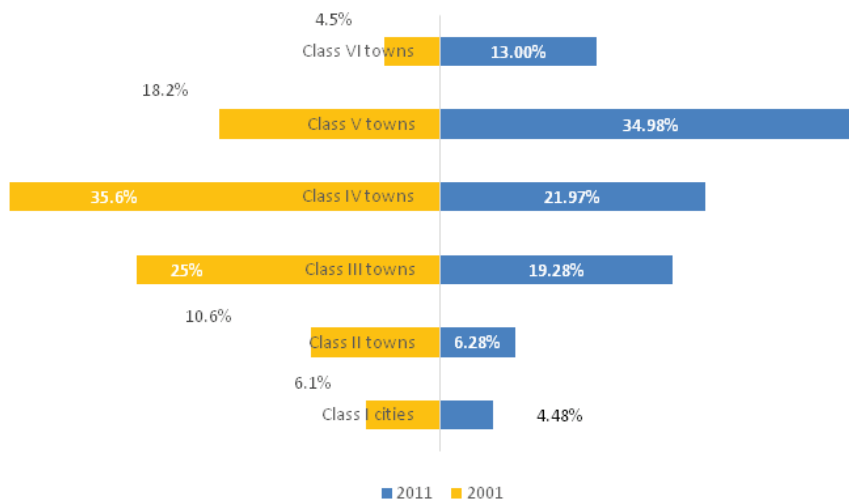
4.1.3 For better quality of living and adequate employment opportunities, millions of people migrate to cities with aspirations. As per census 2011, around 82.6 million people migrated to urban area in the country, growing from 53 million in 2001, achieving a growth of 55%. The State had over 2 million migration to its urban areas. Rural-urban migration rose by 39%, in comparison with 2001. Females continued to be the dominant migrators, though the proportion of female migrants to total migrants has reduced from 54% in 2001 to 52% in 2011 at the National level and 57% to 53% in Odisha.

4.2 Urbanization in Odisha

4.2.1 Though the rate of urbanization has increased from 14.9% in 2001 to 16.7% in 2011, it is relatively lower than 31% at the all India level.

4.2.2 The number of towns/cities as per Census of India, 2011 in Odisha stands at 223. Figure 1 shows the distribution of towns/cities as per various categories defined in Census of India, 2001 and 2011.

Figure 4.1: Distribution of towns/cities as per various Census categories



Source: Census of India, 2001 and 2011

The decadal shift in the pattern of distribution of towns/cities has also been shown in Figure 4.1. The total number of towns/cities has risen from 132 to 223 between 2001 and 2011 respectively. This is first hand indicator of rising urbanization in Odisha. A decadal comparison of distribution of cities/towns shows that in 2001 class-IV and class-III categories had the major share of towns/cities - 35.06% and 25.00% respectively. In 2011, however, class-V and class-IV towns constitute the major proportion of towns/cities holding 34.98% and 21.97% share respectively. Also there has been 8.5% points growth in the class-VI towns (largest cities). The change during the decade suggests that the tendency of smaller towns growing into larger ones as per the categorization is stronger than that of villages entering the urban category, partly exaggerated by the rural-urban migration.

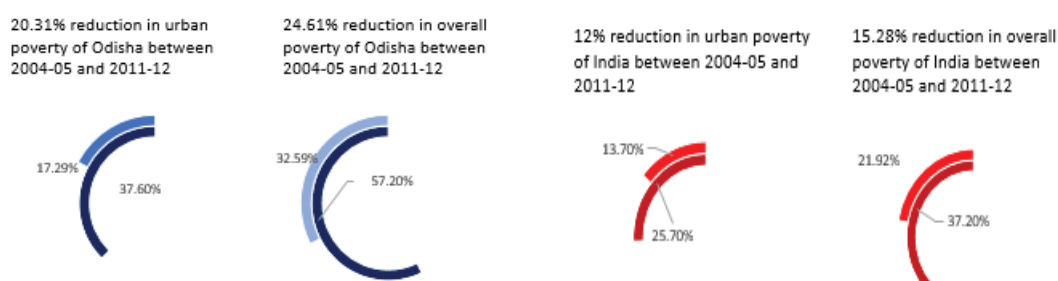
Bhubaneswar with a population of 8.82 lakh and Cuttack with a population of 6.59 lakh will join the metropolitan category soon.

4.3 Urban Poverty

4.3.1 The approach to measuring poverty and poverty alleviation changed visibly in the current decade. The mandate of SDG and advocacy of NITI Aayog call for elimination of poverty by creating gainful jobs and strengthening social programmes. The conventional practices of measuring poverty and identifying / tracking the poor and allocating resources for poverty alleviation programmes were replaced by more realistic approaches. Extent of poverty in the State can be assessed in terms of dimension of poverty and magnitude of deprivation.

4.3.2 Poverty in Odisha recorded the sharpest fall in India by 24.61 percentage points (with average annual decline of 3.52 percentage points) as against the National fall of 15.28 percentage points (with average annual decline of 2.14 percentage points) between 2004-05 & 2011-12. Based on MPCE, the poverty lines of Odisha are estimated at Rs. 695 for rural and Rs. 861 for urban area by 2011-12. Urban poverty headcount contracted appreciably in Odisha 2011-12 with its incidence at 17.29%. The State's urban poverty ratio dropped faster (by 20.31 percentage points) than India (with 12 percentage point fall) between 2004-05 & 2011-12.

Figure 4.2: Trends in reduction of urban and overall poverty in Odisha and India



4.3.3 Poverty Gap Ratio (PGR), the standard indicator to measure the magnitude of deprivation, reflects the degree to which mean consumption of the poor falls short of the established poverty line, indicating the depth of poverty. The poverty lines for 2011-12 (under MRP method) was Rs 861/- for urban Odisha as against Rs 1000/- for urban India. PGR in Odisha declined significantly in urban areas from 9.60 to 3.15 as compared to urban India PGR fall from 6.08 to 2.70 between 2004-05 and 2011-12.

Table 4.1: Comparison of Poverty Gap ratio (PGR) in Odisha & India

Year	Urban Poverty Line (Rs)		PGR	
	Odisha	India	Odisha	India
2004-05	528	539	9.60	6.08
2011-12	861	1000	3.15	2.70

Source: NITI Aayog, New Delhi & DES, Odisha

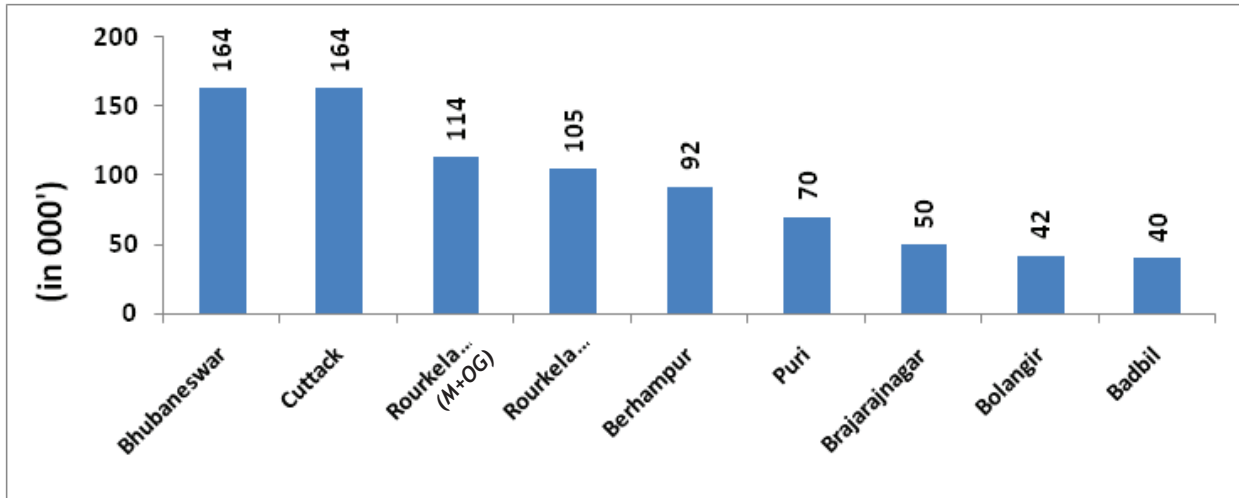
4.3.4 Urban poverty reduction in Odisha

Urban poverty is an offshoot of constant flow of rural-urban migration by the rural poor; lack of employment & income opportunities; deprivations relating to access to housing and basic services; deficient social protection mechanisms; and want of skilling for enabling decent livelihoods in urban areas. This is a complex and recurring issue and a challenge that can often defeat the rationale of urbanization. This State Government addresses the demand-supply constraints of urban poor with number of poverty alleviation programmes.

4.3.5 Slum development

As per 2011 census, 15.60 lakh population of Odisha with 8 lakh males, 7.6 lakh females, 1.9 lakh children, 3.2 lakh SC & 2 lakh ST categories live in 3.50 lakh households in slum area. Total slum population of the State constitute 3.72% of total population and 22% of total urban population of Odisha. The slum population rather have a high literacy rate of about 79%. Among the major cities / towns in Odisha, Bhubaneswar & Cuttack had the highest slum population of 1.64 lakh each followed by Rourkela (M+OG) with 1.14 lakh slum population in 2011.

Figure 4.3: Slum population in major cities in Odisha 2011



Source - Census of India, 2011.

In the context of extent of urbanization and population dimension, Odisha had a comparatively low proportion of slum population at 3.72% of the total as shown in Figure 4.3, the highest being in Andhra Pradesh (undivided) (12%), followed by Puducherry (11%) and Delhi (11%). Major State-wise slum population is presented in the following Figure 4.4.

Figure 4.4: Slum population in major States 2011(%)

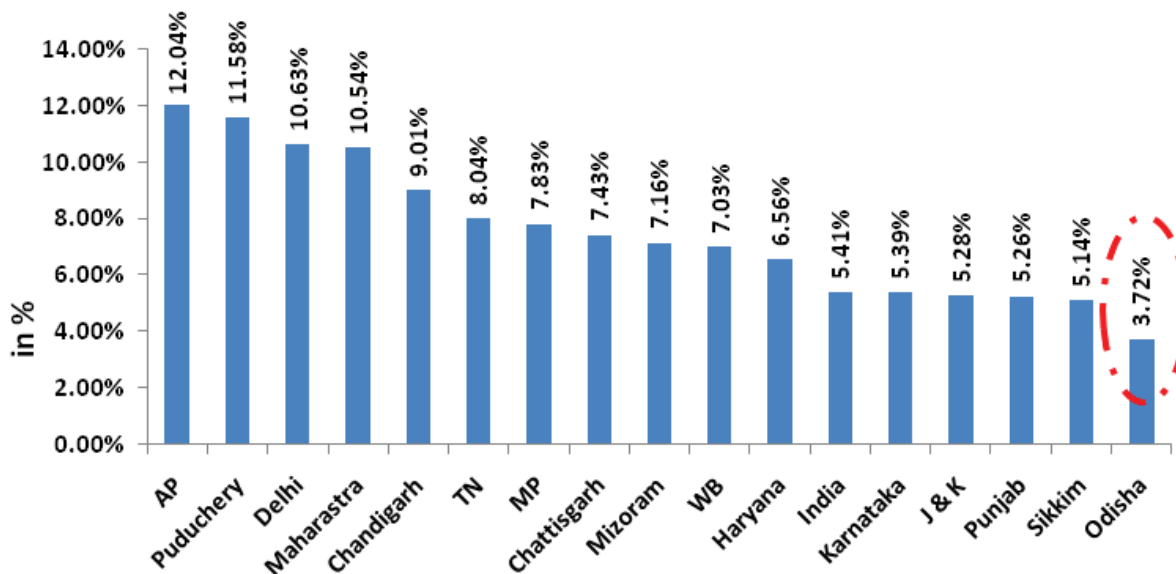


Figure 3: Slum population in major States 2011(%)
Source - Census of India, 2011

4.4 Jaga Mission- Transforming Slum to Liveable Habitat

4.4.1 The demographic shift from rural to urban areas has resulted in shortage of affordable space in urban areas, leading to large chunks of Government land being occupied in past several decades and converted into informal settlements. The informal settlements of the slums without land rights expose its dwellers to insecurity of ownership of land and are under constant threat of demolition or eviction.

4.4.2 The Government of Odisha has enacted a historic legislation “Odisha Land Rights to Slum Dwellers Act, 2017” to provide land rights to the slum Dwellers and for redevelopment, rehabilitation and upgradation of slums in the urban areas of the State. The implementation of the initiative shall promote inclusive growth and shall ensure delivery of basic urban services to the urban poor, which shall result in bringing all the urban slums into the fold of planned development.

Figure 4.5: Odisha awarded for JAGA mission by World habitat Center



Key Features

4.4.3. By this Act the urban poor in slums will get land rights for residential use that is heritable, mortgageable and non-transferable. The settlement will be made for land in actual occupation by the slum household, up to a maximum limit of 646 sq.ft in NACs and 484 sq.ft in Municipalities in case of in situ settlement. In case of relocation of untenable slums, the maximum area of the land allocation will be 323 sq.ft. for each household. Up to 323 sq.ft of land will be allotted free of cost to slum dwellers from the Economically Weaker Section (EWS). The settlement of excess land of slum dwellers belonging to EWS category will be calculated as 25% of the benchmark value of the land of the respective ULBs, and for non-EWS category it is 50% of the benchmark value. A Committee will be constituted for each urban area under the Chairmanship of the District Collector with other stakeholders to facilitate the implementation of this Act. The Committee will also have powers to form sub-committees for each slum area or a group of slums to facilitate the implementation of the Act & Rules.

4.4.4 Another major highlight of this legislation is the creation of the urban poor Welfare Fund at the urban local body level, to which all the money received from the beneficiaries by way of settlement of land will be credited. This fund will be utilized for creating and upgrading the infrastructure in the slum areas, solely for the welfare of the urban poor in the slum areas.

4.5 The Intervention

4.5.1 The slum dwellers are part & parcel of the ecosystem of the urban areas. They provide the critical support services to the majority population of the city, but they themselves are homeless or live in the thatched and temporary houses, vulnerable to the vagaries of the nature.

4.5.2 For implementation of the program, GoO partnered with Tata Trust, Local Non-Government Organizations, Community Based Organization, and Slum Dweller's Association of the respective slums.

4.5.3 The programme was first piloted in 9 ULBs of Ganjam and Puri districts. Implementation includes slum mapping, fixing of slum boundaries, measuring the exact foot print of each household by drone survey, door to door household survey and collection of required documents, numbering, sticking of the household, extensive community dialogue, formation of slum dwellers association in each slum, listing of eligible beneficiaries etc.

4.5.4 Special attention has been given to include women members, differently abled, and local leaders in the community mobilization and planning process. It is mandatory to issue the certificate of the land right jointly in the name of both the spouses in the case of married beneficiaries.

4.5.5 Urban Area Slum Rehabilitation and Redevelopment Committee (UASRRC), an ULB level apex committee has been formed in all 109 ULBs, headed by the District Collector. This Committee would form a sub-committee for verifying the veracity of the documents, slum land settlement plans and extent of land and amount payable, if any, for the excess land to be settled in favour of the respective slum dweller.

4.5.6 After the learning of pilot implementation, the Department is in the process of expansion to rest 100 Municipalities and NACs of the State. NGO selection for community mobilization and household area survey has been completed for all these ULBs. Around 520 officials from ULBs and NGO representatives have already got two days training on land rights implementation which include field exposure at piloted slums of Konark NAC.

4.6 Aahaar

4.6.1 “Aahaar Programme”, which was commenced on 1 April 2015 with 21 Aahaar Kendras in five Municipal Corporations, has been scaled up and 157 Aahaar Kendras are now in operation across all the 114 ULBs in Odisha where hot cooked meals (Rice and Dalma) are being served during 11.00 A.M to 3.00 PM everyday (Except Sunday) at an affordable cost of Rs 5/-.

4.6.2 From 31st December 2018, hot cooked meals at Rs 5 are also served during night (7.00 PM to 9.00 P.M) every day (Except Sunday) in 56 Aahaar Kendras located near Hospitals.

4.6.3 Aahaar Kendras serve food in a hygienic condition where all ultra-modern gadgets like automatic dishwasher, water purifier, rodent catcher, and LED TV are made available. Highest importance is attached to cleanliness and there is a drive to inculcate a sense and culture of “No Food Waste” amongst the people.

4.6.4 Currently more than 1 lakh meals are being served everyday (Except Sunday). 17 implementing partners are entrusted with the responsibility of setting up and managing a central kitchen/attached kitchen which involves cooking, distribution of food to all the outlets, serving food to the beneficiaries in the kendras, managing the outlets, etc.



4.6.5 65 vehicles are deployed for transporting hot cooked meals from 40 kitchens across the State to the designated locations across cities and more than 2000 people are engaged in this process.

4.7 Deendayal Antodaya Yojana- National Urban Livelihood Mission (NULM)

4.7.1 The National Urban Livelihood Mission (NULM), was launched by GoI on September 2013 and was renamed as Deendayal Antodaya Yojana National Urban Livelihood Mission (DAY-NULM) on 1 April 2016 by GOI. It is the only ongoing urban poverty alleviation scheme that had replaced the old scheme of SJSRY. The DAY-NULM objective is to reduce poverty and vulnerability of the urban poor households by enabling them to access 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. The mission aims at providing shelter equipped with essential services to the urban homeless in a phased manner.

Figure 4.6: Six components of NULM



In addition, the Mission also addresses the livelihood concerns of the urban street vendors by facilitating access to suitable spaces, institutional credit, social security and skills to the urban street vendors for accessing emerging market opportunities. The programme has the following major six components as listed in figure 7.

4.8 Employment through Skill Training and Placement (EST&P)

4.8.1 This component of DAY-NULM will focus on aiding for development/upgrading of the skills of the urban poor to enhance their capacity for self-employment and salaried employment. EST&P intends to provide training to the urban poor as per the skill demand from the market, so that they can set up self-employment ventures or secure salaried employment. EST&P will target the urban poor subjected to occupational vulnerability. Economic growth creates income opportunities through gainful employments and enterprises. However, skill development of the poor becomes vital to include them in the growth process, which can contribute to poverty reduction in a significant way. Especially in urban areas, where skills are in greater demand, there must be strategies to match skill demands with existing skill level after finding out the gaps.

4.8.2 During 2015-16, 63 numbers of Skill Training Providers were empaneled to conduct training programme in DAY-NULM ULBs. Out of them only 55-STPs conducted EST&P training, completed by December 2018. The courses prescribed by Modular Employable Scheme of Ministry of Labour and Employment were followed in the training programme.

4.8.3 Total 27811 beneficiaries have completed training under EST&P Component of DAY-NULM. Assessment of 27,043 nos. of trainees has been completed by third party Assessing Bodies empaneled along with RDAT, Hyderabad. Certificates have been provided to 20,504 successful trainees. As on date 4532 certified candidates have been placed by the STPs to earn their livelihoods.

4.8.4 Social Mobilization & Institutional Development (SM&ID)

4.8.5 The mobilization of urban poor households to form their own institutions is an important investment for an effective and sustainable poverty reduction programme. DAY-NULM would lay emphasis on the mobilization of vulnerable sections of the urban population such as SCs, STs, minorities, female-headed households, persons with disabilities, the destitute, migrant laborers, and especially vulnerable occupational groups such as street livelihoods.

4.8.6 As per DAY-NULM guideline prescribed by Gol, the Resource Organizations are to be engaged to catalyze the formation of SHGs, their federation, capacity building of all members and their aggregators like Area Level Federation and City Level Federation, and promotion of financial inclusion. Keeping in view the mandate of the Gol guideline, 21 nos. of Resource Organizations were empaneled through EoI/RFP.

4.8.7 Under SM&ID component 2120 SHGs were formed during 2018-19. A total of 25,782 nos. of SHG groups have been formed by the R.O.s in the ULBs till date. Out of them, 24855 SHGs have opened their Bank Accounts for financial inclusion, including 2120 SHGs in 2018-19. Total 14,203 SHGs have been trained, and 12,578 SHGs have been provided with Revolving Funds. An amount of Rs. 2044.72 lakh have been spent so far under SM & ID component, including Rs. 758.95 lakh in 2018-19.

4.9 Self-Employment Programme (Individual and Group)

4.9.1 This component will focus on financial assistance to individuals/groups of urban poor for setting up gainful self-employment ventures/ micro-enterprises, suited to their skills, training, aptitude and local conditions. The under-employed and unemployed urban poor will be encouraged to set up small enterprises relating to manufacturing, servicing and petty business for which there is considerable local demand. Under self-employment component, 9656 individual beneficiaries, 694 SEP groups and 3930 women SHG groups have been provided with bank loan. Interest subvention of Rs. 50.79 lakh has been spent during FY-2018-19. Besides, Allahabad Bank has developed the portal for interest subvention and all subsidies are processed through DBT.

4.10 Capacity Building & Training (CB&T)

The key objective of Capacity Building & Training (CB & T) component is to transform the role of the Ministry of Housing and Urban Affairs and State Agencies in charge of Urban Poverty alleviation into providers of high-quality technical assistance in the fields of Urban Livelihoods promotion and urban poverty alleviation. Under CB&T component, 201 nos. of contractual Community Organization have been positioned in 112 ULBs. Further, State Mission Management Unit (SMMU) has been formed at State Level with 6 specialists and 33 City Mission Management Units (CMMU) have been formed at ULB Level with 71 Managers for smooth operationalization of NULM Scheme. The selection of 2 service providers for establishment of SMMU and CMMU was done through EoI/RFP. The remuneration of contractual community organizers, SMMU specialist and CMMU managers are borne out of CB&T component of NULM. Total Rs. 2897.19 lakh have been spent under CB&T component. Trainings for Capacity Building of the Staff and Officers are being conducted by SUDA. AToT programme was conducted for field level functionaries.

4.11 Shelter for Urban Homeless

4.11.1 The main objectives of the scheme of Shelter for Urban Homeless (SUH) is to provide shelter and all other essential services to the poorest of the poor segment of urban societies. The shelters should be permanent all-weather 24 x 7 shelters for the urban homeless. At present, 29 no. of SUH centers have been operationalized. Construction work has been completed in 5 SUH centers which are yet to be operational, while 11 centers are under construction. A total amount of Rs. 1557.98 lakh have been spent so far under SUH.

4.12 Support to Urban Street Vendors

4.12.1 This component aims at skilling of street vendors, support micro-enterprise development, credit enablement and pro-vending urban planning along with supporting social security options for vulnerable groups such as women, SCs/STs and minorities. The H&UD Department has notified "Odisha Urban Street Vendors Policy, 2012" with an objective to give urban street vendor user rights of street vending with

facilities for appropriate use of identified space by creating hawking zones in an organized manner by providing Vendor Registration Card.

4.13 Urban Housing

4.13.1 Housing is generally the single largest expenditure of EWS and LIG households; the house is also the prime asset for these families. However, the rising land and construction costs have made affordable housing out of reach for the EWS and LIG households in the urban areas. In this context, housing for the urban poor as well as the lower- and middle-income groups has remained as one of the top priorities of the Government.

4.13.2 Pradhan Mantri Awas Yojana (PMAY)

4.13.3 The Prime Minister of India launched Pradhan Mantri Awas Yojana (PMAY) or “Housing for all (Urban)” mission on 25th June 2015. The mission seeks to address the housing requirements of urban poor including slum dwellers through four programme verticals giving option to the beneficiaries;

1. Slum rehabilitation of Slum-dwellers with participation of private developers using land as a resource;
2. Promotion of affordable housing for weaker section through creditlinked subsidy;
3. Affordable housing in partnership with public and private sectors and
4. Subsidy for beneficiary-led individual house construction or enhancement.

4.13.4 The mission targets constructing over two crore houses across the nation. The target beneficiaries will include eligible families belonging to urban poor, EWS and LIG categories in urban areas of the country.

Policy for Housing for all (HFA) in Urban Areas, Odisha, 2015

4.13.5 Towards creating a comprehensive, holistic policy framework to address all aspects of housing for the urban poor including slum rehabilitation and redevelopment as well as new housing and rental housing, the State Government has notified the ‘policy for Housing for all in Urban Areas, Odisha, 2015’ on 14th August 2015. With a target to provide housing to all in urban Odisha as per the manifesto of Hon’ble Chief Minister, this policy was drafted in lieu of the Central Government scheme PMAY launched in June 2015. The policy focuses on (a) development models including rental housing, (b) implementation framework, (c) allotment mechanism, and (d) operation and maintenance mechanism for affordable housing project. This policy overrides the ‘Odisha Slum Rehabilitation and Development Policy 2011’ and repeals the ‘Revised Odisha Affordable Housing Scheme, 2013’.

4.13.6 The policy adopts seven models of intervention for creation of affordable housing stock, and slum redevelopment through private sector participation mechanism and/or undertaking of projects directly through Government agencies.

4.13.7 Odisha Urban Housing Mission-AWAAS

4.13.8 Recognizing the need for an effective and efficient institutional mechanism for achieving the objectives for Housing for All in Urban Areas, AWAAS (Odisha Urban Housing Mission) was launched by Hon’ble Chief Minister of Odisha on 11-October 2015.

4.13.9 As an integrated directorate of H&UD Department, OUHM will take all policy decisions and undertake necessary administrative and legislative measures to implement the policy. OUHM will also function as the State level Nodal Agency (SLNA) for implementation of central government schemes.

It aims to create surplus housing stock through different strategic development models and ensure shelter for every identified homeless in the State including temporary migrants, through provisioning of permanent residential EWS and LIG units, as well as rental housing.

4.13.10 1,06,726 houses have been sanctioned under BLC-PMAY, 6462 houses have been sanctioned under AHP and 7300 houses under ISSR. 20240 houses have already been completed and 40000 houses are targeted to be completed by this year.

4.13.11 Odisha State Housing Board (OSHB)

4.13.12 The prime objective of O.S.H.B is to provide affordable, litigation free accommodation both in urban as well as semi-urban areas to alleviate the acute shortage of housing in the State. OSHB executes housing schemes and functions with approval of its Board and as per provisions of the “Orissa Housing Board Act 1968” and “The Orissa Housing Board Rules 1970” framed thereunder.

4.13.13 Rental Housing for Migrant Laborers.

4.13.14 As part of the joint initiative between H&UD Department and Construction Worker Welfare Board, a Rental Housing Project has been conceived by the Department. One site has been finalized for 200 bedded Rural Health Centers (RHC), 10 sites have been finalized for construction of 100 bedded RHCs in 5 Municipal Corporations and 10 sites have been finalized for Construction of 50 bedded RHCs.

4.14 Urban Infrastructure

4.14.1 UNNATI- an urban transformation initiative

UNNATI is a multi-sectoral plan that aims at all round inclusive development of all urban areas of the State by achieving 100% piped water supply and 100% energy efficient LED street lighting, along with provision for key social infrastructure such as Kalyan Mandaps, crematoriums, water bodies, parks etc.

4.14.2 Under this scheme 12,113 projects have been finalized out of which 5,240 projects have been completed. Guidelines and M&E tools have also been prepared for ensuring effective implementation of the scheme.

4.15 PEETHA Camps

4.15.1 People’s Empowerment-Enabling Transparency & Accountability on Odisha initiatives (PEETHA) is a sub-theme of UNNATI. Various camps have been organized as part of the PEETHA programme to make the citizens aware of the various people-centric initiatives of the Government and ensure that the benefits under various schemes reach the beneficiaries on camp approach basis.

4.15.2 The programme has ensured transparency and accountability in distribution of benefits as well as empowerment of the citizens by providing information on all welfare/ Development schemes and other initiatives of the Government namely Unnati, Basudha, Aahaar, etc.

4.15.3 Energy Efficient Street Lighting

4.15.4. With a view to providing sustainable, sufficient and uniform light in city roads, markets, institutions and dense traffic junctions of the city, an energy efficient street lighting programme has been taken up by the Department in PPP mode. The programme is being undertaken in phases.

4.15.5 In the Pilot phase, Bhubaneswar Municipal Corporation (BMC) became the first ULB to implement the energy efficient LED street lighting project by replacing the conventional street lights. BMC, in this phase, installed 34,873 energy efficient LED street lights thereby saving 80% of BMC’s power bill.

4.15.6 In the first phase, a Memorandum of Understanding (MOU) was signed between the five Municipal Corporations (Bhubaneswar, Cuttack, Berhampur, Sambalpur and Rourkela) and NEESL & IFC, on 12 July 2017, for retrofitting of energy efficient street lights. Out of the target of 82,414 LED bulbs to be installed, 72,555 have been installed in these five cities.

4.15.7 In the second phase, H&UD initiated the retrofitting programme for the remaining 109 ULBs in Odisha. Out of the targeted 2,38,000 street lights, EESL has installed 2,01,157 street lights.

4.15.8 In the third and final phase, H&UD has decided to implement Greenfield Street lighting project in all uncovered streets/roads in all ULBs. A total of 61,079 light points have been identified, of which 3,148 have been installed.

4.16 Smart Parks

4.16.1 Parks and open space are crucial to the healthy development of our cities. In order to improve the city aesthetics and make it more livable, the H&UD Department is allocating funds in its annual budget for creation and upgradation of green spaces, parks and recreation centers, especially for children. A total of 48 parks have been developed in nine AMRUT cities in the last three years with child friendly equipment and open-air gym. To extend it to all ULBs, H&UD has decided to implement “Smart Parks” scheme with features like walking track, open gym, yoga and meditation platform, child play equipment, drinking water, separate toilets for male and female, LED lights, landscaping/greenery. It is proposed to construct at least 200 smart parks in the next 6 months with an investment of INR 200 crore.

4.17 Urban Governance Reforms

Odisha is one of the pioneering States in implementing various urban reforms in the country. The State Government have been vigorously pursuing the implementation of various reforms as part of the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with an aim to improve service delivery, mobilize resources, make municipal functioning more transparent and functionaries more accountable. For effective implementation of AMRUT reforms, Odisha has won incentive award from Ministry of Housing and Urban Affairs (MoHUA), Govt. of India totaling Rs. 41cr. Consecutively for three years in a row for FY15-16, FY16-17 and FY17-18 securing 3rd, 2nd and 3rd position respectively. The State Government on its own have taken various initiatives for launching of schemes and for enactment of number of policies to make the process of urban development more inclusive and of citizen-centric.

4.17.1 E-Governance

All the nine mission cities had created the ULB websites in FY 2016-17. The State-wide application ‘e-Municipality’ is currently operational in all 114 ULBs of the State including nine AMRUT cities. Citizen centric services like registration of birth/death/marriage, water, grievance redressal, mutation, property tax, issuance of licenses, etc. are delivered through e-Municipality application. Further, efforts are being made to dovetail its components with Digital India initiative like mobile apps services for various e-services. All the mission cities have their own broadband connection.

4.18 Constitution of Municipal Cadre

The service rules for 7 proposed cadres namely General, Administrative, Engineering, Finance, Ministerial, Community Development, and planning have already been formulated and notified. The formulation and notification of public Health & e-Governance service rules are currently under progress.

4.18.1 Credit Rating

The rapid pace of urbanization leads to an increasing pressure on ULBs to ensure adequacy of the above services. Considering the current level of urban infrastructure and sharp increase in urban population, the need for strengthening and augmenting urban infrastructure becomes critical and requires a large amount of investment.

Credit Ratings of all 9 AMRUT cities (Bhubaneswar, Cuttack, Berhampur, Sambalpur, Rourkela, Puri, Balasore, Baripada and Bhadrak) were completed in FY2017-18. Subsequent to the credit ratings, the transaction advisors have been appointed to facilitate issuance of municipal bonds.

4.19 Urban Planning

In order to address the issue of grant of building permission sub-divided in accordance with the provisions of the Planning and Buildings Standards Regulations in force and with an intent to bring all the unplanned areas or unauthorized layouts in the State into the fold of Planned development providing basic amenities to ensure a better quality of life to the citizens, the Department had formulated a scheme for regularization of such unauthorized layouts, that has been notified on 30-May-2017.

4.20 Urban Water Supply

4.20.1 Access to safe drinking water is a basic human right of every citizen. Availability of safe, accessible and adequate water supply to all urban populations is one of the key priorities of the Department. However, there is economic cost involved with its operation, maintenance and delivery. Efforts have been made to minimize operational inefficiency to reduce the financial burden on the consumers by minimizing physical and commercial losses including addressing the issues of Non-Revenue Water (NRW) and energy inefficiency in supply of drinking water. It calls for harnessing, developing and managing surface and ground water sources in an efficient and equitable manner and ensure their protection and that of surrounding ecosystems.

4.20.2 Water Supply Projects under AMRUT Scheme

4.20.3 Under the National flagship programme of Atal Mission for Rejuvenation and Urban Transformation (AMRUT), the Department has identified 130 water supply projects across 9 mission cities (i.e. Bhubaneswar, Berhampur, Cuttack, Rourkela, Sambalpur, Balasore, Bhadrak, Baripada and Puri) that have been taken up with 50% Government of India and 50% State share to be completed by 2019-20. The Service Level Improvement Plans (SLIPs) were prepared for nine AMRUT cities based on which the State Annual Action Plans (SAAP I, II, III for 2015-16 to 2017-18) were prepared and being implemented. The projects are aimed at immediate and substantial enhancement of the service levels parameters including coverage, quantity and quality, time of supply, revenue and reduction in non-revenue water.

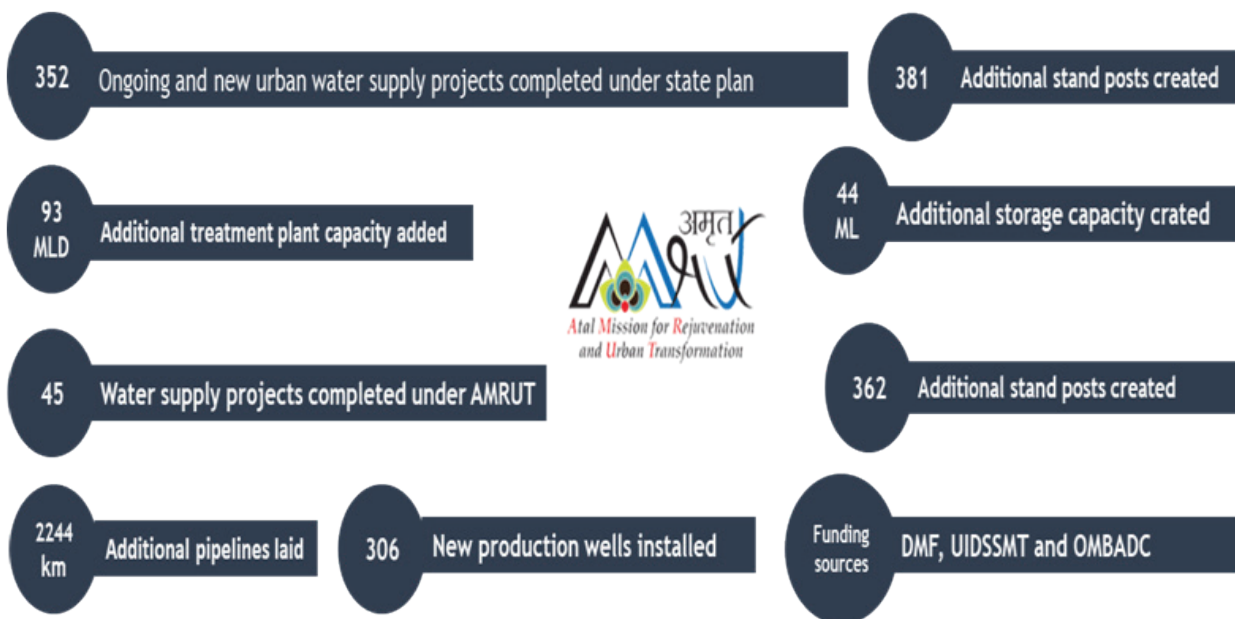
4.20.4 At present about 113LPCD of drinking water is being supplied per day to 114 ULBs benefiting a population of 70 lakh (approximately). Out of this, about 34 lakh urban population are benefited through 519203 house connections and about 14 lakh population is served through 27993 nos. public stand posts. The remaining population is being covered by 37887 nos. hand pump tube-wells in different ULBs and Census Towns to cater to the water demand during non-supply hours and demands of population residing in areas uncovered by piped water supply system. As on 31st March 2019, out of 2032 no. of wards in 114 ULBs, 1463 wards are fully covered, 530 wards are partially covered, and 39 wards are yet to be covered with piped water supply system.

4.20.5 On 20th November 2017 Hon'ble Chief Minister, Odisha had launched universal coverage of water supply to all ULBs of the State including slums and bastis stylized as "Water for all" under "BASUDHA"

(Buxi Jagabandhu Assured Drinking Water to all habitation) scheme. H&UD department has drawn an ambitious plan for phase wise investment of Rs.4380 Cr. approximately starting from the year 2015-2016 for providing at least 70 liters per capita per day (lpcd), to be subsequently increased to 135 lpcd in a span of 12 years. The supply duration must be progressively increased to attain 24 x 7 coverage. The thrust areas for investment would be on 100% (universal) coverage through piped water supply of all ULBs, optional resource utilization, efficient management and service level improvement in water quality monitoring, metering and reduction of non-revenue water, improvement in operational efficiency.

4.20.5 A total of 793 projects have been taken up with a total investment of Rs.3732 Cr. to provide universal coverage of water supply with convergence of funds from various sources like AMRUT, State Plan, DMF, UIDSSMT, OMBADC and Deposits. Out of these, 637 projects have been completed so far. The summary of project progress has been shown in 4.7.

Figure 4.7 Key Achievements during 2018-19 under AMRUT in Odisha



4.20.6 Major Projects which are completed

- Augmentation of source (42 MLD) of water supply to Puri town- work is completed and commissioned.
- Augmentation of water supply to Keonjhar town- work is completed and commissioned.
- Commencement of Water Supply from Tel River (Tarava) Source with additional 7 MLD to Bolangir Town- work is completed and commissioned.
- Bulk Water Supply project for IIT, NISER, IDCO, Jatni and Khurda ULBs worth Rs. 187.71 Cr. by MEIL (Bhubaneswar) Bulk Water Project Private Limited (SPV) through PPP- has been completed and commissioned.

Major projects which are in progress

- “Improvement of Water Supply to Greater Berhampur” with project value of Rs. 372 Cr. is completed and partly commissioned.
- “Integrated Water Supply Scheme under UIDSSMT at Jharsuguda, Baripada, Rourkela, Sambalpur” with project value of Rs. 318.03 Cr. is in progress- The construction is scheduled to complete by November 2020 after which O&M period is for 5 years till November 2025.
- “Improvement of Water Supply to Brajaraj Nagar & Belpahar” with project value of Rs. 228.25 Cr. under District Mineral Funds - LOA issued. The project is in progress and scheduled to be completed by June 2020 after which O&M period is for 5 years till June 2025

4.21 Budget Outlay

Total budget outlay for different work programmes for the year 2018-19 and expenditure ending March 2019 is as follows:

Table 4.2: Budget outlay for different work programmes for 2018-19.

Sl. No.	Head/Sub-Head Scheme-Wise	Annual Plan for 2018-19 (in Rs. Lakh)	Expenditure till March 2019 (in Rs. Lakh)
1	Urban Water Supply Programme	27838.97	25148.60
2	Information, Education & Communication	629.50	209.67
3	SLB Water audit & Zonal bulk metering	0.01	-
4	Automation of Water Treatment Plant & System	50.00	49.58
5	Computerization and e-Governance	200.00	91.59
6	Development of Water Testing Laboratories	300.00	222.61
7	Efficiency Measures for Urban Water Supply system	1.00	-
8	Land Acquisition Charges	0.01	-
9	Decretal Dues	10.00	10.00
10	Sewerage & Sanitation	50.00	8.11
11	Capacity Development & Preparation of DPR	100.00	99.55
	Total:	29179.49	25839.71

Source: Activity Report, 2018-19, H&UD, Department

4.22 Jal Jogan Melas

4.22.1 The H&UD Department has initiated a special drive- “Jal Jogan Mela” across all the ULBs in the State. The primary objective of these drives is to achieve 100% coverage of all Urban Households under the Piped Water Supply Scheme in the State by providing new connections in the project area with exemption of connection fee for the urban poor where distribution networks have been laid and also in those areas where distribution network is existing but sufficient connections have not been given though sufficient water is available. In addition, the melas are also being used as a platform to conduct awareness among citizen on optimum utilization of water, prevent wastage and prevent unauthorized connections or drawal of excess water. This shall result in reduction of Non-Revenue Water (NRW) and promote judicious usage of water among citizens which shall result in generation of additional revenue to the ULBs.

4.22.2 Development of Water Testing Laboratory

4.7.5.1 To ensure that the quality of drinking water, being supplied by PHEO, is free from any type of contamination and suitable for drinking. H&UD Department has approved water quality and monitoring protocol with guidelines for establishment of water testing laboratory at WTP level, division level and State level. In pursuance of these guidelines, 8 nos. divisional level water testing laboratory on PPP mode, covering 9 AMRUT cities (one State level at Bhubaneswar and 8 Divisional level laboratories at Bhubaneswar, Puri, Cuttack, Balasore, Baripada, Rourkela, Sambalpur and Berhampur) as well as other ULBs under the respective PH divisions at a cost of Rs. 66.21 Cr. (Capital cost = Rs. 15.22 Cr. and O&M cost for 10 years = Rs. 50.99 Cr.) have been established. All the 9 water testing laboratories are functional.

4.23 Urban Sanitation

4.23.1 The Government of Odisha is striving to transform urban Odisha into community driven, sanitized, safe, healthy and livable towns by aligning with Swachh Bharat Mission-Urban (SBM-U) and other relevant policies of the Government with necessary institutional framework, planning, monitoring, evaluation, capacity Building and funding support. This is expected to ensure 100% ODF, strengthening of sanitation chain, improved standards of Faecal Sludge and Sewage Management, enhance Solid Waste Management infrastructure in the State and facilitate streamlined service delivery in all the urban areas of the State.

4.23.2 As per Solid Waste Management Rules, 2016, Door to Door collection has been initiated in 90% of the wards and segregation of waste at source initiated in 34% of the wards. 104 ULBs have notified SWM Bye-Laws. Rest 10 ULBs are in different stages of publishing the Bye-Laws. All the 114 ULBs have prepared the Solid Waste management action plan.

4.23.3 In the entire Urban-Odisha, average solid waste generation is about 2,686 Tons per Day (0.98 Million Ton annually). Waste processing is operational for 612 Tons per day, out of which 100TPD of waste can be processed in the compost plant at Puri and in 96 other ULBs. Pit composting method has been adopted to process about 509 Tons per Day of waste. Construction is going on at Berhampur Municipal Corporation for setting up a sanitary landfill and a centralized compost plant of 150 TPD capacity that is expected to be completed by January 2020. Berhampur is declared as Open Defecation Free (ODF). For Bhubaneswar and Cuttack, agreement has been signed with concessionaire for setting up a 550 TPD centralized Waste to Energy plant. The construction activity could not be started due to large scale public resistance at Berhampur a 40 TPD waste to energy plant is being established & micro compost centres are being established at all the ULBs across Odisha in compliance to NGT directions.

4.23.4 As per the decentralized processing plant initiatives, Berhampur Municipal Corporation has established vermi-composting and bio-methanation plant of one ton per day capacity. Rourkela and Cuttack have implemented mechanical compost plant of 0.5 tonnes per day (TPD) each. Bhubaneswar Municipal Corporation, Paradeep Municipality and Joda Municipality have started construction of decentralized compost plants of 5 TPD capacities. Decentralized compost will be set up with a total capacity of 215TPD in 45 ULBs by 30th April 2020 where land has already been identified.

4.23.5 Currently, a total of 40 dedicated Sanitation Experts are handholding EOs/ Commissioners for effective implementation of sanitation activities at ULB level. All of these are expected to dramatically transform solid waste management standards in Odisha and lead to much improved urban sanitation process and standards across the State.

4.23.6. All 114 ULBs from Odisha have been declared Open Defecation Free (ODF) which marks a remarkable feat in the achievement of the objective of Swachh Bharat Mission. All households in urban areas have been provided access to toilets.

4.24 Urban Transport

4.24.1 City Bus Service was introduced in Bhubaneswar and Puri under Centrally Sponsored Scheme of JnNURM during 2009-2010 with creation of a Special Purpose Vehicle (SPV) BCBMP. A part of Smart City Mission programme, Bhubaneswar City Bus Modernization Programme (BCBMP) has been implemented to strengthen the public transport system in the capital region of the State. Under BCBMP, Bhubaneswar Puri Transport Service (BPTS) was later reconstituted along with merger of Cuttack Urban Transport Service Limited (CUTSL), Cuttack by forming Capital Region Urban Transport (CRUT) in 2018 to oversee the operation of City Bus Service in master plan areas of Bhubaneswar, Cuttack and Puri-Konark Development Authority. Presently, Capital Region Urban Transport (CRUT) provides public transportation service in the name of "MO BUS" in its operational areas through a fleet of 200 newly procured city buses of different categories in addition to the existing fleet of 185 buses. 200 nos. of Bus Queue Shelters (BQS) are under construction to strengthen the public transport infrastructure. Sundargarh Urban Transport Trust is in operation at Rourkela.

4.24.2 Development of Bus Terminals in ULBs

Construction of bus terminals at Bhanjanagar, Digapahandi, Konark, Deogarh, Nimapada, Nayagarh, Kuchinda, Hinjilicut, Tarbha and Jajpur are under process with the share of investment between State & ULBs being in the ratio of 80:20.

4.24.3 Inter-State Bus Terminal

Construction of an Inter-State Bus Terminal (ISBT) at Baramunda, Bhubaneswar is in the process of bidding. The project will be executed on Engineering, Procurement, and Construction (EPC) mode by Bhubaneswar Development Authority (BDA) at an estimated cost of Rs. 183 crore. The project will be financed in 40:40:20 ratio from State Government grant, total loan to be taken by BDA and City Infra Development Fund (CIDF) funding.

4.24.4 Public Bicycle Sharing (PBS)

On 26th November 2018, Hon'ble Chief Minister, Shri Naveen Patnaik launched Public Bicycle Sharing (PBS) project as a part of Smart City Mission Programme, namely MoCycle service & mobile app to change the way smart city Bhubaneswar moves in environment friendly way. In first phase, 1,000 digitally mapped cycles with GPS system & digital payment has been made available at 120 points.

Growing Services Sector

The services sector has emerged as the key driver in the economy of Odisha, with a significant share in output and employment. The sector witnessed a double-digit real growth of 11.7% in 2017-18, as per 2019-20(AE) it is 6.8%. Trade, repair, hotels and restaurants contribute the majority share to output from services. Odisha is a net-exporter of goods by rail, accounting for 20.3% of the total outward movement of goods in India between the states. It primarily exports metals and minerals. The State has a huge potential for development of tourism given its rich cultural heritage. Domestic tourists form the largest proportion (99%) of total tourists. The State has been increasing its road infrastructure for industrial development. While road density is comparable to other States, Odisha lacks an adequate rail network. The State's telecom infrastructure is relatively underdeveloped. Consequently, tele-density and internet penetration is lower than the national average. Odisha is the first State in the country to adopt the model of Self-Help Groups (SHGs) as a provider of banking services, and availed bank credit of 0.63% of total credit financed by SCBs in the State in 2018-19, ensuring financial inclusion. The NPA and Overdue is 6.49% and 27.77% of total advance respectively. Priority sector lending in the State has been well above the benchmark of 40%. Credit-deposit ratio is 66 relative to the benchmark of 60. As the economy progresses, the share of services sector in Gross Value Added (GVA) is expected to increase further. The State is committed to provide enabling infrastructure for the service sector's growth.

5.1 Introduction

“Poverty reduction more strongly correlated with growth of services than with growth of manufacturing” World Bank, Geneva, July 2012 (in Role of Services in Economic Development).

5.1.1 Rising income necessitates the demand for more services like banking, tourism, transport, communication and trade. Consequently, the share of service sector in the economy's output grows. Services also support the growth of other sectors in the economy. With consistent rise in per-capita income and improving socio-economic indicators, share of the service sector in Gross Value Added (GVA) has grown from 38.5% in 2011-12 to 40.5% in 2019-20 (AE). The sector grew at a rapid rate registering a double-digit growth of 11.7% in 2017-18 and in 2019-20 (AE) it is 6.84%.

The service sector constitutes 41.6% of GVA in 2018-19 (AE) providing employment to nearly 1/4 of the total workforce in the State

5.1.2 The service sector also provides employment to a significant proportion of workforce in Odisha. The recently available periodic labour force survey data for 2017-18 shows that nearly 24.8% of workers are engaged in services sector in Odisha. It is evident that this sector is an important contributor and driver of growth and development of the State economy.

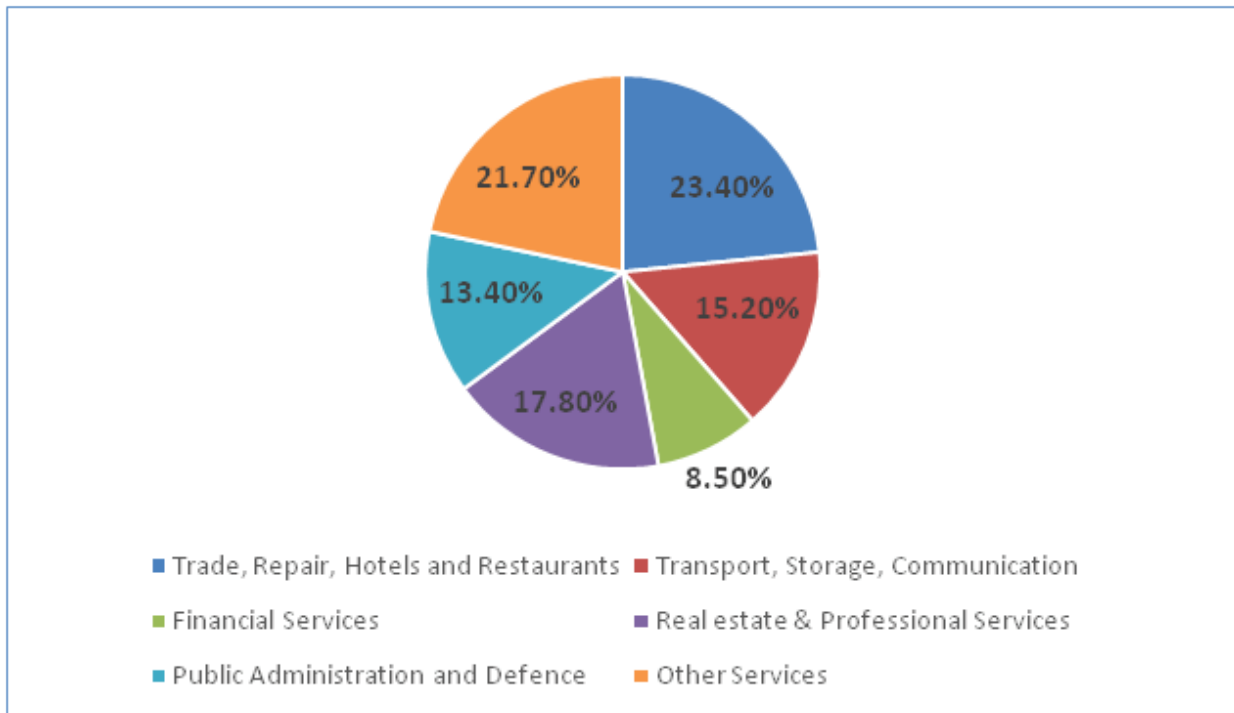
¹Shares calculated throughout the chapter are in current prices. Growth rates have been calculated at constant prices (2011-12)

²Services sector includes, wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities; information and communication; financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities; public administration and defense; compulsory social security; education; human health and social work activities; arts, entertainment and recreation; other service activities; activities of households as employers; undifferentiated goods and services producing activities of households for own use; and activities of extraterritorial organizations and bodies.

5.1.3 The composition of the sub-sectors in services has remained similar over the years, with trade, repair, hotels and restaurants contributing the largest share over the last seven years and continuing to do so in 2017-18 and 2018-19 as well. Figure 5.1 presents the share of various sub-sectors in the GSVA by services as per advance estimates for 2018-19. Trade, repair, hotels and restaurants are expected to account for about 25% share of output from services, followed by transport and communication. Given the significance of the industry sector in the State, the high share of these services that are complementary to mining and manufacturing, is important.

Figure 5.1: Share of various sub-sectors in GSVA from services in Odisha, 2018-19 (AE)

Trade, repair, hotels and restaurant are the largest contributor to GVA from Services

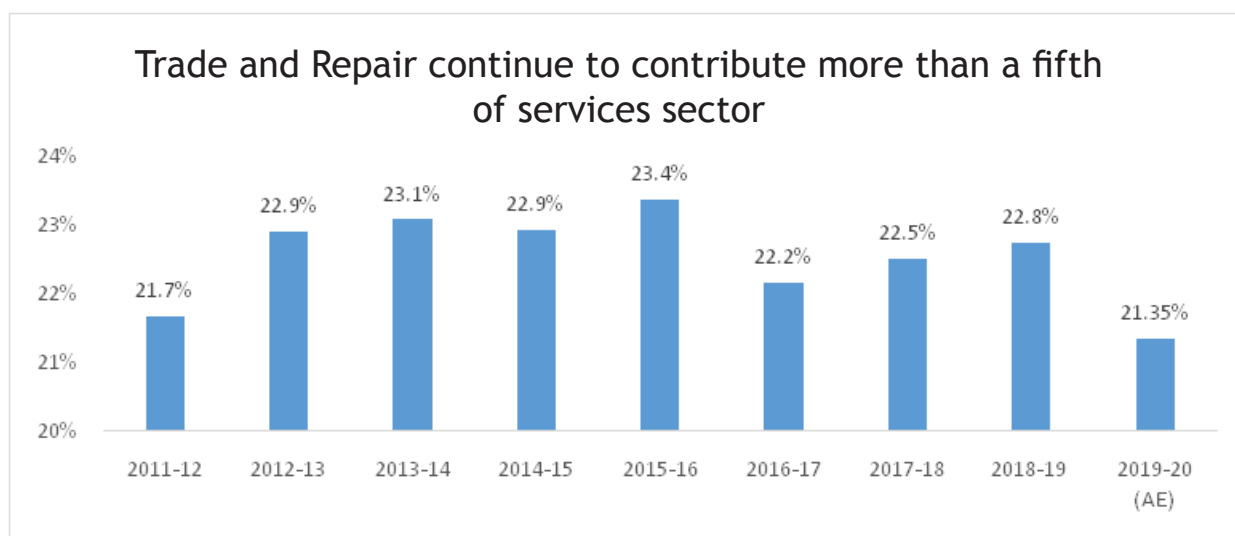


Note: Share calculated at current prices Source: Directorate of Economics and Statistics, Odisha

5.2 Trade and repair

Trade and repair sector is the largest contributor to the service sector's output in the State. The share of this sub-sector has consistently been above 20% in GVA from services sector, as presented in Figure 5.2. The sub-sector is also the third largest employer in the State, following agriculture and construction and the largest employer in the service sector. In 2015-16, 10.5% of the total work force was engaged in trade and repair in Odisha, which makes over one-third of the total workers employed in the services sector. The sub-sector has also shown strong growth in 2012-13 and 2015-16. During 2017-18, the sector reported growth of 3.7%, though advance estimates for 2019-20 indicate a slowdown of real growth to 3.59%.

**Trade and repair
is the leading
service sub-sector
in Odisha**

Figure 5.2: Share of trade and repair in GSV from services in Odisha

Source: Directorate of Economics and Statistics, Odisha

5.3 Inter-state trade of goods

5.3.1 Odisha is the largest inter-State exporter of goods (by rail) amongst all States in the country, accounting for 20.3% of the total outward movement of goods (as of 2016-17) given its natural resource endowment. The State is a net exporter of goods, with outward flow of goods more than five times the inward flow. Given Odisha's position as the 'mineral hub of the country', top exports from the State are primarily metal and mining goods (coal and coke, cement, iron ore, etc.)

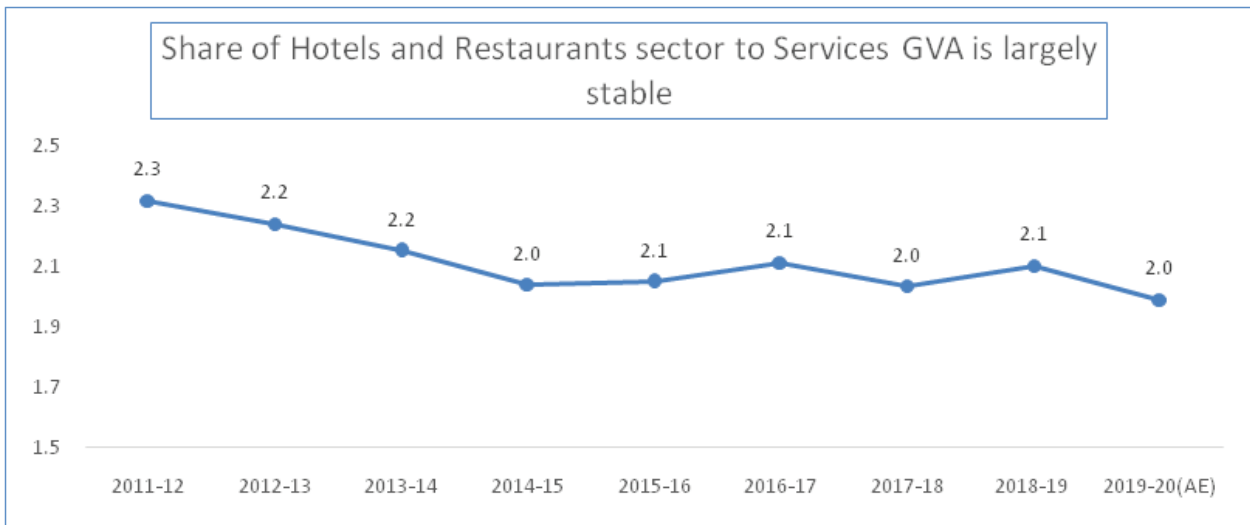
Odisha has the highest share in inter-state outward movement of goods via rail (2016-17)

5.4 Tourism

5.4.1 Known for its temples, beaches, monuments, arts and crafts, historical monuments, lakes and wildlife sanctuaries, Odisha has a lot to offer tourists. Sectors such as tourism have long-term multiplier effects on the output and employment in an economy. The sector is highly labour intensive and generates employment through forward and backward linkages.

5.4.2 The contribution of the sub-sector of 'Hotels and Restaurants' to GSV from services is relatively small as compared to other sectors. Even as 'Trade, Repair, Hotels and Restaurants' group contributed more than 20% to GSV in 2019-20, the contribution of its part, viz. 'Hotels and Restaurants' was 2.0%, implying bigger role of trade and repair services. The share is 2% in 2019-20 (AE) with a contribution of Rs.3875.1 crore. The contribution of the sector to the State GSV has almost remained constant in the past few years.

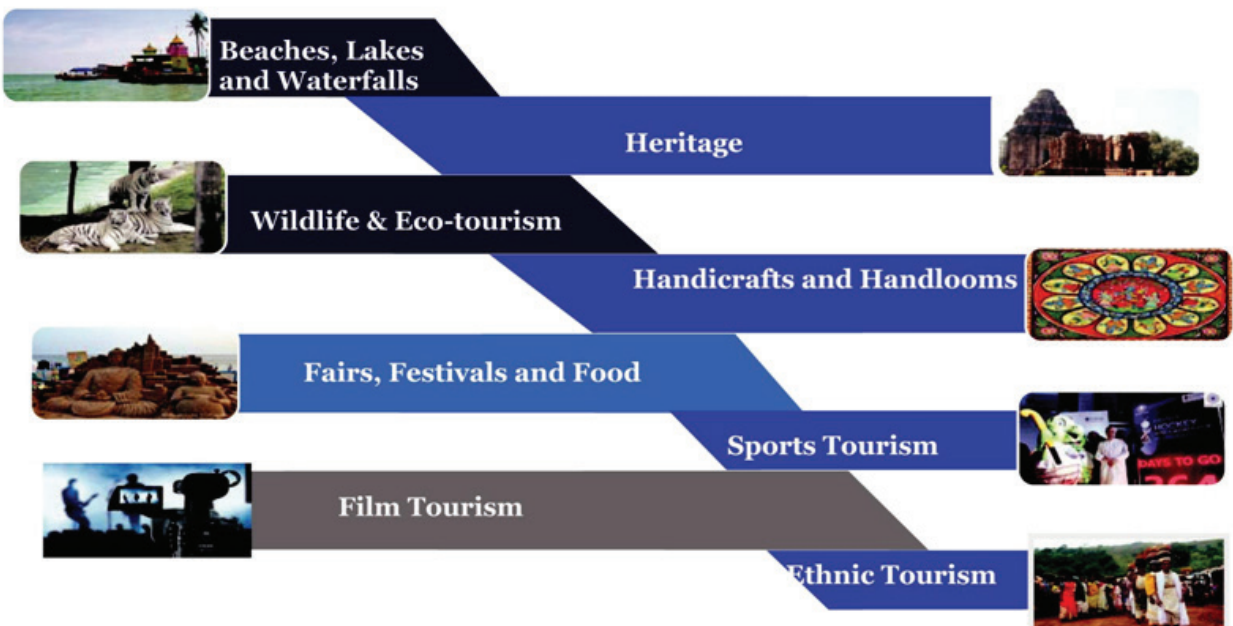
Figure 5.3 Share of hotels and restaurants in Services GVA in Odisha



Source: Directorate of Economics and Statistics, Odisha

5.4.3 The low share of Hotels and Restaurants to services (and overall) output may be due to geographical and structural reasons. Lack of adequate air and rail connectivity to the non-coastal parts of the state also hampers tourist footfalls. Although there exists ample scope for developing tourism in the State given its rich cultural heritage, the State needs to expedite its investment in tourism infrastructure in order to attract more tourists every year.

Figure 5.4 Avenues for tourism in Odisha

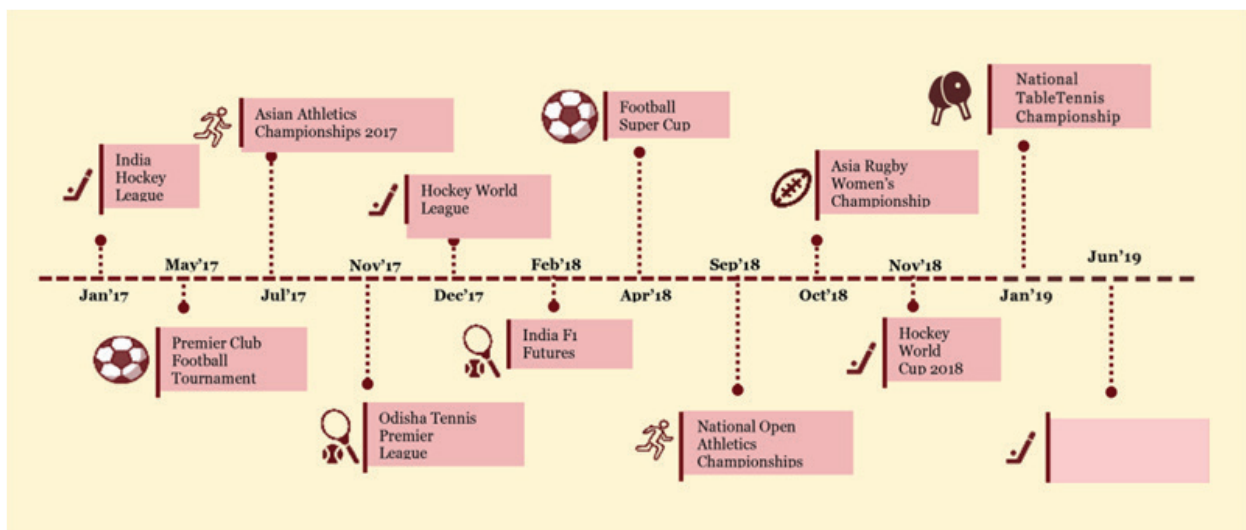


Tourism can play the role of a catalyst in income generation at the bottom of the pyramid if supporting infrastructure is developed

5.4.4 The State offers enormous potential in development of tourism across sub-sectors. Various forms of tourism - cultural, religious, eco-tourism, etc. have grown significantly in the past few years and contributed towards the State's output. The focus can be expanded to upcoming areas like sports tourism and film tourism. The development of infrastructure for tourists has enormous potential for employment and income generation, foreign exchange earnings and value addition for the State. Tourism policies implemented by the State are targeted towards the same.

Box 5.1: Sports Tourism-Promising Avenue for Tourism Growth in Odisha

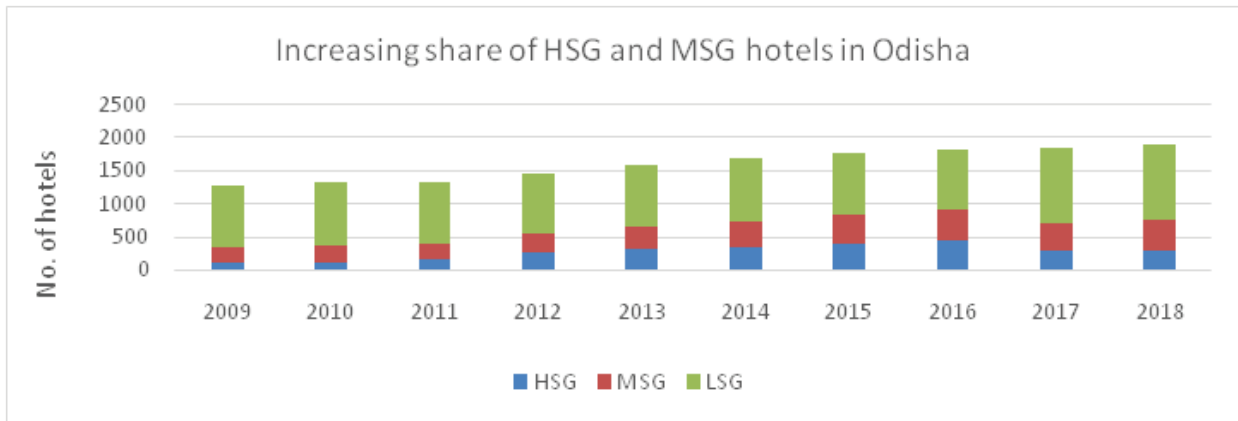
Odisha has emerged as the Sports Capital of India. It has played host to several national and international sports events, particularly in the past two years. Hockey World Cup 2018 was the latest mega sporting event hosted by the State. The influx of tourists during these events contribute significantly to the rise in tourism output for the State. The State has seen increase in revenue from Leisure and Tourism.



I. Tourism Infrastructure

5.4.5 Development of hotel infrastructure determines the growth of tourism. The number of hotels and restaurants in the State has increased from 1328 in 2011 to 1,906 in 2018. At the end of 2018, the State had 39,917 rooms and 79,978 beds to accommodate its tourists. Hotels in Odisha are divided into three major categories such as High Spending Groups (HSGs), Middle Spending Groups (MSGs) and Low Spending Groups (LSGs) as per hotel tariff structure and spending capacity of tourists. Over the past 10 years, the share of HSG and MSG hotels has increased, from 25.7% of total hotels in 2009, to 39.7% in 2018. The growth in LSG hotels has been negative or negligible in most of the years during the period, only increasing significantly (by 24%) in 2017. As Odisha is growing as an industrial hub, it would be beneficial to invest in MSG and HSG hotels in order to attract business tourism and introduce greater diversification in tourist attractions.

Figure 5.5 Number of hotels in Odisha by tariff category

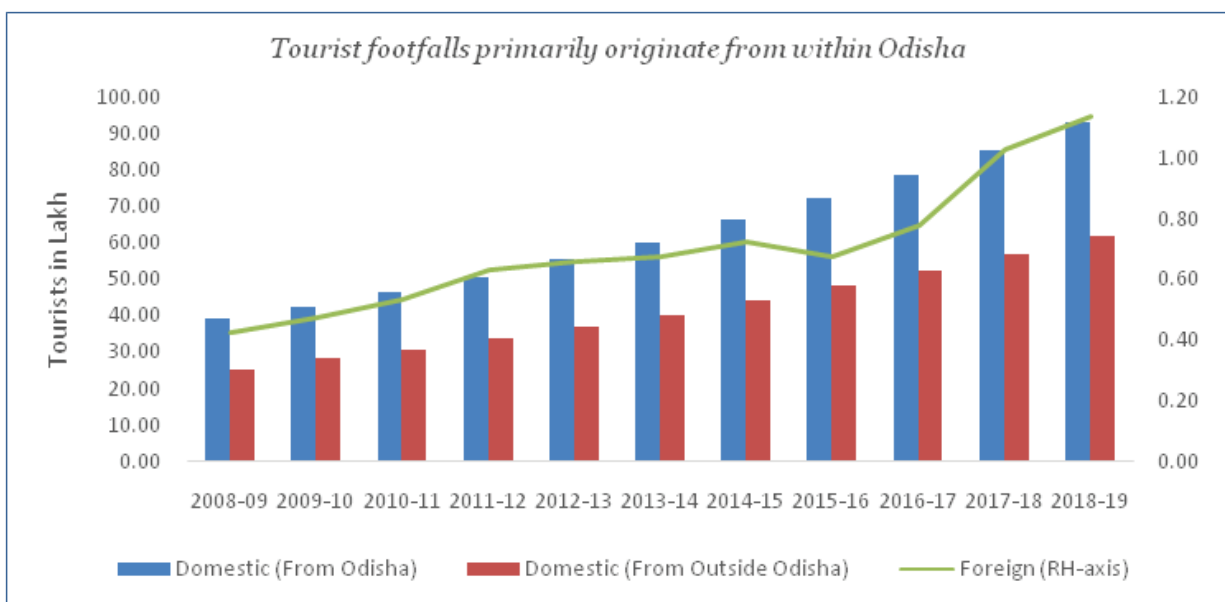


Source: Directorate of Tourism, Odisha

II. Growth of Tourists

5.4.6 Odisha tourism has seen good expansion in recent years with an increase in both domestic and foreign tourists. About 155.10 lakh domestic tourists (from within and outside the State) and 1.14 lakh foreign tourists visited Odisha during 2018-19, registering growth rate of 8.75% and 10.41%, respectively. Domestic tourists drive the growth of the tourism sector in Odisha. Tourist inflow in the State was consistently impressive with an annual average growth rate of 9.25% in the last 5 years. Even foreign tourists inflow to the State was robust with 33% and 10.4% growth rates in 2017-18 and 2018-19, respectively. Composition of tourist arrivals shows that domestic tourists form more than 99% of the total tourists visiting the State. Within domestic tourists, majority (60%) are from Odisha. This highlights the need for marketing Odisha's tourism to not just foreign tourists, but also within the country.

Figure 5.6 Number of tourists (in lakhs) in Odisha



Source: Directorate of Tourism, Odisha

5.4.7 Even though footfall of domestic tourists are significantly higher than that from foreign tourists, the latter stay for longer periods and spend more on an average as compared to their domestic counterparts. However, given their smaller numbers, net inflow of money from domestic tourists is considerably higher. The findings of Tourist Profile Survey 2013-14 by the Tourism Department, Government of Odisha, show that average duration of stay is 11 days in case of a foreign tourist and 3.7 days in case of a domestic tourist. Similarly, the average per capita expenditure was found to be INR 4,167 in the case of foreign tourists and INR 2,763 in the case of domestic tourists. Earnings from domestic tourists amounted to INR 15,855.55 crore in 2018-19, while that from foreign tourists was INR 521.26 crore. The earnings from domestic tourists have increased significantly since 2013-14, indicative of the increased footfall of tourists as discussed in the previous section.

Table 5.1 Inflow of money via tourist spending in Odisha, (INR crore)

Year	Domestic Tourists	Foreign Tourists
2013-14	10288.60	308.94
2014-15	11297.91	331.01
2015-16	12336.93	308.78
2016-17	13405.27	355.22
2017-18	14579.72	472.10
2018-19	15855.55	521.26

Source: Directorate of Tourism, Odisha

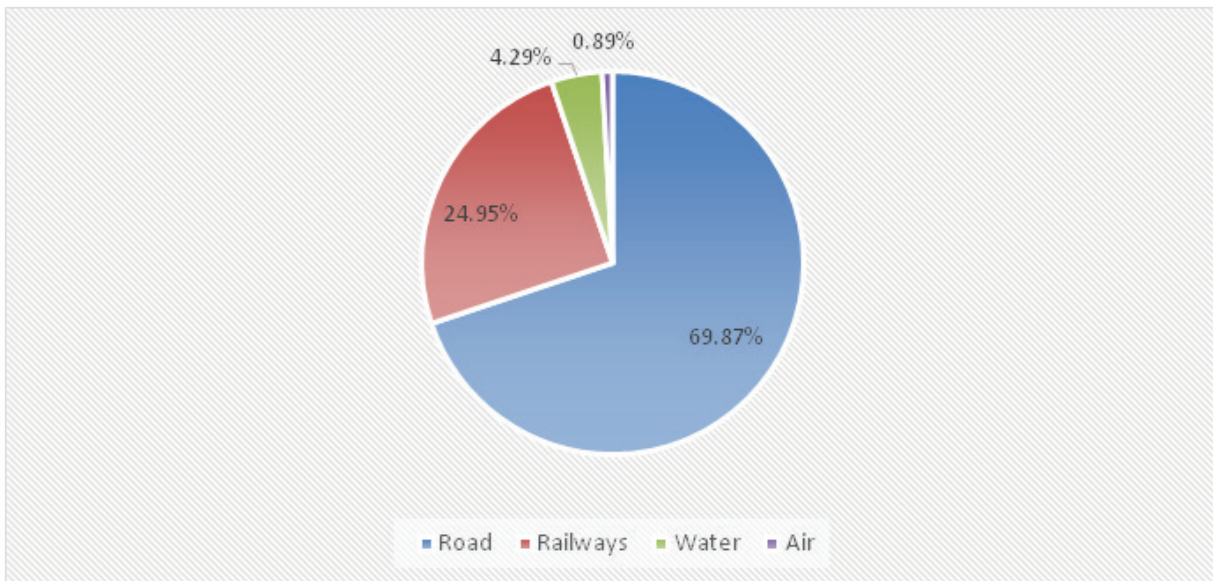
5.5 Transport

5.5.1 Transport services are the third largest contributor to the services sector in Odisha, after trade and repair and real estate. Transportation is an integral part of the State's economy and has emerged as a major contributor to the success story. This sector with its multimodal channels has been supporting growth of mining and manufacturing sectors including trading with an average sectorial growth rate of 7.6% between 2012-13 and 2019-20 (AE). Growing at 0.89% in 2019-20(AE), the gross value added from the sector was INR 29525.40 crore.

5.5.2 Road transport contributes the largest share of transport services GSVA. Transport services constitute four modes of transportation: road, rail, water and air. Road transport subsector has a share of over 49% of transport GVA during 2018-19 and expected to be 48% in 2019-20(AE). This is followed by railways, which contribute over 16% of the GVA of transport services during 2018-19 and expected to grow to 17% during 2019-20(AE).

5.5.3 The composition of output under transport has undergone a change. The share of road transport was highest in 2017-18 but declined slightly in 2018-19 and also in 2019-20 (AE). The share of railway, water and air transport to transport GVA also decline in 2018-19 and 2019-20 (AE)

Figure 5.7 Share of Road, Railway, Water and Air to transport GSV in Odisha (in %), 2019-20(AE)

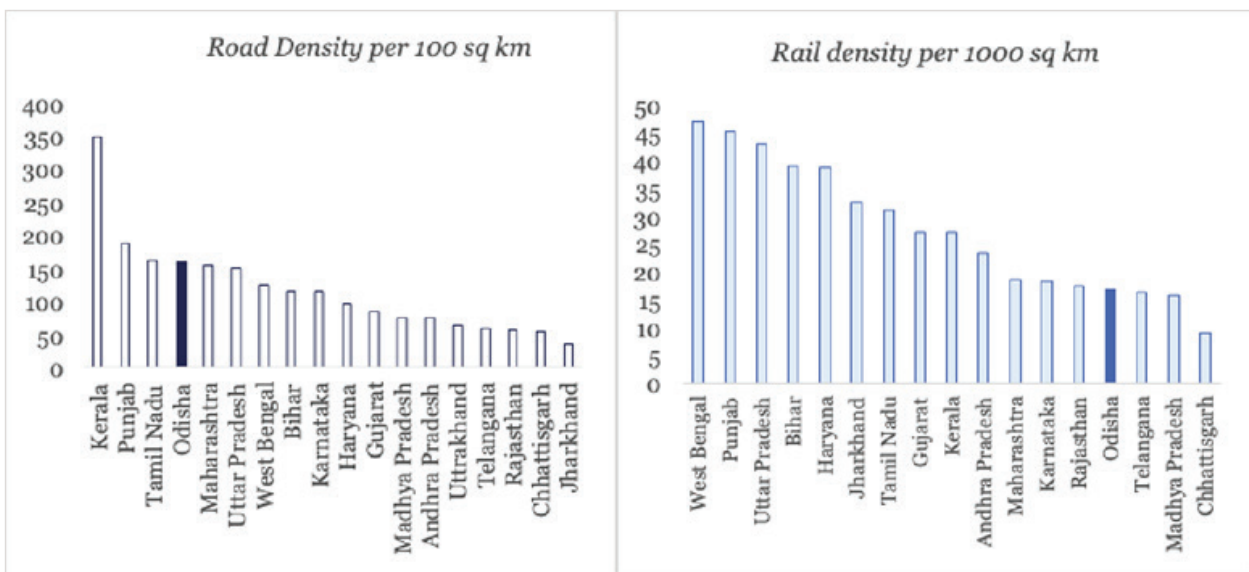


I. Roads

Road infrastructure

5.5.4 Road infrastructure provides the crucial last mile connectivity to human settlements, commercial, industrial and cultural establishments. The road network of the State consists of national highways, express highways, state highways, major district roads, other district roads, rural roads, urban roads, Panchayat Sammiti (PS) roads, Gram Panchayat (GP) roads, forest roads, irrigation roads and Grid Corporation of Odisha (GRIDCO) Roads. In the absence of adequate rail network in Odisha, roads play the predominant role in accommodating passenger and freight movements. Odisha is among the top five non-special category states in terms of surfaced roads' density, while it lags behind in rail density.

Figure 5.8 Road and rail density across states



Source: Transport Research Wing, Ministry of Road Transport (2015) and Highways, Gol and Indian Railways Year Book, 2017-18

5.5.5 The State had a total road length of 2,68,656 kms by the end of 2018-19, growing 1.65% over 2017-18. Other District Roads(ODR) witnessed the highest growth of 25.06% over the last year. The road length of various road types is presented in Table 5.2.

Road transport

5.5.6 Road transport accommodates an overwhelming proportion of passenger and freight traffic among all major modes of transport in Odisha: the total road network of 2.69 lakh kms accommodates a vehicle population of 83.50 lakhs (end of March 2019). Further, growth in vehicle population of 13.20% was much more as against a growth rate of mere 1.65% of road length during 2018-19 in the State. This sub-sector in Odisha operates with public private convergence. It involves regulation and revenue collection, road safety, training, policy, legal issues, etc. The institutional mechanisms for effective administration of road transport include 35 RTOs at regional level, Odisha Road Safety Society and Driving Training Schools/Institutes.

Table 5.2: Length of different types of roads in Odisha, 2017-18

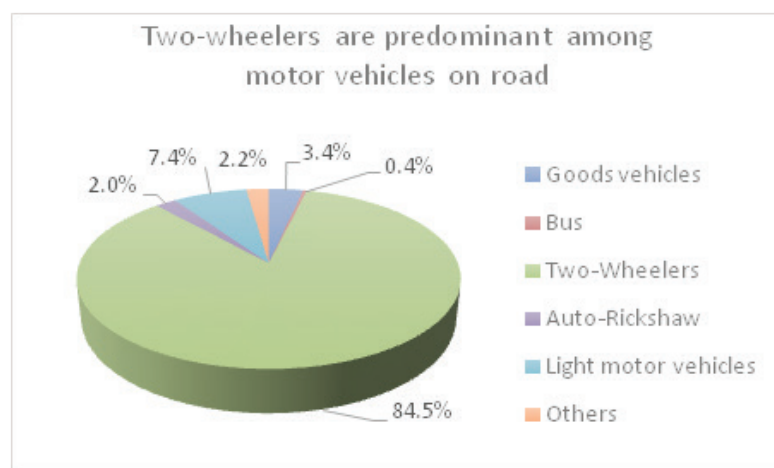
Type of roads	Length (Kms)
National highways	4,848
Express highways	38
State highways	4,105
Urban roads	18,591
Rural roads	43,011
Major district roads	2,812
Other district roads	18,835
GP/PS roads	1,62,476
Forest roads	7,575
Irrigation roads	6,277
GRIDCO roads	88
Total	2,68,656

Source: C.E, NH, C.E R&B, P.R. Dept.

Motor Vehicle Registration

5.5.7 Motor Vehicle (MV) population has grown manifold in Odisha. As on 31 March 2019, the State had 82.89 lakh 'registered' and 69.02 lakh 'on road' vehicles; 8.17 lakh new vehicles were registered during 2018-19 with an annual growth rate of 11% over 2017-18. More than 80% of the MV population on road are 2-wheelers followed by light motor vehicles (7.14%). The predominance of personalised vehicles like two-wheelers, cars, etc. poses a problem for the State in terms of traffic congestion in cities, management, auto pollution, parking and road accident problems.

Figure 5.9 Distribution of motor vehicles in the State (in %)



Source: Office of Transport Commissioner, Odisha

5.5.8 The MV tax components include MV tax, addl. tax, arrear tax, penalty and fees like compounding fees, fees for Driving License (DL), fees for conductor license, registration fees, fees for issue of fitness certificate, permits and miscellaneous fees. MV revenue in Odisha grew by 14.31% in 2018-19, from INR 1,545 crore to INR 1,766 crore, which was less than the growth rate of MV revenue in 2017-18 (25.85%). The MV revenue collected was 98.10% of its target in 2018-19.

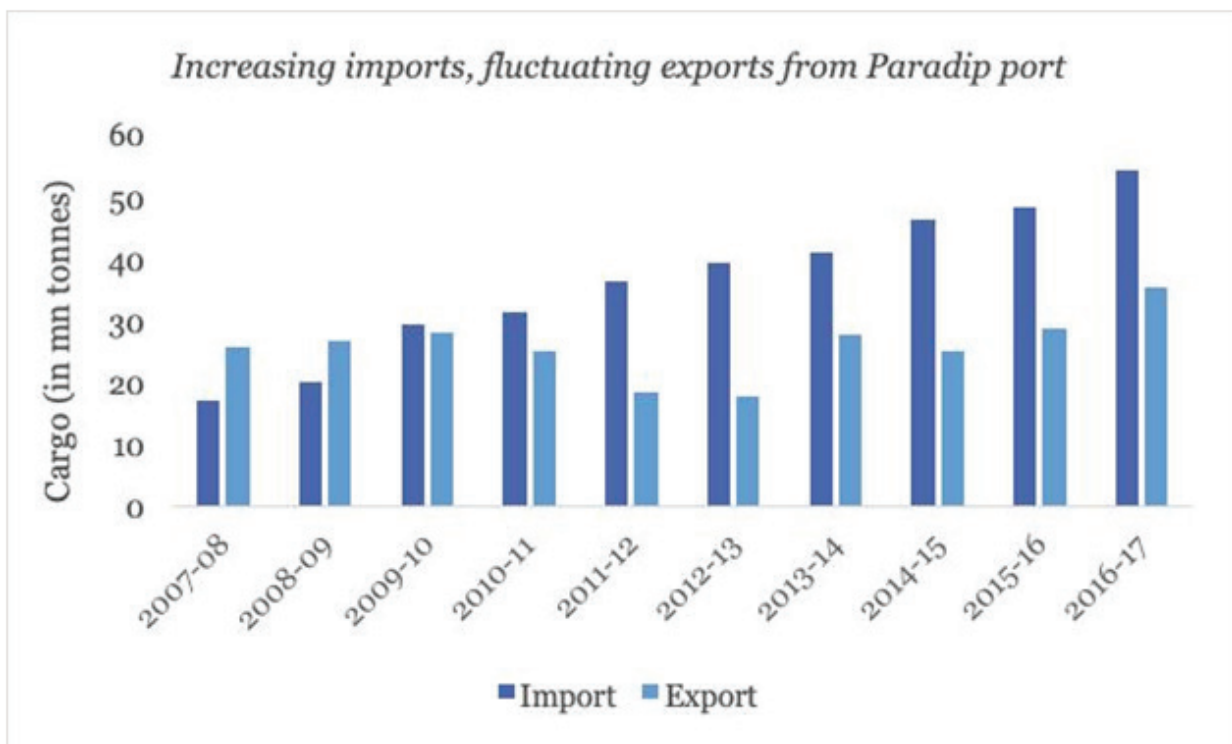
Railway

5.5.9 Railway routes pass through twenty-four districts of the State, excluding Boudh, Deogarh, Kandhamal, Kendrapara, Malkangiri and Nabarangapur. The density of coverage is relatively high in some regions of the State, while central parts remain largely untouched. A large disparity across districts exists. By the end of 2018-19, the State had 2,623 km of railway lines with 301 railway stations and passenger halts and 2,293 kms. broad gauge electrified tracks. During 2018-19, a total of 99.65 million passengers travelled and total revenue of INR 19,088.77 Cr. was collected. Overall, railway coverage is poor in the State and this has hampered the pace of its socio-economic development.

Ports

5.5.10 Odisha's coastal line provides it with a strategic advantage in terms of ease of access of trade via ports. Paradip Port, declared as the 8th major port of India, is the only major port in Odisha. It is the largest port in India in terms of average output per ship-berth-day. The port has 143.44 million tons of cargo handling capacity as of 31 March 2017. During 2018-19, 109.27 million tons of cargo was handled. In the past 10 years, while the volume of imports via the port has increased consistently, exports exhibit a fluctuating trend. The government is undertaking capacity addition projects in the Port, viz. Southern oil jetty, multipurpose clean cargo berth, deep draught coal berth and deep draught iron ore berth on Build-Operate-Transfer (BOT) basis. This is expected to increase cargo handling capacity and volume of exports-imports handled by the port.

Figure 5.10 Cargo handled at Paradip Port in Odisha (in million tonnes)



Source: Paradip Port Trust, Odisha

Other ports

5.5.11 With 480 kms of coastline, Odisha has 14 potential sites for minor ports development. These minor ports are located at Gopalpur, Behuda Muhan and Palur in Ganjam district; Baliharchandi and Astaranga in Puri district; Jatadhar Muhan in Jagatsinghpur district; Inchri, Chandipur, Bahabalpur, Kirtania and Bichitrapur in Balasore district and Dhamra and Chudamani in Bhadrak district. Out of these 14 sites, two non-major ports Dhamara and Gopalpur have been made operational. Three other major ports, i.e., Subarnarekha mouth (Kirtania), Astaranga and riverine ports are in pipeline with Public Private Partnership (PPP) mode.

Inland Water Transport (IWT)

5.5.12 IWT has vast potential but poor network in Odisha. It extends passenger and freight services to people in the absence of road transport and railway services in some areas. Passenger motor launch services are operative in six different water routes in two sectors, i.e., Chandbali and Balugaon sectors. Chandbali sector provides four launch services to Aradi (18kms), to Dhamara-Talachua (35 kms) and to Bhitarkanika (for tourist purpose), while Balugaon sector provides seven launch services to Kalijai (15 kms) and to Krusnaprasadgada (18 kms) and Nuagarah (Astaranga-Kaliakana-Gandakul (20 kms). Jetties/ waiting rooms are constructed in the water routes. During 2017-18, 1.29 lakh passengers moved by IWT and INR 19.11 lakh revenue was collected from fares.

Civil Aviation

5.5.13 The Directorate of Civil Aviation looks after the use and maintenance of the State Government's passenger aircraft and trainer aircrafts, training of student pilots and construction and development of airstrips in the State. There are 19 airstrips across 15 districts of which 12 are owned by the Government of Odisha. There are sixteen helipads in Odisha. Biju Patnaik airport is an international airport in the State connecting Ahmedabad, Surat, Varanasi & Guwahati. At present, this airport provides connectivity to Delhi, Mumbai, Chennai, Kolkata, Bengaluru, Hyderabad, Vizag, Ranchi, Kuala Lumpur and Bangkok. The Airport recorded the highest growth rate in passenger traffic in 2017-18, ferrying 3.24 lakh passengers (growth of 39.4% over the previous year). The revenue earning of the airport has more than doubled from INR 41.47 crore in 2013-14 to INR 93.99 crore in 2017-18.

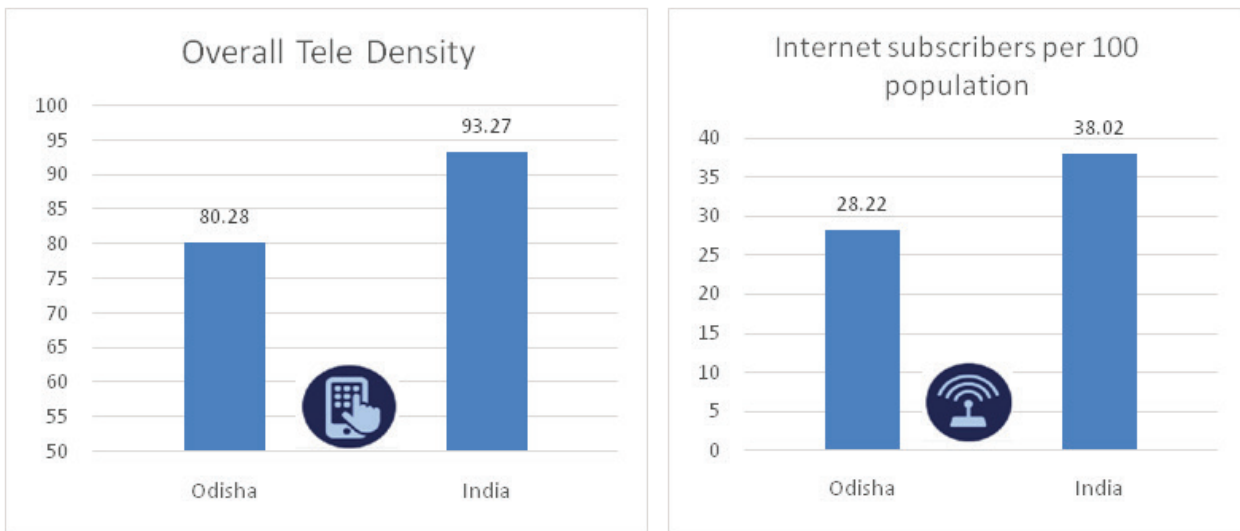
5.6 Telecommunications

5.6.1 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 facilitates online citizen centric services and ensures 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 Government plays a supporting role for increasing mobile connectivity in the state.

5.6.2 The 'communications and services related to broadcasting' sector's contribution to services GVA stood at 4.2% in 2017-18. This has largely remained around 4% in the past seven years. The contribution of the sector to overall output is expected to grow at a high rate of 10.7% in 2018-19, to INR 7,595.6 crores.

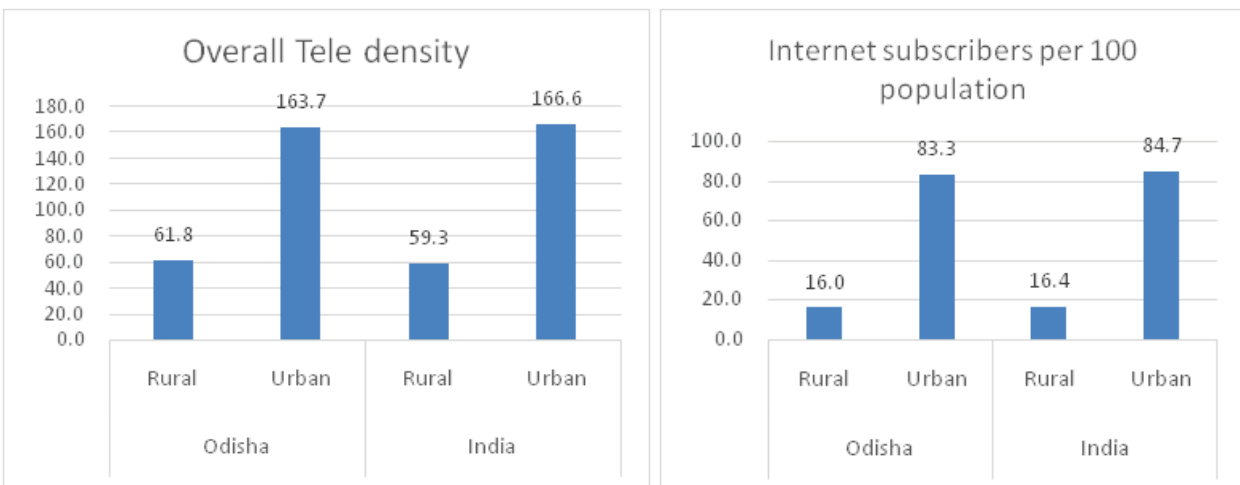
5.6.3 The communications sector is still at a developing stage in the State as inferred by the tele-density and internet subscriber base. The overall Tele-density of Odisha is 80.28, while the national average is 93.27. Similarly, Internet subscribers per 100 population of the State is 28.22 in comparison to the national average of 38.02. In Odisha, Wireless Tele-density is 61.62 in rural areas and 160.95 in Urban areas. In Odisha, the share of wireless subscribers is 99.20% whereas the same of wire line is only 0.80%, which is well compared to national average of 98.12% and 1.28% respectively. Similarly, the Internet subscription per 100 population in Rural areas stands at 16.04 whereas it is 83.28 in case of Urban areas. Thus, there is significant urban-rural difference in the state both for Tele-density and Internet subscription. It is seen that while overall wireless tele-density and internet subscription for Odisha is lower than National level, it is comparable when urban regions are related for both. This implies that in urban regions, the status of telecom infrastructure is adequate and at par with national average. Hence, push for increasing internet services needs to be focused on in rural regions in the State.

Figure 5.11 Telecom indicators: Odisha and India



Source: TRAI, Gol, as on March 2018

Figure 5.12 Telecom indicators: Urban and rural regions



Source: TRAI, Gol, as on March 2018

Table 5.3 Telecommunication status of Odisha and India as on 31 March 2018

Indicator	Odisha			India		
	Total	Rural	Urban	Total	Rural	Urban
Wireless Tele-density (%)	79.64	61.63	160.98	91.51	58.87	161.91
Wireline Tele-density (%)	0.64	0.18	2.75	1.76	0.38	4.73
Overall Tele-density (%)	80.28	61.81	163.73	93.27	59.25	166.64
Total subscribers (in millions)	34.65	21.84	12.81	1211.80	525.87	685.93
Wireless subscribers (in millions)	34.37	21.78	12.60	1188.99	522.49	666.50
Wireline subscribers (in millions)	0.28	0.06	0.22	22.81	3.38	19.43
Total Internet subscribers (millions)	12.20	5.67	6.54	493.96	145.83	348.13
Broadband subscribers (millions)	9.14	3.73	5.40	412.60	106.52	306.08
Narrowband subscribers (millions)	3.06	1.93	1.13	81.35	39.30	42.05
Internet subscribers per 100 population	28.22	16.04	83.28	38.02	16.41	84.74

Source: TRAI, GoI, as on March 2018

5.6.4 A survey was conducted by the Department of Telecommunication, Government of India involving Block Level Officers during 2016-2017 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.

5.6.5 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 for obtaining RoW permission in a given time frame. Telecom Service Providers/Infrastructure Providers are yet to come forward to install telcom infrastructure in Gajapati, Kalahandi, Kandhamal, Malkangiri, Koraput and Rayagada villages of the State.

5.6.6 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.

5.6.7 Under LWE Phase-II, on 23.5.2018, the Union Cabinet has approved to set up 483 number of Mobile connectivity based Towers (Voice-2G +data-4G) in LWE affected 18 districts of Odisha including other LWE affected States. The projects are under progress.

5.7 Financial Services

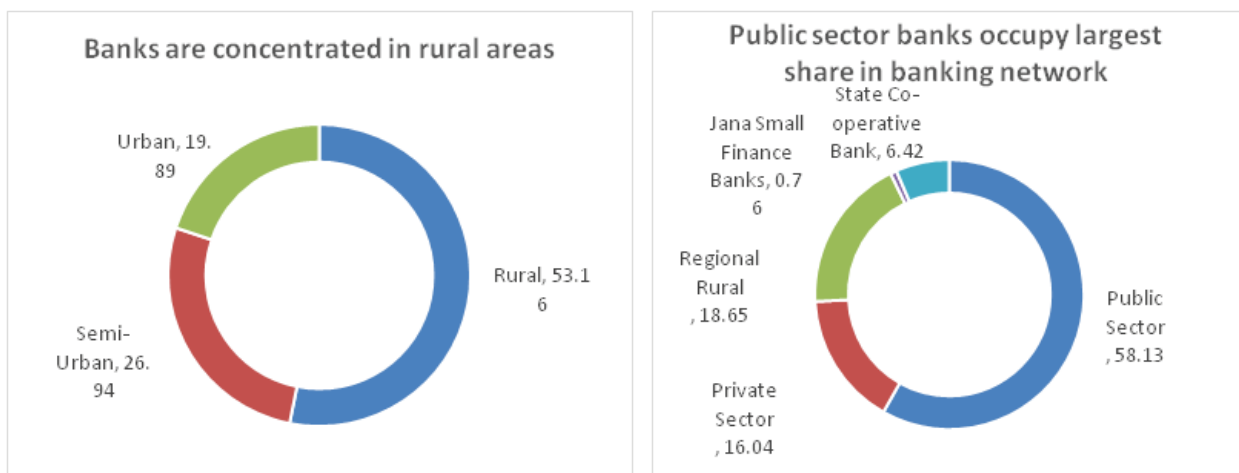
5.7.1 Financial services, viz. banking (savings, deposit and credit), insurance etc. play the role of a catalyst in the growth of the economy through provision of avenues for investment and risk management. As the economy grows, with increasing per capita incomes and wealth, the demand for financial services increases as well. In Odisha, financial services account for a share of around 8.6% in the GVA arising from services sector (2018-19). The growth rate of the sub-sector was increased tremendously during 2017-18 and 2018-19, i.e. 18.91% and 13.56% respectively.

5.7.2 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 network not only promotes financial inclusion, but also enables diversification of economic activities and productive investment. It shoulders the responsibility for mobilising public savings.

I. Banking Network in the state

5.7.3 Odisha has 20 public sector banks, 17 private sector banks, 2 rural banks, 2 Jana small finance banks and 1 state cooperative bank with a total of 5,293 branches as of March 2019. Public sector bank branches constitute 58% of total branches. The average population served by a bank branch is 8,562. 53% of total bank branches are located in rural areas of the State. Bank branches distribution is rather skewed as 53% of bank branches serve about 82% of total population living in rural areas while 47% of bank branches serve only 18% population. During 2018-19, 109 new branches of banks (15 in public sector, 54 in private sector, 2 in co-operative sector and 38 in Jana small finance bank sector) have been opened in the State.

Figure 5.13 Distribution of banks by region and category (in %) in Odisha



Source: SLBC (155th issue), March 2019

II. Bank deposits, advances and credit deposit ratio

5.7.4 Growth in bank deposits and advances is an indication of flow of credit in the economy and Consumer demand. Total deposits of all banks in Odisha grew by 14.14% in 2018-19 over 2017-18. Advances sanctioned and utilised grew by a higher rate of 13.60%, indicative of higher demand for credit in the economy. More than 96% of total bank deposits were with commercial banks.

5.7.5 Agriculture, Minority Community, Weaker sections, Housing are the leading sub-sectors in terms of very high growth of bank advances in 2018-19. Growth rate of priority sub-sectors such as Agriculture (16.6%), MSME (9.39%), Minority Community (67.47%), Weaker sections (21.36%), Housing (20.23%) was higher than that of total advances. Out of total advances by banks in the State, 81.01% was sanctioned and utilised within the State. Priority sector advances were 62.70% of the total advances, way above the benchmark rate of 40%. This indicates the compliance of banks with priority sector lending norms, as well as demand from the agriculture and MSME sector, education, women and housing loans for credit.

Table 5.4 Major banking indicators in Odisha (in INR crore)

Indicators	2017-18	2018-19	Growth (in %)
Total deposit	2,75,511.10	3,14,478.16	14.14
Total advance utilised	1,92,113.70	2,06,786.24	7.64
Total advance sanctioned and utilised in the State	1,47,493.30	1,67,544.90	13.59
Priority sector advance	91,945.75	1,05,049.79	14.25
Agriculture advance	47,431.77	55,310.21	16.61
MSME advance whi	35,313.40	38,627.53	9.39
Education loan	2,018.66	1,961.19	(-)2.85
Housing loan	11951.49	14,369.52	20.23
Advance to minority community	3074.19	5,148.34	67.47
Advance to weaker section	25972.39	31,519.83	21.36

Source: SLBC (155th issue), March 2019

5.7.6 Table 5.5 shows status on various financial inclusion indicators in Odisha. It can be observed that as compared with the performance in 2017-18, the accessibility of formal financial services in terms of ATMs per lakh population or bank branches has very marginally improved. Specifically, the extent of credit given by Scheduled Commercial Banks per person has enhanced from Rs. 24,062 in 2018 to Rs, 42,695 in 2018-19. The trend of financial inclusion in other indicators has shown upward movement

Table 5.5: Key indicators of financial inclusion

Indicators	Odisha	
	2018	2019
Number of ATMs per lakh population	16.65	14.9
Number of Bank Branches per lakh population	11.77 (2017)	11.68
Number of General Insurance offices per lakh population	0.8	NA
Proportion of Credit Financed by Banks to SHGs	0.44 (2016)	0.63
Number of Post offices per lakh population	19.57	18.13
Total Credit by SCBs per person (In Rs.)	24,062	42,695
Number of life insurance policies per lakh population	3092	NA
Total deposits in RRBs per person (In Rs.)	3860	3926
Advance to weaker sections per person (In Rs.)	5183	6955

Source: RBI, IRDA, UBI, SLBC (155th Issue, March, 2019)

5.7.7 Priority sector lending in the State was well above their respective benchmark rates. For an inclusive development of economy, it is essential that credit flow and investment be disbursed uniformly and not be 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% of their loans under priority sector lending, which comprises of advances to agriculture, MSME, education, housing and weaker sections of the society. In the case of Odisha, banks are compliant with the norms for lending in respective sectors, as is evident from the figure below. Credit-Deposit (CD) ratio is the

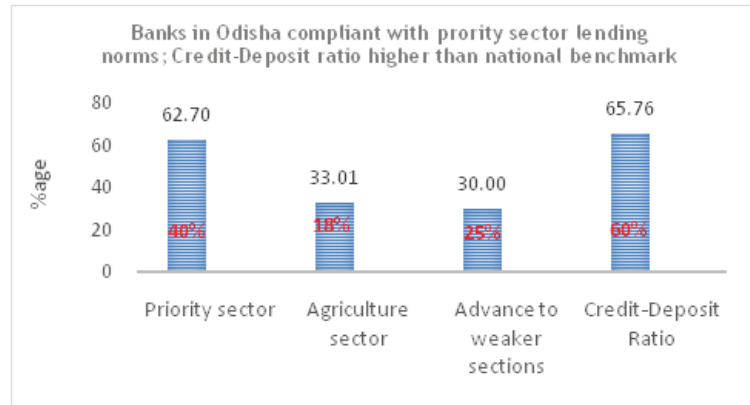
proportion of loan created by banks from deposits it receives. High ratio indicates banks are generating more credit from its deposits and vice versa. Credit deposit ratio (excluding advance sanctioned in other state and utilised in our state) is 51.83% which is below the National Norm of Benchmark CD ratio of 60%.

5.7.8 Public sector banks play a pivotal role in the banking sector in the State, accounting for the larger proportion of bank branches (58.13%) as well as majority share (72.40%) of total deposits and advances (65.78%). Between commercial banks and cooperative banks, share of the latter in total deposit is very small (3.33%). This indicates the increasingly important role of commercial banks in credit flow in the State.

III. Non-Performing Asset (NPA)

5.7.9 Public sector banks in Odisha have higher NPAs levels than private sector banks, similar to the trend seen at all-India levels. An asset including a leased asset becomes non-performing when it ceases to generate income for the bank. Share of non-performing assets in total assets in Odisha, as on March 2018, is given in the Figure 5.15.

Figure 5.14 Priority sector lending and credit-deposit ratio of banks in Odisha, 2018-19



Note: 1) Figures for priority sector and agriculture sector are as percentage of total advances, 2) Figure for advances to weaker sections is as percentage of priority sector advances, 3) Figures in boxes give the benchmark for the indicators

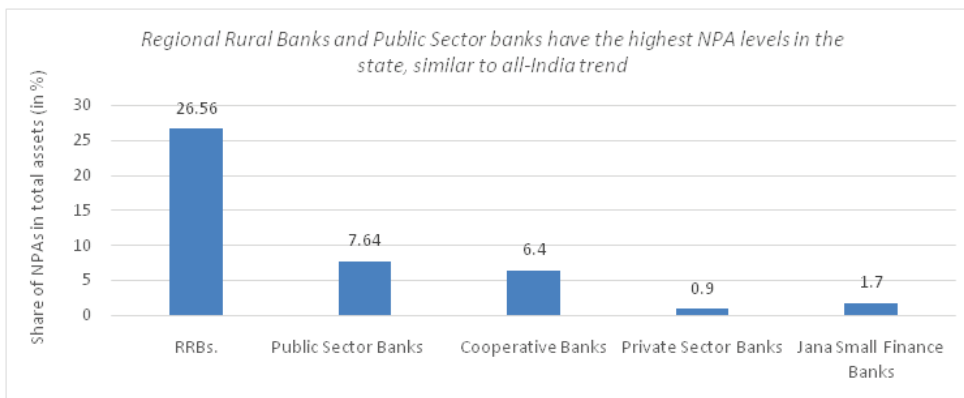
Source: SLBC (155th issue), March 2019

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Figure 5.15 Share of non-performing assets in total assets of banks, by type



Source: SLBC (155th issue), March 2019

5.7.10 During 2018-19, the overall gross NPA and overdue amounts were 6.49% and 27.77% for the banks in the State, which is significantly less as compared to last year figures i.e. 10.60% and 36.70% and still alarming. With regard to government-sponsored schemes, the NPA and overdue percentages are even higher. RRBs had the highest NPA percentage of 26.56. Within the sector, education loan and agriculture term loan had the highest NPAs. The NPA percentage ranging between 3%-16% and overdue ranging between 28%-43% for all major schemes are surely a matter of critical concern. NPA and overdue badly affect the productive recycling of funds. Introduction of a dynamic recovery mechanism will promote reinvestment and ensure better recycling of funds by banks largely. Details are given in Table 5.6.

Table 5.6 Sector wise non-performing assets and overdue as on 31 March 2018

Sector	NPA (%)	Overdue (%)
Short term crop loan	9.66	25.29
Agricultural term loan	11.72	42.52
Agriculture allied	10.63	41.91
Total agriculture	10.23	28.35
MSME sector	7.63	32.83
Education loan	16.23	42.93
Housing loan	3.95	18.19
Total priority sector	8.80	28.90
Total advance	6.49	27.77

Source: SLBC (155th issue), March 2019

IV. Cooperatives

5.7.11 Odisha has a well-structured cooperative sector comprising of three-tier institutional networks, namely short-term agricultural cooperative credit, long-term agricultural co-operative credit and non-agricultural credit cooperatives which play a pivotal role in the dispensation of farm and non-farm credit in the State.

V. Short-term agricultural credit

5.7.12 Even as commercial banks hold close to 97% share in disbursement of total advances with the cooperative sector accounting for the remaining small share, the role is reversed in the case of agricultural credit. Market share of cooperatives in short-term agricultural credit sector is about 68%, with commercial banks accounting for the smaller share of 32%. Short term Crop loan in 2018-19 was INR 12810.33 crore financed to 33.62 members with growth rate of 16.4% over 2017-18. Between 2010-11 and 2018-19, the short term crop loan dispensation has become more than trebled. The per capita crop loan increased from about INR 17,000 to INR 38,000.

5.7.13 The short-term agricultural credit sector provides financial credit support for agricultural operations including purchase of agricultural inputs like certified high yielding varieties of seeds, fertilisers, pesticides and agricultural implements. It also renders assistance for storage and marketing of agricultural produce and helps members to get remunerative prices for their produce. The State has 2,707 Primary Agriculture Cooperative Societies (PACS) including 214 Large sized Adivasi Multi-Purpose Cooperative Societies (LAMPCS) and 6 Farmers' Service Cooperative Societies (FSCS), 17 District Central Cooperative Banks in the middle-tier with 291 agricultural financing branches with the Odisha State Cooperative Bank (OSCB) at the apex level. The network of PACS, LAMPCS and FSCS covers almost all the 6801 GPs of the State for providing easy access of credit to small, marginal and marginalised sections of society.

VI. Agricultural Term Loan

5.7.14 The co-operative credit sector provides term loans, also called investment credit, for agricultural and allied purposes, capital investment, asset creation, land improvement, farm mechanisation, plantations, horticulture and other activities. During 2018-19, a sum of INR 175.01 crore has been provided as agricultural term loan to 19,981 members, which is 2.5% of total Ag. Term loan i.e. INR 7561.01 crore.

VII. Financial Inclusion

5.7.15 The essence of financial inclusion is to ensure delivery of financial services, which include bank account for savings and transaction purposes, 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 this 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. Further, by bringing low-income groups within the perimeter of formal banking sector, financial inclusion protects their financial wealth and other resources in exigent/demanding circumstances.

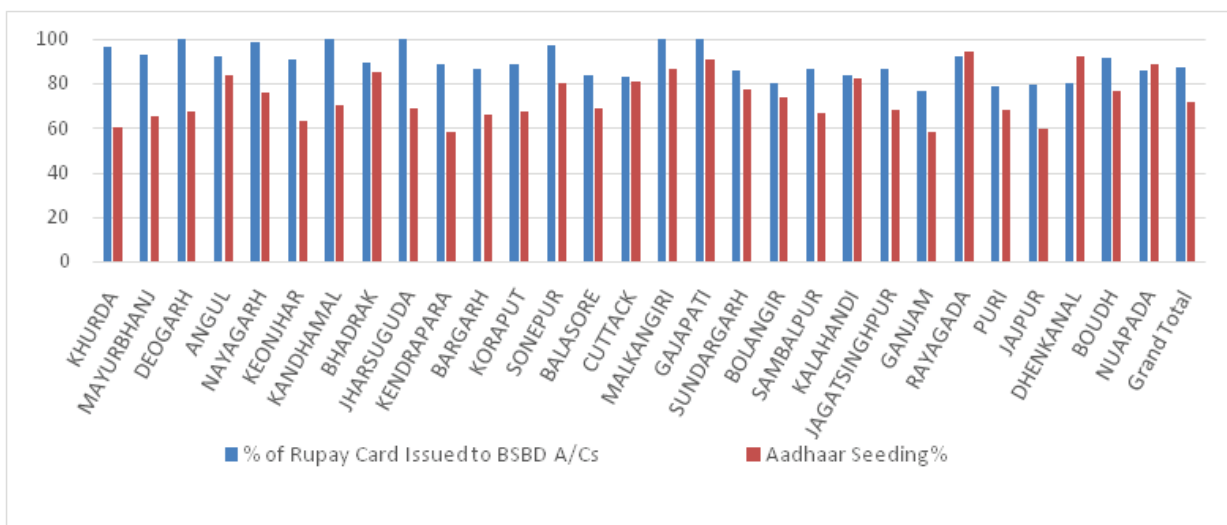
5.7.16 This section presents details of progress of schemes targeted towards increasing access to financial services in the State.

Access to banking services

5.7.17 As per Census 2011, only 45% of households in Odisha availed of banking services, as compared to 58.7% at the national level. The push towards financial inclusion in the form of Jan Dhan Yojana hastled to significant progress. As of March 2019, more than 1.32 crore bank accounts have been opened under the Jan Dhan Yojana in Odisha. These were primarily concentrated in rural areas (92.77 lakh accounts as compared to around 39.67 lakh accounts in urban areas). In all, 1.11 crore accounts were opened in public sector banks, followed by sponsored Regional Rural Banks (RRBs) and private sector banks.

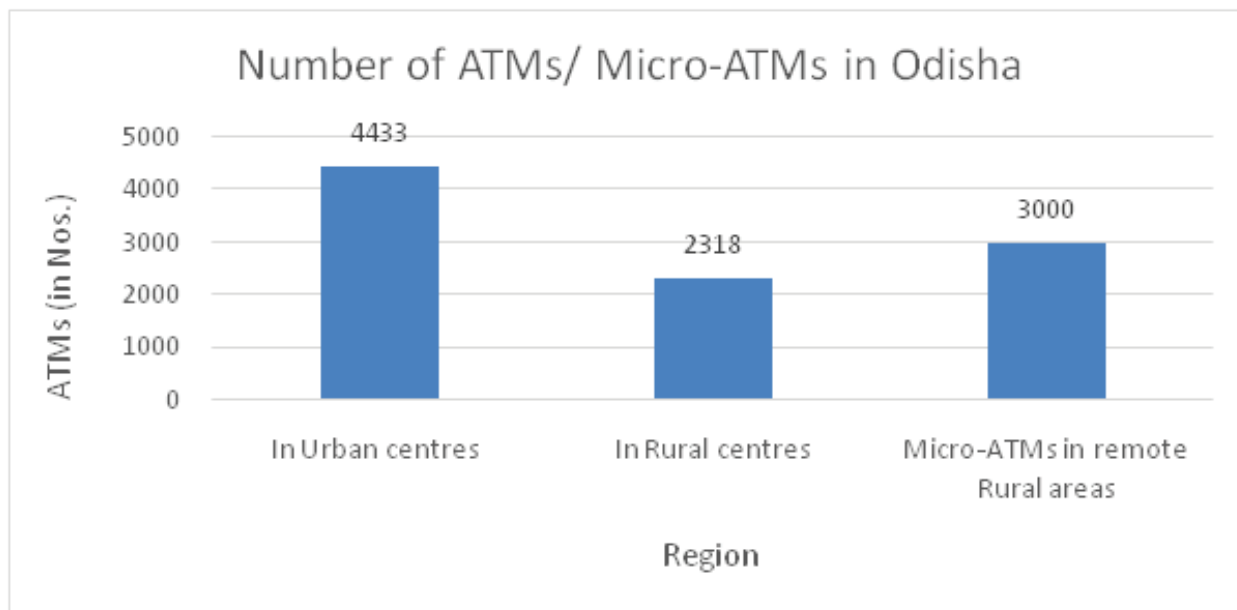
5.7.18 District-wise analysis reveals that out of the 1.32 crore Basic Savings Bank Deposit accounts opened, Mayurbhanj (8.07%), Ganjam (6.62%) and Khurda (5.96%) were the top three districts. On an average, Rupay cards have been issued for more than 87% of Basic Savings Bank Deposits (BSBD) Accounts and Aadhaar seeding done for 71.95%.

Figure 5.16 Status of Aadhaar seeding and issuance of Rupay cards



Source: State-Level Bank Committee (SLBC) (155th issue), March 2019

Figure 5.17 Presence of ATMs in rural and urban Odisha



Source: SLBC, 155th Issue, March, 2019 & Co-operation Deptt.

5.7.19 Even though 53% of bank branches are located in rural areas, the availability of ATMs is skewed towards urban/semi-urban areas. 4,433 ATMs are present in urban centres in the State, as compared to 2,318 in rural areas. The present status of branch and ATM opening in the State indicates that banks are yet to give due importance for installation of ATM at rural branches. Besides, under the financial assistance from NABARD, 3,000 Micro-ATMs were planned to be installed by 31st Oct., 2019 in PACS and LAMPSCS to provide basic banking services to the Account holders of DCCS in remote localities where banking services are not available.

5.7.20 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 24.05.2018, 12 Brick and Mortar Branches and 65 Business Correspondent (BC)/Customer Service Points (CSP) have been opened in said unbanked rural centres. Similarly, out of 1,474 unbanked GPs, 1,058 have at least one banking outlet as on 31 March 2018. Out of 2,268 uncovered villages, 2197 BCs have been deployed by 23 SCBs as on 31.5.19. Further, 8 numbers of Brick and Mortar Branches/outlets have been opened in 5 Aspirational Districts as on 13.6.2019.

5.7.21 As on 31.3.2019, 7284 BC locations have been set up in 7,284 villages and also 45,962 outlets have been opened in 45,888 allotted villages by 24 SCBs for providing financial services in every village having population below 2,000.

5.7.22 Digital connectivity is necessary to ensure financial inclusion. As on 28.6.2019, out of total 3991 GPs & BHQs, 3758 GPs have been connected through Optical Fibre Cable under BharatNet Phase-I covering 18 districts.

Increasing access to finance through Self Help Groups

5.7.23 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. 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), Uttkal Gramya Bank (UGB) and other banks for financial inclusion. The agreements assume significance as around 70% 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 4,000 un-banked GPs and entire State will be covered under the financial inclusion plan. Government is providing interest subventions to Women-SHG in the State (under OLM/NULM/NRLM/Mission Shakti), whose loan accounts are regular, as a result of which effective interest was charged @ 1% upto 31.3.2019, which was very nominal with an aim to arrest NPA to a great extent.

5.7.24 In the meantime, the State Govt. has renamed the Interest Subvention scheme as “Mission Shakti Loan”-interest free loan for WSHGs and approved to provide interest free loans i.e at 0% per annum for WSHGs, for loans upto Rs.3 lakh, effective from 1st April 2019 to accelerate the SHG- Bank linkage programme in the state and to further livelihood promotion of Women SHGs. During 2018-19, totally, 1,31,027 SHGs have been credit linked with banks, availing a total credit of Rs,1,98,270.87 lakh.

5.7.25 Odisha received the National Award for outstanding performance in Financial Inclusion under DAY-NRULM in 2018. Further, Gajapati District received cash award from NITI AYOOG for best performance in Financial Inclusion among Aspirational Districts of India.

5.7.26 As on 31st March,2019, NABARD has extended financial grant of Rs.1288.11 lakh for creating awareness on financial inclusion. On supply side, NABARD has been providing financial support to scheduled commercial banks(SCB),RRBs and Rural co-operative banks(SCB 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 etc. to improve digital transactions. On demand side, financial support has been provided to banks for Mobile Demonstration Van for conducting Financial and Digital literacy camps in rural areas to create awareness about financial and digital literacy among people.

Table 5.7: Government policies on banking sector

Initiative	Objective	Progress in brief
Pradhan Mantri Surakhya Bima Yojana (PMBSY)	Covers accidental insurance of INR 2 Lakhs for death/full disability for 18 to 70 years with a yearly premium of INR 12.	By the end of March 2019, 43.69 lakh persons were enrolled in the 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 INR 330 for coverage of INR 2 lakhs.	By the end of March 2019, 11.45 lakh persons 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.	By the end of March 2019, 4.33 lakh persons were enrolled in the scheme.
Pradhan Mantri Fasal Bima Yojana (PMFBY)	Covers loanee farmers' on a compulsory basis and non-loanee farmers on a voluntary basis for loans to crops due to non-preventable natural risk	During 2018-19, 18.17 lakh loanee and 2.85 lakh non-loanee farmers were covered with area coverage of 14.94 lakh hectares and insured amount of INR 8,797.53 cr.

Source: State-Level Bank Committee (SLBC) (155th issue), March 2019

Human Development and Quality of Life

Human development is the overall process of enlarging people’s freedom, opportunities and enhancing their well-being. Human development is a much broader concept beyond economic wellbeing where the ordinary people must be able to decide who to be, what to do, and how to live. Central approach towards human development is the capabilities. Capabilities are what people can do and what they can become and are the equipment for individuals to pursue a life they value. An individual’s capabilities are expanded (or constrained) by our own efforts and by the institutions and conditions of our society. The Government of Odisha is committed towards the development of capabilities of people of the state including development of social sector and ensuring quality of life.

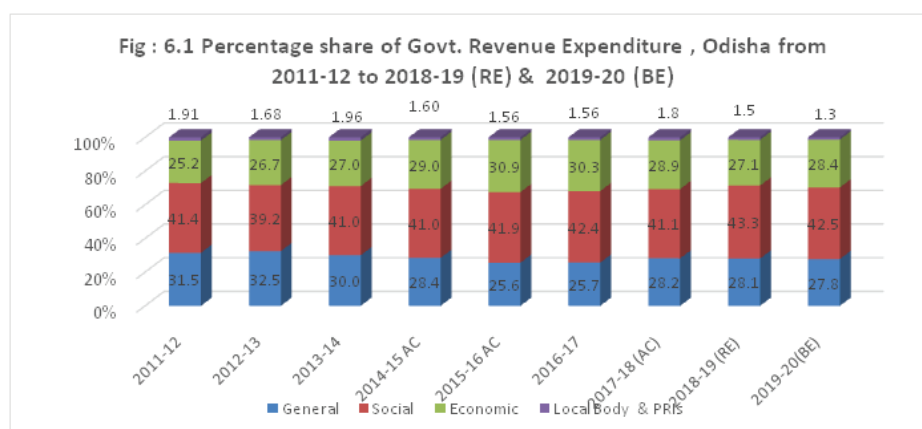
6.1 Introduction

6.1.1 Human development is the study of people that states how and why people from various groups change or remain same over periods of time. It is a way to understand trajectory of overall progress of human life. In economic sense the core to this understanding is capacity approach. As per UNDP definition it is “the process of enlarging people’s choices,” where choices allow people to “lead a long and healthy life, to be educated, to enjoy a decent standard of living,” as well as “political freedom, other guaranteed human rights and various ingredients of self-respect.” The critical elements of human development are long and healthy life, access to knowledge, decent standard of living, gender security, human security, environmental sustainability and political and community participation. In this chapter, an attempt has been made to assess state’s performance on human development and quality of life and various interventions undertaken by the State Government to enrich the human development.

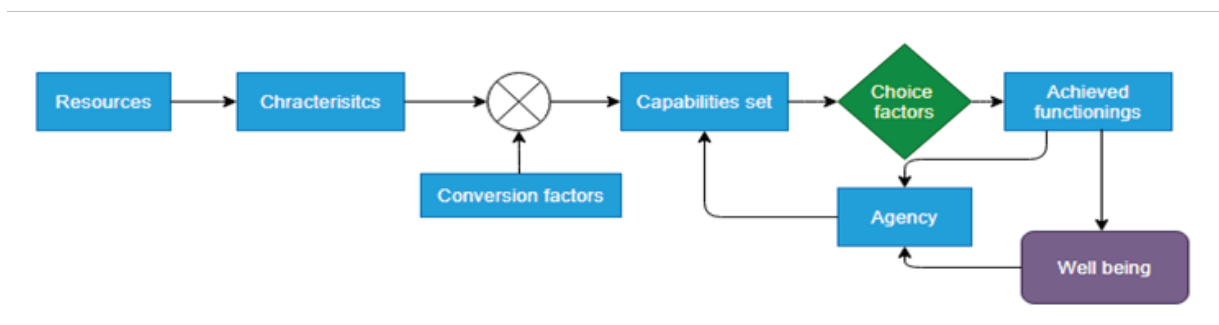
6.2 Resources for Human Resources Development

6.2.1 Government of Odisha has maintained its share of social spending in overall expenditure.

As per 2019-20 Budget Estimates (BE), social sector spending was 42.5% of total expenditure. Social sector expenditure comprises expenditure for education, health, housing, urban and rural development, welfare of SC/STs, among others.



6.2.2 A component wise disaggregation of major sectors shows that the focus on public health and water supply & sanitation has increased overtime. For instance, combined expenditure on medical and public health and family welfare increased from 3.3% to 5.5% of total expenditure in the past eight years. Similarly, expenditure on water supply & sanitation has increased to 4.1% in 2018-19 (RE) from 1.7% in 2011-12.



Box 1: Sen's Capability Approach

Capability Approach is a conceptual framework first articulated by Indian economist and philosopher Amartya Sen. The framework has been seminal contribution towards understanding Human Development. It has been used extensively in the context of human development, for example, by the United Nations Development Programme, as an elaborate and deeper alternative to regular economic indicators such as growth in GDP per capita. The Capability approach directly focusses on quality of life of individuals. The quality of life is analysed in terms of core concepts of functioning and capabilities.

Functioning are states of 'being and doing', for example having shelter, being well-nourished, etc. They define state of wellbeing. They are different from commodities used to achieve that state (a famous example quoted by Sen himself is 'bicycling' is distinguishable from 'possessing a bike'). Capability refers to the set of valuable functioning that a person has effective access to. Thus, a person's capability represents the effective freedom of an individual to choose between different functioning combinations - between different kinds of life - that person has reason to value.

The usefulness of resources as input lies in the things that it allows individuals to do. Sen's understanding of concept of human development argues development as an outcome of lives led and by individuals and freedoms that they enjoy. Thus, human development is defined as the eradication of the major hindrances to individual freedom. Common of these hindrances are poverty, tyranny, poor economic opportunities and others. In this way, the expansion of freedom is viewed both as a primary end and the principal means for development. Human development is achieved when people have greater freedoms (capabilities). These substantive freedoms, according to Sen are "seen in the form of individual capabilities to do things that a person has reason to value". The freedom that we enjoy is inescapably qualified and constrained by the social, political, and economic opportunities that are valuable to individuals. Thus, maximization of choices for individuals to live a life they value is development.

6.3 Decent Standard of Living

6.3.1 Odisha Government has managed to improve its Per-Capita Income (PCI) ranking across states. In 2019-20, Odisha's Per-capita Income is INR 1,01,587 (Advance Estimates) up from INR 95,164 in 2018-19. Since 2011-12, average growth in per-capita income in Odisha has been 9.8% annually. This has contributed significantly to providing decent standard of living in the State. Rising per capita income is a prerequisite to have a decent standard of living. As per World Bank study (2016) consumption inequality in the state is lower than national average. Not only that, the study confirms that the poverty reduction is faster in the state in comparison to many low income states. Faster poverty reduction with lower consumption inequality reflects a healthy development.

6.4 Health and human development

6.4.1 During last one decades, Government of Odisha has taken several reform measures for strengthening delivery of health care services in the state through outcome based participatory bottom up planning process with additional resource allocation through National Health Mission (NHM) and more resource allocation under state budget to address local health issues and needs of the vulnerable communities, backward classes including SC and ST communities of the state. Due to effective policy formulation, significant improvement has been observed in many key health indicators which has been reported in various National Health Surveys. Human resource management, infrastructure, supply chain management and e-governance through 5T initiatives are also played a vital role in improvement of health care in Odisha. The improvements have been the outcome of concerted and continued efforts of the State Government towards establishing more efficient systems through effective planning. Faced with the historical burden of poverty and backwardness, Odisha has made significant strides in improving health outcomes through particular emphasis on health sector reforms.

6.4.2 Life expectancy at birth in Odisha is comparable at the national level. There is a significant improvement in life expectancy at birth from 64.8 years to 67.6 years (one full year) during the period 2012-16 from the period 2009-2013. Female life expectancy is higher than male which follows the national trend. Life expectancy of Odisha is better than many other states such as Madhya Pradesh, Uttar Pradesh, Jharkhand, Chhattisgarh and Assam. This is a multi-dimensional phenomena demanding multipronged approach to improve it over a period (Table 6.1).

Table-6.1: Life Expectancy, Odisha vrs India

Indicator	Odisha	India
Life Expectancy, 2012-16	67.6	68.7
Life Expectancy (Male), 2012-16	66.2	67.4
Life Expectancy (Female), 2012-16	69.1	70.4

Source: SRS, Census of India.

6.4.3 As per NFHS, 2015-16, Infant Mortality Rate (IMR) in Odisha is 40 per 1,000 live births that is comparable to national average of 41. This is indeed an achievement for the State given the high rates of IMR in late 1990s as compared to India. Several health initiatives by the State like IMR Mission in the year 2001, followed by Nabajyoti scheme in 2004 had focused on reduction of IMR at an accelerated rate. In addition to these, the State has devised a special strategy in the year 2015-16 for accelerating the reduction of IMR with a target to achieve 30 by 2020. The other key health indicators in which Odisha fared better compared to all India average is given in Table-6.2

Table-6.2: Key Health Indicators: Odisha vrs India

Indicators	Odisha (NFHS-2015-16)	India (NFHS(2015-16)
IMR	40	41
U5 Mortality	48	50
Use of Family Planning Method (Any method (%))	57.3	53.5
Mother who had full antenatal care (%)	23	21
Institutional birth (%)	85.4	78.9
Children age(12-23 months) fully immunized	78.6	62.0
Children under 5 who are stunted (%)	34.1	38.4
Children under 5 who are wasted (%)	20.4	21.0
Children under 5 who are underweight (%)	34.4	35.8

6.4.4 Another indicator of child well-being, the under-five mortality rate of the State as per the latest data (NFHS,2015-16) stands at 48 per 1,000 live births, decline from 43 in 2005-06. It is better than all India point decline from 74.0 to 50 during the said period. These encouraging achievements may be attributed to enabling policies, programmes and sustained efforts made by the State Government over the last decade.

6.4.5 The state's performance in reduction of IMR and under 5 mortality rate is a result of multiple state programmes targeted at improving women's nutrition, access to healthcare facilities, institutional births, post-natal care, etc. Under the Reproductive Maternal, Neonatal, Child and Adolescent (RMNCH+A). The state has been consistent in its efforts for reducing IMR through different strategies at community as well as facility level. A few of the major interventions, which contributed to reduction in IMR are as follows:

6.4.6 The quantum of jump in proportion of institutional births may be attributed to effective implementation of Mamta, JSY, JSSK, free drugs schemes, 108/102 ambulance services and establishment of maternity waiting homes, operationalization of 24x7 delivery points, First Referral Units (FRUs), blood storage units at CHC level and capacity building of service providers and overall improvement in quality of care at public health facilities. Moreover, active participation of ASHAs in every village has bridged the gaps between community and service providers for utilization of public health facilities and increased institutional deliveries. Other interventions have also been launched by the State Government of Odisha to address the demand for provisioning of health services to populates of Odisha. The summary of all such interventions has been presented in the figure.

Village Health and Nutrition Day (VHND) is organised once in a month in every Anganwadi Centre with joint effort of ANM, AWW and ASHA. The VHND provides quality ante-natal and post-natal care services for expecting and lactating mothers, monitoring growth of child development where services like general health check-ups.

Health care facilities

Delivery points and First Referral Units (FRUs) are strengthened for basic delivery services and secondary care services for mother and children by providing services through critical care units like NCU/NBSU/OT with Caesarean Section (CS) facilities and blood transfusion facilities at FRUs. The FRUs function with specialised manpower for addressing maternal, neonatal and Under 5 mortality factors.

Post-natal care

Janani Sishu Surakshya Karyakram (JSSK) assures cashless services to pregnant women, postnatal women upto six weeks after delivery and sick infants up to one year in government health institutions in both rural and urban areas.

New born stabilization units (NBSUs) & Sick New Born Care Units (SNCU)

The State Government is committed to reducing the IMR in the state by providing health services to all, with special focus on people living in difficult areas, through implementation of various initiatives, programmes and related activities for groups. With these multi-pronged efforts, the State targets to reach the goal of reduction of IMR under 30 by the year 2020.

Interventions in the health sector undertaken by Government of Odisha

Sl.No.	Intervention	Brief description
Major Maternal Health Interventions		
1.	Janani Surakya Yojana (JSY)	Total 5,996,494 number of beneficiaries benefitted under JSY (from 2005-06 till March 2018) and out of this since last five years 2,309,713 got JSY benefits. Due to JSY the institutional delivery has increased from 28.8% in 2005-06 to 85% in 2015-16 as per NFHS-4. During 2018-19, another 4.75 lakh pregnant women got JSY benefits.
2.	Janani Shisu Surakshya Karyakram (JSSK)	This programme was launched in November 2011 which provides free treatment to all pregnant women and sick newborn and infants (upto 1 year) through implementation of Janani Shisu Surakshya Karyakrama at public health facilities. In last five years (since 2013-14) 25,34,365 number of pregnant woman and 4,27,674 sick children have been benefitted. During 2018-19, 4.89 lakh pregnant women and 1.34 lakh sick children got benefit.
3.	Delivery points	State has target of 1,190 delivery points of which 652 institutions are functional and steps have been taken for functionalizing remaining DPs.
4.	First Referral Unit (FRU)	86 hospitals are functioning as FRU (L3) institutions out of 95 for providing Comprehensive Emergency Obstetric care including C-Section.
5.	Skilled Attendant at Birth (SAB)	During the year 2017-18 (Till-Feb 2018), 67 HW(F) and LHV, 205 Staff Nurses and 2 AYUSH doctors were trained in SAB and till date total 7,481 HW(F) and LHV, 4,447 Staff Nurses and 1,559 AYUSH doctors have been trained and are providing services.
6.	Safe abortion care services	Out of 439 targeted institutions, 295 facilities are in readiness for providing CAC service in the state. During 2017-18, up to December 2017, 15,442 numbers of MTPs have been conducted in public facilities and 911 in private facilities. Since last five years a cumulative 1,04,419 safe abortions have been conducted so far.
7.	Village Health Sanitation and Nutrition Day	Fixed day health and Nutrition day (VHSND) is being organized every Tuesday / Friday at village Anganwadi Centers. So far, 5,11,022 VHSND sessions held out of 5,22,772 planned (98%) during 2017-18 (up to Mar 2018). Since last five years 23,48,694 VHSND sessions have been held in all 30 districts and 2.4 crore ANC/PNC check-ups done. In 2018-19, 98% VHSND sessions held against planned.
8.	Standardization of OT and Labor room	State is taking steps for standardizing Labor room and OT as per MNH tool kit. Further under DAKSHATA programme, 18 districts are given focused attention for improving infrastructure and practice in labor room.
9.	Maternity Waiting Homes	These Maa Gruha are established near delivery points to accommodate the expected delivery cases from difficult geographical pockets at least before 7 -10 days of Expected Date of Delivery for having safe institutional delivery. So far 64 MWH are operational out of 73 targeted and 52,811 pregnant women benefitted. Till 2018-19, 81 MWHs got operationalized
10.	Initiatives for Anaemia Control	IFA and Calcium Supplementation - About 9 lakh Pregnant women covered annually. Iron sucrose and Blood transfusion services- made available at Institution level for pregnant women with severe anemia. One-time de-worming of all pregnant woman ensured during pregnancy in second trimester.
11.	Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)	This programme was started in November 2016 which focused on screening of antenatal cases by doctor, preferably O&G specialist, at least once during 2nd or 3rd trimester. This activity is implemented on 9th of every month on fixed day basis in CHC and above facilities. The prime objective of the programme is to screen for high risk pregnancies and initiate its management as appropriate. So far 2,51,121 nos. of antenatal cases have been screened and 17,461 high risk pregnancies detected. Till Mar 2019, 4.67 lakh anti-natal cases have been screened and 26,870 high risk pregnancies got detected.
Major Child Health Interventions		

12.	New Born Care Corner (NBCC)	For preventing mortality and brain damage immediately after birth, 580 Newborn Care Corners are functional at all delivery points, i.e., Labor rooms and OTs, to provide essential newborn care and resuscitation immediately after birth (Progressive Target: 1190).
13.	Sick Newborn Care Units (SNCU) and New Born Stabilization Units (NBSU)	For treatment of sick and low birth weight new-born, 36 Sick Newborn Care Units (Target: 41) and 46 New Born Stabilization Units are operational. 6 new SNCUs are under process to function and 5 NBSUs are being upgraded to SNCUs. Moreover, the bed capacity of 10 existing SNCUs is being increased. During last five year till Jan. 2018, about 2,05,753 children were admitted in SNCU and 1,46,984 (72%) new born were discharged after due treatment. Till 2018-19 (March 2019), 39 SNCUs got operationalized.
14.	Kangaroo Mother Care (KMC)	KMC units have been established in 30 SNCUs adjoining the SNCU for providing Kangaroo Mother Care, i.e., to maintain warmth through skin-to-skin contact and promote early initiation of breastfeeding to all new-born with special focus on preterm, LBW and sick newborns.
15.	Trainings and capacity buildings	In view of effective and efficient services the trainings are being provided to concerned personnel at various levels such as INAP/IAPPD Facility based IMNCI training and Facility Based Newborn Care (FBNC), Orientation of AYUSH MOs on Community Based CDR, etc.
16.	Home based new born care (HBNC)	Training is provided to all ASHAs for early identification and referral of new-borns with danger signs and counselling care givers on home based newborn care. During 2017-18 till Dec. 17, about 12% of LBW babies were reported during HBNC visits and 93% of identified high risk new-borns were referred for appropriate treatment.
17.	Intensified Diarrhoea Control Fortnight (IDCF)	An intensified diarrhea control fortnight is held every year from 2015 during the monsoons, where prophylactic dose of ORS is distributed to each under five children in order to prevent any death due to childhood diarrhea. During the fortnight, ASHA makes home visit to each under five children in her area and counsels the mother on preparation of ORS with demonstration, danger signs and when to seek help in case of an incidence of Diarrhea. Besides, ORS corners are established at all facility level to address any diarrheal case as well as counsel parents/caregivers on ORS preparation and treatment. In 2017, around 84.4% under five children were distributed prophylactic ORS packets and 5.7% under-5 children were distributed ORS packets in 2018 round.

6.4.7 The Government of Odisha is committed towards improvement of nutrition levels of population especially women and children. Without proper nutrition or the essential nutrients, women and their children are at increased risk for disease and poor health outcomes. The topic of 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, pre-school education programme, and improved infrastructure has contributed in the achievements seen in the nutrition indicators for Odisha.

Table 6.3: Budget for nutrition schemes in Odisha

Sl.No.	Year	Budget for ICDS	Budget for supplementary nutrition	% supplementary to Nutrition to ICDS budget
1.	2016-17	1694.98	700.94	41.35
2.	2017-18	1401.56	713.96	50.94
3.	2018-19	1864.95	928.16	49.77

Source : W&CD and MS, Odisha

6.4.8 Odisha's improvement over improvement of indicators of malnutrition is best in country. The percentage of children underweight, stunted (i.e., low height for age) and wasted (i.e., low weight for height) is lower than the national average, as per the NFHS-4 results. Further improvements have been observed along the lines of early initiation of breast-feeding, exclusive breast feeding, complementary feeding and reduction in anemia.

6.4.9 The Government of Odisha is implementing multiple schemes aimed at improving the nutrition and health status of women and children. Different components of Integrated Child Development Schemes along with their progress are mentioned below:

Table 6.4: Integrated child development schemes initiated by Government of Odisha

S.No.	Intervention	Brief description
1.	Supplementary Nutrition Programme (SNP)	Odisha is one of the pioneer states in the country to decentralize SNP in 2011 as per the direction of the Hon'ble Supreme Court of India. SNP is aimed at improving health and nutritional status of children and pregnant and nursing women. Children in the age group of 6 months to 6 years, pregnant women and nursing women are given nutritional support for 300 days a year. Each beneficiary is given nutritious food as part of Hot Cooked Meals (HCM) and Take-Home Ration (THR). Under SNP 45.78 lakh beneficiaries are covered.
2.	Early Childhood Care and Education (ECCE)	Early childhood care and education is one of the core services of the Anganwadi centers. ECCE is directed towards providing and ensuring a natural, joyful and stimulating environment, with emphasis on necessary inputs for optimal growth and development of the children. The focus is on ensuring 4 hours of dedicated pre-school activities along with SNP, Growth Monitoring and other essential interventions.
3.	Fixed Immunization day	Fixed Immunization day is observed on Wednesdays at Anganwadi Centers (AWC) for immunization of children. The PHC and its subordinate health infrastructure carry out immunization of infants and expectant mothers as per the national immunization schedule. Children are also given booster doses. 4.38 lakh children were fully immunized at AWCs in convergence with the Dept. of Health & Family Welfare.
4.	Health Check-up at AWCs	Village Health Sanitation and Nutrition Day (VHSND) has been named as Mamata Diwas in the State. During 2019-20, 32.28 lakh beneficiaries received health check ups. Under the programme, the primary clients are pregnant and nursing women and children below three years. Basic components of primary healthcare services, including early registration, deworming, counseling on early breastfeeding, identification and referral of high-risk cases of children and pregnant women, as well as basic ANC and PNC care is provided at community level in order to address the essential requirements of pregnancy, delivery, referral, childhood illnesses.
5.	Referral Services	Referral services is an important service under ICDS. Pregnant women, severely underweight children, SAM children in need of urgent medical attention and treatment are identified and referred to higher medical institutions for treatment. 6.54 lakh children were referred to higher medical institution in 2019-20. High risk pregnant cases are identified and referred to the medical institutions before the expected date of delivery. SAM children are referred to VHSND for health checkup and then to NRC for institutional care.
6.	Nutrition and Health Education (N.H.Ed.)	N.H.Ed. is a key element of ICDS. All women in the age group of 15-45 years are covered by this component and are counselled on health, nutrition and development needs of the children and families. During 2019-20, 523545 NHED sessions were conducted at AWCs. This is imparted through counselling sessions during home visits and on the Fixed Immunization Days (FIDs) and on the occasions when there is gathering of women in mothers' meetings etc. in the area.

7.	Infrastructure strengthening	<p>Strengthening infrastructure under ICDS i.e. construction of AWC buildings, toilets in AWCs, ensuring drinking water facilities and electricity is a thrust area for the Department. Department has issued guidelines to this effect in convergence with the Department of Panchayati Raj & Drinking Water. Currently, 44,671 AWCs are functioning in own buildings. New guidelines for construction of AWCs in convergence with MGNREGS have been developed and circulated with following features:</p> <p>Beautification of external walls</p> <p>Interior designs;</p> <p>Mamata corner;</p> <p>Kitchen gardens, boundary walls;</p> <p>Kitchens, drinking water facility, toilets and</p> <p>Electrification.</p> <p>In sum, 24,192 AWCs have been sanctioned for construction under MGNREGS out of which 7361 have been completed till date.</p>
8.	Convergence for Nutrition Outcomes	<p>Effective convergence with the Department of Health and Family Welfare, Panchayati Raj & Drinking Water at the State, District and Block level has led to improved health and nutrition outcomes. Joint planning is done at the field level by the functionaries of Health and Family Welfare (H&FW) and Panchayat Raj and Drinking Water (PR&DW) Department for implementation of VHSNDs (Mamata Diwas), Fixed Immunization Day, identification and referral of high-risk pregnant women, SAM children, Severely Under weight children and their follow-up in the community. Frontline workers also participate in special drives such as Mission Indradhanush, JE vaccination, National Deworming Day at the village level. Joint planning is also done for identification and coverage of hard to reach areas in the districts and for implementation of designated days such as Nutrition Week, Breast feeding Week etc. Joint review meetings are held at the District/Block/Project level for reviewing the progress of programmes implemented and for triangulation of data.</p>
9.	Odisha Nutrition Action Plan (ONAP)	<p>Multi Sectoral Plan for nutrition has been launched in the state in December 2016. It charts a road map for planning of multi-sectoral interventions to improve nutritional status of women and children. Nutrition Secretariat has been constituted in the Department to enable and strengthen inter-departmental convergence, with more than 10 departments, in planning and implementation of nutrition-specific and nutrition-sensitive activities.</p>
10.	Crèches in Particularly Vulnerable Tribal Groups (PVTG)	<p>Crèches for children from 6 months to 3 years set up in PVTG and hard to reach areas to prevent under nutrition. 150 crèches have been made operational in five districts namely Rayagada, Kalahandi, Koraput, Malkangiri and Nabarangpur (30 in each district) catering to 2500 children. In addition, a Crèche Resource Centre has been established at Bhubaneswar for scaling up the crèche initiative.</p>
11.	Vulnerability mapping of families with SAM children	<p>Vulnerability mapping of families with SAM children (linked to social security schemes): Districts identify SAM children by conducting growth monitoring of all children (6 months - 5 years) at the AWCs. SAM children having complications are referred to the Nutritional Rehabilitation Centers for treatment and the children not having any medical complications are managed in the community. Districts conduct vulnerability assessment of the families having SAM children and link them with the development schemes of the various Departments.</p>
12.	State wide campaign on Complementary Feeding	<p>A state-wide campaign has been launched to improve complementary food and feeding practices of under two years age children in four focused districts Koraput, Nabarangpur, Rayagada and Keonjhar. A 16-month state-wide campaign has been designed to create awareness on the importance of complementary foods and feeding among key stakeholders, community influencers and faith leaders.</p>

13.	Jiban Sampark	Project 'Jiban Sampark' launched for the welfare of the Particularly Vulnerable Tribal Groups. The project aims at improving uptake of health and nutrition services they are entitled to. The other stakeholder departments are H&FW and ST & SC Development.
14.	Mid-Day Meal Scheme	Midday Meal Scheme is a school meal programme designed to improve the nutritional status of school-age children nationwide. The programme supplies free lunches on working days for children in primary and upper primary classes in government, government aided schools in the state.
15.	Rice fortification to address anemia in Gajapati	Project of fortification of rice implemented in Gajapati district under the MDM programme is aimed at addressing anemia among children.
16.	Malati Devi Prak Vidyalaya Poshak Yojana	2 pairs of uniforms provided to pre-school children to address improvement in school attendance. Improved attendance of children at AWCs has led to improved nutrition outcomes among children.
17.	Promotion of Dietary Diversity to address malnutrition in convergence with OLM	Agro-ecology: Promotion of nutri-gardens and the use/ consumption of organic food. Objective is to include the cultivation of vegetables, primarily grown in the backyard, to be consumed by the family; all this using the appropriate agricultural practices coupled with the best health quality of vegetables (organic and traditional seeds).
18.	Full immunization	Availability and access to immunization facilities protects against major diseases and ensures that child mortality rates are kept under control. Six diseases, viz. poliomyelitis, diphtheria, pertussis, tetanus, tuberculosis and measles are major causes of child mortality, disabilities, morbidity and related malnutrition. In order to protect children from these diseases and pregnant women against tetanus, an immunization programme has been implemented in the State as per the national immunization schedule. The State is providing immunization service to 7.48 lakh pregnant women and 6.74 lakh infants through routine annual immunization. The State's major achievements include: No polio cases since 2008 and, Maternal and neonatal tetanus eliminated since 2014.
19.	Free Dialysis Service (Sahay)	In order to reduce the out of pocket expenditure towards Dialysis services, Free Dialysis Services- 'Sahay' has been launched. Patients requiring dialysis services recommended by treating physicians are provided free dialysis services at all Medical College Hospitals through own system. Steps are being taken to provide free dialysis services in 25 District Head Quarter Hospitals and CHC, Narshingpur through PPP mode to ensure easy access to dialysis services. Annually about 50 thousand patients are benefitted.
20.	Free Ambulance Services (National Ambulance Services)	All people can seek emergency ambulance services to avail treatment at public health facilities by dialing '108' Toll Free Number. 420 Ambulances are operational under fleet of '108' service. Likewise, under '102' Ambulance services 489 ambulances are operational for providing transport services to all pregnant women during ante-natal, delivery and post-natal period up to 42 days from home to institution, institution to institution for higher services and drop back. Besides, free transport/ambulance services are provided to sick infants up to 1 year for seeking treatment at public health facilities under '102' Ambulance service. Further, in order to expand coverage and reach out to unreached habitations, 92 new ambulances are being added to the fleet of '108' Service and 6 Boat Ambulances will also be operational in Kendrapara, Koraput, Malkangiri and Kalahandi districts. More than 17.22 Lakh beneficiaries availed the services under '108' services and more than 16.98 lakhs beneficiaries availed the services under '102' services.

21.	Free Blood Services	Under strengthening of blood services, provision has been made to ensure quality blood to all patients requiring blood at public health facilities. Several incentives and welfare schemes have been introduced to provide free blood to pregnant women, sick infants, blood disorder patients like sickle cell anemia, hemophilia, thalassemia, accidents, destitute and poor patients and free Blood transfusion @INR 350/- per unit of blood. Special provision has been made to provide monthly transport assistance @ INR 500/- per month to all types of blood disorder patients attending blood bank for blood transfusion or treatment at public health facilities. Annually about 1.5 lakhs patients receive free blood.
22.	Exploring Innovation in Health Sector (SwasthyaSahaya)	Efforts are being made to establish digital dispensaries in under-served and hard to reach areas, strengthening Specialist services at major hospitals, establishment of helpdesk for facilitating better patient care and sustaining motivation of ASHAs. In first phase, 30 Digital Dispensaries have been made operational in Keonjhar and Nabarangpur district and 102 additional Digital Dispensaries are being established in other districts.
23.	Strengthening of Ancillary Services at Public Health Facilities (Nirmal)	For promotion of Healthy and Hygienic Hospitals, a new scheme 'Nirmal' has been launched for strengthening of ancillary services (sanitation, laundry, security, lift services etc.) at Public Health Facilities. The main objective is to minimize hospital acquired infections and improve patient's satisfaction.
24.	Free Sanitary Napkins Distribution Scheme (Khushi)	To address the issue of menstrual hygiene among women, both post-partum and post-MTP (Medical Termination of Pregnancy) and adolescent girls, the State Government has introduced 'Khushi' sanitary napkins, which are provided free of cost to women during post-delivery and post-MTP at all public health facilities (@ 6 packets per woman, each packet having 6 napkins). In addition, Government has introduced social marketing of 'Khushi' sanitary napkins in the rural community, through ASHAs, at the subsidized rate of INR 6/- per packet of 6 napkins. As this initiative of the State Government received a favorable response, in order to promote sanitary protection, equity and freedom of mobility for young girls, the Government of Odisha is now provisioning for supply of free sanitary napkins to all school-going girls, from classes 6-12, in all Government and Government-aided schools. More than 17 Lakh school going adolescent girls being benefitted.
25.	Sishu Abong Matru Mrutyuhara Purna Nirakarana Abhijana (SAMMPurNA)	For accelerated reduction of IMR and MMR in the State, a state specific scheme - 'SAMMPurNA' has been implemented in the State since 2015-16. Major interventions include identification, referral and treatment /management of high-risk pregnant women and children, provisioning of mother and baby kit, reimbursement of transport cost @ INR 1,000/- for institutional delivery of Pregnant women in notified difficult villages, provision of stretchers for transportation of patients from difficult villages, enhanced daily allowance to mother of children admitted at NRCs from INR 50/- to INR 100/- per day to incentivize the mother, organization of integrated VHND and Immunization sessions at under-served and hard to reach areas, establishment of High Dependency Units (HDU) for management of critical obstetric cases, establishment of Pediatric Intensive Care Units (PICUs) for management of critical pediatrics cases at District Headquarter Hospitals. Annually more than 10.00 Lakh pregnant women and new-born are being benefitted.
26.	Free Cancer Care and Chemotherapy Services	In order to reduce huge out of pocket expenditure towards cancer care and treatment and to provide quality chemotherapy services at the district level, Odisha Comprehensive Cancer Care Programme has been implemented to strengthen the existing cancer treatment system in the State. Under this scheme, Day Care Chemotherapy units have been established at District Headquarter Hospitals. One dedicated Cancer Wing will be established at Capital Hospital, Bhubaneswar and four Mammography Machines are going to be set up at four new MCHs at Balasore, Bolangir, Mayurbhanj and Koraput. Besides seven Cancer Radiotherapy Units will be set up in six locations of the State; one at Capital Hospital, one each at DHH Jharsuguda, Angul, Nabarangpur and Keonjhar and two at AHRCC, Cuttack. Over 10,309 patients treated, and 8,132 Chemo cycles completed since 2016-17.

27.	Mobile Health Units (Swasthya Sanjog)	In order to ensure primary health care services to the people residing in tribal and difficult areas, 177 Mobile Health Units are operational in all Blocks under Tribal and KBK+ districts of the State covering 6251 difficult villages. MHUs are designed as an alternative model of rural health care delivery for a specified interior area equipped with medical team, essential equipment and drugs. It is envisaged to provide preventive and curative health services in the inaccessible areas and difficult terrain which are un-served underserved under usual circumstances on a fixed day fixed time (fortnight basis).
28.	Universal Eye Healthcare Programme (Sunetra)	This is a Universal Eye Health Programme for five years from 2018-19 to 2022-23 to address all the eye related barriers so that percentage of preventable blindness in Odisha is expected to be brought down to zero through comprehensive Eye care Services in both rural and tribal areas of the state. This scheme aims at Zero backlog of Cataract cases for operation by 2023. Under this scheme, free screening and treatment of all eye diseases, strengthening and expansion of Vision Centres at CHCs and UPHCs to ensure easy access to the patients for primary eye care and at SDHs/DHHs for secondary eye care, introduction of latest eye care technology, mass screening of diabetic retinopathy and lifelong treatment of glaucoma with free treatment for other eye diseases are being taken up. Steps are being taken for strengthening of tertiary eye care at all Medical College Hospitals, RGH Rourkela and Capital Hospital, Bhubaneswar will work as CoE (Centre of Excellence). Annually more than 3 Lakhs patients with Cataract are being benefitted. Free spectacles are being provided to more than 1.00 Lakh school children with refractive error.
29.	Specialist Services in Urban PHCs/CHCs (Ama Clinic)	To reduce out of pocket expenditure of the urban population and slum dwellers, the Govt. of Odisha has launched 'Ama Clinic' to provide weekly specialist services in the Urban Primary Health Centers and Urban Community Health Centers. The specialist services include Obstetrics and Gynaecology (O&G), Paediatric, Nutritionist, Medicine and Geriatric, Adolescent services, Psychiatric services, Ophthalmology services 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.
30.	Place Based Incentives	To attract and retain doctors in inaccessible and remote areas, place based incentives are given to doctors and specialists. It is given to the Medical Officers working in different difficult / remote areas in the state as per vulnerability status of the places taking into consideration certain key parameters such as difficulty and backwardness of the location, tribal dominance, left wing extremism, train communication, road and transport facilities, social infrastructure and distance from state head quarter 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 on attending and performing the duty regularly in V1 to V4 institutions. This incentive is to be given along with the salary. It is applicable to contractual, ad-hoc and regular doctors. General (MBBS) doctors working in V4 CHCs and PHCs get INR 40,000/- as incentive whereas a specialist working in V4 CHC gets INR 80,000/- as incentive.
31.	Corpus Fund	Non- availability of Doctors at inaccessible remote location 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; 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 is to retain human resources in remote and inaccessible areas, to provide flexibility at local level for human resources management and to ensure an accountability of doctors. This fund can be utilized for filling up the gaps in the districts in transportation, communication, accommodation for human resources. Provision of Corpus Fund has been placed with the Collector of the District to devise modalities to address the human resource issues locally.
32.	Strengthening of Casualty, Emergency and Trauma Care	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. Presently eight Trauma Care Centers are operational in the State at three Medical Colleges and Hospitals at Cuttack, Burla and Berhampur, RGH, Rourkela and at DHH Puri, Khordha, Balasore and Bhadrak. A special plan has been prepared to establish 25 more trauma care centers under State budget.

33.	Mukhya Mantri Swasthya Seva Mission	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 emergency, Odisha State Treatment Fund to provide financial assistance for critical health care and Health Investment Promotion Policy.
34.	Free Mental Health Care	Mental Health programme is being implemented across 30 districts of Odisha with provision of screening, counselling, treatment and free psychotropic drugs through capacity building of service providers and ASHAs, establishment of District Crisis Centre (DCCS) or Help Desk, Life Skill Education (LSE), mass awareness through multi-media approach.
35.	Establishment of New Govt. Medical College and Hospitals	Established 4 New Govt. Medical Colleges and Hospitals and 6 more in pipeline. From academic session 2017-18, Saheed Laxman Nayak Medical College and Hospital at Koraput and Pandit Raghunath Murmu Medical College and Hospital at Baripada and in 2018-19 Bhima Bhoi Medical College and Hospital, Bolangir and Fakir Mohan Senapati Medical College and Hospital, Balasore have started. Accordingly, total MBBS seats have been increased from 450 to 1050 to address the shortage of doctors in the State.
36.	Establishment of new Nursing Training Institutions	For expansion of medical education and training to produce more paramedics, efforts were made for establishment of 3 new Auxiliary Nurse and Midwifery Training Centres (ANMTC), 5 new General Nursing and Midwifery Training Centres (GNMTC), 37 new Diploma in Medical Laboratory Technology (DMLT) and 2 new College of Nursing at SCB MCH and VIMSAR.
37.	Creation of new Public Health Facilities	In order to improve easy access to health care services through establishment of 12 new Sub-Divisional Hospitals, 224 Community Health Centres including up-gradation of PHCs/OHs to CHCs, 11 New Primary Health Centres, 95 Urban PHCs (42 new and 53 PHCs converted to UPHCs), 7 urban CHCs (4 new and 3 CHCs converted to UCHCs) and 761 Sub-Centres since 2005.
38.	Cadre restructuring and creation of new post of doctors and paramedical staff	In order to ensure more Human Resource for Health in Public Health Facilities with focus on equity in difficult areas, several reforms were undertaken through cadre restructuring of Odisha Medical Service Cadre, creation of 2508 posts of doctors, 400 posts of dental surgeons and 5719 posts of paramedics. Process has been initiated for creation of Specialist Cadre.
39.	Infrastructure Development	Created State of art health care infrastructure through establishment of 9 new 300 bedded District Head Quarter Hospital buildings, 56 new Mother and Child health Wings (MCH wing), 56 new Operation Theatres, 114 Labour Rooms, 75 new PHC (N) buildings and 2760 Sub-Centres to provide better healthcare services in rural areas and established 2 Urban Community Health Centres (UCHCs) and 47 Urban Primary Health Centres (UPHCs) in urban areas.
40.	Establishment of Critical Care Units	Ensured availability of critical care units at public health facilities through establishment of 13 Intensive Care Units (ICU) at DHH level to provide ICU facilities for all types of patients, 36 Special New Born Care Units (SNCUs) at DHHs, SDHs and Medical College Hospitals and many super specialist services at Medical Colleges like open heart surgery, bone marrow and kidney transplantation etc.

6.5 Education: Way to Human Development

Education empowers individuals with ability to think, reason, aspire and pursue individual objectives. It also provides people with freedom to express. Education plays as an important input develop clear and unbiased logical thinking. Hence education is essential for the overall development of humans. It is one of the core capabilities which helps people transform their lives to something they value, determining prosperity and economic health of populates of an economy.

Odisha has made remarkable progress in educational attainment rates. This has been accompanying by development in infrastructure development for the same. Indicators such as Enrolment rates, completion rates and other physical infrastructure like construction of school buildings/class rooms, drinking water facilities, toilet facilities and appointment of teachers compare favorably with other States. The following sections review the State's progress over these indicators.

6.5.1 Odisha is at the forefront of adoption and implementation of SDGs. The Government is committed to achieve the SDG 4 for education- 'Ensure inclusive and quality education for all and promote lifelong learning' by 2030. This include completion of free primary and secondary schooling for all girls and boys, equal access to affordable vocational training to eliminate gender and wealth disparities and universal access to a quality higher education. Besides, the enactment of Right to Education Act, 2009 (RTE), by the Government of India and the Odisha Right of Children to Free and Compulsory Education Rules, 2010 and Right to Education Cell with the support from UNICEF indicates the top priority accorded to the education sector in the State.

6.5.2 Odisha has made significant progress in educational attainment as well as in educational infrastructure indicators, particularly at the primary level. Enrolment rates, completion rates and other physical infrastructure like construction of school buildings/class rooms, drinking water facilities, toilet facilities and appointment of teachers compare favourably with other States.

Literacy

Literacy improves self-esteem, enhances social status and decision making power and confidence level of individual in the society. It impacts human development outcomes both as input and output.

6.5.3 Odisha has made rapid improvements in the literacy rates in the past few decades. Literacy rates are considered a key indicator of educational performance. As per Census 2011, Odisha's literacy rate was 72.9%, registering a decadal increase of 9.8 percentage points. The literacy rate was almost at par with the country's literacy rate (72.99%). Odisha ranked 10th among the 15 major States.

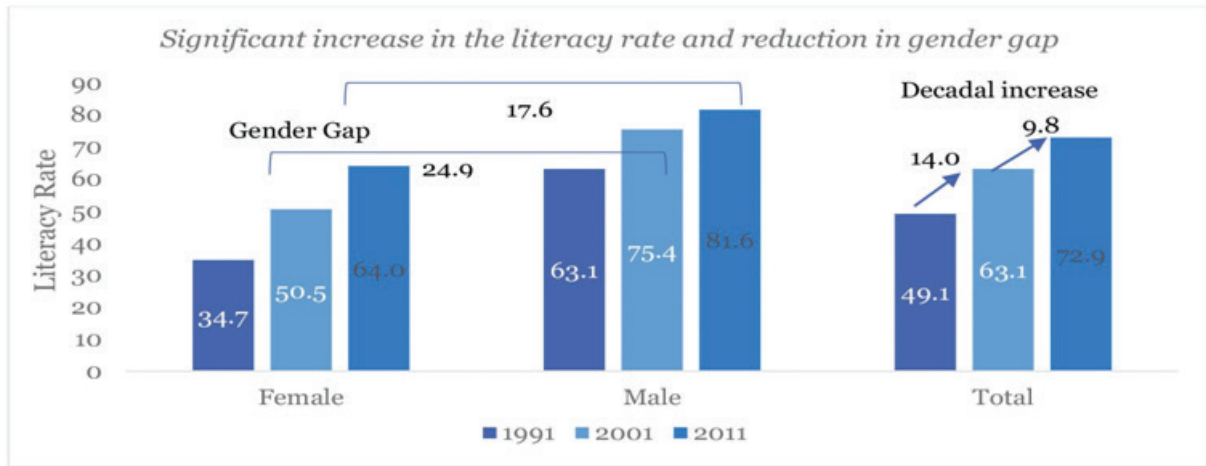
Nearly 7.3 lakh people made the move of being literate every year between 2001 and 11 (on an average 2001-11)

As per the 71st round of National Sample Survey (2014), Odisha's overall literacy rate was 75.5%, with male and female literacy rate at 83.2% and 67.8%, respectively.

6.5.4 According to 2011 Census, the female literacy rate of 64% was close to the national average (India female literacy: 65.5%). The gains in education for females have resulted in remarkable reduction of the gender gap in literacy rate from 24.9 percentage points in 2001 to 17.6 percentage points in 2011. Figure 6.2 compares literacy rate in Odisha by gender from 1991 to 2011.

Gender gap in literacy has narrowed significantly in Odisha, with female literacy rate almost at par with the national average

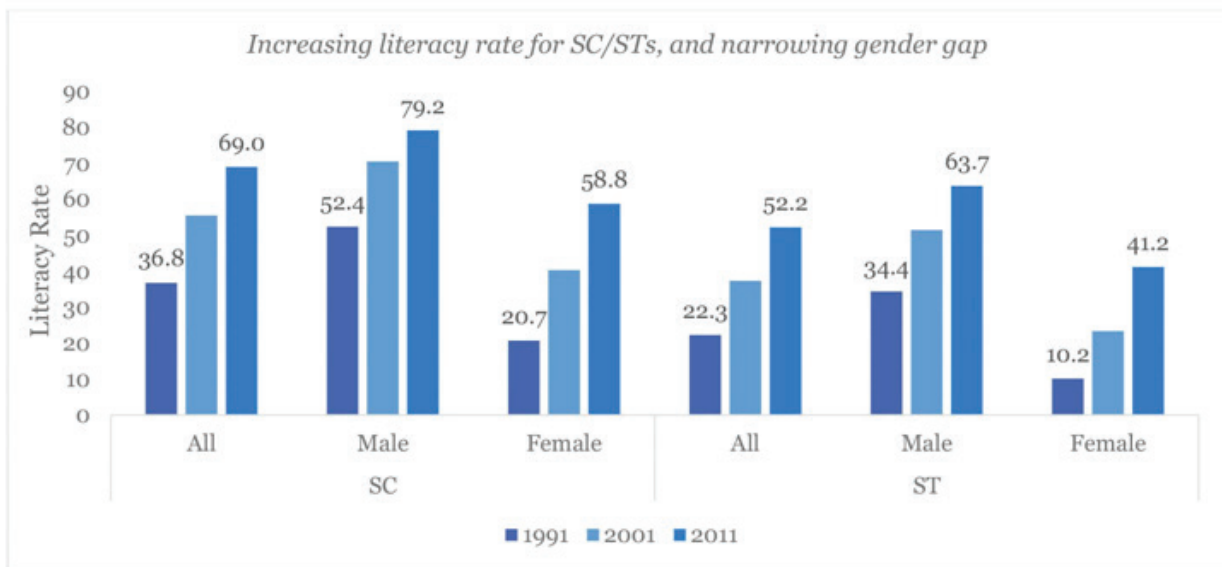
Figure 6.2 Literacy rates in Odisha



Source: Census of India, 1991- 2011

6.5.5 The SC and ST communities had relatively lower literacy rates of 69.02% and 52.24% respectively in 2011. However, it is showing a rising trend over a period of time. (Further, the gender gap has also decreased, i.e. from 31.7 in 1991 to 20.4 in 2011 for SCs and 24.2 to 22.5 over the same period for STs). District wise literacy rates by gender and social groups is presented in Figure 6.3.

Figure 6.3 Literacy rates by gender and social groups in Odisha, 1991-2011



Source: Census of India, 1991-2011

6.5.6 The increase in literacy rate in Odisha during the decade may be due to continuous efforts of the State Government to improve the access and quality of education. Establishment of residential schools for tribals, particularly for girls in tribal dominated areas, establishment of good number of 'Odisha Adarsha Vidyalaya' in each block, 'Mo School Abhiyan' in secondary schools and enrolment of 2.5 lakh girl students under 'Odisha Girls' Incentive Programme' are some of the initiatives taken by the state government that aim at improvements in education levels in the State. It is to be mentioned here that 1721 schools and 6916 hostels (including 4904 hostels for girls) are being run by ST and SC Development Department.

Elementary and secondary education

Odisha is one of the pioneer states to implement Right of Children to free and compulsory education. The state aims at not only to provide necessary infrastructure for primary and upper primary schools, but also to ensure 100% enrolment and quality education to children in between the age group of 6-14yrs.

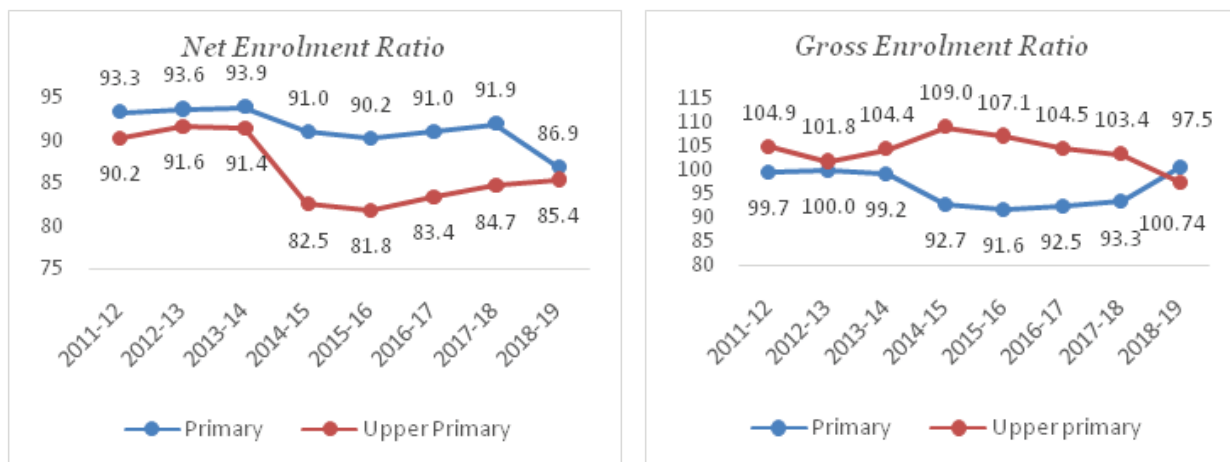
In Odisha, according to 2011 census, there are 56.34 lakhs children in the age group of 6-14, out of which 56.23 lakhs children are studying in 0.67 lakhs schools and 0.10 lakh children are reported to be out of school as per the SDMIS, 2018-19. There are 692 numbers of privately managed aided upper primary schools in the state wherein 1325 teachers are receiving Grant-in-Aid from Government.

6.5.7 Universalisation of primary education under the RTE Act paved the way for making education accessible to all. The status of access to education in Odisha can be accessed through different indicators such as enrolment ratio, pupil teacher ratio, drop-out rate, transition rate, buildings and infrastructure, in both primary and upper primary (together termed as 'elementary') and secondary schools. These are discussed in the following sections.

6.5.8 Enrolment ratio indicates the extent of achievement in universalisation of education. Gross enrolment ratio is defined as the percentage of total student enrolment at a particular level of education (here, elementary) as a ratio of the population in the relevant age group, while Net Enrolment Ratio considers the same ratio with enrolment of only students in the official age group (6-11 years for primary and 11-14 years for upper primary level).

6.5.9 From Figure 6.4, it is observed that GER and NER at primary levels has increased in the past 5 years, since 2014-15 (after witnessing a drop in the preceding year). This indicates that more children are being enrolled in school. At the upper primary level, GER is less than 100. The decline in GER at both levels of schooling may indicate that children are being enrolled in schools at the proper age and their progression from one class to other is also at a normal pace. This is supported by increase in the NER at upper primary level, from 2014-15 to 2018-19 and decrease at primary level during this period. Increasing the net enrolment ratios to 100% can achieve the objective of universalisation of elementary education.

Figure 6.4 Trend in enrolment ratios at the elementary level



Source: Status of Elementary and Secondary Education in Odisha, 2018-19, OSEPA

6.5.10 Dropout rates relate to the proportion of students failing to complete a particular level of education or not enrolling for the next level. The dropout rates in the case of both primary and upper primary education have increased over the years in the State, which is a matter of concern. Dropout rates for primary education increased from 0.43 in 2011-12 to 5.42 in 2018-19. The trend at upper primary schooling is similar. Gender wise disaggregation shows that dropout rates have increased for both boys and girls, across all social groups, particularly those from STs (see Appendix). This needs to be addressed, as access to education involves not only bringing children to school in terms of enrolment, but also making sure that they remain in school.

Social and cultural norms, lack of access to education, disability, migration of families, early marriage etc may be the main reasons for the high dropout rates among ST, SC and girl students. To overcome this issues, the State Govt. have taken lot of steps by establishing 182 Kasturba Gandhi Balika Vidyalaya (KGBV) with 18400 inmates in 23 districts for ST & SC girls, 16 Residential Hostels for urban deprived children with 1000 capacity in 11 districts, 165 seasonal hostels for 7169 migrant children in source point at Baragarh, Bolangir, Kalahandi, Nuapada and Mayurbhanj districts during 2018-19, Besides, Mother Tongue Based Multilingual Education (MLE) has been introduced at primary level to address the issue of language barrier faced by the children of tribal communities. It is operational in 1485 schools of 17 tribal dominated districts in 21 Tribal Languages during 2018-19. 3369 ShikhyaSahayaks for MLE programme are placed in MLE adopted schools to teacher the children in mother tongue.

Table 6.5 Dropout rates at primary and upper primary level of education

Level/Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Primary	0.43	0.40	1.97	1.63	2.82	4.20	5.81	5.42
Upper primary	3.07	2.36	2.40	4.21	3.87	5.15	5.45	6.93

Source: Directorate of Elementary Education and Director, OSEPA

6.5.11 PTR (Pupil Teacher Ratio) is defined as the average number of pupils per teacher in a school in a given year. The RTE Act prescribes that the PTR should be 30:1 and 35:1, at the primary and upper primary level, respectively. Odisha's PTR for the corresponding levels stood at 20:1 and 23:1 during 2018-19, which are better than the prescribed norms. At the secondary level, PTR in Odisha was 23:1 during this period.

6.5.12 Gender Parity Index (GPI) in education reflects the discrimination against girls in access to educational opportunities. Closer the GPI is to one, higher is the State to achieving gender equality. The GPI of primary education, upper primary education and secondary education are 0.93, 0.92 and 1.01 respectively during 2017-18. This is an encouraging sign considering that GPI at all levels is very close to 1 and particularly in terms of secondary education, the index is favourable to girls. However, gender disparities still prevail in terms of enrolment and dropout rates for elementary education, for which continuous efforts are being made by the government to improve the net intake of girls in schools. 3 Transition rate is the number of students admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of students enrolled in the final grade of the lower level of education in the previous year.

Learning outcomes

6.5.13 Learning outcomes at school level provide the information on the ability of the students to understand the subject material and teaching. The National Achievement Survey conducted during 2017 by the Ministry of Human Resource Development (MHRD) provides information about the knowledge and abilities of students in government and government-aided elementary schools. It was observed that performance of students is below the national average in language, mathematics and EVS for class III students; on an average, 62% of the responses by students were correct in Maths and the scores for EVS and Language stood at 60% and 64%, respectively. Top 3 districts in terms of mean scores were Jagatsinghpur (80), Cuttack (74) and Nayagarh (70), while Kandhamal (48), Sambalpur (46) and Koraput (45) fared in the bottom three.

6.5.14 Learning outcomes in Odisha seem to improve with advancements in the education level in case of Maths and Science subjects. The NAS for Class VIII indicates that, on an average, percentage of correct responses in Maths by students in Odisha (44) was higher than the national average (42). In case of science, the scores were same. But, in Language and social science, the performance was below national average.

6.5.15 ASER survey results indicate that there is scope for improvement in reading and arithmetic skills for primary class students. The ASER survey (Annual Status of Education Report) is an annual survey that aims to provide estimates of children's schooling status and basic learning levels for each state and rural district in India. It is conducted by the non-government organisation, Pratham. ASER is only focusing on basic learning of the rural students. In Odisha, 38.7% of Standard III children could read a Standard III level text, while 8.6% could not even read a letter. For arithmetic tasks, 36.5% of Std. III students could recognise numbers from 10-99 and 21.5% could perform subtraction (Table 6.8). Further, there is improvement in reading levels: in 2012, 26.5% of Standard III students could read a Standard II level text, which had increased to 38.7% in 2018. (Table 6.6).

Table 6.6 Reading and Arithmetic learning levels, Rural Odisha (Std. III), 2018(Odisha)

Reading	Not even letter	Letter	Word	Standard I level text	Standard II level text	Total
% Children by reading level	8.6	15.7	22.8	14.02	38.7	100
Arithmetic	Not even 1-9	Recognise nos. 1-9	Recognise nos. 10- 99	Subtract	Divide	Total
% Children by arithmetic level	7.88	24.9	36.5	21.5	9.4	100

Source: ASER State Reports, 2018

Table 6.7 Trends over time- Arithmetic and Reading, 2018 (Odisha)

Year	% of children in standard III who can read standard II level text	% of children in standard III who can do at least subtraction
2012	26.5	26.2
2014	33.0	27.6
2016	35.5	33.9
2018	38.7	30.9

Source: ASER State Reports, 2018

Table 6.8 Basic reading and arithmetic (Odisha)

Age group (yrs)	% Children who can								
	Read Std II level txt			Do at least subtraction			Do division		
	Male	Female	All	Male	Female	All	Male	Female	All
8-10	45.1	49.0	46.9	38.2	39.9	39.0	16.5	14.8	15.7
11-13	66.7	69.6	68.1	58.3	59.0	58.6	36.4	35.9	36.1
14-16	77.0	77.7	77.4	64.1	61.8	62.9	45.5	41.6	43.4

Source : ASER State Reports, 2018

6.5.16 The State government is making continuous efforts to improve the quality of education through up gradation of curriculum, teacher training and improving the conditions of school infrastructure so that it is conducive to enhance the learning ability. For this, the Government of Odisha has launched learning enhancement programmes (LEP), namely Ujjwal, Utthan and Utkarsh. “Ujjwal” programme focuses on equipping students from Class I to V with basic competency in Odia, Mathematics and English; “Utthan” is for students of Class VI to VIII to enable them acquire grade level competency in these three subjects. “Utkarsh” has been undertaken to promote quality education at secondary level in all 30 districts. For Utkarsh teacher trainings were organised for English, Odia, Math & Science subjects. Further, the State is part of NITI Aayog’s ‘SATH-E’ (Sustainable Action for Transforming Human Capital in Education) project, which is envisaged as a programme that aims to transform elementary and secondary school education with the objective is to achieve a significant improvement in one or more areas of access, equity, learning outcomes and governance.

Output

6.5.17 Odisha made remarkable strides in education by free and compulsory education, especially in rural and backward areas in the age group of 6-14 years. During 2018-19, there existed 34,923 number of functional primary schools, with 1,29,841 teachers (Table 6.9). Further, over the past 8 years, the PTR has consistently improved from 30:1 in 2011-12 to 20:1 in 2018-19, going ahead of the norms as prescribed by the RTE Act. At the upper primary level too, the number of schools has increased from 21,117 in 2011-12 to 21781 in 2018-19.

Table 6.9 Number of primary and upper primary schools, teachers and PTR in Odisha

Year	No .of Primary Schools	No .of Primary Teachers	PTR	Upper primary		
				No .of Schools	No .of Teachers	PTR
2011-12	37,012	1,33,262	30:1	21,117	53,264	1:25
2012-13	37,056	1,34,578	28:1	21,289	53,791	1:24
2013-14	36,399	1,21,193	35:1	21,945	62,570	1:34
2014-15	36,550	1,22,214	26:1	22,497	74,647	1:25
2015-16	36,760	1,33,541	25:1	22,795	72,472	1:23
2016-17	36,318	1,32,927	24:1	23,096	72,380	1:23
2017-18	36,070	1,31,544	23:1	22,019	75,558	1:24
2018-19	34,923	1,29,841	20:1	21781	75,012	1:23

Source: Status of Elementary and Secondary Education in Odisha, 2018-19

Education infrastructure

6.5.18 Adequacy of teachers, infrastructure surrounding the school and provision of mid-day meals are known to impact learning performance of students. Odisha performs relatively well as compared to other major States in terms of most school infrastructure indicators.

- As of 2015-16, only 3.6% of schools in Odisha were single-teacher schools, ranking fifth out of 17 States. The average number of teachers per school in the State stood at 4.6.
- More than 90% of schools were approachable by all-weather roads; however, this figure is still low as compared to other states and efforts need to be focused on making the school accessible to all. The objective of Rashtriya Madhyamik Shiksha Abhiyan (RMSA) for Secondary Education is to make quality education available, accessible and affordable to the target population in the age group of 14-18 years with relevant skills and to develop life skills, use of ICT, organization and leadership and community services. For secondary schools, under Rashtriya Madhyamik Shiksha Abhiyan, the State Government provides access to secondary education within a reasonable distance of any habitation (5kms. for secondary and 7-10 kms. for higher secondary schools). Special reference is given to economically weaker sections of the society, the educationally backward, the girls and the disabled children residing in rural areas and other marginalised categories like SC, ST, OBC and Educationally Backward Minorities (EBM).
- The State performs favourably in terms of provision of mid-day meals, a service prevalent in close to 99% of schools. Odisha ranks 4th among States on this parameter.
- Three scholarships namely Odia Bhasa Bruti, Mukhya mantra Medha Bruti and Best School Award have been introduced by the State Govt during 2018-19 in order to promote talent in Odia Medium Govt. and Aided Schools of the State.
- With a view to check the dropout rate at secondary level and increase the transition rate, Odisha Government have introduced the Chief Minister's Free Bicycle Distribution scheme for Class X girl students of Govt. school in 2011. During 2018-19, a sum of Rs.150.28 crore has been spent for this scheme by covering 5.78 lakh students.

- As regards civil infrastructure facilities during 2018-19, out of 49,417 elementary schools, 49,157 schools (99.3%) have their own building with 48,973 numbers of girls' toilet; 49,119 schools (99.7%) have water facilities and 37,450 schools (76.7) have ramps for disabled students.

SATHE

It is new initiatives for improvement in elementary and secondary education through its 15 points, like School Rationalization by Merger, ensuring access, equality in tribal areas, filling up vacancies, remediation training to in service teachers, MIS at all level, accountability to access the strength and weakness, provision modern education etc.

Table 6.10 : Scholarship programmes for Secondary Education in Odisha (2018-19)

Sl.No.	Name of Scholarship	No. of Scholarship	Criteria
1.	Odia Bhasa Bruti	3594 students	@ 10 students Block 10 students per Municipal Corporation 5 students per Municipality 2 students per NAC who have secured highest mark in odia in the HSC Exam- one time scholarship of Rs.5000/- each
2.	Mukhya Mantri Medha Bruti	35940 students	@ 100 per Block 100 per Municipal Corporation 50 per Municipality 20 per NAC who have secured good marks in HSC Exam- Rs.5000/- one time scholarship
3.	Best School Award	1061 schools	@ 3 per Block 2 per MC 1 per Municipality 1 per NAC with good result in HSC Exam - award of Rs.1,00,000/- each

Source : S & ME Deptt, Govt. of Odisha, 2018-19.

Table 6.11 : School infrastructure performance indicators (%) for primary education, 2015-16.

State	Single- teacher schools	Average teachers per school	Schools approachable by all- weather road	Schools provided mid-day meal
Andhra Pradesh	15.9	4.6	94.3	97.6
Bihar	4.2	5.8	86.3	96.5
Chhattisgarh	5	4.2	88.5	98.9
Gujarat	1.5	7.4	96.7	95.7
Haryana	4.8	9.2	98	98.8
Jharkhand	16.4	3.8	53.3	98.2
Karnataka	8.7	5.1	92.3	98.7
Kerala	2.2	14.8	97.2	99
Madhya Pradesh	13.3	3.7	89.7	97.8
Maharashtra	3.1	6.8	97.5	97.2
Odisha	3.6	4.6	90.2	98.7
Punjab	5.5	8.7	99.6	95
Rajasthan	11.9	6.1	78.7	97.6
Tamil Nadu	2.2	9.7	98.3	97.1
Telangana	11.9	5.6	93.9	96.2
Uttar Pradesh	8.3	4.1	96.1	97
West Bengal	3.7	5.9	88.5	98.3

Source: DISE 2015-16.

Vocational and Technical Education

6.5.19 India is on the cusp of a demographic dividend with one of the youngest workforce in the world. At the same time, with rapidly changing technology, automation of jobs and increased globalisation, the skill sets required at the work place are also changing. As a result, there exists a gap between the skill demands of industry and the available skills of the youth. Therefore, Skill Development has emerged as a key strategy to realize youth potential. In order to enhance employability of youth, efforts have to be made with regard to their skill development via vocational and technical education so that all those who enter the workforce are equipped with required skill sets.

6.5.20 Based on the growth trends and contribution to State GDP, emerging skill requirements vary across the sectors. As per the Odisha Skill Gap Report-2012, the demands for skills in primary, secondary and tertiary sectors are likely to arise from the following areas:

Table 6.12: Skill development requirements in Odisha, across sectors.

Primary sector	Secondary sector	Tertiary sector
Food processing, floriculture, horticulture (especially cashews, mangoes, pineapple), animal husbandry and fisheries	Automobile and components, chemicals and pharmaceuticals, construction material and building hardware and electronics hardware.	Healthcare, IT &ITeS, media and entertainment, tourism, transportation and logistics Hospitality.

Source: Skill Gap Assessment for the State of Odisha: A District Wise Analysis, 2012

‘Skilled-in-Odisha’ Initiative

6.5.21 It is projected that by 2026, there will be a demand for 22.58 lakh highly skilled and 62.11 lakh semi-skilled professionals (Skill Gap Assessment report for Odisha, 2012). To meet this huge demand, Odisha has made concerted efforts towards skill development with its ‘Skilled in Odisha’ initiative. Odisha Skill Development Authority (OSDA) has been established to provide overall direction, guidance and implementation of skill development programmes in the State by covering different skill sectors. OSDA works with an overarching mission to bring transformative human development through skilling of youth and making ‘Skilled-in-Odisha’ a global brand. Both technical and vocational education is being promoted by the State under this programme.

Chief Minister’s Employment Generation Programme

6.5.22 In order to provide employable skill training to 150 youths from each GP of the state, for improving employability, Government of Odisha had launched an inclusive skill development strategy in the name of Chief Minister’s Employment Generation Programme (CMEGP) in 2014-15 under which 990,112 youth have been imparted skill training over a period of five years (2014-15 to 2018-19). Odisha has been awarded the 1st prize by the Ministry of Rural Development, Government of India for best implementation of DDUGKY Programme consecutively for FY 2016-17 and 2017-18.

Table 6.13 : No. of youth skilled under Chief Minister’s Employment Generation Programme

Year	No. of youth skilled
2014-15	135,166
2015-16	292,123
2016-17	195,855
2017-18	225,858
2018-19	144.11
Total	990.112

Increased participation of Women in Skill sector

6.5.23 Government of Odisha is encouraging greater participation of women in vocational and technical education. A special scheme 'SUDAKHYA' has been launched by the state government to encourage increased enrolment of girl students into ITIs, hitherto an uncharted territory for girls. As a result, girl enrolment in Govt. ITIs has gone up from 7% to 18% during last three years and it is targeted to achieve 33% enrolment of girls into ITI courses by 2020.

India Skills Competition - Odisha shone with second highest medal tally

6.5.24 Odisha Skills - 2018 was organized to give exposure to our youth to national/international level skill competitions wherein more than 7,000 youth from across the state had competed in various trades. From among them, 76 talents qualified to the Eastern Regional Skills Competitions and finally 33 of them qualified to compete at India Skills 2018. Odisha emerged the second highest state in the medal tally in the said competition, winning four Gold, nine silver, six bronze and two Medallions of Excellence. Out of them, four have represented the country at Eurasian High-tech Skills Competition-2018 in Russia and four have represented the country in World Skills Asia-2018 in Abu Dhabi and brought laurels to the country. Three of our winners will also represent the country in World Skills-2019 to be held in Kazan, Russia. Odisha Skill has been made an annual event.

6.5.25 OSDA is conducting Placement Linked Training Programme through private / government Project Implementing Agencies (PIAs) since 2011-12 to train and equip youths, especially school dropouts with employable skills. During 2017-18, 8863 youths were trained under the programme. 10,428 youths have been enrolled under the programme with cumulative achievement of 72, 987.

Promoting Entrepreneurship - Through 'Nano-Unicorns'

Nano-Urnicorn Project was started by OSDA in the year 2017-18, with the aim to give boost to entrepreneurship development at nano level, thereby promoting micro entrepreneurship culture in Odisha. OSDA acts as the nodal point for selecting, training, mentoring the 142 identified new Nano Entrepreneurs and providing risk capital @ INR 1.00 lakh to each of them. Many of them have started earning handsome profit and employing 2 to 3 persons in their projects. Going forward, it is proposed to support 300 such Nano entrepreneurs during the year 2019-20 and 1,000 during 2020-21.

Initiatives for 'New ITI'

6.5.26 In order to strengthen the Technical and Vocational Education and Training (TVET) eco-system in the state, a number of innovative initiatives have been taken to create the 'New ITIs':

- Centralised Online Admission for all ITIs
- Online Examination for all ITIs
- Developing Websites for all Government ITIs
- Social Media presence of all Government ITIs through
- Facebook/Twitter
- Increase girl enrolment to 33% by 2020.

- Introducing Student Welfare Schemes such as Sudakshya, NirmanKushum, Dakshyata, Kalia-Chhatrabruti, e-Medhabruti etc.
- Extend community service post flood repair & restoration activities in Ernakulum district of Kerala during Aug-September 2018 and also in post Cyclone repair & restoration activities after 'Titli' & 'Fani' in the state.
- Conducted ITI/Poly Fest for youth of Government ITIs and Poly-techniques to provide platform to meet aspiration of the young talent in sports and cultural activities.
- Engagement with Tata Strive for Total Quality Management (TQM), entrepreneurship and financial literacy of ITI students.
- Setting up Skill Museum in ITIs.

Initiatives for Polytechnics

- Online Affiliation System has been introduced in all Engineering Schools/polytechnic institutions. New Examination Rule has been framed.
- MOU has been signed with CISCO to impart IT related courses and CCNA course online to all students of Govt. ITIs and all Govt. and Private Polytechnics of the state free of cost.
- E-Evaluation of Answer Scripts of semester exams introduced.
- Digi Locker facility made available for providing Certificates and Mark sheets.
- 12 services of Diploma and ITI such as verification of Certificates by Employer, Issue of Duplicate Certificates and Mark sheets, Issue of Migration certificates, Issue of Photocopies of Evaluated Answer books etc. are offered online through Lok Seba Adhikar Portal.
- The entire activities of the students right from Registration to declaration of result have been made online.

MoU with CISCO, Tech Mahindra, Maruti, Siemens

Galvanising Research & Development Eco-System in the State

- Premier national level institutions like IIT, IISER, NISER, ICT, IIM, AIIMS, CIPET and CTTC have been established in the state and are contributing towards creating an Eco-System for high end research and development in the state in their respective fields apart from creating high end skills.
- ISRO has opened a Centre of Innovation & Incubation in VSSUT for promoting research in the field of Space and Rocket Technology.
- Conducting Smart Odisha Hackathon, an annual event

Three of the State have found place among the Top Twenty in the Country in the Phase-I Star Grading conducted by MoSDE, Gol.

Higher Education

6.5.27 In an era of globalization and knowledge economy, higher education can be a powerful and effective instrument today to enable social transformation. Higher Education system in Odisha is based on a glorious tradition of learning and research and has a solid foundation of a value system with humanity and service as its cardinal principles. Access to higher education expands the opportunities for skill development of the youth. Completion of graduate or postgraduate courses acts to distinguish the degree holder as a specialist in the subject matter and consequently open up employment or entrepreneurial prospects. Higher education is increasingly being seen as a 'must-have' in the job market as well. Hence, it is imperative for the State to ensure adequate number of institutions offering quality higher education, encourage greater enrolment, gender parity and access by marginalised social groups. The Government of Odisha has initiated meaningful reform measures to make it more inclusive and qualitative and broadening the access, equity, excellence and preparing the youth to meet the challenges of the 21st Century.

6.5.28 Higher Education in Odisha comprises of degree and postgraduate level education including M.Phil and Ph.D courses. Since July 2016, the junior colleges have been separated from degree colleges and put under School and Mass Education Dept. At present, the following institutions are running in the higher education category. During 2018-19, there were 50 Government degree colleges and 820 private degree colleges imparting education to about 6.5 lakh students. The number of state universities has increased to 14 including 02 newly established universities i.e. Rajendra University, Bolangir and Kalahandi University, Bhawanipatna.

Table 6.14 Type and number of higher education institutions in Odisha

Category of Degree Colleges / Universities	Number
Government colleges	50
Non-government Aided colleges (488 category)	580
Non-government unaided colleges	240
Self-financing colleges	150
Aided Sanskrit colleges	50
Other department	02
University	23
a) State universities	15
b) Deemed to be universities	03
c) Private universities	05

Source: Higher Education Department, Odisha

6.5.29 As per the All India Survey on Higher Education during 2017-18, Odisha has 23 colleges per lakh population as against all India average of 28. Odisha compares favourably with Assam, Bihar, Chandigarh, Jharkhand and West Bengal in this respect. Average enrolment per college is 685, which is slightly below the national average of 698.

Gopanbandhu Sikhya Sahayata Yojana

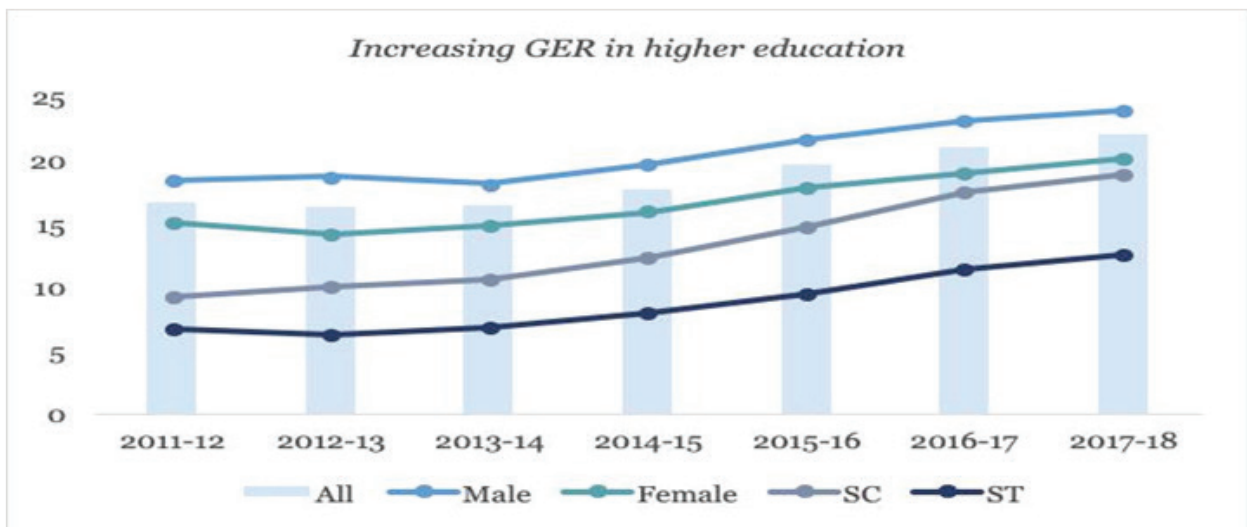
A new scheme namely “Gopandhu Sikhya Sahayata Yojana” is being implemented during 2018-19 on the basis of guidelines issued vide Resolution No-1189 dt-16.01.2019 for extending financial assistance to the students under privileged sections (HIV/ AIDS affected family, households without shelter, distribute/ manual scavengers/ PVTGs/ legally release bonded labourers/ single mother family) for pursuing graduation and post graduation courses. The quantum of financial assistance is Rs.20,000/- per annum.

Gross enrolment ratio

6.5.30 Odisha’s gross enrolment ratio in higher education has increased in the past seven years. GER in 2017-18 stood at 22, as compared to all India average of 25.8. Disparity in access to education is seen in terms of lower GER for females and SC/ST social groups. Female GER is 20.1, while that for SCs and STs is 18.8 and 12.5, respectively. However, the trend of lower GER for these groups is observed at the national level too. A positive trend is that the GER across these groups has also increased significantly in the past few years, particularly for SCs. In terms of PTR the figure for all the institutions in 26 in Odisha the same as national average. In this aspect, Odisha has a better position than 13 states in India.

6.5.31 Gender Parity Index (GPI) in higher education in Odisha is 0.85. This is also reflected in the lower enrolment rates of females as discussed in the section before. GPI has increased from 0.82 in 2011-12 to 0.85 in 2017-18. This increment, which may seem slow, is however an encouraging trend, indicating increasing access to females in higher education, which opens up opportunities for them as they enter the workforce.

Figure 6.5 GER in higher education in Odisha



New Achievement in Education Sector

- 214 Odisha Adarsh Vidyalaya started functioning in 214 blocks covering 29 districts from 2016-17 to 2019-20. 36 more will be more operational from the academic session 2020-21. 30 OAVs upgraded to senior secondary from 2019-20 and 30 more will be in 2020-21. Total 58,712 students enrolled in 214 OAVs.

Mo School Abhiyan:

'Mo School' is a first-of-its-kind initiative by a State for strengthening citizen-government partnership in school education. It has provided a platform to donate funds, materials and services for overall development of schools in the State. It was launched by the Honorable Chief Minister of Odisha Sri. Naveen Patnaik on Children's Day, 14th of Nov 2017.

Financial Year 2018-19

1. 8937 Schools in 30 districts received Rs 29,70,25,792 as contribution to Mo School during 2018-19.
2. The office of MSAPS had received a total amount of Rs 5,294,36,686/- from the government towards matching grant, out of which Rs 3,329,87,906/- was released to 6175 no. of schools by 31 March 2019.
3. An amount of Rs 99750000/- was received from the government towards Programme and Office operation fund, out of which Rs 434,38,627/- was spent in this financial year.
4. Total 149,650 contributors were mobilized in the year 2018-19 under Mo School The Mo School Abhiyan has reached to 308 Blocks of the State in 30 districts.

• State-wise Parents Teacher Association Meeting

<p>Objective :</p> <p>To improve the Learning Outcomes of students through strengthening school-community relationship</p>	<ul style="list-style-type: none"> • Odisha has decided to organise state wide PTM (Parents Teacher Association meeting) 4 times in an academic year in all Govt. Schools of Odisha in a campaign mode. • 1st State-wide PTM was held on 28th June, 2019 to orient all Parents on the Learning Enhancement Program (Ujjwal & Utthan). • 2nd state-wide PTM was held on 16th January, 2020 to discuss the results of the Summative-Assessment 1 & School Certification Program with parents • State has received realtime reponse on PTM through Google Form from 36,086 HMs & 4,750 Monitoring officials. • As per reports collected, parent participation in the PTM was 52%, of which 54% were female parents. • More than 90% parents in the PTM effectively participated and reported that they were satisfied with the agenda
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Garima Awards

The School Certification Programme (Garima) recognizes and rewards schools that are performing in terms of learning Outcomes, and motivate the rest to improve their performance. Under this programme, schools can nominate themselves to be assessed and certified under three categories: Bronze, Silver and Gold. The following are the key objectives of the programme.

- To identify goodperforming schools basis academic performance.
- To encourage school to help students to accomplish grade level Learning Outcomes.
- To generate healthy competition amongst schools in the block/district.
- To recognize and reward these schools HMs and Teachers.
- To recognize and reward schools, clusters and blocks that are ensuring students at appropriate learning outcomes.

Education for ST and SC communities

6.5.32 As a priority area of intervention, the State government is committed to improving the educational status of SC and ST communities by implementing various interventions like free education, award of scholarships, boarding facilities, free text books and reading and writing materials etc. This is driven by the fact that education related indicators for SC/STs continue to be significantly lower than the State average. Historical backward status of SC/STs cannot remain the status quo anymore. Their welfare and development, through special focus on increasing access to education, will lead to overall growth of the State as well, given their large population in the State.

6.5.33 As mentioned in the previous sections, tribal literacy in Odisha has kept pace with the increasing literacy rate in the State, rising significantly from 22.37% in 1991 to 52.24% in 2011. It is noteworthy that when the percentage rise of tribal female literacy at the national level between 2001 and 2011 was 41.97, the corresponding rise for Odisha was phenomenal at 76.29. The same pattern is echoed in tribal male and total tribal literacy rate. This speaks volumes about the untiring and sustained efforts of the Government towards progress of female tribal education.

Expanding Access to Education for the ST and SC children

6.5.34 Odisha is one of the leading States in providing residential schooling facility to tribal students. 1721 residential schools and about 6898 hostels for ST and SC students in the State provide primary to senior secondary education to more than 4.50 lakh ST/SC students. The residential facilities greatly address access-related difficulties faced by tribal children of remote regions and reduce burden of the disadvantaged tribal families by taking care of all expenses towards their children's education.

6.5.35 About 70% of these residential schools are concentrated in 12 tribal dominated Districts. These schools have very high proportion of ST students (81%) followed by SC students (11%) and others (8%). The increasing thrust on the girls' education is evident from the high proportion of girls (60%) in the total enrolment in these schools.

Hostel Facilities for the ST and SC students

6.5.36 State Government has taken another major intervention for the advancement of tribal education in the form of creation of hostels to enable tribal students from remote regions overcome the challenges of spatial isolation and for facilitating easy access to educational facilities. The increase in number of hostels in last 2 decades have been phenomenal with more than 250% growth in the last 16 years. There has been significant thrust on girls' hostels as creation of hostel facility for ST and SC girls is one of the flagship programme of the Government. This also registered the substantial increase in the female literacy among the ST population.

6.5.37 Presently, around 6898 hostels are providing accommodation facility for education purposes to more than 4.50 lakh ST and SC students, of which around 2.75 lakh are girls. The hostel facilities have greatly influenced the enrolment and retention position of tribal students and significantly contributed in continued education and completion of schooling by the disadvantaged ST and SC students. These facilities also reduced the dropout rate among the tribals.

Scholarships

6.5.38 Scholarship is another major scheme of State Government for incentivising the educational attainment among the tribal students, catering to more than 17.18 lakh ST and SC students at pre-matric level and about 4.38 lakh at post-matric level. Scholarship is a great source of financial support to disadvantaged students for their continued education. The State government spends more than Rs.1364.57 crores annually on various Scholarship schemes, of which about 50% comes from the State's own resources.

Table 6.15 : Educational institutions under Development Department as of 2018-19

Category	No. of schools
Ekalavya Model Residential Schools(EMRS)	19
Higher secondary schools (HSS)	62
High schools (Co-ed)	249
Girls high schools	173
Ashram schools	700
Secondary teachers training schools	3
Residential Sevashrams	5
Educational complex for PVTGs (15 ECs upgraded to High Schools)	4
Sevashrams	501
B.Ed. training colleges	1
Kalinga Model Residential Schools (KMRS)	4
Total	1721

6.5.39 A special Financial Assistance Scheme to ST students have been initiated during 2014-15 wherein the entire cost of education for ST students pursuing their studies in National Level Institutions is borne by the State Government. The State Government, over and above their usual Scholarship entitlement, is providing students of Standard IX and X further, additional cash incentive to ST and SC girls.

6.5.40 In order to steer the monitoring activities in the schools and hostels and to make the monitoring officials at different levels accountable, school and Hostel Monitoring Cell has been introduced with central helpline facilities in 1000 residential school. This facility has enabled girl boarders to report

directly to the department issues relating to sexual harassment and abuse, management of mess activities, health issues etc.

6.5.41 OGIP in an add-on cash incentive programme aimed at facilitating increased participation of ST and SC girl students in the Secondary Education. Under Odisha Girls Incentive Programme (OGIP) 2.50 lakh students have been benefitted during 2018-19.

6.5.42 In order to create interest and to imbibe scientific temper among ST/SC students in the field of science, school level, zonal level science exhibition and state level competitions are being conducted among the students of High Schools, Girls High Schools / EMRSs from the year 2010-11 by way of conducting SishuUtsab "SARGIFUL". This festival provides a platform for students reading in SSD schools to showcase their skills, talents and support in enhancing the holistic development through different workshops and to get opportunity in participating various competitions for their grooming.

Major initiatives for ST/SC education

Table 6.16: Schemes, policies and programmes in education sector for SC/ST communities.

Initiative	Objective	Progress in brief
ANWESHA	To provide quality education to SC and ST students -State Govt. in Partnership with urban educational institutions	ANWESHA provides quality education to ST/SC students in 178 best private schools in 17 districts. Under this scheme, over 23,000 ST and SC students are getting free quality education in the best private schools in these districts. Free Lodging and boarding facility are being provided to students; including school fees, uniforms, study material, tutors etc.
AKANKSHA	To provide hostel facility in Urban areas for ST / SC students for higher education studying in post-matric level courses.	Urban Hostel programme 'AKANKSHA' is implemented for providing free boarding and lodging facilities to ST/SC students perusing 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. Proposal for another 6 hostels is in the pipeline.
PRERANA	Post Matric scholarship to eligible SC /ST students through Direct Benefit Transfer (DBT) mode	1.97 lakh ST, 2.03 lakh SC, 1.38 lakh OBC and 923 EBC have been benefitted through PRERANA during 2018-19.
Mission SUVIDYA	To spread the joy of literacy and numeracy to tribal children in Odisha	The ST & SC Development, Minorities & Backward Classes Welfare Department, Odisha has signed a MoU with Akshara Foundation for Mission SUVIDYA in December 2019 in the presence of Hon'ble Chief Minister of Odisha, Shri Naveen Patnaik.

Mission SUVIDYA

It aims to bring qualitative improvement in accommodation provided in 6500 hostels, managed by the ST & SC Development Department, Government of Odisha with 5.7 lakh students. The Mission will provide congenial atmosphere by guaranteed quality service in safety, health, hygiene and food.

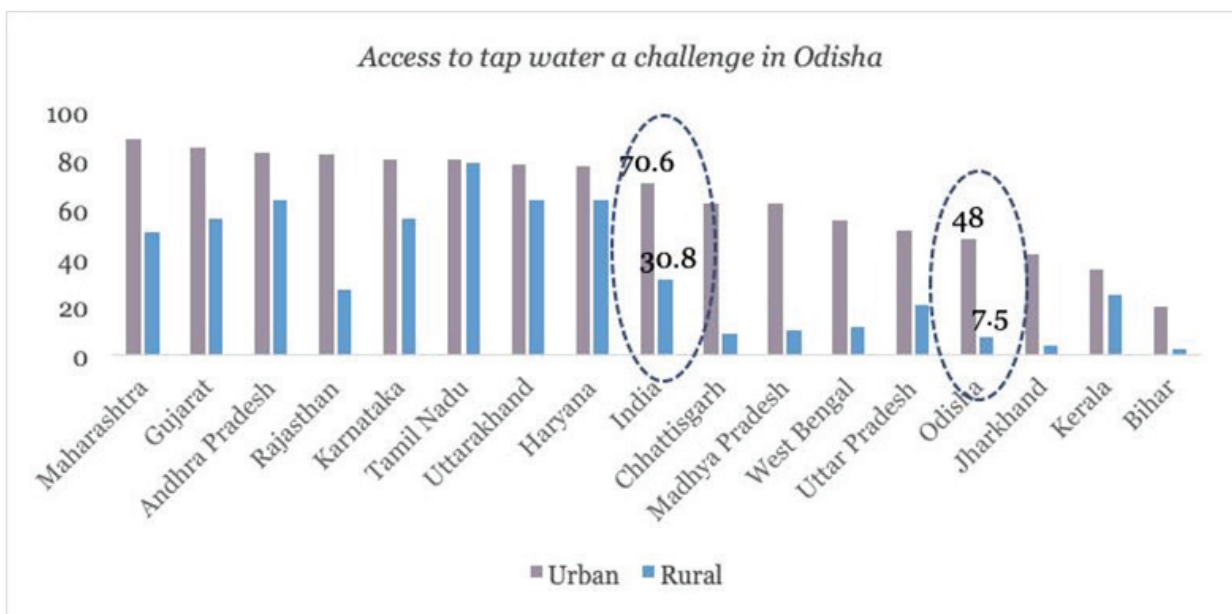
6.6 Water Supply and Sanitation

I. Water Supply

6.6.1 The SDG 6 on clean water and sanitation aims to ensure availability and sustainable management of water and sanitation facilities for all. The goal is closely interrelated with other SDGs such as those of No Poverty (SDG 1) and Good Health and Well Being (Goal 3), each of which affects the access to and availability of Water Supply and Sanitation (WSS) facilities. Odisha's efforts in ensuring this are merged with central sector schemes such as NRDWP (National Rural Drinking Water Supply Programme), Swachh Bharat Mission, urban reforms like AMRUT, etc.

6.6.2 Access to water has been one of the major challenges in the State. As per Census 2011, 48% of urban households and only 7.5% of rural households had access to tap water. This was lower than the corresponding proportions of 70.6% and 30.8% at the national level. In the year 2019, 94% of urban households had access to water supply. The State and Central Government's efforts in increasing access to water supply have led to 98% of habitations being fully covered under the NRDWP in rural areas.

Figure 6.6 Coverage with tap water in rural and urban regions (Census 2011)



Source: Census of India, 2011

6.6.3 Table 6.17 gives the status of population and habitations having piped water supply under NRDWP (as of April 2018). 26.9% of habitations in Odisha have Piped Water Supply (PWS): 25.2% of total habitations are fully covered and 1.67% of inhabitants are partially covered or quality affected. In sum, 46.4% of population has access to piped water supply- as compared to 54.1% of population in India overall. As there is considerable gap to cover both at the State and national level, the Government of Odisha is committed to improving the WSS facilities in the State.

Table 6.17 Status of piped water supply under NRDWP

Population and habitation having piped water supply (As on 01/14/2019)						
	% of Habitation			% of Population		
	Total	Fully covered	Partially covered + quality affected	Total	Fully covered	Partially covered + quality affected
Odisha	26.9	26.56	0.34	46.37	45.51	0.86
India	41.81	32.96	8.84	54.17	40.68	13.49

Source: NRDWP website

6.6.4 URBAN WATER SUPPLY : The State Govt. is committed to provide equitable, affordable, sustainable safe and sufficient water supply to all urban population including urban poor in a time bound manner and to achieve the service level bench mark of 135 lped with 100% coverage of urban households by covering 2025 wards in 114 ULBs of Odisha

II. Sanitation

6.6.5 Lack of sanitation facilities has been a glaring development issue in India, as also in Odisha. As per Census 2011, out of total 96.6 lakh households in the State, 78% households did not have any latrine facilities within their premises and 76.6% households were in practice of open defecation. The push for construction of toilets under the Swachh Bharat Mission has led to a rapid increase in coverage of household latrines. In Odisha, 84.5% individual households have latrines (IHHL).

6.6.6 In Odisha, studies have noted multiple reasons for Odisha's low position in access and use of sanitation facilities:

- Lack of access to a latrine was stated as the primary reason why people practiced open defecation (OD) and lack of cash income on the part of economically poor families was the most stated reason for not opting to install a government-subsidized latrine, despite the available subsidy, since participation requires making a small contribution to toilet construction. Those surveyed thought sanitation costs were high and unaffordable.
- Households that had latrine facilities but continued to practice OD cited reasons such as purity (containing faeces in the latrine pit inside the compound is perceived to be 'impure'), structural and design problems (small toilet size, no roof, water availability), habits (example: rural men have the habit of going for OD), socialising, etc.

6.6.7 The journey towards making Odisha ODF is dependent on government efforts and also increased participation of people which calls for attitudinal and behavioural change. It depends on changing perception towards cleanliness, building and using toilets and maintaining personal hygiene. This implies creating a 'behavioural change' in an individual to help break old cultural habits. Increased information, education and communication (IEC) activities like door-to-door IPC (inter personal communication), rallies, felicitation of champions, mass mobilisation of communities, will contribute to increased awareness.

III. Major initiatives for increasing access to water supply & sanitation

Table 6.18 Schemes, policies, programmes for water supply & sanitation

Initiative	Objective	Achievements
Swachh Bharat Mission 2014-15	To access every person with sanitation facilities, including toilets, solid and liquid waste disposal system, village cleanliness and provision of adequate drinking water.	7,365 number of villages, 681 G.Ps, 12 blocks and 2 districts with ODF status.
Construction of Individual Household Latrine (IHHL) 2015-16	Odisha has also taken initiative to make Odisha ODF by 2020.	
AMA GAON AMA BIKASH 2018-19	Under State Plan to take up construction of new projects, which will contribute to the overall development of the community.	Total 62857 nos. of projects with cost of INR1554, 43, 07, 400/- have been approved covering 6798 nos. of Gram Panchayats of 314 Blocks. Till date INR417.95 Crore has been spent under “Ama Gaon Ama Bikash” scheme.

6.7 Welfare of Women and Children, Elderly, Disabled and SC/ST Communities

I. Development and Empowerment of Women

6.7.1 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 discrimination against women and girls, as it is not only a basic human right, but also crucial for a sustainable future given the role that women empowerment plays in economic growth and development. Women, however, experience considerable disadvantage and discrimination in the society owing to gender bias. This bias reveals itself in the form of disparities in access to education, health services and other social development indicators.

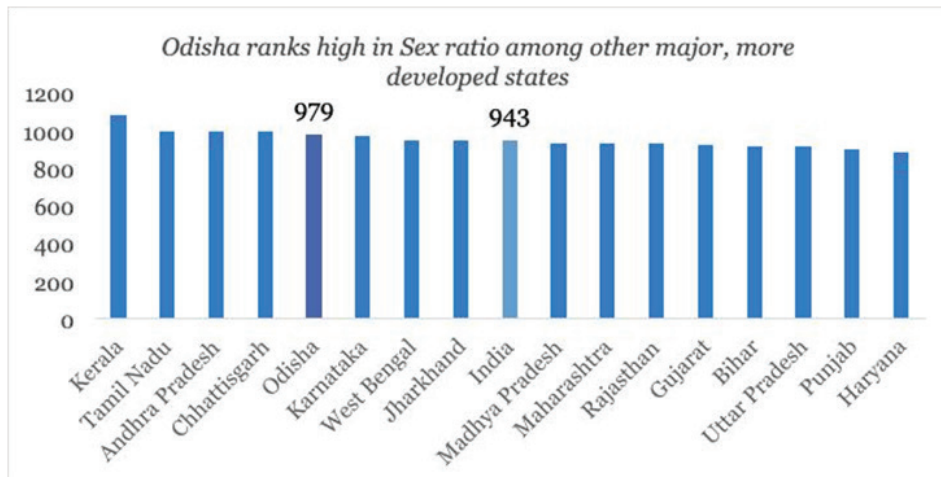
6.7.2 The status of women in the society and economy can be gauged through numerous demographic, sector-specific and economic indicators- mapped from birth to death. Through these, challenges faced by women- and the corresponding policy response to alleviate the same can be ideated. In the following sections, a few of the major indicators are discussed.

6.7.3 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; 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 in fact ranked in the top five of major States in terms of sex ratio. The child sex ratio of the state (941) is better than the national data (918) but the concern is about the declining trend.

6.7.4 The State government has implemented the Biju Kanya Ratna Yojana (Amari Jhia Amari Shakti) scheme, with the objective of creating an enabling environment for the birth, survival and development of the girl child along with ensuring enrolment and retention of girls in educational institutions. The focus is on creating mass awareness on addressing gender discrimination against girls, improved status of nutrition, health, education, sex ratio at birth and child sex ratio. Launched in September 2016 for a period of 3 years 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 on the value of the girl child.

6.7.5 Further, the Odisha State Policy for Girls and Women adopted in 2014, has the mission of creating an enabling environment for girls and women that promotes equal opportunities, eliminates discrimination, ensures holistic development and empowerment and enhances capacities.

Figure 6.7 Sex Ratio in major states in India, 2011

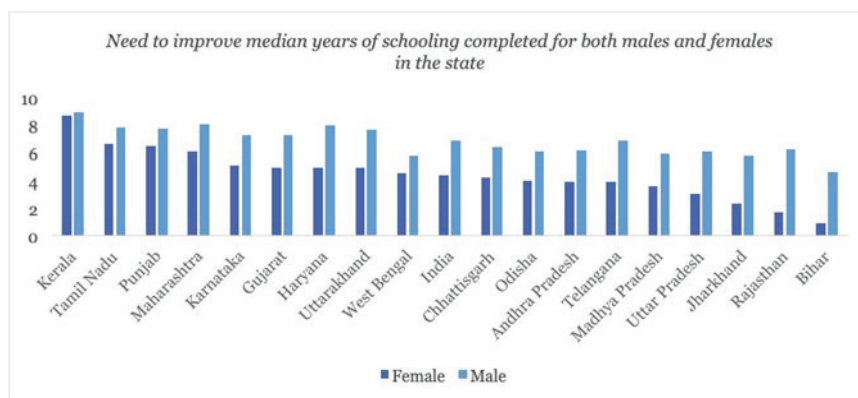


Source: Census of India, 2011

6.7.6 As discussed in the previous sections, female literacy rate (64%) in Odisha is much lower than male literacy rate (81.6%). 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 to reach there: female literacy rates have increased sharply in the past few decades, which resulted in reduction of the gender gap from 24.9% in 2001 to 17.6% in 2011.

6.7.7 Even as Odisha has made significant improvement in education indicators, there is still considerable distance to cover in terms of achieving gender parity in access to education. Median years of schooling in Odisha for females (4 years) are lower than males (6.1 years); this phenomenon is 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. (Appendix 2 and 3). GPIs at elementary and secondary level are more than 0.9; the State targets to reach complete parity with GPI of 1.

Figure 6.8 Median number of years of schooling completed



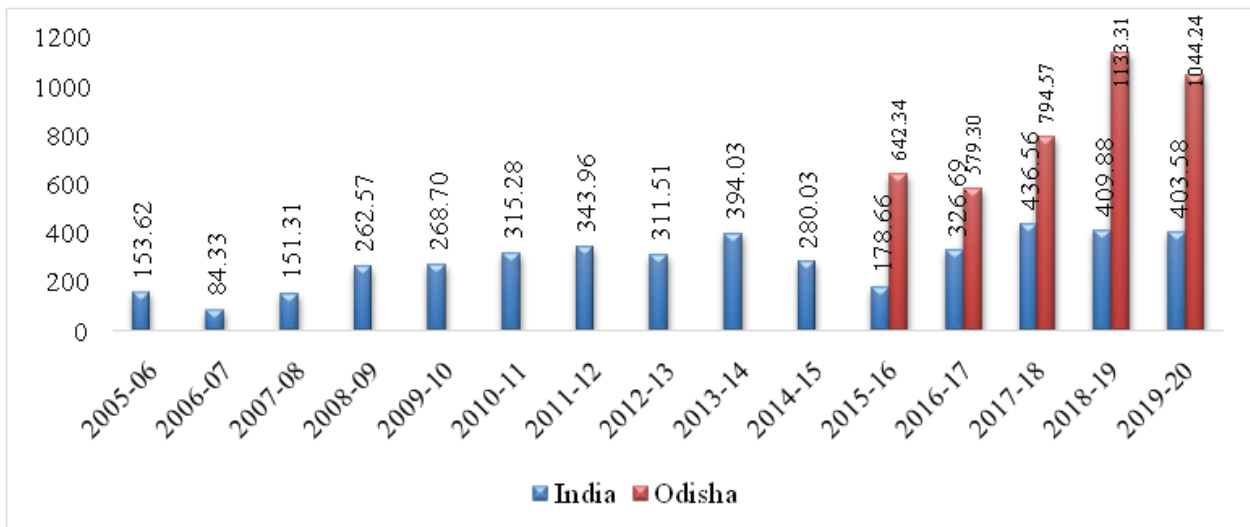
Source: National Family Health Survey, 2015-16 (NFHS-4)

Per capita expenditure on women in India and Odisha in women specific Schemes

In India, per capita women expenditure was lowest in FY 2006-07 and highest in 2017-18. Taking the last three fiscal periods into account, there is a constant decline in per capita woman expenditure in India (Figure-6.9).

On the other hand, Odisha's per capita women expenditure increased from Rs. 794.57 in FY 2017-18 to Rs. 1133.31 in FY 2018-19. However, there is a decline from Rs. 1133.31 in FY 2018-19 to Rs. 1044.24 in FY 2019-20. In this regard, the state needs to focus on more public investment for women.

6.9: Per capita expenditure on woman (100% schemes and programmes)



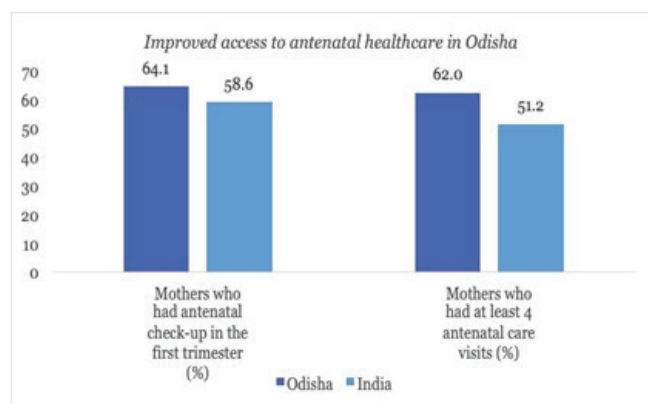
Source: Gender and Child Budget Statement, Government of Odisha

State intervention on Gender Mainstreaming

Odisha government has made concerted efforts in sensitising and implementing various schemes and programmes for its women. These schemes and programmes can 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 schemes include state sector schemes, central sector schemes, centrally sponsored schemes, EOM and SDRF.

6.7.8 Odisha has vastly improved its healthcare facilities targeted towards 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 progress has ensured that the State now ranks above national average and most states in maternity care indicators. As was discussed in the previous sections, Odisha's institutional delivery rates at 85.4% are higher than India average of 78.9%. In other indicators too, Odisha ranks favourably.

Figure 6.10 Maternity care indicators, 2015-16



Source: National Family Health Survey (NFHS-4), 2015-16

6.7.9 Distribution of females in the labour force has increased in the State in the past 3 decades. The proportion of women workers (= work participation rate, which is defined as the percentage of total workers to the total population) in urban and rural areas stood at 29.7% and 14.1%, respectively in 2011. The proportion of women in total main workers has increased from 16.2% in 1981 to 17.9% in 2011, while the proportion of women marginal workers as compared to total marginal workers has declined from 85.8% to 54.52%, over the same period. This appears to be the outcome of increased literacy among women and higher participation of women in the service sector.

6.7.10 Labour force participation rate (LFPR) of females is, however, significantly lower than males in the State, mirroring the trend at the national level. Not only there is intra-state differential between male and female in LFPR, it also shows a wide gap in comparison to national average. This is particularly so in urban Odisha, though a part of it may be attributed to regional disparity in attainment of higher education levels, since urban areas have more and better opportunities for education, more women might be opting for higher education and delaying the entry in the labour force market.

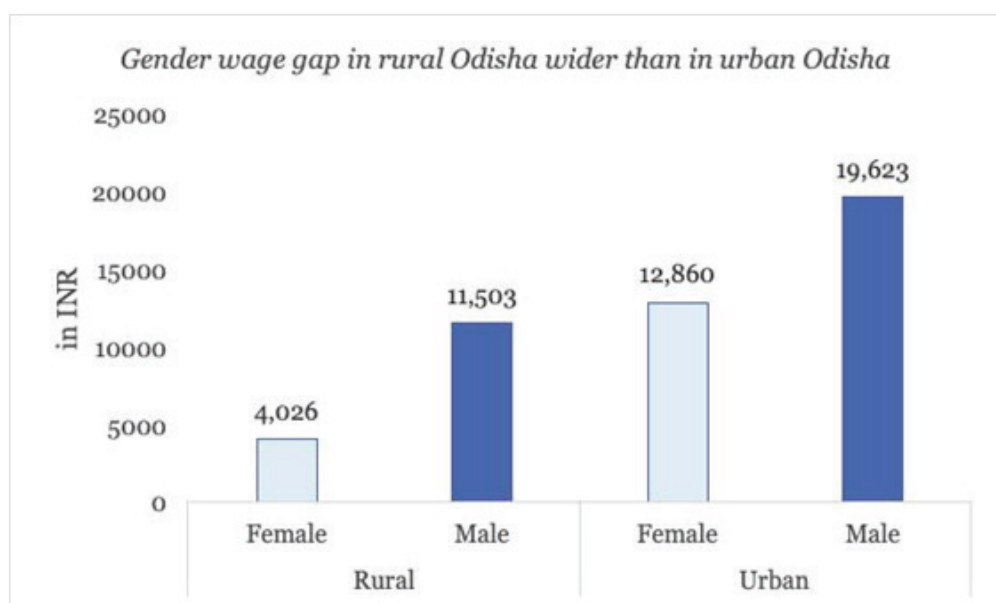
Table 6.19 Labour force participation rate (age 15-59 years), 2017-18

State	Rural			Urban			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Odisha	22.1	84.7	52.3	18.8	80.5	48.7	21.6	84.1	51.7
India	26.6	80.2	53.6	22.3	80.1	51.6	25.3	80.2	53.0

Source: Periodic Labour Force Survey, 2017-18

6.7.11 Gender disparity in wages exists across rural and urban Odisha, more so in urban areas, for salaried employees. While the gap between male and female average wage is INR 6,763 in urban areas, the gap is much wider at INR 7,477 in the rural region.

Figure 6.11 Average wage during the preceding calendar month among the regular wage salaried employees, April-June 2018



Source: Periodic Labour Force Survey, 2017-18

6.7.12 For casual workers too, there exist wage disparity between male and female workers. However, the wage gap is higher in urban areas than in rural areas.

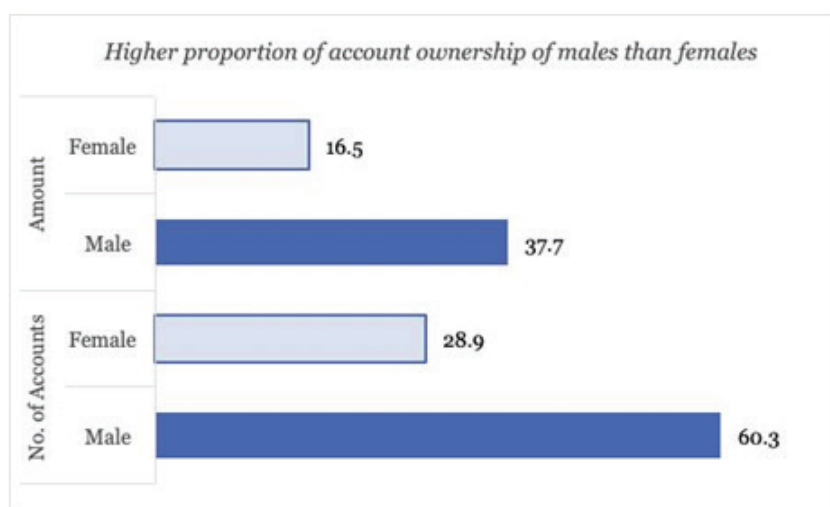
Table 6.20 : Average wage earnings per day (INR) from casual labour work other than public works

Rural		Urban	
Female	Male	Female	Male
160.77	244.71	178.48	265.94

Source: Periodic Labour Force Survey, 2017-18

6.7.13 Financial independence is one of the key strands for gender equality and women empowerment. Access to and use of financial services is expected to lead to greater decision-making power for females. However, there remains a considerable gap in access to finance for women: in terms of ownership of bank deposits, 60.3% of total accounts are held by males, as compared to 28.9% females (remaining held by non-individuals). Amount in deposits held by males is more than double that of females (37.7 vs 16.5%, respectively)

Figure 6.12 Proportion of deposits (amount and number) in scheduled commercial banks, by gender (as of March 2018)



Source: Reserve Bank of India, 2018

6.7.14 Apart from financial inclusion and independence, women's position in entrepreneurship also needs to be strengthened. A glance at statistics in distribution of proprietary establishments indicates that males, both at the State and national level, own an overwhelming majority of establishments. In Odisha, females own 14% of proprietary establishments, across rural and urban regions. At the national level, the figures are slightly higher and skewed towards females in rural areas as compared to urban.

Table 6.21 Distribution of proprietary establishments, by sex of owner, 2014

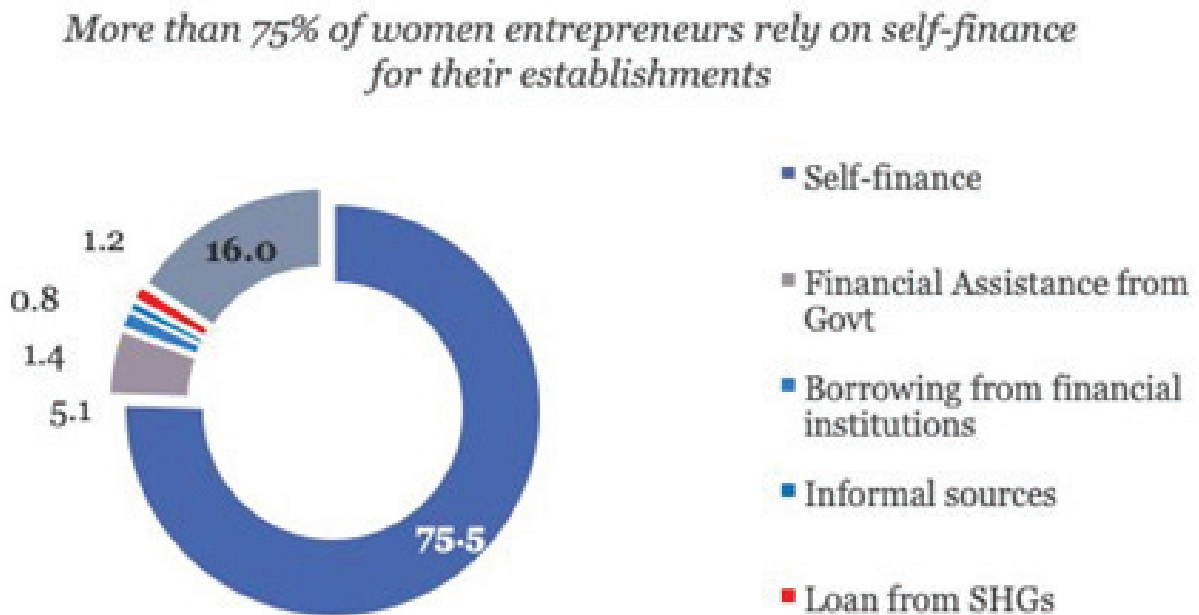
States	Rural			Urban			Total		
	Female	Male	% Female	Female	Male	% Female	Female	Male	% Female
Odisha	17,946	1,09,417	14	2,183	13,495	14	20,129	1,22,912	14
India	2,58,633	8,23,609	24	1,37,485	5,83,264	19	3,96,118	14,06,873	22

Source: Sixth Economic Census (2013-14), Ministry of Statistics and Programme Implementation

6.7.15 The link between access to finance and women entrepreneurs becomes stronger when one considers their major sources of finance; more than 75% of establishments by women entrepreneurs have been self-financed.

Donations and transfers account for 15%, while financial assistance from the government accounts for another 5%. Increasing the sources of external finance for women can yield results so that they are not financially constrained, in order to encourage entrepreneurship.

Figure No. 6.13 Distribution of major sources of finance for establishments under women entrepreneurs



Source: Sixth Economic Census (2013-14), Ministry of Statistics and Programme Implementation

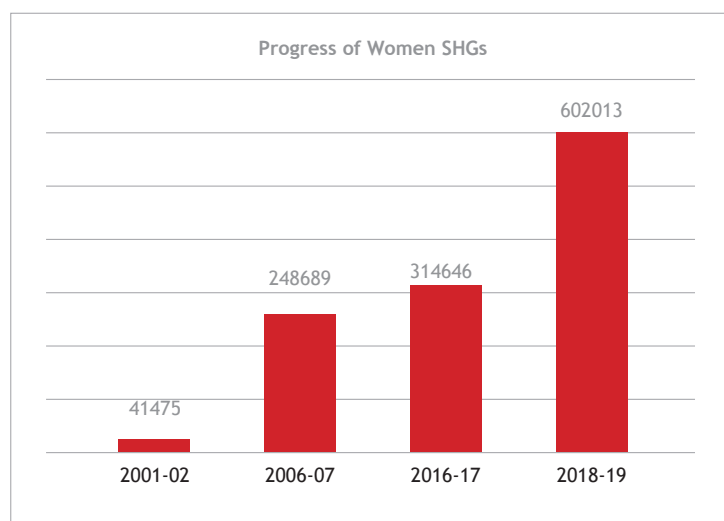
6.1.16 The State has undertaken multiple initiatives to encourage women entrepreneurship. The Mahila Vikas Samabaya Nigam (MVSN) has widened the scope of marketing of products of Women's Self Help Groups (WSHGs) through Pallishree Melas and "Sisir Saras". It provides funds for training of the poor and needy women in traditional occupations to upgrade their skills and sell their products. Mukhya Mantri Mahila Sashakti Karana Yojana (MMMSY) aims at socio-economic empowerment of WSHGs under Mission Shakti through formation of new WSHGs, training and capacity building, livelihood and skill development of all WSHGs in the state and linkages with financial institutions.

Mission Shakti: Towards Women Empowerment

6.7.17 "Mission Shakti" is the State's self-help mission for empowering women through promotion of Women Self Help Groups (WSHGs) to take up various socio-economic activities. The Mission was launched in the state on 8th March 2001 on the eve of International Women's Day. Mission Shakti has the clear objective of empowering women through gainful activities by providing credit and market linkage. Nearly 70 lakh women have been organized into six lakh groups in all blocks and urban local bodies of the State so far. To strengthen the existing WSHGs and to provide momentum to formation of new WSHGs, constant monitoring is undertaken throughout the year. For this purpose, separate Directorate of Mission Shakti has been created under the Department of Women and Child Development and Mission Shakti.

Figure 6.14 Progress of WSHGs under Mission Shakti

6.7.18 Mission Shakti has become a silent revolution in the state transforming the lives of women with 6,02,013 WSHGs comprising of 70,00,010 women. The mission was started with an initial objective of forming two lakh groups in two years. By 2006-07, 2,48,689 women SHGs had been formed which increased to 3,14,646 by 2016-17. Consequent upon creation of new Directorate, additional 2,87,367 WSHGs were formed on a mission mode since April 2017.



Source : Women and Child Development Department and MS, Odisha

Financial Assistance to Women SHGs and SHG Federations

6.7.19 Financial assistance is provided to women SHGs and SHG Federations to supplement following activities:

- Demonstrate credit and investment worthiness of SHG and SHG Federations
- Support in increase of purpose and helpful in availing Bank Linkage
- Enable the SHG and their Federations to start new livelihood activities or to meet the immediate financial needs
- Help the SHG and their Federations to prioritise their need and make prudent investment plans.
- Under digital empowerment, an amount of Rs. 3000.00 has been provided to each SHG as financial assistance to procure a smart phone of their choice from the open market. Out of 6.02 lakh WSHGs in the state, 3.11 lakh SHGs have received financial assistance for digital empowerment during 2018-19 in the first phase. Remaining SHGs will be provided with financial assistance in the financial year 2019-20 in second phase.

Table 6.22 Progress of Mission Shakti under different components

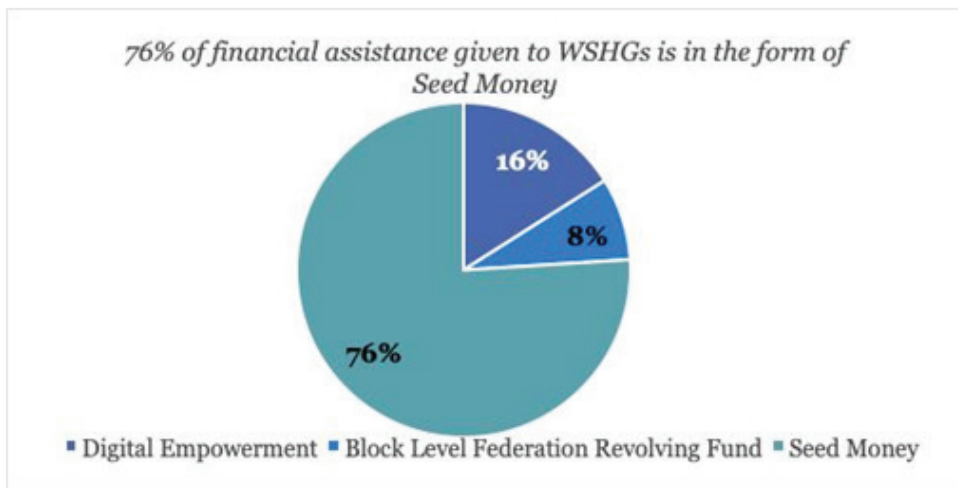
Programme	Year	Fund Released (INR)	Number of WSHGs benefited	Number of WSHG member benefited
Micro Credit Support	2003-04, 2006-07	13,04,30,000	26,086	2,60,860
Seed Money Support	2008-09, 2011-12	1,07,29,17,200	1,66,349	16,63,490
Drudgery Reduction	2013-14	126,649,90,000	1,26,649	12,66,490
Revitalising the WSHG under Mission Shakti	2016-17	128,03,60,000	1,28,036	12,80,360
Seed Money	2018-19	463	3,08,335	30,83,350
Digital Empowerment	2018-19	94	3,11,188	31,11,880
Revolving Fund to Block Level Federations (BLF)	2018-19	50	200	

Source: Women and Child Development Department and MS, Odisha

Financial Inclusion: SHG Bank Linkage

6.7.20 Under Mission Shakti, the SHG-Bank Linkage Programme is a major Financial Inclusion initiative, aiming at ensuring access to institutional credit by Women Self Help Groups, thereby promoting sustainable livelihoods. This programme facilitates the realms of building financial capabilities and self confidence in the women, through internal saving and lending from own funds of the SHGs. During the financial year 2018-19, an amount of INR 1,744.57 crore has been sanctioned to 1,59,520 WSHGs against a target of 1,35,000 number of SHGs by banks.

Figure 6.15 Financial Assistance to WSHGs (Progress under 2018-19)

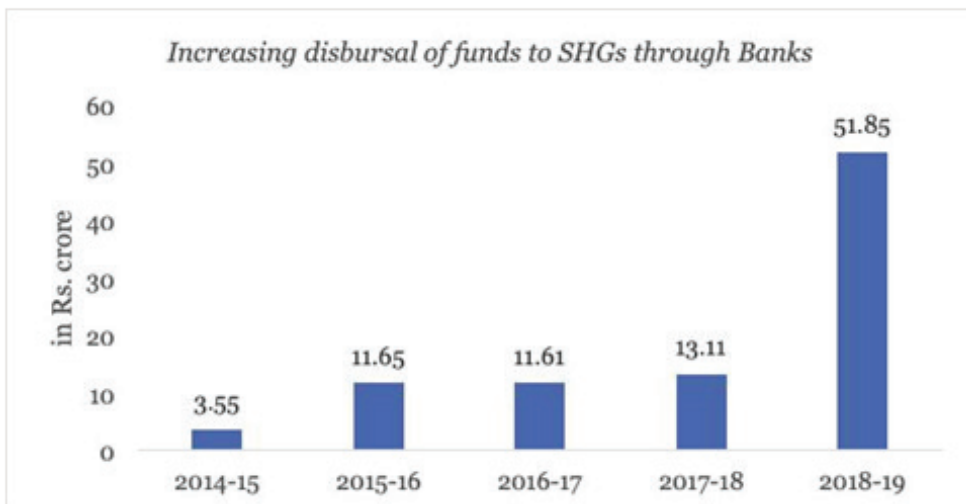


Source: Women and Child Development Department and MS, Odisha

Mission Shakti Loan for WSHGs -State Interest Subvention:

6.7.21 The Mission Shakti Loan (State Interest Subvention Scheme) is aimed at benefiting all prompt and regular repaying WSHGs functioning in the State of Odisha (both rural and urban areas), irrespective of their promoting agency. Under this Scheme, the WSHGs are making regular repayment as per the bank loan schedule and the bank lending rate. On regular repayment, Government is reimbursing the interest amount to the SHGs through concerned banks.

Figure 6.24 Amount Disbursed to SHGs through banks in Odisha



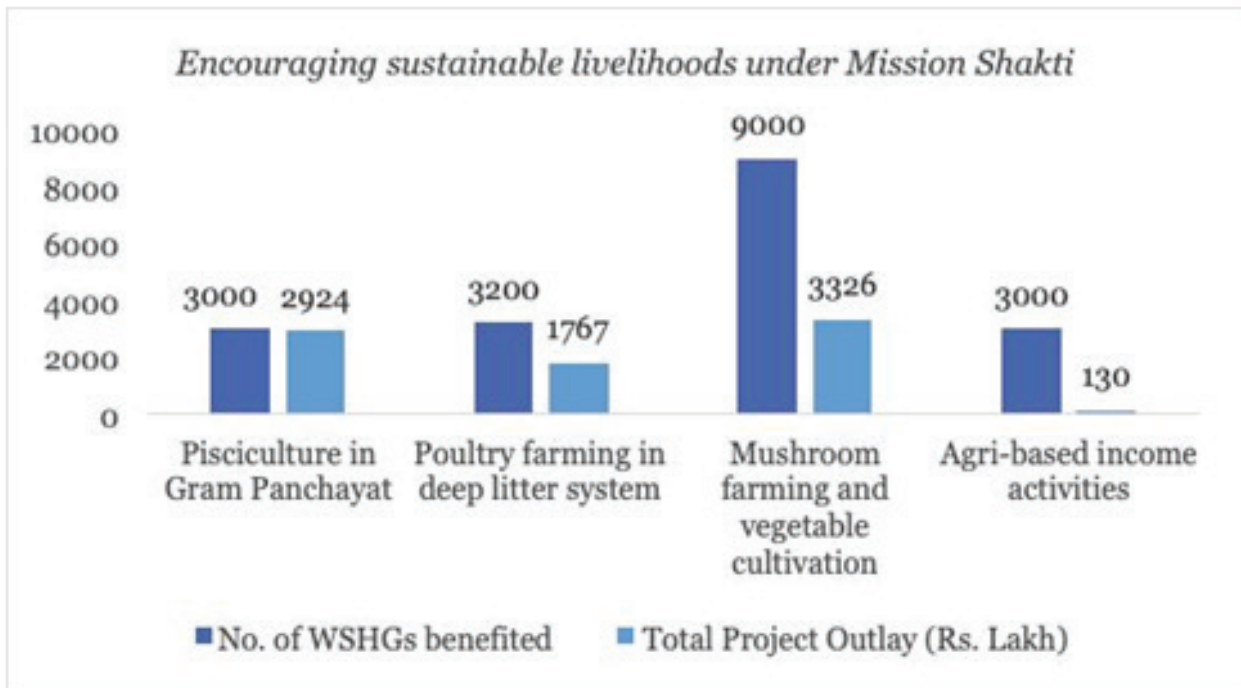
Source: Women and Child Development Department and MS, Odisha

6.7.22 In recognition of women members' efforts towards entrepreneurship at SHG level, the State Government announced the Interest Subvention Scheme for Women Self Help Groups with effect from 1st April 2013, making the effective rate of interest as 2% for loans up-to INR 3 lakhs. Subsequently, considering the growth in credit off take of SHGs in order to further reduce the interest burden, to encourage SHGs to invest more capital in livelihood activities, the effective annual interest rate was reduced to 1% for women SHGs in the State, for loans up to INR 3 lakhs from 1st April 2015. In the meantime, the State Government has approved to provide interest free loans i.e., at 0% per annum for Women Self Help Groups, for loans up to INR 3 lakhs effective from 1st April 2019 to accelerate the SHG bank linkage programme in the State and to supplement further livelihood promotion of women SHGs.

Sustainable Livelihoods

6.7.23 Mission Shakti has also provided opportunities for self-employment by making use of own and acquired skill. Economic pursuits such as agri-based activities like - rice, sugarcane, onion, cultivation, apiculture, bamboo crafts, candle making, chhatua making, incense sticks making, livestock (dairy, sheep rearing), mid-day meal preparation are encouraged under this mission. Various specialised projects and income generating activities related to pisciculture, poultry, mushroom farming and vegetable cultivation have been initiated in convergence with different Government Departments, which directly benefit more than 18,000 Women SHGs. SHGs are involved in diverse activities like manufacturing LED bulbs, running buses under the Biju Gain Gadi supplying Take Home Ration under the ICDS programme, electricity, meter reading, civil construction, producing pickle to brass utensils, dry fruits, wood crafts, ready to eat foods, modern appliqué etc. They also play an active role in taking of social issues like prevention of malnutrition, improvement of sex ratio, prohibition of child marriage etc.

Figure 6.16 Specialised projects through Convergence with Government Departments



Source: Women and Child Development Department and MS, Odisha

Mission Shakti Gruha

Under the “Ama Gaon Ama Bikash” programme of the state government, construction of one “Mission Shakti Gruha” in each GP across the state has been taken up to facilitate regular meeting of SHGs and provide retail outlets for SHG products at the Panchayat level.

PEETHA CAMPS: (Peoples Empowerment Enabling Transparency and Accountability of Odisha Initiatives)

For awareness creation among women on government scheme and programme through organization of GP level programme under PEETHA, camps were organised where women SHGs actively participated in addition to preparation and sale of traditional cuisines of the state popularly known as pitha.

Caring for the women in distress

- SwadharGrehs envision a supportive institutional framework for women victims of difficult circumstances. They provide shelter, food, clothing and health as well as economic and social security. There are 56 SwadharGrehs functional in Odisha.
- Ujjawala is a comprehensive scheme for prevention of trafficking, for rescue, rehabilitation and re-integration of victims of trafficking. 12Ujjawala Homes are running in the state.
- One Stop Centre is a hospital based centre 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. During the year 2018-19, six new One Stop Centres have been operationalised in 6 districts such as: SCB Medical College, Cuttack; MKCG Medical College and Hospital, Berhampur, Ganjam; District Headquarter Hospital, Sambalpur ; Government Hospital, Rourkela, Sundargarh District; District Headquarter Hospital, Koraput and District Headquarter Hospital Campus, Nuapada. 21 more proposals for one stop centres have been approved by the Govt. of India.
- The 181 Women Helpline provides toll-free 24 hours telecom service to women affected by violence seeking support and information; facilitates crisis and non-crisis intervention through referral to the appropriate agencies; provides information about the appropriate support services, government schemes and programmes. More than 14,000 cases have been registered since March 2017.

II. Child Welfare: Ensuring Child Protection

6.7.24 The Department of Women and Child Development and Mission Shakti is implementing the Juvenile Justice (Care and Protection of Children) Act, 2015 [Act 2 of 2016] and the Juvenile Justice (Care and Protection of Children) Model Rules, 2016 and the Protection of children from Sexual Offences Act, 2012. With the prime objective to ensure the best interest of every child in the state, schemes including centrally sponsored (Child Protection Services) and state sponsored (Biju Sishu Surakshya Yojana, BSSY) are operational.

6.7.25 Child Protection Services [formerly known as the Integrated Child Protection Scheme] cater to the basic needs of the “children in need of care and protection” and “children in conflict with law” through proper care, protection, development, treatment and social re-integration. This is done by adopting a child-friendly approach in the adjudication and disposal of matters and promoting the child’s constructive role in the society in consonance with the stipulations made under the “United Nations Convention on the Rights of Children” (ratified by India in December 1992.)

6.7.26 The State continues to provide a safety net for the children who are without biological or adoptive parents or legal guardians and children who are infected by HIV and found to be the most vulnerable, through BSSY. Support for technical education, scholarship assistance for meritorious students, support for Sukanya Samrudhi Yojana and marriage assistance is provided to the eligible boys and girls.

“Biju Sishu Surakhya Yojana” (BSSY)

BSSY has been implemented for providing a safety net for the children affected with HIV/ AIDS and whose biological parents are not alive with four types of assistance namely:

- i. Support for technical education (Rs. 7000/- to Rs. 40,000/-)
- ii. Marriage assistance of Rs. 50,000/- for girl child and Rs. 40,000/- for boys when they attend the age of marriage as a taken assistance.
- iii. Scholarship for the children securing 1st, 2nd & 3rd position in the HSC Examination in respect of each district @ Rs. 20,000/- per child.
- iv. Deposit of Rs. 1000/- in each Financial Year in the Account of the girl child opened under Sukanya Samrudhi Yojana.

An amount of Rs. 20, 61,300/- has been released for BSSY during 2018-19.

III. Support to the Elderly

6.7.27 The elderly in Odisha (age 60 and above) account for close to 9.5% of the State’s population (Census 2011). As the demographic structure of the State changes in the next few decades, the proportion of elderly is expected to increase. In old age, the requirements for financial support and access to healthcare increase manifold; and majority of the support is expected to come from the State with the gradual disintegration of the joint family system. Hence, it is imperative to understand the economic conditions of the old-aged, to prepare an appropriate policy response for them in terms of pension requirements and health care infrastructure.

6.7.28 Majority of the elderly and their households in the State are dependent on external financial support: more than half of households are below the poverty line and close to 39.4% have no source of income. 44.7% of elderly are fully financially dependent. Taken together, it can be said that about 45-55% of the elderly are economically vulnerable; for about 25% , the problem is more acute (being in the lowest wealth quintile and having no assets or any kind of economic support). These are the households, which would be requiring significant social security.

Table 6.23 Indicators of economic vulnerability of the elderly and their households in Odisha, 2012

Indicator	Odisha
BPL HHs (%)	54.4
Antyodaya HHs(%)	5.1
HH with MPCE less than INR 1,000(%)	68.5
HH in lowest wealth quintile (%)	60.0
Elderly with no source of income (%)	39.4
Elderly with no assets (%)	39.5
Elderly fully financially dependent (%)	44.7

Note : Indicators are overlapping and not mutually exclusive.

Source: UNFPA (2012) BKPAI Report on Status of the Elderly in the Select States of India, 2011 and the State Reports, as cited in “Social Security for the Elderly in India”, Institute for Social and Economic Change and UNFPA

6.7.29 To address these issues, the State Government has taken multiple steps: Odisha was the first State in the country to launch the national programme for prevention and control of cancer, diabetes, cardiovascular disease and stroke and the national 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 are the other State schemes for elderly in Odisha. Further, the Madhu Babu Pension Yojana (MBPY) was introduced in 2008 by merging two pension schemes: “State Old Age Pension Rules, 1989” and “Odisha Disability Pension Rule, 1985”. The rate of pension is INR 300 per month per beneficiary up to the age of 79 years and INR 500 per month for 80 years and above. The State Government has launched awards namely “BAYOJYESTHA SAMMAN” for senior citizens and institutions that support their health and wellbeing.

ABADANA

Welfare and Protection of the Destitute Senior Citizen

To achieve the goals of the Odisha State Policy for Senior Citizen 2016, the State Government has launched a scheme “ABADANA” during 2018-19 for the welfare and protection of the Destitute Senior Citizens with a view to improve the quality of life the elderly by providing basic activities, comprehensive rehabilitation services and programmes that shall encourage active and productive ageing. During 2018-19 budgetary allocation of ₹30.50 crore was made for supporting homes for the elderly ₹2.50 crore towards other programme components such as sensitization and awareness of the maintenance and welfare of the parents and senior citizen (MWPAC) Act, 2007, Bayojyestha Samman etc.

IV. Welfare of Persons with Disability

6.7.30 As per 2011 Census, there were 12.44 lakh disabled persons in Odisha. A number of welfare schemes are being implemented in the State with financial support from the Government of India to bring the differently-abled in to the mainstream of the society. Some of these welfare schemes are mentioned below:

- Madhu Babu Pension Yojana (MBPY)
- Special schools for disabled children.
- Distribution of special aids and appliances.
- Rehabilitation of cured leprosy patients.
- Training and rehabilitation of persons with disability.
- Rehabilitation of physically and mentally challenged, socially disadvantaged persons.
- Care and protection of spastic children.
- Scholarship and stipend to disabled students (Banishree)
- Indira Gandhi National Disabled Pensions scheme (IGNDPS).
- Bhima Bhoi Bhinnakshyama Samarthya Abhiyan (BBSA)
- Mission Kshyamada
- Hostels for woman with disability
- Free laptop and voice recorder to persons with Visual Impairment
- Award of incentive for marriage to person with disability.

Table 6.24 Distribution of Type of disabled persons, Odisha, 2011

Type of disability	Number in lakh *
Visual	2.64 (21.20%)
Hearing	2.38 (19.11%)
Speech	0.68 (5.51%)
Orthopaedic	2.60 (20.89%)
Mental	0.72 (5.82%)
Mental illness	1.26 (10.14%)
Multiple disability	1.73 (13.89%)
Total	12.44 (100%)

Source: Census of India, 2011 (In parenthesis, percentage distribution is provided)

The State Govt. has started a training-cum-production centre for manufacturing soaps by disability in order to include them in economic activities.

A - Pension Schemes

- Govt. of Odisha is providing pension under Madhubabu Pension Yojana (MBPY) - 28, 13, 704 nos. of beneficiaries.
- Govt. of India provides pension under National Social Assistance Programme (NSAP) - 20, 08, 371 nos. of beneficiaries.
- Govt. of Odisha provides funds of INR1763 crores annually under MBPY.
- Since Govt. of India provides funds amounting to INR 608 crores under NSAP and in order to maintain parity with the State Govt. pensioners under MBPY, Govt. of Odisha bears additional liability of INR 633 crores, over and above Govt. of India allotment yearly.
- The coverage of pensioners under the above schemes is the largest in terms of percentage of population covered in the country.

B - Old Age Homes

6.7.31 For all round welfare of the Senior Citizens, Persons with Disabilities, Transgenders, Drug addicts and Beggars, Government of Odisha decided to set up Integrated Infrastructure Complex in all 30 districts 1 INR 30.00 crores per district. The infrastructure Complex will aim at holistic care and improving the living standard of these people.

6.7.32 The construction of the Complex in 9 districts has already been started over 25 acres of land in each district. This shall be the India's model scheme dedicated to the welfare of the vulnerable section of the society for which the State Government has already released 62 crores in the last financial year.

C. Welfare of Transgenders and Beggars

SWEEKRUTI :

For the promotion of the transgender equality and justice, the State Govt. has launched a novel scheme "Sweekruti" that shall strive for their social inclusion, empowerment and increased participation in the public life. Under this scheme provision has been made for their survey and identification, issue of multi-purpose smart cards, assistance to parents with transgender children, pre and post metric scholarships, personality development, skill up-gradation and entrepreneurship development along with critical services such as health care, legal aid, counselling services.

SAHAYA:

Beggars are the visible indicators of poverty in our society. In order to respond this issue, the State Govt. conducted a beggar identification survey in all districts of the State. A total of 6482 beggars were identified and a new scheme "SAHAYA" was launched by the State Govt. for their protection, care and rehabilitation.

V. Welfare of Scheduled Castes and Scheduled Tribes

6.7.33 Odisha occupies a unique position among the Indian States and Union Territories for having a rich and colourful tribal scenario. The scheduled tribes (ST) and scheduled castes (SC) constitute about 40% of the State's total population (ST-22.85 % and SC-17.13 % as per 2011 census). About 44.7 % area of Odisha has been notified as scheduled area. It extends over 119 blocks in thirteen districts, which covers ST population (about 68 %) of the total tribal population of the State. Out of 635 tribal communities in India, 62 are found in Odisha and 13 are Particularly Vulnerable Tribal Groups (PVTG). There are 93 scheduled caste communities in the State. The State Government implements several programmes for economic, educational and social development of the SC and ST communities.

6.7.34 The SC/ST groups have been historically disadvantaged and discriminated. This has resulted in their social and economic deprivation in terms of access to education, livelihood, finance, asset ownership. As discussed in previous sections, education indicators, viz. literacy, dropout rates are significantly poorer for the SC/ST groups as compared to the overall averages. Similarly, poverty rates among these groups continue to be much higher, even though reduction in their poverty rates has been the highest in the State (See Section on Poverty and Inequality).

6.7.35 Development of ST and SC communities, elimination of all forms of exploitation and improvement of their quality of life has been the prime objective of development policies of the Government. A number of special programmes have been launched to uplift the socio-economic status of both ST and SC communities. Some of these programmes are briefly described below.

Special Development Councils:

6.7.36 In order to ensure tribal development is more effective, inclusive and participatory, the State Government felt the necessity to involve tribals extensively at all stages of the development process, starting from identification of deficit areas, plan formulation, implementation and monitoring. Keeping the above objectives in view, Government has set up Special Development Council in 9 Districts of the State having the highest concentration of tribal population, such as Mayurbhanj, Kenonjhar, Sundergarh, Kandhamal, Gajapati, Koraput, Rayagada, Nabarangpur and Malkangiri covering 117 blocks, 2022 Gram Panchayats, 18687 village, about 14 lakhs ST households and 63.43 lakhs ST population. These Councils specially focus on preservation promotion and protection of tribal culture and traditions, heritage and unique identity of each tribe. The Special Development Councils have representation from each tribe residing in the district. It is a state plan scheme for tribal development.

6.7.37 The Special Development Councils aim at:

- Conservation and propagation of tribal culture for retaining tribal identity;
- Recognition and promotion of the indigenous knowledge system of the tribal;
- Documentation of tangible and intangible tribal culture, tradition and practices;
- Identification of tribal resources and making the indigenous knowledge / unique culture a means of livelihood;
- Organization of exposure visits on the range of development issues;
- Promotion of tribal languages and dialects for development communication;
- Optimal utilization of available resources in tribal areas for sustainable tribal development as per felt needs of tribals and,
- Promotion of sports and youth activities among tribal at various levels.
- Critical gap filling including last mile connectivity and other basic minimum needs, which are otherwise not available from normal development programs.

6.7.38 During 2017-18 and 2018-19 the following projects have been completed by 9 SDCs as on 31.03.2019 by utilising Rs. 154.04 core.

- a) 2974 scared groves have been completed out of 3849 projected.
- b) 598 tribal weekly markets have been complicated out of 797 identified.
- c) Total numberof 86 Block level cultural festivals have been organized out of 117 block level festivals. Out of the 9 district level cultural festivals targeted to be held, 6 have been completed.
- d) As many as 1533 Tribal cultural clubs have been identified out of which 445 have been completed.

- e) As regards, providing Musicals Instruments are concerned, out of 1525, 1054 clubs have been provided with Musical Instruments.
- f) 647 Dance Troupes have been identified and 501 troupes have been empanelled and provided with dance Costumes.
- g) About 10724 Tribal delegates have undertaken Exposure visit out of 10864 delegates targeted as a confidence building measure.
- h) Artisan identity Cards have been issued to 27190 Tribal Artisans.
- i) Printing of 21 Tribal Bilingual Dictionaries and 21 Tribal Trilingual Proficiency Modules has been completed and distribution of these books has been done in all 30 districts.
- j) Around 3019 Tribal Youth Clubs have been identified for providing sport kits for promotion of sports and sports Kit distributed to 2058 Youth Clubs.
- k) 42 Tribal Resource Centres have been constructed in Sundergarh district out of 49 decided to be taken up.
- l) Land has been identified for construction of Tribal Museum in all the 9 SDC districts and boundary wall construction started in 4 districts namely Gajapati, Nabarangpur, Sundargarh & Keonjhar.

Special Central Assistance (SCA) to Tribal Sub-Scheme (TSS)

6.7.39 The Ministry of Tribal Affairs (MoTA) is providing the Special Central Assistance (SCA) to the State Government as an additive to the State Tribal Sub-Scheme (TSS) for all round socio-economic development of tribal people. Besides, Information, Education and Communication (IEC) related programmes in tribal areas have been implemented. The SCA Funds are provided to the ITDA, Micro Projects and MADA / Cluster Blocks for implementation of Income Generation Scheme (IGS) in the sectors of agriculture, horticulture, irrigation, sericulture, animal husbandry, village small scale cottage industries, skill development training etc. and Infrastructure Development Scheme (IDS) in the ratio of 70:30. A portion of SCA is allocated to OSFDC for implementation of Dispersal Tribal Development Programme (DTDP).

6.7.40 During 2018-19, INR 175.53 crore was received and utilised for supporting 98,540 tribal beneficiaries with various income generation activities and infrastructure development incidental to livelihood enhancement.

Grants under Article - 275(1) of the Constitution of India

6.7.41 As per the provisions of Article 275(1) of the Constitution of India, the Ministry of Tribal Affairs gives annual grants to States to promote welfare of STs based on ST population in the State. The assistance covers the entire TSP area. Under this scheme, 100% grants are given to meet the cost of specific projects for tribals and raise the level of administration of Scheduled Areas. Projects like Ekalavya Model Residential Schools (EMRS) from Classes VI to XII, roads, bridges, minor irrigation projects, hostel buildings, educational complexes, drinking water facilities and electrification of tribal bastis and establishment of multipurpose service centres are usually implemented under the programme.

6.7.42 During 2018-19, an amount of INR 200.66 crore was sanctioned under Article 275(1) and 1,345 infrastructure projects have been taken up, primarily in education, irrigation, connectivity etc.

Focused Area Development Programme (FADP)

6.7.43 Odisha Tribal Development Society (OTDS) has been facilitating implementation of Focused Area Development Programme (FADP) with the objective to:

- ensure sustainable livelihood of ST families through land and non-land based livelihood activities,
- develop suitable infrastructure so as to improve the standard of living of tribal,
- develop backward and forward linkages and strengthen the local institutions and,
- Improve the governance system in the tribal villages by strengthening the Community Institutions.

6.7.44 FADP, a decadal Perspective Plan is being implemented by converging resources from SCA to TSP, Article 275(1), MGNREGS, NHM, RKVY and Biju Krushak Vikas Yojana (BKVY).

6.7.45 During 2018-19, an amount of INR 51.00 crore have been sanctioned and utilised under Focused Area Development Programme (FADP) for supporting 45,254 tribal beneficiaries through various livelihood interventions.

Modified Area Development Approach (MADA)

6.7.46 Adopted during the 6th Plan, this programme aims at development of tribal populations residing outside TSP areas in contiguous patches having a population of 10,000 or more, of which, at least 50 percent are tribal. There are 45 MADA pockets in 46 blocks of 17 districts covering 5.68 lakh population. Individual family oriented income-generating schemes for ST communities and critical infrastructure development programmes are implemented in these pockets.

6.7.47 During 2018-19, a sum of INR1.00 crore has been released under SCA to TSS for implementation of various IGS activities and INR 1.75 crore under Article 275(1) for various infrastructure development programmes.

Clusters

6.7.48 The cluster approach was introduced during the 7th Plan in order to bring smaller areas with tribal concentrations beyond the MADA pockets into the mainstream of development. Contiguous areas with at least 5,000 population (2001 census) and 50% tribal concentration are identified as clusters. There are 14 such clusters spread over 13 blocks in 10 districts with 62,021 tribal population.

6.7.49 During 2018-19, funds to the tune of INR 1.58 crore have been released under SCA to TSS for implementation of various IGS and infrastructure development activities.

Micro Projects

6.7.50 Seventeen Micro Projects have been implemented in the State for all round development of 13 Particularly Vulnerable Tribal Groups (PVTGs), recognized by the Government of India, with 78,519 population residing in parts of 20 blocks of 12 districts (based on the survey conducted in 2007). Out of these 17 Micro Projects, 13 are located within the Scheduled Areas and the remaining four outside the TSP area. During 11th plan period (2007-12) both conservation of culture and development have been carefully balanced in the development approach for the PVTGs by formulation a scheme namely "Conservation - cum- Development" (CCD) which aims at addressing the critical felt needs of the PVTGs by improving infrastructure and providing basic facilities within their easy reach with a view to eliminate poverty, increase literacy level, food security and conserve their traditional culture.

6.7.51 During 2018-19, funds to the tune of INR 5.16 crore released under SCA to TSS for implementation of various infrastructure development programmes in the Micro Project areas.

Dispersed Tribal Development Programme (DTDP)

6.7.52 The dispersed ST population of the State (27 percent) located outside the ITDA/MADA/Cluster pocket areas, is covered under a special project for tribal development called “Dispersed Tribal Development Programme (DTDP)”. Odisha Scheduled Castes and Scheduled Tribes Development Finance Co-operative Corporation Ltd., is the nodal agency that operates DTDP for the total dispersed STs. For this population, DTDP has been implemented and has the following salient aspects: (i) to provide subsidy money for various bankable income generating schemes, (ii) to initiate community minor irrigation projects such as LIPs, WHS and Check-Dams, (iii) to conduct training programmes for promoting self-employment and wage-employment and (iv) to enrol ST households as members of cooperatives.

6.7.53 During 2018-19, funds to the tune of INR 8.29 crore released and utilised for the dispersed ST population of the State under SCA to TSS for Assistance to SHG for Livelihood Enhancement and Skill Development programme.

Protection of Civil Rights of SC and ST

- **Legal Aid Assistance:** Legal aid is being extended to SCs/STs to fight cases for establishing their rights, titles, interest and possession over disputed land and also for cases under the PCR Act, 1955 and the POA Act, 1989. State government have opened 390 legal aid cells in 314 block headquarters by engaging 697 legal retainers (30 numbers 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 have set 3 special courts in Balasore, Bolangir and Cuttack for speedy trial of cases.
- **Inter-Caste Marriages:** Cash incentives of INR 1.00 lakh is being provided for inter-caste marriages between SCs and other castes in Hindu communities for social integration and removal of untouchability. There have been increasing trend of inter-caste marriages from 558 to 971 between 2015 and 2018.

Atrocities against SC/ST communities:

6.7.54 Monetary Relief is being provided to the victims of atrocities belonging to SC/ST communities after joint enquires conducted by the Senior Police officers and the Magistrates. During the year 2018-19, INR 14.87 crore has been spent for payment of monetary relief to 1796 ST/SC atrocity victims.

Odisha SC and ST Development Finance Co-operative Corporation (OSFDC)

6.7.55 Established in 1979-80, OSFDC aims at implementing various economic development programmes for the benefit of poor SC, ST (DTDP) and scavenger communities of the State under various income generating schemes.

Odisha PVTG Empowerment and Livelihood Improvement Programme (OPELIP)

6.7.56 OPELIP has been launched in 12 districts of Odisha viz. Malkangiri, Rayagada, Angul, Deogarh, Ganjam, Nuapada, Keonjhar, Sundargarh, Gajapati, Kandhamal, Kalahandi and Mayurbhanj covering 1,019 villages and 84 GPs of 20 blocks through 17 micro projects for duration of eight years from 2016-17 to 2023-24 having financial outlay of INR 795.42 crore for 62,356 targeted households. Its objectives are to improve the food and nutrition security, reduction of poverty, livelihood opportunities adopted by tribal communities and build the capacity of the targeted households, improve their agricultural practices, promote income generating micro-enterprises and ensure access to education, health and other services and improve communities' infrastructure. During 2018-19, funds to the tune of INR 88.00 crore released and also utilised to assist 30,000 beneficiaries.

Odisha Tribal Empowerment and Livelihood Programme (OTELP)

6.7.59 This programme is being implemented from 2005 by ST and SC Development Department, Government of Odisha with the financial assistance from DFID, IFAD and WFP to ensure the livelihood and food security of poor tribal households through equitable, self-managed and sustainable exploitation of natural resources. The new OTELP plus is a replication of OTELP and covers 998 Micro Water-Sheds (MWS) in 50 Blocks of 10 districts covering 2695 villages and is to be funded out of State Plan and other convergence programmes. During 2018-19, an amount of INR 30.63 crore has been spent out of an annual budget of INR 95.84 crore under this scheme benefitting 36,000 tribal beneficiaries.

6.7.60 Odisha Tribal Development Co-operative Corporation Ltd (TD CCOL) is a state level apex cooperative with an objective to prevent exploitation of tribal communities from middle man / money lender and make sure that basic household articles are available in and around the villages at fair price. Handicraft and handloom products are being sold with the brand name of “TRIBES ODISHA” and the minor forest produce and agricultural produces are sold under “ADISHA” brand. At present, TDCCOL is operating 10 outlets in district headquarters namely Bhubaneswar, Puri, Baripada, Rayagada, Koraput and Nabarangpur. More than 10 livelihood cultures, handicraft, tribal art and printing etc have been strengthened.

KORAPUT COFFEE

Odisha got its first brand of coffee in the name of “Koraput Coffee” grown by the tribals. Setting up the plant will promote coffee grown in Koraput district of Odisha and help growers get fair price. It is an initiative of the district administration’s coffee development trust with financial assistance from TDCCOL, Bhubaneswar with technical backup of Coffee Board, ITDA and CDT, Koraput.

6.8 Poverty measurement

The approach to the issue of poverty alleviation changed remarkably in the current decade. Niti Aayog of India has advocated elimination of poverty by creating gainful jobs and strengthening social programs.

6.8.1 Ending poverty in all its forms everywhere forms the first goal of the Sustainable Development agenda. Poverty is more than just the lack of income or access to resources - it manifests itself in diminished opportunities for education, social discrimination and the inability to participate in decision-making processes. SDG 1 thus calls for ensuring social protection, enhancing access to basic services and building resilience against the impacts of natural disasters which can cause severe damage to people’s resources and livelihoods (United Nations in India).

Consumption Expenditure and Poverty

6.8.2 The latest poverty estimates at national and state-level are available for 2011-12. The erstwhile Planning Commission, now NITI Aayog estimated the poverty line based on consumption expenditure surveys conducted by the National Sample Survey Office (NSSO). Prior to 2011-12 as well, consumption expenditure-based methods were used to estimate the poverty line. Consumption expenditure is less volatile over time, considered to be measured more reliably than income and hence, offers good estimate of economic well-being.

6.8.3 The last available poverty estimates are quite dated. In order to formulate targeted policy responses based on the ever-changing economic structure of the State, it is imperative to examine the changes in consumption expenditure, to provide for a rough estimate for developments in the economy. In this section, changes in Monthly Per Capita Consumption Expenditure (MPCE) in Odisha are considered based on two surveys:

- Consumption expenditure data is available from NABARD's first ever survey on Financial Inclusion (NABARD All India Rural Financial Inclusion Survey (NAFIS) for the year 2016-17. NAFIS provides consumption expenditure based on a nationally representative sample survey. The survey covers mostly rural households: for example, in Odisha, 94% of households covered were rural and the rest were in semi-urban areas.
- The latest NSSO consumption expenditure data for the year 2011-12.

6.8.4 Since, sample coverage is different between NSSO survey (2011-12) and NAFIS (2016-17), the consumption expenditure estimates from these two surveys are not strictly comparable. However, NAFIS has followed the same definition of consumption expenditure as followed by NSSO. In the absence of updated poverty estimates, comparisons between these surveys is helpful to gauge the poverty conditions in the State.

6.8.5 As per the NAFIS (2016-17), monthly per capita consumption expenditure for Odisha is INR 1,403.25. This is an increment of more than 55% over the MPCE in rural Odisha as per NSSO estimates of 2011-12 (CAGR of 9.2%). The corresponding MPCE for all-India is INR 1,477. Even as Odisha's MPCE is lower than the national average, there seems to be a convergence in expenditure: growth rate in MPCE for Odisha (9.2%) was much higher than that witnessed at all-India level (2.8%).

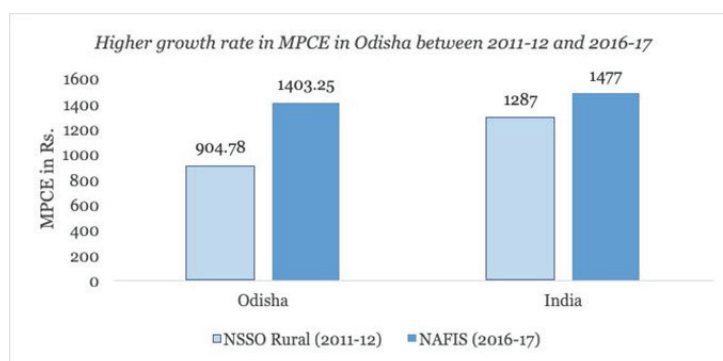
6.8.6 The State government has implemented several schemes with the objective of enhancing livelihood opportunities for the poor and vulnerable, as detailed in the next section. The increase in consumption expenditure post 2011-12 is indicative of improved economic well-being in the State, which would have contributed to reduction in poverty. Latest poverty estimates would throw a clearer picture on actual poverty reduction in the country and the State.

6.8.7 At the national level, reduction in poverty has been driven by States like Odisha, particularly since 2000s. Geographical factors along with historical reasons kept Odisha poor for a long time. Natural calamities made the economic and social life of people difficult year after year. Also, mineral policies of the past did not provide any specific impetus for the growth of the state. Close to 60% of the population was below the poverty line in 1993-94. The situation had not changed even a decade later (2004-05), with Poverty Head Count Ratio (PHCR) of 57%.

However, the dent in poverty from 2004-05 to 2011-12 has been quite significant in Odisha in comparison to other states. With a 24.6 percentage points decline, HCR in 2011-12 stood at 32.59%. 82 lakh poor in the State were pulled out of poverty in the span of eight years. Overall, India recorded 15 percentage points of poverty reduction during the same period.

6.8.8 During 2011-12, the HCR of SC and ST communities in rural Odisha were 41.4% and 63.5% respectively. It is noticed that poverty among ST and SC communities has reduced at a faster rate i.e. by 20.88 and 26.51 percentage points respectively from 2004-05 to 2011-12 compared to overall poverty reduction.

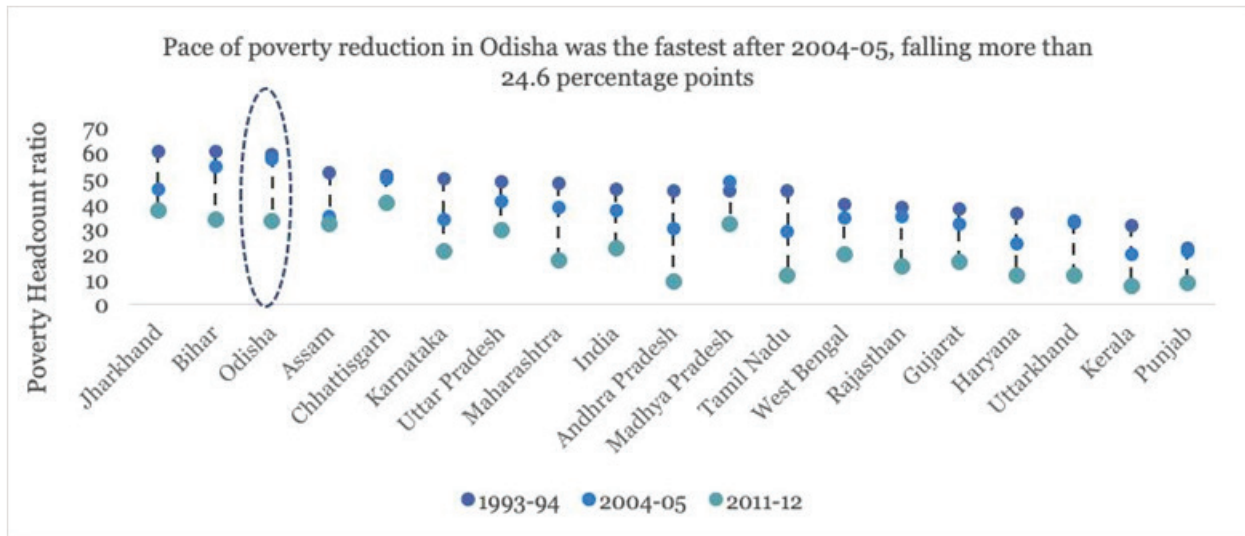
Figure 6.17 : Monthly per capita consumption expenditure of Odisha vis-à-vis India



Source: NSSO 68th round survey, 2011-12 and NAFIS, 2016-17
Note: The two surveys are not strictly comparable

6.8.9 Poverty Gap Ratio (PGR) in the standard indicators to measure the extent of depth of poverty or magnitude of deprivation in any jurisdiction. It reflects the degree to which means consumption of the poor falls short of the official poverty line, indicating the depth of poverty. The PGR declined significantly in rural areas of Odisha from 17.37 in 2004-05 to 7.01 in 2011-12, while in urban areas the decline was from 9.60 to 3.15 during the same period. In India, the PGR declined from 9.64 to 5.05 in rural areas and from 6.08 to 2.70 in urban areas between 2004-05 and 2011-12.

Figure 6.18 Poverty head count ratio in Odisha and selected states



Source: NITI Aayog, various years

6.9 Major Initiatives for Poverty Alleviation

6.9.1 The State and Central Government have made concerted efforts in implementing a series of poverty alleviation programmes to reduce the dimension, deprivation and inequality in poverty in Odisha. These programmes have direct bearing on social security, living standard, livelihood, human development and economic wellbeing of the poor, vulnerable and weaker sections of the society in the long run. Table 6.25 gives a list of key interventions for poverty reduction. Details of some of the schemes are presented in the next section.

Table 6.25 Key interventions towards poverty alleviation in Odisha

Theme	Programme and objectives	Target group
Employment generation	National Rural Livelihood Mission (NRLM), Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)	Unemployed persons in unorganised labour force
Food security	Rupee One per kg of rice, Targeted Public Distribution System (TPDS), Antyodaya Anna Yojana (AAY), Mid-Day Meal (MDM), Supplementary Nutrition Program (SNP)	Persons identified as poor
Housing	PMAY, Biju Pucca Ghar, Mo Kudia	Economically weaker, houseless and lower income group
Social security	Madhubabu Pension Yojana, Aam Aadmi Bima Yojana (AABI)	Persons identified as poor
Economic infrastructure	Critical irrigation projects such as OCTMP (Odisha Community Tank Management Project)	Rural poor
Livelihood opportunities	Odisha Tribal Empowerment and Livelihood Programme (OTELP), JEEBIKA	Tribal and other vulnerable communities

Housing: PMAY (Grameen)

6.9.2 The houseless poor families and those living in less than two kutchra rooms as per SECC, 2011 survey are eligible for availing housing assistance to construct minimum of 25 sq mtr of house. The housing assistance is INR 1.3 lakh in IAP districts and 1.2 lakh in non-IAP districts. 4.58 lakh houses have been constructed in 2018-19 under PMAY.

Housing: Biju Pucca Ghar

6.9.3 Biju Pucca Ghar Yojana is a State plan scheme and is designed to provide new houses to the deserving and genuinely poor rural households not having any pucca house. The objective of the scheme is to convert all kutchra houses into pucca house in rural areas of the state in a fixed time frame in a mission mode approach. Preference is given to the following groups:

- Poor women in distress, physically challenged, mentally challenged, victims of domestic violence, destitute widows, women headed households, adult orphans of Government registered institutions, victims of leprosy and AIDS,
- Poor victims of fire or flood
- Tribal households whose houses are “fully collapsed” due to elephant menace,
- Primitive Tribes Groups (PTG) may be given priority without insisting on title of land.
- Livelihood: Odisha Tribal Empowerment and Livelihood Programme (OTELP)

Employment Generation: MGNREGS

6.9.4 The basic objective of MGNREGS is to enhance livelihood security in rural areas by providing at least 100 days of guaranteed employment in a financial year to every rural household whose adult members are willing to do unskilled manual work. 830.96 lakh person days have been generated under the scheme during the year 2018-19.

Employment Generation: National Rural Livelihoods Mission (NRLM)

6.9.5 The Ministry of Rural Development (MoRD), Government of India in June 2011, launched national Rural Livelihoods Mission (NRLM). In Odisha, the centrally sponsored programme Swarna Jayanti Gram Swarajgar Yojana (SGSY) has been restructured as National Rural Livelihoods Mission (NRLM). Odisha was the first state in the country to launch National Rural Livelihoods Mission in its bid to bring down rural poverty by promoting diversified and gainful self-employment to the rural poor. Odisha Livelihoods Mission (OLM) is implementing the scheme with an objective to enhance the socio-economic condition of rural poor through promotion of sustainable community based institutions. The targeted poor households are mobilized into Self Help Groups (SHGs) which are in turn federated into higher-level institution at village as Cluster Level Forums (CLFs) and G.P level Gram Panchayat Level Federation (GPLF). Youths are trained under the Placement Linked Skill Development Programme. Households are covered under livelihood intervention producer group that include agriculture/horticulture, livestock and non- farm sectors etc. SHGs are credit-linked to improve access to finance. Rural Self Employment Institutes (RSETIs) are setup in all 30 districts of the State to promote rural entrepreneurship and self-employment. As on March 2018, 3,30,693 SHGs were functional in the State and during 2018-19 (up to January 2019), 19,179 SHGs were promoted.

KBK Districts in Odisha: Journey towards development

The eight districts of Koraput, Malkangiri, Nabarangpur, Rayagada, Bolangir, Subarnapur, Kalahandi and Nuapada (carved out of the erstwhile districts of Koraput, Bolangir and Kalahandi are known as KBK districts) are considered to be under severe poverty. Multiple socio-economic indicators signal the backward nature of the KBK districts: high poverty, low literacy rates, high mortality rates, etc. The persistence of under development in these districts is a combination of historical, geographical, social, economic and demographic factors.

Weak agro-climatic conditions, poor connectivity and infrastructure, physical isolation and low social capabilities among tribals characterise this region, which suffers from multiple deprivations and backwardness: (i) tribal backwardness, (ii) hill area backwardness and (iii) backwardness due to severe natural calamities. KBK districts are largely in hilly and forested regions: difficulty in geographical accessibility continues to pose a hindrance to delivery of public services. The region is also home to a large proportion of tribal population, which have been historically disadvantaged. Majority of tribal communities continue to depend upon subsistence agriculture. Agriculture in this region is not productive and high yielding because of its undulating landscape, poor quality of the soil, dry nature of the land and scarce water resources. Rural poor and tribals in particular face severe food insecurity and depend on forests for their livelihood and subsistence. However, agricultural production fluctuates from year to year under the impact of natural calamities: droughts and floods, which frequent this region. Vulnerability to recurring droughts and famine like situations, have led to distress migration of the poor during non-agricultural season. Forests are subjected to degradation of varying degrees on account of severe biotic pressure, intensive use, shifting cultivation, mining, diversion for developmental projects and lack of adequate investment for their sustainable management.

The economic development of the State cannot be brought to the take-off stage, unless this region gets special attention of the planners and policy makers. To address regional disparities in development, the State Government has been implementing the Biju KBK Plan since 2006-07. It aims to create opportunities for socio-economic-human capital development of the eight KBK districts and improve quality of life of people of the region, disadvantaged groups in particular. District Sector programme relate to Bijli, Sadak, Pani and Livelihood initiatives. Between 2009 & 2017, 24,228 projects have been completed at the cost of INR 1076 crore under the BKBK plan. The Plan performed noticeably better in 'Sadak' projects (14,643) followed by 'Pani' projects (5,744) and 'Bijli' projects (1,071) during the last eight years.

Except Subarnapur, all seven KBK districts are now part of the Transformation of Aspirational Districts programme of the central government, which aims to expeditiously improve the socio-economic status of 117 districts from across 28 states. The programme focusses on five main themes— health & nutrition, education, agriculture & water resources, financial inclusion & skill development and basic infrastructure, which have direct bearing on the quality of life and economic productivity of citizens. Districts of Kalahandi (Agriculture), Malkangiri (Agriculture) and Nabarangpur (Financial inclusion) were listed as the 'Most Improved' in the NITI Aayog's 'Aspirational Districts Dashboard' (2018).

Governance Reforms and Institution Building

The problem of material prosperity is never a standalone issue. Production, consumption and trade of goods and services are always contextual to its relationship with customs, laws and government. Hence governance plays an important role in the economic wellbeing of the agents of the economy. According to World Bank definition “Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the State for the institutions that govern economic and social interactions among them.” Some generic variables determining the quality of governance are size of the government itself, fiscal soundness, development of technology-based solutions for tackling various deterrents of governance and federalism as instrument to ensure integrity at all possible levels.

The Government of Odisha is committed to improve the quality of Governance. The latest landmark steps undertaken by government is the envisioning and implementation of ‘Mo Sarkar’. ‘Mo Sarkar,’ which literally translates into “My Government” is an important transformative initiative under the 5Ts programme. 5Ts-Technology, Teamwork, Transparency & Time leading to Transformation is a Citizen centric governance model intended to provide effective service delivery.

Governance reforms empowered by technology addressing the needs of industrial disruptions are the key focus of Government of Odisha. An enabled environment addressing the industries that have the maximum potential to create value for the citizens of the State forms the core philosophy of growth of Odisha.

The concept of governance is as old as human civilization itself. In case of India and the State of Odisha it refers to the democratic government elected by the people. Introduced as the concept of “just state”, it finds an introduction in Chanakya’s Arthashastra, where he tries to underline the strategies for and responsibilities of a ruler for running a just state. Around 380 B.C. some of the similar concepts can be found in Plato’s seminal work “The Republic”. The concept is introduced as Kubernaos, which means to steer a ship as metaphor for a king steering the state.

In simple terms it means the process of decision making and implementation, by the ruling authority of the land. Governance is a broad concept covering all aspects of how a country is governed, including its economic policies, regulatory framework and adherence to rule of law.

7.1.1 Governance and Well-being

UNDP in 2007 produced a strategic note to understand governance and its implications. The note's theme was engineered around Governance for Human development. Defining governance as "a system of values, policies and institutions by which a society manages its economic, political and social affairs through interactions within and among the state, civil society and private sector. It is the way society organizes itself to make and implement decisions achieving mutual understanding, agreement and action. It consists of the mechanisms and processes for citizens and groups to articulate their interests, mediate their differences and exercise their legal rights and obligations. It is the rules, institutions and practices that set the limits and provide incentives for individuals, organizations and firms". Some of the key drivers of development in any economy include education, health, security, capital expenditure by state etc. These are a subset of larger set of public goods and services that are to be provided by a federal governance system at various levels. Hence performance of government in terms of its governance variables has a positive association with the development of the economy.

In India, according to a comprehensive definition of the erstwhile Planning Commission stated in 2008, "Governance relates to the management of all such processes that, in any society, define the environment which permits and enables individuals to raise their capability levels on one hand and provide opportunities to realize their potential and enlarge the set of available choices, on the other".

As it can be seen from the Figure 1, the creation of favorable political, economic and legal environment is the direct responsibility of the State. All government agencies or systems have an elaborate set of practices and procedures for upward reporting and accountability with respect to performance of designated tasks given time and budget. Complimenting these they also have horizontal answerability to ensure the checks and balances. For example, Comptroller & Auditor General (CAG) audits the expenditures incurred by the national and State governments. The theoretical elements of good governance are shown in Figure 2.

The elements of good governance as shown in Figure 2, are materialized by focusing on few tangible dimensions. These tangible dimensions are directions along which actions taken by the government drive good practices in governance. They are transparency of processes, clear property rights, measures to tackle corruption, law & order, distribution of public goods & services and enabling technology-based governance by employing technology.

Figure 1: Major players in governance

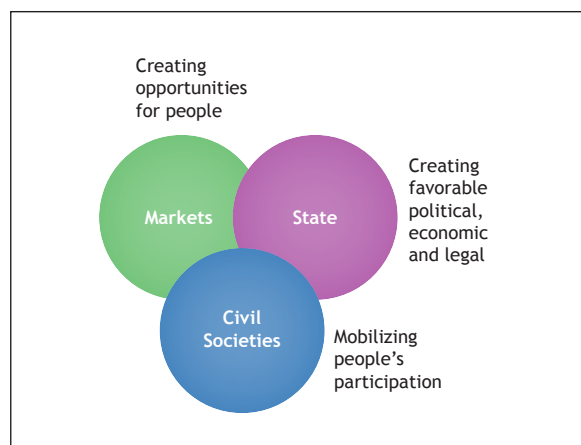


Figure 2: Elements of Good governance

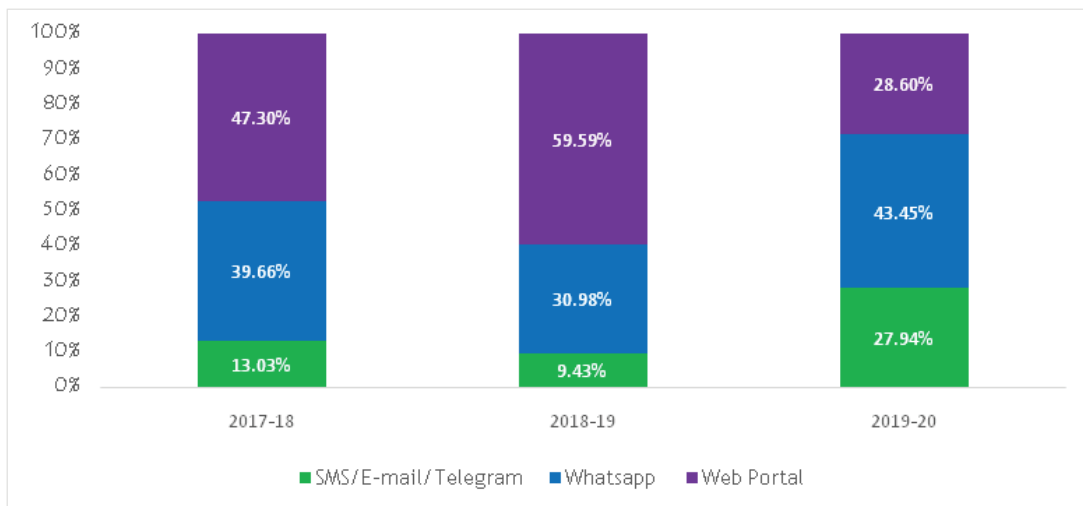


Box 1: Participatory Budget Initiative (PBI)

Participation of people is the very essence of any democratic set up. An important dimension of good governance is participation of populates of the State in the decision-making process. The State Government invites suggestions from the public on their expectations from the budget. To accomplish this the Government of Odisha has identified technology as the enabler of people’s participation in Financial Budget decision making.



The Finance Department of Government of Odisha, with the approval of the Hon’ble Chief Minister of the State sought public opinion from the people of the State on various issues pertaining to the budget. Public opinions were obtained directly and indirectly through pre-budget consultation process and through three PBI channels i.e. the web portal on the Finance Department’s website, Short Messaging Services & Electronic Mails with the help of Information & Technology Department. All these three channels went on live for a little over three weeks starting from 4th June 2019 to 15th June 2019. In this span of time, the response received is remarkable. The total number of registered responses as on the 15th June 2019 stood at 4255.



Further, the views were obtained directly through the pre-budget consultation process in a session chaired by the Hon’ble Finance Minister and Finance Secretary on 17th June 2019. The discussion group comprised ex-finance ministers, former finance secretaries, academicians, bankers, leaders of various non-government organizations (NGOs), industrialists, journalists, civil society representatives, etc. To further empower all the stakeholders, Government of Odisha has taken further steps towards citizen centric governance. Implementation of Mo Sarkar and 5Ts has been identified as the top priority for implementation.

Box item 2: 5 T and Mo Sarkar

1. Technology
2. Teamwork
3. Transparency
4. And Time leading to
5. Transformation

**5Ts**

Implementation of 5Ts and Mo Sarkar initiative are two top priority areas of Government of Odisha. 5Ts is a citizen centric governance model started by the Government. It is envisioned to streamline the public policy for effective service delivery. The 5Ts charter is based on the philosophy of optimal utilization of Technology, Teamwork, Transparency and Time leading to Transformation. Under the 5Ts focus has been on 'Technology' which should reduce the time taken in decision making and help in better monitoring of the various schemes of the Government. This would lead to Transparent administration and Time bound goal tracking. This should facilitate better inter-departmental as well as intra-departmental collaboration so that the whole government machinery works as a Team in order to Transform the overall Governance of the State. Each department submits a broad outline of the action plan they seek to implement in their department. Every department has a 5Ts cell with a nodal officer assigned to track the 5Ts action plan, with the P&C department nominated as the Nodal Department for coordinating and documenting 5T charter of all departments.

Mo Sarkar

'Mo Sarkar' initiative, which literally translates to 'My Government', is an important transformative initiative under the 5Ts programme. The 'Mo Sarkar' initiative seeks citizens feedback through ICT to bring positive change in public servants' attitude towards public service. The objective of the 'Mo Sarkar' programme is to provide service to people with dignity and to build a healthy working atmosphere in Government offices. The phone numbers of people who are coming to government offices will be collected randomly with the purpose of improving the governance system by collecting feedback on behavior and professionalism of government officers.

Within 24 hours of his/her visit, a complainant will receive an SMS stating that their complaint has been received and that their number has been uploaded onto the system. Process under 'Mo Sarkar' initiative involves:

- Registration Process - starts with name, contact no and purpose of visit
- Database automatically reflected on Mo Sarkar Dashboard
- Implementing Department given User Id and Password to operate
- The department sets some predefined Q&A to talk with the citizen to take feedback
- If registration not done, person can call 14545 to register his/her complain.
- The entire process is software driven and will be provided under the Mo Sarkar Initiative.
- The Department needs to set some questions for the feedback mechanism.

The 'Mo Sarkar' initiative has been first launched at all police stations across the State along with 21 district headquarters hospitals and three government-run Medical College Hospitals at Cuttack, Berhampur and Sambalpur since 2nd October 2019. The programme will be extended to all Government Offices by 5th March 2020.

7.2 Delivery of Public Services

7.2.1. Delivery of Public Services and Economic development are correlated. People, including all the legal persons, in developing economies are more dependent on provisioning of public/social goods and services as well as infrastructure. This is mainly attributable to absence of a fully developed market for services or poverty. Provision of basic services like health, education and infrastructure, are inaccessible to many economic agents - both consumers and producers of the economy. Thus, delivery of public goods and services in timely and efficient manner is instrumental for further economic development of a State like Odisha.

7.2.2 Government of Odisha is committed towards empowering citizens by enacting “Odisha Right to Public Services Act, 2012”. Odisha Right to Public Services Act, 2012 in Odisha is an exemplary initiative by the State Government to check corruption in public service delivery. The ORTPS Act 2012 aims to cover various guarantees under a single umbrella at the State level. It looks towards addressing the already growing demand of citizens for improved public services, reducing corruption through imposing penalties on Public Authorities for default in delivery of services and aims at universalization of public services. In addition, what was under the Citizens’ Charters an administrative guarantee has been translated into a legal right, justiciable under the provisions of ORTPS Act. Salient features of the Act cover:

- Different services which a citizen can obtain from different Departments as notified, along with time limit for delivery of such services.
- For delivery of each service notified, there shall be a Designated Officer to whom the citizen can make an application. The Designated Officer will provide the said service in a time bound manner.
- In case a citizen is unable to get the said services within the prescribed time limit, he/she may file an appeal before an Appellate Authority. The Appellate Authority will consider the case and pass necessary order.
- Any citizen aggrieved with the order of the Appellate Authority or in case of delay in providing the service within the prescribed time limit, may file a revision petition before the Revisional Authority.
- If the Revisional Authority found that the Designated Officer has failed to provide the service without enough and reasonable cause, he may impose a penalty against the Designated Officer not exceeding Rs.5000/-.
- If the Revisional Authority observed that there is delay in providing the service, beyond the stipulated time, he may also impose a penalty not exceeding Rs.250/- per each day of delay.
- The penalty shall be charged from the Designated Officer, Appellate Authority and the concerned subordinate staff and shall be in the proportion to be decided by the Revisional Authority.
- However, the Designated Officer, Appellate Authority and subordinate staff, will be given a reasonable opportunity of being heard before any penalty is imposed on him/her.
- Non-compliance of the order of the Revisional Authority shall amount to misconduct and make such Government servant liable for disciplinary action.

341 Services of 25 Departments have been notified under the Odisha Right to Public Services Act, 2012.

7.2.3 The State has enabled monitoring of citizens’ applications through a Central Monitoring System (CMS). Out of 341 services notified, more than 55 services have been made online and others are being rolled out in swift mode. Citizens get online acknowledgement of their applications and can check the Status of application, anytime and anywhere.

Figure 3: Website of Central Monitoring System, Odisha Right to Public Services Act



Right to Public Service CENTRAL MONITORING SYSTEM
 Government of Odisha କେନ୍ଦ୍ରୀୟ ପରିଚାଳନା ପଦ୍ଧତି

Welcome to Central Monitoring System

Scope & Objectives

- It is a Web Application.
- The application will be available both online and offline
- Creating a database of all applications received under ORTPS Act.
- Auto generated Acknowledgement on receipt of application.
- Computerized register for DO, AA & RA.
- Different Types of MIS Reports generation.
- User Friendly Application for all Offices
- Tracking the status of the application by the citizen
- SMS Alert service

MIS Reports

Central Monitoring System will generate different types of MIS Reports.

- State MIS Report with Graphs
- District wise MIS Report with Graphs
- Department Wise MIS Report with Graphs
- Office Wise MIS Report with Graphs
- Comparison Report

Office Wise Login

(Please enter your User Name and Password, then hit "Login" button to enter into the Control Panel.)

User Type:

User Name:

Password:

Security Code:

Login

Quick Links

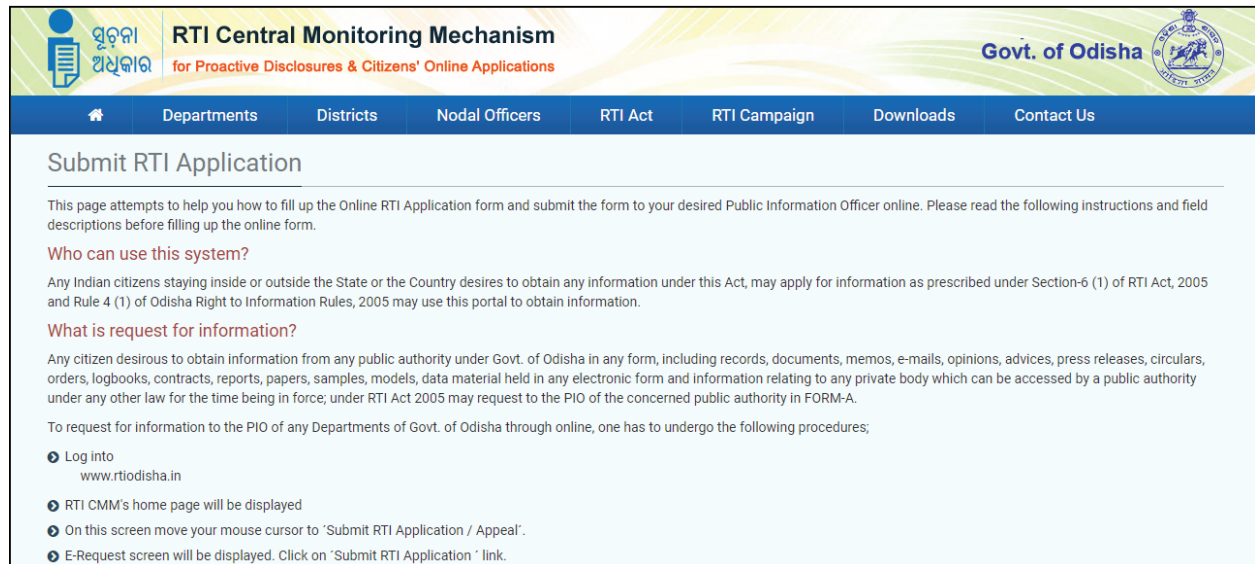
- January 2020 Report(Offline)
- January 2020 Report(Online)
- Total Application for Year 2014
- Summary Reports For Year 2014
- 2013 Summary Report
- List of Services Integrated in CMS
- Departments
- ORTPS Services
- Acknowledgment Number Details
- Check Application Status
- Home

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CENTER FOR MODERNIZING GOVERNMENT INITIATIVE (CMGI)
 (A SOCIETY UNDER GENERAL ADMINISTRATION & PUBLIC GRIEVANCE (AR) DEPARTMENT)
 GOVERNMENT OF ODISHA
 ACHARYA VIHAR, BHUSANESWAR-751023. PHONE: 0674-2367371, 2367083. FAX: 0674-2367083.
 Website: <http://www.cmgi.org.in>

Government of Odisha stands by its commitment for Transparency in Governance. CMS is technology enabled solution towards materializing Government of Odisha's commitment for transparency in governance. The CMS provides monthly information on applications for service delivery, received by each district. For the month of January 2020, the highest number of applications were received in Ganjam (4527), of which, 241 applications were approved. Eight out of thirty districts had an approval rate (applications approved as proportion of applications received) of more than 90%. Bolangir leads the percentage of approved cases with 100% approval rate.

7.2.4. Government of Odisha is committed towards enactment of The Right to Information (RTI). The Right to Information (RTI) Act enacted by the Parliament of India aims to provide for a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, the constitution of a Central Information Commission and State Information Commissions and for matters connected therewith or incidental thereto. Here also State Government has introduced a technology enabled online platform in the form of RTI Central Monitoring Mechanism as depicted in Figure 4. The objective has been to improve exercising power of the rights by citizens of the State and transparency in the process.

Figure 4: RTI Central Monitoring Mechanism



7.3 Law and order

7.3.1 The law and order and overall crime situation in the State has remained under control. Sporadic law and order situation have been handled with tact and forbearance. As a result there has been no significant communal or student unrest in the state. The Left Wing Extremism situation has also improved substantially during last few years. Protection of women, children and weaker section is among the top-most priorities of the state. All sensitive and important cases are being treated as red flag cases for better monitoring of investigation.

In order to enable citizens to track the progress of cases filed with the police, Odisha Police has implemented Crime and Criminal Tracking Network and Systems (CCTNS). 18 services are being provided to citizens through CCTNS by Odisha Police. To provide better and quick services to citizen, Odisha Police has launched "Citizen Portal" under the CCTNS Project through internet, which enables citizens to register their complaints and seek services from the Police Department without visiting the police station/ higher offices. It also enables them to track the status of their complaints/service requests online. Odisha Police has also developed Mobile App namely "SAHAYATA" for citizens and "ARAKHI" App to help the IO's for investigation on the spot. VAHAN & SARATHI Service of Transport Department has been integrated with Core Application Software of CCTNS. Accident Investigation Module has also been developed to capture data required for analysis complying requirements of Ministry of Road Transport, Government of India. The Module will generate an analytical report which will help in policy formulation for reducing fatalities in road accidents and in making roads safer. For effective monitoring, reduced time for medical reports and for maintaining transparency Medico Legal Opinion System (MLOS) has been introduced. It enables Investigating Officers of Odisha Police to directly send requisition to Medical Officers who can upload examination reports against requisition. This system is integrated with CCTNS Core Application Software database.

Odisha is a frontrunner in implementation of CCTNS project and has been recently awarded by NCRB for good practices.

Figure 5: Website of CCTNS Citizen Portal



7.3.2 Maintainer of law and order, Police. 'Police' and 'Public Order' are State subjects under the Seventh Schedule to the Constitution of India and therefore, it is the primary duty of the State Governments to prevent, detect, register and investigate crime and prosecute the criminals. State Government of Odisha is committed towards maintaining the law and order in the society. Odisha Police in recent past implemented Crime and Criminal Tracking Network and Systems (CCTNS) which is a Mission Mode Project of Government of India (GoI). To make this implementation more citizen-centric, the State Government has decided to apply 5 T model to the existing CCTNS.

7.4 Tackling Corruption

7.4.1 Elimination of corruption is not only a moral imperative but also an economic one. Improved governance in the form of non-expropriation, contract enforcement and decrease in bureaucratic delays and corruption can raise the GDP growth rate significantly. Absence of a graft is an indicator of the quality of governance. The State government's Vigilance Department has taken various punitive measures to apprehend sources of corruption such as misappropriation of public resources, taking bribes, acquisition of disproportionate assets, among others. The measures include enquiries, investigations, confiscation of property, dismissal from service, registration of criminal cases, arrests, etc. It has set up two special courts, one each at Cuttack and Bhubaneswar, to try the cases of disproportionate assets against persons, who had held or are holding high political and public offices. Since the institution of Special Courts, 46 cases have ended in conviction against Class-I officers for the possession of disproportionate assets. The details of actions taken by the State Vigilance department/Special Courts in 2019 are as follows:

A. Registration of criminal cases: 250 criminal cases were registered against 34 Class-I officers, 44 Class-II officers, 235 Class-III employees, 05 Class-IV employees, 28 Other Public Servants and 165 private persons. Out of these cases, 53 cases were instituted for acquisition of disproportionate assets amounting

to INR 62.83 crore (as per FIR) against 58 public servants and 25 private persons. 113 Trap cases were instituted during the period against 120 public servants and 02 private persons, while accepting bribe from the complainants amounting to INR 17.36 lakh.

B. Enquiries: The State Vigilance initiated 254 enquiries against 27 Class-I officers, 25 Class-II officers 187 Class-III employees, 05 Class-IV employees, 34 Other Public Servants and 13 Private persons for their alleged involvement in various acts of corruption. During the period, 226 enquiries were disposed of, out of which, 64 enquiries were referred to respective departments for initiation of departmental action, 127 enquiries were converted to criminal cases and 35 enquiries were closed due to inadequate substantiation.

C. Investigation/involvement: Investigation was completed in 118 Vigilance cases, out of which, charge sheets were placed in 112 cases against 11 Class-I officers, 09 Class-II officers, 124 Class-III employees,

3 Class-IV employees, 7 Other Public Servants and 38 private persons. Final reports were submitted in 11 cases.

D. Arrest: 159 persons were arrested, which included 21 Class-I officers, 19 Class-II officers, 103 Class-III employees, 5 Class-IV employees, 3 Other Public Servants and 8 private persons.

E. Disposal by court: 147 Vigilance cases were disposed of by the Courts. Out of 147 cases, 21 cases were abetted due to death of the accused person and were discharged/quashed. Out of the remaining 126 cases, 60 cases ended in conviction against 05 Class-I Officers, 4 Class-II Officers,

53 Class-III employees, 2 Class-IV employee, 4 Other Public Servants and 3 private persons. Thus, altogether, 21 accused persons were convicted during the year. The percentage of conviction with respect to the cases disposed of after trial by the courts comes to 43%.

F. Dismissal from service: 59 Public Servants were dismissed from government service following their conviction in Vigilance cases, which included 4 Class-I Officer, 12 Class-II Officers, 42 Class-III employees and 1 other Public Servants.

G. Confiscation of property: Two courts of Authorised Officers are functioning at Cuttack and Bhubaneswar to initiate proceedings for confiscation of disproportionate assets of the accused persons, facing trial in the Special Courts. So far, applications for confiscation of property have been filed in 245 cases, out of which, 77 cases have been disposed of and final orders regarding confiscation of property have been passed in 45 cases. 32 cases have been dropped /dismissed. In six cases, properties of the accused persons have been taken into possession by the State Government, where government horticulture, nursery, public homeopathy dispensary, anganwadi centre, working women hostel and a post office have been opened.

H. Attachment of property: Applications for attachment of properties have been filed by the State Vigilance in 4 cases.

I. Misappropriation cases: 84 misappropriation cases relating to misappropriation of public money against 213 persons, including 148 public servants and 65 private persons, involving misappropriation of public funds amounting to INR 6.32 crore have been registered. Misappropriation cases have been registered against 10 Class-I officers, 2 Class-II officers, 115 Class-III employees, 21 other public servants and 65 private persons.

7.5 Transparency

7.5.1 Transparency is one of the basic principles of good governance. It implies people's insight into the Public Administration Bodies. The information on doings of Public Administration Bodies helps citizens to participate actively in the governance process. Transparency brings in more accountability on the part of government agencies and enhances objectivity of their functioning. Transparency is the defining dimension to minimize information asymmetry regarding the governance processes.

7.5.2 Odisha has been one of the committed States in the area of ensuring transparency in governance. Multiple initiatives, viz., citizen grievance redressal, litigation management system, publishing of outcome budget, audit reports of municipal bodies, etc. are being complied with by the State government.

7.5.3 E-Abhijoga: This is the official grievance redressal portal of Government of Odisha. An initiative under CPGRAMS (Centralized Public Grievance Redressal and Monitoring System), it is technology enabled, online integrated applications system. Its primary objective is submission of grievances by the aggrieved citizens irrespective of their locations. The portal operates round the clock (24x7) and is dedicated for instant and easy communication between the Chief Minister's Office and citizens. This results in the speedy redressal of their grievances. The website form of the portal was launched in 2010. The portal is now extended to all State Government Departments of Odisha, Heads of Departments and in all 30 districts.

Figure 6: Website of e-Abhijoga



7.5.4. Integrated Recruitment Management System (IRMS) is a software application for end to end automation of the recruitment process i.e. from requisitioning authorities by the Commission till sponsoring of candidates. This application has already been implemented in the Odisha Sub-ordinate Staff Selection Commission in order to insure transparency and time bound completion of recruitment. This system will soon be implemented in Odisha Public Service Commission and Odisha Staff Selection Commission.

Litigation Management System (LMS)

7.5.5. HRMS (Human Resources Management System) has already been implemented in order to automate E-PayRoll and online submission of Pay Bill to the Treasury. All Group-A & Group-B Officers are now able to submit their E-PAR through HRMS. All Government Servants are now able to submit Property Statement online through HRMS. This year, all Drawing and Disbursing officers have submitted Annual Establishment Review Report online in HRMS. It's a centralized database of both regular and contractual employees of the State. This year, Government has decided to implement online Pension papers through IFMS along with Service Book through HRMS.

Figure 7: Litigation management system



7.5.6 The Odisha Lokayukta Act, 2014 (Odisha Act 12 of 2018) has been enacted to provide for establishment of Lokayukta for the State of Odisha to inquire into allegations of corruption against certain public functionaries and for matters connected therewith or incidental thereto vide Law Department Notification No. 6523/L, dated 23.6.2018. The said Act has been brought into force w.e.f. 07.7.2018. After commencement of the Act, the Government, by notification, have established a body called the Lokayukta as required u/s 3(1) of the Act w.e.f. 28.2.2019. The office of the Lokayukta in the State has started functioning with the assumption of charge of Hon'ble Chairperson of the Lokayukta w.e.f. 20.3.2019.

Local bodies' financial status

7.5.7 Odisha is among the States that are compliant towards timely submission of duly audited financial Statements of local bodies. To develop standardized database on local body finances, Odisha is among the States which have legislated a Local Fund Audit system. The purpose of the system is to audit the accounts of local bodies and submit the audited data annually. The State's Local Fund Audit has been diligent and active in placing information relating to local body finances across all tiers and districts on an annual basis in the public domain.

7.6 e-Governance

7.6.1 e-governance can be defined as the internet and technology enabled delivery of government information or services to citizens, businesses and within government (vertically or horizontally in terms of level of federalism). This strong conception of governance is observed at various levels of government right from national to rural panchayati raj these days. It is ideally designed to be one-step internet enabled gateway to all the major services provided by the government. e-governance tackles corruption and brings transparency to any governance body. Some major drivers behind this are:

- Dissipating relevant information to the citizens in timely and efficient manner;
- Better management and execution of service delivery;
- Empowerment of people by making information access beyond any human biases like religion, caste, gender, creed etc;
- Improved productivity in terms of time taken by citizens to avail government information or services;
- Cost savings for suppliers, customers and government itself in terms of doing business;
- Better participation of people, empowering governance and true essence of democracy;
- Using IT infrastructure to execute functions of planning, supervising, staffing and coordination within and across government departments more efficiently.

E-governance lies at the heart of the fourth industrial revolution shaping the way government executes its duties. It is a result of two global shifts: the revolution of information technology (IT) enabled by electronic devices and software's and the governance revolution, a school of thought which first conceptualized the relation between good governance and developmental outcomes of an economy. Both these shifts are changing the way a democratic society works and the ways in which society is governed. This brings us to the opportunity for not incremental but radical gains in terms of tackling corruption, enhancing transparency, improving efficiency and effectiveness of governance across various sectors.

7.6.2 Despite the limitations, the government has been increasingly using ICT in its various functions.

Agriculture and Farmers' Empowerment Department, Government of Odisha received the National Award for DBT (Direct Benefits Transfer) for agri-inputs like seeds, farm machinery, implemented under 'AGRISNET' project. Computer Society of India, SIG e-governance award of recognition for distribution and monitoring of agricultural implement & increasing irrigation potential through electric & solar power 2019-20.

7.7 Decentralization: Empowering Panchayati Raj Institutions

7.7.1 According to Census of India, 2011, 83.31% of total population of Odisha is from rural areas. Hence rural development is an important pillar of State development. Panchayati Raj plays an instrumental role in achieving objectives of rural development. The policies and programmes of Panchayati Raj focus on all round economic development and social justice through empowerment.

The State is endowed with rich natural resources in form of vast mineral deposits, forests, fertile land, plentiful surface and ground water resources, long coastline and picturesque tourist potential. Poverty eradication strategy therefore is based on combination of natural and human resources management. Panchayats at village levels are expected to perform certain obligatory functions to provide basic services to all the people living in the area. Gram Panchayats in Orissa have been empowered to levy taxes and manage community assets created out of different poverty eradication and area development schemes. They as constitutional bodies represent the model of community participation and social empowerment. Basic services among others include:

- Primary education
- Primary health
- Safe Drinking water
- Sanitation and street lighting
- Environment protection
- Common property resources (CPR) management

Box item 4: History of Panchayati Raj in Odisha

Panchayati Raj Institutions (PRIs) were first given a legal status through Odisha Gram Panchayat Act in the year 1948. Subsequently, the three-tier system of Panchayati Raj Institutions was introduced in the year 1961, after passing of the Panchayat Samities and Zilla Parishad Acts in 1959. Thus, in post independent India, Odisha was one of the few States in the country which adopted a three tier Panchayati Raj system before the Balwant Rai Mehta Committee Report (1967) recommended its adoption.

Zilla Parishad was abolished in 1968. However, Zilla Parishad was reintroduced in the year 1990 and elections were held to Zilla Parishads in 1992 with reservation of 33% of seats for women much ahead of the 73rd amendment of the Constitution of India. After enactment of 73rd amendment Act of Constitution of India elections were held to Panchayati Raj Institutions and after enactment of Panchayats(Extension to Scheduled Areas) Act 1996 (PESA) the posts of all the three tiers of Panchayati Raj Institutions in scheduled areas were reserved for members of Scheduled Tribes. Election to Panchayati Raj Institutions is being conducted under the superintendence, direction and control of the constitutionally appointed State Election Commission.

After the 73rd amendment, the 5th General Election to the three tiers of Panchayati Raj Institutions was successfully conducted in 2017 with 50% reservation for Women, Scheduled Tribes and Scheduled

7.7.2 Local Government Directory (LGD). Introduction Local Government Directory (LGD) is one of the applications developed as part of Panchayat Enterprise Suite (PES) under e-Panchayat Mission Mode project (MMP). LGD aims to keep all information about the structure of Local Governments and revenue entities online. Main objective of LGD is to maintain up-to-date list of revenue entities (districts/subdistricts/villages), Local Government Bodies (Panchayats, Municipalities and traditional bodies) and their wards, organizational structure of Central, State and Local Governments, reporting hierarchy within the government organizations and parliamentary and assembly constituencies and their relationship with one another. Primary objective of the 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 information in public domain.

Figure 8: Local Government Directory in context of Panchayati Raj

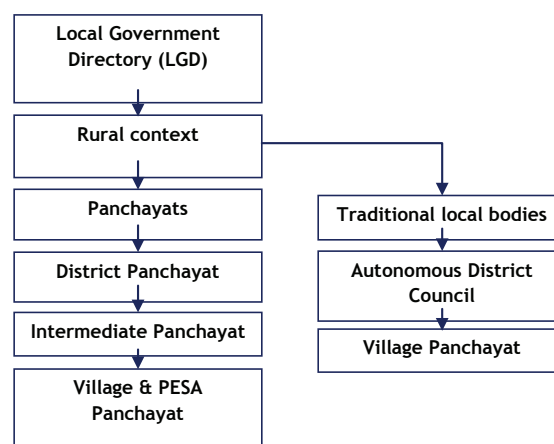


Table 1: Odisha Administrative Units Information on LGD

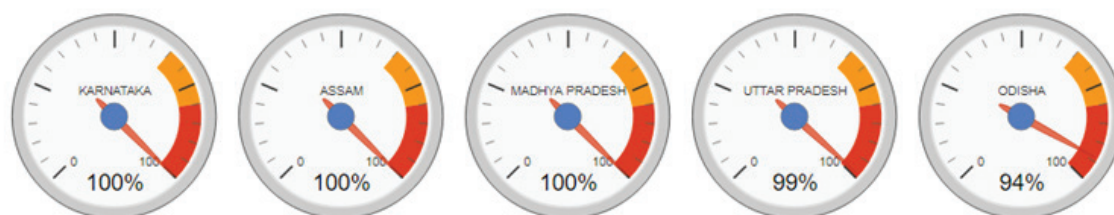
Number of Districts	Number of Subdivisions	Number of Blocks	Tehsils	Number of Villages	Number of Gram Panchayat
30	58	314	317	47677	6802

Source: Local Government Directory (online MIS)

7.7.3 Panchayati Raj Institutions Accounting Software (PRIASoft) aims to keep track of all the inflow (Receipts) and outflow (Expenditure) of the Panchayati Raj Institutions. The application facilitates better financial management of Panchayati Raj Institutions (PRIs) by bringing about transparency and accountability in the maintenance of accounts thereby leading to better credibility and ultimately strengthening of PRIs. It is a centralized Accounting Software intended for use by all the three levels of Panchayati Raj namely Zilla, Block and Village Panchayat. Apart from making the process of accounting simple and easy (necessarily due to lack of trained manpower at this level), it ensures a better financial management, transparency and accountability at the Panchayat level. Odisha is among the leaders in terms of adopting online payment.

Figure 9: Top five states in adoption of online payments (2019-20)

Top Five States in adopting Online Payment(2019-2020)



Source: PRIA Soft and PFMS integration dashboard (<https://accountingonline.gov.in>)

The online tool is committed to strengthening of transparent accounting practices. It is a web enabled, open source-based e-Governance solution. The arrangement also complies with the C&AG prescribed 4-tier accounting classification under Model Accounting Structure.

Table 2: Number of Accounting Units onboard during financial year 2019-20 (as on 23rd January 2020) Odisha

No. of Voucher Booked	Value of Vouchers (in Crores)		No. of Vouchers Frozen	Value of Vouchers Frozen (in Crores)	
	Receipts	Payments		Receipts	Payments
126682	2031.15	2750.13	610725	5586.23	7941.80

Source: PIRA Softdashboard(<https://accountingonline.gov.in>)

7.7.4 National Asset Directory (NAD). National Asset Directory (NAD) is one of the software applications envisaged as part of Phase II of e-Panchayat MMP. NAD aims to keep stock of all the assets created, controlled and maintained by the RLB/ULB/Line Department in the country and assign a code to each asset for its unique identification leading to effective utilization of the assets. NAD software application will be primarily used by the officials of RLBs (Village Panchayat, Block Panchayat, and District Panchayat), ULBs (Municipalities, Town Areas etc.), State PR Departments, and line Departments of State, Ministry of Panchayati Raj and other Central line Ministries/Departments. State Government of Odisha has adopted this application out of Panchayati Enterprise Suite (PES) available. The implementation has started with PRIs. The progress has been shown in Table 3 below.

Table 3: Adoption status for application National Asset Directory - Panchayati Raj Institutions of Odisha

District Panchayat			Intermediate Panchayat			Village Panchayat		
Total	Adopted	%	Total	Adopted	%	Total	Adopted	%
30	0	0.00	314	7	2.23	6798	17	0.25

Source: Adoption reports, Online MIS reports of NAD (panchayatonline.gov.in)

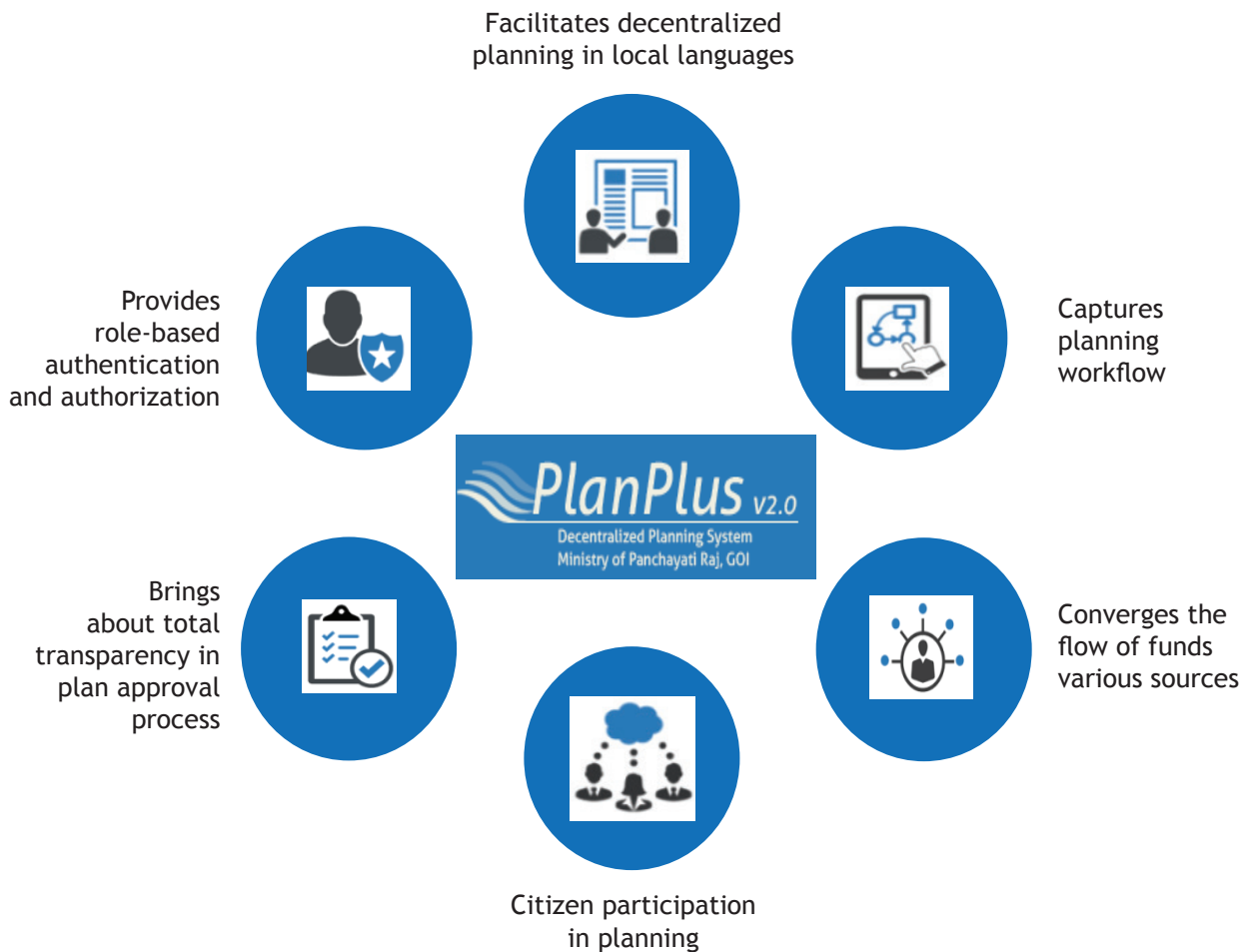


ActionSoft is one of the applications available under e-Panchayat Mission Mode Project. The application facilitates reporting of physical and financial progress of the activities included in the Action Plan(s) of the RLBs and ULBs. The progress of the activities undertaken by the RLBs and ULBs, utilizing various Central/ State specific schemes and/ or other sources of funds can be monitored through ActionSoft. State Government of Odisha has adopted this application out of Panchayati Enterprise Suite (PES) available. The key features of Actionsoft which has led to its adoption by Government of Odisha are:



7.7.6 PlanPlus V 2.0. Decentralizing Planning System, Ministry of Panchayati Raj, Government of India (GoI). PlanPlus is a software developed by NIC, under guidance and direction from Ministry of Panchayati Raj, in order to demystify and strengthen the decentralized planning process. The software is a web-based software and captures the entire planning workflow starting from identification of needs, the plan approval process till the final approval by the District Planning Committee. The software is highly generic and can be extended to capture the plans prepared by line departments at the state and central level to generate the National Plan. The key features of PlanPlus which has led to its adoption by Government of Odisha are:

Figure 10: Functional outcomes of Plan Plus application



7.8 e-Governance initiatives in Revenue Administration:

7.8.1 Revenue and Disaster Management Department has implemented a host of e-Governance initiatives to improve the delivery of various public services in an efficient, transparent and time-bound manner. Some of them are listed below:

a) Computerisation of Registration Process:

- The e-Registration project is in operation in all registration offices of the State since 4th January, 2010. The objective of this project is automation of the registration processes for registration of deeds, preservation and issue of certified copy of deeds, conducting searches and maintaining back office records in electronic mode.
- More than 95% of documents are registered within the ORTPS timeline (three days). Immediately after registration, an SMS with URL is sent to the mobile number of the claimant / purchaser to download the scanned copy of the registered deed from the IGR Portal.
- During the period from 01.04.2019 to 24.01.2020, 2.64 lakh documents were registered, 3.92 lakh encumbrance certificates and 0.55 lakh certified copies of previously registered documents were issued through the e-Registration system.
- Facilities have been provided to the registrant public since 24th December 2018 for preparation and submission of sale deeds of immovable property online for taking prior appointment from the concerned Registering Officer for presentation and registration of the deed.
- Consent Based Aadhaar Authentication: Consent Based Aadhaar Authentication during property registration has been introduced in the State by amending the Odisha Registration Rules. For this purpose, the e-Registration application has been integrated with the Aadhaar database of UIDAI.
- PAN verification: To enable the quoting of PAN of registrant public during sale or purchase of immovable properties, the Odisha Registration Rules have been amended. For verification of PAN, the e-Registration application has been integrated with the PAN database of the Income Tax Department.
- e-Stamping: Collection of stamp duty through e-Stamping is in operation in the State since 27 June 2016. During the period from 01.04.2019 to 24.01.2020, 37,737 number of e-Stamp certificates have been issued through which stamp duty amounting to Rs 414.16 crore have been collected.

b) Maintenance and updation of land records:

- Bhulekh (computerisation of land records): Digitisation of land records of the tenants of the State showing the ownership of the land has been done, which is available in the Bhulekh website (<http://bhulekh.ori.nic.in>). Computerised RoRs are being issued and delivered through speed post to the citizens after online mutation through the LRMS software.
- Digitisation of cadastral maps (Bhunaksha): Approximately 1,13,000 number of 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): The mutation process has been made mandatorily online in all 317 tahasils of the State w.e.f 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. SMS alerts on mutation case number and various stages of mutation are sent to the mobile number of buyer / claimant. There is no need to visit the concerned tahasil office for getting a Record of Rights (RoR) after registration of land.

The status of the mutation case is also available in the tahasil website (<http://bhulekh.ori.nic.in/TahasilWebsite/TahasilInfoWeb.aspx>). A total number of 7.95 lakh mutation cases have been disposed in the LRMS software in the State from 01.04.2019 to 24.01.2020.

- Postal delivery of RoRs: After mutation RoR is sent through in the address of the buyer / claimant as mentioned in Sale Transaction Report through speed post.
- Creation of Modern Record Rooms at the Tahsil level: For digitisation, preservation and easy retrieval of revenue case records, modern record rooms have been established in 279 tahsils of the State out of 317 tahsils. Total number of 13,469,894 documents have been scanned and uploaded in the Document Management System (DMS) software till 31st January, 2020.
- Survey / Re-survey using modern technologies: Hi-tech survey operations using aerial photography followed by ground truthing by DGPS / ETS is going on in the districts of Sundargarh, Deogarh, Sambalpur, Bolangir and Subarnapur. Four thousand eight hundred and fifty one villages have been notified in these districts for carrying out hi-tech survey work.
- Revenue Court Case Monitoring System (RCCMS): The RCCMS has been developed by NIC for institution and disposal of all types of revenue cases except mutation case in a single platform. RCCMS Application is being used by all Collectors, Additional District Magistrate (ADMs), Sub-Collectors and Tahasildars.
- ORTPS Daily Bulletin: ORTPS Daily Bulletin (<http://bhulekh.ori.nic.in/ortpsa/>) on registration and mutation services is being published w.e.f. 31 July 2018 by collecting data on real time basis from e-Registration, LRMS and RCCMS application software through web service to monitor the effective delivery of notified public services.
- Revenue Minister's Helpline: Revenue Minister's Helpline was started on 31 October 2018 for effective redressal of the grievances of citizens pertaining to services of the Revenue and DM Department. Citizens not getting various services related to Revenue Administration within the prescribed time limit can lodge their grievances by mentioning the name of the office, name of the district, case number and date of application through the toll-free number (1800-1218-242), SMS, e-mail ID, online portal and whatsapp (9437704414).
- Recent e-Governance Initiatives
- To facilitate online land revenue payment, Revenue and DM Department introduced e-PAUTI Portal (<http://odishalandrevenue.nic.in>) on 15th August, 2019. The Tenant's Ledger has been digitized for facilitating such online land revenue payment. Details of 1.65 Crore Khatiyans, 5.65 Crore Plots and 3.5 Crore Tenants have been digitized. Considering the overwhelming response from Citizens to e-PAUTI Portal and penetration of smartphones, mobile app (PAUTI) was developed and launched on 28th December, 2019. This app has been integrated with BHIM App to offer more choices and flexibility to Citizens. This new system will create a win-win situation for both Revenue field functionaries and Citizens.

- It is important to trust in the goodness of the Citizens than in the integrity of systemic processes. Revenue and DM Department has brought about changes in Rules for issuance of Resident and Income Certificates based on self-declaration of applicants and documents submitted by them.
- For effective management of time of both citizens and Revenue officers, it has been decided to phase out the Solvency Certificates for various purposes like grant of licences to storage agents, for grant / renewal of excise licences, operation of quarry lease etc. within the State.
- To facilitate the submission of applications by citizens online from anywhere at any time for getting Miscellaneous and Caste certificates, Revenue & DM Department has launched issue of e-Certificates w.e.f. 28.12.2019. The applicants can download the certificates from their mailbox, e-District Portal and also from DigiLocker.

Resources for Development

Availability of adequate resources for development is critical for a state, especially Odisha, given the developmental mandate. Channelization of resources to build human and physical capital are necessary for sustainable development of an economy. Developmental challenges like housing conditions, 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 mobilisation 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. The developmental revenue expenditure of the State has more than doubled in 2018-19, from its level in 2011-12.

Fiscal performance of Odisha continued to be satisfactory during 2018-19 and it is expected to continue on this trend in 2019-20. The state has consistently reported a revenue surplus and has maintained gross fiscal deficit within the threshold limit set by the FRBM Act.

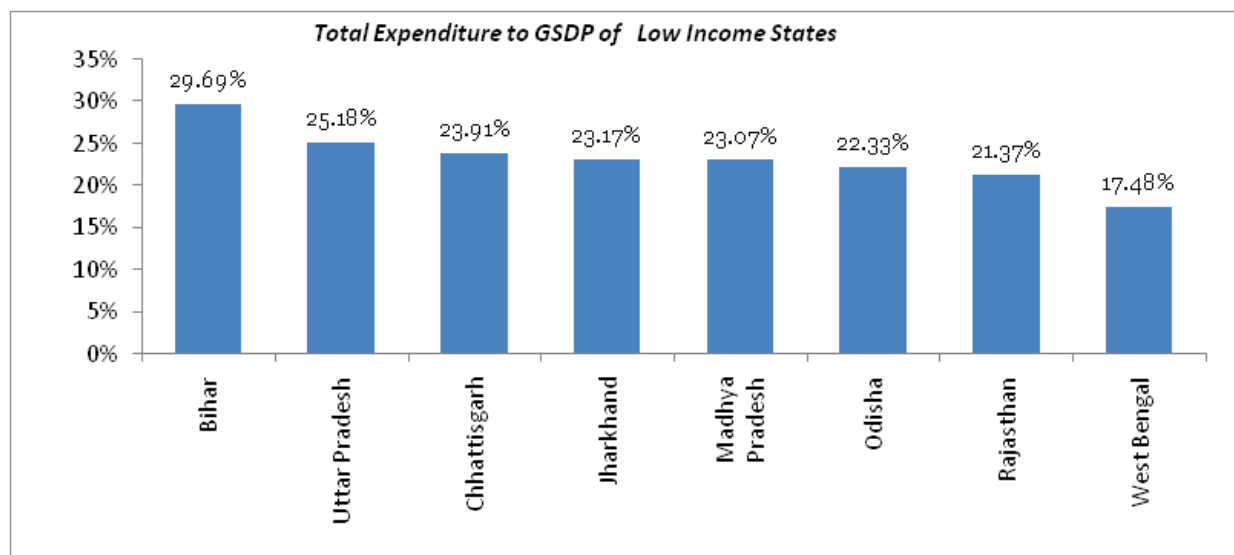
VAT and state excise are the largest contributors to the State's own tax revenue, while the industry sector drives the own non-tax revenues of the State. Post the introduction of GST, the revenues from SGST are also significant contributors to the State's own tax revenues. However, as the revenue from GST in Odisha has remained much below the protected revenue, the share of State's own revenue sources (tax and non-tax) has further declined and the dependence on central transfers (share in central taxes and grants) has grown. 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 developmental sector, with share of committed expenditure much lower than 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 harmony with the State's developmental needs.

Debt stock to GSDP ratio in the State has been maintained under the 25% threshold consistently for 13 years. The current debt position of the State puts it at low risk of both, debt and interest repayment 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.

8.1. Introduction

8.1.1 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 on developmental needs of the economy. On an average, during 2013-14 and 2018-19, Odisha's total expenditure to GSDP ratio stood at around 22.3%. Further, 73% of this expenditure or 16.4% of GSDP has been diverted towards developmental purposes, with focus on education, healthcare, rural development, irrigation, and transportation.

Figure 8.1: Total expenditure to GSDP (average for 2013-14 to 2018-19 RE)

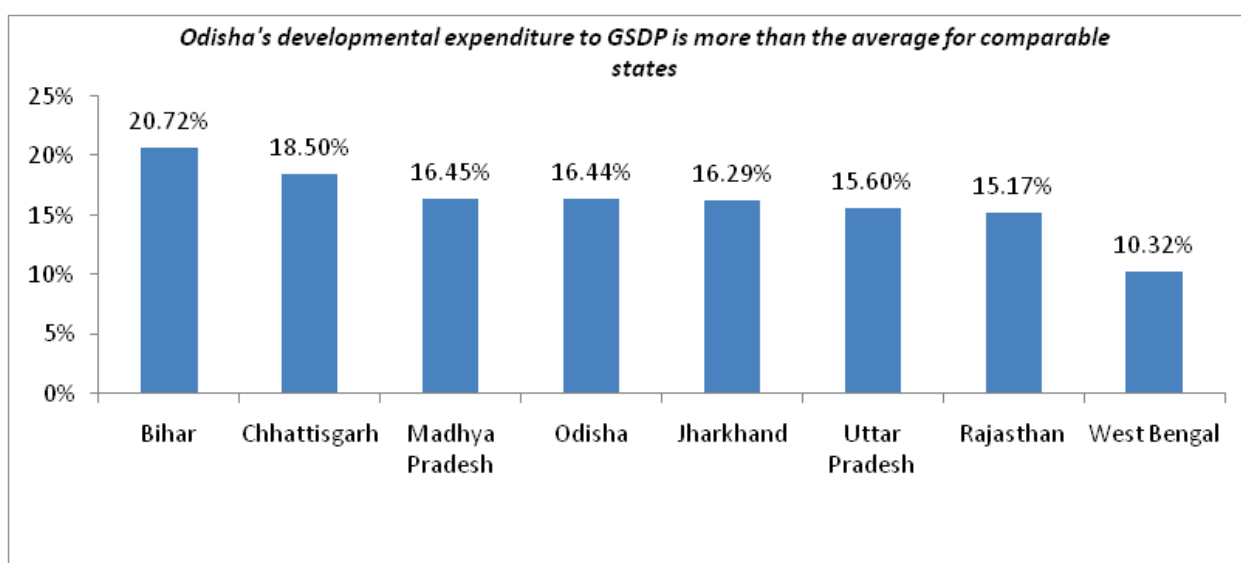


Source: State Finances: A Study of State Budgets, RBI

Figure 8.1 shows the Odisha's position on total expenditure (as a proportion of GSDP) for comparable states (low-income states, as classified by the World Bank).

The State has the fourth highest proportion of its total expenditure among comparable states allocated towards developments as shown in Figure 8.1(A), indicative of its commitment towards developing the state, in spite of the historical challenges it has faced.

Figure 8.1(A): Development expenditure to GSDP (average for 2013-14 to 2018-19 RE)



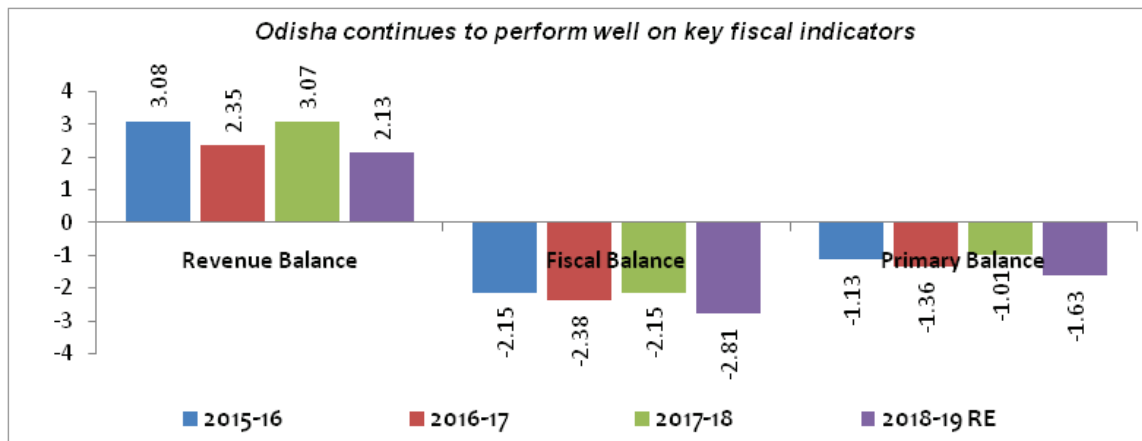
Source: State Finances: A Study of State Budgets, RBI

8.2 Major fiscal indicators

8.2.1 Odisha's performance on the fiscal front continued to be satisfactory in 2018-19 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 to ensure a revenue surplus and the state has been successful in maintaining it.

Odisha has maintained a revenue surplus since 2005-06

Figure 8.2: Key fiscal indicators for Odisha (as percentage of GDP)

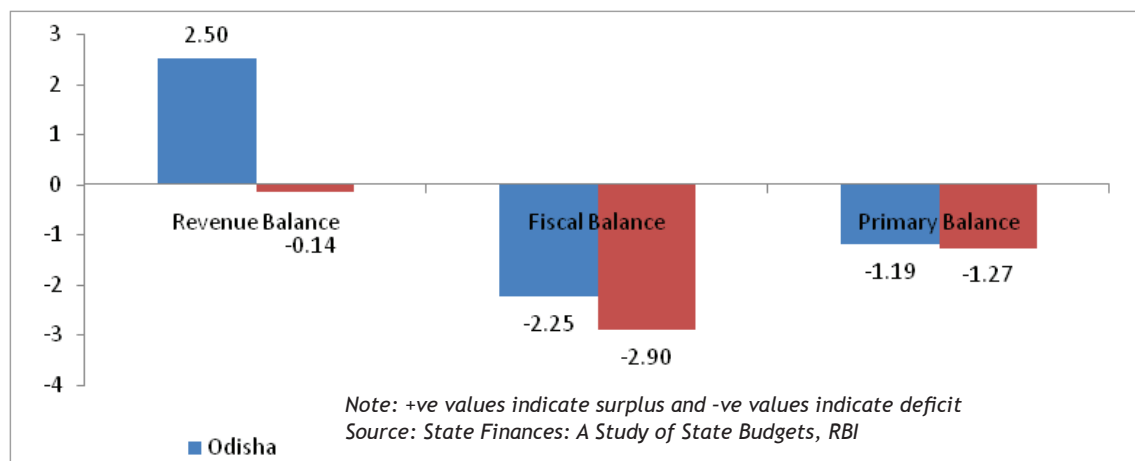


Source: Annual Budget documents, Odisha

8.2.2 Odisha has been successful in complying with the Odisha Fiscal Responsibility and Budget Management Act to maintain gross fiscal deficit under 3.5% of its GDP, though a rising trend has been observed. The zero fiscal deficit position in 2012-13 has moved to 2.81% of GDP as estimated for 2018-19 RE.

8.2.3 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 GDP) during the last 5 years (2014-15 to 2018-19 RE), while all states average shows a deficit. The State's average revenue surplus (2014-15 to 2018-19 RE) stood at 2.5% against the all states average of -0.14%, the fiscal deficit of the State, on an average is lower than the all-states average, as highlighted in Figure 8.3.

Figure 8.3: Key fiscal indicators as a percentage of GDP (Average for 2014-15 to 2018-19 RE)



Source: State Finances: A Study of State Budgets, RBI

Box 1: Fiscal discipline success

Fiscal discipline is an important determinant to sustenance of the fiscal and macro-position of an economy. It improves the decision-making capacity of the governments by prioritising the developmental needs and cut down on operational expenses. State governments are accountable for a large number of functional responsibilities, which span over 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, year-on-year.

The concerning factor is that, this success has been achieved partly by containing the public spending. The relatively lower per-capita income of the state, higher poverty ratio, 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 2 times in a span of 6 years.

8.3 State's receipts**8.3.1 Revenue receipts**

Revenue receipts of Odisha have been maintained at over 16% of the GSDP since 2011-12, and it was 20.55% in 2018-19 RE. Revenue receipts as per 2018-19 RE are about 2.5 times from the level in 2011-12, growing at an average rate of 14.3% annually. Growth of revenue receipts had witnessed a marginal slow down during 2016-17, but the State revived in 2017-18 onwards. Revenue receipts were expected to be Rs. 1,01,882.80 crores in 2018-19 RE. Outlook for revenue receipts indicate towards continuation of this upward growth with revenue crossing 21% of GSDP in 2019-20.

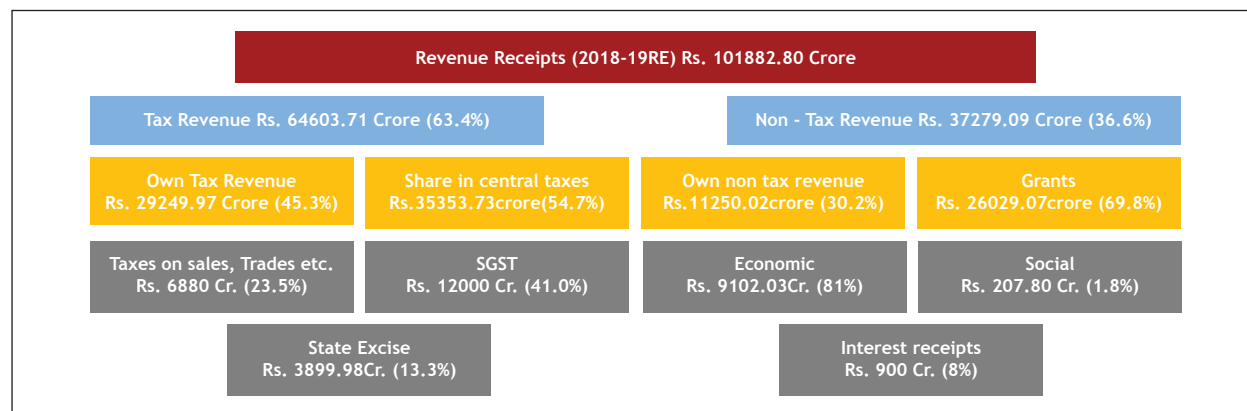
Revenue receipts have more than doubled in 6 years.

Composition of revenue receipts

8.3.2 Tax revenues account for majority of the State's revenue receipts. Additionally, their share has been growing over the years, owing to the growth in transfers from the Central Government. Tax Revenues for 2018-19 RE were Rs. 64,603.71 crores. This contributed to a share of 63.4% of total revenue receipts. The share of tax revenues in revenue receipts is estimated to be 62.6% in 2019-20. 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. After increase of vertical transfer from 32% to 42% from 2015-16, the contribution of share of central taxes in the total revenue of the State has risen and these revenues have become the major source of tax revenues for the State.

8.3.3 Non-tax revenues that constitute revenues from the various social, economic and general services provided by the State and grants, contribute around one-third of the State's revenue receipts. Having grown on an average 13.2% annually since 2011-12, non-tax revenues have grown to Rs.37,279.09 crores in 2018-19RE. The composition of non-tax revenues has undergone a transition during the last 7 years, with the share of state's own non-tax revenues witnessing a fluctuating trend. The growth in share has fallen to 4.4% in 2017-18 from 25.4% in 2012-13 and it was increased to 34% as per 2018-19RE over 2017-18. It is evident that the state's dependence on transfers and grants has been growing.

Figure 8.4: Composition of revenue receipts



Source: Annual Budget documents, Odisha

State's own revenue

8.3.4 State's own revenue (SOR) as a proportion of GDP shows a fluctuating trend contributed by variation in both, tax and non-tax revenues. SOR marginally increased from 8.6% of GDP in 2011-12 to 8.3% in 2018-19 RE. Further, it shows a fluctuating trend in between 7.9% and 9.5% of GDP during the period 2012-13 to 2018-19 RE. The estimates for 2019-20, SOR as a proportion of GDP is likely to attain the level of 8.5%.

State's own tax revenue

8.3.5 The share of state's own tax revenue in tax revenues has been declining in the recent years primarily due to lower GST revenue realization compared to protected revenue. This has resulted in higher dependence on central transfers. From a share of 52.4% in 2011-12, the share is estimated to decline to 45.7% in 2019-20. Own tax revenues for 2018-19 RE were Rs.29,249.97 crores or 6.1% of the GDP. However, the outlook for own tax revenues indicates that the share is expected to maintain the same level in 2019-20. Growth in own tax revenues has been fluctuating with an average growth rate of 12.5% annually. Post a slowdown in growth to 1.4% in 2016-17, own tax revenues grew at 22.1% in 2017-18, the highest in last seven years. Estimates for 2019-20 indicate a possible increase in their growth.

8.3.6 Sales tax and state excise are the major contributors to the State's own tax revenues with a combined share of over 70% and a strong growth each year. Sales tax contributes around 60% of the state's own tax revenue and forms over 3.5% of GDP, with double-digit growth every year. Post the introduction of GST, the share and growth of sales tax has witnessed a decline, with majority taxes being subsumed under GST. The contribution of GST to own tax revenues was 41% in 2018-19 RE. On the other hand, with 16.3% annual average growth rate between 2012-13 and 2018-19, the share of revenues from the state excise under own tax revenue has witnessed a growing trend. Revenues from electricity duty are also witnessing a growing trend. Estimates for 2019-20 indicate that SGST, VAT, and state excise will continue to be the lead contributor. The State's own taxes as a proportion of GDP are presented in Table 8.1.

Table 8.1: State's own tax revenues as a proportion of GSDP in Odisha

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19RE
State's own tax	5.8%	5.7%	5.7%	6.3%	6.9%	5.8%	6.4%	6.1%
SGST	NA	NA	NA	NA	NA	NA	1.5% (23.7%)	2.6% (42.6%)
Sales tax (VAT)	3.5% (61.0%)	3.7% (64.4%)	3.6% (63.5%)	3.8% (59.6%)	4.0% (58.1%)	3.4% (58.6%)	2.7% (41.3%)	1.4% (22.9%)
State excise	0.6% (10.3%)	0.6% (10.0%)	0.6% (10.5%)	0.6% (10.3%)	0.8% (11.3%)	0.7% (12.2%)	0.7% (11.5%)	0.8% (13.0%)
Stamp duty registration fees	0.2% (3.7%)	0.2% (3.6%)	0.2% (3.6%)	0.3% (4.0%)	0.7% (9.6%)	0.3% (6.0%)	0.2% (3.7%)	0.2% (3.7%)
Motor vehicle tax	0.3% (5.9%)	0.3% (5.0%)	0.3% (5.1%)	0.3% (4.6%)	0.3% (4.6%)	0.3% (5.3%)	0.4% (5.5%)	0.4% (6.0%)
Electricity duty	0.2% (4.1%)	0.2% (3.9%)	0.2% (4.0%)	0.5% (8.7%)	0.4% (5.4%)	0.4% (7.2%)	0.5% (7.1%)	0.5% (9.0%)
Land revenue	0.2% (3.9%)	0.2% (2.8%)	0.1% (2.6%)	0.2% (3.3%)	0.2% (2.6%)	0.1% (2.0%)	0.1% (1.9%)	0.1% (1.8%)

Note: Figures in parentheses indicate share in State's own tax revenue

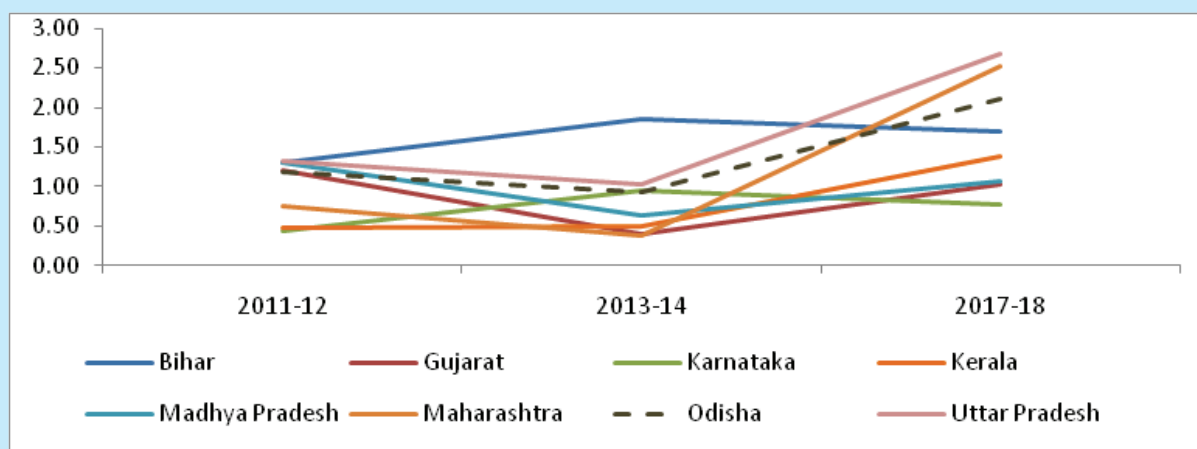
Source: Annual Budget documents, Odisha

Box 2: Odisha's improvement on tax mobilisation

Tax buoyancy is a measure of an economy's ability to mobilise tax revenue efficiently and the responsiveness of tax collection to growing gross domestic product of the economy. A value of more than one of tax buoyancy indicates that the government is effectively collecting more taxes as the economy grows and tax base expands. Odisha's tax buoyancy has grown in the last 7 years from 1.19 in 2011-12 to 2.05 in 2017-18, even though the State witnessed various natural disasters that impacted the growth of the economy.

The State today has one of the highest tax buoyancy out of all States. The figure below presents the tax buoyancy of select states (a mixture of high and low income) during the last few years. It can be observed that Odisha has shown the improvement, unlike the deteriorating tax buoyancy of various high-income states (some of which have declined below the threshold limit of 1).

Odisha has shown significant improvement in tax buoyancy



State's own non-tax revenues

8.3.7 Industries, with a share of over 73% are the driver of state's revenue from non-tax sources. The high volatility in prices for minerals, which are the major industries in Odisha, 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.

8.3.8 State's revenue from own non-tax sources stood at Rs.11250.02 crores in 2018-19 RE, equivalent to 2.3% of GSDP. Post a contraction of 7.7% in 2016-17, revenues from this source expected to grow by 34% in 2018-19 RE over 2017-18. The estimates for 2019-20 indicate that the state's own non-tax resources will grow at about 11%, contributed by growth mostly in interest and industries.

Box 3: Growing non-tax revenue base

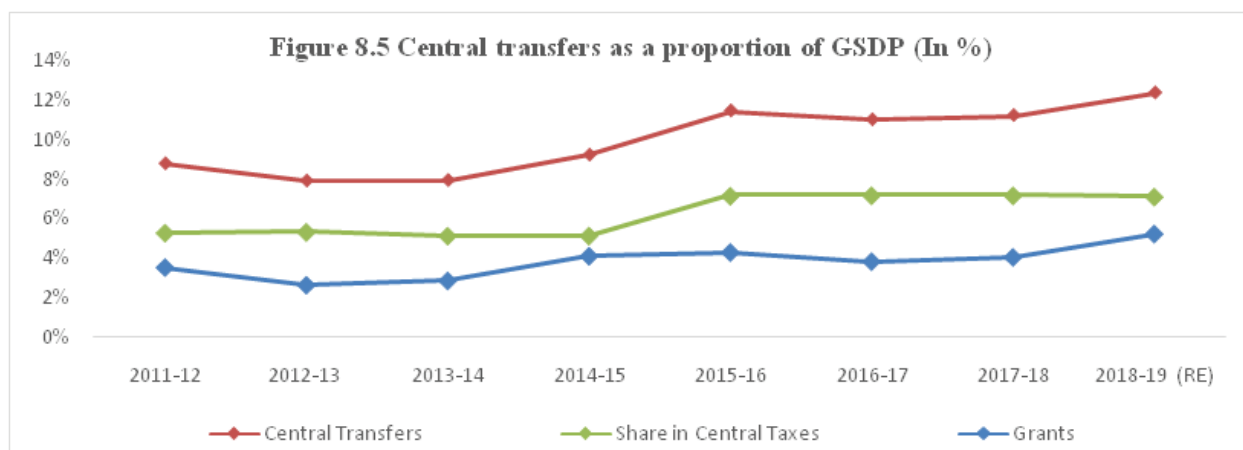
The industries sector is the major contributor to the non-tax revenues for the state. However, the sector's revenues are highly susceptible to fluctuations in prices of minerals, which are passed onto the non-tax revenues of the State. Odisha can diversify to other revenue sources to increase revenues 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 2017-18 to 2019-20 (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.

Sectors	Odisha	Best Performing State		Median value
Education	0.21%	Haryana	6.30%	0.80%
Healthcare	0.90%	Punjab	8.60%	3.50%
Housing	6.13%	Jharkhand	129.00%	2.10%
Water Supply and sanitation	3.08%	Goa	35.50%	0.40%
Crop Husbandry	0.90%	Jharkhand	8.20%	0.60%
Forests & wildlife	7.81%	Andhra Pradesh	184.80%	18.40%
Major & medium irrigation	100.22%	Gujarat	240.60%	22.60%
Minor irrigation	2.02%	Chhattisgarh	260.90%	3.80%
Industries	4051.47%	Odisha	4051.50%	291.70%
Tourism	0.51%	Haryana	32.30%	2.10%

Central transfers

8.3.9 The State's dependence on central transfers has been growing. With routing of funds for central schemes through state budgets and increased devolution in the 14th FC period, the share of central transfers has witnessed a growth. The contribution of these transfers has grown from 50.6% of revenue receipts (8.8% of GSDP) in 2011-12 to 60.2% (12.4% of GSDP) in 2018-19 RE. Estimates for 2019-20 indicate their share will grow further to 60.5%. Central transfers include both share of central taxes and grants from the Centre. Figure 8.5 presents the proportion of each of these transfers as a proportion of the GSDP.



Source: *State Finances: A Study of State Budgets, RBI and Annual Budget documents, Odisha*

8.3.10 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 55% of the share in central transfers. With consistent double-digit growth in income tax and high growth in corporation tax, the share in central taxes stood at Rs.35,353.73 crores in 2018-19 RE. Grants, on the other hand, stood at Rs.26029.07 crores. Centrally sponsored schemes (CSSs) and statutory grants are the major contributors to this component.

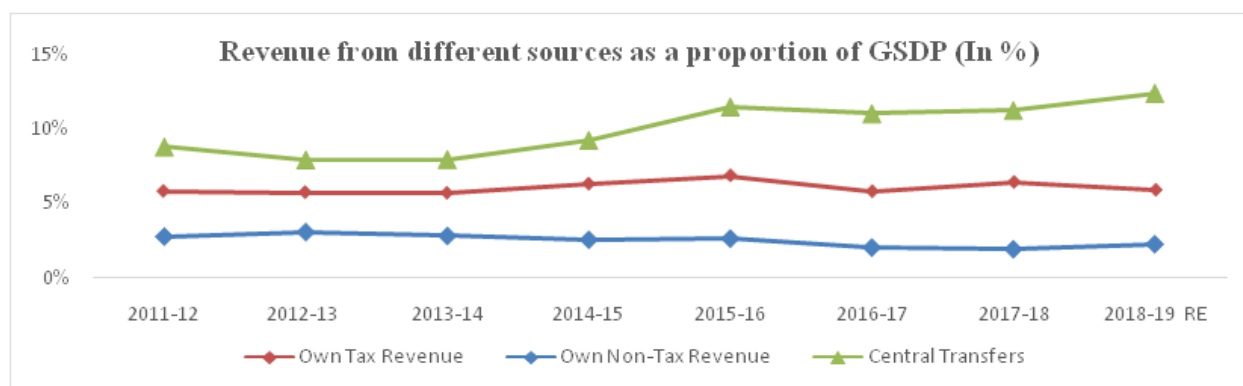
8.4 Key revenue indicators

8.4.1 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.

Revenue sources as a proportion of GSDP

8.4.2 The State's dependence on own sources to mobilise revenues has been stable. On the other hand, dependence on central transfers has grown, driving the growth in revenue receipts of the State. Own tax revenues as proportion of GSDP have marginally grown from 5.8% in 2011-12 to 5.9% in 2018-19 RE, after witnessing a peak of 6.9% in 2015-16. However, own non-tax revenues have been witnessing a decline consistently since 2012-13, reaching its lowest of 1.9% of GSDP in 2017-18. However, revenues from this source increased to 2.3% in 2018-19 RE. Central transfers, which form the largest share of revenue receipts, have been growing. A sharp jump in their proportion to GSDP has been witnessed from 2015-16 as reflected in Figure 8.6.

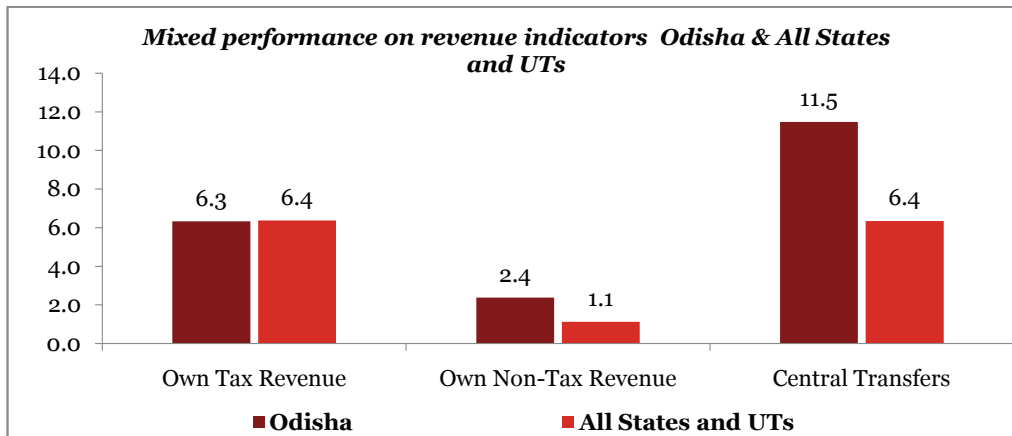
Figure 8.6: Revenue from different sources as a proportion of GSDP (in %)



Source: *State Finances: A Study of State Budgets, RBI and Annual Budget documents, Odisha*

8.4.3 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 four-year period (2015-16 to 2018-19 RE) 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 2015-16 to 2018-19 RE is more than double the average for All States in the same period. However, the State's share of central transfers to GSDP for Odisha is 11.5% against the All States & UTs average of 6.4%.

Figure 8.7: Revenue from different sources as a proportion of GDP vis-a-vis other states (2015-16 to 2018-19 RE)



Source: State Finances: A Study of State Budgets, RBI

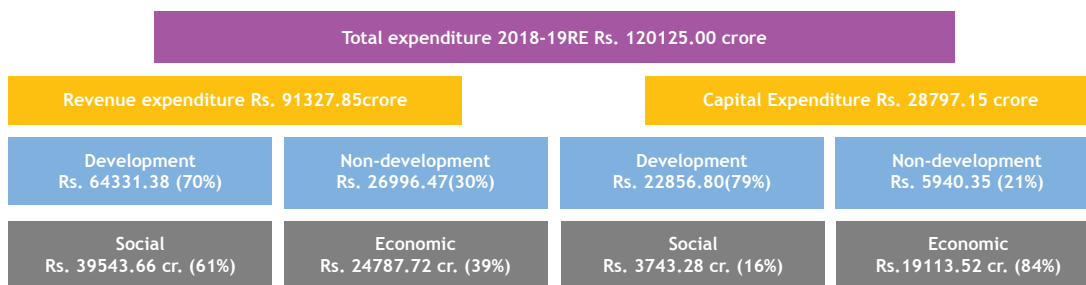
8.5 State's expenditure

8.5.1 Odisha's expenditure has been witnessing consistent double-digit growth over the years (2011-12 to 2018-19 RE). Growing at an average rate of 14.5% annually since 2011-12, the total expenditure stood at Rs.1,20,125 crores in 2018-19 RE. The total expenditure continued its high growth in 2019-20 (BE), with an estimated growth rate of 15.71% over 2018-19 RE.

Composition of state expenditure

8.5.2 Revenue expenditures are the largest contributor to the total expenditure by the State and continue to be so in 2018-19 RE with a share of 76%. Revenue expenditures stood at Rs.91,327.85 crores in 2018-19 RE, growing 27.13% over 2017-18. The share of revenue expenditure has witnessed a decline over the years, from 82.3% in 2011-12 to 76% in 2018-19 RE. However, the share is estimated to rise to 78.2% in 2019-20 (BE). With the focus of the government on building infrastructure to ensure sustainable growth, the share of capital outlay has become more than 4 times in 7 years. With 12% growth over the last year, capital outlay stood at Rs. 23,655 crores in 2018-19 RE.

Figure 8.8: Composition of state expenditure



Source: Annual Budget documents, Odisha

Revenue expenditures

8.5.3 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 Rs. 64331.38 crores in 2018-19 RE, contributing 70% of revenue expenditure. Non-developmental expenditure accounted for 30%. Sector wise, education (19%), rural development (12%) and medical & public health (6%) 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.

8.5.4 Social sector accounts for the majority share of developmental expenditure and contributes 61% of the expenditure in 2018-19 RE. Within the social sector, education, medical welfare, and water supply and sanitation are the sectors with highest 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 be stable around these figures in 2019-20 (BE).

8.5.5 On the other hand, rural development, agriculture, irrigation, and roads and bridges are the lead contributors to the economic sector expenditure, underlying the State's commitment to developing the infrastructure and rural sector of the economy. The committed expenditure on interest payments and pension form the majority of non-developmental expenditure. The fiscal prudence of the State has kept the share of these components constrained around 19% in 2018-19 (Table 8.2).

Table 8.2: Composition of revenue expenditure

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19RE
Developmental	66.6%	65.8%	68.0%	70.0%	72.8%	72.7%	70.0%	70.9%
Social	41.4%	39.2%	41.0%	41.0%	41.9%	42.4%	41.1%	43.3%
Education	19.6%	19.0%	18.2%	19.2%	18.8%	18.2%	19.2%	18.7%
Medical	3.3%	3.8%	3.6%	4.9%	5.1%	5.7%	5.3%	5.6%
Water supply and sanitation	1.6%	1.6%	1.6%	2.1%	3.4%	3.6%	2.4%	3.6%
Economic	25.2%	26.7%	27.0%	29.0%	30.9%	30.3%	28.9%	27.1%
Agriculture and allied services	9.1%	10.7%	10.3%	11.0%	9.9%	10.0%	8.1%	9.1%
Rural development	5.3%	5.7%	6.5%	8.7%	12.6%	12.3%	12.6%	11.3%
Irrigation and flood control	2.5%	2.7%	3.1%	2.7%	3.1%	2.9%	2.7%	1.8%
Roads and bridges	3.4%	4.0%	3.7%	3.7%	3.1%	3.0%	3.1%	2.4%
Non-developmental	31.5%	32.5%	30.0%	28.4%	25.6%	25.7%	28.2%	28.1%
Interest payments	7.4%	7.3%	6.3%	5.5%	5.7%	6.2%	6.9%	6.4%
Pensions	13.7%	14.1%	13.0%	12.5%	10.8%	10.5%	12.1%	12.3%
Grants to ULBs and PRIs	1.9%	1.7%	2.0%	1.6%	1.6%	1.6%	1.8%	1.5%

Source: State Finances: A Study of State Budgets, RBI and Annual Budget documents, Odisha

8.5.6 Revenue expenditure has witnessed consistent double-digit growth during the last 8 years growing at an annual average rate of 14%. This high growth is expected to continue in the coming years as well. Revenue expenditure is estimated to grow at 19.06% in 2019-20 (BE) over 2018-19 RE. The developmental sector, with its high share and annual average growth rate of 14% is the driver of growth in the revenue expenditures. However, growth in various components of revenue expenditure has been volatile.

Capital Expenditure

8.5.7 Capital Outlay, Disbursement of Loans & Advances and Repayment of loan constitute Capital Expenditure.

Capital outlay

8.5.8 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 the state. The capital outlay in 2018-19 RE was Rs.23655.24 crores, almost 5.3 times of its value in 2011-12. Year-on-year, capital outlay has witnessed high double-digit growth (except for 2016-17). The growth trend was 12.06% in capital outlay for 2018-19 RE which is likely to reduce to 3.46% as per the estimate of 2019-20. The majority share of these expenditures is allocated to economic activities. In 2018-19 RE, 80.8% of capital outlay was diverted towards economic services, while social services were allocated 15.8% of the total capital outlay. The remaining was for non-developmental purposes (Table 8.3). Economic services drive the growth in capital outlay. On an average, economic services have grown at over 27% annually between 2012-13 and 2018-19, while social services grew at 34%.

8.5.9 Capital outlay has been in tandem with the developmental needs of the State. Consistently during the last 8 years, over 65% 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 to weather conditions. Thus, the State has been focusing on providing a sustainable irrigation network. On an average, 29% of capital outlay has been diverted towards major and medium irrigation and flood control in the last 8 years. In 2018-19 RE, Rs. 7601.19 crores were expected to be spent on such projects, which accounted for 32.1% of the capital outlay. Another focus centre of the government is to build the transport system. The State still has one of the lowest rail connectivity amongst all States. In 2018-19 RE, 33.6% of capital outlay was allocated for transport purposes.

8.5.10 In terms of social services, the majority share is diverted towards the welfare of SC/STs. Close to 40% of Odisha's population belongs to these marginalised groups 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 8.3: Composition of capital outlay

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19 RE
General services	5.7%	6.2%	6.1%	3.5%	2.5%	2.0%	2.2%	3.4%
Social services	14.6%	21.5%	22.2%	20.7%	17.1%	16.2%	19.9%	15.8%
Education	2.2%	0.7%	2.0%	3.3%	2.9%	1.9%	3.5%	3.3%
Medical and public health	0.8%	1.5%	1.9%	3.7%	3.1%	3.6%	3.7%	2.4%
Housing	2.6%	3.1%	2.0%	2.0%	1.8%	1.7%	1.4%	1.4%
Water supply and sanitation	1.9%	3.2%	7.3%	4.8%	4.0%	4.9%	7.5%	6.1%
Welfare of SC/ST	6.4%	8.4%	5.4%	3.9%	3.3%	2.5%	2.5%	1.7%
Economic services	79.6%	72.3%	71.7%	75.8%	80.4%	81.7%	77.9%	80.8%
Major and medium irrigation and flood control	39.0%	35.7%	28.5%	25.7%	24.4%	31.4%	32.4%	32.1%
Transport	27.8%	27.5%	28.4%	41.2%	44.2%	36.6%	33.9%	33.6%

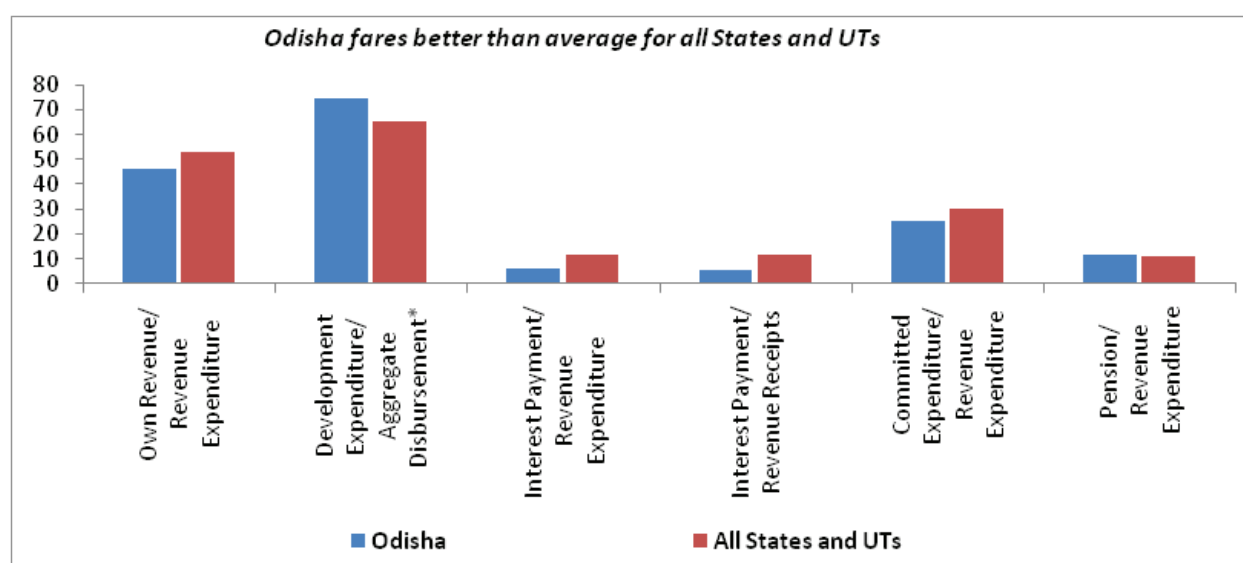
Source: State Finances: A Study of State Budgets, RBI and Annual Budget documents, Odisha

8.6 Quality of Expenditure

Key indicators

8.6.1 Odisha's performance on various indicators of quality of expenditure has fared well in comparison to all states. Figure 8.9 compares the performance of Odisha vis-à-vis all states, on average during 2016-17 to 2019-20 (BE). 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 comparably lower than the average for other states. Pension expenditure as a proportion of total revenue expenditure, however, is marginally higher.

Figure 8.9: Quality of expenditure (2016-17 to 2019-20BE)



Source: State Finances: A Study of State Budgets, RBI

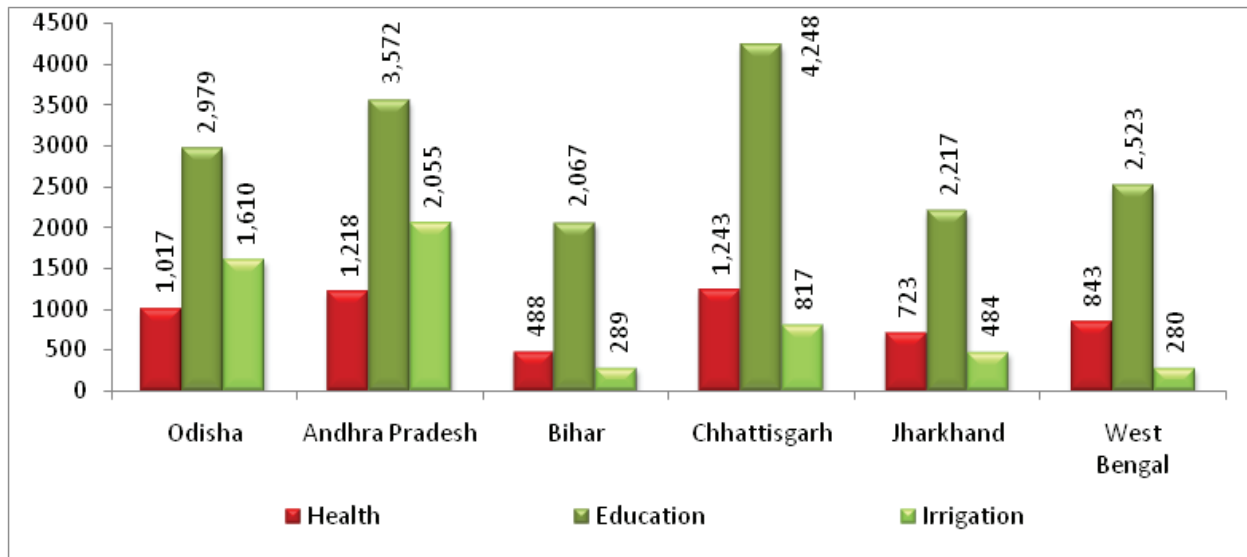
Per Capita Expenditure

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 the disbursement ratio. On an average, the Government of Odisha has spent Rs. 14641 annually per capita for developmental purposes between 2014-15 and 2018-19.

The average per capita spending during the period from 2014-15 to 2018-19 (RE) on health, education and irrigation of Odisha and neighbouring/ nearby States i.e. Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand and West Bengal has been derived taking into consideration the data published by RBI in the "State Finances - A Study of Budgets" in 2016-17, 2017-18, 2018-19 and 2019-20 issue and projected population for States (2014-15 to 2018-19) published by MOSPI, Government of India on per capita GSDP.

The Figure 8.10 reflects the average per capita spending on health, education and irrigation of Odisha, Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand and West Bengal. On comparison, it is revealed that the average per capita spending in Odisha on Irrigation is second highest i.e Rs 1610 and third highest in respect of per capita spending on Health & Education amounting to Rs 1017 and Rs 2979 among the six States included for comparison. The State has been successful in providing for the developmental needs across most sectors along with maintaining fiscal discipline.

Figure 8.10: Average Per Capita Expenditure on Health, Education and Irrigation

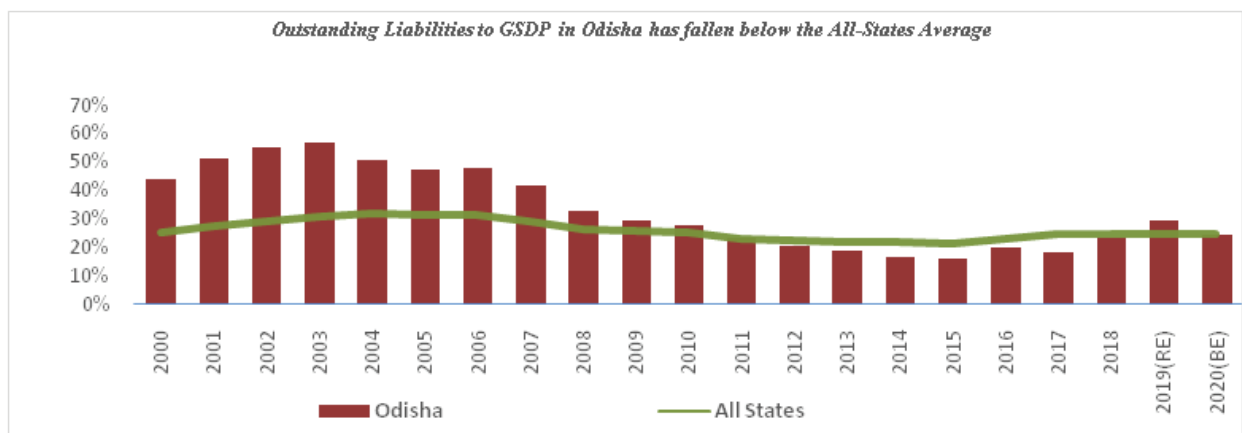


8.7 State's liabilities

Outstanding liabilities

8.7.1 Outstanding liabilities of Odisha have witnessed a sharp decline, with prudent measures undertaken to stabilise the fiscal position of the State. Odisha had the 4th highest total outstanding liabilities-to-GSDP ratio at 57% on 31st March 2003, against the all-states' average of 31%. The consistent efforts of the State Government have decreased this proportion to 25% as per the budget estimates for 31 March 2020 which is at par with the all-states' average (Figure 8.11). The total outstanding liabilities of the State stood at Rs. 1,33,316 crore as per the budget estimate of 2019-20.

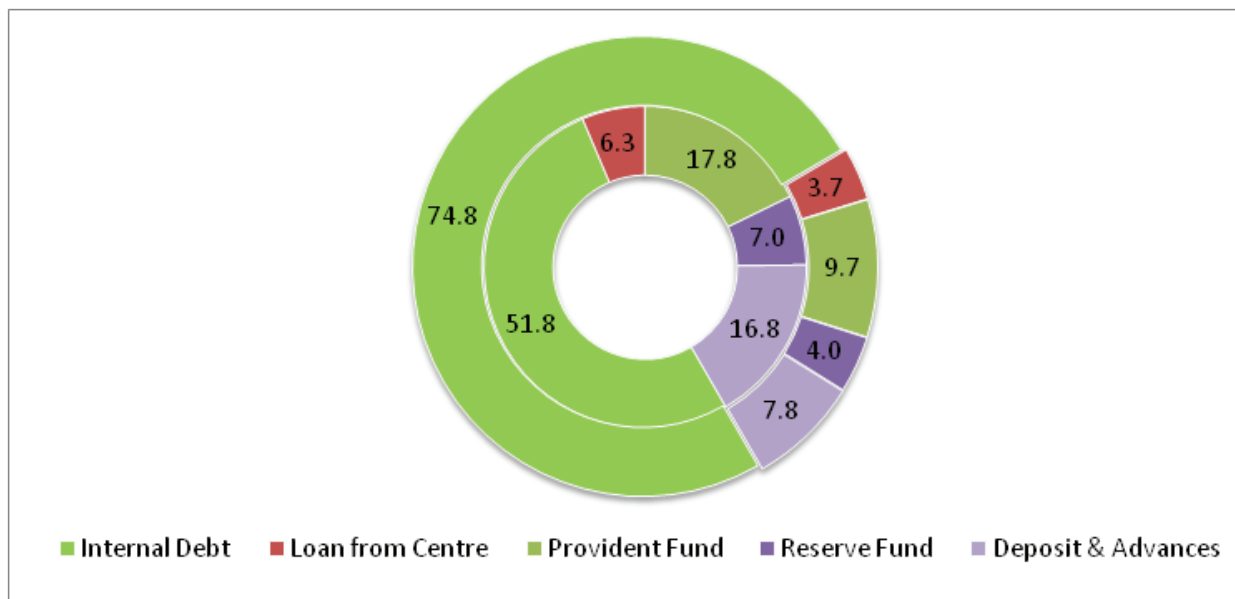
Figure 8.11: Ratio of outstanding liabilities to GSDP (as at end March)



Source: State Finances: A Study of State Budgets, RBI

8.7.2 Internal debts form the largest share (51.8%) of outstanding liabilities for Odisha as against the all states & UTs average of 74.8% (Figure 8.12).

Figure 8.12: Composition of total outstanding liabilities (In %) Odisha vis-à-vis India (as at end March, 2020)

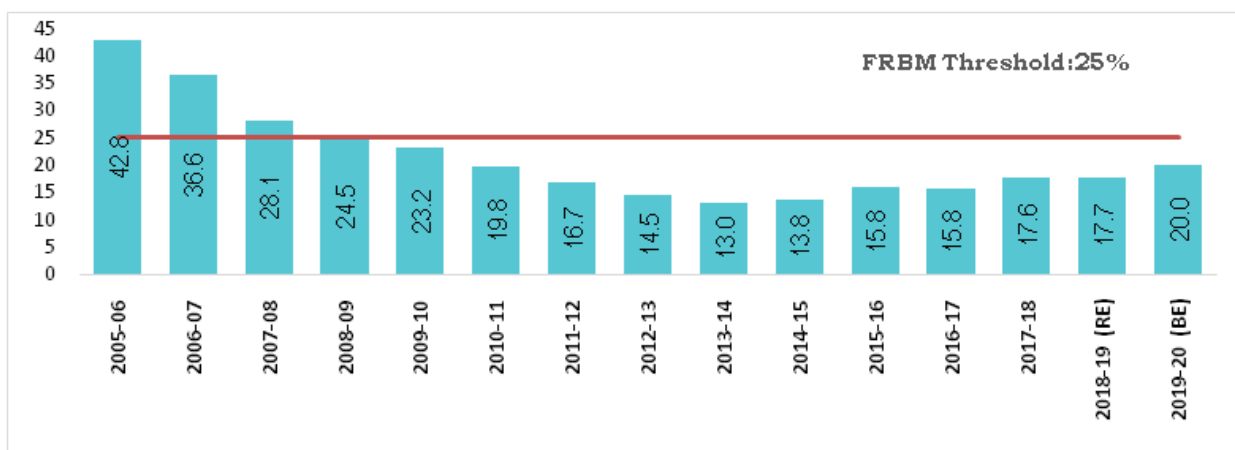


Source: State Finances: A Study of State Budgets, RBI

8.8 Debt stock

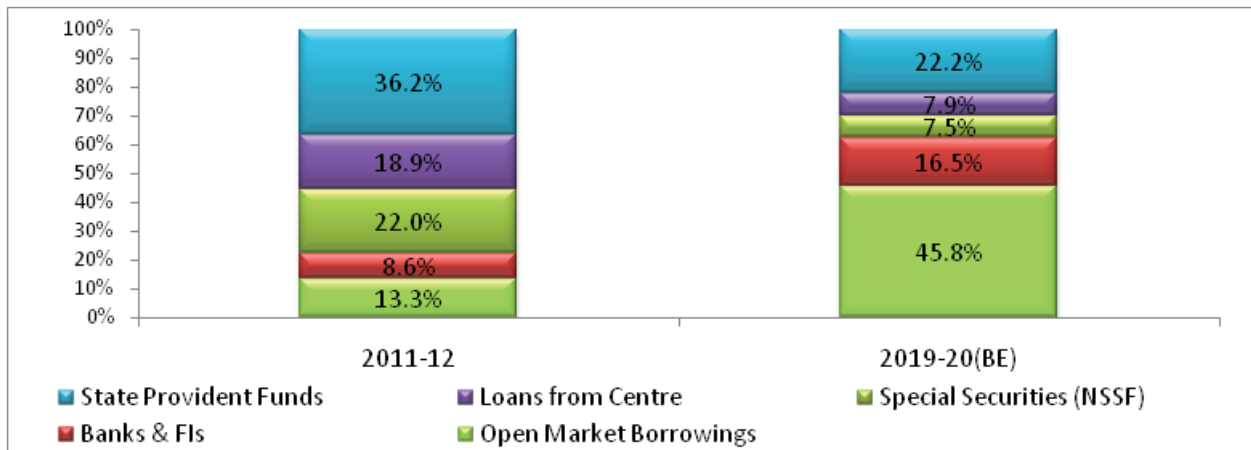
8.8.1 Debt stocks that form the largest component of outstanding liabilities have also witnessed a decline over the years. Debt Stocks as a proportion of GSDP stood at 42.8% in 2005-06, much higher than the limit of 25% set under the Fiscal Responsibility and Budget Management Act, 2005. The State had resolved to commit to the thresholds prescribed by the Act and it took strict measures in this context. The State has successfully been able to contain debt-GSDP below the threshold limit since 2008-09, as presented in Figure 8.13. However, with rising developmental needs, the debt to GSDP has been witnessing a rising trend since 2014-15. The total debt to GSDP is estimated to be at 20% in 2019-20, after declining to 13% in 2013-14.

Figure 8.13: Debt stock to GSDP



Source: Annual Budget documents, Odisha

Figure 8.14: Composition of debt stock



Source: Annual Budget documents, Odisha

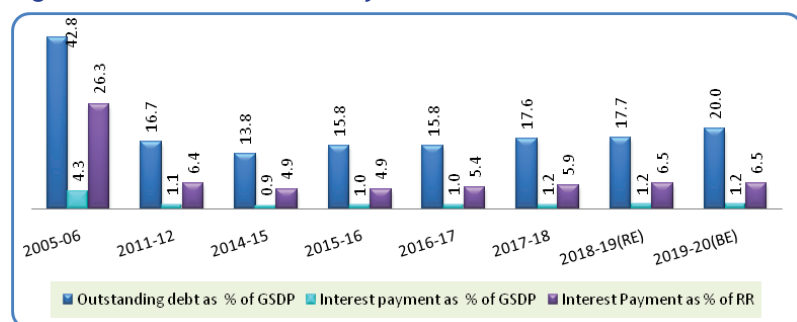
8.8.2 Composition of debt stock in the State has also witnessed a transition as the State has moved towards open market borrowings and borrowings from banks and other financial institutions (Figure 8.14). State provident funds and special securities (NSSF) were the largest contributors to the debt stock in 2011-12, contributing 36% and 22% respectively. With reducing dependence on NSSF and state provident fund, open market borrowings and bank/FI loans have grown to 62%.

8.8.3 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 rate on a sustainable basis. In order to fulfil this objective, the State has the fiscal space to opt for higher capital receipts to fund capital outlay in developmental sectors.

Debt Sustainability

8.8.4 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

Figure 8.15: Debt Sustainability



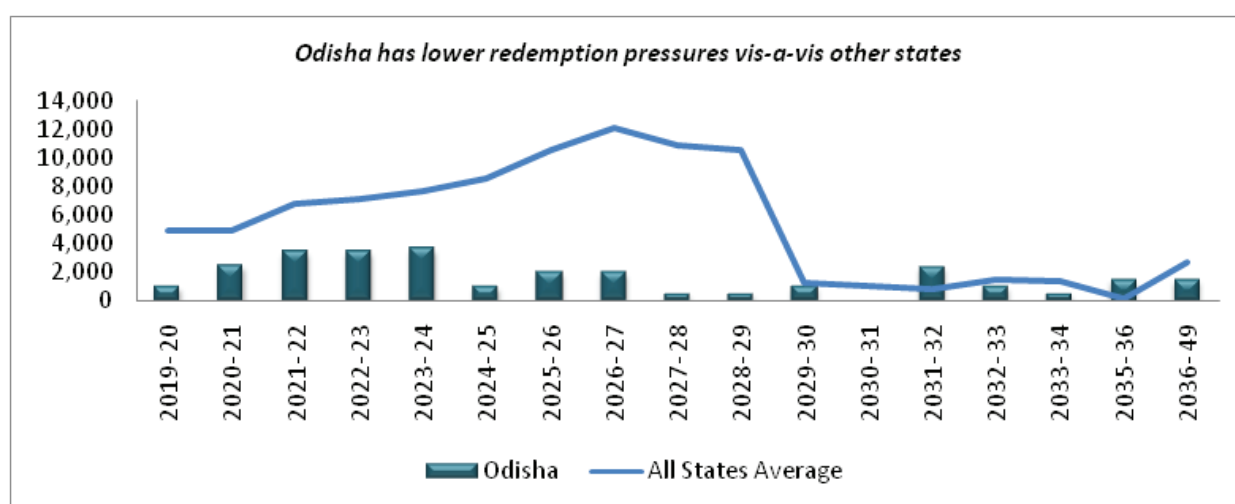
all the budgetary transactions and is an important indicator of fiscal correction initiatives undertaken during the year. Consistent with the lower debt-GSDP ratio, an improvement has been noted in the debt sustainability. The consolidated outstanding debt of the State Government as a proportion of GSDP declined steadily from 2005-06 (42.8%) to 2019-20 BE (20.0%), reflecting the impact of the debt relief mechanism that incentivised states' adherence to a rule-based fiscal regime.

8.8.5 The State Government is able to contain its interest payments to revenue receipts ratio (IP-RR), which decreased from 26.3% in 2005-06 to 5.6 % in 2018-19 (within 15 per cent). The consolidated debt-GSDP ratio of the state Government declined from 42.84% in 2005-06 to 20.0 % in 2019-20 (BE), which is much lower than the target of 25% stipulated by the 14thFC.

Maturity profile of outstanding state government securities' liabilities

8.8.6 The maturity profile of Odisha highlights near term redemption, reaching Rs. 3473 crore in 2021-22. About 50% of total amount outstanding is expected to be repaid/refinanced in the next five years (as per the status on end March 2019). In comparison to other states, the maturity profile of Odisha is much less worrying (Figure 8.16). With low borrowing, the State has much lesser debt obligations.

Figure 8.16: Maturity profile of Odisha vis-a-vis other states



Source: State Finances: A Study of State Budgets, RBI

8.9 Impact of goods and services tax

The introduction of goods and services tax (GST) in July 2017 subsumed 17 taxes levied by the Centre and State under the GST. With initial troubleshoot issues related with the implementation of the new tax regime, Odisha has been facing revenue losses. As per the constitutional provisions, the State will get compensation towards loss of revenue for five years. However, the State may continue to sustain loss on account of GST even after five years because of the structural changes like the rate structure, abolition of CST, entry tax, etc.

The comparative collection position after the introduction of GST from August to March 2018-19 vis-à-vis 2017-18 and Financial Year 2018-19 are furnished in Table 8.4.

Table 8.4: Comparative analysis of tax under GST regime (Rs. in crore)

S.No.	Types of Revenue	August - March		April-March
		2017-18	2018-19	2018-19
1	GST revenue (SGST + IGST)	6,609.27	7861.12	11942..58
2	Revenue from taxes subsumed under GST (VAT, CST, OST, OET, entry tax)	575.10	117.71	197.86
Total revenue from GST and taxes subsumed under GST		7184.37	7978.83	12140.44

It can be seen that revenue collection increased by 11.06 % during 2018-19 as compared to 2017-18 (9 months).

Table 8.5: Comparison of Tax under old and new GST regime for selected commodities

S. No.	Commodity	Tax under old regime	Tax under GST regime
1	Paddy, Rice, Atta, Maida, Suji, Pulses, Gur, (Jaggery)	5 % (VAT)	NA
2	Mining sector	5% (VAT) + 0.5% (Entry tax) + 2% (CST, incase of inter-state sales)	2.5%
3	Edible oil	5% (VAT) + 1% (Entry tax)	2.5%
4	Fertiliser	5%	2.5%
5	Timber and forest products	5%	2.5%
6	Tobacco	25%	14%
7	Electrical and electronic goods	14.5% (VAT) + 1% (Entry tax)	9%
8	Biscuits and confectionaries	14.5% (VAT) + 2% (Entry tax)	9%
9	Milk powder and dairy products	14.5% (VAT)	2.5%
10	Automobiles and spare parts, cement, soft drinks, tyres and tubes, paints, refrigerators, washing machines	14.5% (VAT) + 1% or 2% (Entry tax)	9%

In comparison to other states, Odisha's dependence on the subsumed taxes is much higher as shown in Table 8.6 and thus, much larger revenue losses are expected.

Table 8.6: Dependence on subsumed taxes

2015-16	Subsumed revenue	Non-subsumed revenue	Ratio
Odisha	11,049	4,064	2.71
All States/UTs with legislation	3,96,882	2,46,264	1.61

Source: Commissionerate for CT& GST, Odisha

8.10 Compensation for revenue losses

8.10.1 For the purpose of compensation, collection under the tax subsumed in GST in the year 2015-16 has been taken as the base year and 14% is assumed as the annual growth rate to determine the protected revenue in a year after the introduction of GST. The actual collection is deducted from the protected revenue and the balance is given as compensation on bi-monthly basis. The base year collection for 2015-16 is presented in Table 8.7:

Table 8.7: Tax collections during 2015-16

Tax component	Collection (Rs. in crores)
VAT	8,445.39
CST	883.33
Entertainment tax	30.96
Entry tax	1,662.99
Forest development tax	10.81
Advertisement tax	15.86
Total	11,049.34

8.10.2 Applying 14% growth rate to the base year's collection, revenue for 2018-19 is worked out at Rs. 16370.08 crore. Revenue collection during this period is Rs. 12140.45 crore, which implies compensation claim of the State stands at Rs. 4229.64 crore out of which compensation received so far is Rs. 3785.00 crore. Balance Compensation of Rs. 444.64 crore is yet to be received as the final revenue receipt figure of OGST, IGST share and VAT, OST, CST and Entry Tax collected on GST goods, Entertainment Tax and FD Tax during the period 01.04.2018 to 31.03.2019 has not been received from the Principal Accountant General (A & E), Odisha.

8.11 Government initiatives

S. No.	Initiative	Objective	Progress in brief
1	Goods and services tax(GST)	Subsumed of all taxes under GST.	Seven taxes, namely value added tax, central sales tax, entertainment tax, entry tax, forest development tax, advertisement tax, and luxury tax.
2	Integrated Financial Management System (IFMS-2.0)	Automation of Treasuries and for electronic receipts and disbursement.	About 95% of Government receipts and 100% disbursement are made through electronic mode. The State is in the process of switching over to complete electronic mode.
3	Integration of SBI e-Pay with IFMS	To provide payment gateway service for facilitating online and offline payment of taxes in Odisha Treasury Portal.	Facilitated payment through card and internet banking of all major banks. Multi-account settlements promote e-Payment and ease of doing business for people dealing with various departments such as Revenue Transport, Industries, and Steel and Mines.
4	Development of Online Application for Revision of Pension in "ARPANA" Portal	To expedite the process redetermination of pension without causing any hardship to the pensioner in a transparent and efficient manner	ARPANA (Application for Revision of Pension using Aadhaar N Authentication) developed. Now the pension revision is done in a seamless manner.
5	Public Financial Management System(PFMS)	To track last mile utilisation of funds through various implementing agencies and make just in time releases.	Odisha is one of the better performers in the country in implementation of PFMS.
6	Creation of separate Directorate of Public Private Partnership (PPP)	Revamping of Public Private Partnership (PPP) in Odisha	Separate Directorate of Public Private Partnership (PPP) created. Drafting of a new PPP policy is in the process.

8.12 Reform in Budget making process

The State Government has been laying emphasis in bringing reforms in budget making process in the area of accessibility, understanding and participation by general public in 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 a recently published second report of the Transparency International on "Transparency in Budget process". With objective to further improve our budget credibility, the State Government has introduced "Strategic Budget making process" for preparation for the budget for the ensuing year. A Medium Term Fiscal Framework (MTFF) has been brought into the budget making process and advance indicative budget ceiling was communicated to the Departments to make their budget estimate more credible. Odisha is the first State in India to introduce such reform in active partnership with International Monetary Fund (IMF)

Appendix-1

Key aggregates of State domestic product at current prices

Sl. No	Item	(Rs. in Lakh)										Growth over previous year (in %)						
		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (3rd RE)	2017-18 (2nd RE)	2018-19 (1st RE)	2019-20 (A)	2012-13	2013-14	2014-15	2015-16	2016-17 (3rd RE)	2017-18 (2nd RE)	2018-19 (1st RE)	2019-20 (A)
1	Gross State Value Added at basic prices	22023169	24916295	28044263	29520164	30450599	35573466	38798870	44748013	48056991	13.14	12.55	5.26	3.15	16.82	9.07	15.33	7.39
2	Taxes on Products	2031089	2340292	2715614	3082180	3529971	4920611	5785781	6163782	6824683	15.22	16.04	13.50	14.53	39.40	17.58	6.53	10.72
3	Less Subsidies on Products	955550	1086627	1112340	1177349	1125620	1137833	1107732	1327784	1499429	13.72	2.37	5.84	-4.39	1.09	-2.65	19.87	12.93
4	Gross State Domestic Product (1+2-3)	23098708	26169960	29647538	31424995	32854950	39356244	43476919	49584011	53382246	13.30	13.29	6.00	4.55	19.79	10.47	14.05	7.66
5	Consumption of Fixed Capital	2676113	2838712	3549800	3932653	4457048	5047197	5571251	6458553	6878786	6.08	25.05	10.79	13.33	13.24	10.38	15.93	6.51
6	Net State Value Added at basic prices (1-5)	19347056	22077583	24494463	25587510	25993551	30526268	33227619	38289460	41178205	14.11	10.95	4.46	1.59	17.44	8.85	15.23	7.54
7	Net State Domestic Product (4-5)	20422595	23331248	26097738	27492341	28397902	34309046	37905668	43125458	46503460	14.24	11.86	5.34	3.29	20.82	10.48	13.77	7.83
8	Population (Lakh)	422.22	426.51	430.84	435.22	439.63	444.10	448.61	453.17	457.77	1.02	1.02	1.02	1.01	1.02	1.02	1.02	1.02
9	Per Capita Gross State Domestic Product (Rupees)	54708	61358	66813	72205	74733	88620	96915	109416	116614	12.16	12.15	4.93	3.50	18.58	9.36	12.90	6.58
10	Per Capita Net State Domestic Product (Rupees)	48370	54703	60574	63169	64595	77255	84496	95164	101587	13.09	10.73	4.28	2.26	19.60	9.37	12.63	6.75

Appendix-2

Key aggregates of State domestic product at constant (2011-12) prices

Sl. No	Item	(Rs. in Lakh)										Growth over previous year (in %)						
		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (3rd RE)	2017-18 (2nd RE)	2018-19 (1st RE)	2019-20 (A)	2012-13 -13	2013-14 -14	2014-15 -15	2015-16 -16	2016-17 -17 (3rd RE)	2017-18 -18 (2nd RE)	2018-19 -19 (1st RE)	2019-20 (A)
1	Gross State Value Added at basic prices	22023169	23191892	25256176	25584002	27464169	31132709	32715227	35525278	37675718	5.31	8.90	1.30	7.35	13.36	5.08	8.59	6.05
2	Taxes on Products	2031089	2136425	2257786	2398864	2582087	3430016	3945030	4097759	4422356	5.19	5.68	6.25	7.64	32.84	15.01	3.87	7.92
3	Less Subsidies on Products	955550	991969	924810	916332	823363	793151	755306	882727	971621	3.81	-6.77	-0.92	10.15	-3.67	-4.77	16.87	10.07
4	Gross State Domestic Product (1+2-3)	23098708	24336348	26589153	27066534	29222893	33769574	35904951	38740310	41126453	5.36	9.26	1.80	7.97	15.56	6.32	7.90	6.16
5	Consumption of Fixed Capital	2676113	2706241	3276966	3473460	3903726	4399981	4735385	5058336	5365860	1.13	21.09	6.00	12.39	12.71	7.62	6.82	6.08
6	Net State Value Added at basic prices (1-5)	19347056	20485651	21979211	22110541	23560444	26732727	27979842	30466943	32309857	5.89	7.29	0.60	6.56	13.46	4.67	8.89	6.05
7	Net State Domestic Product (4-5)	20422595	21630107	23312187	23593074	25319167	29369593	31169566	33681974	35760592	5.91	7.78	1.20	7.32	16.00	6.13	8.06	6.17
8	Population (Lakh)	422.22	426.51	430.84	435.22	439.63	444.10	448.61	453.17	457.77	1.02	1.02	1.02	1.01	1.02	1.02	1.02	1.02
9	Per Capita Gross State Domestic Product (Rupees)	54708	57059	61715	62190	66472	76040	80036	85487	89841	4.30	8.16	0.77	6.88	14.40	5.25	6.81	5.09
10	Per Capita Net State Domestic Product (Rupees)	48370	50714	54109	54210	57592	66133	69480	74325	78119	4.85	6.69	0.19	6.24	14.83	5.06	6.97	5.10

Appendix-3

Gross State Value Added (Rs. in lakhs by economic activity at current basic prices

Sl. No.	Economic Activity	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (3rd RE)	2017-18 (2nd RE)	2018-19 (1st RE)	2019-20 (A)
1.	Agriculture, Forestry and Fishing	3934537	5342867	5674967	6556959	6163541	7423914	7557426	8951689	9561156
1.1	Crops	2555039	3750538	3802014	4436266	3765010	4706368	4418696	5169188	5274784
1.2	Livestock	538911	637320	729849	803496	880542	909722	1176538	1572413	1880136
1.3	Forestry and Logging	572223	619884	784937	864086	957598	1107973	1106034	1261054	1277107
1.4	Fishing and Aquaculture	268365	335124	358168	453110	560391	699852	856159	949035	1129129
2.	Mining and Quarrying	2648738	2666989	2868392	2703161	2862080	3292040	3649173	4615296	5323225
	Primary	6583276	8009855	8543359	9260120	9025621	10715954	11206599	13566985	14884381
3.	Manufacturing	4116404	4212453	5168498	4724215	4654610	6741691	7152186	8438174	8674852
4.	Electricity, Gas, Water Supply & Other Utility Services	775701	937278	1044477	1008706	1218871	1317249	1310198	1515715	1567045
5.	Construction	2059629	2074164	2314669	2393041	2370792	2609297	2970357	3238270	3463208
	Secondary	6951734	7223895	8527644	8125962	8244272	10668238	11432741	13192159	13705106
6.	Trade, Repair, Hotels and Restaurants	2035854	2436044	2769620	3030218	3352591	3538315	3978677	4324058	4544795
6.1	Trade & Repair Services	1838866	2218946	2533465	2782577	3082291	3240558	3649916	3951930	4157288
6.2	Hotels & Restaurants	196989	217098	236155	247641	270300	297758	328761	372128	387507
7.	Transport, Storage, Communication & Services related to Broadcasting	1347538	1560857	1771254	2048455	2257036	2565362	2752137	2915272	2952540
7.1	Railways	179466	233719	266785	343229	395310	425542	426570	480017	505967
7.2	Transport by means other than Railways	819369	940402	1039368	1149260	1223740	1485406	1682853	1742323	1710964
7.2.1	Road transport	693450	802859	892415	972267	1036673	1239346	1393870	1437717	1416571
7.2.2	Water transport	41962	42597	42862	47988	44899	72279	73939	83813	87046
7.2.3	Air transport	3421	7232	5311	8947	17220	19571	24282	23290	18121
7.2.4	Services incidental to Transport	80536	87715	98780	120058	124947	154210	190761	197503	189226
7.3	Storage	13967	15384	18233	18781	20245	22462	23172	26125	26888
7.4	Communication & Services related to Broadcasting	334737	371354	446868	537185	617741	631953	619543	666807	708721
8.	Financial Services	796303	910354	962328	1065147	1184299	1187867	1366262	1551485	1657388
9.	Real estate, Ownership of Dwelling & Professional Services	1707147	1901721	2146627	2321999	2439614	2670973	2882171	3184897	3474467
10.	Public Administration and Defence	863077	980808	1390657	1517496	1573618	1599470	1793338	2178059	2618827
11.	Other Services	1738239	1892760	1932774	2150766	2373548	2627286	3386944	3835096	4219487
	Tertiary	8488159	9682545	10973261	12134082	13180706	14189274	16159530	17988868	19467504
12	TOTAL GSDVA at Basic Prices	22023169	24916295	28044263	29520164	30450599	35573466	38798870	44748013	48056991
13	Gross State Domestic Product(GSDVA + Product Taxes - Product Subsidies)	23098708	26169960	29647538	31424995	32854950	39356244	43476919	49584011	53382246
14	Per capita GSDP (Rupees)	54708	61358	68813	72205	74733	88620	96915	109416	116614

Appendix-4

Gross State Value Added (Rs. in lakhs 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 (3rd RE)	2017-18 (2nd RE)	2018-19 (1st RE)	2019-20 (A)
1.	Agriculture, Forestry and Fishing	3934537	4558109	4368529	4711024	4111533	4927394	4525732	4906578	5279735
1.1	Crops	2555039	3153542	2864360	3154054	2454137	3021972	2492218	2719336	2799083
1.2	Livestock	538911	550337	603389	581686	609794	628998	675503	771824	931461
1.3	Forestry and Logging	572223	552477	604105	638507	675204	822358	826406	837455	901412
1.4	Fishing and Aquaculture	268365	301753	296675	336777	372398	454065	531605	577964	647778
2.	Mining and Quarrying	2648738	2596740	3097752	2851914	3674187	4179091	4037895	4691193	4851692
	Primary	6583276	7154850	7466281	7562938	7785720	9106485	8563628	9597771	10131427
3.	Manufacturing	4116404	3985120	4830204	4374503	4840719	6446482	6998073	7530791	7976363
4.	Electricity, Gas, Water Supply & Other Utility Services	775701	924884	987637	919544	1105926	1187222	1164489	1281562	1347397
5.	Construction	2059629	2009633	2144855	2138636	2146416	2299282	2480441	2670850	2788840
	Secondary	6951734	6919638	7962695	7432683	8093061	9932986	10643003	11483203	12112601
6.	Trade, Repair, Hotels and Restaurants	2035854	2274231	2454254	2652360	3052006	3164656	3453294	3594644	3720362
6.1	Trade & Repair Services	1838866	2071553	2245248	2435870	2806083	2898586	3168305	3285870	3403819
6.2	Hotels & Restaurants	196989	202677	209006	216490	245923	266069	284989	308774	316543
7.	Transport, Storage, Communication & Services related to Broadcasting	1347538	1509441	1639446	1841387	2037154	2192946	2363092	2376727	2397899
7.1	Railways	179466	222896	247615	297269	336282	302072	362875	391819	420063
7.2	Transport by means other than Railways	819369	914347	966706	1045914	1123670	1316377	1451496	1418808	1382419
7.2 .1	Road transport	693450	780615	830026	884837	951901	1098318	1202242	1170761	1140946
7.2 .2	Water transport	41962	41416	39866	43673	41228	64054	63774	68251	70109
7.2 .3	Air transport	3421	7031	4939	8143	15811	17343	20944	18966	14595
7.2 .4	Services Incidental to Transport	80536	85284	91875	109262	114730	136661	164536	160830	156770
7.3	Storage	13967	14039	14304	13838	15730	19923	20019	21812	23129
7.4	Communication & Services related to Broadcasting	334737	358160	410822	484366	561472	554574	528702	544288	572288
8.	Financial Services	796303	898381	929172	1018384	1097064	1103758	1312528	1490467	1582892
9.	Real estate, Ownership of Dwelling & Professional Services	1707147	1770647	1889542	2002383	2154941	2312812	2508077	2657498	2854858
10.	Public Administration and Defence	863077	923056	1249332	1340689	1434156	1436997	1565240	1861382	2248922
11.	Other Services	1738239	1741648	1665455	1733178	1810066	1882069	2306366	2463586	2626756
	Tertiary	8488159	9117405	9827201	10588381	11585388	12093237	13508597	14444304	15431690
12	TOTAL GSDVA at Basic Prices	22023169	23191892	25256176	25584002	27464169	31132709	32715227	35525278	37675718
13	Gross State Domestic Product(GSDVA + Product Taxes - Product Subsidies)	23098708	24336348	26589153	27066534	29222893	33769574	35904951	38740310	41126453
14	Per capita GSDP (Rupees)	54708	57059	61715	62190	66472	76040	80036	85487	89841

Appendix-5

Gender Budgeting share in India and Odisha

Year	Total Schemes			Women Specific Schemes (100%)			Pro women schemes (30%)		
	GB/Tot Exp.	GB/GDP	GB/SSE	GB/Tot Exp.	GB/GDP	GB/SSE	GB/Tot Exp.	GB/GDP	GB/SSE
	India								
2005-06	4.77	0.67	12.8	1.63	0.23	4.37	3.14	0.44	8.43
2006-07	3.83	0.52	9.98	0.79	0.11	2.07	3.03	0.41	7.91
2007-08	3.15	0.46	8.42	1.19	0.17	3.18	1.96	0.28	5.24
2008-09	5.51	0.9	14.97	1.65	0.27	4.49	3.86	0.63	10.48
2009-10	5.51	0.88	14.33	1.52	0.24	3.94	4	0.64	10.39
2010-11	5.51	0.88	14.84	1.52	0.24	4.09	3.99	0.64	10.75
2011-12	5.83	0.88	14.7	1.55	0.23	3.91	4.28	0.65	10.78
2012-13	5.46	0.79	12.96	1.32	0.19	3.13	4.14	0.6	9.82
2013-14	5.38	0.76	12.59	1.53	0.22	3.58	3.85	0.54	9.01
2014-15	4.88	0.66	9.89	1.04	0.14	2.11	3.84	0.52	7.78
2015-16	4.55	0.59	8.39	0.64	0.08	1.18	3.91	0.51	7.21
2016-17	4.78	0.63	8.54	1.05	0.14	1.88	3.73	0.49	6.66
2017-18	4.34	0.54	7.73	1.34	0.17	2.4	2.99	0.37	5.34
2018-19	5.11	0.66	8.13	1.12	0.14	1.78	3.99	0.52	6.35
2019-20	4.91	0.65	8.15	0.99	0.13	1.64	3.93	0.52	6.51
	Odisha								
2015-16	45.17	10.88	98.57	1.8	0.43	3.93	43.37	10.44	94.64
2016-17	25.47	5.76	55.85	1.5	0.34	3.28	23.98	5.42	52.56
2017-18	28.52	6.4	61.59	1.86	0.42	4.01	26.67	5.98	57.58
2018-19	32.53	7.72	66.17	2.27	0.54	4.61	30.26	7.19	61.56
2019-20	34.69	8.6	69.81	1.82	0.45	3.67	32.87	8.15	66.15

Appendix-6 Total Expenditure on child-related schemes across major departments (Rs. in crore)

	2017-18 (Accounts)	2018-19 (RE)	2019-20 (BE)
Home Dept.	0.00	1.92	0.00
School and Mass Education	12058.59	15058.97	16467.00
STSCDMBCW	2071.66	2456.37	2464.89
Health and Family Welfare	76.90	166.66	81.21
LESID	1.00	1.50	3.40
Sports & Youth Services	8.41	12.17	12.75
DWCDMS	2134.24	2617.22	2947.28
Higher Education	19.84	26.13	26.37
DSSEPD	31.79	41.70	45.92
Disaster Management	0.36	34.83	0.00
Total	16402.79	20417.47	22048.82

Appendix-7 Government Ayurvedic and Homoeopathic Medical Institutions and Services in Odisha

Year	Type of Model	Hospitals	Dispensaries	Doctors in position	Beds treated	Patient (in lakh nos.)
2011	Homeopath	4	561	401	125	56.34
	Ayurvedic	5	619	577	468	58.98
	Unani	-	9	5	-	0.8
2012	Homeopath	4	561	338	125	48.53
	Ayurvedic	5	619	497	468	55.39
	Unani	0	9	5	-	0.77
2013	Homeopath	4	561	319	125	44.94
	Ayurvedic	5	619	483	468	56.58
	Unani	0	9	5	0	0.62
2014	Homeopath	4	561	304	125	44.96
	Ayurvedic	5	619	483	468	54.04
	Unani	0	9	4	0	0.63
2015	Homeopath	4	561	304	125	41.72
	Ayurvedic	5	619	483	468	51.99
	Unani	Nil	9	4	Nil	5.01
2016	Homeopath	4	561	417	135	42.9
	Ayurvedic	5	619	437	418	54.26
	Unani	Nil	9	4	Nil	0.01
2017	Homeopath	4	561	423	135	54.46
	Ayurvedic	5	620	445	468	57.67
	Unani	Nil	9	3	Nil	0.09
2018	Homeopathy	4	561	440	135	
	Ayurvedic	5	620	469	468	
	Unani	Nil	9	3	Nil	
2019	Homeopathy	4	561	422	125	65.89
	Ayurvedic	5	620	430	468	69.78
	Unani	Nil	09	03	Nil	0.11

Appendix-8 Status of Elementary Education In Odisha

INDICATOR	2014-15	2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6
1. Enrolment (in lakh nos.)					
i. All	63.86	63.28	61.98	59.73	57.33
ii. SC	12.21	11.93	11.67	11.43	10.66
iii. ST	19.30	19.08	18.73	17.85	17.02
iv. Girls	30.89	30.58	29.9	28.91	27.03
2. Out of School Children	5152	9368	41656	3649	10216
3. Dropout rate					
i. Primary	1.63	2.82	4.2	5.81	5.42
ii. Upper Primary	4.21	3.87	5.15	5.45	6.93
4. Gross Enrolment Ratio (GER)	97.67	96.5	96.47	96.80	99.53
5. Net Enrolment Ratio (NER)	88.42	87.57	88.47	89.41	86.32
6. Pupil Teacher Ratio	25.46	24.29	23.48	23.49	20.92
7. Percentage of Gross Enrolment of Girls at Primary School Level	92.79	91.71	92.56	93.4	100.17
8. Percentage of Gross Enrolment of Girls at Upper Primary School Level	108.68	106.48	104.17	103.07	97.60

Appendix-9 Dropout Rates in Primary Schools in Odisha

Year	All categories			Scheduled castes			Scheduled tribes		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2008-09	5.00	4.89	4.95	7.7	8.22	7.96	9.05	12.34	10.69
2009-10	2.57	3.1	2.83	4.06	4.36	4.21	6.27	6.66	6.46
2010-11	2.35	2.86	2.6	3.08	3.89	3.38	4.12	5.35	4.85
2011-12	0.25	0.62	0.43	2.15	2.68	2.41	3.51	2.8	3.1
2012-13	0.73	0.22	0.37	2.36	2.42	2.39	2.76	2.85	2.97
2013-14	2.08	2.05	1.97	2.41	2.38	2.39	2.68	2.77	2.71
2014-15	1.58	1.78	1.63	0.93	1.34	1.13	3.57	3.93	3.75f
2015-16	2.87	2.92	2.82	3.66	2.77	3.3	6.88	7.26	7.07
2016-17	4.02	4.41	4.2	3.25	3.13	3.19	7.07	7.62	7.34
2017-18	5.99	5.61	5.81	3.81	3.69	3.75	9.34	9.36	9.35
2018-19	5.02	5.89	5.42	5.19	4.41	4.81	5.73	6.82	6.26

Appendix-10 Dropout Rates in Upper Primary schools in Odisha

Year	All Categories			Scheduled Caste			Scheduled Tribal		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2010-11	7.15	7.31	7.23	6.86	6.05	6.21	7.18	6.96	7.85
2011-12	3.85	2.23	3.07	2.2	1.23	2.74	3.2	6.31	4.7
2012-13	2.45	2.38	2.36	2.44	2.39	2.41	3.95	3.29	3.38
2013-14	2.71	2.08	2.4	2.84	2.24	2.58	3.48	3.89	3.63
2014-15	4.31	4.25	4.21	4.39	4.5	4.45	4.14	5.91	5.03
2015-16	4.2	3.52	3.87	5.46	4.11	4.8	9.38	8.27	8.82
2016-17	5.29	5.02	5.15	5.84	5.81	5.83	9.88	9.11	9.51
2017-18	5.97	4.9	5.45	4.04	3.59	3.82	11.23	9.12	10.22
2018-19	6.84	7.08	6.93	8.87	7.81	8.35	9.08	8.79	8.94

Appendix-11 Pupil Teacher Ratio (Govt.) For The Year 2018-19

SL	DISTRICT	PRIMARY	UPPER PRIMARY
1	Angul	18	22
2	Balasore	22	25
3	Bargarh	21	24
4	Bhadrak	20	26
5	Bolangir	22	27
6	Boudh	17	30
7	Cuttack	20	20
8	Deogarh	13	18
9	Dhenkanal	17	22
10	Gajapati	18	16
11	Ganjam	21	24
12	Jagatsinghpur	14	16
13	Jajpur	21	19
14	Jharsuguda	16	18
15	Kalahandi	20	25
16	Kandhamal	17	17
17	Kendrapada	21	22
18	Keonjhar	22	24
19	Khordha	21	22
20	Koraput	23	22
21	Malkangiri	24	24
22	Mayurbhanj	19	27
23	Nabarangpur	28	29
24	Nayagarh	17	20
25	Nuapada	20	28
26	Puri	16	19
27	Rayagada	19	20
28	Sambalpur	17	23
29	Sonepur	17	24
30	Sundargarh	19	22
TOTAL	20	23	

Appendix-12 Rainfall in Odisha, 2019

Sl. No.	District	Actual Annual Rainfall	Average Deviation (%)
1	Angul	1258.5	-10.2
2	Balasore	1661.8	4.4
3	Bargarh	1584.1	15.9
4	Bhadrak	1506.2	5.5
5	Balangir	1565.6	21.4
6	Boudh	1532.1	-5.6
7	Cuttack	1880.2	32.0
8	Deogarh	1411.3	-10.8
9	Dhenkanal	1463.9	2.5
10	Gajapati	1520.5	8.4
11	Ganjam	1574.6	23.4
12	Jagatsinghpur	1647.9	8.8
13	Jajpur	1750.0	12.2
14	Jharsuguda	1823.8	33.8
15	Kalahandi	1694.4	27.4
16	Kandhamal	1671.7	17.1
17	Kendrapara	1583.1	1.7
18	Keonjhar	1494.7	0.5
19	Khordha	1816.3	29.0
20	Koraput	2105.1	34.3
21	Malkanagiri	2104.2	26.2
22	Mayurbhanj	1682.6	5.2
23	Nawarangpur	1695.3	8.0
24	Nayagarh	1713.6	26.5
25	Nuapada	1167.4	-9.3
26	Puri	1858.9	31.9
27	Rayagada	1407.6	9.5
28	Sambalpur	1529.3	2.2
29	Subarnapur	1724.1	21.5
30	Sundargarh	1404.9	-1.2
Total		48833.6	
	State Average	1627.8	12.2

Appendix-13

Abstract of Village electrification status of all 30 Districts as on 31.03.2019

Sl.No.	Name of the District	No.of inhabited census vills. as per 2011 census	No. of villages electrified as on 31.03.18	Total Nos. of villages electrified during 2018-19	Total Nos. of villages electrified as on 31.03.18	Balance villages to be electrified
1	2	3	4	5	6 (4+5)	7(3-6)
1	Angul	1654	1652	2	1654	0
2	Cuttack	1854	1852	2	1854	0
3	Dhenkanal	1081	1081	0	1081	0
4	Jagatsinghpur	1223	1223	0	1223	0
5	Jajpur (CESU portion)	207	207	0	207	0
6	Jajpur (NESCO portion)	1391	1391	0	1391	0
7	Kendrapara	1415	1385	0	1385	30
8	Khurda	1356	1356	0	1356	0
9	Nayagarh	1541	1534	7	1541	0
10	Puri(CESU portion)	1523	1503	0	1503	20
11	Puri(SOUTHCO portion)	77	73	4	77	0
12	Balasore	2635	2633	0	2633	*0
13	Bhadrak	1250	1242	0	1242	*0
14	Keonjhar	2064	2059	0	2059	*0
15	Mayurbhanj	3751	3644	1	3645	*0
16	Bargarh	1179	1179	0	1179	0
17	Balangir	1751	1751	0	1751	0
18	Deogarh	718	706	12	718	0
19	Jharsuguda	347	347	0	347	0
20	Kalahandi	2116	2047	69	2116	0
21	Nuapada	656	656	0	656	0
22	Sambalpur	1229	1229	0	1229	0
23	Sonepur	856	856	0	856	0
24	Sundargarh	1713	1713	0	1713	0
25	Boudh	1117	1101	16	1117	0
25	Koraput	1941	1383	558	1941	0
27	Rayagada	2468	2220	248	2468	0
28	Gajapati	1499	1382	117	1499	0
29	Ganjam	2783	2753	30	2783	0
30	Kandhamal	2417	2017	400	2417	0
31	Malkangiri	995	898	97	995	0
32	Nawarangpur	868	820	48	868	0
	Total	47675	45893	1611	47504	50

